

"Desalination" is a term which has been coined to encompass all of the methods and techniques available for removing and reducing the amount of salts dissolved in water. The term includes those processes for sea water conversion as well as those intended to reduce the salinity of brackish waters.

We are extremely interested in desalination. California participated with the Office of Saline Water in the construction of a saline water conversion plant at Point Loma. We are again participating with the OSW in its San Diego Saline Water Test Facility. The plant will be constructed by the OSW, and the State will market the water.

If financially feasible processes were available, we could use them to provide supplemental water to Los Angeles and other south-coastal metropolitan areas. Economical processes could reduce or perhaps even eliminate the problems of increasing salinity in the Salton Sea which now threatens to become too salty for the ocean fishes that abound there at the present time.

We also might be able to use these processes to remove the salts from drainage waters in the San Joaquin Valley, thus adding to our water supply as well as decreasing the problem of drainage removal.

Although numerous desalination methods are available, none of them are economical enough for general use at this time. Limitations of time and cost have forced us to proceed along more conventional lines in coming to grips with our immediate problems.

In one San Joaquin Valley town, Coalinga, both electro dialysis and reverse osmosis processes are being used to demineralize brackish well waters to provide drinking water for the community. These processes, though costing about \$100 to \$150 per acre-foot, provide substantial savings when compared to the cost of the former method which involved the transportation of drinking water to the community in railroad tank cars. Here again the use of available technology is limited by the costs involved.

Cost, however, is not the only problem. There are other water quality factors which must be resolved in addition to breaking the cost barrier, a major one being what to do with the concentrated wastes. When desalination plants are located inland, the problem is to get rid of the concentrates without permitting them to reenter the water supply.

The problem of brine disposal is also present when desalination plants are located along the coastline. There is insufficient knowledge of the ecology and currents in the ocean. For instance, it is believed that sections of the offshore waters are almost devoid of plant and animal life in contrast to their great abundance elsewhere. There has never been a comprehensive survey of the coastal ecology and the horizontal and/or vertical currents. In order to provide a safe place in the ocean for deposit of hot concentrated brines, comprehensive surveys of the ecology and oceanography of the most likely section of the coast should be made.

Mr. VIVIAN. Mr. Chairman?

Mr. DADDARIO. Yes, Mr. Vivian?

Mr. VIVIAN. You have touched upon a subject of very great interest to me; of the ability of the ocean to absorb types of waste over long