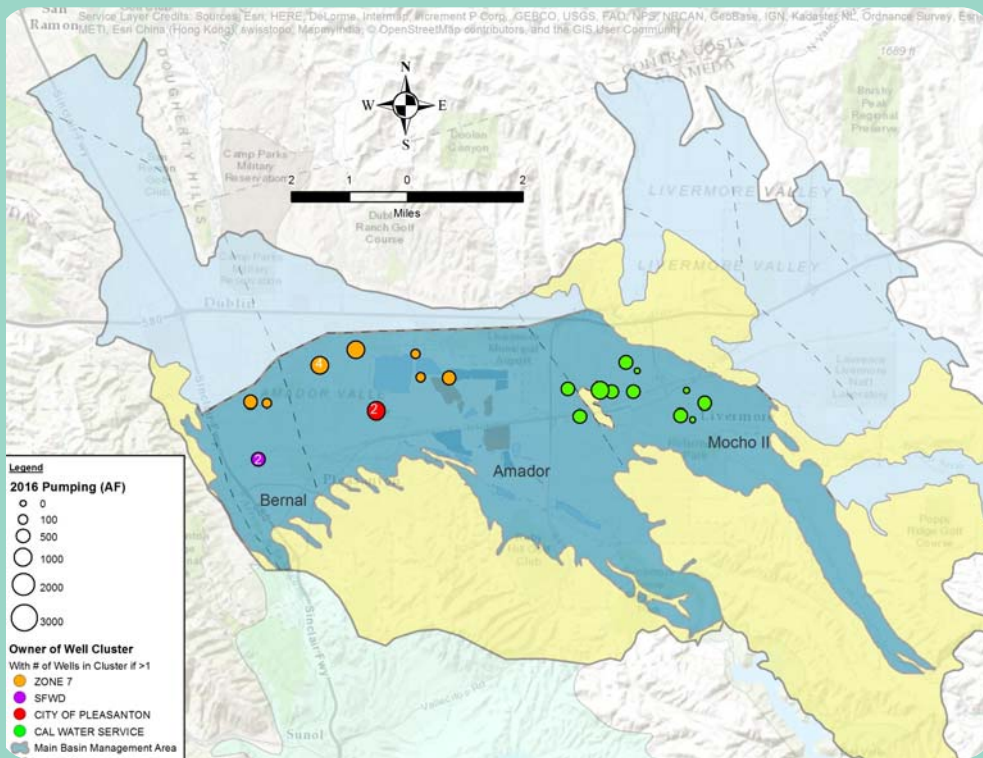


ANNUAL REPORT FOR THE GROUNDWATER MANAGEMENT PROGRAM 2016 WATER YEAR

LIVERMORE VALLEY GROUNDWATER BASIN



JULY 2017



Zone 7 Water Agency

**Annual Report for the
Groundwater Management Program
2016 Water Year (October 2015 – September 2016)
Livermore Valley Groundwater Basin**

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Appendix 6-1: 2015 Study of Nitrate Occurrences in South Livermore

Acronyms and Abbreviations

Abbrev	Description	Abbrev	Description
µg/L	Micro grams per liter	DWR	California Department of Water Resources
ACCDA	Alameda County Community Development Agency	EBRPD	East Bay Regional Parks District
ACEH	Alameda County Environmental Health	EIR	Environmental Impact Report
ACNP	Alamo Canal near Pleasanton	ESL	Environmental screening level
ACWD	Alameda County Water District	ETo	Evapotranspiration
ADLLV	Arroyo De La Laguna at Verona	ft	Feet
ADVP	Arroyo Del Valle Pleasanton	GIS	Geographic information systems
AF	Acre-feet	GPD	Gallons per day
AF/yr	Acre-feet per year	GPQ	Groundwater Pumping Quota
ALP	Arroyo Las Positas	GSA	Groundwater Sustainability Agency
ALP_ELCH	Arroyo Las Positas at El Charro	GSP	Groundwater Sustainability Plan
ALPL	Arroyo Las Positas near Livermore	GWMP	Groundwater Management Plan
ALTC	Altamont Creek	GWE	Groundwater Elevation
AMHAG	Arroyo Mocho Hageman	HI	Hydrologic Inventory
AM_KB	Arroyo Mocho at Kaiser Bridge	HRL	Health reference level
AMNL	Arroyo Mocho near Livermore	ISCO	In-situ chemical oxidation
AMP	Arroyo Mocho Pleasanton	LAMP	Local Agency Management Program
AOC	Area of Concern	LAVWMA	Livermore-Amador Valley Water Management Agency
AVADLL	Arroyo Valle at Arroyo de la Laguna	lbs	Pounds
AVBLC	Arroyo Valle below Lang Canyon	LDV	Lake Del Valle
AVNL	Arroyo Valle near Livemore	LLNL	Lawrence Livermore National Laboratory
BBID	Byron-Bethany Irrigation District	LTCP	Low-Threat Underground Storage Tank Closure Policy
bgs	Below ground surface	LWRP	Livermore Water Reclamation Plant
BMOs	Basin management objectives	MCL	Maximum contaminant level
BMPs	Best management practices	mg/L	Milligrams per liter
BO	Basin objective	MGDP	Mocho Groundwater Demineralization Plant
BTEX	Benzene, toluene, ethylbenzene, xylene	MOU	Memorandum of Understanding
CASGEM	California Statewide Groundwater Elevation Monitoring	msl	Mean sea level
CCNP	Chabot Canal near Pleasanton	MTBE	Methyl tertiary-butyl ether
CEC	Constituents-of-emerging-concern	NAVD	North American Vertical Datum
CEQA	California Environmental Quality Act	N	Nitrogen
cfs	Cubic feet per second	NC	North Canyons
CIMIS	California Irrigation Management Information System	NMP	Nutrient Management Plan
COL	Chain of Lakes	NO ₃	Nitrate Ion
Cr	Chromium	NOP	Notice of Preparation
CrIII	Trivalent chromium	NPDES	National Pollutant Discharge Elimination System
CrVI	Hexavalent chromium	OWTS	Onsite wastewater treatment system
CWS	California Water Service	PCE	Tetrachlorethylene
CY	Calendar year	POTW	Publicly owned treatment works
DCE	Dichloroethene	ppb	Parts per billion
DOE	Department of Energy	PRP	Potential responsible party
DSRSD	Dublin San Ramon Services District	RAP	Remedial Action Plan

Abbrev	Description	Abbrev	Description
RO	Reverse osmosis	TKN	Total Kjeldahl nitrogen
RP	Responsible Party	TPHd	Total petroleum hydrocarbons as diesel
RRE	Rural residential equivalent	TPHg	Total petroleum hydrocarbons as gasoline
RWQCB	California Regional Water Quality Control Board	TSS	Toxic Sites Surveillance
SBA	South Bay Aqueduct	USEPA	U.S. Environmental Protection Agency
SGMA	Sustainable Groundwater Management Act	USGS	U.S. Geological Survey
SLIC	Spills, Leaks, Investigations, and Clean-ups	UST	Underground storage tank
SFPUC	San Francisco Public Utilities Commission	VA	Veteran's Administration
SMP	Salt Management Plan	VC	Vinyl chloride
SNMP	Salt Nutrient Management Plan	VOC	Volatile organic compound
SWP	State Water Project	WBIC	Weather-Based Irrigation Controller
SWRCB	State Water Resources Control Board	WDR	Waste Discharge Requirement
TAF	Thousand acre-feet	WMP	Well Master Plan
TBA	Tertiary-butyl alcohol	WQO	Water Quality Objective
TCE	Trichloroethylene	WWMP	Wastewater Management Plan
TDS	Total dissolved solids	WY	Water year (October 1 through September 30)

LIVERMORE VALLEY GROUNDWATER BASIN WEST-EAST CROSS-SECTION

