



SOUTHERN CALIFORNIA SALINITY COALITION 2011 Annual Report

Using Policy & Science to Protect Water from Salinity

The Southern California Salinity Coalition (SCSC) was founded in 2002 by a group of Southern California water and wastewater agencies to better manage salinity in our water supplies. The National Water Research Institute (NWRI) administers SCSC on behalf of its members.

A nonprofit, SCSC coordinates salinity management strategies and programs throughout Southern California. Among our activities, we fund research projects, publish reports, and hold workshops or summits on relevant issues in salinity, such as salinity/nutrient management planning and concentrate management. We also collaborate with other organizations in our field, such as the Multi-State Salinity Coalition and Southwest Membrane Operator Association.

Summary of 2011 SCSC Activities

The following activities were undertaken by SCSC in 2011:

Research Projects: SCSC provides funding for research projects that address the need to control salinity in water resources and reduce salinity in potable water, wastewater, and recycled water. Several projects were approved for funding in 2011. Other projects are ongoing. Projects include:

- ***Salt Management Study Update***
Update the 1998 salinity management action plan, USBR salinity economics impact model, and Southern California groundwater salt balance determination. Partners include the Metropolitan Water District of Southern California (MWD) and USBR.
- ***White Paper on Ocean Brine Disposal***
Summarize the scientific/regulatory issues associated with ocean brine disposal, and recommend strategies for the continued use of ocean outfalls as a brine disposal option. The PI is Michael Welch, Consultant.
- ***Evaluation of Alternatives to Water Softeners***
Develop performance/cost data for technologies that soften hard water or reduce the scaling effects of hard water without increasing total dissolved solids in wastewater. The PI is Peter Fox, Arizona State University, and partners include WaterReuse Foundation and County Sanitation Districts of Los Angeles County.
- ***Automatic Water Softener Removal Rebate Program***
Develop a regional education and rebate program for the voluntary removal of residential self-regenerating water softeners in the Chino Basin area. The PI is Craig Proctor, Inland Empire Utilities Agency (IEUA), and partners include IEUA, NWRI, and MWD.

SCSC Member Agencies

Eastern Municipal Water District
Inland Empire Utilities Agency
Metropolitan Water District of Southern California
Orange County Sanitation District
Orange County Water District
San Diego County Water Authority
Sanitation Districts of Los Angeles County
Santa Ana Watershed Project Authority

Grants Received: In 2011, SCSC received grant funding of \$100,000 from the Southern California Area Office of the USBR’s conservation program for a project titled “Salinity Mitigation Strategies.” Under this project, an approach will be developed to assess irrigation and treatment impacts due to salinity and identify solutions to conserve water and reduce regional economic costs throughout Southern California. The project will focus on the assessment and control of salinity in imported water from the Colorado River. Study outcomes will support the efforts of the SCSC research project, “Salt Management Study Update” (see Research Projects).

Fellowship Award: In partnership with NWRI, SCSC awards fellowships to support graduate research addressing the need to remove or reduce salts from water supplies and preserve water resources in Southern California. The current fellowship recipient is Kari Varin at the University of California, Los Angeles (her advisor is Yoram Cohen). The title of her research project is *Water Desalination by Reverse Osmosis (RO) with Nanostructured Polymers*; its purpose is to develop high-performance membranes based on surface nano-structuring via atmospheric pressure plasma-induced surface graft polymerization.



Outreach and Education: SCSC products are made available online and at exhibits. The following products continue to be of interest to the public, including:

- **SCSC Fact Sheet on Salinity and Water Softeners.** A one-page fact sheet for public use on the impacts of water softeners on salinity in water resources. www.socalsalinity.org/scscpublications.htm
- **Salinity Management Guide.** Available online at www.salinitymanagement.org or as a CD-ROM, this interactive tool shows how recycled water can be safely used for landscape irrigation and that salinity can be addressed through proper management strategies.
- **SCSC Website.** The website www.socalsalinity.org promotes SCSC projects, publications, and events, as well as raises awareness through education and outreach.
- **SCSC Publications.** Complimentary downloads at www.socalsalinity.org/scscpublications.htm
 - Southern California Regional Brine-Concentrate Management Study-Phase I
 - Desalination Recovery Enhancement and Concentrate Management Study – Phase II
 - Automatic Water Softener Rebate Program-Phase II: Public Outreach Program
 - Proposed Guidelines for Salinity/Nutrient Management Planning in the San Diego Region

Partner with SCSC
SCSC is seeking partnerships on research and policy efforts to reduce and/or manage salinity in water resources. Please contact Jeff Mosher, SCSC Administrative Director, at (714) 378-3278 or jmosher@nwri-usa.org.

Future Projects: For 2012, SCSC plans to implement future white papers on “Programs to Reduce Upstream Loading” and “Salinity Impacts Public Education Strategy,” as well as a project on “California Action Plan for Salinity and Water Quality” (which will establish a comprehensive strategy to address salinity and water quality problems in the State of California).

Southern California Salinity Coalition

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