New Administration: EPA Nominees Seem Acceptable to All Sides

When President Carter announced on 16 February his nominee for administrator of the Environmental Protection Agency (EPA), he pretty well filled out his new Administration's roster of top players in the fields of environment, energy, and natural resources management. And, with but a few exceptions, the individuals who have been named seem to be fairly well received by environmentalists and business and resource-user interests alike. But a number of key nominations, especially at the subcabinet level, remain to be announced, and some of them could be controversial, though perhaps not to the point that a strong effort will be made to have any nominee rejected.

Key appointments that Jimmy Carter made early were those of James R. Schlesinger as his top adviser and man-to-see on energy policy and former Idaho Governor Cecil D. Andrus as Secretary of the Interior. By now, their attitudes have become fairly well known. Both appear to favor a policy mix that includes a greater emphasis on energy conservation than in the past but also a continued, if somewhat more cautious, push to develop energy supplies. Andrus, whose responsibilities are far broader than Schlesinger's, promises to make long-term environmental values a primary consideration in the management of the public lands, even though this could mean moving more slowly with the leasing of federal coal and outer continental shelf oil and gas tracts.

Now Carter is making his appointments in the environmental area, and his choices give some indication of what can be expected in that quarter, too. By and large, it seems that the strong hands in charge of energy policy and resource management will be matched by equally competent hands responsible for environmental protection.

From a quick survey one finds these new faces.

The Environmental Protection Agency. Douglas M. Costle, President Carter's choice to head EPA, is looked upon kindly by both environmental leaders and spokesmen for business and industry. Although he comes to EPA from the congressional budget office, where he was assistant director for the natural resources and commerce division, Costle is best known as commissioner of the Connecticut Department of Environmental Protection from 1973 to 1975. "I would certainly call him a friend of the environment," says Marc Caplan, director of the Connecticut Citizen Action Group, a Nader-inspired organization in Hartford. Caplan describes Costle, who is 37, as sharp and able and—unlike many public officials—not merely responsive to citizens groups but actively seeking their support. "But I don't think you can count on him always to do the right thing," Caplan adds. "He will be looking to the President for leadership." With this in mind, Caplan says that citizens groups must keep up their demands and maintain a favorable political climate for environmental protection.

"Reasonable and Fair"

Gary Knight, of the U.S. Chamber of Commerce in Washington, also speaks well of Costle. "We've heard a lot of good things about him," he says, observing that the word from industry people in Connecticut is that Costle is fair-minded and reasonable. Knight finds some comfort, too, in the appointment of Barbara Blum—a leader of the Carter campaign and formerly an environmental lobbyist in Atlanta—as EPA's deputy administrator. "I understand that she and her husband have had to meet a payroll," he says. (From 1966 to 1974, Blum was vice-president of the restaurant and restaurant-equipment supply chain which she and her husband founded.)

The White House is still to announce its choice of EPA's assistant administrators for the various functional areas, such as planning and management, enforcement, the clean air and clean water programs, and control of toxic substances. These are key jobs in an agency which, as many observers see it, still has a long way to go to get a firm hand on its complex administrative tasks.

The Council on Environmental Quality. Although not yet formally nominated at this writing, two highly regarded environmentalists, one a California legislator, the other a prominent environmental lawyer, are expected to be appointed to the CEQ. The council's chairman is to be Charles Warren, the Democratic assemblyman from Los Angeles who last spring shrewdly took advantage of the then pending nuclear ballot initiative to bring about the enactment of his own nuclear safety measures (*Science*, 25 June 1976).

Warren's other legislative accomplishments include sponsorship of the California Energy Conservation and Development Act of 1974 (creating the California Energy Commission), the Utility Lifeline Act of 1975 (providing an ensured level of service for all customers but particularly the aged), the California Environmental Quality Act of 1976 (strengthening the state law requiring impact statements on major public and private projects), and the California Coastal Act of 1976 (establishing a permanent land-use regulatory regime for the state's coastal margin). In addition, Warren sponsored the Agricultural Lands Preservation Act of 1976, which passed the assembly but was narrowly defeated in the state senate.

The other prospective CEQ nominee is Gustave Speth, an attorney with the Washington office of the Natural Resources Defense Council, the environmental law group which Speth and several other young Yale Law School graduates organized back in 1969. Regarded as one of the ablest of an able group of lawyers, Speth has had a major part in a number of important lawsuits, including one brought successfully in behalf of the Scientists Institute for Public Information to force the AEC to prepare an environmental impact statement on its research and development program for the breeder reactor.

CEQ's influence has been marginal in recent years; but, if Jimmy Carter gives the council his ear, it could now play a pivotal role on some key issues. Conscious of this, people in the nuclear industry view the forthcoming nomination of Warren and Speth warily.

The Department of Agriculture. The job of Secretary of Agriculture, now held by former Minnesota congressman Bob Bergland, is certainly not thought of as an environmental post, but one of the subcabinet jobs under Bergland is directly and importantly concerned with some vital environmental issues. It is that of Assistant Secretary for Conservation, Research, and Education, under which falls the U.S. Forest Service and the Soil Conservation Service (SCS) as well as the Agricultural Research Service.

Rupert Cutler, whose formal nomination to this job is said to await only routine FBI clearance, is looked upon by environmentalists as a splendid choice. In this position, Cutler would help arbitrate policy disputes over matters such

as how much clear-cutting to allow in the national forests and how far the SCS should go with its stream channelization projects.

According to Donald T. Donnelly, associate director of the American Farm Bureau's Washington office, many land-grant college people regard Cutler as an "environmental extremist." "Just the mention of his name drives them up the wall," Donnelly says.

Before undertaking graduate studies in resource economics and law at Michigan State University (MSU) in 1969, Cutler had held a succession of jobs with conservation organizations, including the National Wildlife Federation and the Wilderness Society. After receiving his Ph.D. in 1972, he joined the MSU faculty to teach in the fields of forestry, fish and wildlife management, and park and recreation resources. He has been active in extension work and has served as a member of Michigan's Environmental Review Board, a state equivalent to the CEQ.

Despite the dismay felt by some land-grant institution people at the prospect of Cutler's appointment, one strategically placed individual in state university circles told *Science* that he did not think opposition to the appointment would amount to much. To fight a nomination publicly is, he says, "risky as hell, because if you don't succeed, you've got a tiger on your hands." Besides, he added, the objections he had heard raised to Cutler seemed insubstantial.

Return of a Veteran

President Carter has made no new appointments yet at the Energy Research and Development Administration, and, since the departure of Robert C. Seamans, Jr., on 20 January, Seamans' deputy, Robert W. Fri, has been acting administrator. But Carter has appointed a new administrator for the Federal Energy Administration. In some respects the FEA has always been less than meets the eye, but if an able, forceful, and highly experienced administrator can make a difference, it is clear that the new incumbent, John F. O'Leary, will bring this agency greater prominence and respect. O'Leary has served successfully as head of the Federal Power Commission's Bureau of Natural Gas, the Department of the Interior's Bureau of Mines, the old Atomic Energy Commission's reactor-licensing directorate, and, most recently, as the top state energy official in New Mexico. He has gained a widespread reputation as an aggressive and effective administrator in all of these various roles. In the opinion of some, O'Leary's finest hour came when the Nixon White House, apparently doing the bidding of coal operators resentful at O'Leary's key role in the drafting and enforcement of the Coal Mine Safety Act, fired him.

Some environmentalists are unhappy with the O'Leary appointment because they associate him with the drive on the part of the coal industry to develop a big synthetic fuels industry in the Southwest. Yet he is also publicly committed to strict regulation of strip mining. On balance, many environmentalists seem to grant him an at least grudging acceptance. "Our New Mexico people say he isn't too bad," observes Brock Evans, head of the Sierra Club's Washington office.—LUTHER J. CARTER

Aftermath of the New Math: Its Originators Defend It

The "new math" movement, which was extensively promoted during the 1960's, has come under a barrage of criticism and a new movement—"back-to-basics"—has been gaining momentum. People complain that the new math produced a generation of computational cripples who are seriously hindered in their attempts to use mathematics in school and in their daily lives.

Proponents of the back-to-basics movement, which stresses computation and drill, often point to declining test scores in mathematics sections of college board exams and of national standardized tests, such as the Iowa Tests of Basic Skills and the Comprehensive Tests of Basic Skills (CTBS). They also say that the new math movement was pedagogically wrong—that it required students to reason in a way that contradicts what is known about how people learn.

Developers of the new math programs have answers for these charges, but their answers are not often heard. This article is based on their responses to criticism and their assessments of the past 15 years of curriculum reform.

First, the curriculum developers deny that test results demonstrate that students who were counted as being exposed to new math programs were subsequently less able to compute. They argue that the new math programs were, in fact, never properly implemented, so it is impossible to say whether the goals of the movement could have been achieved. Some of these goals were to emphasize concepts rather than rules in mathematics and to introduce topics of modern mathematics that have proved increasingly important in the 20th century. These include probability, statistics, and logic. The desired reforms were incorporated into a number of experimental curriculums written by mathematicians and members of mathematics education departments at universities. Among the better known curriculums were the School Mathematics Study Group (SMSG) and the University of Maryland Mathematics Project (UMMaP). Developers of the new math programs stress that there was no one curriculum that can be identified with this movement. But the curriculums shared many of the same goals, and all are lumped together when the new math is attacked.

Some developers of the new math movement admit that they invited the criticisms and hostility of the general public by their failure to anticipate the major difficulties in implementing radical new curriculums. They fear that the current back-to-basics movement is misdirected but that the social attitudes and economic climate of this country are no longer right for a new round of curriculum reforms.

The most widely cited evidence that the new math programs hindered students' computational abilities is the declining scores on the mathematics sections of the Scholastic Aptitude Tests (SAT). But the declines in mathematics scores from 1962 to 1975 were not as pronounced as those in verbal scores. The scores of Iowa Tests administered in 1963 and in 1970 indicated that students in the lower grades improved in their abilities to solve problems and to grasp concepts. Students in the upper grades did substantially worse in mathematics in 1970 than in 1963, but they also did worse in reading and language skills. A comparison of CTBS scores of 1968 and 1973 indicates that performance on the