

San Juan Basin Groundwater and Facilities Management Plan

Final Report



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Prepared by



WILDERMUTH™
ENVIRONMENTAL INC.

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Acronyms, Abbreviations, and Initialisms

acre-ft/yr	acre-feet per year
acre-ft	acre feet
ADA	American with Disabilities Act
ADT	Average daily traffic
AGR	Agricultural Supply
AWT	advanced water treatment
Basin Plan	Water Quality Control Plan for the San Diego Basin
Caltrans	The California Department of Transportation
Camp Pendleton	City of San Clemente and Marine Corps Base
CASGEM	California Statewide Groundwater Elevation
CBC	California Building Code
CDC	California Department of Conservation
CDFG	California Department of Fish and Game
CDFM	cumulative departure from mean
CDPH	California Department of Public Health
CGS	California Geological Survey
CMIP3	Coupled Model Intercomparison Project Phase 3
CNDDB	Natural Diversity Data Base
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society's Electronic Inventory
COLD	Cold Freshwater Habitat
CPT	cone penetration tests
CRA	Colorado River Aqueduct
CSC	California Species of Special Concern
CSJC	City of San Juan Capistrano
DOT	U.S. Department of Transportation
DWR	Department of Water Resources
EC	electrical conductivity
EIR	environmental impact report
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FSC	Federal Species of Concern
ft-amsl	Feet above mean sea level
ft-bgs	feet below ground surface
FY	fiscal year

Acronyms, Abbreviations, and Initialisms

GCM	global circulation models
GFDL	Geophysical Fluid Dynamic Lab Model
gpm	gallons per minute
HA	Hydrologic Area
HSA	Hydrologic Sub-Area
IND	Industrial Service Supply
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Powers Authority
JRTP	Joint Regional Treatment Plant
LNAPL	Light Nonaqueous Phase Liquids
MCL	maximum contamination level
meq/L	milliequivalents per liter
mg/L	Milligrams per liter
mgd	millions gallons per day
MNWD	Moulton Niguel Water District
MPAH	The Orange County Master Plan of Arterial Highways
MSL	mean sea level
MTBE	methyl-tert-butyl-ether
MUN	Municipal and Domestic Supply
MWDOC	Water District of Orange County
MWDSC	Metropolitan Water District of Southern California
NCEP	National Centers for Environmental Predictions
NO3-N	nitrate as nitrogen
Ntu	Nephelometric Turbidity Units
OCTA	Orange County Transportation Authority
PCM	Parallel Climate Model
PERI	programmatic environmental impact report
QA/QC	quality assurance/quality control
REC1	Contact Water Recreation (REC1)
REC2	Non-contact Water Recreation
RMAP	Radar Mean Areal Precipitation
RMV	Rancho Mission Viejo
RO	reverse osmosis
SCAG	Southern California Association of Governments
SCRRA	Southern California Regional Rail Authority
SCWD	South Coast Water District

Acronyms, Abbreviations, and Initialisms

SJBA	San Juan Basin Authority
SJBGFMP	San Juan Basin Groundwater and Facilities Management Plan
SJHGC	San Juan Hills Golf Course
SMWD	Santa Margarita Water District
SOB	state of the basin
SOCOD	South Orange County Ocean Desalter
SR-1	Pacific Coast Highway
SR-241	Foothill Transportation Corridor.
SR-241	State Route 241
SR-73	State Route 73
SR-74	Ortega Highway
SRES	special report emissions scenarios
SWP	State Water Project
SWRCB	State Water Resources Control Board
SY	specific yield
TAC	Technical Advisory Committee
TBA	tert-butyl-alcohol
TCWD	Trabuco Canyon Water District
TDS	total dissolved solids
TUa	acute toxic units
ug/L	micrograms per liter
UNEP	United Nations Environment Programme
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tanks
VMT	vehicle miles traveled
VOC	volatile organic chemicals
WARM	Warm Freshwater Habitat
WAS	waster activated sludge
WCRP	World Climate Research Programme
WEI	Wildermuth Environmental, Inc.
WILD	Wildlife Habitat
WMO	World Meteorological Organization
WRP	water reclamation plant