

desalting technology as described in S. 991 of this Congress. I am pleased to present this statement in support of the program to develop large-capacity sea water desalting technology as described in S. 991, 92nd Congress, first session.

On March 2, 1970, we appeared before this subcommittee to outline California's desalting objectives. Our statement is on record in your file, and contains background information on the Department's desalting program, and our years of cooperation with the Federal Office of Saline Water. We informed this subcommittee that as the result of an updated cooperative agreement with the Office of Saline Water, one of the early joint efforts would be to explore thoroughly the feasibility of construction and operation of a large-capacity prototype desalter in California. There is a critical need to gather information on large-capacity desalting during the seventies so that it will be possible to make decisions in the eighties concerning the role desalting may play in meeting future water requirements. We are pleased to report considerable progress on the program presented to you last year.

In May of 1970, an agreement was signed between the Department of Water Resources and the Office of Saline Water to conduct a joint study for the development of a large-capacity prototype desalter of up to 50 million gallons per day—50,000 acre-feet per year—capacity. The study is being financed on a 50-50 basis between the two agencies. The work is being conducted by the Department and its consultants.

The construction and operation of a large-capacity prototype desalter is proposed to accomplish several important objectives, as follows:

1. Determine from a prototype desalter the technical and operating information needed for more accurate design and cost estimates of large-capacity desalters.
2. Operate a prototype desalter in conjunction with an electric power generation unit to evaluate interface problems between water and power production.
3. Provide the desalted water to a water service area in order to gain experience in the best means of integrating a supply of desalted water with other water supplies.
4. Establish means of environmentally acceptable operation, especially in connection with the discharge of warm sea water and brine back into the ocean.

The prototype desalter study was initiated in July of 1970. One of the first efforts was the determination of a water service area and a site where a prototype desalter might be constructed. In January of this year this determination was completed and the Department issued a report entitled "Site Selection for a Large Scale Desalting Plant." A copy of the report will be provided for the subcommittee file.

As part of the site selection study, the State of California, working with the Department of the Interior, evaluated eight potential water marketing areas along the California coast, between San Francisco and the Mexican border, which indicated an interest in using desalted water produced by a prototype desalting plant. These eight areas were evaluated as six water service areas, as follows: San Mateo-Santa Cruz, Santa Cruz-Monterey, San Luis Obispo-Santa Barbara, Santa Barbara-Ventura, Orange, San Diego.