

**American Council of Engineering Companies (ACEC) California
Policy Platform
Desalination**

Approved by the Executive Committee on April 9, 2014

Approved by the Board of Directors on April 9, 2014

Issue

- California is largely dependent on runoff from the Sierra snowpack, local runoff to reservoirs, and imported water from the Colorado River and Owens Valley to supply potable water to its population. These sources can be significantly impacted by cycles of drought, environmental constraints, regulatory restrictions, and many other factors.
- Few areas of California have reliable, local sources of potable water. Local groundwater sources are often constrained by volume (potential for overdraft), environmental impacts, and judicial adjudications.
- Traditional water supply management methods such as surface water storage, groundwater banking and extraction, and inter-basin water transfers will not be sufficient to meet increasing water demands.
- Conservation and use of recycled water for irrigation, industrial processing, and groundwater recharge has helped extend the local sources of potable water.
- Although potable water demand in some areas of the state has recently declined due to conservation efforts and a sluggish economy, these reductions will likely be insufficient to enable existing sources of supply to meet future demands.
- Seawater desalination plants are capable of producing product water that meets applicable drinking water standards, and are subject to rigorous oversight from State regulatory agencies.
- Seawater desalination can provide a new, drought-proof source of potable water to augment agencies' existing water portfolios.
- Development of desalination projects is an arduous process due to tight regulatory constraints, environmental opposition, and high cost per unit of water produced.
- Advances in technology have resulted in a more efficient treatment process that has reduced desalination construction and operating costs to be in line with the wholesale cost of current water supplies for many agencies.
- Environmental concerns regarding seawater desalination plants include impacts to fish and other aquatic life near plant water intakes and the potential damage to the environment caused by discharging the residual concentrate/brine produced during the desalination process

into the ocean. New plants can be co-located with existing ocean-cooled power plants to eliminate new intake structures, dilute brine through co-discharges, and reduce energy needs for the desalination process.

Policy

ACEC California believes that seawater desalination can improve the overall reliability of potable water supplies to meet California's growing needs, especially in communities that import the majority of their potable water.

ACEC California supports:

- Creating new sources of water supply while being good stewards of the environment.
- Streamlining of the application and permitting process for design and construction of new desalination plants.
- Developing water resources that provide relief in the event that primary sources of imported water are disrupted due to various forms of emergency.
- Expanding public/private partnerships to design, construct, operate, and maintain desalination plants.
- Including funding in the Water Bond for desalination projects.

Rationale

- Seawater desalination can provide a drought-proof, highly reliable and sustainable source of potable water, and can help to diversify a community's water supply portfolio.
- For many coastal communities, seawater desalination may be a particularly viable solution to reduce dependence on imported water.
- Desalination plants help to diversify drinking water sources, thereby improving the reliability of water supply systems. Diversification allows the flexibility to take selected water treatment plants, pipelines, and/or pump stations out of service in response to emergencies, repair needs, or planned maintenance.
- Desalination projects provide economic benefit through the creation of jobs. Operation and maintenance of plants create opportunities for full-time, highly skilled positions and other positive indirect impacts to the local economies where plants are located.

*ACEC CA Policy Platform
Desalination
First Approved (2014)*