

Critical Assessment of Desalination Technologies

Funding Agency:

- Water Research Foundation (AwwaRF 4006)
- UK Drinking Water Inspectorate

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Project Objectives

- Identify and evaluate the full range of water quality, energy, environmental, economic, social, institutional, and regulatory impacts of implementing desalination technologies.



Methodology

- Data collection
 - Literature Review
 - International utility survey
 - Expert workshop
- Case study analysis
 - California, Colorado, Florida, Arizona, UK, Australia, Israel
- Development of a multiple criteria decision analysis (MCDA) approach



Major Findings

Challenges	Mitigation Strategies
<ul style="list-style-type: none">• Environmental considerations• Energy use• Carbon footprint• Water quality• Concentrate disposal• High cost	<ul style="list-style-type: none">• Conduct thorough feasibility study and pilot-testing• Address early and effectively environmental concerns• Lead a collaborative, open, and transparent dialogue• Develop a multiple criteria decision analysis approach

