

Sierra Club
BULLETIN/JULY 1970



EDITORIAL

A second summer is passing in Alaska without construction beginning on the oil pipeline and an access road north of the Yukon. Yet the impact of preliminary work for both is profound, and Prudhoe Bay is already one of the largest industrial complexes of Alaska. Huge stocks of equipment and pipe have been deployed, and north of the Yukon construction camps stand ready with routes already bulldozed across the tundra.

A national newspaper chain has blamed the Sierra Club for bringing this development to a stop and accuses us of being irresponsible. Indeed, the club has joined with other conservationists to stop the headlong rush to get the oil out as soon as possible, but who is really irresponsible in the matter?

If the oil companies had not been stopped, construction would already be well under way. Yet it is now abundantly evident that too little study had been done by last year to provide a safe basis for proceeding. Even the engineering studies had not been finished, and questions still remain over how to insulate buried pipe. The geological studies are still being completed this summer, specifically on the area north of Fairbanks which poses the toughest construction problems. The biological studies have only begun, and water quality studies won't be finished until next spring. In a reconnaissance report, the Fish and Wildlife Service complains of "unrealistic timetables" and admits frankly that "the complex interrelationships" . . . could not be assessed adequately in the short time available."

If the oil companies had been allowed to go ahead, the U.S. Geological Survey would not have been able to discover the unsolved permafrost problems in the Copper River Basin. The U.S.G.S. now insists that no more than 50-60 per cent of the pipeline can be safely buried, although the companies wanted to bury 90 per cent of it. The probability of rupture is greater with buried pipe, but burying it is cheaper and leaks are harder to detect.

TAPS has still not given the U.S.G.S. answers to its questions about safety in the Copper River Basin, and safety questions have not even yet been asked about the difficult Fort Hamlin Hills area north of Fairbanks. Federal Water analysts have yet to figure out how to adequately monitor the pipe for leaks, which could ruin local streams. The Fish and Wildlife Service has not been given the time and money to do proper ecological surveys. And if much of the pipeline is put above ground, nothing is yet known about its effect upon caribou migrations. Little, too, is known about the effects of ballast oil on salmon in Valdez Harbr, about the effects of development at Prudhoe Bay on Arctic waterfowl, and how great the toll will be of wildlife which cannot tolerate man: dall sheep, grizzly bear, wolves, foxes and falcons. Neither has anyone yet thought through questions of esthetic impact, as at Thompson Pass, where the pipeline would require huge cuts in the sideslopes.

In short, the oil companies were willing to fly blind in the rush to get the oil out. Mistakes have already been made, and major disasters threaten. Each additional study brings new problems to light, and each delay allows more studies to be completed.

It is the oil companies who have been irresponsible in trying to panic everyone into instant development. It was their monumental presumption to invest \$200 million in supplies and equipment before anyone knew where, when, and how a pipeline could be safely built and at what financial and environmental cost.

They stand doubly indicted for their premature haste and their presumption.

Michael McCloskey
Executive Director



Sierra Club

BULLETIN/JULY 1970

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

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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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NEWS

FEDERAL REORGANIZATION

President Nixon has announced a reorganization plan for combining federal environmental regulatory agencies into one independent Environmental Protection Administration. Under the new plan, water pollution, air pollution, solid waste disposal, pesticide standards and controls, and radiation regulation would be taken from their respective departments and from the Atomic Energy Commission and consolidated into a new agency. Senator Gaylord Nelson of Wisconsin said the President's plan "should result in a much tougher more effective federal role in dealing with polluters of all kinds."

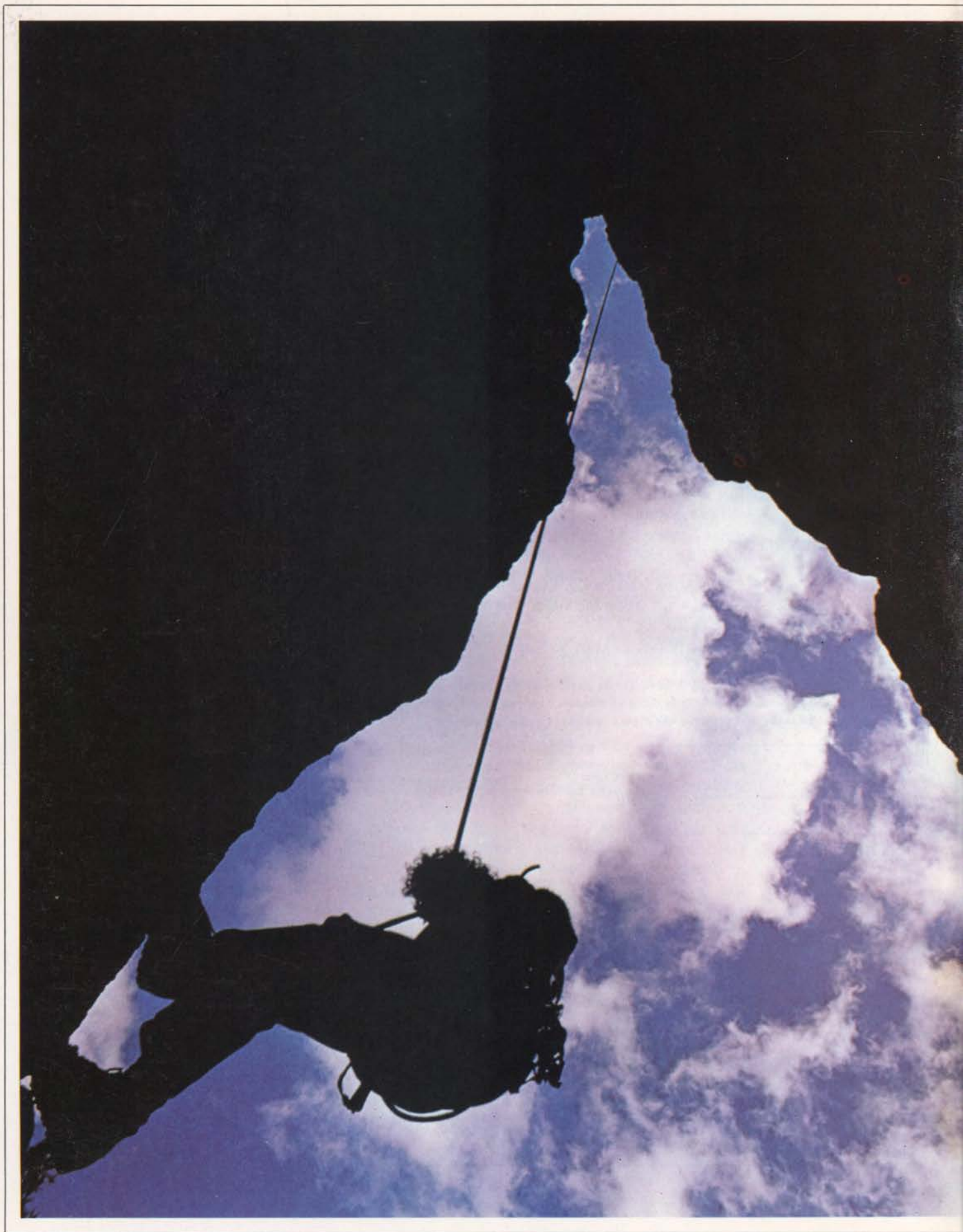
The President has also disclosed plans for a National Oceanic and Atmospheric Administration (NOAA) under the Department of Commerce. This new bureau would expand the existing Environmental Science Services Administration by adding the functions of the Bureau of Commercial Fisheries, Corps of Engineers Great Lakes Survey, Coast Guard buoy development, and Navy's National Oceanographic Center. Nelson expressed concern about this aspect of the reorganization proposal, questioning whether putting the major federal responsibility for the future of the oceans in the Department of Commerce "is the way to establish a national commitment to protect the vital marine environment."

WILDLIFE JURISDICTION

Information has reached the Sierra Club that there is a move underway in the Interior Department to turn over wildlife management within national parks to state game and fish departments. The National and Western Associations of Fish and Game Commissioners have been pushing the plan for some time, but are making more headway now because of the Administration's policy of "giving government back to the states." Reportedly a draft regulation to implement this shift has been on Secretary Hickel's desk awaiting his signature for more than a month. The proposed regulation is at complete odds with the recommendations of the Public Land Law Review Commission which supports strengthening federal jurisdiction over wildlife on federal lands.

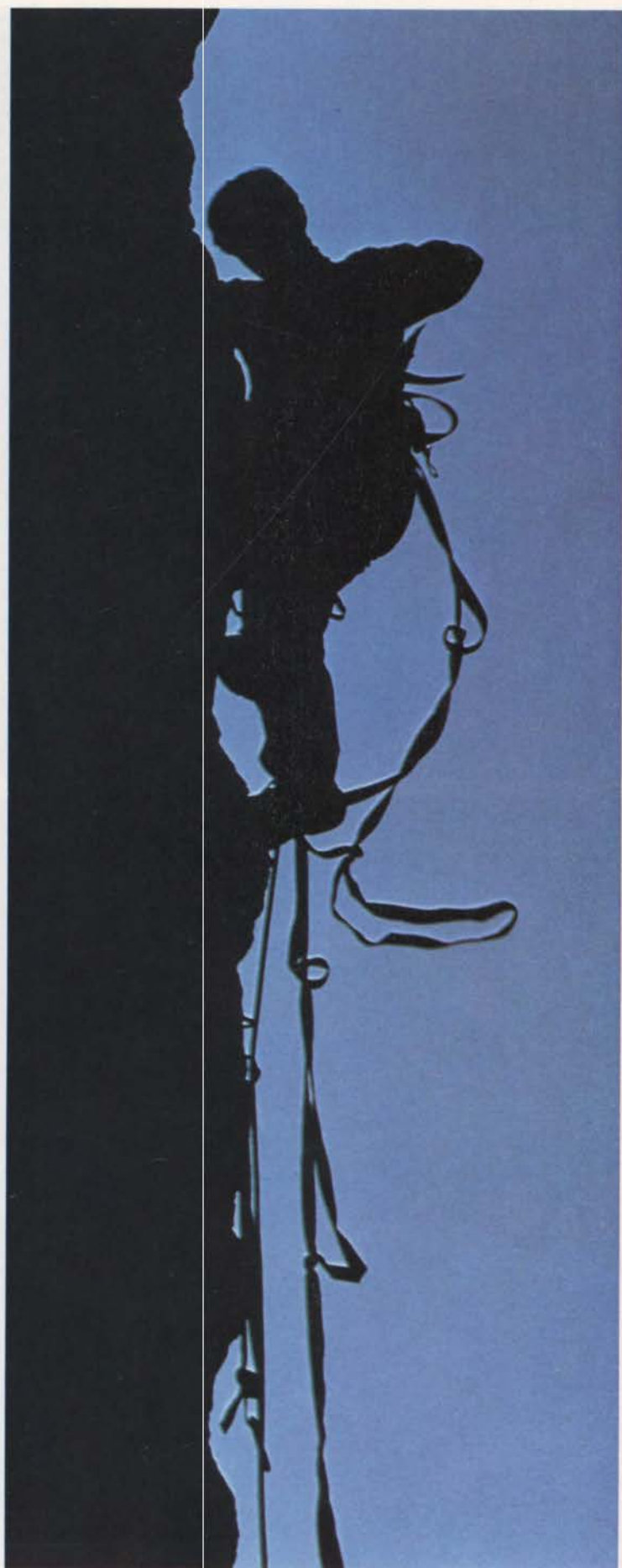
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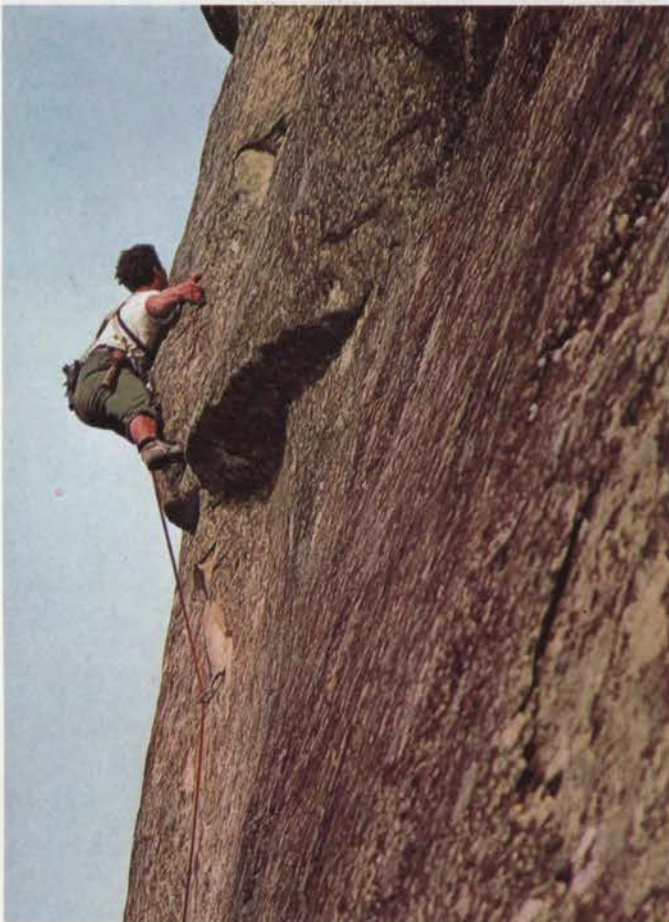


ROCK!

*I follow a strange path
Above unseen
Void below
Ropes hang free
The crack is thin*



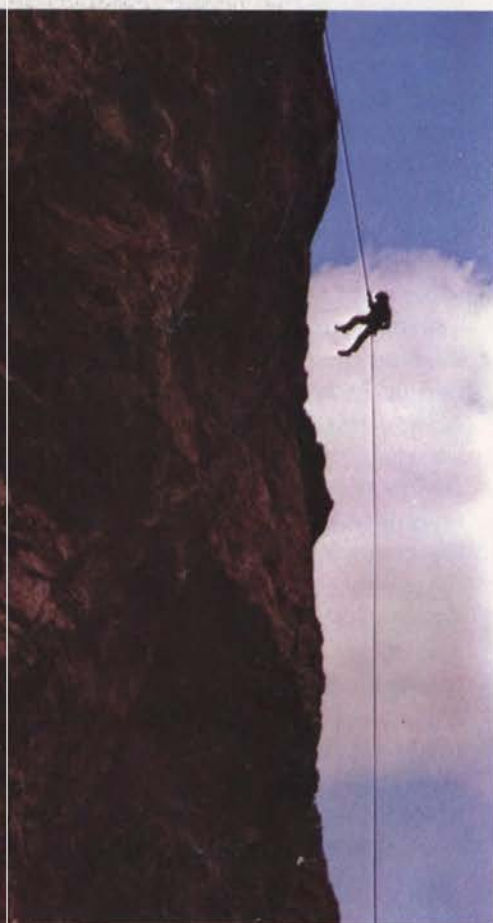
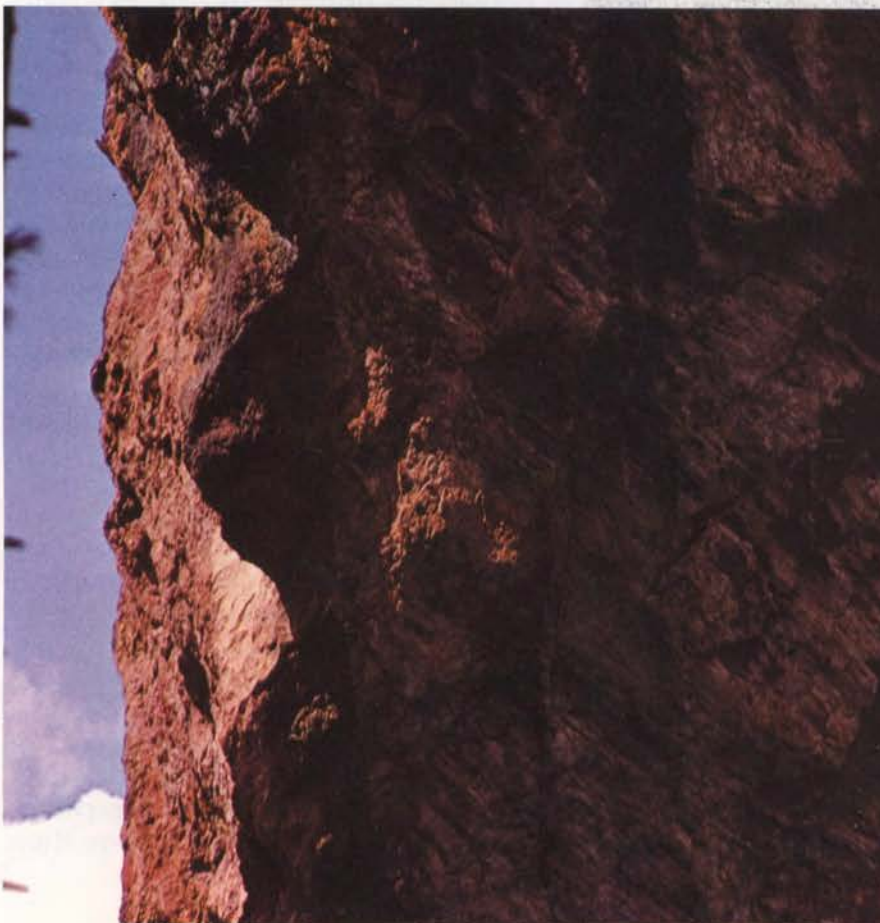
Photographs and text by Steve Marts.



*Tense is the night
Wall of my dreams
Iron rings clear
Chimneys long, cool, dark
Light from above*



*There is no reason
It is all reason
The rock is cold
The rock is hard
The rock is me*



WATER PROJECTS

—A Changing Perspective

By Michael McCloskey

As a reflection of the environmental movement, the context for planning water projects is changing drastically, particularly in the west and in rural areas.

Projects to develop water resources have a special place in the nation's political history. From the earliest times, internal improvements, especially in the form of public water projects, have been controversial. Questions of constitutional authority and the respective roles of public and private agencies have dominated the controversy. Yet on the frontier, and the less developed portions of the country, these projects have generally been popular. They have offered a ready stimulus to economic development. At the very least, construction has provided employment, and usually more enduring benefits ensued: navigation, flood control, irrigation, and hydroelectricity. While the already developed regions of the country might question the economic efficiency of dollars invested in these projects instead of in other areas, this investment could always be justified as a matter of political equity. As each region of the country passed through successive economic stages, it got subsidies of various sorts. The south got cotton subsidies, the midwest corn subsidies, the east tariffs and armament purchases, and the west water project subsidies.

The context for this rough and ready method of keeping the political peace was that of a developing nation. Internal improvements in water were used to advance settlement, to secure claims to new territories, and to promote agriculture in all regions. The aim was to promote widespread settlement in what was an empty land, and to promote growth of an emerging economy. Later in the depression of the 1930's, these goals were re-interpreted to place emphasis on putting unemployed people to work. In place of the goal of regional development, income re-distribution through public works became a dominant goal as a new matter of political equity. Moreover, in this period and earlier, prevention of private monopoly and exploitation, as part of the political program of the progressive period, were continuing goals in public development of water resources. Conversely, these

projects were resisted by those who held either a different view of regional equities or who believed that the role of government should be more limited.

Now, most of the politically desirable projects have been built. The political controversies of the first half of this century over public participation in water development are fast becoming history. This is so not only because most of the easy or profitable projects have been built but also because the whole context has changed — in economic, historical, and political terms. What was once an empty land is now a full land — and all regions have been sufficiently settled; in fact, rural depopulation is now the trend. With social overhead investments in rural areas being abandoned with depopulation, what sense does it make to continue to invest in local service water projects? An economy of scarcity has now given way to an economy of abundance where our problem is to dispose of excess production. A large degree of public control over resources, including water, has now been achieved, and remaining fears of monopoly control have been lost in an abundant economy. Instead of continuing unemployment, we generally have high employment with a tendency toward chronic inflation which creates strong competition for investment dollars.

This radical change in circumstances has now produced an overriding concern for intangibles — all those amenities of the environment which are enjoyed as common goods outside the market economy. It is these resources that now are in short supply, pressed too hard, as they are, by the dynamism of an overly efficient economic system. On the extent to which natural amenities now survive, however, rests the quality of our lives. Planning for environmental preservation, and the population stability that will allow it, is now the overriding goal that conservationists feel public policy should pursue.

In an earlier period public policy gave the benefit of the doubt to the case *for* constructing water projects. Conditions then may have warranted this presumption in favor of re-arranging natural conditions. How-

ever, conditions have now changed entirely. Much of nature *has* been re-arranged; conditions now reflect a shortage of natural amenities. The benefit of the doubt should now be shifted in accordance with changing conditions. The presumption should now be shifted in favor of retaining remaining vestiges of nature — unaltered watercourses in particular — unless engineers can sustain a heavy burden of proof in showing an uncontestable need for their projects.

Now it may be suggested that concern over further water project development is moot in that the era of dam and canal building is over. Certainly the great period of construction does seem to be behind us, but powerful agencies have vested interests in continuing these activities. Diminishing returns may be setting in in terms of total public values stemming from further projects, but the sponsoring agencies have developed great expertise in attributing economic and political benefits to these projects. Special clientele in our economy are organized to promote projects of these agencies. Their expertise, the power of their clientele, and the inertia of political habit combine to give substance to their ambitions.

What then are the ambitions of these agencies? The Federal Power Commission lists 154 hydroelectric projects which it feels could be economically constructed by 1980. Conservationists will probably object to construction of between 15-20 per cent of these. In any event, the Federal Power Commission says only 30 per cent of the hydro potential of this country has been developed in some 1500 plants. The Federal Water Resources Council predicts an increase of about one-and-a-half times in hydro capacity by the year 2000, which is at a somewhat slower rate than the Federal Power Commission hopes. Hydro agencies look to the use of hydro projects to supply peaking power at low load factors, to pumped storage plants, and to low-head turbines to keep a place for hydro in the future total energy supply picture. Nevertheless, by the year 2000, according to these estimates, hydro will be supplying less than 5 per cent of our electricity.

Presently some 42 million acres are under irrigation, 95 per cent of them in the west. Eight million of these acres are irrigated by water from the Bureau of Reclamation's 113 projects. The Water Resources Council projects a 40 per cent increase in land to be brought under irrigation by the year 2000. Presumably much of this increase would be facilitated by new storage and diversion works. It should be pointed out that, alternatively, new water could be provided through increasing efficiency of existing works. Presently 50 per cent of irrigation water is wasted by

farms. Efficiency could be easily increased to 70 per cent with sufficient incentives, according to the Water Resources Council.

The Corps of Engineers alone by 1980 wishes to double the storage capacity of America's reservoirs. It suggests that this water could be useful for what is, euphemistically, called "water quality control," which means, among other things, diluting sewage and other effluents. Needless to say, other ways of maintaining water quality exist. If the pollution control methods used in Germany's Ruhr Valley were adopted here, for instance, all of America's industrial output in 1980 could be supported by the low flows of the Columbia River alone. Nevertheless, a three-fold increase in industrial water supply investment is foreseen by the Water Resources Council; the same increase is seen for municipal water supply facilities.

The Corps of Engineers also wants to expand its inland waterways for navigation. A 20 per cent increase is forecast by the year 2000. 5000 new miles of waterway, dredged to at least 9 feet, are projected on top of the 22,500 miles already available. Though the increase is modest in relation to other projects, the investments projected by then are astronomical: \$21 billion of public monies by the year 2000.

By 1980 the Corps of Engineers also hopes to have more than doubled the 1960 capacity of the country's flood control works, moving from 219 reservoirs (with 87 MAF capacity) to 738 reservoirs (with 191 MAF capacity), from 9047 miles of levees and floodwalls to 16,408 miles, and from 7430 miles of so-called channel improvements to 10,613 of them. Presumably these figures are destined to go up because continued encroachments on flood plains present new economic values "needing" protection. It should be noted, of course, that flood plain zoning, flood proofing, early warning systems, and insurance often can handle the problems just as well.

Obviously all of the projections are predicated upon continued population growth and economic expansion. However, a growing number of observers feel that planning to facilitate growth operates as a self-fulfilling prophecy. If growth is not a good in itself but in fact can be undesirable, failure to facilitate it may work as a deterrent. In this light, negative planning — i.e., planning to prevent growth — may be the best policy. In any event, many of these projected goals are merely self-serving efforts to promote a continued role for an agency. Any "real" needs can be served, in most cases, through a variety of alternative means. Capital available for dam projects should be able to filter into these alternative approaches.

In the face of these projections, however, one can

readily wonder whether any wild and natural streams will survive if these agencies' ambitions are not checked. To some extent, the Wild and Scenic Rivers System Act of 1968 will help. Of the 725 rivers of appreciable size in the United States, some 35 may be protected by the Act, though only 8 are completely protected initially. Probably conservationists will work to have about 100 of these rivers ultimately preserved in the system. Seventy-one were inventoried by the Bureau of Outdoor Recreation in its 1964 study. Another 13, not in the study, were inserted in the Act finally passed, and some others figured prominently in debate. Moreover, additional protection may come through state action under the terms of the Act.

Despite the fact that only fragments of these streams will probably be protected under the Wild and Scenic Rivers Act — i.e., those reaches of 20 miles or more — there will probably be intense competition for sites between developers and those who wish to keep some streams wild. This competition will be exacerbated by the realization that many projects are not being proposed to directly serve consumer needs. In other words, if these projects were not built, no discernible damage would be experienced by local consumers. To illustrate, the following practices are increasingly common among federal agencies:

(1) A project is devised to provide a role for competing agencies, as in the Eel River basin of northern California where projects have been devised to keep peace between the Corps of Engineers and the Bureau of Reclamation so that each can have an equal role.

(2) A project is justified primarily to serve recreational "needs" despite the fact that no bona fide recreational group expresses any need or wants the dam. An example is the Gilbert Dam in Arkansas where important recreational values, in fact, would be lost.

(3) Another common practice, in arid regions, is to build a reclamation project to sell water at far below its actual delivery cost. This underpricing, as with the Central Arizona Project, maintains an artificial agricultural demand for water that would not exist in the absence of the heavy subsidy.

(4) In the case of Grand Canyon dams which we defeated, we saw an even more questionable extension of these subsidies. Hydro dams would be built in the canyon to generate profits from electrical sales so that the profits could be stockpiled to finance later diversions of water from the northwest. Construction of these dams, thus, was designed to produce a subsidy two steps removed from the

actual beneficiaries.

Non-federal agencies are guilty of proposals just as egregious in their remoteness of purpose.

(1) As feasible undeveloped sites for hydro projects grow fewer in number, utilities are getting into the practice of filing on sites with the Federal Power Commission just to protect their territorial control. In the absence of fear of counter-filing, the utilities might never develop the sites. Chelan Public Utility District, for instance, has filed on Washington's Wenatchee River for this reason despite the fact that it has a large surplus of power to sell outside its service area. The City of San Francisco wants to expand its Hetch Hetchy project, ostensibly, for the same reason.

(2) This practice is related to another — that of expanding hydro projects as a money-making enterprise of a public agency. The expansion has nothing to do with serving the agency's own customers. The additional capacity is designed solely to generate surplus revenues to enrich the utility, with the implied promise that rates or taxes may ultimately be reduced as a customer benefit.

(3) Somewhat related is the fixation which some utilities have on squeezing the last drop of hydro out of their production territory regardless of environmental damage and despite the fact that most new large increments of power in their supply systems will be from other sources. Seattle City Light is trying to do this with its plan for raising Ross Dam and developing Thunder Creek in a recreational area at the edge of the new North Cascades National Park.

(4) Another dubious practice related to protective filing is the struggle to get the last major hydro sites developed before nuclear power renders them economically uncompetitive. The battle to get any kind of license in Hells Canyon is a case in point. Many believe that in another few years, sites in Hells Canyon will not be able to produce power as cheaply as nuclear plants can. The financial and emotional commitments of a twelve-year struggle there keep public and private utilities alike fixed in their determination to salvage something from the long effort.

(5) Finally, we see utilities with projects having expiring 50 year licenses struggling to get renewals despite the fact that the projects are obsolete. Instead of facing the fact that it is time to start cleaning obsolescences and clearing our streams of needless obstructions, they work to find ways to renovate the projects for extremely marginal benefits. For instance, the City of San Francisco wants to remove

the old Lake Eleanor Dam that it got in Yosemite National Park as part of the Hetch Hetchy Project and to build a new larger dam. It admits, however, that the power revenues would be insignificant. Now is the time to correct the mistake of 50 years ago that broke John Muir's heart.

To guard against these abuses and to give the benefit of the doubt at this point in our history to nature, a number of institutional reforms need to be made in our planning process for water projects. These are primarily applicable to federal projects, but could be adapted, in part for use by the Federal Power Commission and state licensing and planning authorities.

Present practice is unduly weighted in favor of construction because all basic data is organized and evaluated by the agency which sponsors such projects. The agency does this in partnership with forces in Congress which have an interest in seeing a project go forward. To reverse the weighting, separate institutions should be established to handle the three basic aspects of project evaluation: those dealing with engineering, economics, and intangibles. Engineering evaluation could be handled by the construction agency, but economics and intangibles should be evaluated by agencies which are completely separate and could be variously lodged either in the Water Resources Council or in various places within the Executive Office of the President, or they could be independent. Thus to be recommended to Congress, a project should have to be: (1) recommended by engineers who felt it represented the best engineering solution to accomplish goals assigned as part of a larger plan; (2) it should have to pass muster at the hands of a board of economists who would apply rigorous economic tests; and (3) it should have to be approved by a board of people chosen for their experience in judging intangibles such as ecological, natural, recreational, and social values. They would look both at intangible benefits and costs. A project would have to clear these three hurdles to even reach the Bureau of the Budget and the Executive Office of the President, and public hearings should be held before the reports are forwarded.

At that level, the project should be scrutinized further by the Council on Environmental Quality to test conformity with the National Environmental Protection Act and to verify the adequacy of the threefold evaluation at lower levels. It is particularly important that fully adequate reports be prepared in compliance with Section 102(2)(c) of that act. These reports need to set forth in detail an account of the project's environmental impact, including those that are adverse, a

description of irreversible commitments, a discussion of long and short-term effects, and a list of alternative approaches. Also the record must show that all other affected and interested agencies have been consulted.

Congress thus should be given a recommendation along with alternatives. It should then proceed to study and authorize each project separately, or at least in related sets. Presently, this is the practice of the Interior Committees with respect to projects of the Bureau of Reclamation. However, projects of the Corps of Engineers each year are grouped together in one huge omnibus bill that the Public Works Committees consider. This omnibus package is carefully constructed by the Corps so as to garner the greatest possible support on the Committees. Where possible, each member is given a project in his district that will gain his overall support for the package. As a result, the package often commands less than adequate scrutiny.

The remedy is to break the package into smaller pieces, so that individual projects will gain greater exposure and scrutiny, and so that there will be fewer vested interests in the exact configuration of the package. The sanctity of "pork barrel" may be harder to maintain if there is no longer just one package to keep intact; log-rolling commitments will be harder to obtain if many small, diverse packages are under consideration.

In addition, Congress should greatly expand its own review staff. An analysis branch, either in the Library of Congress or as an adjunct of the Committees, should exist to carefully examine the mountain of paperwork that the agencies send up. The presumption that a project's merit is suggested by the size of the backup report can only be challenged if such a staff exists. Presently only a skeleton staff exists to check obvious weaknesses.

Now one may reasonably ask how realistic these proposals are. Admittedly they are far-reaching; yet there are stirrings in these directions already. It is time that promoters of water projects take a hard look at their political future. Their political base is eroding with the weakening of their historical rationale. Probably their future success will depend on the extent to which they can make peace with conservation groups and urban interests. However, the rigidity of established outlooks may make peace-making difficult. Their greatest hazard, however, may be in not even trying.

Mr. McCloskey is the Executive Director of the Sierra Club.



EARTH POETRY

By William Everson

As the Age of Objectivity peaks, achieving crescendo in the space shots, the recovery of the sense of earth surely indicates one of the most profound moments in the life of man on this planet. What it implies is the reawakening of a point of view of mystery and wonder. This point of view is inherently religious, but its sacral root has been severed in the Age of Objectivity, and at the present time it is not deeply experienced in the forms of religious practice in this country.

Perhaps the chief expression of it, therefore, lies in the voice of poetry. And its development in the immediate future must lie somewhere along the line already hewn out by the implements of poetry.

It is evident that there is an inherent harmony between the words, poetry and earth. They go together. Does this mean that the recovery of our earth, which the interest in ecology signals, must be fulfilled in the recovery of our poetry? I do not suggest this in the manner of a poet seeking to advance the cause of his art on the wave of the ecological awakening. Rather, what I am suggesting is that the ecological awakening will not be complete unless the poetic element presides over its consummation.

This is because a merely utilitarian, or merely operative, approach to ecology can never complete or resolve the need that the current interest in it attests to. Because no matter how skillfully you employ the mastery of environment in the uses of environment, as long as your attitude does not transcend the merely operative, the merely utilitarian, you will be constructing only another kind of edifice, man's triumph rather than nature's triumph. And until the triumph of nature transcends, or rather explodes, into the celebration of God, then nature can only remain man's slave.

But how often is this done? Every day we are informed of the ways in which industry is getting into the big Ecology Act. And if it does what it claims it will, it will summarily clean up its pollution of the last one hundred and fifty years. The purification of the past. But it seems to me that this purification process is really only the other side of the pollution process. Pollution and purification, the two faces of the operational demon. The Great God Process. This grim industrial attitude says "What we can pollute we can purify. And when we have made it pure we are going to maintain the balance of heaven and earth if we have to harness hell to do it!"

I am bracing myself for a computerized ecology, with every bird banded, every fish counted, and every coyote in the brush rounded up for its periodic rabies immunization shot. Lord knows I am making no

rugged individualist pitch. I am simply saying that the danger in a triumphant ecology is the secularization of nature, rather than the sacralization of man through nature, which it properly ought to mean.

Robinson Jeffers, who majored in science at college but feared the triumph of science over nature even as he abhorred the triumph of man over God, used his verse both to declare the danger and to correct the attitude, correct it through the focus of the poem itself. He was able to do this because poetry and earth are harmonious, and you cannot speak of earth, in any ultimate sense, unless you do it in the language of poetry.

The poem is called "Science", and it may be found in the Sierra Club's *Not Man apart*.

*Man, introverted man, having crossed
In passage and but a little with the nature of things
this latter century
Has begot giants; but being taken up
Like a maniac with self-love and inward conflicts
cannot manage his hybrids.
Being used to deal with edgeless dreams,
Now he's bred knives on nature turns them also
inward: they have thirsty points though.
His mind forebodes his own destruction;
Actaeon who saw the goddess naked among leaves
and his hounds tore him.
A little knowledge, a pebble from the shingle,
A drop from the oceans: who would have dreamed
this infinitely little too much?*

The poem asks, Who would have thought that so tiny a thing in nature as the human brain could unbalance the vastness of nature itself? And it is the poet's warning to ecology. Ecology is not a great science, not yet anyway. But modest as it is, who would have dreamed this infinitely little, too much?

And yet, because it is a poem, it corrects what it indicts, simply by the point of view which, as a poem, it enforces. To the degree it "took" in your consciousness the problem it raises is simultaneously solved.

This threat to nature from the mind of man, and the resistance of nature to that threat, find their meeting place in the zone of mystery. For the mystery in the mind of man to know, and the mystery in the heart of nature to resist and elude that knowledge, have formed the underlying dynamic of the human spirit over the last several centuries. Nor can we say that man, in his conquest of mystery, has won. The more he discovers the more the mystery eludes him. Now he is beginning to forego his thirst a little, insofar as the exploitation of his immediate environment is con-

cerned. Or maybe its just that the conquest of outer space has absorbed his aggressive energies for a time, so that his earthly environment can momentarily catch its breath.

Anyway, the whole world is beginning to cry "Hands off!" Man is beginning to recognize that he has converted discovery into knowledge and knowledge into utility, and that utility is strangling not only the earth and its nature, but humanity and its nature as well.

The correct management of natural resources can never mean the recovery of nature. For the recovery of nature can only come through contemplation, and contemplation, while it has no quarrel with management in the sense of forbearance, certainly does have a quarrel with management in the sense of business.

You can be as busy as you like in cleaning up the creeks, and God bless you for it. But when the creeks are cleaned up, then the time for contemplation begins in earnest. And the history of spirituality testifies to this sobering fact — it is a good deal easier to clean up a creek than it is to contemplate it. Because in order to contemplate you have to be still within yourself. And to be still within yourself is not something you can simply decide to do. Rather stillness is something you have to wait for, and you can't command it. It is a gift of God.

To clean up a creek is salutary, but to keep your hands off it after you have cleaned it is more than salutary. It is holiness. Because in order to do that you have had to experience what the creek truly is, what it is in itself.

In a poem called "O Lovely Rock" Jeffers shows what this means. It was written on a camping trip, one any of us might take, and take for granted. But what the poet sees is of the essence.

*We stayed the night in the pathless gorge of Ventana
Creek, up the east fork.*

*The rock walls and the mountain ridges hung forest
on forest above our heads, maple and redwood,
Laurel, oak, madrone, up to the high and slender
Santa Lucian firs that stare up the cataracts*

Of slide-rock to the star-color precipices.

*We lay on gravel and kept a little campfire for warmth.
Past midnight only two or three coals glowed red in
the cooling darkness; I laid a clutch of dead bay-
leaves*

*On the ember ends and felted dry sticks across them
and lay down again. The revived flame*

*Lighted my sleeping son's face and his companion's,
and the vertical face of the great gorge-wall*

*Across the stream. Light leaves overhead danced in
the fire's breath, tree-trunks were seen; it was*

the rock wall

*That fascinated my eyes and mind. Nothing strange:
light-gray diorite with two or three slanting seams
in it,*

*Smooth-polished by the endless attrition of slides and
floods; no fern nor lichen, pure naked rock . . . as
if I were*

*Seeing rock for the first time. As if I were seeing
through the flame-lit surface into the real and
bodily*

And living rock. Nothing strange . . . I cannot

*Tell you how strange: the silent passion, the deep
nobility and childlike loveliness: this fate going on
Outside our fates. It is here in the mountain like a
grave smiling child. I shall die, and my boys*

*Will live and die, our world will go on through its
rapid agonies of change and discovery; this age
will die,*

*And wolves have howled in the snow around a new
Bethlehem: this rock will be here, grave, earnest,
not passive: the energies*

*That are its atoms will still be bearing the whole
mountain above: and I, many packed centuries
ago,*

*Felt its intense reality with love and wonder, this
lonely rock.*

You see what I mean when I insist that our concern must end in awe, even as it begins in our need to busy ourselves with betterment?

The clue lies in the ingredient of mystery. This mystery, insofar as it applies to nature, we call wildness. One of my favorite slogans of the Sierra Club is from Thoreau: "In wildness is the preservation of the world." It could just as well read: "In mystery is the preservation of the world."

No, not just as well. There remains a large degree of mystery in a domestic animal, for instance, though not much wildness. It is in wildness that the essential nature of the animal reveals itself, like an epiphany of the divine. Actually we domesticate animals in a vain attempt to avail ourselves of that mystery.

So too do we domesticate the earth. But the thing about the wild animal, the undomesticated animal, is that the pure potency, which its form of life reveals to us about the greater life from which it springs, gives us the charge of something totally other. It must therefore be a kind of grace, which nothing we can touch, as we can touch the domestic animal, can offer to us.

For this reason humanity has always valued the pelts of purely wild creatures. Something of the primal mystery inheres in them, and wearing them we sym-

bologically appropriate their otherness to ourselves. Primitive man most acutely understood this. The American Indian universally wore the pelts of animals because they were sacred to him.

The mystery of death, which is at the heart of the mystery of wildness and the mystery of God, reaches its ultimate in another mystery, the mystery of renewal. The paradox is this: the mystery of renewal is greater than the fact of death. Not greater than the *mystery* of death, mind you, for death is the greatest mystery of life, but it is greater than the *factuality* of death, death in its mere mechanistic annihilation.

I'm referring to something deeper, something perceptible only to the contemplative perspective, something quite apart from the philosophical consideration that recreation in its many forms somehow *justifies* destruction. What I have in mind is rather the religious point of view, that death *constitutes* renewal.

Renewal springs from the guts of destruction itself and is the meaning of destruction. The germ of life, of existence, spurts from the chaos of dissolution. Death *is*. Renewal *is*. They are the two faces of the one existence.

If we have decimated our planet it is not because we have overpopulated it, but because we have ceased to respect it, have ceased to honor either violence or death, as the Indians, who preceded us here, palpably honored them.

For each of these entities is holy. Violence holy? Yes, Jeffers has said that violence is the sire of all the world's values. This is not the glorification of violence in the fascist sense, but respect for it, as an element in the processes of change, as the operative point in the resistance, the clash of transition.

If we are appalled by the prevalence of violence in our world today it is because there is no mystery apparent in it. Nothing comes of it. Something is blown apart, no more, and we are left shuddering before the brute factuality of the splintering.

In nature this is not so:

*What but the wolf's tooth whittled so fine
The fleet limbs of the antelope?*

*What but fear winged the birds, and hunger
Jewelled with such eyes the great goshawk's head?
Violence has been the sire of all the world's values.*

If only we could grasp this point and keep it in our hearts, then we could suffer the invasion of violence, or rather live in the threat of violence, without terror.

Even if we care only to notice that what a decade or two ago was the terrible raw cut of earth where the freeways were pushed through under the steel blades of bulldozers; that what was then a gash already has been transformed, moulded by weather,

softened to the contour of the earth's curve, modified by the indestructible weeds and grasses whose role it is to soften and heal the mechanistic ravages of man—even at this most common level, renewal is the real certitude that underlies the horror of our pollution.

I find in this theme Jeffers at his most reassuring. "Bixby's Landing" is about an abandoned lime kiln on the Big Sur coast, which must surely have been in its day an unspeakable profanation of the beauty of that place. But Jeffers, just as he saw the meaning of the lonely rock in the canyon, saw the meaning of the old scars of industry on the hills.

May we all find the reassurance we crave in these lines, even if we cannot follow the poet through to the awful heart of violence that is changing the world, even if we cannot see the agency of man's violence for what it really is, which the poet does see, and, through the solution of his poems, offers us.

*They burned lime on the hill and dropped it down
here in an iron car*

*On a long cable; here the ships warped in
And took their loads from the engine, the water is deep
to the cliff. The car*

*Hangs half way over in the gape of the gorge,
Stationed like a north star above the peaks of the
redwoods, iron perch*

*For the little red hawks when they cease from
hovering*

*When they've struck prey; the spider's fling of a cable
rust-glued to the pulleys.*

*The laborers are gone, but what a good multitude
Is here in return: the rich-lichened rock, the rose-tipped
stonecrop, the constant*

Ocean's voices, the cloud-lighted space.

*The kilns are cold on the hill but here in the rust of
the broken boiler*

*Quick lizards lighten, and a rattlesnake flows
Down the racked masonry, over the crumbled fire-brick.*

In the rotting timbers

*And roofless platforms all the free companies
Of windy grasses have root and make seed; wild buck-
wheat blooms in the fat*

Weather-slacked lime from the bursted barrels.

*Two duckhawks darting in the sky of their cliff-hung
nest are the voice of the headland.*

Wine-hearted solitude, our mother the wilderness,

*Men's failures are often as beautiful as men's triumphs,
but your returnings*

Are even more precious than your first presence.

Mr. Everson, known as Brother Antonius, left the Dominican Order in 1969. He is a poet and author of several books, including a study of Robinson Jeffers.

A FABLE FOR OUR TIMES

Once upon a time there was a small, beautiful, green and graceful country called Vietnam. It needed to be saved. (In later years no one could remember exactly what it needed to be saved from, but that is another story.) For many years Vietnam was in the process of being saved by France, but the French eventually tired of their labors and left. Then America took on the job. America was well equipped for country-saving. It was the richest and most powerful nation on earth. It had, for example, nuclear explosives on hand and ready to use equal to six tons of TNT for every man, woman, and child in the world. It had huge and very efficient factories, brilliant and dedicated scientists, and most (but not everybody) would agree, it had good intentions. Sadly, America had one fatal flaw — its inhabitants were in love with technology and thought it could do no wrong. A visitor to America during the time of this story would probably have guessed its outcome after seeing how its inhabitants were treating their own country. The air was mostly foul, the water putrid, and most of the land was either covered with concrete or garbage. But Americans were never much on introspection and they didn't foresee the result of their loving embrace on the small country. They set out to save Vietnam with the same enthusiasm and determination their forefathers had displayed in conquering the frontier. They bombed. More than 3 million tons of explosives were dropped — 50 per cent more than the total bomb tonnage dropped in both theatres of World War II. Technologists looked on in awe and spoke of a ditch 30 feet deep, 45 feet wide, and 30 thousand miles long



if all the bomb craters were placed in a row. What the Vietnam peasant spoke of was never recorded. Entire villages were destroyed by bombing, napalm fires and artillery. After one such mission an American officer made the prophetic explanation that it was necessary to destroy the village in order to save it. Unquestioned, the logic of such a statement became sanctified. They bombed with chemicals as well as explosives, and trees, bushes, plants died by the millions of acres in a program with the Orwellian name of "Operation Ranch Hand" whose macabre motto was "only we can prevent forests." The consequences of such a deliberate and massive ecological attack were unknown and unknowable but that was no deterrent. Thousands of herbicide and defoliant missions were flown before anyone seriously questioned their long-range effect on humans and animals as well as on plants. By the time deformed fetuses began appearing and signs of lasting ecological damage were becoming increasingly apparent success had been achieved. Vietnam had been saved. But the country was dead.

Editor's note: Fact and fiction have become one in Southeast Asia, or so it would seem. How can one give aid to a country and its people by destroying both? Because of the wartime conditions there has been little opportunity to study first hand either short term or long term effects of the massive bombing, defoliation and herbicide programs. It is becoming abundantly clear, however, that these programs represent the deliberate destruction of the environment on a scale without precedent in the history of man. And as we are learning almost daily at home to our great sorrow, our use of technology has far outstripped our ability to understand and predict its consequences.

• REFERENCES •

- The Far East and Oceanic Agr. Situation. 1968. U.S.D.A, Econ. Research Serv. ERS—Foreign 223. 30 pp.
Gruchow, N. 1970 Curbs on 2,4,5-T Use Imposed. *Science* 168:453.
Harvey, G. R. and J. D. Mann. 1969. Picloram in Vietnam, *Scientist and Citizen* 10:166-171.
Hersh, S. M. 1968. Chemical and Biological Warfare. Bobbs-Merrill, New York 354 pp.
Mayer, J. 1967. Starvation as a Weapon in Vietnam. *Scientist and Citizen* 9: 116-121.
Nature. 1970. Another Herbicide on the Blacklist. 226: 301-311.
Okonkwo, P. O. 1969. Starvation: Weapon of War. *Science* 165:753.
Orians, G. H. and E. W. Pfeiffer. 1970. Ecological Effects of the War in Vietnam, *Science* 168: 544-554,
Rose, S. (ed.). 1968. CBW: Chemical and Biological Warfare. George C. Harrap and Co., Ltd. London. 209 pp.
Tschirley, F. H. 1969. Defoliation in Vietnam. *Science* 163: 779-786.
Whiteside, T. 1970. Defoliation. Ballantine Books Inc. New York. 168 pp.



LAND USE POLICY

The Sierra Club has endorsed the general principles underlying the National Land Use Policy Act of 1970 (S. 3354) which include: comprehensive planning, development of a federal land use policy, coordination of federal construction and grant programs, making ecological and environmental considerations a major element in coordinating efforts, and having states reassume some of the jurisdiction they have delegated to counties with respect to land use control and planning.

ILLINOIS

The Illinois Environmental Protection Act, one of the strongest and most comprehensive state anti-pollution programs yet drafted, went into effect early in July. The Act dissolves the existing scattered state pollution-fighting machinery and creates three major independent agencies:

(1) *The Environmental Protection Agency*, the investigating and prosecuting body, has a broad mandate of authority over air, water, soil, and noise pollution as well as the control of solid waste disposal, underground and surface water supplies, and radioactive and pesticide hazards. The agency is to conduct a program of continuing surveillance of actual or potential contaminant or noise sources, of public water supplies, and of refuse disposal sites. Following investigation, the Agency presents enforcement cases before the Pollution Control Board or takes summary enforcement action by sealing any equipment, vehicle, vessel, aircraft or other facility operated in violation of regulations set by the Pollution Control Board.

(2) *The Pollution Control Board*, the administrative and quasi-judicial body, is empowered to define and implement environmental control standards for the State of Illinois and has the authority to act for Illinois in regard to the adoption of standards for submission to the U.S. under any federal law respecting environmental protection. The Board has the power to conduct hearings on complaints charging violations of the act or of regulations set by the Board. The Board also hears petitions for variances and reviews cases where the Environmental Protection Agency has refused to grant a permit or has sealed equipment.

(3) *The Illinois Institute for Environmental Quality*, the scientific body, is to investigate practical problems and implement studies and programs relating to the technology and administration of environmental protection; to obtain, store, and process relevant data; and to recommend technological, administrative, and legislative action concerning en-

vironmental quality and re-cycling, re-use, and conservation of natural resources and solid wastes. The Institute will work with the Agency and the Board in forming regulations and developing enforcement strategies. In addition the Institute will co-operate with all levels of the state's school system to evaluate curricula and to advance interdisciplinary approaches to the problems of the environment.

MEMBERSHIP NOTES

The first *Bulletin* sent to new members will be the issue dated after the beginning of membership. *Bulletins* are mailed second class from San Francisco and can take four to six weeks to reach Eastern destinations. All Club members are entitled to Club publications and mailings; where several members of one family receive unwanted duplications *upon request* all mailings to persons will be halted excepting ballots and dues notices.

DEEP SEA DRILLING

Two technological breakthroughs have been hailed by scientists as major advances in deep sea exploration. Conservationists, however, are concerned that without adequate regulations and environmentally sound controls these new techniques may unleash greater pollution and foster reckless exploitation of the oceans.

The first new development, advanced drilling techniques that will hasten oil, gas and mineral extraction from virtually any part of the world's oceans, was announced last month by the Scripps Institution of Oceanography in San Diego. Engineers aboard the *Glomar Challenger*, the vessel contracted for drilling and coring in the National Science Foundation's Deep Sea Drilling Project, said they had successfully withdrawn the worn drill bit, replaced it, and reinserted it in the bore-hole 10,000 feet below the ocean's surface using sonar scanning to guide the bit. Previous drilling experiments ended prematurely when drill bits dulled on layers of flint-like rock known as chert. This re-entry capability will permit deeper drilling into ocean rock.

The Atomic Energy Commission has announced a second new development, a successful demonstration of a nuclear probe capable of detecting valuable minerals on the ocean floor. The undersea probe can spot elements such as gold, silver, copper, and manganese in quantities as low as one ounce per ton of rock. The device, operated from a surface ship or a submersible vehicle, can identify kinds and quantities of 20 to 30 different elements in ocean floor mineral deposits within three to five minutes.

ALASKA HAUL ROAD

On July 2 Governor Keith Miller of Alaska cancelled the special session of the state legislature which he had earlier called to convene on July 6. The session had been slated to consider alternatives to legislation enacted in the last days of the regular session requiring the Trans-Alaska Pipeline System to repay the state for constructing a road to Alaska's North Slope (estimated cost \$120 million) over a five year period at 7½ per cent interest. However, TAPS rejected the proposal five days after the regular legislative session ended because they could not guarantee repayment. Governor Miller hoped that a "no-repayment road proposal" could clear both Houses during the special session, because once the road is built, pipeline construction can begin. With the special session now cancelled, there is no chance of any road being constructed along the pipeline route this summer.

Meanwhile TAPS is facing other problems. They had contracted with five construction companies to build different segments of the haul road, when they were halted by an injunction won in a U.S. District Court in April by conservationists. Under the injunction the federal government is barred from giving TAPS a right-of-way permit. As a result, TAPS, party to firm contracts with the road building companies, is losing \$100,000 per day while they settle claims of breach of contract.

PLLRC

"The report is not as bad as we feared, but it fails to meet the most pressing conservation challenges," Michael McCloskey, Executive Director of the Club, said following the release in late June of the Public Land Law Review Commission report. The Commission, after five years of study, sent to the President and Congress 137 major recommendations for revision of laws covering use of the 755-million acres in federal ownership. These recommendations include combining the Forest Service with the Interior Department to create a new Department of Natural Resources; only limited revision of the 1872 Mining Act; establishment of environmental guidelines with anti-pollution controls; earmarking nearly one-fourth of national forests primarily for timber production; banning sale of products from federal land to a plant that violates pollution standards; and tightening of congressional control over public lands.

"While the report, which basically contents itself with the housekeeping task of clearing away many obsolete laws, is useful in help-

ing cut the cumberson ties with the past, it provides no clear charter for the future," McCloskey pointed out. "No clear commitment is made to retain nearly all of the public domain in federal ownership, though it is acknowledged that the major part of these lands probably should be retained," he said. McCloskey criticized the report for attempting to assure all commercial users of the public domain of greater and more regular output of products, with "misplaced emphasis on economics in contrast to ecology." In addition, the commission supports retaining some of the major features of the obsolete Mining Law of 1872. "The miners still get to decide where and when to mine, regardless of the conflicts with other values," McCloskey said. The House and Senate Interior Committees will not begin consideration of legislation based on the commission's recommendations until next year.

DDT

In response to a Court of Appeals order, Agriculture Secretary Hardin declined to suspend general use of DDT. The court had ordered the Department to suspend use or explain why it did not, after five conservation organizations, including the Sierra Club, instituted legal proceedings. Papers filed by the Department said that "scientific evidence now available does not establish that the use of DDT constitutes an imminent hazard to human health . . . (although) there are some adverse effects upon certain species of fish and wildlife . . . but such effects do not constitute an imminent hazard to fish and wildlife and the environment." Conservation groups sought an immediate ban while waiting for litigation to finally decide the issue. Last month the Interior Department banned use of DDT and other persistent pesticides on 534 million acres of public land in the U.S.

PARKLANDS

Several park, wilderness, and national seashore measures have been making headway through Congress this past month. H.R. 17399, to appropriate \$7.1 million for land acquisition at Pt. Reyes National Seashore, was cleared for the President's signature. This is the second supplemental appropriation approved this year for the California coastal park. Secretary Hickel has recommended that Congress approve legislation to establish a 20,430-acre Gulf Islands National Seashore in Louisiana, Florida, and Mississippi. And Agriculture Department approval was sent to Congress for a 32,000-acre Oregon Dunes National Recreation Area. Another water-oriented parkland, the 43,000-acre Apostle Islands National Lakeshore of Wis-

consin was favorably reported by the full House Interior Committee. The Senate passed S.710, establishing Mt. Baldy, Pine Mountain, and Sycamore Canyon wilderness areas in Arizona, and S.1732, establishing a wilderness area in Craters of the Moon National Monument in Idaho. The Senate also approved S.531, establishing Capitol Reef National Park, and S.532, establishing Arches National Park.

GILA RIVER

Judge James A. Walsh of the U.S. District Court for the District of Arizona has ordered that Melvin B. Laird, Secretary of Defense, and co-defendants be enjoined from clearing and removing vegetation along a 54-mile strip of bottomland bordering the Gila River. The defendants are ordered to comply with the provisions of the National Environmental Protection Act and the Interim Guidelines of the Council on Environmental Quality. The court found that the channel clearance project was "a major federal action significantly affecting the quality of the human environment" and that the provisions of the Act were applicable to the work to be done by the U.S. Army Corps of Engineers under a channel clearance contract in the Gila River area. A petition seeking the injunction was filed by the Sierra Club and six other conservation groups.

NUCLEAR PLANTS

The Sierra Club is party to two actions seeking to force industry to use the most up-to-date techniques available to minimize thermal and radioactive pollution from nuclear power plants. In one action the Club intervened with others in a hearing before the Atomic Energy Commission to determine whether the Palisades nuclear plant, the first large nuclear plant to be completed on Lake Michigan, should be granted a provisional operating license. The Club claims that neither the Commission nor the Michigan power company have complied with the requirements of the National Environmental Policy Act (NEPA).

In a second action the Club joined with two conservation groups to petition the AEC to halt construction of the Calvert Cliffs nuclear power plant on Chesapeake Bay until the AEC can conduct the environmental studies required by NEPA. This petition also asks the AEC to amend its regulations to require similar action on the 52 power plants now in various stages of construction throughout the United States. As currently planned, the majority of these plants, including Calvert Cliffs, will not utilize existing techniques to minimize thermal and radioactive pollution.

CLIMBER'S GUIDE

A 1972 revision of "Climber's Guide to the High Sierra" is underway, and editor Andrew Smatko needs information from active hikers and climbers: notes on new routes on any peaks — named or unnamed, first ascents, knapsack routes with classification, and highest campable sites (with adequate water) in any remote area or canyon in the High Sierra would be appreciated. Suggestions for improving the Guide will be welcome, as well as trip notes and detailed minutiae. Please send to: Andrew J. Smatko, M.D., 2021 Santa Monica Blvd., Santa Monica, CA 90404.

ACTION NOW

TIMBER HARVEST

President Nixon has directed the secretaries of Agriculture and Interior to formulate plans for management of forest lands "to permit increased harvest of softwood timber consistent with sustained yield, environmental quality, and multiple use objectives." The President said the plans should "take cognizance of the increased requirements for timber to meet our housing goals," and that "the level of timber to be offered for sale should provide reasonable flexibility to take account of anticipated swings in demand."

Conservationists view the President's statement as an attempt to establish by Executive Order the timber-cutting sought by the Forest Products Industry in the National Timber Supply Act which was turned back by the House in February. A Sierra Club statement described Nixon's action as "a sophisticated rationalization for accelerating the presently excessive rate of cutting on our national forest lands." Nixon's major justification for boosting the cutting rate is the current housing shortage and the assumption that the decline in new housing starts is due to a lumber shortage. Yet, the nation's lumber mills are now over producing, and more than 30-billion board feet of standing timber, almost three times the annual cut, has been sold to lumbermen, but remains uncut on national forest lands.

Write to the President (The White House, Washington, D.C., 20500) urge him to revoke his order, which is based on the false premise that cutting can be increased immediately without any decline in environmental quality. Ask him to appoint a special commission to advise him on how to maintain environmental quality in the national forests.

NEW ENVIRONMENTAL BILLS

A variety of environment-oriented bills have been introduced in the current session of Congress. Summaries of major pieces of legislation have been prepared to inform readers of the nature of these bills.

S. 3507, H.R. 16256

The "Detergent Pollution Control Act of 1970," introduced by Senator Gaylord Nelson, amends the Federal Water Pollution Control Act to ban polyphosphates in detergents and establishes standards to abate and control water pollution by detergents.

S. 3484

Introduced by Senator Gaylord Nelson, the "Marine Environment and Pollution Control Act of 1970" is far-reaching legislation that vests full water pollution regulatory authority in the federal government. It requires any citizen to get a waste disposal permit from the Secretary of the Interior, upon approval of the Council on Environmental Quality, to dump waste in the Great Lakes or oceans. For developing management plans to protect the marine environment, the bill creates an Inter-Agency Committee on Marine Resources Management to coordinate government departments, and an Advisory Committee on Marine Environment within the Department of Interior.

H.R.15933; also H.R.15934, H.R.16312

The "Environmental Quality Education Act," introduced by Representative John Brademas, establishes educational programs designed to develop environmental curriculum. The measure includes grants to state and local educational agencies, public and private organizations and institutions for increasing public knowledge on environmental quality and ecology; funds are not specified.

S.3491

The "Mined Lands Restoration and Protection Act of 1970," introduced by Senator Gaylord Nelson, is a long-range, comprehensive program to reclaim federal, state and private lands and waters damaged by surface and strip mining. The measure provides federal regulation of mining in accordance with criteria aimed at conserving and protecting lands. It provides grants to states and local agencies for research in the conservation, utilization and development of strip mined lands.

S. 1219

Senator Alan Cranston's bill directs the Secretary of the Interior to investigate and study methods of oil extraction under leases already issued in the Santa Barbara Channel to eliminate the threat of pollution and environmental damage. The Secretary would terminate all drilling for oil, gas and other minerals in the Channel, and suspend drilling under other leases for all areas off the California coast until the study is completed.

S. 3505

Senator Henry Jackson's bill raises the funding of the Land and Water Conservation Fund from \$200 million annually to \$300 million, with a guarantee that any deficiency in appropriations will be made up from off-shore oil revenues.

S. 3468

This Administration-backed measure would establish an Environmental Financing Authority which would grant loans to states for financing the non-federal share of the cost of constructing waste treatment facilities. Initial capital provided for the Authority is \$100 million.

S. 3460, H.R. 16155

Senator Joseph Tydings and Representative Robert Giaimo's "Coast-

al Zone Management Act of 1970" establishes a national policy for coastal zone resources and gives grants-in-aid to states for establishing coastal zone management programs. Review authority of state programs is vested in the National Council on Marine Resources and Engineering Development. The bill provides grants of up to 50 per cent to be given by the Council to state coastal authorities for the operation of estuarine sanctuaries as natural field laboratories. Funds provided are \$125 million. The measure does not allow direct federal regulation or acquisition of lands.

S. 3444

Introduced by Senator Gaylord Nelson in February, this bill is innovative, far-reaching legislation that establishes a National Lakes Areas System, patterned after the Wilderness and Wild Rivers Acts. It directs the Secretary of the Interior to study lakes, including the Great Lakes and others of substantial size, to determine which ones should be in the System. The bill provides \$75 million annually for lake area studies and research.

H.R. 16258

Introduced by Representative John Saylor, this bill is omnibus legislation that will add 28 new units to the National Wilderness System, including areas in Alaska, Oregon, Washington, New Mexico, Michigan and Massachusetts.

S. 3502

Introduced by Senator Robert Packwood, this bill aims at encouraging smaller families through reduced tax exemptions for added children. The exemption from Federal Income taxes for the first child in a family is \$1000, \$750 for the second, \$500 for the third, and \$750 for each additional child.

S. 2752

Hearings were held in February on the "Intergovernment Coordination of Power Development and Environmental Protection Act," introduced in Congress by Senator Edmund Muskie. This bill provides an improved framework for controlling site selection and construction of new major power facilities by coordinating federal, state, local and private efforts and planning under a set of established criteria. Ultimate control is vested in a federal agency supervising a number of regional boards. The bill needs to be amended to emphasize the need to conserve energy. Ecological factors in power facility planning, hearing and enforcement procedures also need to be spelled out.

H.R. 16086

The "Noise Control Act of 1970," introduced by Representative Bertram Podell, establishes a federal noise control office under the Office of the Surgeon General and provides grants-in-aid to states for establishing noise control programs. The bill provides funds for research into the causes and effects of noise, and methods and techniques for the control, prevention and abatement of noise.

S. 3575

The "Environmental Protection Act of 1970," introduced by Senators Philip Hart and George McGovern, declares that each person is entitled to have the environment protected, preserved and enhanced and should have an adequate legal remedy that will protect the air, water and land of the country from pollution, impairment or destruction. The measure allows individuals to take persons to court who violate these rights.

WASHINGTON REPORT

New information on the environmental impact of supersonic transport planes, coupled with revelations of a "sweetheart" contract between government and aircraft manufacturers for its production, has stoked up efforts to block a \$290 million federal subsidy for the next phase of the project.

The new developments brought together some 30 conservation, consumer, labor and other organizations in a renewed drive to stop Congress from increasing the \$630 million already expended for an aircraft judged by economists as non-competitive in the world transportation scheme. The coalition has been telling members of the Senate that the \$290 million allocation for fiscal 1971 work on the SST should be eliminated.

The coalition formed to oppose the SST has based its disapproval on grounds in addition to the evidence presented by the scientific community that SST operations have potential environmental hazards beyond those previously encountered by mankind. Hearings before Congressional committees have raised major questions of public policy.

The House Appropriations Committee held hearings on the contract between the Federal Aviation Administration and the Boeing Aircraft Company. It found that after the two prototype planes had been built under the current contract, the U.S. government, having spent \$1.3 billion, would not receive one penny in return. The contract only provides that when production of the SSTs moves into high gear, the U.S. Treasury will receive a royalty on production. For example, when Boeing has sold 139 of the boom-creating aircraft, the U.S. government will be in the hole by \$1.183 billion, while Boeing will have had a profit of \$150 million.

In recent memory, this contract between the FAA and Boeing is the first where a \$1 billion interest-free loan has been made available to a corporation so that it can gain a monopoly on production. The FAA Boeing contract provides that the government put up 90 per cent of the cost of two SST prototypes, without interest. The interest will be paid only as the aircraft are sold over the break-even figure.

These facts were brought out at length in a paper presented by Wheaton College Professor John Walgreen, an economist who assisted former Department of Defense Secretary Robert McNamara in a review of the SST program.

Dr. Walgreen said: "The SST subsidy will be drawn from general tax revenues and granted to highly skilled workers in the aircraft industry, stockholders of the SST manufacturers and their suppliers,

and air travelers who can afford faster transportation at prices that do not reflect all the costs involved... If flight paths are restricted, the program will lose about a billion dollars."

Another strange facet of the contract between the manufacturer and the U.S. government is that the agency representing the taxpayers—the FAA—is also the promoter of the product. The FAA is supposed to establish standards and certificate aircraft for safe operations. In the case of the SST it has taken on the role of developer and creator. The Congress has *never* authorized the construction of the SST, but an obscure section of an appropriation bill gives it the leeway to develop advanced aircraft types. This is the basis for the go-ahead by the FAA for pouring public funds into SST commitments.

Arguments have been made that the SST will provide employment in a distressed aircraft industry. However, on April 30, 1970, the Assistant Secretary for Manpower in the Department of Labor told the Joint Economic Committee that the net employment increase from the SST would be negligible and that SST production would do little to benefit those lower skilled workers hardest hit by the current downturn.

The same committee heard testimony from a re-known economist, Mary Goldring of the *London Economist*, that the high-priced SSTs will have to be subsidized by airfares paid by those who ride in tourist class on regular airlines.

The dollar drain on the Treasury, as described by leading economists, does not take into account the environmental cost of the SST. Dr. Richard L. Garwin, a physicist who headed a panel of President Nixon's Science Advisory Committee on the SST, said the airport noise from the plane would be "equivalent to the simultaneous takeoff of 50 of the loudest aircraft allowed under FAA certification requirements."

At Senate hearings, Dr. Gordon J. F. McDonald, the scientist member of President Nixon's Council on Environmental Quality, said that supersonic transport injections of water vapor into the upper atmosphere decreases ozone protection from ultra-violet rays.

"This is potentially such a significant problem that we really must understand it before proceeding in any way to alter the water vapor content of this part of the atmosphere," Dr. McDonald said.

The \$290 million for the SST program will be a large factor in the \$1.3 billion deficit for the end of fiscal 1971 predicted by the Administration.

— W. Lloyd Tupling

[REDACTED]

from the Sierra Club Exhibit Format book *Baja California*

