2007 San Diego Integrated Regional Water Management Plan

Part 1 of 2





This page is deliberately blank



Regional Advisory Committee (RAC) (25 members)

Regional Water Management Group (RWMG)

- Kathleen Flannery, CAO Project Manager, County of San Diego (chair)
- Marsi Steirer, Deputy Director of Water Policy and Strategic Planning, City of San Diego
- Ken Weinberg, Director of Water Resources, San Diego County Water Authority

Retail Water Entities

- Michael Bardin, General Manager, Santa Fe Irrigation District
- Dennis Bostad, General Manager, Sweetwater Authority
- Keith Lewinger, General Manager, Fallbrook Public Utility District
- Susan Varty, Director, Olivenhain Municipal Water District
- Mark Weston, General Manager, Helix Water District

Natural Resources and Watersheds

- Craig Adams, Executive Director, San Dieguito River Valley Conservancy
- Chris Basilevac, Project Director, The Nature Conservancy
- Doug Gibson, Executive Director, San Elijo Lagoon Conservancy
- Rob Hutsel, Executive Director, San Diego River Park Foundation
- Megan Johnson, Watershed Coordinator, Southern California Wetlands Recovery Project
- Judy Mitchell, District Coordinator, Mission Resource Conservation District

Water Quality

Wastewater / Recycled Water

- Neal Brown, P.E., Director of Engineering and Planning, Padre Dam Municipal Water District
- Mike Thornton, P.E., General Manager, San Elijo Joint Powers Authority

<u>Stormwater</u>

- Kirk Ammerman, P.E., Principal Civil Engineer, City of Chula Vista
- Meleah Ashford, Consultant to the City of Encinitas



Regional Advisory Committee (continued)

Members At Large

- Michael Connolly, Councilman, Campo Kumeyaay Nation
- Linda Flournoy, Sustainability Consultant, Planning & Engineering for Sustainability
- Karen Franz, Watershed Monitoring Program Director, San Diego Coastkeeper
- Eric Larson, Executive Director, Farm Bureau of San Diego County
- Rich Pyle, San Diego Regional Chamber of Commerce
- Shelby Tucker, Regional Planner, San Diego Association of Governments (SANDAG)
- Richard Wright, Ph.D., Professor Emeritus of Geography, SDSU; San Diego Regional Water Quality Control Board Member

Advisory Resource Agencies

- Dave Gibson, San Diego Regional Water Quality Control Board
- Meena Westford, Area Planning Officer, Southern California Area Office, United States Bureau of Reclamation

Alternate RAC Members

- Steve Aceti, Southern California Wetlands Recovery Project
- Rick Alexander, Sweetwater Authority
- Melissa Estes, Campo Kumeyaay Nation
- Jason Giessow, Mission Resource Conservation District
- Zach Principe, The Nature Conservancy
- Bill Steele, Southern California Area Office, United States Bureau of Reclamation
- Mark Umphres, P.E., Helix Water District
- Terressa Whitaker, San Diego State University (for Richard Wright)



Others RAC Participants

- Anna Aljabiry, California Department of Water Resources
- Steve Arakawa, Metropolitan Water District of Southern California
- Robyn Badger, San Diego Zoological Society
- Tracie Billington, P.E., California Department of Water Resources
- Grace Chan, Metropolitan Water District of Southern California
- Scott Couch, State Water Resources Control Board
- Shahla Farahnak, State Water Resources Control Board
- Kelly Hendrickson, San Diego Zoological Society
- Larry Johnson, Campo/Lake Morena Planning Group
- Marty Leavitt, Resource Conservation District
- Krista Mendelsohn, Resource Conservation District
- Jyo Purohit, Sparkers, Inc.
- Norman Shopay, California Department of Water Resources
- Geoffrey D. Smith, MA, The Escondido Creek Conservancy
- John Woodling, California Department of Water Resources



Staff and Consultants

Regional Water Management Group Staff

County of San Diego

- Jon Van Rhyn, Water Quality Program Manager, Watershed Protection Program, Department of Public Works
- Sheri McPherson, Environmental Health Specialist III, Watershed Protection Program, Department of Public Works
- Cecilia Padres, Environmental Health Specialist II, Watershed Protection Program, Department of Public Works

San Diego County Water Authority

- Dana Friehauf, P.E., Principal Water Resources Specialist, Water Resources Department
- Toby Roy, Water Resources Manager, Water Resources Department
- Mark Stadler, Principal Imported Water Specialist
- Maria Mariscal, Senior Water Resources Specialist, Water Resources Department

City of San Diego

- Cathy Pieroni, Senior Water Resources Specialist, Water Policy and Strategic Planning Division, Water Department
- Jeffery Pasek, Watershed Manager, Water Policy and Strategic Planning Division, Water Department

Regional Water Management Group Consultant Team

RMC Water and Environment

- Tom Richardson, P.E., Principle (San Diego IRWM Project Leader)
- Emmalynne Hu
- Persephene St. Charles
- Kate Streams
- Alyson Watson, P.E.
- Tom West, P.E.

Michael R. Welch Consulting

• Michael R. Welch, Ph.D., P.E. (IRWM Plan Preparation)



TABLE OF CONTENTS

IRWM PLAN SECTIONS

- A. INTRODUCTION AND REGIONAL WATER MANAGEMENT GROUP
- **B. DESCRIPTION OF REGION**
- C. VISION, MISSION, GOALS, AND OBJECTIVES
- D. WATER MANAGEMENT STRATEGIES
- E. INTEGRATION OF WATER MANAGEMENT STRATEGIES
- F. REGIONAL PRIORITIES
- G. IMPLEMENTATION
- H. IMPACTS AND BENEFITS
- I. EVALUATION OF PLAN PERFORMANCE
- J. DATA MANAGEMENT
- K. FINANCING
- L. STATEWIDE PRIORITIES
- M. CONSISTENCY WITH LOCAL PLANS
- N. STAKEHOLDER OUTREACH
- O. COORDINATION

APPENDICES (see following page for list of appendices)

LIST OF APPENDICES

- Appendix 1: San Diego Region Watershed Maps
- Appendix 2: Designated Beneficial Uses of Groundwater and Surface Water
- Appendix 3: Basin Plan Water Quality Objectives
- Appendix 4: Endangered and Threatened Species
- Appendix 5: San Diego Region Water Management Projects
- **Appendix 6:** Integrated Water Management Strategies and Benefits
- Appendix 7: IRWM Project Objectives, Geography, Scoring and Ranking
- Appendix 8: Public Outreach Plan
- Appendix 9: RWMG Memorandum of Understanding (MOU)
- Appendix 10: Tier I Projects Feasibility, Schedules and Costs
- Appendix 11: Tier I Projects Impacts and Benefits
- Appendix 12: Tier I Projects Conformance with Statewide Priorities
- Appendix 13: Summary of the Region's Local Water Management Plans
- Appendix 14: Stakeholder Outreach Attachments

LIST OF ABBREVIATIONS

AF	Acre-feet
AFY	Acre-feet per year
ASBS	Area of Special Biological Significance
Basin Plan	Water Quality Control Plan for the San Diego Basin
BLM	U.S. Bureau of Land Management
BMP	Best management practice
BWAC	Bi-National Water Advisory Council
CEDEN	California Environmental Data Exchange Network
CERES	California Environmental Resource Evaluation System
CEQA	California Environmental Quality Act
cfs	Cubic feet per second
CIP	Capital Improvement Program
County	County of San Diego
CUWCC	California Urban Water Conservation Council
CWA	Clean Water Act
DAC	Disadvantaged community
DEH	County of San Diego Department of Environmental Health
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DWR	California Department of Water Resources
EPA	U.S. Environmental Protection Agency
ERL	Effects range, low
ERM	Effects range, medium
ESP	Emergency Storage Program
GAMA	Groundwater Ambient Monitoring Assessment
GIS	Geographic Information System
HA	Hydrologic Area (subunit of Hydrologic Unit)
HU	Hydrologic Unit
ICWM Plan	Integrated Coastal Water Management Plan
IID	Imperial Irrigation District

LIST OF ABBREVIATIONS (Continued)

IRWM	Integrated Regional Water Management
IRWM Plan	Integrated Regional Water Management Plan
ISRF	Infrastructure State Revolving Fund
JPA	Joint Powers Authority
JURMP	Jurisdictional Urban Runoff Management Plan
LID	Low impact development
LISA	Local Investigations and Studies Assistance
LRP	Local Resources Program
LWSD	Local Water Supply Development
MCL	Maximum contaminant level
Metro System	San Diego Metropolitan Wastewater System
Metropolitan	Metropolitan Water District of Southern California
mgd	Million gallons per day
mg/l	Milligrams per liter
МНСР	Multiple Habitat Conservation Program
MSCP	Multiple Species Conservation Program
MHI	Median household income
MS4	Municipal Separate Storm Sewer System
MOU	Memorandum of understanding
MWD	Municipal Water District
O&M	Operation and maintenance
NA	Not applicable
NEPA	National Environmental Protection Act
NGO	Non-government organization
NPDES	National Pollutant Discharge Elimination System
NPS	Non-point source
NWIS	National Weather Information System
Ocean Plan	California Water Quality Control Plan for Ocean Waters
Plan	San Diego Region Integrated Regional Water Management Plan
POTW	Public owned treatment works
RAC	Regional Advisory Committee

LIST OF ABBREVIATIONS (Continued)

Region	San Diego Region
Regional Board	California Regional Water Quality Control Board, San Diego Region
RWMG	Regional Water Management Group
SAMP	Special Area Management Plan
SANDAG	San Diego Association of Governments
SCCCOS	Southern California Coastal Ocean Observing System
SCCWRP	Southern California Coastal Water Research Project
SCWRP	Southern California Wetlands Recovery Project
SUSMP	Standard Urban Runoff Management Program
SDRC	San Diego River Coalition
SWAMP	Surface Water Ambient Monitoring Program
State Board	State Water Resources Control Board
TAC	Technical Advisory Committee
TBD	To be developed
TDS	Total dissolved solids
TMDL	Total maximum daily load
USBR	U.S. Bureau of Reclamation
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
Water Authority	San Diego County Water Authority
WDR	Waste discharge requirements
WMA	Watershed Management Area
WMI	Watershed Management Initiative
WURMP	Watershed Urban Runoff Management Plan

This page is deliberately blank