

# EQUINOX CENTER

News Release, Tuesday, December 21, 2010

Contact: Ann Tartre, Acting Director, Equinox Center (760) 230-2960; [ann@equinoxcenter.org](mailto:ann@equinoxcenter.org)

## **Seawater Solution: Desalination a Viable Resource for Local, Sustainable Fresh Water**

The Equinox Center today released the fourth [report](#) of its H2Overview Project, a series on San Diego County's critical water supply issues. Extended droughts, a growing population, crumbling infrastructure and the threat of earthquakes, legal disputes and concerns about threatened species have put San Diego County's water supplies at risk, and resulted in escalating water prices. In this context, the study reveals that, while not without challenges, **desalination could be a high-quality, drought-proof water source to add to the region's water supply.**

The Equinox Center report comes on the heels of an announcement this week by California Department of Water Resources officials that San Diego County and other urban areas will receive 50% of their requested water allocation from the State Water Project, which brings water to the region from Northern California. Last week, water managers in the southwest met to discuss the historically low levels of water in Lake Mead, a large reservoir on the Colorado River which also supplies water to the San Diego region.

**Key findings** of *H2Overview: The Potential of Desalinated Seawater as a Water Source in San Diego County*:

- **Provided that the best possible design and environmental mitigation strategies are employed, desalinated seawater can be a viable water source for San Diego to add to its local water portfolio.**
  - ❑ Currently the San Diego region imports over 80% of its water supply from Northern California or the Colorado River. Both supplies are at risk due to environmental, legal and infrastructure issues and a natural disaster such as an earthquake or wildfires could jeopardize our water supply for months.
  - ❑ Seawater desalination could provide a reliable, drought-proof water source and reduce the region's dependence on imported water and other already scarce sources (groundwater, surface water) that will likely be affected by climate change.
  - ❑ The quality of water from seawater desalination is quite high--better than our current treated imported water supply.
- **Seawater desalination does have some challenges, including its high energy usage, and higher marginal costs compared to other sources.**
  - ❑ Extensive development of seawater desalination in San Diego County could challenge the region's ability to meet its climate and air quality goals, although the use of renewable energy sources to supply power to desalination plants could help mitigate this issue.

# EQUINOX CENTER

- ❑ Desalinated seawater currently has a higher marginal cost compared to other sources, and because of its high energy usage, costs may escalate faster than other sources if energy prices increase dramatically in the next decades.
- **With good design that utilizes the most advanced technologies, many potential harmful environmental impacts from seawater desalination can be reduced or eliminated.**
  - ❑ The environmental impacts are dependent on the siting of the facility, the design of the plant and technology used, and the characteristics of the surrounding habitat and ecosystem.
- **Currently four seawater desalination plants are being considered to supply water to the San Diego region: Poseidon’s Carlsbad plant, the San Diego County Water Authority’s Camp Pendleton proposal, and two proposed plants in Baja, California, Mexico.** Each proposed project has its own unique characteristics and they should be considered on a case by case basis. If all were approved, together they could provide between 10-15% of the region’s supply by 2020.

“This study shows that seawater desalination can help bolster the reliability of our water supply as the region’s population and our businesses grow over the next decades,” said Ann Tartre, Equinox Center’s Acting Director. “However, because seawater desalination requires large capital investments, we recommend that before water managers pursue extensive development of seawater desalination in the region, stakeholders come *together* to create a blueprint for a water portfolio that optimizes economic, environmental and social outcomes. “

Aaron Contorer, Equinox Center’s Board Chair, emphasized that “this ‘triple bottom line’ approach used by the Australian National Water Initiative is a strategy that the San Diego region should consider emulating. We need solutions that are good for our economy, good for the environment and good for the community at large. Desalination, if done appropriately, could be part of the answer to our region’s water challenges,” said Contorer.

*About Equinox Center:* The Equinox Center is an independent, non-partisan, not-for-profit organization formed in 2008 to research and advance best practices and innovative solutions to balance San Diego's regional growth with our finite natural resources. The Center is dedicated to helping San Diego County craft an intelligent and sustainable future while enhancing economic opportunities in the region. Pursuing its 3 core values (healthy environment, strong economy, vibrant communities), Equinox Center works at the heart of four major issue areas: water, land use, energy and transportation.