
Desal Implementation Challenges Entitlement and Permitting

CalDesal Conference 2012

The logo for DUDEK consists of a horizontal bar divided into three colored segments: blue, orange, and green. The word "DUDEK" is written in blue capital letters to the right of the green segment.

DUDEK

Process Overview

- **Determining Project Need**
- **Design and Investigative Studies**
- **CEQA**
- **Permitting**
- **Challenges/Litigation**

CEQA Challenges

Making the Case for Desal

- **Evaluating Project Need**
 - Specific Demand Analyses
 - Broader Portfolio Considerations
 - Diversification
 - Reliability

- **Relationship to Alternatives**
 - How is Need Satisfied?
 - Conservation
 - IPR
 - Other Local Supply Options
 - Storage and Management
 - Stormwater Capture/Treatment
 - DPR – not yet...

“Big 3” Issues

- **Energy and Greenhouse Gas Emissions**
- **Impingement and Entrainment**
- **Brine Disposal**

Energy and Greenhouse Gas Emissions

- **Determining Baseline**
 - Water Supply Portfolio Energy Usage
 - Displacement of Existing Supply Sources (Imported)
 - Credit for Existing Programs

- **Selecting “Compliance” Method**
 - CEQA Threshold
 - Existing/Established Thresholds
 - “Net Carbon Neutral”
 - 100% Offset
 - Climate Action Plan

Energy and Greenhouse Gas Emissions

- **Coastal Act Section 30253:**
 - “Minimize energy consumption and vehicle miles traveled”
- **CEQA Appendix F**
 - Avoid inefficient, wasteful, unnecessary energy consumption
- **CEQA Guidelines 2010**
 - Added provisions for analysis of GHG Emissions
- **Applicable Thresholds – Air District, etc.**

Evaluating I/E Effects

- **CEQA 15065**
 - **Substantially** reduce the habitat of a fish or wildlife species
 - Cause a fish or wildlife population to drop below **self-sustaining** levels
 - Substantially reduce the number or restrict the range of an **endangered, rare or threatened species**;
- **Ocean Plan**
 - **Protection** of beneficial uses – marine habitat, etc
- **California Water Code Section 13142.5(b)**
 - **Best available** site, design, technology and mitigation feasible to **minimize** intake and mortality of marine life.
- **Coastal Act - Sections 30230 and 30231**
 - Marine resources shall be **maintained**, enhanced, and where feasible, restored
 - Maintain **optimum populations** of marine organisms
 - **Minimize** adverse effects - Entrainment

Brine Disposal

- **Issues**
 - **Salinity Tolerance**
 - **Brine Dilution/Dispersal**
 - **Intake Effects (Dilution)**

Proposed California Ocean Plan Amendments

- Purpose: Standardize Process
- Opportunity to Consider Broader Policy Considerations
- Status
- Issues:
 - Sufficiency of Data and Data Gaps
 - Site and Project Specific Variations
 - Conclusions

Brine Disposal Expert Panel Report:

“From these studies, it is clear that the effects (or lack thereof) of desalination concentrate vary widely, depending on the organism, site, the biotic community at the site, the nature of the concentrate, and to what degree it is diluted and dispersed.”

Permitting

Permitting Issue	Applicable Laws, Standards, Regulations	Permitting Agency
<ul style="list-style-type: none"> • Intake • Brine Disposal • GHG Emissions • Construction Effects 	California Coastal Act §30230 and §30231	<ul style="list-style-type: none"> • California Coastal Commission
	California Water Code §13142.5 (b)	<ul style="list-style-type: none"> • State Water Resources Control Board • Regional Water Quality Control Boards
	California Public Trust Doctrine	<ul style="list-style-type: none"> • California State Lands Commission
	Magnuson-Stevens Act	<ul style="list-style-type: none"> • NOAA Fisheries
	Endangered Species Acts (CA and U.S.)	<ul style="list-style-type: none"> • NOAA Fisheries • California Department of Fish and Game
	Marine Mammal Protection Act	<ul style="list-style-type: none"> • NOAA Fisheries

Permitting

Environmental Regulations and Management can get “Siloed”

- **Holistic Vision of Water Management Outcomes**

- Native Fisheries
- Climate Change Adaptation
- Growth
- Reliability
- Other Social Factors

State Water Code Section 13142:

“The principles, guidelines, and objectives shall be consistent with the state goal of providing a decent home and suitable living environment for every Californian.”