A Novel Hybrid Membrane Desalination Process with Minimal pretreatment and Concentrate

Funding Agency:

CA DWR

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Project Objectives

- Membrane selection and process modeling of hybrid reverse osmosis/ forward osmosis process
- Design and construction of a advanced benchscale RO/FO system
- Testing of advanced bench scale RO/FO system





Methodology

- Experiments are being conducted on the bench scale to quantify the forward and reverse diffusion of of both feed and draw solution solutes in specially developed FO membranes
- Experiments conducted with advanced benchscale system to determine advantages and limitation of hybrid RO/FO systems for enhanced recovery of impaired saline water



