

Through its unusual character as a basically private Institution with strong governmental relationships, the Smithsonian can help provide the synthesis so critical to the successful creation of a national association of regional centers. Furthermore, the Smithsonian could help provide administrative support, including legal services, which will be so vital in the early stages of the association's development.

In our view, the basic concepts of an association of regional centers for ecological studies include: (1) a cybernetic system of research, education, and communication of information to society, (2) interdisciplinary and interinstitutional integration focused on contemporary ecological problems, (3) a network of regional university-based consortia, and (4) an ecosystem approach focused on man and his total environment. We would welcome the opportunity to join with Congress, the Ecological Society, private institutions, and universities across the land in meeting the challenges which confront this enterprise.

II. MANDATE FOR MISSION-ORIENTED ECOLOGICAL RESEARCH IN THE FEDERAL AGENCIES

The quality control of our environment is largely determined by the policies and activities of the various federal agencies whose concern is the management of the nation's natural resources. It is now clear that the exercise of this responsibility requires a strengthening of authority and financial support for the conduct of ecological research as a foundation for the management of these resources. A report prepared by the National Academy of Sciences for the National Park Service is illustrative of the problems involving ecological research that exist in one natural-resource agency of the Government. It is submitted that the conclusions reached in the NAS report apply in general to the policies and programs of the Fish and Wildlife Service, the Bureau of Land Management, the Federal Water Pollution Control Administration, the Forest Service, the Soil Conservation Service, the Public Health Service, the Atomic Energy Commission, the Federal Power Commission, the Tennessee Valley Authority, and others.

It is acknowledged that there exists in statutory authorizations many directives for scientific research of various types of these agencies. Nowhere, is there a clear expression of the requirement for integration through an ecological approach in the research. These agencies should be granted explicit authority and sufficient funds to conduct ecological research and directed to coordinate existing research authorities into a mission-oriented ecological research program to provide, as applicable, the following items:

- (1) An ecological survey and inventory of the lands and resources controlled or responsible for.
- (2) An ecological analysis of problems in operational or regulatory management, administration, and planning resulting from, and contributing to, *inter alia*, program policy, visitor use, demographic, economic, social, and technological change as may relate to resource and landscape use and development.
- (3) Cooperative planning with other Federal, State, and local agencies that administer or regulate the use of natural resources.