

lion dollars since the Department was organized back in 1849. Its geologists and its mining and construction engineers were there to help pioneer the West.

This long-term investment in research has brought us the basic knowledge required to manage over 460 million acres of public lands, to administer mineral leasing on all federally owned lands, to provide water for 9 million acres of farmland, to protect 230 national parks, monuments, and historic sites, and to handle wisely our valuable fish and wildlife resources.

These are all direct departmental applications of our continuing research programs. But the benefits from this research reach far beyond the Department's boundaries. Interior furnishes vital information on the entire environment. It supplies our basic geologic and topographic maps, tells of earthquake hazards, predicts natural water supplies, and aids the minerals and fishing industries through its research and information services.

Few mineral deposits have been discovered and brought into production without the Geological Survey having played a role in some aspect of the exploration, or the Bureau of Mines having had a hand in the characterization and processing technology. The predictable catches of our U.S. fishing fleets today are the result of research performed many years ago by Interior and cooperating agency scientists.

This Nation has a dependable resource base. The fact that we are sure of this base is largely due to Interior's research efforts. We have shortages and we know that present supplies are far from inexhaustible. But we know where those shortages exist, we know how fast the depletion is taking place, and we are at work to find alternatives for resources that will some day no longer serve us. We need to continue, even to step up, our efforts in this direction.

We have concern, too, for how our resources have been developed. In the process of extraction we have been guilty of waste, of pollution, of landscape mayhem. Yet along the way we have found, through intelligently directed research, the means to match this ugly record with a creative one—discovery of additional resources, reuse of present resources, invention of new resources.

The scientific ability and determination of our past has established the dependability of our resource base. It is scientific ingenuity, honed by experience and tempered by concern, that will guarantee this dependable resource base into a future where the spoilage and pollution, which we also inherited from the past, are happily missing.

We already possess the kind of technology necessary to continue tearing away at our resources. If we choose to sit down at Nature's peace table and negotiate for her remaining treasures, then stepped-up research, mirroring our new environmental concern, is needed.

We are in, and have grown to accept, the nuclear age and the space age. Spectacular as these are, they leave us with the challenge of the next age, which is the age of environmental quality.

This will be an age in which man truly understands the earth and air and water that sustain him. He will try to operate in concert with these elements, rather than at their expense, for he will see clearly that the expense ultimately is his.

Many of our most pressing social problems have their roots in lack or misuse of our land and its resources. Development of a peaceful working relationship between man and Nature can do nothing to