

to \$720,000 (for California) have been made to all eligible states except Indiana, which has come into the coastal management program only recently.

Once its management program is approved by OCZM, a state becomes entitled to regular annual administrative grants. Also, it then has the assurance (albeit somewhat qualified) that all new federal projects or permits affecting its coastal zone are to be consistent with the management program. This guarantee of "federal consistency" may actually turn out to be more important to some states than the grants-in-aid, especially given both the impending rush to develop outer continental shelf oil resources and the importance of coastal regions for the siting of electric power plants. By the same token, the energy agencies are aware that, because of the federal-consistency guarantee, it is all the more important that energy needs not be overlooked in the preparation of state coastal zone programs.

In May, the Washington program received the OCZM's preliminary approval, and thus became the first to achieve such advanced status. But the Maine program would probably have been fully approved except for the fact that Governor James Longley has withheld his endorsement and questioned whether the program vests too much authority in state agencies and too little in local government.

Central to the Washington program is the Washington Shoreline Management Act of 1971, under which local governments are responsible for inventorying coastal resources and preparing master plans, subject to state review and approval. The coastal zone is to be divided up into several classifications, namely "natural," "conservancy," "rural," and "urban," with the latter being the best and perhaps the only bet for energy facilities. The granting of development permits also is done by local governments, but variances from the master plan require state concurrence. All power plant siting is subject to the review of the state's Thermal Power Plant Evaluation Council.

For all its strengths, the Washington program is regarded by the OCZM as still a bit patchy. For instance, in most places, development activities occurring more than 200 feet inland from the high water mark are beyond the purview of the Shoreline Management Act and are subject only to indirect and possibly inadequate controls, such as might be exercised under the air and water quality laws.

These considerations, together with the fact that by no means all of the coastal counties have completed their master plans, go far to explain why the Washington program has not yet been given fi-

nal approval. Also, the OCZM, even though convinced that the energy agencies have asked for more than the law requires, wants to see more evidence that energy needs have been fully considered.

Coastal zone management in Maine, as in Washington, was well along even before the federal law was enacted. Measures such as the Site Location of Development Act of 1970, the Mandatory Shoreland Zoning Act of 1971, and the Wetland Control and Protection Act of 1972 have given the Maine program a strong statutory base. For instance, under the site location act, all high-intensity land uses along the coast are subject to a special state permit.

In its comments on the management program for Maine's mid-coastal region, the FEA observed that, despite industry interest in establishing oil terminals and refineries in this state, no such projects had been approved (this comment preceded the recent state action approving an oil terminal and refinery at Eastport). The agency indicated that, in view of the possibility of oil and gas production on Georges Bank and of the large demand for oil in New England, the need for oil ports and other energy facilities in Maine may be especially great. And, whereas Maine coastal zone planning thus far has envisioned the development of oil ports and refineries in only a few places (such as the Portland area), the FEA would prefer that the range of choice be much wider.

In sum, with Maine, Washington, and other states now beginning to submit their coastal management programs to the OCZM for review, this fledgling agency is in something of a dilemma. On the one hand, it does not want to overstep its statutory mandate by second-guessing states on matters such as energy planning. On the other hand, it is being pushed by the FEA and other energy agencies to reject state plans that do not specifically provide for energy facility siting. In instances where the omission is clearly arbitrary, the OCZM will be on safe legal ground in complying with the agencies' demand. Absent such arbitrariness, the OCZM either will have to stretch the letter of the law (as it understands the law) and require program revisions, or it will have to reject the energy agencies' demands.

The latter course may not be easy in an Administration that seems to give an overriding importance to energy development. In February, the White House submitted to Congress an energy facility siting bill (*Science*, 28 February) that would allow the FEA administrator to reject state energy plans and rewrite them if necessary. Many in Congress regard this legislation as far too heavy-handed to be enacted. Possibly having a better chance of enact-

ment is a bill by Senator Ernest F. Hollings (D-S.C.), who sponsored the Coastal Zone Management Act. His bill would amend the coastal zone act to create a "coastal impact fund" from which \$200 million would be available annually for 5 years for state planning and management programs to cope with energy facility development and its impacts. But, because it does not call for federal review and approval of state energy plans, this measure is no substitute for the Administration's facilities siting bill.

If this latter bill is indeed stymied, the Administration may come increasingly to see the coastal zone program as a useful means of pushing the states to establish energy facility siting programs that can pass muster with the FEA.

—LUTHER J. CARTER

RECENT DEATHS

Ely Chinoy, 53; professor of sociology and anthropology, Smith College; 21 April.

Eugene A. Cogan, 46; director for research design and reporting, Human Resources Research Organization; 28 April.

Burns B. Crookston, 52; professor of education, University of Connecticut; 28 April.

John F. Dashiell, 87; professor emeritus of psychology, University of North Carolina, Chapel Hill; 3 May.

William G. Edwards, 87; professor emeritus of lumbering, Pennsylvania State University; 17 May.

Rubin H. Flocks, 69; former head, urology department, University of Iowa; 17 May.

George J. Gabuzda, 55; professor of medicine, Case Western Reserve School of Medicine; 16 May.

Harold V. Gaskill, 70; former dean of science, Iowa State University; 19 April.

Grace A. Goldsmith, 71; former dean, Tulane University School of Public Health and Tropical Medicine; 28 April.

Eugene Greuling, 60; professor of physics, Duke University; 16 April.

Mary E. Patno, 59; professor of biostatistics, University of Michigan; 11 February.

Walter S. Phillips, 69; former chairman, botany department, University of Arizona; 1 April.

Milton J. Polissar, 74; former professor of chemistry, City College of San Francisco; 25 March.

George H. Reed, 69; former chairman, chemistry department, Union College; 23 March.