"Groundwater Salinity: A Groundwater Dilemma"

March 24-25, 2009
Radisson Hotel – Sacramento, CA

Day 1 – Tuesday, March 24, 2009

(as of 3/16/09)

7:00 AM **Registration/Breakfast**

8:15 – 8:30 AM **GRA Welcome & Introduction**
James F. Strandberg, GRA President

Opening Session
Moderator: Vicki Kretsinger, Luhdorff & Scalmanini, Consulting Engineers

8:30 – 9:00 AM *Groundwater in the Broader Context of California Water Policy*
Dan Dooley, Vice President, University of California Agriculture and Natural Resources

9:00 – 9:30 AM *Salt in the Rio Grande: Where Does It Come From, Where Does It Go To?*
Fred Philips, Hydrology Program, New Mexico Tech

9:30 – 10:00 AM *The Dilemma of Conflicting Laws*
John Letey, Professor Emeritus at University of California, Riverside

10:00 – 10:30 AM **BREAK – Exhibit Hall**

General Session 1 – Salinity Impacts –Trends, Sources, Distributions, and Regulatory Perspectives
Moderator: Karl Longley, Chair, Coordinator, Water Resources Programs, California Water Institute

10:30 – 11:00 AM *Impact of Salinity*
Joe Grindstaff, CALFED

11:00 – 11:30 AM *Estimating the Economic Costs of Salinity in the Central Valley*
Richard Howitt, University of California, Davis

11:30 – 12:00 PM *Climate Change, Groundwater Sustainability and Salinity*
Graham Fogg, University of California, Davis

12:00 – 1:20 PM LUNCH and KEYNOTE PRESENTATION – TBA

Concurrent Session 1A – Characterization
Moderator: Jean Moran, California State University, East Bay

1:20-1:50 pm	*Adaptive Fluid Logging Experiments to Determine the Depth Distribution of Salt from Existing Groundwater Wells Beneath Seasonally Flooded Wetlands* Nigel Quinn, Lawrence Berkeley National Laboratory		1:20-1:50 pm	*Ground-Water Salinity "Hot Spots" Under the Lower San Joaquin River, California* Charles Kratzer, U.S. Geological Survey
1:50-2:20 pm	*Geophysical Methods to Map Brackish and Saline Water in Aquifers* John Jansen, Aquifer Science and Technology		1:50-2:20 pm	*Distribution, Trends, and Factors Affecting Salinity in Ground Water in the Eastern San Joaquin Valley, California* Bryant Jurgens, U.S. Geological Survey
2:20-2:50 pm	*The Combined Use of Stable Isotopes and Major Cations and Anions to Differentiate Salinity Impacts at Wastewater Treatment and Disposal Facilities* Thomas Butler, ECO:LOGIC Engineering		2:20-2:50 pm	*Sources of High-Chloride Water to Wells, Eastern San Joaquin Ground-Water Subbasin, California* John Izbicki, U.S. Geological Survey

Concurrent Session 1B – Regional Salinity Sources
Moderator: Sarge Green, California Water Institute

2:50 – 3:20 PM BREAK – Exhibit Hall

Concurrent Session 2A – Fate and Transport
Moderator: Michael Steiger, Erler & Kalinowski, Inc.

Concurrent Session 2B – Regional/Political Solutions
Moderator: Ray Tremblay, Los Angeles County Sanitation Districts

3:20-3:50 pm	*The Hilmar SEP: A Study of the Environmental Impacts of Salinity from Food Processing on Soil and Groundwater in the Central Valley, California* Pascual Benito, University of California, Berkeley		3:20-3:50 pm	*Solving the Salinity Problem in the Santa Ana Watershed* Mark Wildermuth, Wildermuth Environmental, Inc.
3:50-4:20 pm	*Reduced Leaching: Transport of Salts and Boron and Impacts on Groundwater Quality* Donald Suarez, U.S. Salinity Laboratory, USDA-ARS		3:50-4:20 pm	*Democracy in Action: Controlling Saline Discharges Via the Ballot Box* Francisco Guerrero, Los Angeles County Sanitation Districts
4:20-4:50 pm	*Evaluation of Background Salinity Conditions and Evapoconcentration in Shallow Groundwater* Christopher Heppner, Erler & Kalinowski, Inc.		4:20-4:50 pm	*Central Valley Salinity and Nutrient Management Planning: Problem, Solutions and Plan* Daniel Cozad, Integrated Planning and Management, Inc.
4:50-5:10 pm	*Modeling Saline Impacts on Water Supply: Local and Regional Case Studies* Brian Heywood, Camp, Dresser, McKee (CDM)		4:50-5:10 pm	*A Consensus Based Approach to Groundwater Overdraft and Saline Intrusion Management in Eastern San Joaquin County* Brandon Nakagawa, San Joaquin County Water Resources Division

5:30 – 7:00 PM RECEPTION - Exhibits and Poster Session

Day 2 – Wednesday, March 25, 2009

7:00 am Registration/Breakfast

Concurrent Session 3A – Source Impacts and Source Control
Moderator: Ted Johnson, Water Replenishment District of So. CA

Concurrent Session 3B – Regulatory and Policy Issues
Moderator: Rudy Schnagl, Central Valley Regional Water Quality Control Board

8:10-8:40 am	*Dairy Impacts on Groundwater Salinity – A Regional Comparison* Thomas Harter, University of California, Davis		8:10-8:40 am	*Bay Delta Water Quality Control Plan: Southern Delta Salinity* Les Grober, State Water Resources Control Board
8:40-9:10 am	*Controlling Salinity Discharges from a Rendering Facility* Michael Steiger, Erler & Kalinowski, Inc.		8:40-9:10 am	*Collaborative Regulation: The CV-SALTS Initiative and Salinity Regulation in the Central Valley* Ken Landau, Assistant E.O., Central Valley Regional Water Quality Control Board

9:10-9:40 am	*Municipal Wastewater Salinity Regulatory Compliance in an Agricultural Setting: A Million Dollar Question??* Joe DiGiorgio, ECO:LOGIC Engineering		9:10-9:40 am	*City of Tracy's Approach to Delta Salinity Requirements* Steve Bayley, City of Tracy
9:40-10:10 am	*Brackish Groundwater as a Resource* James Beach, Leggette, Brashears and Graham, Inc.		9:40-10:10 am	*SWRCB Resolution 68-16: The Ambient Water Quality Dilemma* Gary Carlton, Kennedy-Jenks

10:10-10:30 am BREAK – Exhibit Hall

Concurrent Session 4A – Technologies
Moderator: Jose Faria, Department of Water Resources

Concurrent Session 4B – Wetland and River Salt Measurement and Management
Moderator: Andrew Chang, UC Center for Water Resources

10:30-11:00 am	*Integrated on-Farm Drainage Management: A Salt and Shallow Water Table Management Technique for Irrigated Lands* John Diener, Red Rock Ranch		10:30-11:00 am	*Salt Dynamics in Isolated, Freshwater Wetlands* Kate Huckelbridge, University of California, Berkeley
11:00-11:30 am	*One Water District, Three Desalination Projects* Michael Garrod, Sweetwater Authority		11:00-11:30 am	*Investigating the Dynamics of Managed Wetland Ecosystems in the GEA: Relating Soil Salinity, Micro-Topography, and Vegetation Productivity* Patrick Rahilly, UC Merced, School of Engineering, Grasslands Water District
11:30-12:00 pm	*Integrated on-Farm Drainage Management and Desalination* Avi Migemi, Head of Water Resources Unit, Israeli National Water Company		11:30-12:00 pm	*Lagrangian Sensor Network for Monitoring in the San Joaquin – Sacramento Delta* Andrew Tinka, University of California, Berkeley

12:00 – 1:20 PM LUNCH

General Session 2 – Saline Drainage/Seawater Intrusion
Moderator: Andrew Chang, UC Center for Water Resources

1:20 – 1:50 pm *Assessment of Seawater Intrusion Potential from Seal Level Rise and Pumping in Coastal Aquifers of California*
Hugo Loáiciga, University of California, Santa Barbara

1:50 – 2:20 pm *Forages for Saline Drainage Water Management*
Steven Kaffka, Director, Center for Integrated Farming Systems, University of California, Davis

2:20 – 2:45 pm *Large Scale Utilization of Saline Groundwater for Development and Irrigation of Pistachios Interplanted with Cotton*
Blake Sanden, UCCE Irrigation, Soils & Agronomy Advisor, Kern County

2:45-3:00 pm BREAK – Exhibit Hall

General Session 3 – Panel Discussion – What is the Future for Salinity Management?
Moderator: Karl Longley, Chair, Coordinator, Water Resources Programs, California Water Institute

3:00-4:00 pm Panelists:
Jonathan Bishop, Chief Deputy, State Water Resources Control Board
Kamyar Guivetchi, Department of Water Resources
Michael Hightower, Sandia National Laboratory (National Perspective on Desalination of Brackish Groundwater)
Bobbi Larson, Central Valley Salinity Coalition

4:00 pm Q&A with Panel

4:30 pm Closing Remarks

POSTER PRESENTATIONS
(Available for viewing during the entire Conference)

Evaluating the Effects of Soil Amendments on Physical and Chemical Properties of a Saline-sodic Soil
Sharon Benes, Department of Plant Science, California State University, Fresno

Selenium Incorporation and Performance of Beef Cattle Grazing Pastures Irrigated with Saline-sodic Drainage Water
Sharon Benes, Department of Plant Science, California State University, Fresno

Groundwater Salinity Investigation Beneath and West of the Sharpe Army Depot, Lathrop, California: Where is the Eastern San Joaquin County "Saline Front"?
Jeff Brown, URS Corporation

Verifying the Use of Specific Conductance as a Surrogate for Chloride in Seawater Matrices
Robert Mooney, In-Situ Inc.

Interactive Guide to Management of Salinity in Landscaping Irrigated with Recycled Water
Bahman Sheikh, Water Reuse Consultant