

program to the Advanced Waste Treatment and Wastewater Renovation Research Program of the Environmental Protection Agency has occurred and more may be expected. While the most immediate problems in water pollution control relate primarily to the removal of organic substances and nutrients, many uses of water add dissolved inorganic pollutants as well. When water is recycled, its dissolved solids content can build up to unacceptable levels. In a complete wastewater renovation system, these dissolved solids may have to be removed to make the water capable of further re-use.

Total water supply and waste management systems may, in the future, require a true systems approach that combines conventional water supply, desalting, sewage treatment, wastewater renovation and solid waste disposal in optimal arrangements. In these applications small-scale desalting plants would dominate, with membrane processes having inherent advantages over distillation. Large desalting plants, however, may be required for some of these total system applications.

In an attempt to develop quantitative estimates of the probably magnitude of the future use of desalted water in areas outlined