

New Agencies Created, NOAA and EPA

President Nixon's plans to establish an Environmental Protection Agency (EPA) and a National Oceanic and Atmospheric Agency (NOAA) became effective 2 October.

EPA will be an independent agency made up principally of the Federal Water Quality Administration, now in the Department of the Interior, and the National Air Pollution Control Administration, now in the Department of Health, Education, and Welfare. Establishment of EPA is generally favored by conservation groups as well as by congressional leaders in the field of pollution abatement.

The plan to establish NOAA, however, has drawn fire from conservationists and from Senator Gaylord Nelson (D-Wis.) and several others in Congress. NOAA, to be a part of the Department of Commerce, would be made up of the Environmental Science Services Administration, already in Commerce, the Sea Grant program from the National Science Foundation, the marine fishery and marine mining programs from the Department of the Interior, and several other activities such as the national oceanographic data and instrumentation centers from the Navy.

Nelson said that the establishment of NOAA should await a decision as to which federal agency will administer the proposed coastal zone management program. Nelson has expressed satisfaction, however, at the fact that NOAA will be subject to all standards for environmental protection approved by EPA. Representative John Dingell (D-Mich.) has objected to the removal of marine fishery programs from Interior. Appointment of the heads of NOAA and EPA has not been announced.

—L.J.C.

which in the past has operated almost exclusively under contract to the Atomic Energy Commission; and the locale is the congressional district of Representative Joe L. Evins, the Tennessee Democrat who chairs the House appropriations subcommittee that handles the NSF budget. The subjects to be researched at Oak Ridge include environmental mutagenesis, techniques for measuring mutation rates in man, water treatment by hyperfiltration, case studies for national systems analyses, regional modeling, and an environmental information system.

Another large grant, \$647,900, was awarded to Michigan State University, East Lansing, for a project titled "Design and Management of Environmental Systems." Harvard received \$589,800 for an "Environmental Systems Program." And Kansas State University was awarded \$231,000 for work on "Political and Scientific Effectiveness in Nuclear Materials Control."

A grant of \$448,000 was awarded to the University of California, at Davis, under the title of "Land Use and Energy Flow Component of a Model of Society." The Applied Physics Laboratory, administered by Johns Hopkins University, predominantly under contract to the Navy, was awarded \$370,-

000 for research on fire fighting and prevention.

In all instances, the research will involve a variety of disciplines. In the environmental field, the spread is particularly broad, often ranging from the physical sciences to law and economics.

Snow reports that over 2000 inquiries have come in since the program was announced last December and that there have been 250 preliminary proposals and 50 formal proposals. In all awards made so far, he said, there has been a great deal of give and take between the applicants and his office, with proposals usually going back and forth two or three times before a final version is agreed on. Snow's staff currently numbers seven professionals and five secretaries; one measure of IRRPOS' future growth is that the total number is expected to rise to 17 by year's end. The review process for applications calls for approval by the IRRPOS staff, approval by the NSF director, and final approval by the National Science Board. The Board is said to take a lively interest in the program but, with minor exceptions, has so far approved whatever has been sent along.

IRRPOS is NSF's most visible response to the demands that the scientific community orient itself toward

contemporary problems, but the response shows up in other ways, too. Thus, even if they do not bear an IRRPOS label or come under that office, programs throughout the foundation are increasingly sensitive to the atmosphere that favors the seemingly useful. It is difficult to pin this down, especially since McElroy has stated his insistence that the new thrust be financed as an "add-on" to NSF's traditional activities, rather than a subtraction from them. But, in view of inflation, the relatively slow growth of the NSF budget, and pressures to pick up projects from the Defense Department, one wonders where the money is coming from. Thus, more and more, the foundation seems to be gravitating toward interesting, apparently worthwhile, but new projects that depart from its traditional role as the bank for basic research. For example, it recently announced an award of \$154,630 under which 15 unemployed scientists and engineers will receive training in computer science at Stanford. "Support of this project," an NSF announcement said, "is in accord with the National Science Foundation's efforts to seek innovative ways of providing skilled manpower for the scientific and technological openings that exist in industry and other sectors of the economy. . . . Retraining can both help individuals remain abreast of our rapidly changing technology, and help the economy make best use of these experienced individuals."

It is all part of a process in which the Washington administrators of basic science are getting into step with the political tempo that calls for aiming science toward doing something about problems that are here and now. NASA did it by cutting out two moon-rock collecting expeditions, and not one influential voice is to be heard in support of the scientists who genuinely feel that those rocks are very important. NIH is the acknowledged master of supporting science under the banner of disease fighting, but even its clients are feeling unprecedented pressures to pay more attention to disease.

Just how far this trend will develop is among the many uncertainties in Washington today. But it is worth recalling that, when President Nixon publicly introduced his new science adviser, Edward David, Jr., last month, he started out by describing him as "a very practical man." Kind words for basic research did follow, but the emphasis was on practicality.—D. S. GREENBERG