

Conservation: Keeping Watch on the Road Builders

Over the past century, highway construction has evolved from a modest endeavor barely scratching the countryside to a gigantic engineering enterprise which few natural obstacles can defy. The road builders have frequently invaded natural sanctuaries, damaged streams, and threatened historic landmarks. Problems of ill-advised routing of highways arise initially at the state level, for the selection of highway routes is a state prerogative. However, the routes of highways built in part with federal funds—a category

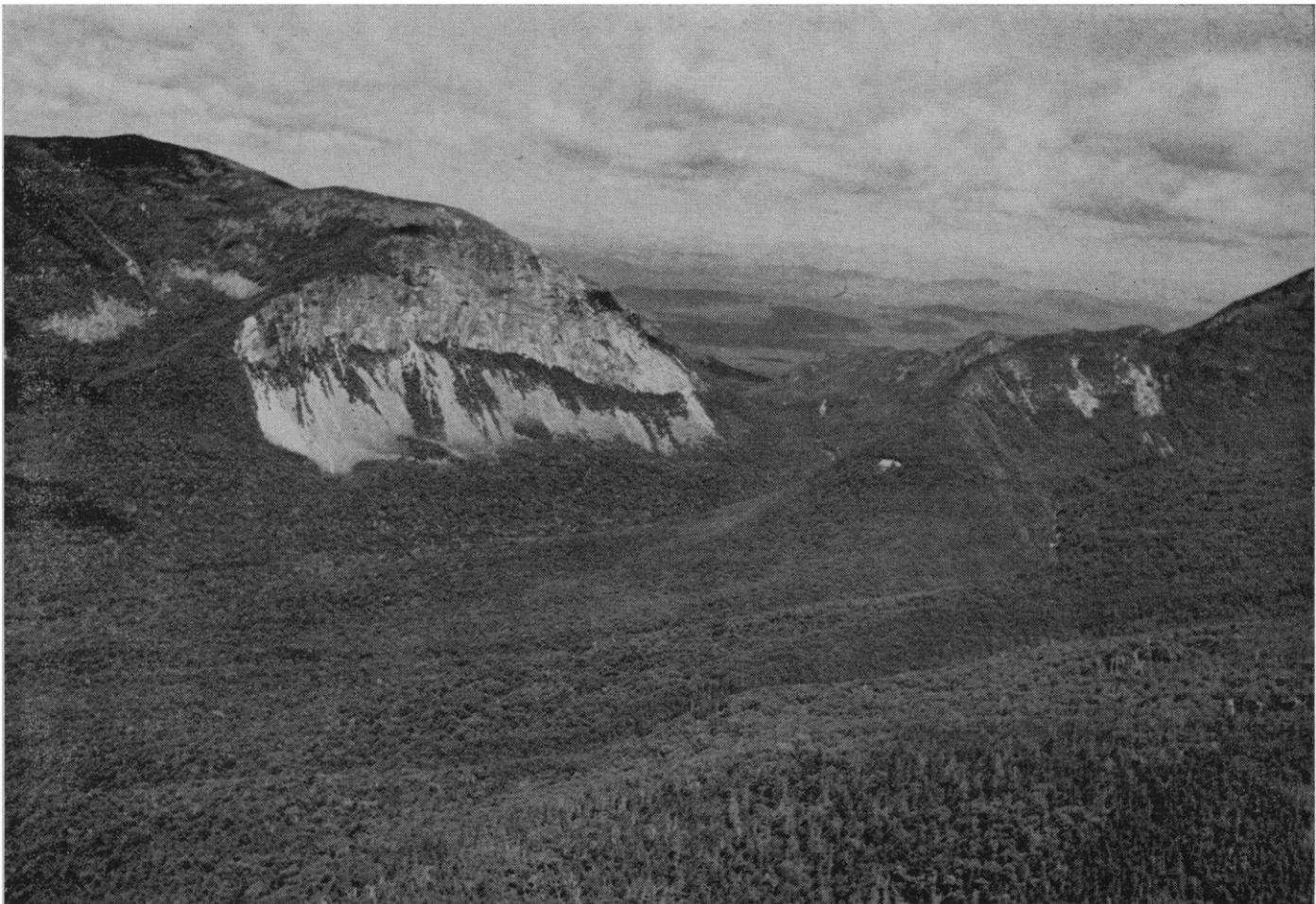
which includes most main roads—are subject to federal approval, and the U.S. Bureau of Public Roads (BPR) is criticized for too often failing to use its financial leverage to demand greater attention to conservation questions.

The bureau, with some coaxing from members of Congress, has become more conservation-minded in the last few years. But the federal engineers and their colleagues in the states are still often suspected of being obsessed with the pouring of concrete. Indeed, this suspicion is entertained by the

President's Citizens Advisory Committee on Recreation and Natural Beauty.

In its first annual report, made 29 June, the committee indicated that far-reaching reforms in the route-selection process are necessary if the road builders are to be trusted with the landscapes where they do their massive handiwork. It ran through the catalog of complaints that people make against existing methods of route selection—"that only lip service is paid to environmental values; that route selections are arbitrary and based on narrow grounds; that the public can express itself only after the decisions have been made; and that once they are made, there is no deflecting the engineers from their inexorable course."

Routes are chosen, the committee added, by archaic methods which are incompatible with present national policy, as last expressed in the Department of Transportation Act of 1966. The act says "special effort shall be



FRANCONIA NOTCH. Plans to route Interstate 93 through this pass overlooked by New Hampshire's famed Old Man of the Mountains have been modified in an effort to meet the objections of conservationists. The interstate highway will pass beneath the notch through a 3000-foot tunnel, while an existing surface road will take visitors to Franconia Notch State Park through the pass. [New Hampshire State photo by Dick Smith]

Interior's Role Strengthened in Protecting Estuaries

Henceforth, the U.S. Department of the Interior will play a stronger advisory role before permits are granted for nonfederal dredging and filling projects in estuaries and navigable inland waters. Such projects have led to a steady loss of estuarine habitat and to efforts by some members of Congress to pass legislation giving Interior a veto power over permit applications (*Science*, 30 June), which are granted by the U.S. Army Corps of Engineers. Recently, however, the secretaries of the Army and the Interior agreed to new review procedures concerning dredging and filling applications.

Whereas previously the Corps of Engineers obtained the advice of Interior's Fish and Wildlife Service on applications, now the Corps will also seek the advice of two other Interior agencies—the Water Pollution Control Administration and the National Park Service—and that of state conservation agencies. In cases where the permit applicant cannot satisfy Interior's objections to the project, his application will be referred to Washington for consideration by the Chief of Engineers and the Undersecretary of the Interior. Ultimately, unresolved issues are to be decided by the Secretary of the Army in consultation with the Secretary of the Interior.

In light of the new agreement, Representative John D. Dingell of Michigan, chairman of the House Fisheries and Wildlife Subcommittee, plans to drop his proposal to make dredging and filling applications subject to Interior's approval. He will continue to press for other features of his estuarine bill, such as the provisions calling for an inventory of estuarine areas and the designation of some areas for possible park status. The proposal to give Interior a veto over permits faced strong opposition, and its approval by Congress was in doubt. Nevertheless, it provided a strong stimulus to the negotiations which resulted in the Army-Interior agreement.—L.J.C.

made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." Moreover, it says the Secretary of Transportation shall consult the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and also the states, in developing transportation plans to maintain or enhance the beauty of the lands traversed. Proposals to build roads through parks, refuges, or historic sites shall not be approved, the act says, unless no "feasible and prudent alternative" is available.

The panel's recommendations, though seemingly mild, would provide new means for state and federal agencies concerned with natural resources and recreation to look over the highway engineer's shoulder. This would be accomplished by (i) improving existing procedures for giving all state, federal, and local agencies whose interests are affected a chance to comment as soon as an area is considered for selection as a route corridor; (ii) improving public

hearing procedures by requiring that an *impartial* hearing be held on the prospective corridor once all agency reports are available, and, in unusually controversial cases, requiring a second hearing once a specific route alignment has been proposed; and (iii) having both the federal and state governments establish interdepartmental Highway Review Boards which would review significant route-selection controversies and make formal recommendations (cases reviewed by the federal board would be decided by the Secretary of Transportation).

Although reports of advisory panels often are lost in the rush of events, this one seems assured of attention. The Advisory Committee on Recreation and Natural Beauty was established last year as an outgrowth of the 1965 White House Conference on Natural Beauty. Laurance S. Rockefeller, a generous supporter of Lady Bird Johnson's beautification projects and a personal friend of both Mrs. Johnson and the President, was named chairman.

Mrs. Johnson's efforts on behalf of conservation and natural beauty have been well received by the public and represent a political asset worth fostering. This in itself increases the likelihood that some, if not all, of the reforms proposed by the Rockefeller committee will be adopted following their review by a Cabinet-level body known as the President's Council on Recreation and Natural Beauty.

While certain of the proposals have the support of BPR, the proposal to establish a Highway Review Board is opposed by the bureau. "We feel strongly that any attempt to bring other departments into the decision-making process can't help but dilute the authority of the Secretary of Transportation," says one BPR engineer. Not mentioned is the bureau's reluctance to have its own power diluted. The bureau, formerly part of the Department of Commerce, has been a semiautonomous agency with lots of money and plenty of politically influential friends in the state highway agencies and among the road contractors and the suppliers of materials.

Whatever its failings, the bureau has taken some steps to require the state highway agencies to give more consideration to conservation questions. Over the past few years BPR has required state highway departments to submit proposed federal-aid highway projects to the state agencies responsible for wildlife, recreation, and historic sites at an early stage of planning. It had been prodded by Senator Lee Metcalf of Montana, who in 1963 was seeking legislation which would give the Department of the Interior a veto over highway plans.

Two years ago Metcalf again introduced legislation—this time a bill giving Interior authority to review, but not to veto, all highway plans. BPR's efforts to give the conservation agencies a stronger voice in highway planning had failed to produce the desired results, the Senator felt. Some highway officials had indicated their disdain for the interagency review procedure by speaking of the fish and game commissioners as men "who could not even read a blueprint." Typically, the state wildlife agencies were spending "nickels and dimes" while the state highway departments were spending millions. In political influence the wildlife people were no match for the road builders.

The Metcalf bill was supported by

conservation groups but opposed by BPR, and even by Interior, which said that such legislation was not needed. It never reached the Senate floor. Metcalf will reintroduce the measure this year, again with the prospect of strong opposition.

Bureau of Public Roads engineers regard themselves as the aggrieved victims of a propaganda campaign by conservation groups skillful at making much out of little. E. H. Swick, director of BPR's office of right-of-way and location, says that, although the bureau is spending \$4 billion a year for thousands of miles of highway construction, the number of route-selection decisions producing conservation controversies is small. While this appears true, conservationists are frequently disappointed in the highway builder's sense of values in cases where the protection of a valuable natural area would require either higher road construction costs or a loss of "user-savings" by the motorist.

Interstate 87 is going through Westchester County, the suburban area to the north of New York City where green space is at a premium. There were two possible routes, the shorter—and cheaper (by about 16 percent)—one passing through the "Chestnut Ridge" area dear to local conservationists. The longer route, too, would pass through a sanctuary, and BPR contended that one routing would be no more destructive to wildlife than the other. By insisting on the Chestnut Ridge route, however, the bureau overrode the wishes of Governor Rockefeller, Secretary of the Interior Udall, and many residents of Westchester county (although the county was divided on the issue).

The user-savings argument figures importantly in the Colorado highway department's justification for its plans to have Interstate 70 follow the 16.5-mile "Red Buffalo" route through the Gore Range-Eagles Nest Primitive Area, instead of the 27.1-mile Vail Pass route, where a road now exists and where project costs would be several times less. Computing a motorist's costs at 10 cents a mile, the department says that each trip over the Red Buffalo route will represent a saving of \$1.05 over what a trip via Vail Pass would have cost. The value of the wilderness to be violated cannot be so neatly computed.

In some instances controversies over route selections are carried on in the

dark, for lack of knowledge of the effects of road construction on natural communities. Interior has assumed that the construction of Interstate 65 through the Wheeler National Wildlife Refuge would lessen the refuge's values as a wintering place for waterfowl. But BPR says it can find nothing to support such a belief. The bureau has agreed to some change in the route alignment and will spend \$1 million for additional bridges, but, Swick says, whether this really is needed for proper refuge management is not clear.

"We need more positive information from the conservationists," Swick says. "We are asking, 'what are we doing to you?'" According to BPR officials, the bureau itself will be demanding more studies and documentation from the state highway agencies on the effects of highways on the environment. These agencies will be turning increasingly to the universities for research.

Whether or not major new route-

selection policies are adopted, the Rockefeller panel's call for reforms is putting the highway builders on their mettle. Even before the panel's work was well underway, BPR was drafting a memorandum (still to be issued) requiring the state highway agencies to adopt some of the hearing procedures which the panel is now recommending.

Clearly, greater effort at minimizing the damage of highway construction to the environment is needed. A large road-building program seems likely to continue indefinitely. Although the 41,000-mile Interstate System will be completed by the mid-1970's, a major effort will be needed to upgrade other parts of the national highway network. Moreover, there is now talk of a multi-billion-dollar system of "scenic roads." It would be ironic indeed if, in such a program, the bureau should give insufficient attention to conservation values, thereby adding to its list of real and alleged offenses against the environment—LUTHER J. CARTER

Environmental Pollution: West Germany, U.S. Cooperate

Bonn. Both West Germany and the United States have heavy concentrations of industry which create special problems of environmental pollution. And both countries have federal systems of government which pose special problems in dealing with man-made blight. A modest West German-U.S. cooperative program aimed at improving the quality of the environment is, therefore, rooted in real common interest.

In origin the program dates back to a December 1965 meeting between President Johnson and Ludwig Erhard, who was then Chancellor of the Federal Republic. Johnson said that Americans were impressed with German efforts to make cities more livable and that he was sending Interior Secretary Stewart L. Udall at the head of an interdepartmental team of American officials and experts to look at German accomplishments in natural-resource management and also to explore pos-

sibilities for a cooperative program between the two countries.

The report of this team last year became the basis for what informally is called the Udall program. Emphasis initially was on exchanges of both people and ideas in several key areas: water management, air pollution, noise abatement, urban planning, solid waste disposal, and coal research. Of those areas, exchanges have already taken place in the fields of water and air pollution, solid waste disposal, and coal research.

This year the program has been expanded to include electric power. A U.S. electric power study team is scheduled to visit Germany for 2 weeks in October and a similar German group is tentatively scheduled to visit major U.S. power facilities several weeks later.

Also scheduled for the fall is a visit to Germany by an American urban planning delegation headed by Housing and Urban Development Secretary