

SoCal Salinity News

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Coalition Members

Calleguas Municipal
Water District

Central and West Basin
Municipal Water Districts

Los Angeles
Department of
Water & Power

Inland Empire
Utilities Agency

Irvine Ranch
Water District

Metropolitan
Water District
of Southern California

Mojave Water Agency

Orange County
Sanitation District

Orange County
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San Diego
Water Authority

Sanitation Districts of
Los Angeles County

Santa Ana River
Watershed Project
Authority

Water
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of Southern California

in Affiliation with the

National Water
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Coalition President Testifies at Colorado River Salinity Control Forum

RICHARD ATWATER of the Inland Empire Utilities Agency, the President of the Southern California Salinity Coalition, Inc., testified at the Colorado River Salinity Control Forum about the goals and objectives of the Coalition.

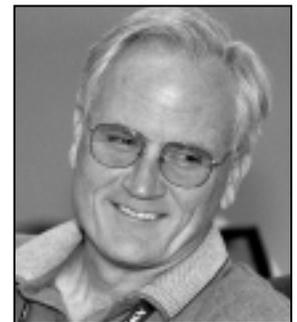
One of the Coalition's focal points is the need to control the salinity concentrations of the Colorado River, which provides nearly 30-million people with water. Salts dissolved in Colorado River water cause over \$300 million in damages each year.

The Southern California Salinity Coalition, Inc., was established in 2002 with the primary objective of determining the best available approaches to managing and reducing salinity in Southern California

The Coalition also strongly supports the efforts of the Metropolitan Water District of Southern California in implementing the action plan included its Salinity Management Study. These include:

- Establishing source control salinity measures to reduce the concentration of imported supplies, which include water from the Colorado River and California State Water Project.
- Controlling the local sources of salt, including the regulation of water softeners.
- Constructing brine sewers to export salts within the watersheds of Southern California to the Pacific Ocean.
- Desalinating wastewater and brackish groundwater to allow the reuse and recycling of salinity-impaired local supplies and to reduce our dependence on water supplies from the Colorado River and California State Water Project.

Salinity is considered the most under-recognized water-quality problem in the United States today. The Southern California Salinity Coalition, however, is actively seeking a means to remedy it.



*Richard W. Atwater,
Coalition President*

Salinity Coalition's First Project Is Under Way

SIX MONTHS AGO, the Salinity Coalition began funding the "Water Softener Pilot Program," a project that is assessing customer behavior towards different types of incentive programs to help mitigate salinity issues that are caused by the use of water softeners in residential households. The Principal Investigators of this project are David S. Kung and Kim Knight, both of Claremont Graduate University in California.

Their study included four major components used to evaluate consumer

preferences regarding the use of water softening devices, including:

- Focus group sessions.
- Focus group multiple questionnaires.
- Large-scale general survey.

Salt and Pepper Issues

There's a reason why blood tastes salty. Human blood contains about 0.9 percent sodium chloride (otherwise known as salt). That's about 9,000 parts per million — or about *nine times* the maximum salinity level set by state regulators of drinking water.

Source: AQUEDUCT MAGAZINE, June 2002.

- An incentive program (funded by the State Department of Water Resources).

The results of the focus group sessions showed four distinct trends:

- There was a significant amount of misinformation or lack of information about the effects of water softeners on wastewater treatment.
- Participants without water softeners want to "regulate" change-out of softeners as a primary solution to the problem.

Please see FIRST PROJECT on reverse side

Coalition Not Alone in Fighting Salinity

AROUND THE NATION, water industry coalitions and other groups supporting salinity control and desalination-related initiatives are joining forces to advance the nation's capacity to provide safe, adequate, and affordable water supplies to current and future generations.

The Southern California Salinity Coalition is only one among several groups dedicated to managing salinity, including:

Colorado River Salinity Control Forum

The Colorado River Basin Salinity Control Forum was formed by the basin states in 1973 to develop water quality standards for salinity in the Colorado River (which, at present, provides water for nearly 30-million people). Participants include elected representatives from the states of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, as well as the Natural Resources Conservation Services and Bureau of Land Management of the United States Department of the Interior, Bureau of Reclamation.

Joint Water Reuse Task Force

Established in 2000, the Joint Water Reuse Task Force is a cooperative partnership between the nation's foremost organizations to advance the science and technology of water recycling. Partici-

pants include the WaterReuse Foundation, American Water Works Association Research Foundation, Water Environment Research Foundation, National Water Research Institute, and United States Department of the Interior, Bureau of Reclamation.

United States Desalination Coalition

Based in Washington, DC, the United States Desalination Coalition is a non-profit trade association that consists mostly of public water agencies interested in pursuing federal assistance for the planning, design, construction, operation, and maintenance of seawater desalination projects. Members include the Los Angeles Department of Water and Power, Municipal Water District of Orange County, Metropolitan Water District of Southern California, San Diego County Water Authority, West Basin Municipal Water District, and American Water Western Region. The Coalition is currently seeking membership from other states.

Multi-State Salinity Coalition

The goal of the Multi-State Salinity Coalition is to enhance the sustainability and quality of water resources through the removal of salinity. To do this, it actively supports research in technologies that can be used for cost-effective desalting and

concentrate disposal. The Coalition was established 3 years ago by a group of water utilities and districts on the west coast. Its participants now include the El Paso Water Utility, Southern Nevada Water Authority, the Cities of Phoenix, Scottsdale, and Tucson, the Salt River Project, Metropolitan Domestic Water Improvement District (Arizona), Metropolitan Water District of Southern California, and St. Johns Water Management District (Florida).



In April 2003, these four groups worked together with the Southern California Salinity Coalition to prepare a collaborative declaration to preserve and enhance our water supplies through desalination, a membrane treatment process that removes salts and other dissolved substances from water.

The declaration listed the following benefits of salt removal:

From seawater: Desalination creates new potable supplies for coastal areas that have reached the limits of local and imported supplies.

From brackish groundwater reserves: Desalination provides supplemental supplies to serve growing inland regions with limited local freshwater supplies.

From other high-salinity source waters: Desalination prevents the further degradation of soils and aquifers, avoids millions of dollars per year in unnecessary costs to the industry and consumers, and allows the United States to meet treaty obligations with Mexico.

In addition, the declaration suggested the following actions to meet challenges to desalination:

- Engage our leaders, stakeholders, and public through desalination education and outreach.
- Expand research to control salinity, desalt water, and manage concentrate (the waste from the desalination process).
- Provide incentives to promote the expansion of water production capacity through desalination.
- Establish regulatory reforms to distinguish between the concentrate waste product and hazardous waste (desalination is impeded when concentrate is categorized as a hazardous waste).

First Project Looks at Water Softeners

Continued from reverse side

- Participants with softening devices were willing to consider changing or modifying their continued use of the appliance with appropriate justifications and adequate monetary incentives.
- Water districts were trusted by focus group attendees as sources of accurate information about water quality issues.

A subsequent study of focus group participants showed significant changes in their attitudes toward water softeners throughout the session and afterwards as they became more aware of the issues. Nearly three-quarters of the attendees who had water softeners desired an incentive to change their system. Only 7 percent refused to change their present system.

Salt Through History

Among ancient China's sophisticated technology (300-400 A.D.) was the process of drilling bamboo pipes to depths of 3,000 feet to bring salt brines to the surface. Oil traces found in the same wells led to the same use of this technology in modern oil production, though the modern use of oil was only discovered much later, and ushered in the period of the Industrial Revolution.

Source: http://salt.org.il/news_arch.htm