

provide desalting technology to them and give OSW information on utilization of various desalting processes, on possible sites or areas for future desalting use, and indicate needs for research and development emphasis. The desalting studies thus support the first three program elements.

The OSW program has been carried out through a series of grants and contracts with educational institutions, industry, and cooperating Federal, state, and local agencies. We can now see a growing desalting industry with exciting potential.

The following considerations justify the need for legislation to continue for 5 years the existing authority of the Secretary of the Interior to conduct the Saline Water Program. This legislation is justified by several factors:

1. Current information about our water resources and environment, much of which has been developed only in the last decade, clearly indicates that desalting technology will be required to reuse water, and to recover valuable by-products.

2. An effective water resource program must be based on the realization of the complexity of the water resource system. Optimum utilization of our water resources involves both economic and other considerations. In the light of all this, the program provided for in this legislation includes coordination; information; stimulation of those areas of desalting technology which may either lag behind or require exceptionally long lead times; encouragement of technical and managerial innovation; technical assistance to communities; and encouragement of a stable broadly-based desalting industry.

3. Where desalting is the only technique that will meet a requirement, there is no decision problem. With other alternatives existing, the Federal Government and potential users must keep pace with the current capabilities and the future prospects of water technology to develop viable long-range plans for the maximum use and protection of water resources.

4. The intense concern over the environment in the last few years has revealed that we need to know more about its problems. Thus, Federal participation in desalting provides greater flexibility in dealing with problems of environmental control.

5. Our population will continue to increase. This growth of necessity means a more intensive use of water and a resultant build-up of contamination. It is possible to achieve any desired degree of water renovation by using such desalting technology as distillation and reverse osmosis.

6. Further, as our population increases, we will approach the limits on the quantity of water we can impound and thus approach the limits of water storage.

7. During long droughts, stream flow will be reduced and stored water will be depleted. Water systems including desalting plants would insure a continuous supply of fresh water.

8. Since a considerable time is required for refinement of the technology and construction of plants, the desalting program, with the continued development and the rapid application of the technology including plant construction and acquisition of data under a variety of conditions, must continue.

This new legislation will give the OSW desalting program the tools needed for it to make its proper contribution to the future water needs of the Nation.

You will note that we have requested authorization of the necessary monies subject to a biannual review by the Congress throughout the life of the desalting program. The considered advice and guidance of this committee have been invaluable; therefore, it is our intention to present not only the Appropriations Committee but this committee with a periodic review.

We anticipate that as part of our program, we would provide limited technical assistance upon request since many of the smaller communities cannot retain an engineering staff with training in desalting technology. Similarly, we would expect to furnish information and direction to agencies with loan and grant-in-aid authority to encourage consideration of desalting as an alternative in water resource programs under their jurisdiction.

We are also requesting authority to sponsor research projects with foreign organizations. There are many competent investigators abroad who have singular expertise in highly specialized areas, some of whom we would like to sponsor, particularly in fundamental research. Where the investigations of these scientists appear to promise significant process improvements or occasionally new processes, it would be to the benefit of the program to determine whether, in fact, their results warrant further investigation and eventual process development. It is not the intention of OSW to create or sponsor foreign desalting