

significantly dependent upon the concentration of salt in the water supplied. The membrane processes on the other hand are quite dependent upon the initial salt concentration as well as its chemical composition. Costs for membrane processes are thus more difficult to express as generalized values. The 35 cents per thousand gallons at Siesta Key is illustrative of 1000-1400 ppm brackish water conversion costs using electrodialysis. This process is fairly well developed commercially for capacities of 1 mgd and below. Reverse osmosis has reached commercial availability and use only in sizes up to 100,000 gallons per day, hence, cost estimates are not as firm as those for electrodialysis and distillation in the 1 mgd size range. Best indications from the analysis of reverse osmosis pilot plants suggest costs of 50 cents per thousand gallons with present membranes, assuming a one-year membrane life for 3000 ppm salinity and 1 mgd capacity. The scaling economies for reverse osmosis units presently appear to be much less than that for distillation technology, and the large 40-50 mgd reverse osmosis plants may well be only a series of smaller units installed to provide the desired capacity.