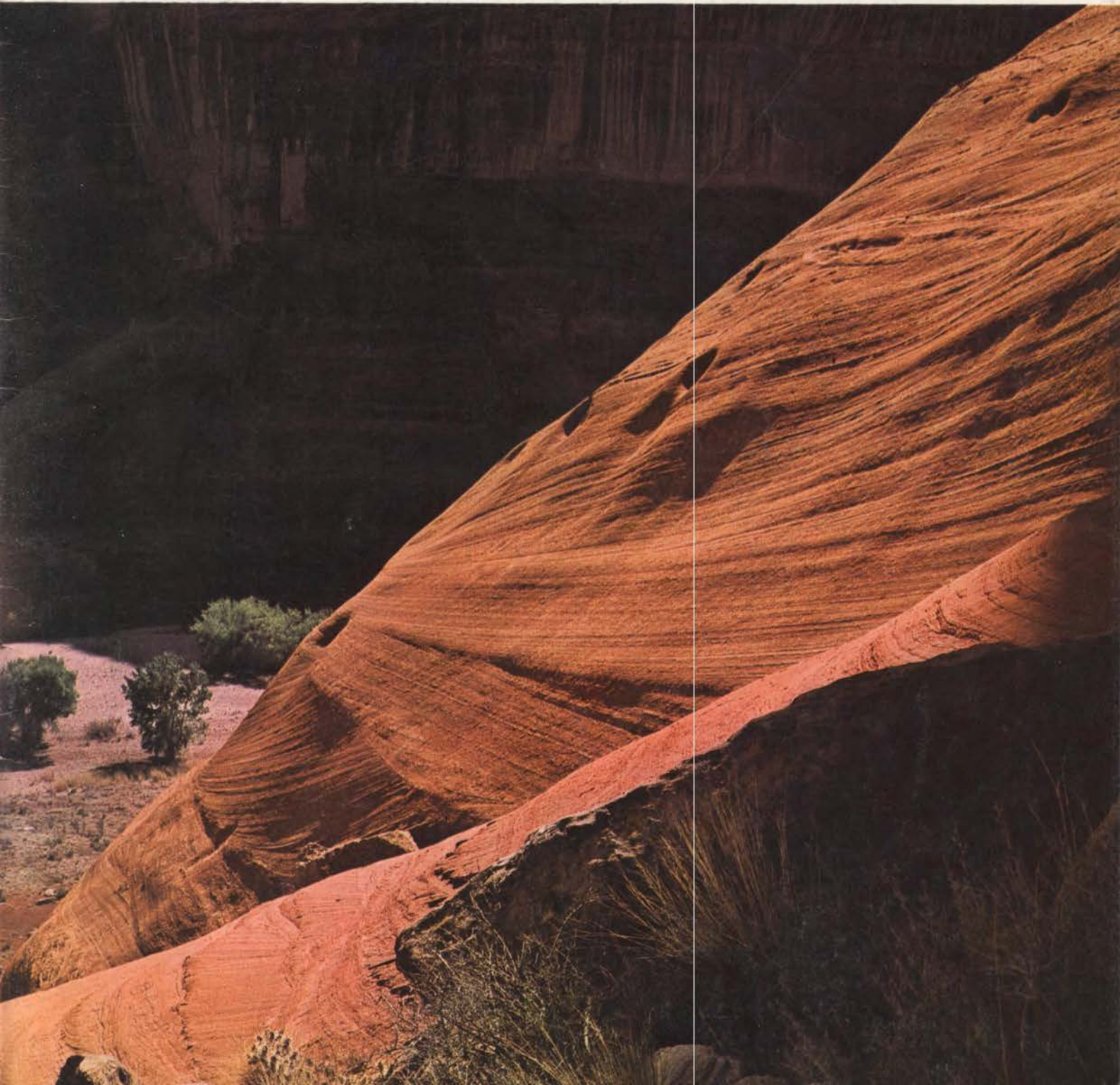


Sierra Club
BULLETIN/AUGUST 1970



EDITORIAL

The SST's recent escape from extinction in the House of Representatives (vote: 176-162 for the requested \$290 million appropriation) has led the Nixon Administration into attempting a real sales job on the public. The new chief Administration spokesman, William Magruder, travels and speaks extensively of the alleged benefits:

- "Building the SST will improve the international balance of payments."
- "The technical challenge brings out the Yankee Trader in all Americans."
- We must "continue to be first in technological development."
- "Darn right it's patriotic to be for the SST."
- "Continuing the government subsidy will bring closer the day when the project can be turned back to private capital."

Side-stepping the environmental issue, he blithely acknowledges the SST is "not a vacuum cleaner," and "not designed to solve social problems." Magruder answers conservationists by labeling concerns about atmospheric pollution as "patently absurd."

Such environmental problems as may exist will, Magruder says, be examined closely by two newly formed advisory councils on the environment and "community noise." They include as members none of the persons who served on the several Presidential commissions and the Environmental Quality Council that have already examined these problems, and found that the plane is 1) technologically useless, 2) a bad investment in false prestige, and 3) a drain on the balance of payments, because it would stimulate more American travel than aircraft sales abroad.

The Magruder approach is homey. To each audience he mentions taking a cut in salary to become the Administration's spokesman, and his hospital bed decision to take the job. The listener also learns of his wife's favorable reaction to the project after having it explained "in terms a layman can understand." Described by one paper as a "boyish looking, forty-seven-year-old with cool, steady, blue eyes, crew cut, brown hair and deeply tanned face," Magruder's basic pitch is that American know-how can solve anything. Describing everyone as environmentalists ("because we all live in the environment"), Magruder subtly suggests that opponents to the SST are enemies of Uncle Sam's getting things done, and the advancement of science. To those familiar with the facts, his arguments are a strange mixture of folksy irrelevance, facts out of context, and half-truths. The sales method is appropriate for hawking patent medicine.

At his request, members of the Sierra Club staff met recently with Magruder to discuss the SST. His public relations man came out of the meeting saying conservationists "would not listen to reason." On our side, we publicly reiterated requests for copies of the Garwin report — initially produced on executive order and subsequently suppressed, likewise by executive order. We also pressed for a national TV debate between Magruder himself and conservationists, or a panel of experts on both sides. This request was turned down flatly, with the statement that Congress alone is the proper forum for debate and discussion of the issue. Conservationists were chided for wishing "to take the issues to the streets." But Magruder admitted, after first denying, that he is now on a national speaking tour to sell the public on the Administration's position.

The Administration's handling of the SST controversy, involving the suppression of evidence and a sales job insulting to the intelligence, fits with its recent attempt by executive order to rob conservationists of their Timber Supply Act victory in Congress. Increasingly, conservationists must question the President's motives, priorities, and the extent and quality of his purported commitment to save and improve the environment.

Phillip S. Berry
President



Sierra Club

BULLETIN/AUGUST 1970

VOLUME 55 • NUMBER 8

... TO EXPLORE, ENJOY, AND PROTECT
THE NATION'S SCENIC RESOURCES ...

NEWS

TWO KEY VOTES

The June Bulletin's insert on "Environment 1970 and the Vote" was a "first of a kind" report. Such reports have usually not been possible because Congressmen prefer not to go on record on key issues, but to hide behind anonymous teller votes, voice votes, and votes on supposedly procedural questions. Both of the votes listed in our report involved key procedural decisions*, which were understood by most Congressmen to offer the only real opportunity for their position to be recorded publicly on these issues.

A number of Congressmen now report that they actually voted against the SST appropriation on the unrecorded teller vote which came first, despite the fact that they parted company with most SST opponents on the final recorded vote on the procedural question. These are Representatives Charles Gubser, Burt Talcott, Kenneth Gray, Rogers Morton, William Stiger, and John Wold. Congressmen Gubser and Talcott also report that they were opposed to the timber supply bill, although again they did not vote with its opponents on the recorded vote on the procedural question. Both Congressmen Gubser and Talcott report they opposed the SST appropriation because they felt there were better uses of federal funds.

—M.M.

**In the case of the timber bill, a motion on a rule to bring the bill to the floor, and, in the case of the SST, a motion on the previous question which had the effect of choking off a proposed amendment to delete SST monies from the Department of Transportation appropriation bill.*

COVER: Sandstone wall, Canyon de Chelly, by Philip Hyde. Part of the Southwest's Four Corners area being ransacked for power to feed large Western cities. See page 14.

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Art Direction: Mark Nobles

THE SIERRA CLUB,* founded in 1892, has devoted itself to the study and protection of national scenic resources, particularly those of mountain regions. Participation is invited in the program to enjoy and preserve wilderness, wildlife, forests, and streams.

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*Reg. U.S. Pat. Off.

N.Y. POWER CRISIS

Consolidated Edison blamed the Sierra Club and Scenic Hudson Preservation Conference's five-year-old court order blocking construction of a proposed generating plant at Storm King for New York's mid-summer power crisis. "If we had the two million kilo-

CONTINUED ON PAGE 22

ACTION NOW
PAGE 22



Harrison Begay

Creation of North Mountain, by Harrison Begay, Navajo.
From *American Indian Painting* by Dorothy Dunn.

CHILD OF NATURE

THE AMERICAN INDIAN AS AN ECOLOGIST

By Fred Fertig

Before today's sudden popular interest in ecology and before the science of ecology (a very young science), before the waste and rapine of so much of the American land, disturbing or destroying so many vital ecological systems, before all this there was the American Indian — our first ecologist.

Theodora Kroeber and Robert F. Heizer in the Sierra Club's *Almost Ancestors: The First Californians* state: "Ecologically [these] Indians were part of a natural order between whose people and other animal

and plant life there was a will-nigh perfect symbiosis. [California] was a place of unravished forests, streams, valleys, hills, and meadows. The Indian's preservation of the land and its products for the ten thousand or more years of their undisputed occupancy was such that the white invaders wrested from them a garden, not the wilderness it salved their consciences to call it."

Separated as we moderns are from our roots in the good earth, it is not surprising that we have forgotten those vital connections between ourselves and nature

so well understood by the Indians. Dependent on everything from processed foods to cut flowers, plastic dishes to alloyed tools, it is nearly impossible for us to experience the dangerous implications of breaking into the ecology of life. We try to live by everything artificial, nothing natural, opposing actually our one-time union with nature.

In other words, modern man seems to have chosen to leave his home place in the system of nature, as if he could do the impossible and live entirely apart from the oneness of the universe, the systems of soil and sea and sky. Yet as Rachel Carson reminded us, the salt and tides of the primordial sea are in our bodies — and are denied at our peril.

If man is the product of evolution, then he is also part of — cannot live away from — the ecosystems. Human nature is one end product of Nature, a fact no Indian ever tried to gainsay.

The American Indian, who the early philosophers and romancers so often called, rightly (though sometimes condescendingly) “child of nature”, knew that his life depended on a cooperation with nature, at once resourceful and reverential. The Indian of course had the advantage, before urbanization and technology, of living on and being a part of Mother Earth. His religion was necessarily and appropriately a nature religion. The Indian, living directly on desert or plain, under the sky, beside the waters, would get a prompt feed-back from nature when he was careless. Thus he understood that wasteful or destructive intervention in nature’s processes would result in famine, shortages of fiber for clothing and other uses, no potable water.

Thoreau, who made extensive notes toward a book on the native Americans, in his journal spoke of how the Indian was nature’s “inhabitant and not her guest.” It would have been in his spirit to add “and not her enemy, as were his neighbors” — cutting down the woods, scaring away wild life, cutting off the food sources of the Red Man. The Indian saw himself, unlike the practical Yankees, as part of the great chain of being, never thinking to isolate himself as did those New England village dwellers from nature’s contact. Thoreau was in agreement, and in conflict with his fellow Yankees: to fight nature and leave it behind was to lose its great moral and educational influence.

It was the Anglo-European immigrant’s notion that nature must be conquered and changed that was one prime cause of the conflicts between the native Americans and the white immigrant farmers. Albert E. Burke, at the Sierra Club’s 1967 Wilderness Conference, told what may be the classic story illustrating the opposition between Indian ecology and Anglo

anti-ecology. In 1883 in the Dakota Territory a farmer was plowing up the soil on his homestead. He had done it before, back where he came from, he would do it here. Then he noticed a Sioux on horseback staring at him as he continued his plowing. Becoming bothered, he asked the Indian what he wanted. The answer was simply: “Wrong side up.”

Dr. Burke, as a former director of Yale’s Graduate Studies in Conservation and Resource Use, comments that the Indian was not a scientist. He had absolutely no idea about the more than eight thousand years of experience that human beings had had using the land with results that had destroyed some civilizations. The Indian knew nothing about what happens when you turn the sod cover over and expose the bacteria so that the sunlight can kill it and otherwise oxidize the soil so that in effect it loses its binding properties and blows away. But he did know on the basis of the wisdom of the generations, living in close contact with the land, that the earth should not be turned wrong side up. In the late 1880’s, and afterward, drought, then dust bowls, were the result. Contemporary agricultural science can but echo what that Sioux said back in 1883.

It was no wonder that former Secretary of Interior Stewart Udall could begin his influential book on the conservation crisis, *The Quiet Crisis*, with a chapter on “The Land Wisdom of the Indians.” Concluding that chapter, he wrote: “It is ironical that today the conservation movement finds itself turning back to the ancient Indian land ideas, to the Indian understanding that we are not outside of nature, but of it. From this wisdom we can learn how to conserve the best parts of our continent.”

The new science of ecology can learn from the ecological wisdom of the Indians. An old Indian practice of burning over certain areas has been found, after careful tests, to justify controlled burning in our forests. Biologist Estella B. Leopold told the 1967 Wilderness Conference that scientific burning clears off choking growths and helps maintain a wide variety of plant communities.

How did the Indian develop that intuition and awareness that made him so at home in the natural world? Living intimately with earth and water, through time and weather cycles, observing and experimenting (almost scientifically) with the resources and processes of his natural environment, he learned how with care he could gather the materials for his every human need. Then in his mind, later in ceremony and myth, he built those respectful attitudes that made the difference between simple extraction and greedy exploi-

tation of nature's goods.

When tribes had given a loving name to every feature of the natural world, had created stories humorous about the coyote or serious about the beginning of the world, there was no encouragement to waste the riches of nature. So highly regarded were the animals and plants among the Hopi, they named clans or groups of clans (phratries) after them. Hopi society included the Eagle-Sun phratry containing the reed and greasewood clans, the Firé-Coyote phratry containing the mescal, juniper and pinyon clans.

At Table Mountain in California the Maidu flint miner was prohibited from taking away more flint than he could break off with a single blow of his stone hammer. The California Pomo of the lake region recognized that the destruction of duck eggs meant fewer birds though eggs were enjoyed. Indian informants told anthropologist S. A. Barrett that to prevent depletion the young birds were not molested until they were at least half-grown.

An excellent demonstration of the Indian sense of ecology is provided by the Chumash people of the Santa Barbara coast of California. Their material lives were determined by resourceful use of fish and shellfish and seaweed from the Pacific, and by gathering of seeds and plants and hunting the deer and lion and smaller land animals. But whatever was collected was totally used, nothing cast aside. The abalone provided both meat and decorative shell that was also made into dishes, or worked, as a curved single-piece fishhook. Just one plant, the amole or soap plant, provided a bulb that was roasted and eaten, husks frayed to become brushes for painting or general utility, soap lather, and also a poison from the crushed plant that expedited the catching of fish. The chia sage was used variously as a medicine or with its seeds prepared as a flour.

A recent study carried out by the Santa Barbara schools and anthropology students from the University of California Santa Barbara campus, working with surviving Chumash, concluded: "The natural environment was rich, but the Chumash were so successful because they utilized it very ingeniously. They mastered the environment with a remarkable sense of ecological balance."

Lucy Thompson, a California Klamath, in a straightforward little book, *To the American Indian*, tells how her ancestors preserved the sugar-pine. There was a heavy fine and the threat of death for any one that willfully destroyed this timber. With that irony Udall mentioned, Mrs. Thompson related how when a white man arrived among the Indians in the old days, he would take an Indian woman. In the fall of the year

when she would go and collect pinenuts, the pale face would go with her. Instead of permitting the nuts to be shaken loose in the Indian way, he would chop the tree down and tell the woman, "There they are, what are you going to do about it?" At first the woman complained, writes Mrs. Thompson, saying, the "white man would spoil everything. Then the Indians began to cut the trees. In later years these trees became valuable in the eyes of the white man, and it . . . became his complaint that the Indians ought to be arrested and punished."

Henry Azbill, a Maidu of the upper Sacramento Valley of California, recently told me how Maidu hunters after killing a deer would approach the carcass, then ask pardon of the spirit of the deer because it had been necessary to kill it for food. The Maidu along with the Yurok and other northern California peoples, dressed in deer skins and moved in deerlike fashion in a dance intended to honor and placate the deer to be hunted. The Maidu had a sacred duck dance, with the duck symbolizing all birds. There were also grizzly bear, grasshopper, and turtle dances, though not all were sacred dances and some were "just for fun."

The widely differing Indian tribes across the North American continent still held in common their belief that the "earth was mother of all," and gods or spirits were nature gods and spirits. The Montana region Blackfeet and other tribes prayed to the sun. The Creek Indians, formerly of Alabama and Georgia, believed in a supreme deity that lived in the sky, but there were lesser spirits—eagles, snakes, panthers, for example; all thought to have souls like human beings and to possess human attributes. One did not recklessly kill such a being. The Tewa of New Mexico and northeastern Arizona sang:

*"O our Mother the Earth, O our Father the Sky,
Your children are we, and with tired backs
We bring you the gifts you love."*

With a peculiar pertinency the young Indians of several tribes who recently "occupied" Alcatraz Island in San Francisco Bay declared their intention of establishing on the Island an Indian Center of Ecology. They stated: "Indian people have been aware of their involvement with the total environment for thousands of years, in contrast to the typical non-Indian method of exploitation of the environment." Their hope is to engage in scientific research in solving some of the "extreme problems of pollution that face the nation," and, "The Center of Ecology will use this total involvement with Nature as a guideline in its work." This Indian war whoop came from the center of one of the great bays

of the world, fouled and reduced in size by non-Indian miners, ranchers, industrialists and real estate developers over the last hundred years.

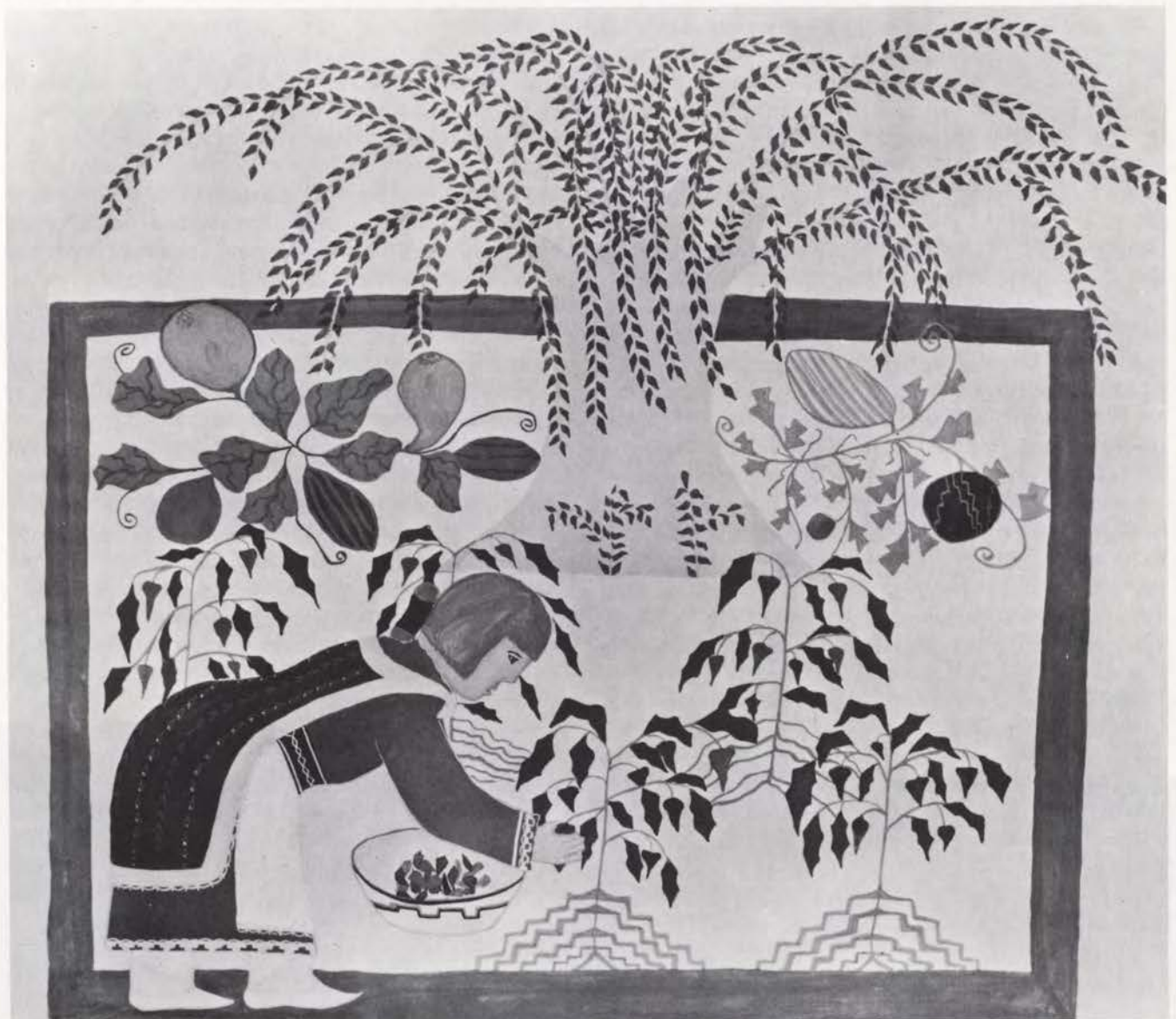
These youthful Red Power advocates have a feeling of something lost. They know from old tales, the memories of their parents, that the nature sense of their ancestors was health-making and life-preserving. Their forefathers could smell the weather, tell the coming of fall or spring, where to find a particular root or seed or flower, knew the habits and the spirit of the animals, birds and fish.

Now even the Indian, shut away on the reservation by "civilized" men afraid of "nature's" man—he has almost forgotten his wilderness wisdom, and goes to class with the old ones, to learn it again. We should

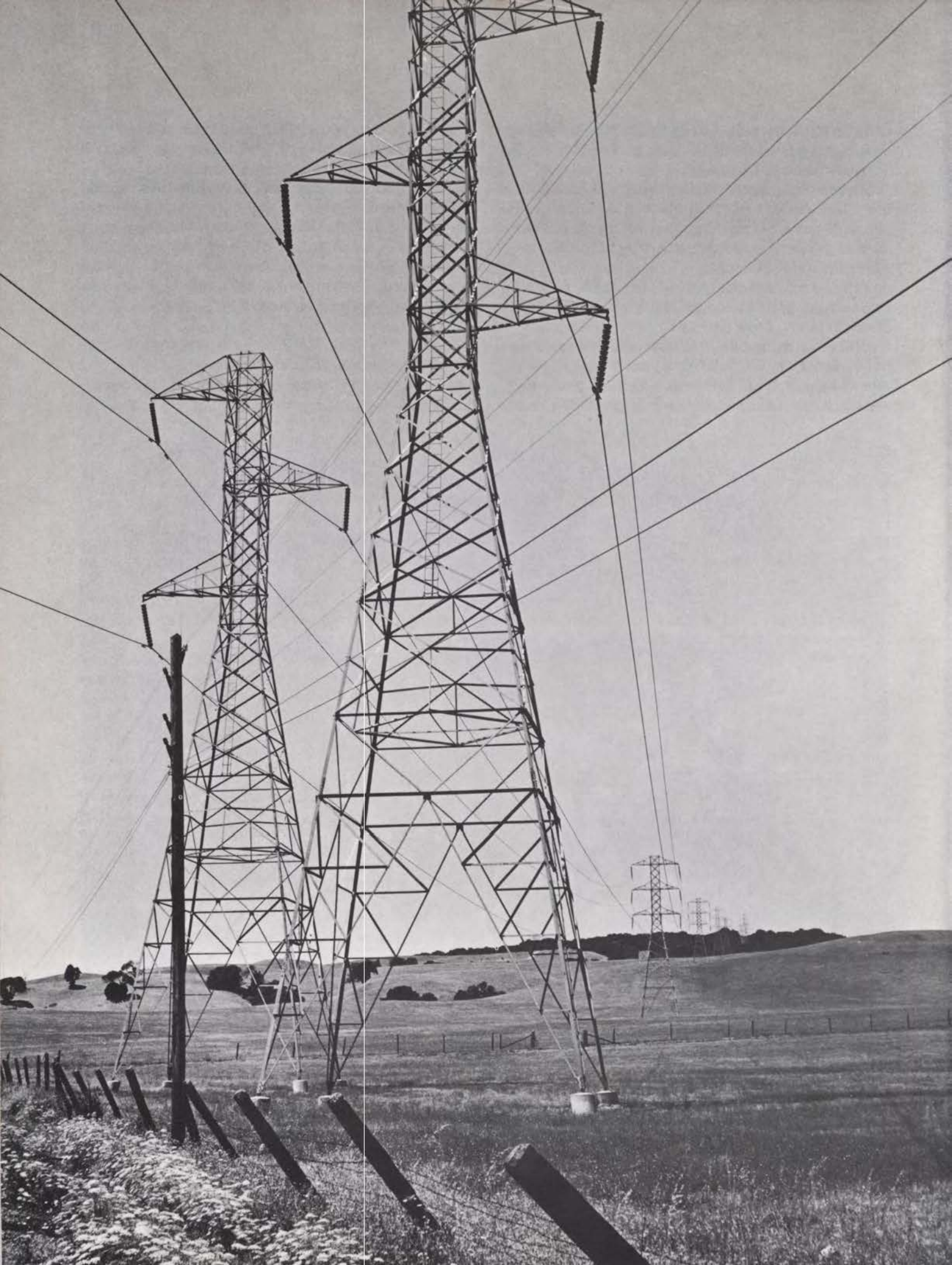
join him in that school today and thus seek to rejoin the ecological community.

It will not pay to become romantic or nostalgic about a time and an Indian way of life that cannot ever be entirely recovered. We have killed and buried and dug up and plowed off too much. We had a cruel part even in erasing the racial and ecological memories and intuitions of the Red Man. But the Indians' nearly forgotten land wisdom, his ecological sense, is indispensable to our survival.

Mr. Fertig is working on a full-scale history of the California Indian. He has done book reviews for the Bulletin and is the author of a biographical essay on the mountaineer, Norman Clyde.



Woman Picking Chili, by Lolita Torivio, Acoma Pueblo. From *American Indian Painting* by Dorothy Dunn.



FEDERAL POWER COMMISSION

Originally a conservationist triumph over exploiters, the Commission now protects the very practices it should prevent.

By Keith Roberts

Electricity shocks in more ways than one these days. Consider: the generation and transmission of electricity destroys more wild or scenic areas than almost any other activity. Witness the Grand Canyon, Hells Canyon, Nipomo Dunes, Storm King, and Ramparts Dam proposals, to say nothing of transmission line routing.

Power plants contribute nearly 50 per cent of all sulfur dioxide and 20 per cent of nitrogen oxide emissions in the nation, which are estimated to cause billions of dollars in crop and property damage and wreak untold injury on human health.

Thermal pollution is an increasingly recognized hazard; and the extraction and transportation of fossil fuels spread drilling rigs, strip mine scars, and oil slicks over the earth's face. In short, while we are reeling from the present impact of electric power, the electric utility industry happily predicts that power output will quadruple in the next twenty years. This juggernaut will require at least 150 new sites for major generating installations; transmission lines, which presently cover three million acres, will devour four million more.

In the absence of a coherent and persuasive case for slowing the increase in power consumption, indiscriminate opposition to all specific proposals for power generation, be they hydroelectric, conventional steam-generating plants, or nuclear reactors, appears increasingly short-sighted. To be fair, articulating a sound energy policy is a task of extreme difficulty. In attacking electric power, environmentalists encounter an array of political and economic muscle. The electric utility industry is the nation's largest. Its monopoly position and guaranteed rate of return on expenses (usually including political, legal and public relations outlays) multiply the impact of its size. Attacks on electric power also meet opposition from coal, gas, oil, railroad, and electric equipment interests.

Under these circumstances, environmentalists might consider courting the governmental agencies with the power, expertise, and duty to shape energy policy. Chief among these is the Federal Power Commission, created in 1920 to ensure that hydroelectric

projects and other uses of the nation's water resources would be "best adapted to a comprehensive plan for improving or developing a waterway or waterways" for the public benefit, and in 1935 given broad planning authority "for the purpose of assuring an abundant supply of electric energy . . . with the greatest possible economy and with regard to the proper utilization and conservation of natural resources."

Far from hosting a flock of environmental suitors, however, the FPC finds itself largely abandoned to the advances of the electric power industry. For all the public interest this powerful agency attracts, it might as well be the Fountains and Playgrounds Commission. Unfortunately, public inattention, and the irresponsibility of too many Commissioners, have wrought their effect. Originally a conservationist triumph over exploiters, the Commission now protects the very practices it should prevent. Of most immediate environmental concern are its failures in planning and licensing.

The Commission does no ongoing power planning. Its major planning effort has been concentrated in the 1964 National Power Survey and its forthcoming 1970 version. Unfortunately, the Commission has chosen to undertake these surveys by creating industry task forces and stitching together the work they produce. It does little or no staff work: the result is basically an industry concoction. Neither the public concerned about the environment, nor consumers, receive any representation on these task forces whatsoever, with the token exception of a recently appointed task force on environment. This pillar of public participation not only comes so late in the planning process as to be virtually powerless, it also contains a most unrepresentative membership. Seven members represent government agencies. Of the other three, one represents Commonwealth Edison; one is an engineering professor; and one is a conservationist.

Not surprisingly, the power surveys merely sanctify the industry's predictions of enormous consumption increases although the predictions themselves are

based on purely passive projections of historical trends, as computed and assembled by utility staffs. Nor has the Commission itself studied such questions as how efficiently we use power, the effect of rates on power use patterns, or the effect on unemployment of substituting electrical for mechanical power. Instead, it churns out speech after speech attacking those who oppose increased power consumption, chanting the industry's litany that such ideas are impractical, and piously proclaiming the goal of "serving the utility needs of the nation's consumers while preserving our environmental quality of life," in the words of Chairman Nassikas at hearings of U.S. Senate, Committee on Commerce, Subcommittee on Energy, Natural Resources and the Environment.

Turning from planning to the actual licensing of hydroelectric facilities, the FPC's present performance seems even worse. In the absence of informed public participation, licensing has come to encompass a multitude of sins. The most serious, from an environmental point of view, is that the formal licensing procedures come so late in the planning process that denial, substantial modification, or any other delay-causing move by the FPC with respect to a major project would be highly disruptive to power reliability, and therefore virtually out of the question. This circumstance has made intervention in these proceedings — the only good opportunity for public participation — mainly a prescription for costly frustration.

The one apparent exception, the Storm King case, merely illustrates the point. In 1963, Consolidated Edison sought to license a huge hydroelectric facility at Storm King mountain, on a scenic portion of the Hudson River. Since it planned the facility to be operational by 1968, its own planning procedures required it to know the site, design, and major engineering details of the project by 1958 at the latest. Yet, by delaying the application until 1963, Con Edison virtually assured a favorable FPC decision since, at that late date, alternative power sources to meet the 1968 demand could not readily be found. Thus, unless the FPC wanted to risk power blackouts, it had to grant the license.

The conservationists who intervened to seek denial of the license therefore played against a stacked deck from the start. Despite a battle which has lasted for over seven years, expenditures of nearly \$1 million, and donated services worth several million more, there is no serious prospect that the license will be denied. To be sure, the intervenors have won substantial modifications in the project design, but even this partial victory illustrates less the efficacy of intervening in

licensing procedures than the enormous effort required to obtain any success whatsoever. Unfortunately, Storm King, while spectacular, represents the normal approach to licensing of electric utility installations on both the federal and state level.

Despite the sorry state of the Federal Power Commission (exacerbated by the present Chairman's apparent belief that all problems can be solved by leaving them to state regulation and utility company benevolence), conservationists could not make a worse mistake than to turn away from it. It is the agency with both the power and responsibility to resolve many of the environmental problems of electric power. Indeed, the present failure of its planning and licensing procedures is partly attributable to conservationist neglect, and will change only when environmentalists pay it some attention.

Environmentalists might question the Commission's present planning efforts, publicize its incestuous parentage, and remain skeptical of its "findings." They could seek thorough reform of Commission planning; let the Commission engage in continuous planning efforts, including a search for answers to some of the basic questions that have been raised about the effects of electric power. Any such planning should permit adequate input from all interested parties. With respect to the National Power Survey, the Commission should insure adequate public representation on the advisory committees and task forces.

Environmentalists should also seek reform of the licensing procedures. Indeed, by permitting utilities to file applications so late in the planning stage, the FPC arguably violates the Federal Power Act which, according to the Supreme Court in *Udall v. FPC*, 387 US 428, requires it to fully consider all reasonable alternatives before licensing a hydroelectric project as "best adapted to a comprehensive plan" for the waterway. It seems clear that the Commission can hardly give full consideration to alternatives if, in fact, the application has been filed so late as to preclude their existence. One possible reform would be to require two license hearings on a project, one at an early point in the planning stage. It would impose no great burden on utilities to submit their projects ten or more years in advance for siting and design consideration and early submission would permit effective examination of utility planning, project choice, and facility design. Intricate safety and engineering details of the project could be left to a later proceeding.

There are various ways to exert pressure for such structural reforms (other than picketing and the like).

One of those most overlooked is talking with the people responsible—in this case, FPC Commissioners, high officials, and Congressmen on the Senate and House Commerce Committees. Invite them to events, write them letters, petition for rulemaking to remedy the problems. Another approach is to marshal Congressional pressure by getting Congressmen to make inquiries, hold hearings, or introduce legislation. A third lever of pressure, probably the most important, is publicity. Officials neglecting their job or doing it badly prove allergic to publicity and react quickly, for adverse attention bruises egos, damages careers, and embarrasses superiors. Lawsuits, where feasible, can of course provide the most effective pressure.

Structural reform takes time. Meanwhile, intervention can be highly useful, as the Club has learned in the cases to which it has been a party: Storm King, Grand Canyon, Hells Canyon, and others. While present procedures make successful opposition to important new projects exceedingly difficult, intervention can obtain modifications, and may even stop some projects. But the relicensing cases now arising provide a major opportunity for useful intervention. Many major hydroelectric licenses are expiring. Under the Federal Power Act, the government may “recapture” these projects, or the Commission may award the project license to the applicant or anyone else. Under the conditions of the law, the fair cost of takeover should be little or nothing in most cases, even though continued possession of the hydroelectric facility would be extremely valuable to the utility involved. These circumstances give the intervenor tremendous leverage to obtain modifications, promises, or other advantages from the vulnerable licensee. Intervention also provides an opportunity for communicating with the Commission in a persuasive way and changing its present outlook.

Notice of forthcoming proceedings appears in the *Federal Register* and local newspapers in affected areas. The easiest way to learn of them, however, is to subscribe to the free FPC News, published weekly by the Commission’s Office of Communication. The public generally has 30 days to respond to license applications. But the only effective response, practically speaking, is a formal petition to intervene.

While intervention can prove time-consuming and expensive, it automatically provides several benefits. First, it alerts the Commission staff to the application as requiring special attention. Second, the intervenor gains a chance to persuade the FPC staff of his position. The staff prepares its own position in each case, and obviously has resources and expertise which con-

servationists could use. Even if the intervenor doesn’t persuade the staff, he may receive assistance. Third, intervention forces the Commission to play fair. For example, the courts have ordered the Commission to consider a project’s environmental impact. But the staff, however pure its heart or convincing its case, cannot appeal Commission decisions; consequently, unless an intervenor stands ready to appeal, the Commission can ignore environmental impact with impunity.

The FPC responsibilities discussed here merely scratch the surface of electric power regulation. Under the Johnson Administration, the Commission made some tentative beginnings at exercising its long dormant ratemaking powers, antitrust responsibilities, authority to require interconnection between power systems (meaning fewer, more efficient power plants), and accounting duties. These powers give the Commission considerable leverage over electric power expansion and use. While the present Commission has relapsed into inactivity, state regulation of this powerful interstate business is so weak that environmentalists have no real alternative but to turn the present Commission from its cynically irresponsible retreat.

Finally, environmentalists must press Chairman Nassikas to follow his predecessor’s lead in seeking additional authority. For all its powers, the Commission lacks any control whatsoever over most steam-generating plants and transmission lines. Nor do many states have authority. Thus, incredibly, private utilities often choose plant sitings and transmission line routes with as much freedom as landowners have to locate their fenceposts. The Commission under Chairman Lee White introduced legislation to remedy this gap, and various Congressmen have proposed other legislation: such as S. 1071 by Senator Edward Kennedy, S. 2752 by Senator Edmund Muskie, and H.R. 7186 by Congressmen Richard Ottinger, John Moss and others. S. 1071 and H.R. 7186 particularly stress environmental concerns. While the Sierra Club has been supporting these measures, and indeed its Executive Director Michael McCloskey was asked to speak for conservationists at the hearing held early this year by Senator Muskie, it is crucial that more environmentalists emphatically support such measures. The public must be given an effective voice in these vital decisions.

Mr. Roberts authored the Atlantic Chapter’s report on Machiasport, and is now associated with the Center for Study of Responsive Law.



Feather

“One is constantly reminded of the infinite lavishness and fertility of Nature — inexhaustible abundance. . . . And when we look into any of her operations that lie within reach of our minds, we learn that no particle of her material is wasted or worn out. It is eternally flowing from use to use, beauty to yet higher beauty.”

— John Muir

“Sail”



Weed





Flower



Shell

THE RAPE OF BLACK MESA

By William Brown

Dot Klish Canyon is a long way from Los Angeles. In fact, it's a long way from any place, unless you think of Navajo trading posts like Pinon and Shonto as places.

But Los Angeles and Las Vegas, Tucson and Phoenix, and even Washington, D.C., have come to Dot Klish Canyon in a big way. They have ripped across it to get to Black Mesa's coal fields. They will strip mine the coal, then ship it to power plants being built at Page, Arizona, and Mohave, Nevada.

A few days ago I stood in Dot Klish Canyon and looked at the mess. The road to the coal plant smashes across the canyon twice. The bulldozers hit a steep ridge the first time, so they just turned around and rammed through another one. The double road-bed dams the wash in the bottom of the canyon, destroying the natural drainage. A Navajo garden downstream lies dry and abandoned in the sun. A nearby hogan stands vacant. It is a scene of brutal devastation, compounded by the most careless scalping kind of non-engineering. It made me mad.

Why were Dot Klish Canyon and the rest of Black Mesa and the people who live there chosen for sacrifice? Hanging from this question is a tale of environmental tragedy. It is a tale of the industrial octopus, created by the insatiable demands of its customers, reaching into remote places and tearing them apart. This is the hidden story of environmental destruction. It's what happens to people who speak quietly in strange tongues, to places away from highways and headlines . . .

The far Southwest and Southern California keep booming. Nobody asks if the growth is wise, if the earth can provide. These things are assumed. So utility companies and government agencies scramble to get power and water to fuel the growth.

All parties to this process reinforce each other. The Federal Power Commission warns of brownouts in Los Angeles. Business, industry, and local government take heed and join the chorus that demands more power. Tucson and Phoenix must have more water from the Colorado River, because they have already mined groundwater far in excess of natural recharge. The U.S. Bureau of Reclamation needs more power to pump water from the river into the Central Arizona Project. So it becomes the lead

federal agency pushing coal-fired power plants, which are trade-offs for the dams it couldn't build in Grand Canyon.

And, as cities become more crowded and unlivable, their victimized people have to blow off steam somehow, so Las Vegas has to have more casinos, advertised by more obscene neon signs. Finally, to cap this complex of functional and frivolous forces, all parties can join the moral cause of helping the poor Indians by industrializing their reservation. So the deals were made, the contracts signed.

Conservationists and ecologists are concerned about the coal-fired power plants operating, being built, and proposed in the Southwest. One that is operating near Farmington, New Mexico, daily spews out hundreds of fly ash and invisible poisonous gasses. Aerial tracking of the visible air pollution shows that this single plant (not yet in full operation) soils air, water, land and people over an area 100,000 square miles in the Four Corners region of New Mexico, Arizona, Colorado, and Utah.

What's going to happen when the Farmington plant is joined by its sister San Juan plant, by two more proposed in Utah, by two now under construction at Page and Mohave? Projecting the answer from the observed effects of the Farmington plant, Dr. Joseph J. Devaney of Los Alamos Scientific Laboratory paints a noxious smear from Southern California to the Rocky Mountains. Long-term weather inversions typical of this region will concentrate the smog. It simply means goodbye to the distances and spaces and mountain ranges floating over the plateaus and canyons of this great country.

But the effects of this huge power complex go far beyond esthetics. Thousands of tons of oxides of sulfur and nitrogen will poison the visible pall. These poisons have cumulative, and largely unknown, impacts on living things, including man.

Water from the Colorado River and its tributaries will be heated and consumed in vast quantities. This will concentrate the river's already high salinity, with serious effects on domestic, agricultural and industrial water uses in California, Arizona and Nevada, not to mention our good neighbor Mexico.

On and on the questions go — what about coal dust, pipelines, ash dumps, transmission lines, leach-

ing of soil, road and railroad construction, runoff from chemical and industrial processes? What will be the direct and indirect environmental results of all these insults? No wonder ecologists are worried.

A few statistics on one plant, the Navajo Generating Station at Page, hint of the magnitude of operations: 23,000 tons of coal consumed daily; stacks 700 to 800 feet high; 40,000 acre feet of water used annually (water flows through cooling towers at 270,000 gallons each minute); 765 acres for ash disposal; 1,021 acres for the plant itself; 800 miles of transmission lines to get power to delivery points; plant cost \$328 million, transmission lines \$172 million, railroad from Black Mesa coal plant more than \$20 million.

All of this investment and consumption will give the Page plant a 2,310 megawatt capacity. The total system of plants will have close to a 14,000 megawatt capacity. So, multiply the Page plant figures by six to get the size of the octopus spreading across the Southwest.

To date, conservationists have aimed their barbs at the plants themselves, by contesting air and water pollution control standards, devices, and operating efficiencies. The companies accommodate some changes but always qualify them with considerations of economic feasibility and a reminder of their primary responsibility—to produce more power—whatever the cost to the environment.

So it's back to Black Mesa, where the forces and powers come together, unwatched, to get coal—back to Dot Klish Canyon and the wrecked home of a Navajo family. Where are they now?

Black Mesa is a great highland in the Navajo and Hopi Reservations of northeast Arizona. It is hundreds of square miles of high valleys, dry washes, and aspen-laced piney canyons descending from a surrounding rim to a basin-like center. Navajo Indians live in the northern part—gardening and grazing sheep and cows. The southern end breaks away in a series of deep canyons interspersed by high peninsulas of the mesa. Here the Hopi Indians have their villages. These remarkable people have lived here nearly a thousand years—just about the way they live now.

An island of forest and grass in the desert, last outpost of ancient cultures—that's part of what Black Mesa is about.

But then there is the coal. It is spread thin over the 64,000-acre mining lease in the Navajo Indian Reservation and the Navajo-Hopi joint use area. That means extensive stripping and wide-spread devastation. It means networks of roads, big roads to carry

100-ton capacity loaders.

Today, the main road from U.S. 164 to the coal processing plant steals the scene. From the point where it leaves the highway and climbs the north rim of Black Mesa, then cuts across drainages and ridges for 15 miles to the coal plant, this road is a monument to all that is ecologically and esthetically wrong. It straight-lines and crosscuts the land in a massive swath of destruction. It is a line-of-sight road that violates every engineering principle. This means flooding and washouts and all manner of drainage destruction and clogging. Cuts through the ridges make no attempt to run with the contours. Huge expanses of bare, wounded earth will slump and slide, and the bulldozers will come back to shove the debris into the washes. The road is a crime, a gash, and a folly.

This road is 15 miles long. Debris alleys along the sides (where all trees and vegetation have been grubbed out) make it 150 feet wide in places. Add to this the parallel, equally devastated power line swath. Add to this the full network of mine roads. Add to this the thousands of acres of strip-mine devastation. Upshot: goodbye Black Mesa.

What about the people? They are traditional Navajos. Few of them speak English. They and their ancestors have lived here for a long time. They will be displaced; "relocated" is the term. But to where? For traditional Navajos (not the urbanized, Anglicized progressives of Window Rock who signed the lease contracts), there simply aren't any places to go. All favorable areas of the largely barren Navajo Reservation are already occupied. Functionally illiterate and unemployable for industrial and urban life, deprived of their gardens and pastures, these people will be refugees. But what the hell? This is progress.

While I was driving on the road to the coal plant, a big truck came roaring through. I moved over to the shoulder and closed the windows against the immense dust cloud swirling from the truck. Later I got to a high point where I could see the truck booming on toward the plant. On the road ahead of the truck was a Navajo pick-up going the accustomed 30 or 40 miles an hour (to save gas). The truck blew its horn, the pick-up moved over a little, its bed full of children. The whole scene disappeared in the cloud of dust, and when it settled the pick-up was in the ditch. "Move over boy," that scene said. "We're comin' through." It sort of symbolized the whole future for these displaced Navajos of Black Mesa.

You might be tempted to say, "Too bad about the Navajos, but at least the Hopis will be okay. They're

Monument Valley, Navajo Indian Reservation.



a long way from the coal fields."

That would be hasty. Because now we come to water. The coal mining lease lies athwart the drainages that head on Black Mesa's high rim, then flow southerly and southwesterly to the Hopi farmlands and beyond to the extensive Navajo farms in Moenkopi Wash. Spring snow melt and summer rains turn these usually dry washes into streams that water the Indian farms.

Once the strip mining starts it will interdict this flow of surface water. Artificial channels through the mine fields will be only partially effective. Much water, held in check by the torn up landscape, will leach into the ground. Water that does get through will carry in solution undetermined amounts of sulfuric acid. What does this portend for the Indian farms?

Aside from ruined, poisoned drainages and streams, there will be unknown effects on the ground water that feeds desert springs. Some of the acid-loaded leach water will reach underground water tables through fractures in the overlying rock.

Another problem: the coal that goes to the Mohave plant will be pumped through a slurry line 275 miles long. It takes lots of water to make slurry and push it through a pipe 275 miles long. That water will be mined out of Black Mesa by deep wells. According to the pump operator it will take 2,000 gallons of water a minute.

Now for some geology. Black Mesa, though topographically a highland, is geologically a structural basin. In terms of groundwater, that makes it a low point. Skeleton Mesa to the north is higher. So are the Hopi villages, and the springs that give them life. The main aquifer of the region (that's where the groundwater is) is the Navajo Sandstone. This sandstone formation is 3,000 feet deep under the Black Mesa. It is higher in the surrounding areas. And, water flows downhill.

Pumping 2,000 gallons per minute out of Black Mesa will produce unknown effects on the surrounding parts of the Navajo and Hopi Reservations. Life on these reservations is pretty hard already. Take away the water and it will be impossible. Upshot: goodbye Hopis and many more Navajos over many thousands of square miles.

That about sums it up. The land, the water, and the people of Black Mesa are expendable. They have to be sacrificed to the demand for more power. That's how Los Angeles and Las Vegas and the rest of the big cities got to Black Mesa. That's how the poor Indian got helped.

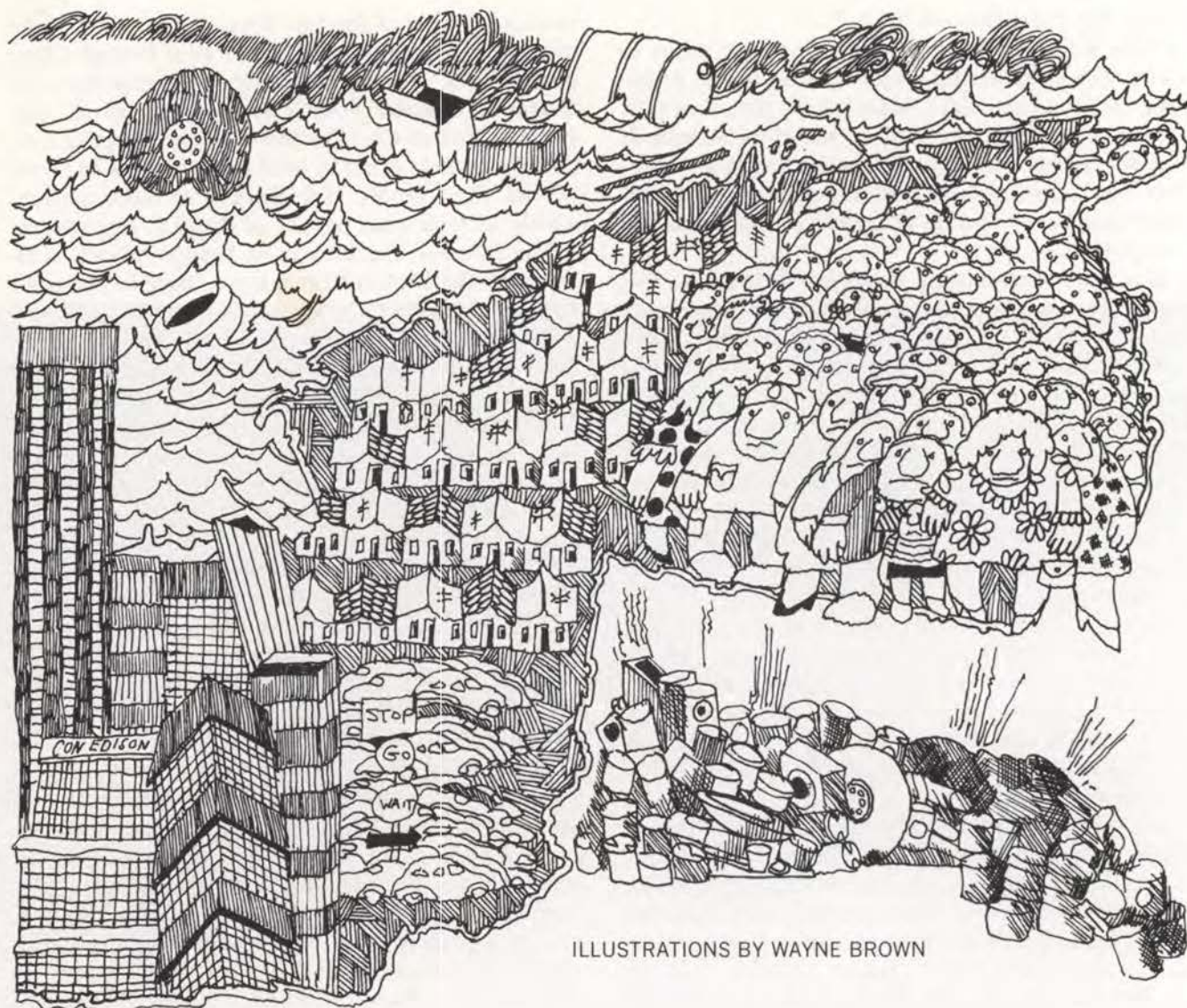
It might ease the pain a bit to hear about the environmental protection plans put out by the public

relations people of the Salt River Project. This is the managing utility for the Navajo Power Project. Other participants are the Los Angeles Department of Water and Power, Arizona Public Service Co., Nevada Power Co., Tucson Gas and Electric Co., and the biggest of all in terms of kilowatts to be received, the friendly U.S. Bureau of Reclamation, which, with its sister agency of the U.S. Department of the Interior, the Bureau of Indian Affairs, is always on the lookout for ways to benefit the poor Indian.

The best short statement of the Navajo Power Project's environmental policies is the one entitled "Environmental Policy." Part of it states: "The policy of the Salt River Project is to take whatever steps are technologically and economically feasible to protect the environment, while fulfilling our primary responsibility of providing adequate low-cost water and power. We will: conduct those studies necessary to obtain a complete understanding of how any new facility or activity may effect the environment, and take appropriate action to provide that protection; avoid the return of water to lakes, rivers or streams which has dissolved solids or other material which would be detrimental to the ecology of the area as determined by ecologists, biologists and controlling agencies; design and landscape all new facilities so that they will blend pleasingly with the surrounding area; inspect and survey all new facility sites so that any historic or archaeological materials can be saved for posterity; and work harmoniously with all federal, state, and local agencies and groups responsible for or interested in the protection of our environment."

I wonder where the ecologists were (much less plain journeymen engineers) when they built the road? I wonder if the Salt River Project and its coal mining and processing agent, the Peabody Coal Company, have gone beyond dollars and gallons per minute in their hydrologic studies of Black Mesa. I wonder, when they piously talk of historical and archeological salvage, if they include living cultures a thousand years old? I wonder if they could care less?

Mr. Brown is a former environmental awareness specialist for the National Park Service. He is living in Santa Fe and authoring a book. The organization working to help Black Mesa is the Central Clearing House, 107 Cienega Street, Santa Fe, New Mexico 87501; this article is reprinted from the New Mexico Review and Legislative Journal.



ILLUSTRATIONS BY WAYNE BROWN

NEW JERSEY: CONSERVATION IN A CROWDED STATE

By George Schindler

The 1960 census showed New Jersey to be the nation's most densely populated state, and in the subsequent years the population has grown until now there are nearly 7.5 million people on New Jersey's 7521 square miles of land. With this density of almost 1000 people per square mile, Ohio would have 41 million people, Florida 58 million and California 158 million.

Having a population density greater than that of the Netherlands, Japan, India or mainland China is only one of New Jersey's problems. Another, and in some ways an even more basic problem, is the state's

historical lack of identity. Long regarded by outsiders as merely a series of way-stations en route from Philadelphia to New York, New Jersey as a result has an insufficient sense of statehood or of independence from its neighbors—a fact that has many odd consequences. For example, New Jersey has no major network TV, so retailers obtain without cost the benefit of TV advertising from New York and Pennsylvania stations, whose antennas cover most of the state. It is said of the average north Jerseyite that he knows more about the politics of New York City than of his own community. Further, to avoid taxes the state has

always sought unusual ways to collect revenues—ranging from inviting in Tories after the Revolution to engage in foreign trade, through charging “transit duties” on railroad freight and passengers in the mid 19th century, to the modern “sin” taxes on liquor and gambling. To put it bluntly and perhaps uncharitably, New Jersey is a freeloading tax haven. It depends on its big-city neighbors not only for television but for jobs, business services of many kinds, medical and social-service facilities, recreation and cultural activities, yet does not pay in taxes its fair share for the creation and maintenance of these amenities. New Jersey until recently had no broad-base tax; now there is a sales tax. Near the top among the states in per-capita affluence, it is near the bottom, if not at the very bottom, in per cent of per-capita income devoted to state services. A disproportionately high percentage of students leave New Jersey for college, because of inadequate support for higher education. It is hardly surprising, then, that in these circumstances the preservation of open space and natural areas has suffered from neglect.

Tending to be a collection of pleasant suburban communities, New Jersey also has enough concentrated urban decay to cause rioting. Priding itself as a “research state,” it nevertheless has enough heavy industry to scar the land in many areas. A pall of air pollution usually hangs over most of the eastern edge of the state in the New York metropolitan region. The rivers in that area are badly, visibly polluted (one of the big ones is the Passaic; at low flow it consists in places of over 50% sewage). New Jersey accepts massive amounts of garbage from out of state. There is not even much architectural innovation to mitigate the unrelieved ugliness over large sections. Hyper-industrialized and hyper-residentialized already, New Jersey has chambers of commerce that plead for more and more industry (in this they are joined by most municipal governments calling for more “tax ratables”). The results are predictable. Parkland is neglected and, just as students leave New Jersey for college, residents in search of something more than playgrounds with bumper-to-bumper picnic tables head for Maine, the Adirondacks or points west and south (this is why you see so many New Jersey license plates on the nation’s highways). The less affluent, however, are stuck in their pressure-cooker environment.

Confronted by this situation the old-line conservationist might be tempted to write off New Jersey as a total loss, deciding that efforts could more profitably be spent elsewhere. But this would be a mistake. The

situation is not so hopeless as it appears from the more frightening statistics. The citizens were wise enough in 1961 to pass a “Green Acres” bond authorization to acquire land and give it a degree of protection. There is open land. One frequently hears that New Jersey is two-thirds or three-fourths “undeveloped,” and while such statements are debatable, depending on one’s definition of development, the fact remains that large portions of the state are still relatively unmarked by man. Previously acquired parks, plus Green Acres (the program is unfortunately now out of funds), plus foreseeable additions will probably amount to some 480,000 acres, or ten per cent of the state’s total. While much of this is highly developed recreationally, it is at least free of housing, heavy commerce and industry. There are forests and farms, and 300,000 acres of coastal wetlands.

In the northeastern part of the state, and only 30 miles from Manhattan, lies the 3750-acre Great Swamp Wilderness Area, which must surely hold some sort of record for intensity of citizen-outcry per acre of wilderness—a record established a few years ago when the Port of New York Authority tried to build a jetport there. In the southern part of the state lie the Pine Barrens: 1875 square miles of white sand and white cedars, pitch pines and oaks, and 15,600 billion gallons of almost chemically pure fresh water—an area unique in the experience of most people hiking or canoeing through it for the first time.

The Barrens (which, incidentally, are not “barren,” containing as they do a profusion of northern, southern and rare species of flora and fauna that are a naturalist’s delight) are the last of the very large wilderness areas left in the state. But many small pockets of wilderness or near-wilderness are scattered here and there. And there are other amenities. Unless one is traveling the maximum distance it is possible to travel in this small state, almost any point in New Jersey is reachable by auto in an hour-and-a-half or less. Hiking, camping, backpacking and canoeing are year-round activities, except for only a few of the coldest and snowiest days. In fact, one can easily do worse than enjoy the outdoors in New Jersey autumn, winter and spring, then escape to higher ground during the hotter, more crowded months. One can even claim more and say that a walk along the Kittatinny Ridge in the early spring when the shadbush and dogwood are in bloom, or a stroll along Island Beach by the Atlantic, or a canoe trip down the Mullica or the Delaware, can compare in scenic impressiveness with almost any other outing in the country. New

Jersey was, and to a certain extent still is, a very beautiful state.

Federal holdings are not extensive. Besides the Wildlife Refuge and Wilderness Area in the Great Swamp, there is the Brigantine National Wildlife Refuge near Atlantic City, plus a number of other smaller areas and national monuments. The most significant recent federal development is the establishment, currently in progress, of the 72,000-acre Delaware Water Gap National Recreation Area along the Delaware River in Pennsylvania and (44,000 acres) in New Jersey. When completed, the DWGNRA will be the major recreational facility in the northeast, with usage estimated—probably conservatively—at ten million visitors per year. The land has great recreational potential, but unfortunately 14,000 acres of it is scheduled to be inundated by a huge reservoir, backed up along 37 miles of the Delaware River behind a 120-foot high earthen dam near Tocks Island, about five miles upstream from the Water Gap. If built—and there are grave doubts that it should be—the dam will be footed in some very shaky shales and sandstones, and consequently will require expensive engineering measures to make it safe. In an effort to arrive at an attractive benefit/cost ratio to justify \$230 million cost of the dam the Army Corps of Engineers, according to a recent study, failed to subtract out the benefits of existing recreational facilities that would be covered by the reservoir, and incorrectly included benefits from recreational facilities that are expected to spring up outside the Area.

Another federal project of great significance is the proposed Gateway National Seashore at the entrance to New York harbor, announced in May 1969. In addition to its sections of land in New York (including Breezy Point, Jamaica Bay and a part of Staten Island) it would include Sandy Hook peninsula in New Jersey, which is the southern part of the entrance to the harbor, and, hopefully, portions of the Atlantic Highlands. Sandy Hook is the last stretch of undeveloped seashore of any size left for preservation in New Jersey, and is therefore the subject of many park proposals.

Still another possible and very desirable federal project is one proposed by Dr. Jack McCormick of the Philadelphia Academy of Natural Sciences—a plan to give a form of federal protection to the watershed of the Wading River in the Pine Barrens, a region of great ecological value. And in New Jersey there is a park project which, though small, is of considerable symbolic importance. This is the effort to beautify

the waterfront close to the Statue of Liberty and thus give the Lady the setting she deserves.

Distinguishing possibilities from actual performance, however, one quickly realizes that scenically and environmentally, New Jersey is on the edge of disaster. Within the next five to ten years, depending on the way public sentiment turns, New Jersey can begin to preserve the best of its remaining undeveloped areas, or New Jersey can continue on its present headlong course toward what State Assemblyman Thomas Kean has described as potentially the first completely “wall-to-wall concrete state.”



So, rather than being devoid of conservation interest, New Jersey, it can be argued, is the scene of one of the most significant conservation struggles of all. If the American people ever wake up to the realities of what massive industrialization and overpopulation are actually doing to them, this awakening could quite conceivably take place in such a highly developed, crowded region.

Conservation issues in New Jersey range over so many subjects—dams, highways, land grabs, bad zoning, pollution, and other forms of environmental outrage—that a few examples must suffice to suggest the whole. (The Sierra Club, North and South Jersey Groups, is concerned with all of these issues and is actively involved in many of them.)

Item: A nature center is opened near Batsto, a restored village of historical interest in south Jersey, but it is soon closed. Reason? Vandalism, littering by beer cans, and other forms of destruction. Another nature center, this one of advanced design, is opened in Bergen County. Within two weeks the pedestal-mounted descriptions along a nature trail are vandalized. In the Great Swamp an amateur naturalist discovers a patch of wild orchids. He goes back next day to photograph them but finds that they are all picked.

Item: The Port of New York Authority did not give up when it lost the battle of the Great Swamp. Still regarding New Jersey in the traditional way as just so much “unimproved” real estate, and in spite of all



common sense and all rational concern for nonmaterial human needs, the Port Authority insisted on a fourth jetport in the northern, more densely populated part of this desperately overpopulated state. And if the previous state administration had had its way, the fourth jetport would have been built in the Pine Barrens. The new Governor, William T. Cahill, seems unfriendly to jetports, so the issue is temporarily quiescent.

Item: The New Jersey Division of State and Regional Planning looks forward to a population of 10 million in 1990 and to what the Division blissfully calls the ultimate, "horizon" population of 20 million. Some horizon. (Often it seems that no one ever entertains the possibility that any of the growth curves—whether for seat-miles of airline travel, population, miles of highway, industrial output, housing units, or anything else—will ever level off.)

Item: A family sells the beautiful, mountainous Worthington Tract to New Jersey, hoping to preserve it from commercial development, only to have the Governor in 1961 sell 715 acres of it, including spectacular Sunfish Pond, to a group of power companies for a pumped storage installation.

Item: The Hudson County Freeholders, with the concurrence of the Hudson County Park Commissioners, suddenly announced last year that an area on top of the Palisades overlooking the Hudson River and the Manhattan skyline was "excess parkland" which they would be glad to sell to a developer if he would be so kind as to build a 30-story apartment building on it. This was too much even for notorious Hudson County, and the project was killed in the courts.

Item: The Army Corps of Engineers recently announced a flood control plan for the Passaic River. The favorable benefit/cost ratio is based in large part on having 7.8 million recreational visits per year on only 3200 acres of land. The plan has as a goal the improvement of the environment, but the language of

the plan renders this goal suspect because open space becomes "unimproved land," wetlands become areas to be "enhanced" by drainage, and swamps become nothing but "breeding grounds for mosquitoes." And a basis for the plan is the fear that throughout the river basin "economic growth is being jeopardized."

Item: Interstate 80, headed for a housing development, veered instead around the development and consumed a large part of Great Piece Meadows, an important migratory station on the Atlantic flyway. Interstate 280 is slicing through Troy Meadows, another valuable wetland, and is also cutting off access to a park by Newark's ghetto poor. Interstate 78 is slicing off a section of Watchung Reservation, a heavily used, badly needed park.



Item: A dedicated conservationist with his own funds is attempting to save a 3000-acre tract, Sussex Woodlands, which, among its many wilderness values, includes what could be the last two resident wild black bear in the state of New Jersey. But the local community has zoned the property, though mountainous, as 1½ acre residential lots and is taxing the land beyond the owner's financial means.

And so it goes. Under the doctrine of constant, unlimited growth, the state may succeed in all its economic efforts only to find that when the "horizon" population of 20 million is reached, it will have failed its citizens. New Jersey at that point may discover that it has achieved its maximum possible share of the GNP, but at too great a price in natural resources.

Hopeful signs include a rapidly rising Sierra Club membership, establishment of conservation commissions in various communities, and conservation-oriented organizations springing up all over the state. But the momentum of the GNP delusion is very great, and it will take a tremendous effort to prevent total urbanization.

Mr. Schindler is the Conservation Chairman of the Club's Atlantic Chapter.

watts from Storm King, we wouldn't be in this fix," a Con Ed spokesman told the *New York Post*. Noting that two major Con Ed power plants are shut down for the summer due to mechanical breakdowns, the Executive Director of the Scenic Hudson Preservation Conference said, "Even if we had Storm King, it would probably not do any good in this situation."

In 1965 the New York Federal Court of Appeals ordered the Federal Power Commission to reevaluate the proposed Storm King plant because of its possible adverse environmental impact. The FPC is expected to reach a decision this fall. "When Storm King was stopped by the court order, Con Ed knew it faced long delays, if the plant would ever be approved at all. We suggested then that Con Ed should look for other power sources, like gas turbines. If they had put turbines in at that time, we wouldn't have this crisis today," claimed Peter Borrelli, the Club's Eastern representative.

ACTION NOW

NORTH CASCADES

Although a national park and two magnificent wilderness areas have been set aside in the North Cascades of Washington state, much of the best of this country was omitted in the compromise legislation which established these parklands in 1968. The undesignated area remains under the jurisdiction of the U.S. Forest Service in a vaguely defined "multiple use" category, which permits much destructive logging. Now, the Forest Service, in response to public pressure, has announced new classification proposals which would place more emphasis on the scenic and wilderness values of some 800,000 acres. The proposals would also establish some 250,000 acres of the area as roadless and bar logging in the long contested drainages of Buck, Downey, and Lost creeks.

Conservationists feel that these are much needed proposals. The timber industry feels otherwise, and has mounted a full scale assault on the whole concept. "This crucial issue hangs in the balance as the Forest Service makes up its mind what to do. Northwest conservationists are issuing an urgent plea for letters from across the country to help save these 800,000 acres of spectacular scenery and wilderness," Brock Evans, the Club's Northwest representative, reports. Letters expressing support for the Forest Service proposals and asking for stronger protection of this wilderness from logging should be sent to Harold Chriswell, Supervisor, Mt. Baker National Forest, Federal Building, Bellingham, Wash.

WATER PARKLANDS

Measures to establish a Gulf Islands National Seashore and a Sleeping Bear Dune National Lakeshore moved ahead in Congress last month. H.R. 10864, to establish a 20,340-acre National Seashore in Louisiana, Florida and Mississippi, was favorably reported to the full House Interior Committee. The House Parks and Recreation Subcommittee approved for full committee action H.R. 11929, to establish Sleeping Bear Dunes National Lakeshore in Michigan. A vote on the bills is expected in September. Also reported favorably out of the House Parks and Recreation Subcommittee session was S. 2208, authorizing an Interior Department study on the feasibility of a national lakeshore on Lake Tahoe.

AEC DUMP

Central Kansas will be the site of a 1000-acre underground storage facility for atomic waste, the Atomic Energy Commission has announced. An abandoned salt mine plus an underground pit that the AEC will dig will be the only repositories of radioactive waste in the country for the next 25-30 years, because of the location's reportedly low amount of seismic movement. The equivalent of 120 55-gallon drums of high and low level waste will be deposited daily in either granulated or liquid states, enclosed in multi-walled containers. (High level wastes from nuclear power plants are intensely radioactive spent fuel materials that will remain hazardous for thousands of years. Low level wastes are anything contaminated by high level wastes, such as tools, gloves, etc.). Ronald Baxter, chairman of the Rocky Mountain Chapter's Kansas Group, reports that the Kansas Geological Survey at the University of Kansas has refused to endorse the AEC site until a two-year study has been completed on its geological safety. "The Sierra Club Kansas Group maintains its opposition to the establishment of any storage facility in the state of Kansas — unless further study and tests insure the safety and integrity of the site and the transportation methods," the Group resolution stated.

MICHIGAN ACT

The Michigan State legislature has passed an Environmental Protection Act that arms private citizens with the power to take government and industry to court for acts endangering the environment. "The purpose of this legislation is to let individual citizens compete with agencies in a constructive way. Every citizen can be a Ralph Nader," said one of the Senate sponsors of the bill. The Act allows a citizen to seek a court injunction against the state, industry, or a private group for alleged pollution. The court, in turn, can impose conditions and penalties to

prevent irreparable injuries to natural resources of the state. In addition, the court can investigate anti-pollution standards set by the state agencies, and, if evidence warrants it, order a review of those standards.

FOUNDATION GRANTS

The Sierra Club Foundation has given \$100,640 in grants to the Club's non-legislative projects and to the environmentally oriented programs of other groups so far this year. Most of the projects could not have been undertaken without many generous contributions, primarily from Club members. The Foundation supports substantially the Club publications, film and campus programs. It provided aid for this spring's national Environmental Teach-in programs. Foundation funds support legal efforts on behalf of the Hudson River; Pennsylvania's Tincum Marsh; Southeast Alaska; Mineral King; and the French Pete de facto wilderness in Oregon. The Foundation will soon support a Club legal staff member. A substantial grant has been given the Center for Study of Responsive Law (a Ralph Nader group) for a study of the administration of California public lands.

OUTINGS 1971

Micronesia, the "little islands" of the Pacific, will host five Club outings for three and four weeks in February and March, 1971. Highlights will include a visit to the Marshall Islands, Ponape and hiking in the area's highest mountains amidst lush foliage and fresh water streams, and the Truk Islands for a glimpse of island village life, food and dancing. Cost of the trip will be approximately \$1100-1300.

Two natural history oriented Nepal trips will start April 2 and 23. The four-week trips will include visits to Kathmandu Valley amidst a profusion of mountain rhododendrons and migrating birds, and tropical Terai country. Naturalist Dr. Robert Fleming will accompany the outings. Cost is approximately \$1800.

A February Galapagos Islands trip will include 23 days of island exploration. Details on all trips may be obtained from the Club Outings Department, 1050 Mills Tower, San Francisco, California 94104.

OUTING PHOTOS

Black and white photographs (preferably 8 x 10) are needed for the 1971 Annual Outing Issue of the *Bulletin*. Photographs taken on Club outings or ones that would be appropriate in the Outing *Bulletin* should be sent to the Outing Editor, Sierra Club, 1050 Mills Tower, San Francisco, Calif. 94104. Indicate if photos may be kept for future *Bulletin* use, or if they are for one time use. Photographs must be submitted before October 30, 1970.

WASHINGTON REPORT

Oil companies seeking to exploit the vast oil deposits of Alaska's North Slope have been playing a waiting game in recent weeks. They can afford to wait, because of a number of things that have occurred in Washington. In the end, they expect to win concurrence for their plan to pipe oil for 800 miles from Prudhoe Bay to Valdez.

Here is a synopsis of the elements which may give the oil companies the go-ahead they need to push the pipeline across Alaska:

(1) The land order issued by Interior Secretary Stewart Udall shortly before he left office in January 1969 — Public Land Order 4582. This order "froze" all unreserved lands in Alaska from disposal while Congress was considering the claims of Alaska natives that their use and occupancy of many millions of acres gave them rights to title and ownership.

Shortly after this order was issued, President Nixon appointed Walter Hickel as Secretary of the Interior to succeed Udall. At his confirmation hearings, Mr. Hickel said he would not rescind the Udall land freeze during the 91st Congress. His commitment to observe the land freeze was only for the 91st Congress. At any rate the land order expires at midnight December 31, 1970.

(2) The Classification and Multiple Use Act governing 400 million acres of public domain under the jurisdiction of the Bureau of Land Management. This act, unless extended in the few months remaining in this Congress, will expire on January 1, 1971. Without this act, the Bureau of Land Management will have no authority to classify how some 235 million acres of land in Alaska are ultimately utilized; whether it is to be disposed of or retained in Federal ownership.

(3) The Alaska Native Claims Act. Legislation to allocate 10 million acres of Alaska land to the natives has passed the Senate, but is still pending before the House Indian Affairs Subcommittee. Prospects for its passage before adjournment of the 91st Congress are remote, to say the least.

(4) The Federal Court injunction barring Secretary Hickel from issuing rights-of-way to the Trans-Alaska Pipeline Systems for a haul road and oil pipeline corridor. This action was based on the contention that Interior had not complied with the National Environmental Policy Act of 1969 (which requires reports on environmental impact for new Federal projects) and that the width of the right of way sought by TAPS exceeded limits set by other law. Alaska natives also have gone to court to block pipeline crossing of vil-

lage land; but once their claims are recognized, future litigation is uncertain.

(5) During the 91st Congress, Interior Committees of the House and Senate have taken action on two requests of Secretary Hickel that the Udall "freeze" order be modified. The first modification approved by the Committees permitted construction of a key 60-mile stretch of the Trans-Alaska Pipeline Route.

The second change was a request that the freeze be lifted entirely for any route and facilities which Hickel deemed necessary for the TAPS construction program. The Senate Interior Committee acquiesced to this, and the House Committee endorsed it after considerable debate and a split vote.

How come the situation looks so good for the oil companies? The reason is: the Alaska Statehood Act.

The legislation which created Alaska as the 49th state gave the state preferential right to select 104 million acres as state property from all unreserved land in the territory. This means it can select anything not in native villages, national forests, national parks, national wildlife refuges, in military reserves, or classified by the Bureau of Land Management. The Udall land freeze has held up this right of selection. On January 1, Hickel's obligation to retain the freeze will expire, as will the freeze order itself.

The Federal Court order applies only to the federal land under Hickel's jurisdiction. Once the State of Alaska has selected the land to which it is entitled — including acreage for the pipeline — the injunction will no longer apply. The Trans-Alaska Pipeline can be laid over state-owned land, under terms determined by the State of Alaska, without being bound by the rather stringent federal stipulations which were to accompany any construction permit.

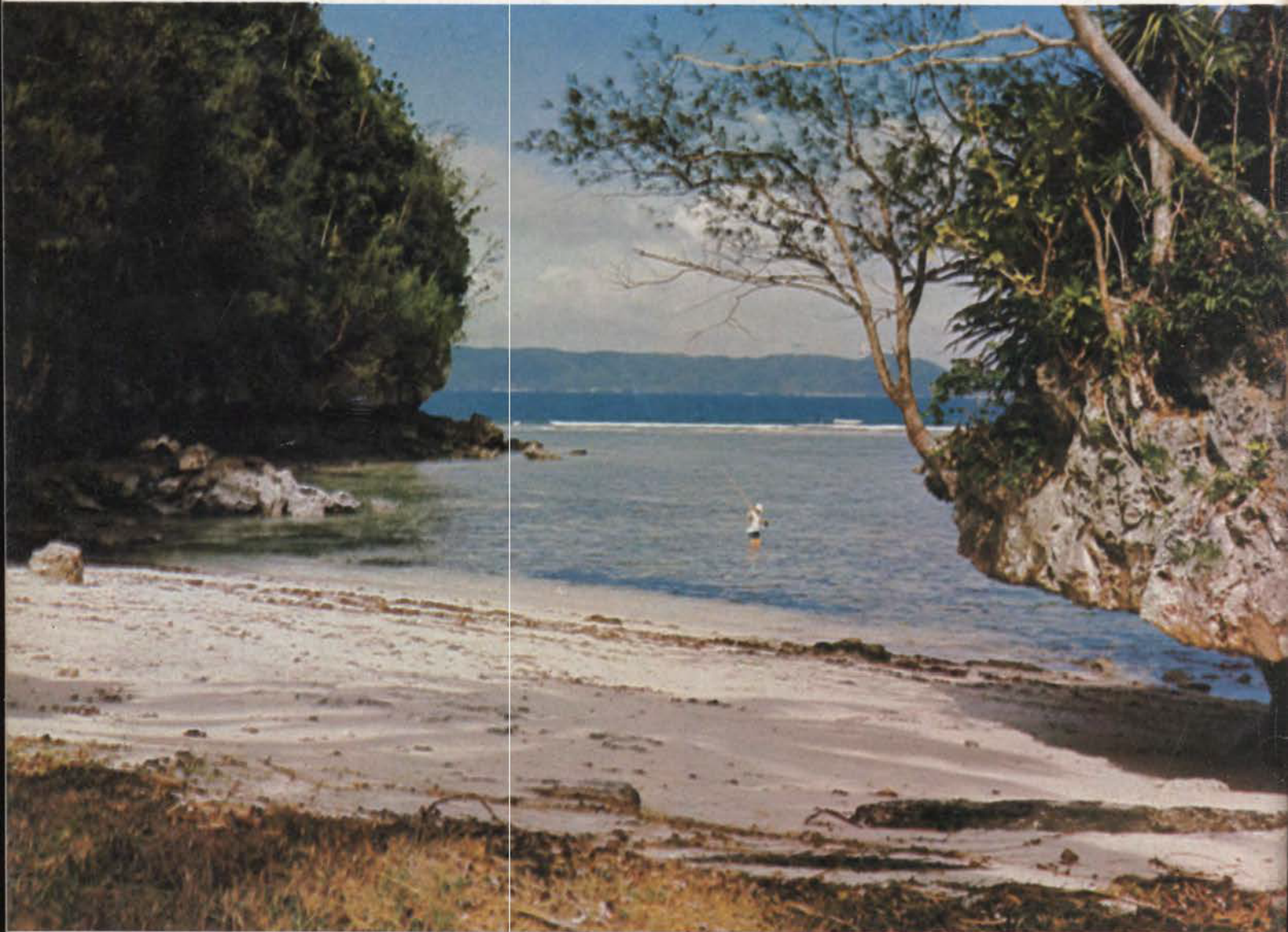
Of course, things could change so that the oil companies would not have carte blanche, come New Year's Day. Congress could extend the Classification and Multiple Use Act; Secretary Hickel could renew the Udall land freeze order, or Congress could require that he do so. Alaska could elect a Governor determined to protect his state's environment, or President Nixon could step in and take leadership so that the last great uncontaminated area of our nation is adequately shielded.

But there is no reason for optimism that any of these things will happen. On campuses and in millions of homes, environmental protection is the watchword. But in the political arena, oil is still king.

— W. Lloyd Tupling

RE.

Palau District, Western Carolines, Micronesia



— 1971 Outing to Micronesia, see page 22.