

fresh water for agriculture. This is still an ultimate goal, but by far the most difficult to achieve. We intend to explore, in conjunction with other Federal agencies and State universities, an experimental program to develop an optimized agricultural system which could feasibly use moderate-cost, high-quality water.

Our fundamental and applied research will continue to provide the solid foundation for our development programs and to seek out new processes, materials, and process effects. We will give particular emphasis to those processes which offer the highest probability of a scientific breakthrough, and will continue to search for materials that will enable us to reduce the capital investment required for desalting plants.

We have defined our 5-year desalting program to meet the needs of potential areas of use where desalting offers an alternative.

Our estimated costs for this program are \$240 million.

I want to thank this committee again for the opportunity to testify in behalf of a program which certainly the Department of the Interior considers to be very vital to this Nation.

(The prepared statement follows:)

STATEMENT OF JAMES R. SMITH, ASSISTANT SECRETARY FOR WATER AND POWER RESOURCES, U.S. DEPARTMENT OF THE INTERIOR

Mr. Chairman and members of the committee, I am glad to have the opportunity to appear before you today to provide comments on S. 991 and testify in behalf of the Department of the Interior's legislative proposal for a five-year program to further advance the technology for low-cost desalting processes as well as our request for \$27,025,000 authorization of appropriations for the fiscal year ending June 30, 1972 (S. 716).

The Office of Science and Technology Report recently transmitted to the Congress by the President sets forth goals for a national program. Our request, which entails some changes in the scope of our authority, is commensurate with these goals. I would like to discuss briefly the basis for this legislation, summarize the salient points, and present our plans for the period covered by the request.

The work of the Office of Saline Water and of the Office of Water Resources Research has been integrated within the Department of the Interior with the program of the Bureau of Reclamation under the responsibility of the Assistant Secretary for Water and Power Resources. This program now presents and exceptional opportunity to conduct a unified water research, development, and management program of broad scope.

My review of the many achievements of the desalting program has convinced me of its sound potential for continuing progress. The technology is now available to meet the water needs of small communities and many specialized situations. Our program must now address itself to the objectives of continued reductions in desalting costs and developing large-scale technology. We must get the developing technology to the people of our Nation who need it.

Like many members of this committee, I am keenly interested in the potential of desalting to provide an alternate source to assist us in meeting the constantly increasing demands for more and more fresh water.

When we study the population projections and relate those projections to the demand for water, it is clear that we must use every practical program the mind of man can devise to conserve and make wise use of our existing sources of supply. Furthermore, we need to supplement that supply through technological creativity, such as water purification and reclamation systems, desalting processes, and comprehensive management systems.

When we look at the projections of water consumption through the year 2000 and compare these projections with those for water availability, it becomes apparent that desalting technology will be a very important tool of water management.

Our expanding population will also require increased industrial activity. This increase in industrial activity will be in more than direct ratio to the population growth because of increased personal income and expanded buying power. In-