



Zone 7 Water Agency
100 North Canyons Parkway, Livermore, CA 94551
(925) 454-5000



.....

2015 Urban Water Management Plan



..... March '16, 2016

Errata Sheet for Minor Corrections to Zone 7 Water Agency 2015 Urban Water Management Plan (UWMP)

This errata sheet logs minor content errors that were identified after final adoption of the *Zone 7 Water Agency 2015 UWMP*. DWR has determined that these corrections are minor and do not require the UWMP to be amended.

X These data errors have been corrected in the Department of Water Resources (DWR) UWMP database at <https://wuedata.water.ca.gov/secure/>

X This errata sheet has been filed with the UWMP in all locations where it is made publicly available, including the California State Library. Errata may be submitted to State Library via email to cslgps@library.ca.us

Name and agency of the person filing errata sheet:

Amparo Flores

Name

Zone 7 Water Agency

Agency

#	Description of Correction	Location	Rationale	Date Error Corrected
1	Add the sentence in the first paragraph, after the sentence "DWR has not identified Basin 2-10 as either in overdraft or expected to be in overdraft.": <i>"The Livermore Valley Groundwater Basin is not adjudicated."</i>	Page 6-7	Clearly state that the basin is not adjudicated.	April 28, 2017
2	The percentage of normal for a single-dry year (2014) for the California Water Fix should be changed to 60% from 27%.	Table 7-9 in the UWMP (DWR Table 7-1W)	Incorrect calculation.	April 28, 2017

2015

URBAN WATER MANAGEMENT PLAN

Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551



(925) 454-5000

March 31, 2016

Prepared by:

ZONE 7 WATER AGENCY STAFF

Contributors:

Boni Brewer – Communications Specialist
Jarnail Chahal, P.E. – Manager of Engineering
Tami Church – Assistant Water Resources Planner, Integrated Planning
Gurpal Deol – Water Quality Manager
Jill Duerig, P.E. – General Manager
Amparo Flores, P.E. – Associate Engineer, Integrated Planning
JaVia Green – Staff Analyst, Finance
Matt Katen, P.G. – Groundwater Services Manager
Brad Ledesma, P.E. – Associate Engineer, Integrated Planning
Carol Mahoney, P.G. – Manager of Integrated Water Resources
Robyn Navarra – Water Conservation Coordinator
Angela O'Brien, P.E. – Associate Engineer, Water Quality
Tom Rooze, P.G. – Associate Geologist, Groundwater Services
Sal Segura, P.E. – Associate Engineer, Integrated Planning
Osborn Solitei – Assistant General Manager, Finance

Report Contact:

Amparo Flores, (925) 454-5019, aflores@zone7water.com

TABLE OF CONTENTS

1	Introduction and Overview	1-1
1.1	Purpose	1-1
1.2	Previous UWMPs	1-1
1.3	Changes from 2010 UWMP	1-2
1.4	Plan Contents and Organization.....	1-2
2	Plan Preparation: Agency Coordination and Public Participation	2-1
2.1	Basis for Preparing a Plan.....	2-1
2.2	Individual Compliance.....	2-1
2.3	Calendar Year and Unit of Measure	2-1
2.4	Coordination and Outreach.....	2-2
3	Service Area and System Description	3-1
3.1	Overview	3-1
3.2	Service Area	3-3
3.3	Service Area Climate	3-5
3.4	Service Area Population and Demographics	3-7
3.5	Water System Facilities.....	3-8
4	System Water Use	4-1
4.1	Water Uses by Sector	4-1
5	Reducing Per Capita Water Usage	5-1
6	Water Supplies and Storage	6-1
6.1	Imported Water: State Water Project.....	6-2
6.2	Local Surface Water: Arroyo Valle	6-5
6.3	Groundwater	6-6
6.4	Water Transfer: Byron Bethany Irrigation District	6-16
6.5	Local Storage	6-16
6.6	Non-Local Storage	6-18
6.7	Wastewater and Recycled Water.....	6-19
6.8	Future Water Projects	6-22
6.9	Summary of Existing and Planned Sources of Water.....	6-26
6.10	Climate Change Impacts	6-29
7	Water Supply Reliability Assessment	7-1
7.1	Constraints on Water Sources.....	7-1

7.2	Reliability By Type of Year	7-6
7.3	Supply and Demand Assessment.....	7-19
7.4	Regional Supply Reliability	7-26
8	Water Shortage Contingency Planning.....	8-1
8.1	Stages of Action	8-1
8.2	Consumption Reduction Methods by Agencies	8-3
8.3	Determining Reductions.....	8-4
8.4	Revenue and Expenditure Impacts.....	8-4
8.5	Adoption Resolution.....	8-6
8.6	Catastrophic Water Supply Interruption	8-6
8.7	Minimum Water Supply for Next Three Years.....	8-8
9	Demand Management Measures.....	9-1
10	Plan Adoption, Submittal & Implementation	10-1
10.1	Inclusion of All 2015 Data.....	10-1
10.2	Notice of Public Hearing.....	10-1
10.3	Public Hearing and Adoption	10-1
10.4	Plan Submittal.....	10-2
10.5	Public Availability.....	10-2
10.6	Plan Implementation.....	10-2
10.7	Amending an Adopted UWMP	10-3

List of Figures

Figure	Title	Page
Figure 3-1	Location of Service Area and Major Streams and Arroyos	3-4
Figure 3-2	Variation of Rainfall in the Service Area	3-5
Figure 3-3	Climate Data for Zone 7's Service Area (2010-2014)	3-6
Figure 3-4	Actual and Projected Population within Zone 7's Service Area	3-7
Figure 3-5	Zone 7's Major Water System Facilities	3-11
Figure 6-1	Livermore Valley Groundwater Basin.	6-6
Figure 6-2	Main Basin Groundwater Storage	6-11
Figure 6-3	Artificial Recharge, Pumping, and Net Cumulative Impacts to Operational Storage from 1974 WY through 2015 WY	6-12
Figure 6-4	Future Chain of Lakes	6-17
Figure 7-1	Projected Table A Allocations of State Water Project Water and Selected Years Based on Water Supply Conditions	7-9
Figure 7-2	Historical Inflows from Arroyo Valle and Selected Years Based on Water Supply Conditions	7-14

List of Tables

Table	Title	Page
Table 1-1	Roadmap of Water Code Requirements and Corresponding UWMP Sections	1-3
Table 2-1	Coordination and Notification for Plan Preparation [DWR Table 2-4 W]	2-4
Table 3-1	Climate Data for Zone 7's Service Area (2010-2014)	3-6
Table 3-2	Current and Projected Population in Zone 7's Service Area [DWR Table 3-1 W]	3-7
Table 3-3	Zone 7 Groundwater Extraction Wells and their Capacities	3-9
Table 4-1	Current Water Demands [DWR Table 4-1 W]	4-2
Table 4-2	Projected Water Demands [DWR Table 4-2 W]	4-3
Table 4-3	Total Water Demands [DWR Table 4-3 W]	4-3
Table 4-4	Volume of Water Loss in the Transmission System for 2015 [DWR Table 4-4 W]	4-4
Table 6-1	Natural Sustainable Yield Demand Components	6-9
Table 6-2	Zone 7 Actual Groundwater Volumes Pumped for 2011 to 2015 [DWR Table 6-1 W]	6-10

Table 6-3	Zone 7 Actual and Projected Artificial Recharge and Groundwater Extraction for 2015-2035 during Normal Water Years	6-10
Table 6-4	Zone 7 Groundwater Quality: TDS and Hardness (2010 - 2014)	6-14
Table 6-5	Local Agencies Involved in Wastewater and Recycled Water	6-19
Table 6-6	Zone 7's Water Storage Volumes	6-26
Table 6-7	Actual Water Supplies in 2015 [DWR Table 6-8 W]	6-26
Table 6-8	Summary of Projected Normal Year Water Supplies [DWR Table 6-9 W]	6-28
Table 7-1	Basis of Water Year and Available Supply: SWP Table A Water [DWR Table 7-1 W]	7-10
Table 7-2	Maximum Carryover Available to Zone 7 for Use in Following Year [DWR Table 7-1 W]	7-11
Table 7-3	Basis of Water Year and Available Supply: Yuba Accord Water [DWR Table 7-1 W]	7-12
Table 7-4	Basis of Water Year and Available Supply: Arroyo Valle [DWR Table 7-1 W]	7-13
Table 7-5	Basis of Water Year and Available Supply: BBID [DWR Table 7-1 W]	7-13
Table 7-6	Basis of Water Year and Available Supply from Storage: Main Basin [DWR Table 7-1 W]	7-16
Table 7-7	Maximum Pumpback and Exchange Water Available from Semitropic [DWR Table 7-1 W]	7-17
Table 7-8	Maximum Stored Water Available from Cawelo [DWR Table 7-1 W]	7-18
Table 7-9	Basis of Water Year and Additional Supply from California WaterFix [DWR Table 7-1 W]	7-18
Table 7-10	Basis of Water Year and Additional Supply from Other New Water Supplies [DWR Table 7-1 W]	7-19
Table 7-11	Summary of Estimated Available Water Supply	7-20
Table 7-12	Comparison of Normal Year Water Supplies and Demands [DWR Table 7-2 W]	7-21
Table 7-13	Comparison of Single Dry Year Water Supplies and Demands [DWR Table 7-3 W]	7-22
Table 7-14	Comparison of Multiple-Dry Year Water Supplies and Demands [DWR Table 7-4 W]	7-23
Table 8-1	Water Shortage Stages, Demand Reduction Targets, and Water Supply Conditions [DWR Table 8-1]	8-2
Table 8-2	Water Shortage Stages and Associated Actions	8-3
Table 8-3	Water Shortage Surcharges	8-5
Table 8-4	Three-Year Estimated Minimum Water Supply (Acre-Foot Annually) [DWR Table 8-4 W]	8-8
Table 10-1	Notification to Cities and Counties [DWR Table 10-1 W]	10-1

List of Appendices

Appendix A	Public Notices
Appendix B	Zone 7 Water Agency Water Supply Reliability Policy (Resolution 13-4230)
Appendix C	Example Resolution for Declaration of Water Shortage Stage
Appendix D	Example Resolution for Declaration of Water Shortage Surcharge
Appendix E	Zone 7 Water Agency Adoption of the 2015 UWMP and Water Shortage Contingency Plan (Resolution 16-122)
Appendix F	2014 CUWCC Best Management Practice (BMP) Wholesale Coverage Report

Acronyms and Definitions

The following terms and acronyms have been used throughout this UWMP to improve document clarity and readability.

ACWD	Alameda County Water District
ADWF	Average Dry Weather Flow
AF	Acre-feet
AFA	Acre-feet annually
BARR	Bay Area Regional Reliability (Partnership)
Basin	Livermore Valley Groundwater Basin
BAWSCA	Bay Area Water Supply and Conservation Agency
BBID	Byron-Bethany Irrigation District
BMP	Best Management Practices
Cal Water	California Water Service Company – Livermore District
CCF	Hundred cubic-feet
CCWD	Contra Costa Water District
CII	Commercial, Industrial, & Institutional
CIMIS	California Irrigation Management Information System
CoVWR	Committee of Valley Water Retailers
COS	Cost-of-Service
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CWC	California Water Code
DERWA	DSRSD-EBMUD Recycled Water Authority
District	Alameda County Flood Control and Water Conservation District
District Act	Act 205 of the California Uncodified Water Code
DMM	Demand Management Measures
DSRSD	Dublin San Ramon Services District
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EOC	Emergency Operations Center
ETo	Evapotranspiration rate based on standard grass as reference

GMP	Groundwater Management Plan
HET	High-Efficiency Toilet
LAVWMA	Livermore-Amador Valley Water Management Agency
Livermore	City of Livermore
M&I	Municipal and Industrial
Main Basin	Portion of the Livermore Valley Groundwater Basin with highest-yielding aquifers and best-quality groundwater
MGD/mgd	Million gallons per day
MMWD	Marin Municipal Water District
MOU	Memorandum of Understanding Regarding Urban Water Conservation in California
Msl	Mean sea level
Pleasanton	City of Pleasanton
Retailers	Cal Water, DSRSD, Livermore, and Pleasanton
RWQCB	Regional Water Quality Control Board
SBX 7-7	Senate Bill X7-7 related to 20% water conservation by 2020
SBA	South Bay Aqueduct
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
SMP	Salt Management Plan
SRVRWP	San Ramon Valley Recycled Water Program
State	State of California
SWP	State Water Project
TDS	Total Dissolved Solids
TWRG	Tri-Valley Water Retailers Group
UWMP	Urban Water Management Plan
UWMP Act	California Urban Water Management Planning Act
Yuba Accord	Lower Yuba River Accord
Zone 7	Zone 7 of the Alameda County Flood Control and Water Conservation District (also referred to as Zone 7 Water Agency)
Zone 7 Board	Zone 7 Water Agency Board of Directors

1 INTRODUCTION AND OVERVIEW

Zone 7 of the Alameda County Flood Control and Water Conservation District, also known as the Zone 7 Water Agency (Zone 7) prepared this 2015 Urban Water Management Plan (2015 UWMP) in response to the California Urban Water Management Planning Act (UWMP Act), which requires the adoption of an updated UWMP every five years on or before December 31, in years ending in zero or five. An urban water supplier that does not prepare, adopt, and submit an UWMP to the California Department of Water Resources (DWR) is ineligible to receive drought assistance from the State of California (State). For the 2015 UWMP, the State has extended the submission deadline to July 1, 2016. Zone 7's Board of Directors adopted the 2015 UWMP on March 16, 2016. It was submitted to DWR on April 1, 2016.

1.1 PURPOSE

Every five years, Zone 7 updates its UWMP, documenting the latest results of Zone 7's water supply planning efforts. In particular, the Water Supply Evaluation Update (WSE Update)¹ served as the foundation for the 2015 UWMP. An evaluation of Zone 7's water supply conditions, needs, and options was completed as part of the WSE Update. The 2014 Water Year Annual Report for the Groundwater Management Program and Zone 7's Capital Improvement Program also provided critical information. The 2015 UWMP, along with the reference documents listed above are accessible through Zone 7's website at www.zone7water.com.

1.2 PREVIOUS UWMPs

Zone 7 adopted its first UWMP in 1985, and then prepared an updated UWMP in 1991, in cooperation with three of the retailers supplied by Zone 7 [City of Livermore (Livermore), City of Pleasanton (Pleasanton), and Dublin San Ramon Services District (DSRSD)]. Zone 7 prepared and adopted a Water Shortage Contingency Plan in January 1992, and then updated and adopted an UWMP, which included a Water Shortage Contingency Plan, in 1995, 2000, and 2005. The 2005 UWMP was approved (i.e., "verified for completeness") by DWR in early 2006. Zone 7's 2010 UWMP was formally accepted by DWR on September 19, 2011.

This 2015 UWMP updates and supersedes all previous UWMPs prepared by Zone 7. Zone 7 is almost exclusively a water wholesaler that provides water for municipal and industrial purposes indirectly through four retail urban water suppliers (Retailers) in the Livermore-Amador Valley: DSRSD, Livermore, Pleasanton, and California Water Service Company – Livermore District (Cal Water). Zone 7 also provides untreated water to irrigation customers but that service is not part of this plan. This UWMP therefore addresses water demand, water supply, and water resource management for the region covered by the Retailer service areas, which include the cities of Livermore, Pleasanton, Dublin, and a

¹ Zone 7 Water Agency, 2016. Water Supply Evaluation Update.



portion of San Ramon called Dougherty Valley. Additional details are included in the UWMPs prepared by the Retailers.

1.3 CHANGES FROM 2010 UWMP

Since the preparation of Zone 7's 2010 UWMP, a number of changes to the California Water Code (CWC) have been made that impact the preparation of UWMPs. These include the following:

- Demand Management Measures [*CWC Section 10631 (f) (1) and (2)*] – Requires water suppliers to provide narratives describing their water demand management measures, as provided. Requires retail water suppliers to address the nature and extent of each water demand management measure implemented over the past 5 years and describe the water demand management measures that the supplier plans to implement to achieve its water use targets.
- Submittal Date [*CWC Section 10621 (d)*] – Requires each urban water supplier to submit its 2015 plan to the Department of Water Resources by July 1, 2016.
- Standardized Forms [*CWC Section 10644 (a) (2)*] – Requires the plan, or amendments to the plan, to be submitted electronically to the department.
- Water Loss [*CWC Section 10631 I (1) (J) al(e) (3)–(A)*] - Requires a plan to quantify and report on distribution system water loss.
- Voluntary reporting of passive savings [*CWC Section 10631 (e)–(4)*] - Provides for water use projections to display and account for the water savings estimated to result from adopted codes standards ordinances, or transportation and land use plans, when that information is available and applicable to an urban water supplier.
- Voluntary reporting of energy intensity [*CWC Section 10631.2 (a) and–(b)*] - Provides for an urban water supplier to include certain energy-related information, including, but not limited to, an estimate of the amount of energy used to extract or divert water supplies.
- Defining Water Features [*CWC Section 1–632*] - Requires urban water suppliers to analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.

Changes to the CWC that are applicable to wholesale water agencies have been incorporated into this UWMP.

1.4 PLAN CONTENTS AND ORGANIZATION

This UWMP was prepared in compliance with the requirements of the UWMP Act and its amendments as they apply to wholesale water agencies. **Table 1-1** provides a roadmap of where each of those requirements is addressed in this UWMP (in order of the referenced water code section).



As noted in **Table 1-1**, this UWMP also includes a Water Shortage Contingency Plan (**Chapter 8**) as required under Section 10632 of the Water Code.

Table 1-1. Roadmap of Water Code Requirements and Corresponding UWMP Sections

Water Code Section	UWMP Section	Content Description
10620(d)	2.4	Agency Coordination
10620 (f)	7.4	Resource Maximization/Import Minimization Plan
10621 (a)		Updated Plan in Years Ending in Five and Zero
10621 (b)	2.4, 10.2	City and County Notification and Participation
10631(a)	3.1-3.4	Service Area Information
10631(b)	Chapter 6	Water Sources
10631(b) (1)-(4)	6.3	Water Sources - Groundwater
10631(c) (1-3)	Chapter 7	Reliability of Supply Sources
10631(d)	6.4, 6.8.2, 7.4	Transfer & Exchange Opportunities
10631(e) (1) (2) (3)	N/A	Water Use By Customer Type
10631(f)(1) (2) (3) (4) and 10631(g) and 10631(j)	Chapter 9, Appendix F	Demand Management Measures (DMMs)
10631 (h)	6.8	Planned Water Supply Projects & Programs
10631(i)	6.8.2	Opportunities for Development of Desalinated Water
10631.5	Chapter 9, Appendix F	Determination of DMM Implementation
10632(a)	Chapter 8	Water Shortage Contingency Plan
10632(b)	8.7	Three-Year Minimum Water Supply
10632(c)	8.6	Preparation for Catastrophic Water Supply Interruption
10632(d)	8.1, 8.2	Prohibitions against specific water use practices during water shortages
10632 (e)	8.2	Consumption Reduction Methods
10632 (f)	N/A	Excessive use penalties or charges for excessive use
10632(g)	8.4	Revenue and Expenditure Impacts



Water Code Section	UWMP Section	Content Description
10632(i)	8.2	Reduction Measuring Mechanism
10633	N/A	Recycled Water Agency Plan
10633 (a)	6.7	Description of Wastewater System
10633	6.7.1	Recycled Water Plan Coordination
10633(a-d)	N/A	Wastewater Disposal and Current Use
10633(e)	6.7, 6.8.3	Projected Uses of Recycled Water
10633 (f)	6.7.2, 6.8.3	Plan to Optimize Use of Recycled Water
10634	7.1	Water Quality Impacts on Availability of Supply
10635(a)	Chapter 7	Water Service Reliability – Normal, Dry, and Multiple-Dry Years
10635 (b)	2.4, 10.2	Provision of Water Service Reliability Section to Cities/ Counties Within Service Area
10642	2.4, 10.2, 10.3, 10.5	Public Participation
10643	10.6	Review of Implementation of 2015 UWMP
10644 (a)	10.5	Provision of 2015 UWMP to Local Governments
10645	10.5	Places Where UWMP is Available For Public Review
10656, 10657	10.3, 10.6	UWMP Adoption & Implementation



2 PLAN PREPARATION: AGENCY COORDINATION AND PUBLIC PARTICIPATION

Water Code Section 10620

This chapter provides information on Zone 7 Water Agency's (Zone 7's) process for developing the 2015 UWMP, including efforts in coordination and outreach.

2.1 BASIS FOR PREPARING A PLAN

This 2015 Urban Water Management Plan (2015 UWMP) has been prepared in compliance with the California Urban Water Management Planning Act (UWMP Act), California Water Code (CWC) Division 6, Part 2.6, Sections 10610 through 10650. According to CWC 10617, every urban water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers, or supplies more than 3,000 acre-feet of water annually (AFA), shall prepare and adopt an UWMP. In 2014, Zone 7 Water Agency (Zone 7) directly and indirectly supplied 30,200 acre-feet (AF) of municipal and industrial water, thereby meeting the threshold for the required preparation of an UWMP. Zone 7 manages public water system number CA0110010.

While Zone 7 is primarily a wholesaler, Zone 7 also directly serves thirteen retail municipal connections. Direct retail customers include commercial and institutional water users as described in more detail in **Chapter 4**. CWC 10608.12(p) defines an "urban retail water supplier" as one that "*directly provides potable municipal water to more than 3,000 end-users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes*". Zone 7 directly serves potable water to a population of less than 3,000 at a 5-year average demand of 300 acre-feet. Zone 7 is therefore considered primarily an "urban wholesale water supplier", as defined in CWC 10608.12(r), for the purposes of the UWMP preparation and only needs to address wholesaler requirements.

2.2 INDIVIDUAL COMPLIANCE

While this 2015 UWMP was developed in close coordination with the Retailers and other stakeholders, it was developed as an "individual UWMP" and focuses on Zone 7's regional water supply management of its service area. Each of Zone 7's Retailers is preparing an UWMP, which covers that agency's water supply management in more detail.

2.3 CALENDAR YEAR AND UNIT OF MEASURE

This 2015 UWMP reports on a calendar year basis. All water volumes are reported in acre-feet, unless otherwise indicated.



2.4 COORDINATION AND OUTREACH

2.4.1 Coordination with the Retailers

Zone 7 is strongly committed to coordinating with the Retailers on issues that affect their own water supply management activities. Zone 7 prepares an annual review of the Sustainable Water Supply, which is a five-year look-ahead based on spring conditions that is posted on Zone 7's website and described at a public meeting. Retailer water suppliers (Retailers) participate in the process through a number of forums, including public presentations to the Zone 7 Board of Directors (Zone 7 Board), presentations to and discussions with the Tri-Valley Water Retailers Group (TWRG), and publication of the Annual Review of Sustainable Water Supply for Zone 7 Water Agency. Zone 7 also regularly meets with the Retailers on other key issues such as budgeting, rates, water quality issues, and others.

As the first formal step in the preparation of the 2015 UWMP, Zone 7 held a kick-off meeting with the Retailers on May 15, 2015 to coordinate the development of the UWMPs. Zone 7 held two additional meetings with the Retailers over the UWMP development process period, on September 15, 2015 and February 4, 2016. The Retailers provided necessary information for the completion of the 2015 UWMP, particularly information on their population and water demand projections, wastewater management, and recycled water plans. A preliminary draft version of the UWMP was provided for the Retailers' review on January 12, 2016 and their comments were incorporated in the development of the Public Draft 2015 UWMP distributed to the public on February 4, 2016. Zone 7 also assisted the Retailers in the preparation of their individual UWMPs, including identification and quantification of water supplies available for their use.

2.4.2 Coordination with Other Water Agencies

As a contractor of the State Water Project (SWP) (discussed in more detail in **Section 6.1**), Zone 7 is heavily engaged with the Department of Water Resources (DWR). Through membership in the State Water Contractors, Zone 7 also regularly interacts with other water agencies receiving water from the SWP and serving a total of over 25 million people across the state. The State and Federal Contractors Water Agency is a Joint Powers Authority that brings together SWP contractors like Zone 7 and Central Valley Project (CVP) contractors to work towards assuring sufficient and reliable export water supplies from the SWP and CVP. Through membership and active participation in the California Urban Water Agencies (CUWA), Zone 7 regularly confers with other urban water agencies across California on statewide water issues such as drought management, water supply reliability challenges, water quality management, etc. Zone 7 is also an active member of the Association of California Water Agencies (ACWA), the largest statewide coalition of public water agencies in the country representing water suppliers responsible for 90% of the water delivered to cities, farms, and businesses in California.

At the regional level, Zone 7 is actively engaged in the Bay Area Water Agencies Coalition (BAWAC), which is comprised of water agencies in Alameda, Contra Costa, San Francisco,



San Mateo, and Santa Clara counties. BAWAC is committed to advancing water conservation in the region as part of the Bay Area Integrated Regional Water Management Plan. Zone 7 is also a member of the Bay Area Regional Reliability Partnership, which brings together nine Bay Area water agencies aiming to improve regional water supply reliability by working cooperatively on a mutually beneficial and regionally focused basis.

The activities described above are only some of the key ways that Zone 7 remains strongly involved in water resource management issues, not just at the local level, but also at the regional and state levels.

2.4.3 Public Process

The development of the 2015 UWMP was presented to the Zone 7 Board's Water Resources Committee on November 9, 2015 and January 12, 2016; both meetings were open to the public.

As required by CWC 10621(b), Zone 7 formally notified the cities it serves (Dublin, Livermore, Pleasanton, and San Ramon), the Alameda County Planning Department, and Contra Costa County of the update process for the UWMP and the opportunity to submit comments on the Draft 2015 UWMP on January 15, 2016, which is at least 60 days before the public hearing on March 16, 2016. Zone 7 also notified the Livermore-Amador Valley Water Management Agency, a joint powers agency created in 1974 by the cities of Livermore and Pleasanton and DSRSD for the purpose of discharging their treated wastewater to San Francisco Bay, as well as East Bay Municipal Utility District (EBMUD).

The Draft 2015 UWMP was made available for public review on February 4, 2016 before the public hearing at the March 16, 2016 Zone 7 Board Meeting. As advertised in the local newspapers, the Draft 2015 UWMP was made available for public review and comment in public libraries, in the Zone 7 administrative office, on the Zone 7 website, and during the public hearing. Public notices are included in **Appendix A**.

Table 2-1 presents a list of the agencies that were engaged in the preparation of the 2015 UWMP.



**Table 2-1. Coordination and Notification for Plan Preparation
[DWR Table 2-4 W]**

Agency	Retailers	Noticed of UWMP Update^a	Was sent a copy of the UWMP	Participated in UWMP preparation
<i>Water Retailers</i>				
California Water Service Company	X	X	X	X
City of Livermore	X	X	X	X
City of Pleasanton	X	X	X	X
Dublin San Ramon Services District	X	X	X	X
<i>Other Water Management Agencies</i>				
Department of Water Resources			X	X
<i>Relevant Public Agencies</i>				
Alameda County Planning Department		X	b	
City of Dublin Planning Department		X	b	
City of San Ramon Planning Department		X	b	
Contra Costa County Water Agency		X	b	
East Bay Municipal Utility District (EBMUD)		X	b	
Livermore-Amador Valley Water Management Agency (LAVWMA)		X	b	
Alameda County Public Library – Dublin			X	
Livermore Public Library			X	
Pleasanton Public Library			X	

a. At least 60 days prior to public hearing (Cities and Counties).

b. Notified of availability of copies in public libraries, at the Zone 7 office, and online.

Note that the California Environmental Quality Act (CEQA) does not apply to the preparation and adoption of a UWMP as stated in CWC 10652, and therefore did not require the public process associated with CEQA.



3 SERVICE AREA AND SYSTEM DESCRIPTION

Water Code Section 10631

3.1 OVERVIEW

Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7 Water Agency or Zone 7) is one of ten active zones of the Alameda County Flood Control and Water Conservation District (District). Zone 7 is the only zone in the District that provides water services in addition to flood protection.

3.1.1 Alameda County Flood Control and Water Conservation District

The District was created in 1949 by the California State Legislature through passage of the Alameda County Flood Control and Water Conservation District Act (1949 ch 1275, published as Act 20 of the California Uncodified Water Code) (District Act) to provide control of flood and storm waters and to conserve water for beneficial uses. The District is also vested with the power to store water in surface or underground reservoirs within or outside of the District for the common benefit of the District; conserve and reclaim water for present and future use within the District; appropriate and acquire water and water rights; and import water into the District.

The District is further authorized by the District Act to prevent interference with or diminution of, or to declare rights in the natural flow of any stream or surface or subterranean supply of waters used or useful for any purpose of the District and to prevent contamination, pollution or otherwise rendering unfit for beneficial use the surface or subsurface water used or useful in the District.

The District is also authorized to levy replenishment assessments upon the production of groundwater from all water-producing facilities, whether public or private, within the District.

3.1.2 Zone 7 Water Agency – Wholesale Water Agency

The history of Zone 7 as a separate water resource management agency can be traced to the mid-1950s, when the Livermore-Amador Valley was primarily rural in character, with a population of approximately 30,000 people. The area faced a number of problems, including groundwater overdraft, poor drainage and flood hazards, and uncertainty over future water supplies. It was against this backdrop that the residents of the Livermore-Amador Valley voted, in 1957, to create Zone 7 Water Agency or Zone 7.

Zone 7 is governed by a locally-elected seven-member Board of Directors (Zone 7 Board). Each director is elected at-large by residents within Zone 7's service area to a four-year term. The Zone 7 Board sets policy and provides direction to Zone 7 management and staff.



In 2003, the legislature passed Assembly Bill 1125 and gave the Zone 7 Board full authority and autonomy to govern matters solely affecting Zone 7 independently of the Alameda County Board of Supervisors. The Alameda County Board of Supervisors, acting as the District Board of Supervisors, solely governs the other nine zones of the District.

Zone 7's key water resource management responsibilities include:

- serve as the contractor with the Department of Water Resources (DWR) for the State Water Project,
- manage the local water right on Arroyo Valle,
- procure other water supplies as necessary to meet demands,
- provide wholesale treated water supply,
- provide untreated water for agriculture,
- sustainably manage the Livermore Valley Groundwater Basin,
- operate and maintain water treatment and transmission systems, and
- manage regional stormwater for public safety and protection of property.

Under Zone 7's Groundwater Management Program, Zone 7 administers oversight of the local groundwater basin—the Livermore Valley Groundwater Basin—and prevents groundwater overdraft. Furthermore, the recently-enacted Sustainable Groundwater Management Act of 2014 (SGMA) designates Zone 7 as the exclusive local agency to become the Groundwater Sustainability Agency (GSA) for the groundwater basins within its statutory boundaries. As of late 2015, Zone 7 is in the process of formally electing to accept its role of GSA for the Livermore Valley Groundwater Basin.

The Main Basin is the portion of the Livermore Valley Groundwater Basin that contains the highest-yielding aquifers and generally the best quality groundwater. The primary groundwater basin management objectives of Zone 7 are to provide for the control and conservation of waters for beneficial future uses, the conjunctive use of groundwater and surface water, the importation of additional surface water, and the use of the groundwater basin to provide water storage for imported surface water used during drought periods. Zone 7's groundwater management policies and programs are described in the Groundwater Management Plan, which is discussed in **Section 6.3**.

3.1.3 Zone 7's Retailers

As the water wholesaler for the Livermore-Amador Valley, also commonly referred to as the Tri-Valley², Zone 7 supplies treated water to four retail water supply agencies (Retailers):

² The Tri-Valley Area, as defined here, includes the City of Dublin, City of Livermore, City of Pleasanton, and part of the City of San Ramon.



- California Water Service Company – Livermore District (Cal Water),
- Dublin San Ramon Services District (DSRSD),
- City of Livermore (Livermore), and
- City of Pleasanton (Pleasanton).

These Retailers deliver water for municipal and industrial (M&I) purposes within their individual service areas, which include the cities of Livermore, Pleasanton, Dublin, and a portion of San Ramon (Dougherty Valley).

Over 2002 and 2003, the Retailers signed the “Tri-Valley Water Retailers Cooperation Agreement” (Agreement), which provided a framework for cooperation amongst the Retailers to enhance their abilities to serve their customers. The Committee of Valley Water Retailers (CoVWR), consisting of elected officials from each retailer, was formed as part of the Agreement. The Tri-Valley Water Retailers Group (TWRG), consisting of staff from each retailer, was also formed to administer the actions called for under the Agreement, to develop consensus on issues of mutual concern, and to prepare an Annual Report for approval by the CoVWR. Until 2013, when the last retailer withdrew from the Agreement, the CoVWR and the TWRG served as formal forums for the Retailers to discuss issues of common interest and to communicate the Retailers’ position on such issues to Zone 7. Since the end of the Agreement, the Retailers have continued to meet, with participation by Zone 7, to discuss Tri-Valley water issues as needed.

3.2 SERVICE AREA

3.2.1 Location of the Service Area

Zone 7’s water service area (**Figure 3-1**) is located about 40 miles south-east of San Francisco, and encompasses an area of approximately 425 square miles of the eastern portion of Alameda County, including the Livermore-Amador Valley, Sunol Valley, and portions of the Diablo Range. Zone 7 also serves a portion of Contra Costa County (Dougherty Valley in San Ramon) through an out of service area agreement with DSRSD.

3.2.2 Major Streams and Arroyos in the Service Area

Zone 7’s service area overlies the Alameda Creek Watershed. This watershed encompasses almost 700 square miles, and extends from Altamont Pass to the east, San Francisco Bay to the west, Mount Diablo to the north, and Mount Hamilton to the south.

Major streams in Zone 7’s service area include the Arroyo Valle, Arroyo Mocho, Arroyo Las Positas, Alamo Canal, South San Ramon Creek, and Tassajara Creek (**Figure 3-1**). Both the Arroyo Valle and Arroyo Mocho originate in the woodland forests of the Burnt Hills region in Santa Clara County, in the sub-watershed above Lake Del Valle. The Arroyo Valle and Arroyo Mocho have the largest drainage areas within the Zone 7 service area.

The Arroyo Valle flows into Lake Del Valle above Lang Canyon, then continues its journey below the Del Valle Dam, flowing westerly through a regional park on the southern border



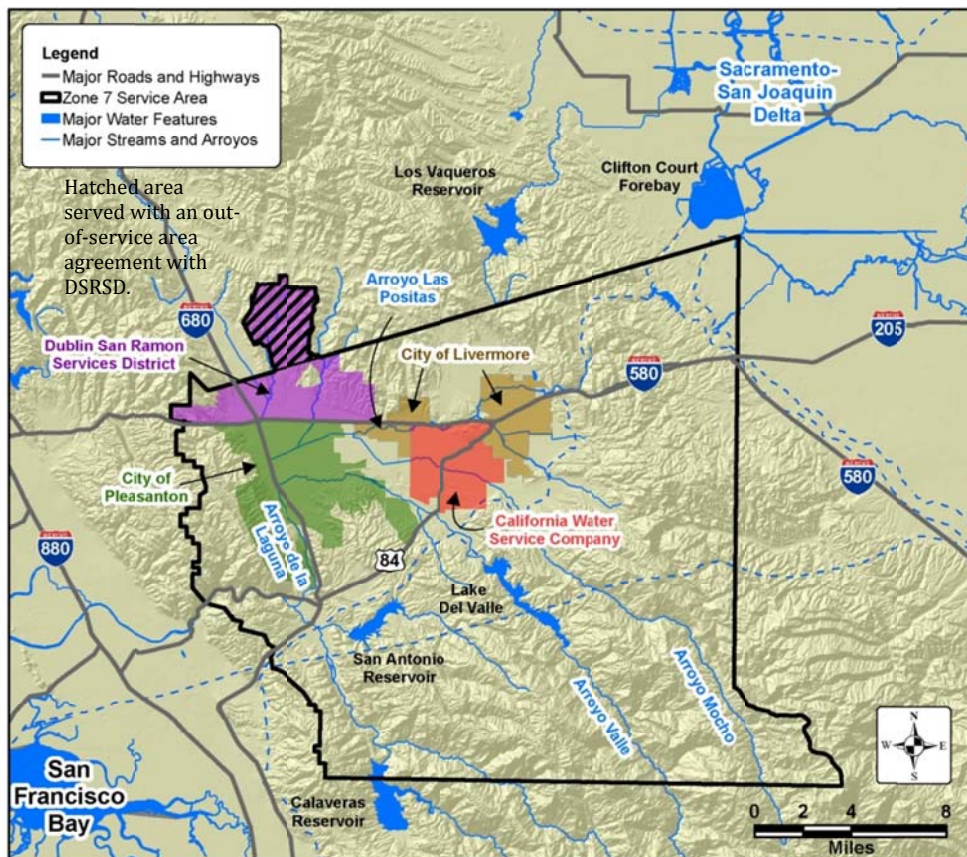
of Livermore before reaching Pleasanton. Flowing southwesterly through the historic downtown area of Pleasanton, it ultimately joins the Arroyo de la Laguna.

The Arroyo Mocho remains a natural waterway as it flows southwest through the oak woodlands east of Livermore, then continues through the southern portion of Livermore; from there, it becomes an improved channel and proceeds through the gravel mining area, merging with the Arroyo Las Positas in Livermore.

The Arroyo Las Positas mainly flows westerly along Interstate 580, and is fed by the Arroyo Seco, Altamont Creek, Cayetano Creek, Collier Canyon Creek, and Cottonwood Creek. At its confluence with the Arroyo Mocho in Livermore, the streambed becomes a wide, trapezoidal-shaped flood control channel. The Arroyo Mocho then flows into the Arroyo de la Laguna, which is a tributary of Alameda Creek.

Both the Arroyo Valle and the Arroyo Mocho serve vital roles in Zone 7's groundwater recharge program, as to a lesser extent does the Arroyo Las Positas. At the request of Zone 7, DWR releases water into these arroyos to supplement the natural recharge of the Main Basin, while providing secondary aesthetic and environmental benefits.

Figure 3-1. Location of Service Area and Major Streams and Arroyos



3.3 SERVICE AREA CLIMATE

The climate within Zone 7's service area is best described as Mediterranean, characterized by hot, dry summers and cool, moist winters. **Figure 3-2** shows the variation in rainfall in the Zone 7 service area, with generally lower rainfall amounts in the eastern portion. **Table 3-1** provides a summary of climate conditions within Zone 7's service area (using the CIMIS station in Pleasanton as an example), including average evapotranspiration (ET_o), precipitation, and temperature over 2010 to 2014, while **Figure 3-3** provides a graphical representation. As shown in **Table 3-1**, over 2010-2014, the average annual precipitation was approximately 16 inches of water, while total evapotranspiration was approximately 52 inches of water; average monthly temperatures varied from 47 to 69 degrees Fahrenheit throughout the year.

Figure 3-2. Variation of Rainfall in the Service Area

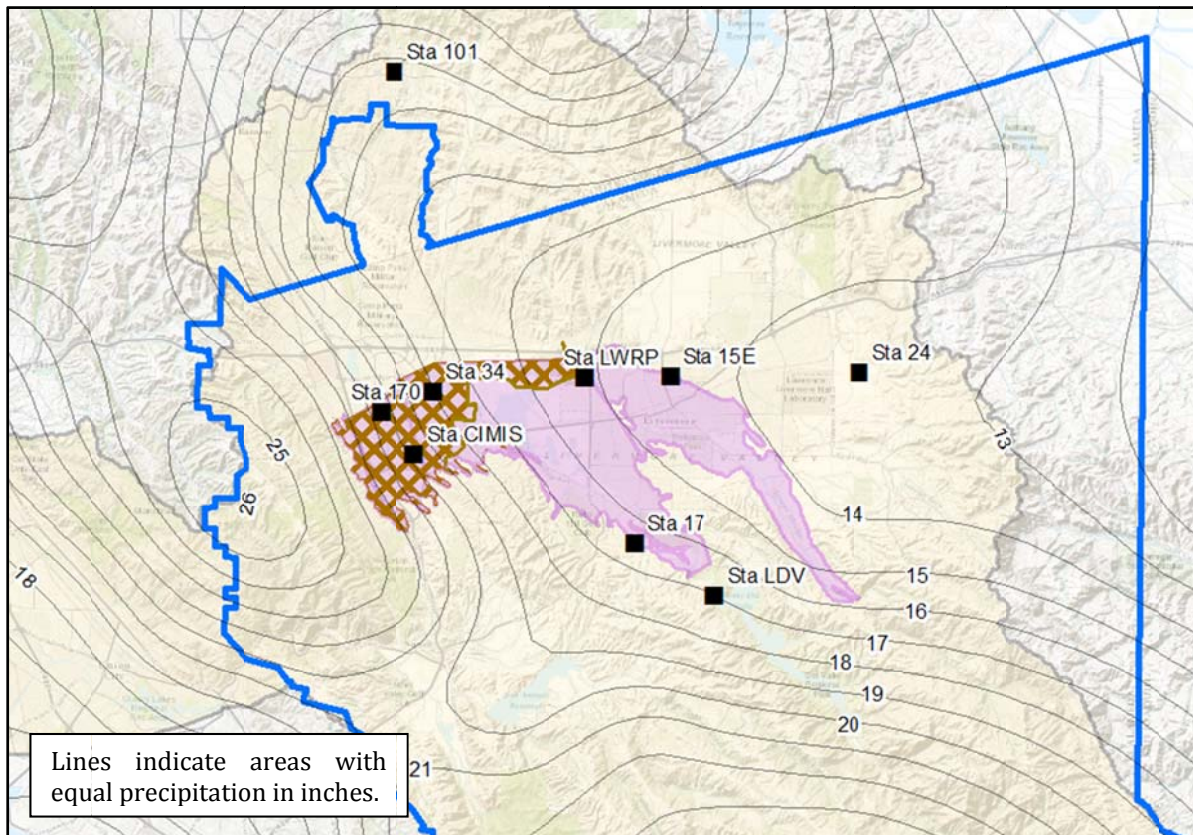
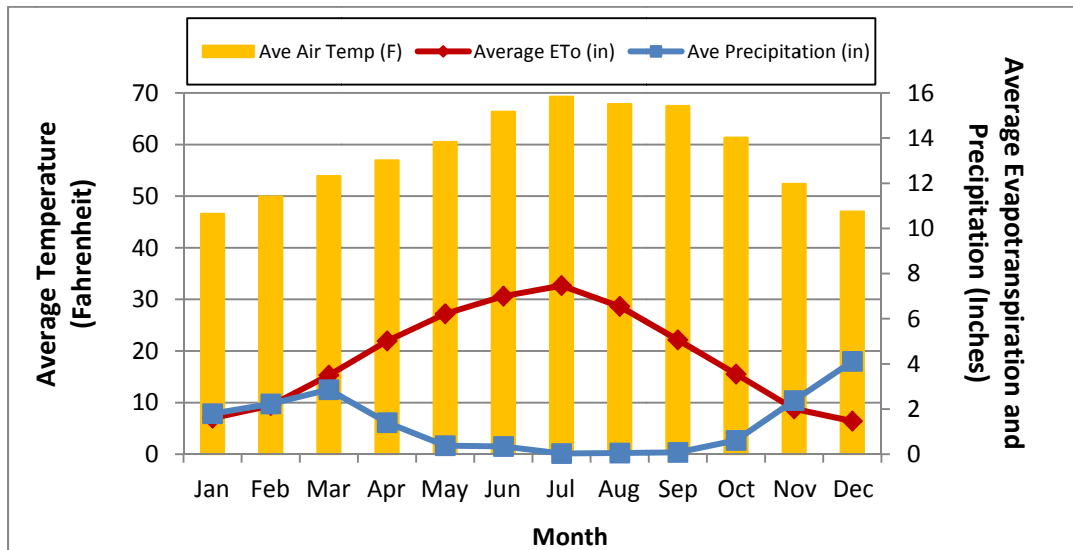


Table 3-1. Climate Data for Zone 7's Service Area (2010-2014)^a

Month	Standard Monthly Average ETo (inches) ^b	Average Total Rainfall (inches)	Average Temperature (degrees Fahrenheit)	
			Max	Min
January	1.6	1.8	61	36
February	2.2	2.2	62	39
March	3.5	2.9	66	42
April	5.0	1.4	70	45
May	6.2	0.4	74	48
June	7.0	0.3	81	53
July	7.5	0.0	87	56
August	6.5	0.1	86	54
September	5.1	0.1	85	53
October	3.5	0.6	78	48
November	2.0	2.4	67	41
December	1.5	4.1	60	36
TOTAL	51.6	16.3		

- a. Data for CIMIS Station 191 (Pleasanton) from January 2010 to December 2014, downloaded September 2015 from www.cimis.water.ca.gov.
- b. Reference evapotranspiration based on standard grass as reference (ET₀).

Figure 3-3. Climate Data for Zone 7's Service Area (2010-2014)^{a,b}



- a. Data for CIMIS Station 191 (Pleasanton) from January 2010 to December 2014, downloaded September 2015 from www.cimis.water.ca.gov.
- b. Reference evapotranspiration based on standard grass as reference (ET₀).

3.4 SERVICE AREA POPULATION AND DEMOGRAPHICS

As shown on **Figure 3-4**, the population within Zone 7’s service area has increased by 80% over 1990 to 2015, and is projected to grow by another 20% from 237,000 in 2015 to 285,000 in 2030, when buildout is projected to occur. The current and projected populations within Zone 7’s service area are also presented in **Table 3-2**. The population projections were provided by the Retailers and were developed based on data from the State of California, the Association of Bay Area Governments, and general plans.

Figure 3-4. Actual and Projected Population within Zone 7’s Service Area

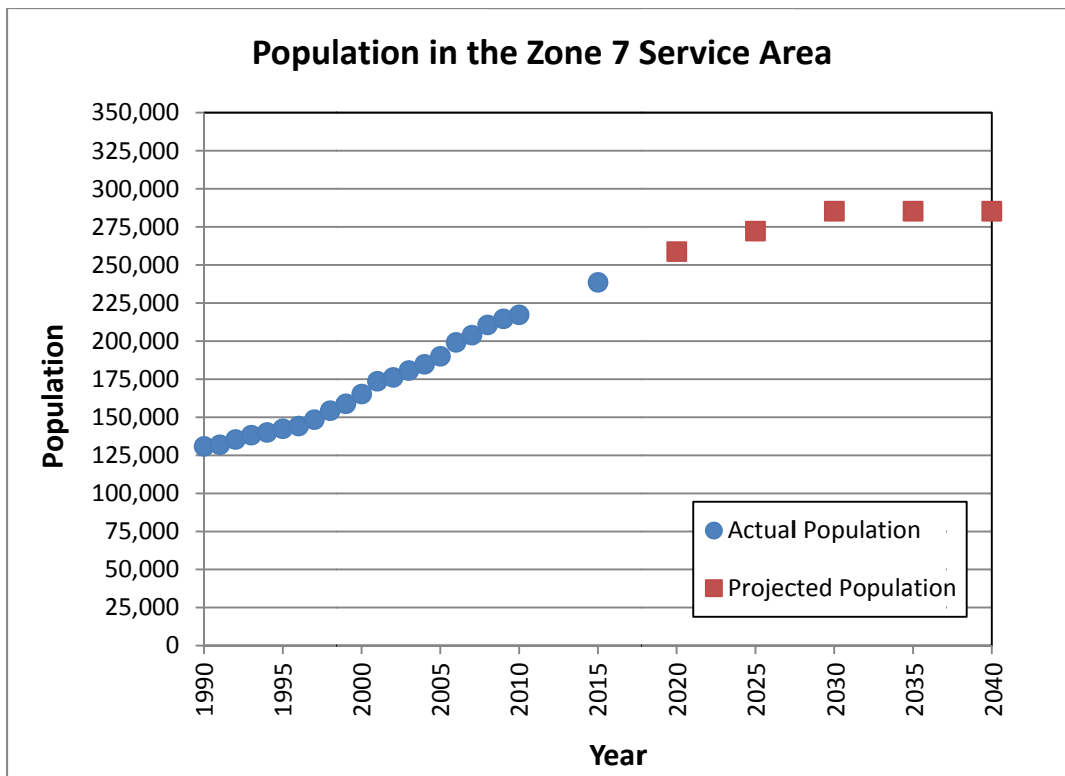


Table 3-2. Current and Projected Population in Zone 7’s Service Area [DWR Table 3-1 W]

Population Served	2015	2020	2025	2030	2035
DSRSD	80,200	92,600	98,300	103,100	103,100
Livermore	28,800	29,200	28,700	32,400	32,400
Pleasanton	72,200	75,600	78,800	82,300	82,300
Cal Water - Livermore	57,400	61,400	66,400	67,500	67,500
TOTAL	238,600	258,800	272,200	285,300	285,300



3.5 WATER SYSTEM FACILITIES

Zone 7 has a robust water supply system consisting of an aqueduct, surface water treatment plants, wells, a groundwater demineralization plant, and a storage and transmission system (**Figure 3-5**).

3.5.1 South Bay Aqueduct



South Bay Aqueduct (at Tesla Road)

Zone 7 imports raw surface water from the State Water Project (SWP) through the South Bay Aqueduct (SBA) for direct irrigation use by agricultural users; for treatment and transmission to Retailers and direct retail customers; and for groundwater recharge. The SBA, which is operated by the Department of Water Resources (DWR), starts from Bethany Reservoir near Tracy in the northeastern corner of Zone 7's service area, then leaves the service area southwest of San Antonio Reservoir, ultimately terminating in San Jose. The SBA normally delivers water pumped from the Delta—derived from the SWP and from Zone 7's transfer agreement with Byron Bethany Irrigation

District—and water released from Lake Del Valle. Other water supplies procured by Zone 7 could also be delivered through the Delta (e.g., transfer water available through the Dry Year Transfer Program).

3.5.2 Surface Water Treatment Plants

Zone 7 operates two water treatment plants: the Del Valle Water Treatment Plant (DVWTP) and the Patterson Pass Water Treatment Plant (PPWTP).

3.5.2.1 *Del Valle Water Treatment Plant*

The DVWTP is located along the SBA, just south of Lake Del Valle, and has an average capacity of 36 million gallons per day (MGD), although it is permitted to operate up to 40.9 MGD. It can receive water either directly from the SBA or from Lake Del Valle. The treatment processes include coagulation, flocculation, clarification, multi-media filtration, and chlorine disinfection. In addition, chloramine is added to maintain a disinfectant residual in the distribution system.

3.5.2.2 *Patterson Pass Water Treatment Plant*

The PPWTP is located along the SBA, just south of Interstate 580, and has an average capacity of 19 MGD (permitted up to 21.5 MGD). Because PPWTP is upstream of Lake Del Valle, it is not able to physically receive water from this water supply source. There is a small 30-MG raw water reservoir onsite operated by DWR. There are currently two separate but parallel treatment plants at the plant site: a conventional plant and an

ultrafiltration plant. The two plants share the same water source, finished-water clearwell, and solids handling facilities, but are operated independently of each other by Zone 7.

The treatment processes in the conventional system include coagulation, flocculation, sedimentation, dual-media filtration, and chlorine disinfection. The ultrafiltration plant consists of coagulation, flocculation, sedimentation, an ultrafiltration membrane system, and chlorine disinfection. In addition, chloramine is used to maintain a disinfectant residual in the distribution system.

3.5.3 Wells

Zone 7 owns and operates ten municipal supply wells located in four wellfields. The Hopyard, Mocho, Stoneridge, and Chain of Lakes wellfields are situated in the west side of the service area. Their rated capacities are summarized in **Table 3-3** below. The total combined pumping capacity of all wells is approximately 42.3 MGD. Of the total pumping capacity, 10.8 MGD is intended primarily for use in emergency and drought conditions. Therefore, total groundwater pumping capacity under normal operating conditions is approximately 31.5 MGD.

Table 3-3. Zone 7 Groundwater Extraction Wells and their Capacities

Facility	Rated Capacity	
	GPM	MGD
Hopyard Wellfield	4,927	7.1
Hopyard 6	3,817	5.5
Hopyard 9	1,110	1.6
Mocho 1 and 2 Wellfield	4,511	6.5
Mocho 1	2,290	3.3
Mocho 2	2,221	3.2
Mocho 3 and 4 Wellfield^a	7,842	11.3
Mocho 3	4,164	6
Mocho 4	3,678	5.3
Stoneridge Wellfield	4,580	6.6
Chain of Lakes Wellfield	7,495	10.8
Chain of Lakes 1	2,498	3.6
Chain of Lakes 2	3,470	5
Chain of Lakes 5	1,527	2.2
TOTAL	29,356	42.3

a. Note that there is lower net water production due to brine concentrate losses when the demineralization facility is operating.

3.5.4 Mocho Groundwater Demineralization Plant

At the Mocho wellfield, there is a reverse osmosis membrane-based demineralization facility (Mocho Groundwater Demineralization Plant or MGDP) designed to improve delivered water quality and mitigate salt build-up in the groundwater basin. Construction of this facility, which can produce up to 6.1 MGD of demineralized water, was completed in 2009. Under normal operation, twenty percent (20%) of the influent to the MGDP is lost through brine disposal.

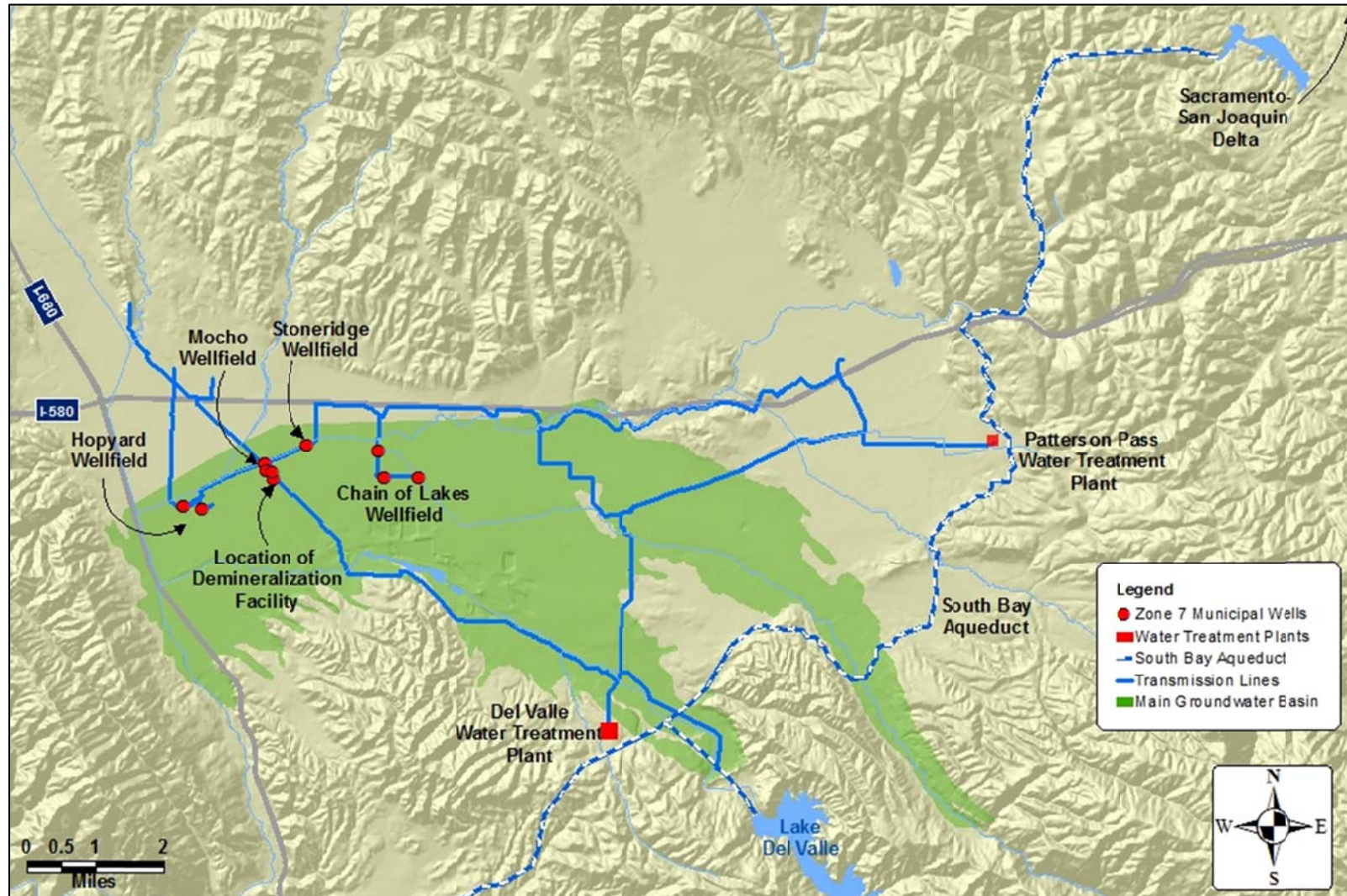
3.5.5 Storage and Transmission System

Zone 7 has four treated water storage reservoirs within the system: Dougherty Reservoir (joint use with DSRSD), DVWTP Clearwells 1 and 2, and PPWTP Clearwell. These four facilities provide a total storage volume of 13.5 MG.

Zone 7's transmission system consists of approximately 35 miles of pipeline ranging from 12 to 42 inches in diameter. Elevations across the transmission system range from 600 to 680 feet above mean seal level (msl) on the eastern side of the service area, to approximately 330 feet above msl on the western side of the service area.



Figure 3-5. Zone 7's Major Water System Facilities



4 SYSTEM WATER USE

Water Code Section 10631(e)

This chapter describes and quantifies Zone 7's current water use and projected use through 2035.

4.1 WATER USES BY SECTOR

Zone 7's service area is home to a diverse, vibrant, and rapidly growing community that supports a population of approximately 240,000 people and a myriad of vital and dynamic commercial, agricultural, and industrial enterprises. The eastern reaches of Zone 7's service area include oil wells and acres of energy-generating windmills, while other areas include large employers such as Kaiser Permanente, Safeway, Oracle, Provident Financial, SAP, and Lawrence Livermore National Laboratory. The area also supports a number of award-winning wineries. Industrial water use is not a major component of water use in the area but industrial users do exist, such as The Clorox Company (chemical company), Roche Molecular Systems (medical diagnostic products), and A-1 Enterprise (waste hauler).

As discussed previously, Zone 7 provides wholesale treated water to the Retailers, who use the water for Municipal and Industrial (M&I) purposes within their service areas. Three of the Retailers—DSRSD, Livermore, and Pleasanton—also provide recycled water for landscape irrigation to supplement treated water supply. In addition to supplying treated water, Zone 7 also supplies raw or untreated water for agricultural purposes to 3,500 acres, primarily consisting of vineyards in the southern portion of Livermore Valley. Agriculture in the Livermore area also produces olives, olive oil, pistachios, and prime beef. Six direct retail customers, including commercial and institutional water users, are also served by Zone 7; they represent a small percentage of demand. Finally, a small percentage of water is lost in the system as 'unaccounted-for water'.

For any given year, surplus water is used in the following ways: recharge of the local groundwater basin, storage in groundwater banks in Kern County (Semitropic Water Storage District and Cawelo Water District), storage in the State Water Project (SWP) system as 'carryover' in San Luis Reservoir, and storage of local water in Lake Del Valle. Zone 7 is also considering storage in Los Vaqueros Reservoir, owned and operated by Contra Costa Water District, in the future, and is currently pursuing a pilot exchange as a proof of concept.

Zone 7 works closely with the Retailers to develop the demand projection under '*Sales to other agencies/anticipated demand*', which represents most of Zone 7's demand. The projected water demands provided are based on each retail agency's own methodology and historical practice, and represent their best estimate of their water supply need. Zone 7 develops projections for the direct retail customers, untreated water (agricultural) customers, and unaccounted-for water in its water supply system.



Note that uncertainty is inherent with any type of projection; the rate of increase of demands and the ultimate demands will be affected by economic conditions, regulations (e.g., land use ordinances), technology (e.g., water efficiency of future appliances), behavior, and other factors. The 2015 UWMP demand projections are lower than the 2010 UWMP projections due to new recycled water projects and water conservation programs being implemented by the Retailers. Zone 7 will continue to re-evaluate demand trends annually.

Table 4-1 quantifies current water uses or demands in the Zone 7 service area, while **Table 4-2** presents projected demands. The total demands are presented in **Table 4-3**. Finally, the volume of water loss in the transmission system for 2015 is listed in **Table 4-4**.

**Table 4-1. Current Water Demands
[DWR Table 4-1 W]**

Use Type	2015 Actual (Acre-Feet)		
	Additional Description	Level of Treatment When Delivered	Volume
Sales to other agencies	Retailer Demand	Drinking Water	24,300
Agricultural irrigation	Untreated Water Demand	Raw Water	5,600
Retail demand for use by agencies that are primarily wholesalers with a small volume of retail sales	Direct Retail Demand	Drinking Water	300
Groundwater recharge	Local Groundwater Basin	Raw Water	3,900
Other	Kern County Groundwater Banking Programs	Raw Water	-
Other	Surface Water Storage - SWP Carryover or Other Storage	Raw Water	13,000
Losses	Transmission System	Drinking Water	800
TOTAL			47,900



**Table 4-2. Projected Water Demands
[DWR Table 4-2 W]**

Use Type	Additional Description	Projected Water Demands (Acre-Feet)			
		2020	2025	2030	2035
Sales to other agencies	Retailer Demand	41,300	44,700	46,600	47,600
Agricultural irrigation	Untreated Water Demand	6,200	6,600	7,800	8,300
Retail demand for use by agencies that are primarily wholesalers with a small volume of retail sales	Direct Retail Demand	300	300	300	300
Groundwater recharge	Local Groundwater Basin	9,200	9,200	9,200	9,200
Other	Kern County Groundwater Banking Programs	0	300	7,300	9,000
Other	Surface Water Storage - SWP Carryover or Other Storage	10,000	10,000	10,000	10,000
Losses	Transmission System	2,100	2,200	2,300	2,400
Losses	Storage Losses	3,000	4,000	6,000	6,000
TOTAL		72,100	77,300	89,500	92,800

**Table 4-3. Total Water Demands
[DWR Table 4-3 W]**

Demands (Acre-Feet)	2015	2020	2025	2030	2035
Potable and Raw Water <i>(From Tables 4-1 and 4-2)</i>	47,900	72,100	77,300	89,500	92,800
Recycled Water Demand ^a	-	-	-	-	-
TOTAL WATER DEMAND	47,900	72,100	77,300	89,500	92,800

a. Zone 7 currently does not produce nor distribute recycled water directly. However, several retailers do provide recycled water in Zone 7's service area.



**Table 4-4. Volume of Water Loss in the Transmission System for 2015
[DWR Table 4-4 W]**

Reporting Period Start Date (Month/Year)	Volume of Water Loss (Acre-Feet)
January 2015	800



5 REDUCING PER CAPITA WATER USAGE

Water Code Section 10608.36

Wholesale water suppliers, such as Zone 7 Water Agency, are not required to establish a baseline and meet targets for reducing daily per capita water use as defined in Senate Bill X7-7 (SBX7-7) or the Water Conservation Act of 2009. However, Zone 7 is fully supportive of the achievement of SBX7-7 water use reduction targets by the Retailers.

As discussed in **Chapter 9**, Zone 7 provides regional coordination of conservation programs, which include community workshops and other events, school education programs, and rebate and giveaway programs. Zone 7's Conservation Coordinator is also actively engaged in various conservation-oriented regional and state organizations, including the California Urban Water Association (CUWA) and the California Urban Water Conservation Council (CUWCC). Finally, the Coordinator tracks conservation-related state legislation and local ordinances and integrates them into the Zone 7 conservation program development process to ensure timely compliance and achievement of conservation goals.

Zone 7 is also fully supporting the current and expanded use of recycled water in the Tri-Valley—resulting in lower consumption of potable water supplies—by updating the Salt Management Plan to address nutrient management and supporting Retailer grant applications for recycled water infrastructure funding. Finally, Zone 7 has been working closely with the Retailers in exploring potential options for expanding recycled water use beyond irrigation applications, as discussed in **Section 6.8.3**.



6 WATER SUPPLIES AND STORAGE

Water Code Section 10631

The purpose of this chapter is to describe Zone 7 Water Agency's (Zone 7's) existing and future water supply sources. The water supply quantities presented are based on an average or normal hydrologic year; varying water supply conditions under drought/dry and wet years are discussed in Chapter 7 (Water Supply Reliability).

Zone 7's water supply has two major components: (1) incoming water supplies available through contracts and water rights and 2) accumulated water supplies in storage. Incoming water supplies consist of annually allocated imported surface water supply and local surface water runoff. Accumulated or "banked" water supplies are available in local and non-local storage locations.

Three of Zone 7's Retailers—Dublin San Ramon Services District (DSRSD), Livermore, and Pleasanton—also produce and/or supply recycled water to their service areas; more details about recycled water are available in **Section 6.7**. Two retailers, Pleasanton and Cal Water, pump groundwater directly in addition to the water supply provided by Zone 7. DSRSD has a contract with Zone 7 to pump groundwater on its behalf.

To optimize use of its local resources, Zone 7 practices conjunctive use of the Livermore Valley Groundwater Basin, which is discussed in more detail in **Section 6.2**, and stores local runoff from Arroyo Valle in the local reservoir (Lake Del Valle) owned and operated by the Department of Water Resources (DWR).

Two long-term water storage ("banking") agreements with agencies south of Zone 7's service area in Kern County (Semitropic Water Storage District and Cawelo Water District) provide additional flexibility in managing fluctuations in supplies. These agreements are described in **Section 6.6**.

To mitigate the risk associated with significant reliance on imported water supply, Zone 7 continues to develop local sources of water and to diversify its water supply portfolio. An update to the 2011 Water Supply Evaluation³, the Water Supply Evaluation Update⁴ (WSE Update), was recently completed in early 2016, with the goal of documenting Zone 7's most current water supplies based on new information and experience gained over the current drought. Future water supply portfolios considered in the WSE Update are discussed in **Section 6.8**.

³ Zone 7 Water Agency, 2011. Water Supply Evaluation.

⁴ Zone 7 Water Agency, 2016. Water Supply Evaluation Update.



6.1 IMPORTED WATER: STATE WATER PROJECT

Purchased water from the State Water Project (SWP)—the nation’s largest publicly-built water storage and conveyance system serving over 25 million people throughout California—is by far Zone 7’s largest water source, providing over 80% of the treated water supplied to its customers on an annual average basis.



Supply from the SWP is delivered via the South Bay Aqueduct, which can also be used to deliver other supplies.

DWR provides water supply from the SWP to twenty-nine SWP Contractors (Contractors), including Zone 7, in exchange for Contractor payment of all costs associated with providing that supply. DWR and each of the Contractors entered into substantially uniform long-term water supply contracts (Contracts) in the 1960s with initial 75-year terms, which begin to expire in 2035. Zone 7’s Contract was executed in 1961. While the Contracts provide for continued water service to the Contractors beyond the initial term, efforts are currently underway to extend the Contracts to improve financing conditions for the SWP.

The majority of the capital costs associated with the development and maintenance of the SWP is financed using revenue bonds. These bonds have historically been sold with 30-year terms. It has become more challenging in recent years to affordably finance capital expenditures for the SWP because DWR bonds used to finance these expenditures are limited to terms that only extend to the year 2035, about 20 years from now. To ensure continued affordability of debt service to Contractors, it is necessary to extend the term of the Contracts, which will allow DWR to continue to sell bonds with 30-year terms.

Negotiations on extending the Contracts took place between DWR and the Contractors during 2013 and 2014, and were open to the public. The following terms were agreed to and are currently the subject of analysis under the requirements of the California Environmental Quality Act (CEQA) (Notice of Preparation dated September 12, 2014):

- extend the term of the 29 Water Supply Contracts to December 31, 2085,
- provide for increased SWP financial operating reserves during the extended term of the Contracts,
- provide additional funding mechanisms and accounts to address SWP needs and purposes, and
- develop a revised payment methodology with a corresponding billing system that better matches the timing of future SWP revenues to future expenditures.

It is anticipated that the term of the SWP Contracts will be extended to December 31, 2085 and the data and information contained in this UWMP reflect that assumption.

SWP water originates within the Feather River watershed, is captured in and released from Lake Oroville, and flows through the Sacramento-San Joaquin Delta (Delta) before it is conveyed by the South Bay Aqueduct (SBA) to Zone 7. Much of the SWP water continues on to southern California via the California Aqueduct.

The SBA also delivers water to two other water agencies: Santa Clara Valley Water District and Alameda County Water District. Lake Del Valle is part of the SBA system and is used for storage of SWP water, as well as local runoff.

At Zone 7, SWP water is directly used to meet treated water demands from municipal and industrial customers—primarily wholesale and some direct retail—and untreated water demands from agricultural customers. It is also used to artificially recharge the local groundwater basin, as discussed in **Section 6.2**, and fill non-local storage in Kern County.

Zone 7 has access to several types of water from the SWP as described below.

6.1.1 Table A Allocation

Each SWP contractor is limited to a maximum annual contract amount as specified in Article 6(c) and Table A of the SWP Contract; this amount is therefore commonly referred to as “Table A.” As noted above, Zone 7 first entered into the SWP Contract in November 1961; as the SWP was expanded and as Zone 7 demands increased over the years, Zone 7’s Table A amount was increased, reaching the amount of 46,000 acre-feet annually (AFA) in 1997. Since then, Zone 7 has increased its supply from the SWP through a series of five permanent transfers. In December 1999, Zone 7 secured Table A SWP allocations from Lost Hills Water District of 15,000 AFA and Berrenda Mesa Water District of 7,000 AFA. In December 2000, 10,000 AFA of SWP allocation from Belridge Water Storage District was acquired. An additional 2,219 AFA was obtained from the same source in October 2003. Finally, 400 AFA of water was acquired from the Tulare Lake Basin Water Storage District in 2003. Together, these transfers have raised Zone 7’s current Table A allocation to 80,619 AFA.



Zone 7 has the ability to carry Table A water from one year to another. Zone 7’s SWP carryover is stored in San Luis Reservoir.

In practice, the actual amount of SWP water available to Zone 7 under the Table A allocation process varies from year to year due to hydrologic conditions, water demands of other contractors, existing SWP stored water, SWP facility capacity, and environmental/regulatory requirements.

In July 2015, DWR issued the “State Water Project Final Delivery Capability Report 2015” (2015 Delivery Capability Report)⁵. Since 2002, DWR has been publishing ‘Delivery Reliability Reports’ to provide contractors and other local agencies a single source of the most current data available on SWP delivery reliability that can be used for the development of local plans such as UWMPs. There were notable changes in 2015. First, DWR renamed the report ‘Delivery Capability Report’. Second, and more importantly, DWR provided multiple alternatives for the reliability of the SWP under future conditions; this is discussed in more detail in **Section 7.2.1**. Under the ‘Early Long-Term’ alternative in the 2015 Delivery Capability Report, the SWP’s projected long-term average yield is 62% of Table A, equivalent to approximately 50,000 AFA for Zone 7.

As a SWP contractor, Zone 7 has the option to store unused Table A water from one year to the next in SWP surface storage facilities—specifically San Luis Reservoir in the case of Zone 7—when there is storage capacity available. This “carryover” water is also called Article 12e or 56c water, in reference to the relevant contract terms. Article 12e water must be taken by March 31 of the following year, but Article 56c water may remain as carryover as long as San Luis Reservoir storage is available. Zone 7 typically maintains between 10,000 to 15,000 acre-feet (AF) of carryover water. The analysis in this UWMP assumes Zone 7 carries over 10,000 AF of water each year.

6.1.2 Article 21 Water (Interruptible or Surplus Water)

Under Article 21 of Zone 7’s SWP Contract, Zone 7 also has access to excess water supply from the SWP that is available only if: 1) it does not interfere with SWP operations or Table A allocations, 2) excess water is available in the Delta, and 3) it will not be stored in the SWP system. Per the 2015 Delivery Capability Report, the projected yield from Article 21 is very low and does not represent a significant water supply for Zone 7.

6.1.3 Article 56d Water (Turnback Pool Water) and Multi-Year Pool Demonstration Program

Article 56d is a contract provision that allows SWP contractors with unused Table A water to sell that water to other SWP contractors via a “turnback pool” administered by DWR on an annual basis. Historically, only a few SWP contractors have been in a position to make turnback pool water available for purchase, particularly in normal or dry years. Over 2013 and 2014, DWR began pilot-testing a Multi-Year Pool Demonstration Program (“Water Pool Program”) to evaluate the feasibility of a multi-year water purchase program. The Water Pool Program could conceivably provide an alternative to the Turnback Pool, providing more incentive to prospective sellers and therefore increasing the amount of water available. In 2015, the Water Pool Program was re-introduced through the end of 2016 at a price more in line with the current market. The program remains on pilot status.

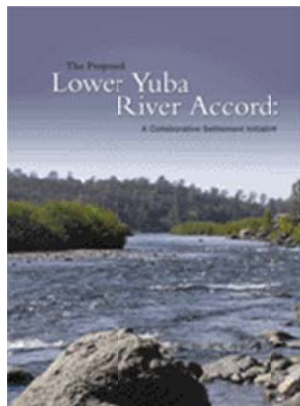
⁵ DWR, 2015. The State Water Project Final Delivery Capability Report 2015. (Available at: <http://baydeltaoffice.water.ca.gov/swpreliability/>)



While Zone 7 received 2,500 AF of water from the Water Pool Program in 2013, Zone 7 currently does not anticipate a significant amount of water supply to be reliably available under Article 56d (or its alternative) until there is a resolution to the current Delta crisis.

6.1.4 Yuba Accord

In 2007, Zone 7 entered into a contract with DWR to purchase additional water under the Lower Yuba River Accord (Yuba Accord). The original contract expires in 2025, and a number of amendments have been made to the original agreement over the years, including a new pricing agreement executed in 2014.

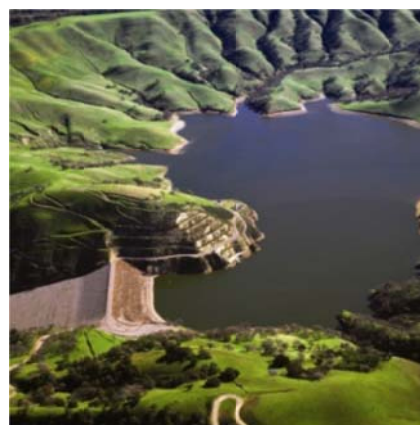


There are four different types (“Components”) of Yuba water available; Zone 7 has the option to purchase Components 2 and 3 water during drought conditions, and Component 4 water when the Yuba County Water Agency has determined that it has water supply available to sell.

Water is primarily available during dry years under the Yuba Accord, and the amount is relatively small: 400 AF in 2014 and approximately 300 AF in 2015. For planning purposes, Zone 7 currently assumes a long-term average yield of 145 AFA under the Yuba Accord; in the future, this amount may increase given the recently renegotiated terms in 2014. Any such increase will be reflected in future planning efforts.

6.2 LOCAL SURFACE WATER: ARROYO VALLE

Zone 7, along with the Alameda County Water District (ACWD), has a water right (Permit 11319 [Application 17002]) to divert flows from Arroyo Valle. Runoff from the Arroyo Valle watershed above Lake Del Valle is stored in the lake, which is managed by DWR as part of the SWP. Lake Del Valle stores imported surface water deliveries from the SWP and serves a flood control function, as well as a recreational one. In late fall, DWR typically lowers lake levels in anticipation of runoff from winter storm events. Water supply in Lake Del Valle is made available to Zone 7 via the SBA through operating agreements with DWR. Inflows to Lake Del Valle, after accounting for permit conditions, are equally divided between ACWD and Zone 7.



Supply from Arroyo Valle is stored in Lake Del Valle

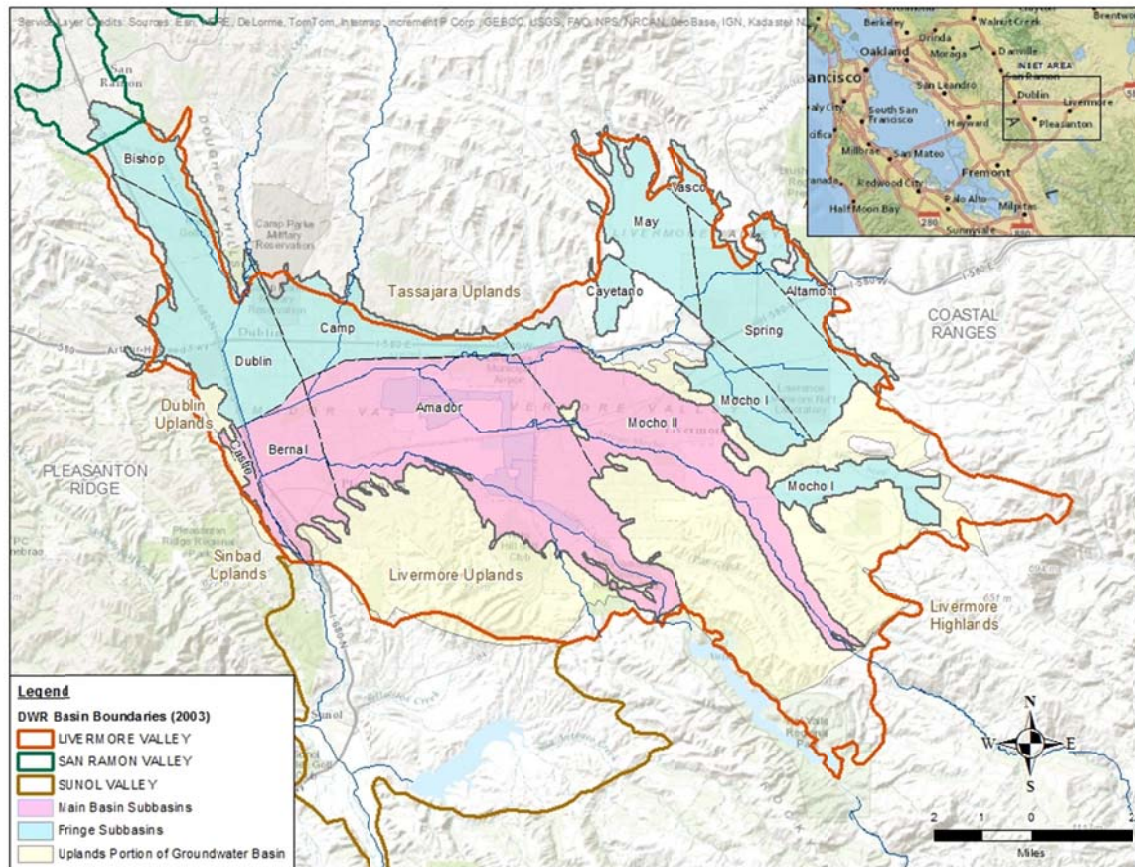
Zone 7 modeling and analysis indicates that the current average inflows available to Zone 7 are approximately 7,300 AFA. The construction of the Chain of Lakes (discussed in **Section 6.5**) will allow for increased yield from this water supply in the future.

6.3 GROUNDWATER

6.3.1 Basin Description

Zone 7 overlies the Livermore Valley Groundwater Basin (Basin); the Main Basin is the portion of the Basin that contains high-yielding aquifers and generally the best-quality groundwater. **Figure 6-1** provides a map of the Basin, identifying the Main Basin and sub-basins. More detailed descriptions of the Basin and Main Basin are available in Zone 7's Groundwater Management Plan (GMP)⁶, which can be accessed at <http://www.zone7water.com/index.php/36-public/content/79-groundwater-management-plan>. The associated Annual Report for the 2014 Water Year⁷ is accessible at <http://www.zone7water.com/index.php/36-public/content/76-groundwater-management-program-annual-report>.

Figure 6-1. Livermore Valley Groundwater Basin



⁶ Jones & Stokes, 2005. Groundwater Management Plan for Livermore-Amador Valley Groundwater Basin.

⁷ Zone 7, 2015. Annual Report for the Groundwater Management Program – 2014 Water Year.

As defined in DWR Bulletin 118 update 2003 (*California's Groundwater*), the Livermore Valley Groundwater Basin (DWR Basin 2-10) extends from the Pleasanton Ridge east to the Altamont Hills and from the Livermore Uplands north to the Tassajara Uplands. **DWR has not identified Basin 2-10 as either in overdraft or expected to be in overdraft.** The Livermore Valley Groundwater Basin is not adjudicated. Surface drainage features include Arroyo Valle, Arroyo Mocho, and Arroyo Las Positas as principal streams, with Alamo Creek, South San Ramon Creek and Tassajara Creek as minor streams. All streams converge on the west side of the basin to form Arroyo de la Laguna, flowing south and joining Alameda Creek in Sunol Valley, and ultimately draining to the San Francisco Bay. Some geologic structures restrict the lateral movement of groundwater, but the general groundwater gradient is from east to west, towards Arroyo de la Laguna, and from north to south along South San Ramon Creek and Arroyo del la Laguna.

The entire floor of the Livermore Valley and portions of the upland areas on all sides of the valley overlie groundwater-bearing materials. The materials are mostly continental deposits from alluvial fans, outwash plains, and lakes. They include valley-fill materials, the Livermore Formation, and the Tassajara Formation. Under most conditions, the valley-fill and Livermore Formation yield adequate to large quantities of groundwater to all types of wells, with the larger supply wells being located in the Main Basin. The Main Basin is composed of the Castle, Bernal, Amador, and Mocho II sub-basins, with an estimated total storage capacity of 254,000 AF.

6.3.2 Groundwater Management

The 2005 Groundwater Management Plan (GMP)⁶ documented all of Zone 7's then-current groundwater management policies and programs and was developed to satisfy the requirements set forth in the California Groundwater Management Planning Act (Water Code Sections 10750, *et seq.*). More recently, a Salt and Nutrient Management Plan has been incorporated into the GMP, as discussed further in **Section 6.3.2.4**. Zone 7 prepares annual reports that summarize the results of the groundwater monitoring, evaluation, and management efforts by water year (WY); the most recent version of the annual report is for the 2014 WY⁷.

For Zone 7's operations, the Main Basin is considered a storage facility and not a long-term water supply because Zone 7 does not have access to naturally-recharged water, and only pumps groundwater that has been artificially recharged with surface water supplies. As part of this conjunctive use program, Zone 7's policy is to maintain groundwater levels above historic lows in the Main Basin to minimize the risk of inducing land subsidence. Currently, this is accomplished by releasing water—SWP water or locally-stored runoff from Arroyo Valle—to the arroyos for percolation and replenishment of the aquifers and by managing pumping activities.

Zone 7 established historic lows based on the lowest measured groundwater elevations in various wells in the Main Basin. The difference between water surface elevations when the Main Basin is full and water surface elevations when the Main Basin is at historic lows defines Zone 7's *operational storage*. Of the estimated total storage capacity of 254,000 AF,



operational storage is about 126,000 AF based on Zone 7's experience operating the Main Basin, with the remaining 128,000 AF considered emergency reserve storage.

A summary of the key elements of the GMP follows.

6.3.2.1 Groundwater Level Monitoring and Storage Estimates

Zone 7 routinely monitors groundwater levels within the Main Basin. Some of the data collected is submitted to DWR under the California Statewide Groundwater Elevation Monitoring (CASGEM) program. All the data is reflected in the annual reporting on the Groundwater Management Program.

Two independent methods are used to estimate groundwater storage: 1) Hydrologic Inventory and 2) Nodal Groundwater Elevation. The Hydrologic Inventory method computes storage change each quarter from basin supply and demand data; this method can also be used to forecast future water storage conditions. The Nodal Groundwater Elevation method computes storage from hundreds of water level measurements. **Figure 6-2** depicts Main Basin storage levels calculated using the two methods. Zone 7 continues to refine the calculation methods; the average of the two results is generally used as the estimate of total groundwater storage volume.

Figure 6-2 shows the effects of extended pumping due to the drought over 1987 to 1992 and the effects of the current drought, which arguably extends beyond to 2012 to 2007. Stored groundwater at the end of the 2015 WY was approximately 212,000 AF, with 84,000 AF of groundwater available as operational storage or 67% of the estimated total operational storage.

6.3.2.2 Current Sustainable Yield and Groundwater Allocation

Long-term natural sustainable yield is contractually defined as the average amount of groundwater annually replenished by natural recharge in the Main Basin—through percolation of rainfall, natural stream flow, and irrigation waters, and inflow of subsurface waters—and which can therefore be pumped without lowering the long-term average groundwater volume in storage. In contrast, “artificial recharge” is the aquifer replenishment that occurs from artificially induced or enhanced stream flow, as described in the previous section. With artificial recharge, more groundwater can be sustainably extracted from the Main Basin each year.

The natural sustainable yield of the Main Basin has been determined to be about 13,400 AFA, which is about 11% of the operational storage. This long-term natural sustainable yield is based on over a century of hydrologic records and projections of future recharge conditions. This sustainable yield is allocated among non-Zone 7 groundwater users as shown in **Table 6-1**.

Each retailer has an established “Groundwater Pumping Quota” (GPQ), formerly referred to as the “Independent Quota” in the original Municipal and Industrial water supply contract between Zone 7 and each retailer. Pleasanton and Cal Water pump their own GPQ. Zone 7



pumps DSRSD’s GPQ. Livermore has not had any groundwater pumping capability for many years, and has therefore not been using their GPQ. Averages are maintained by allowance of “carryover”—limited to 20% of the GPQ—when less than the GPQ is used in a given year. A retailer must pay a “recharge fee” for all groundwater pumped exceeding their GPQ and any carryover. This practice helps avoid a repeat of historical over-drafting of the basin by the larger municipal users. The fee covers the cost of importing and recharging additional water into the Main Basin. The balance of the natural sustainable yield is pumped for other municipal, agricultural, and gravel mining uses.

Table 6-1. Natural Sustainable Yield Demand Components

DEMAND COMPONENT OF THE SUSTAINABLE YIELD	SUSTAINABLE AVERAGE (AFA)
Municipal pumping by retailers (GPQs) ^a	7,214
<i>City of Pleasanton</i>	3,500
<i>Cal Water Service</i>	3,069
<i>DSRSD</i>	645
Other groundwater pumping ^b	1,186
Agricultural pumping	400
Mining area losses ^c	4,600
TOTAL	13,400

a. Based on calendar year. Livermore has a GPQ of 31 AF but it has not been used for many years.

b. For drinking water supply

c. Includes mining area evaporation, discharges that are diverted to arroyos and flow out of the Main Basin area, and losses incurred during gravel production and export.

Zone 7’s groundwater extraction for its treated water system does not use the natural sustainable yield from the Main Basin; instead, ***Zone 7 pumps only water that has been recharged as part of its artificial recharge program using its surface water supplies.*** During high demands, groundwater is used to supplement surface water supply delivered via the SBA. Groundwater is also used when the SBA is out of service due to maintenance and improvements or when Zone 7’s surface water treatment plants are operating under reduced capacity due to construction, repairs, etc. Finally, Zone 7 taps into its stored groundwater under emergency or drought conditions, when there may be insufficient surface water supply available. Zone 7 also pumps groundwater out of the Main Basin during normal water years to help reduce the salt loading in the Main Basin. As discussed in **Section 3.5**, a demineralization facility has been in operation starting in 2009 to achieve additional salt removal. Zone 7’s groundwater pumping over the last five years is presented in **Table 6-2**. Zone 7 plans to recharge 9,200 AFA on average, which means that Zone 7 can pump an equivalent 9,200 AFA on average from the Main Basin as indicated in **Table 6-3**.



**Table 6-2. Zone 7 Actual Groundwater Volumes Pumped for 2011 to 2015
[DWR Table 6-1 W]**

Groundwater Type	Location or Basin Name	2011	2012	2013	2014	2015
Alluvial Basin	Livermore Valley Groundwater Basin	5,585	11,959	10,404	7,717	2,056
TOTAL		5,585	11,959	10,404	7,717	2,056

NOTES: Zone 7 pumps only water that has been recharged as part of its artificial recharge program using its surface water supplies. Actual groundwater used as supply is lower than the total groundwater volume pumped shown in the table because of demineralization losses at the MGDP.

Table 6-3. Zone 7 Actual and Projected Artificial Recharge and Groundwater Extraction for 2015-2035 during Normal Water Years^a

Amount (Acre-Feet)	Actual	Projected: Normal Years			
	2015	2020	2025	2030	2035
Artificial Recharge	4,230	9,200	9,200	9,200	9,200
Groundwater Extraction	2,056	9,200	9,200	9,200	9,200

a. Zone 7 does not use the Main Basin's natural sustainable yield so it only pumps what it artificially recharges.



Figure 6-2. Main Basin Groundwater Storage

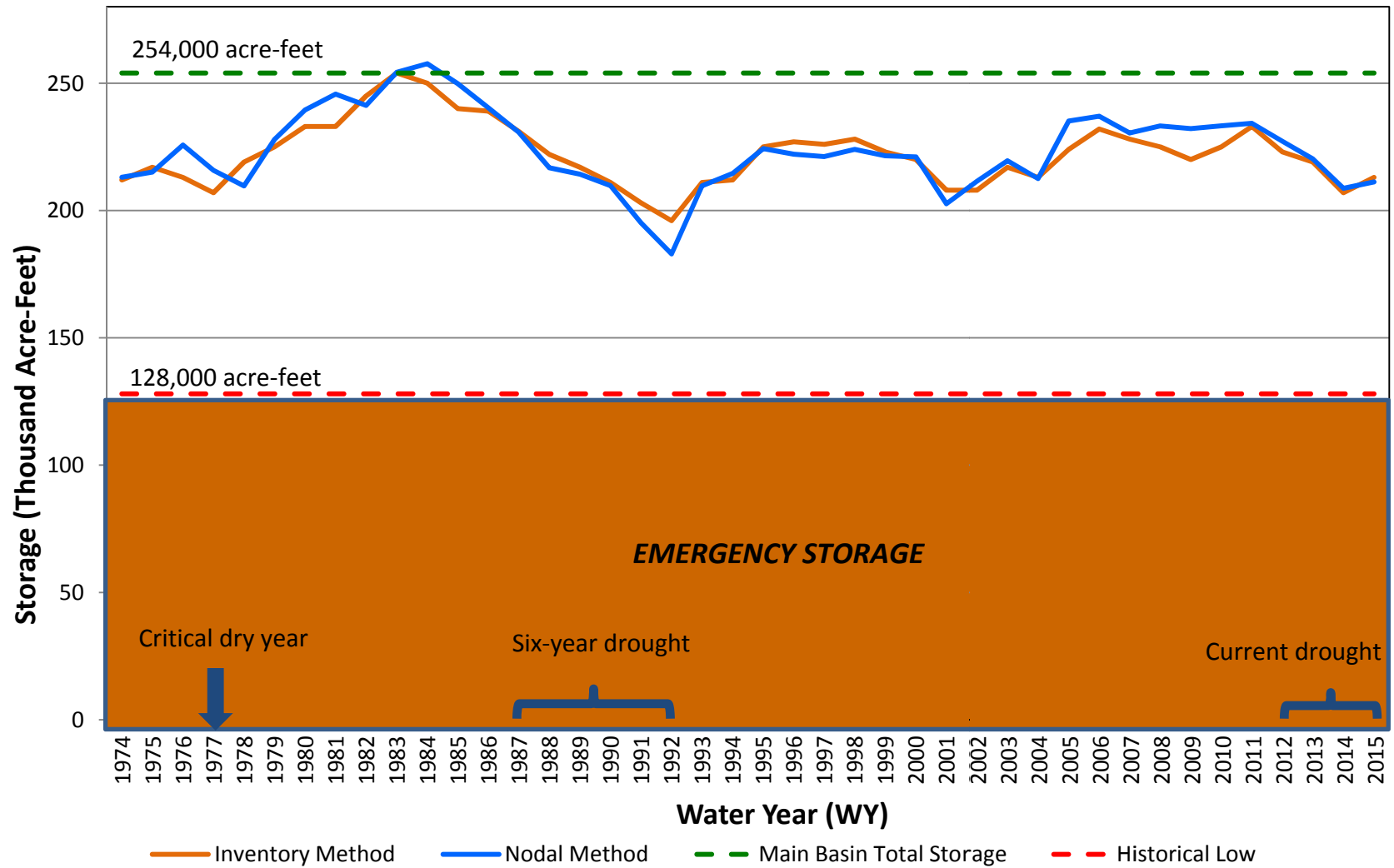
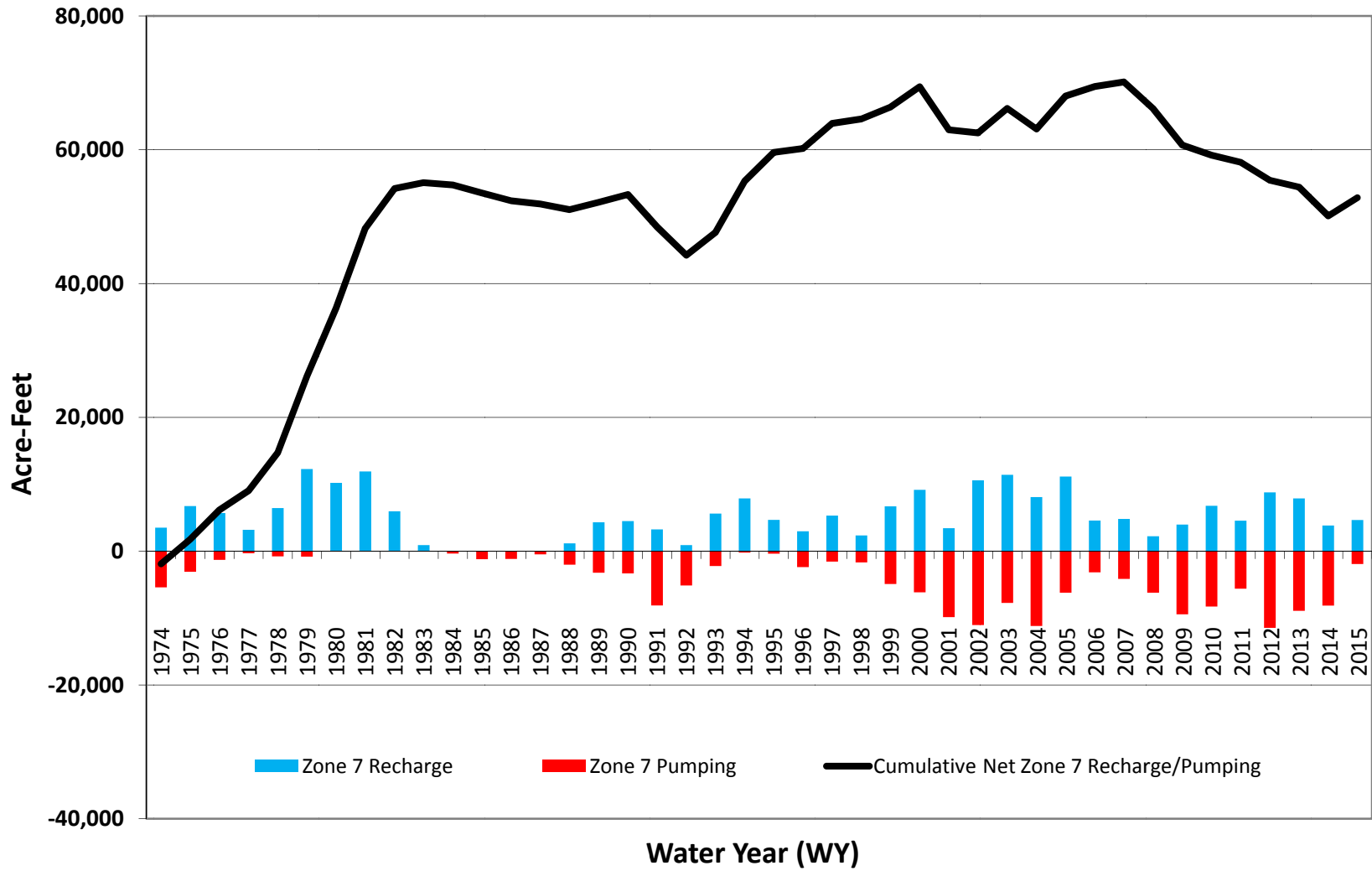


Figure 6-3. Artificial Recharge, Pumping, and Net Cumulative Impacts to Operational Storage from 1974 WY through 2015 WY



6.3.2.3 Artificial Recharge and Groundwater Extraction by Zone 7

Before the construction of the SWP in the early 1960s, groundwater was the sole water source for the Livermore-Amador Valley. This resource has gone through several periods of extended withdrawal and subsequent recovery. In the 1960s, when approximately 110,000 AF of groundwater was extracted, the Main Basin reached its historic low of 128,000 AF. The Main Basin was allowed to recover from 1962 to 1983. It was during this era that Zone 7 first conducted a program of groundwater replenishment by recharging imported surface water via its streams or arroyos (“in-stream recharge” or “artificial recharge”) for storage in the Main Basin, began supplying treated surface water to customers to augment groundwater supplies, and regulating municipal pumping by other users as discussed further in the following section.

Figure 6-3 shows Zone 7’s total annual artificial recharge amounts, pumping amounts, and their cumulative net impacts to operational storage from 1974 WY to 2015 WY. Zone 7’s operational policy is to maintain the balance between the combination of natural and artificial recharge and withdrawal or pumping to maintain groundwater levels above the emergency reserve storage. Zone 7 has generally been able to pump as much groundwater as it has needed to over the last five years; however, during the current drought, some decreases in groundwater elevation did noticeably affect the production of certain wells. Zone 7 is continuing to study the groundwater basin and developing new tools (such as an improved groundwater model) to better understand the levels of groundwater extraction possible under various conditions, and contributing factors such as groundwater connectivity, spatial distribution of groundwater in the Main Basin, and others.

Since 1974, Zone 7 has artificially recharged over 53,000 AF more water than it has pumped, helping to offset demands and keeping the Main Basin’s groundwater levels above the historical lows. Between 1974 and 2007 Zone 7 had artificially recharged approximately 70,000 AF more than it had pumped during that same time; however, since 2007, Zone 7 has pumped about 17,000 AF more than it has artificially recharged, primarily due to construction work on the SBA, recent drought conditions, and lower-than-average SWP allocations over that same time period. The surplus artificial recharge that was accomplished before 2007 has kept the overall net groundwater storage significantly above historical lows as previously shown on **Figure 6-2**.

Zone 7 plans to augment its current groundwater in-stream recharge capacity with off-stream recharge using the future Chain of Lakes, which is described further in **Section 6.5**.

6.3.2.4 Groundwater Quality Monitoring and Protection

In general, the Main Basin contains good-quality groundwater that meets all state and federal drinking water standards; groundwater is chloraminated simply to match the disinfectant residual in the transmission system. Recently, the State of California promulgated a new regulation for hexavalent chromium or Cr(VI). Zone 7 has several groundwater wells with naturally-occurring Cr(VI) concentrations near the Maximum Contaminant Level (MCL). To manage Cr(VI), Zone 7 is actively managing flows from the



affected wells. For example, Cr(VI) levels at the Stoneridge well, Zone 7's highest-production well, is being managed through system blending. Also, the Cr(VI) level of Chain of Lakes 5 well currently requires blending with the other wells in that wellfield. These conditions are being monitored and may change in the future.

Over the last few decades, there has been a slow degradation of groundwater quality as evidenced by rising Total Dissolved Solids (TDS) and hardness levels. To address this problem, Zone 7 developed a Salt Management Plan (SMP)⁸, which was approved by the Regional Water Quality Control Board in 2004, satisfying a condition of the Master Water Recycling Permit. The SMP was incorporated into Zone 7's GMP in 2005. Salinity levels are being addressed primarily through groundwater pumping and demineralization⁸. As noted in **Section 3.5.4**, Zone 7 completed construction of the 6.1-MGD Mocho Groundwater Demineralization Plant (MGDP) in 2009 in the Mocho wellfield. The facility simultaneously allows for the removal and export of concentrated minerals or salts⁹ from the Main Basin and the delivery of treated water with reduced TDS and hardness levels to Zone 7's customers. **Table 6-4** lists the average groundwater quality characteristics measured as TDS and hardness over 2010 to 2014, reflecting operation of the MGDP.

Table 6-4. Zone 7 Groundwater Quality: TDS and Hardness (2010 - 2014)

Year	Total Dissolved Solids (mg/L)	Hardness (mg/L)
2010	596	408
2011	586	397
2012	617	408
2013	576	387
2014	577	378

Zone 7 implements a wastewater and recycled water monitoring program as part of the GMP. In the 2014 WY, about 27% (1,413 AF) of the recycled water produced in the Tri-Valley area was applied to landscapes over the Main Basin; the remainder was applied on areas outside of the Main Basin, primarily on areas overlying the Dublin and Camp fringe basins and the Tassajara uplands⁷. There is also a small amount of untreated wastewater (530 AF in the 2014 WY) that is discharged to the Main Basin as leachate from wastewater treatment ponds located in southern Livermore, from onsite domestic wastewater systems (septic systems), and from leaking wastewater and recycled water pipelines that run throughout the Basin.

⁸ Zone 7 Water Agency, 2004. Salt Management Plan. <http://www.zone7water.com/publications-reports/reports-planning-documents/158-salt-management-plan-2004>

⁹ The brine concentrate resulting from the treatment system is exported to the San Francisco Bay via a regional wastewater export pipeline.



Nitrates and salinity have historically been the primary water quality constituents-of-concern in wastewater and recycled water, but nitrates have become less of a concern since 1995 when the Livermore Water Reclamation Plant—which, along with DSRSD's Wastewater Treatment Plant, is one of the two wastewater treatment facilities in the area feeding into recycled water facilities—reduced nitrates in its effluent. Salinity is addressed by the SMP, as discussed above. In 2015, Zone 7 completed a Nutrient Management Plan (NMP)¹⁰, which provides an assessment of the existing and future groundwater nutrient concentrations relative to the current and planned expansion of recycled water projects and future development in the Livermore Valley. The NMP also presents planned actions for addressing positive nutrient loads and high groundwater nitrate concentrations in localized Areas of Concern where the use of onsite wastewater treatment systems (i.e., septic tank systems) is the predominant method for sewage disposal. The NMP was prepared as a supplement to the SMP; together, they are a Salt and Nutrient Management Plan (SNMP) and has been incorporated into the GMP.

Under the Toxic Sites Surveillance Program, Zone 7 documents and tracks polluted sites across the groundwater basin that pose a potential threat to drinking water and interfaces with lead agencies to ensure that the Main Basin is protected. Information is gathered from state, county, and local agencies, as well as from Zone 7's well permitting program and the State Water Resources Control Board's GeoTracker website, and compiled in a geographic information systems (GIS) database. In general, there are two types of spills potentially threatening the Livermore Valley Groundwater Basin: petroleum-based fuel products and industrial chemical contaminants. In the 2014 WY, Zone 7 tracked the progress of 53 active sites where contamination has been detected in groundwater or is threatening groundwater. More details on the affected sites and their remediation can be found in the Annual Report⁷.

6.3.2.5 Land Surface Elevation Monitoring Program

The Land Surface Elevation Monitoring Program involves conducting high-precision surveys across the Bernal and Amador Subbasins, starting and ending at stable bedrock elevation stations and passing through or near Zone 7 and Pleasanton wellfields. From this main circuit, several looped or branched circuits are also surveyed in the same manner to assess ground surface elevation changes within other Zone 7 wellfields and across the northern Main Basin boundary. Elevations and vertical distances between certain wellhead features, such as concrete pads, floors, pedestals, casing flanges and water level reference points are also monitored for change. The normal monitoring frequency is twice per year for most of the circuits and the wellhead features, corresponding with the semi-annual groundwater level monitoring events (spring and fall), and only during the fall event for one circuit. Based on the most recent data collection (2014 WY), there was no indication that inelastic subsidence occurred anywhere in the valley during the water year due to groundwater pumping.⁷

¹⁰ Zone 7 Water Agency, 2015. Nutrient Management Plan - Livermore Valley Groundwater Basin. http://www.zone7water.com/images/pdf_docs/groundwater/nmp-2015_final.pdf



6.4 WATER TRANSFER: BYRON BETHANY IRRIGATION DISTRICT

The Byron Bethany Irrigation District (BBID) diverts water from the Sacramento-San Joaquin Delta (Delta) pursuant to a “Notice of Appropriation of Water” dated May 18, 1914¹¹. Zone 7 entered into a short-term water transfer demonstration project in 1994 with BBID, which provided a minimum supplemental water supply of 2,000 AFA. This was a five-year agreement with a potential to purchase up to 5,000 AFA. In 1998, Zone 7 and BBID agreed to convert the short-term agreement into a long-term 15-year contract, renewable every five years up to a total of 30 years. The current contract was recently extended through 2030 with an option to extend through 2039. However, in the last few years, BBID, Zone 7, and DWR have been reviewing the potential yield available for Zone 7, and discussing the long-term future of the contract. Furthermore, Zone 7 now expects the available supply under this contract to diminish as BBID’s own water demands increase. Until discussions among BBID, DWR, and Zone 7 reach a conclusion, 2,000 AFA of water is assumed to be available under this contract at this time; this amount is similar to the latest BBID transfer approved in 2013 of 2,200 AF¹².

Note that water purchased from BBID is delivered to Zone 7 via the SBA.

6.5 LOCAL STORAGE

Zone 7 has three options for local storage: Lake Del Valle, the Main Groundwater Basin, and, in the future, Chain of Lakes.

As described above in **Section 6.3**, Lake Del Valle is used to store runoff from the Arroyo Valle watershed above the lake and also to store imported surface water deliveries from the SWP. Zone 7 can store up to about 7,500 AF of its share of Arroyo Valle runoff in the lake; runoff collected in any given year is required to be delivered to Zone 7 by the end of the following year.

The Main Basin is used conjunctively and is artificially recharged with SWP water and local runoff as described in **Section 6.2.2.3**. Zone 7 typically relies on the operational storage capacity of 126,000 AF.

The future Chain of Lakes (COLs), shown on **Figure 6-4**, is a series of former or active gravel quarry pits located in the heart of the Livermore-Amador Valley. The COLs will ultimately consist of ten lakes named Lakes A through I and Cope Lake, connected through a series of conduits. Zone 7 currently owns Lake I and Cope Lake, and expects Lakes A and H to be dedicated to Zone 7 within the next few years once reclamation is completed. The remaining lakes (B through G) will be transitioned to Zone 7 over the next decades, likely

¹¹ Source: Mountain House Master Plan.

¹² Agreement among the Department of Water Resources of the State of California, Byron Bethany Irrigation District, and Alameda County Flood Control and Water Conservation District, Zone 7 for Conveyance of 2013 Transfer Water (SWPAO # 13-706). July 2, 2013.



through 2060. The COLs will ultimately cover approximately 1,500 acres and have 150,000 AF of total storage volume; 31,000 AF is estimated to be available for operational storage¹³.

Envisioned as a large facility to be used for water management and related purposes by Zone 7, use of the COLs will include surface storage of local runoff, SWP water, other potential future sources of surface water, stormwater, and, possibly, recycled water. With the surface water storage capability, the key functions of the COLs are to facilitate increased recharge of the Main Basin and to allow Zone 7 to perfect its water right on the Arroyo Valle, thereby increasing future yields from this local supply. Lake I is currently planned to be the key recharge lake. More details on the potential future use of the COLs can be found in the Preliminary Lake Use Evaluation for the Chain of Lakes (2014)¹⁴.

Figure 6-4. Future Chain of Lakes



¹³ Zone 7 Water Agency. Preliminary Lake Use Evaluation for the Chain of Lakes. March 2014.

¹⁴ Zone 7 Water Agency, 2014. Preliminary Lake Use Evaluation for the Chain of Lakes. http://www.zone7water.com/images/pdf_docs/integrated-planning/3-14_col-lake-use-evltn.pdf.

6.6 NON-LOCAL STORAGE

In addition to local storage, Zone 7 also participates in the two non-local (also called “out-of-basin”) groundwater banking programs described below; both banks are located in Kern County. Note that while these banking programs provide a water source during drought years, they represent water previously stored from Zone 7’s surface water supplies during wet years. Therefore, they do not have a net contribution to Zone 7’s water supply over the long-term and in fact result in some operational losses as described below. While the out-of-basin groundwater banks significantly enhance system reliability, this banked water supply requires Banks Pumping Plant in the Delta and the SBA to be operational and SWP Table A allocations to be above 5%.

6.6.1 Semitropic Water Storage District

Zone 7 originally acquired a storage capacity of 65,000 AF in the Semitropic Water Storage District (Semitropic) groundwater banking program in 1998. Subsequently, Zone 7 agreed to participate in Semitropic’s Stored Water Recovery Unit, which increased pumpback capacity and allowed Zone 7 to contractually store an additional 13,000 AF. Zone 7 currently has a total of 78,000 AF of groundwater banking storage capacity available to augment water supplies during drought conditions. During non-drought periods, Zone 7 can store up to 5,883 AFA in the Semitropic groundwater bank. Note that a 10% loss is associated with water stored in Semitropic. The agreement is in effect through December 31, 2035.

Under the contract terms, Zone 7 can request up to 9,100 AF of pumpback and up to 8,645 AF of exchange water. Pumpback is water that is pumped out of the Semitropic aquifer and into the SWP system. Exchange water is water that is transferred between Zone 7 and Semitropic by adjusting the amounts of Table A water delivered to Zone 7 and Semitropic; the availability of this type of water depends on projected SWP allocation. During the current drought, Zone 7 was able to recover 9,900 AF in 2014 and about 12,500 AF in 2015.

6.6.2 Cawelo Water District

Similar to the arrangements with Semitropic, Zone 7 has 120,000 AF of groundwater banking storage capacity available with the Cawelo Water District, as executed in an agreement in 2006. During non-drought periods, Zone 7 can store up to 5,000 AFA in the bank¹⁵. Zone 7 has the ability to request up to 10,000 AFA of pumpback (or SWP exchange water) from Cawelo. During the current drought, Zone 7 was able to recover 9,700 AF, delivered evenly over 2014 and 2015; most of this water was used directly while the rest was stored in San Luis Reservoir for future use. The agreement is in effect through December 31, 2035.

¹⁵ Zone 7 only gets storage credit for 50% of the water provided to Cawelo. Per the existing contract, Zone 7 can normally only send 10,000 AF in any given year to Cawelo; therefore, the maximum contractual credit is 5,000 AFA (10,000 divided by 2).

6.7 WASTEWATER AND RECYCLED WATER

Zone 7 does not currently handle wastewater nor recycled water; however, three local agencies—all water supply retailers—are involved in wastewater and recycled water activities as listed in **Table 6-5**. Further details regarding recycled water use in Zone 7’s service area can be found in the 2015 UWMPs of Livermore, Pleasanton, and DSRSD. In the Zone 7 service area, recycled water is currently only used for non-potable applications, primarily landscape irrigation. As discussed in **Section 6.8.3**, Zone 7 is currently working with the Retailers to explore the feasibility of potable reuse in the Tri-Valley area.

Table 6-5. Local Agencies Involved in Wastewater and Recycled Water

Local Agency	Collects Wastewater	Treats and Discharges Wastewater	Produces Recycled Water	Distributes Recycled Water
City of Livermore	X	X	X	X
City of Pleasanton	X			X
Dublin San Ramon Services District	X	X	X	X

DSRSD and Livermore treat all of the wastewater collected within the city limits of Pleasanton, Dublin, and Livermore, and portions of San Ramon. Wastewater transport out of the area is handled through the Livermore-Amador Valley Water Management Agency (LAVWMA), a joint powers authority (JPA) composed of DSRSD, Livermore, and Pleasanton. Since 1979, LAVWMA has owned the conveyance facilities that transport treated wastewater from the treatment plants west over the Dublin grade, and eventually to the East Bay Dischargers Authority, which dechlorinates the effluent and discharges it through a deepwater pipeline into San Francisco Bay.

In Livermore, recycled water was first used in the early 1960’s to irrigate grain fields surrounding the Livermore Municipal Airport. When the Las Positas Golf Course opened in 1966, the course was also irrigated with secondary recycled water. After the treatment plant upgrade in 1974, Livermore started outdoor irrigation with tertiary treated recycled water. In 2002, ultraviolet disinfection was added to the treatment process in lieu of chlorine. Today, Livermore’s recycled water irrigates the golf course, the airport, Las Positas College, the business parks north of I-580, landscape areas west of Highway 84, the Highway 84 corridor north of Jack London Blvd, and the Stanley Blvd Improvement Project. The Livermore Reclamation Plant (WRP) can produce up to 6.0 million gallons per day (MGD), which is approximately 18 AF per day of recycled water. In 2015, the Livermore WRP produced 2,400 AF of recycled water with 2,300 AF used within the Livermore Municipal Service Area.

In 1995, DSRSD and East Bay Municipal Utility District (EBMUD), a major water and wastewater retailer serving a portion of San Ramon, formed a JPA called the “DSRSD-EBMUD Recycled Water Authority” (DERWA). This entity operates the San Ramon Valley



Recycled Water Program (SRVRWP), which supplies recycled water to portions of DSRSD's and EBMUD's service areas. Through DERWA's SRVRWP, DSRSD began supplying tertiary-treated water (sand filtration or microfiltration followed by UV disinfection) in 2006 for landscape irrigation. In 2015, DERWA supplied approximately 2,800 AF of recycled water to DSRSD's service area and to Pleasanton. By 2040, it is estimated that DERWA will serve approximately 4,000 AF to DSRSD and 1,700 AF to Pleasanton for a total of 5,700 AF of recycled water.

In 2014, DSRSD provided 55 AF of recycled water free to commercial and residential customers for irrigation. This program was started in the midst of the drought to preserve the residential lawns and shrubs in the DSRSD service area. Residential customers filled their own closed containers with recycled water and were limited to 300 gallons per trip. The program quickly became immensely popular and hundreds of customers flocked to the DSRSD WWTP from areas both within and outside the service area. In 2015, DSRSD expanded the number of fill stations to 30 and tripled the volume of recycled water given away at the fill station. DSRSD provided 165 AF of recycled water free to commercial and residential customers in 2015. More than 3,500 residents signed up to haul recycled water.

In 2014, Livermore also implemented the Residential Recycled Water Program at no charge to City of Livermore permittees to make it more convenient for Livermore and Cal Water customers to obtain up to 300 gallons of recycled water per visit. The recycled water was made available so City of Livermore residents could supplement their potable water landscape irrigation to keep plants alive if needed during the warm summer months. In 2014, Livermore provided 73 permittees approximately 1 AF of recycled water. In 2015, interest in the Residential Recycled Water Program increased significantly, resulting in Livermore providing 15 AF of recycled water to 898 permittees.

Within Zone 7's service area, existing uses for recycled water include landscape irrigation, fire protection, commercial/industrial use, golf course irrigation, and construction.

6.7.1 Recycled Water Coordination

As the groundwater basin management agency, Zone 7 is cognizant of the potential salt loading impacts arising out of recycled water use. Zone 7 has taken a pro-active approach to mitigate such impacts particularly within the Main Basin, as described in the Groundwater Management Plan⁶.

Recognizing that recycled water is an important part of a complete water resource management program for the Livermore-Amador Valley, Zone 7 is incorporating its use in future water supply planning. In joint efforts with the Retailers, Zone 7 continually supports the



Zone 7 is working with the Retailers to evaluate increased use of local recycled water supplies.

search for safe, economically-feasible, and publicly acceptable methods to increase local water resources, including the optimal use of recycled water.

Plans for water recycling within the Zone 7 service area are coordinated amongst Zone 7 Water Agency, the Retailers, the wastewater/recycled water agencies (DSRSD, Livermore, and Pleasanton), the regulatory agencies such as the Department of Drinking Water and the Regional Water Quality Control Board (RWQCB), and planning agencies such as the City of Livermore Community Development Department. Zone 7 reviews recycled water plans both from a water supply management perspective and from a groundwater protection perspective. Given Zone 7's integral role in water supply and groundwater management in the Livermore-Amador Valley, Zone 7 is a co-permittee under the Master Water Recycling Permit issued by the RWQCB in December 1993 (Order No. 93-159).

Provision D.1.c.ii of the Master Water Recycling Permit required the development of a Salt Management Plan⁸ (SMP) to assess and manage cumulative salt loading impacts on the Livermore Valley Groundwater Basin (Basin). Approved in October 2004 by the RWQCB, the SMP identified demineralization with export of the brine stream as the best means of mitigating salt loading in the Basin. DSRSD and Livermore are now operating under General Order 96-011. The SWRCB's 2009 Recycled Water Policy required the development of a Nutrient Management Plan, which Zone 7 completed in 2015; a combined Salt and Nutrient Management Plan (SNMP) has been incorporated into the GMP⁶ originally developed in September 2005. All of these documents were developed in close consultation with the Retailers and other stakeholders.

Recharging with low TDS water is a cornerstone of the SMP. Zone 7 is also currently operating a demineralization facility to help manage the salt loading in the Main Basin. The demineralization facility has the added benefit of providing softer water to Zone 7's potable water customers in the western portion of Zone 7's service area, where there is a regional concentration of groundwater production facilities with relatively high levels of TDS. Expansion of recycled water use over the groundwater basin will require additional measures to mitigate the associated additional salt loading.

6.7.2 Actions to Encourage and Optimize Future Recycled Water Use

Recycled water is an important component of the total water supply portfolio for the Livermore-Amador Valley as it represents a local, reliable, and drought-resistant supply. Zone 7 is therefore working closely with the Retailers to review the potential for increasing recycled water use within the Livermore-Amador Valley.

Zone 7 will continue to work with the Retailers to develop increased recycled water use projects for non-potable uses (e.g., irrigation) in the Livermore-Amador Valley and identify potential opportunities for storage—which would facilitate expanded recycled water use—during non-irrigation months. The feasibility of developing potable reuse will also continue to be evaluated as described in the WSE Update⁴. As part of these efforts, Zone 7 will also continue to ensure that water quality goals for the Main Basin are achieved and additional mitigation is provided if necessary, as required in the recycled water permits. Zone 7 will



continue to support Retailer applications for state and federal grants for construction of additional recycled water infrastructure.

6.8 FUTURE WATER PROJECTS

Zone 7's imported water supplies have decreased in reliability over the years as SWP reliability has declined. Furthermore, Zone 7 expects continued growth in population; projected increases in demand are difficult to predict given unknowns related to ultimate levels of conservation. Using updated information since the 2011 Water Supply Evaluation³, the WSE Update⁴ evaluated water supply alternatives or potential future water supply projects that could be used to make up for the decreased reliability from existing supplies and to meet demands from growth. These alternatives are described below. Zone 7 expects that a portfolio of these alternatives will be needed to meet future supply shortfalls. Note that conservation is part of Zone 7's future water supply portfolio and is reflected as demand reduction, which were incorporated in the Retailers' demands used in the analysis.

6.8.1 California WaterFix

As described in **Section 6.1**, Zone 7 currently has a long-term contract with DWR for a Table A amount of 80,619 AFA from the SWP. This source represents most of Zone 7's normal supply and is therefore critical to the overall reliability of Zone 7's water system. Each year, DWR allocates a portion of the Table A amount—up to 100%—depending on hydrologic conditions, water demands, storage, and legal and environmental constraints.

From 2005 to 2009, DWR reduced the projected long-term average allocation ("reliability") of Table A water from approximately 76% to 60% due to projected impacts associated with pumping restrictions in the Delta and climate change, and it remains at around that level. This decrease in reliability from the SWP has reduced Zone 7's sustainable annual water supplies by approximately 13,000 AF¹⁶.

As a contractor of the SWP, Zone 7 is working very closely with DWR and other water



Source: www.californiawaterfix.com/

¹⁶ Reduction = 80,619 AF x (76% - 60%)

agencies, environmental groups, regulatory agencies, and fish agencies to address the declining reliability of the SWP (more details on the challenges faced by the Delta and the SWP can be found in **Section 7.1.1**). Efforts to improve Delta conditions have been in progress for decades and have culminated in the California WaterFix, the project proposed by DWR and the United States Bureau of Reclamation (USBR) that would create a dual conveyance system in the Delta, including new intakes in the northern Delta. California WaterFix is designed to “achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem”.

The California WaterFix would be one of the most complex projects ever undertaken by the State of California, and much work remains before it can be fully defined and implemented. A public review and comment period on the updated draft environmental documents for California WaterFix began on July 10, 2015 and ended on October 30, 2015; the environmental documents are not anticipated to be final until Fall 2016. DWR and USBR are proceeding with the finalization of the environmental documents, coordination with fish agencies, work with the State Water Resources Control Board on a petition for new points of diversion, and preliminary design. The latest estimate for completion of the California WaterFix is 2028. The latest modeling indicates that the project can restore SWP reliability from the current average allocation of 62% to an average allocation of 72%, resulting in restoration of 8,000 AFA of SWP supply for Zone 7 once the project is in place.

More details on the California WaterFix and updates on the current status can be accessed at: <http://www.californiawaterfix.com/>.

6.8.2 Bay Area Regional Desalination Project

In addition to the groundwater desalination or demineralization already being practiced by Zone 7, the potential for desalination of brackish water from Suisun Bay is also being considered by Zone 7.

The Bay Area Regional Desalination Project (BARDP) is a joint venture among Zone 7 and four other Bay Area water agencies (Contra Costa Water District [CCWD], East Bay Municipal Utility District [EBMUD], San Francisco Public Utilities Commission [SFPUC], and Santa Clara Valley Water District [SCVWD]), working together to investigate the feasibility of a regional brackish water treatment facility in eastern Contra Costa County. The costs and potential environmental impacts of desalination of brackish water (estimated at 5,000 milligrams per liter [mg/L] TDS) are significantly less than that of seawater (approximately 30,000 mg/L TDS).



Zone 7 joined the BARDP in June 2010 to evaluate the potential for receiving 5,600 AFA of new water supply

The BARDP provides the following benefits¹⁷:

- minimize potential adverse environmental impacts associated with the construction of separate desalination plants in close proximity to one another and construction of other new facilities;
- provide substantial cost savings through economies of scale, such as pooling resources and sharing of project administration, as compared to individual projects conducted separately by the agencies;
- promote a strong regional cooperation concept by joint ownership, operation, and management of a regional desalination facility that will serve the needs of multiple water providers in northern California;
- provide water during emergencies such as earthquakes or levee failures;
- provide a supplemental water supply source during extended droughts; and
- allow major facilities, such as treatment plants, water pipelines, and pump stations, to be taken out of service for maintenance or repairs.

Through the use of an existing water right license and a permit held by CCWD and/or a new water right, the BARDP could provide participating agencies with a combined yield of 22,400 AFA (20 MGD) of new water supply. Zone 7 could potentially receive 5,600 AFA (5 MGD). There are two alternatives for the conveyance of this new water supply to Zone 7: via a new intertie with EBMUD or through the SBA via an exchange of Central Valley Project Water with CCWD.

Site-specific studies were completed in 2013 and 2014 to answer key questions related to water wheeling, water quality impacts, fish impacts, energy use and greenhouse gas emissions, and use of Los Vaqueros Reservoir¹⁸. With the studies completed, the partners have determined that the BARDP is technically feasible. If agencies decide to pursue the BARDP, the next steps would include environmental review and permitting, and preliminary design. Zone 7 estimates that the earliest in-service year for the BARDP is 2022 under an expedited schedule.

More details on the BARDP and updates on the current status can be accessed at: <http://www.regionaldesal.com/index.php>.

¹⁷ MWH, 2010. Bay Area Regional Desalination Project: Pilot Testing at Mallard Slough – Pilot Plant Engineering Report.

¹⁸ The full reports for the site-specific studies can be accessed at: <http://www.regionaldesal.com/documents.html>.



6.8.3 Potable Reuse

As described in **Section 6.7**, the Tri-Valley area has used recycled water for irrigation and other non-potable uses for decades. Use of purified recycled water as a future *potable* water supply (“potable reuse”) is currently under consideration. There are many different ways in which potable reuse could be implemented; the most promising options—feasible and implementable within a reasonable time frame of about seven years—are described in the following sections. Any combination of these options cannot exceed approximately 7,700 AF (6.9 MGD) because all of the options rely on the same sources of wastewater.

Potable reuse offers the benefits of being local and drought-proof; however, some key implementation issues remain to be resolved, including the need for multiple barriers, the feasibility of groundwater injection, and regulatory uncertainty.

More details on the potential contribution of indirect or direct reuse of purified recycled water to Zone 7’s future water supply are provided below. Zone 7 will continue to work with the Retailers on evaluating the feasibility of these potential options.

6.8.3.1 *Indirect Potable Reuse*

Indirect Potable Reuse (IPR) can be generally defined as purifying water from a wastewater treatment plant, and then returning it to the natural water cycle (e.g., storage in a reservoir or groundwater basin to meet minimum retention times) before being diverted by a drinking water treatment plant or municipal supply well to meet potable water demands. Three potential IPR projects for the Tri-Valley area were identified in the WSE Update⁴ that may provide 4,800 to 7,120 AFA:

- pond percolation via Lake I recharge using purified water from Livermore,
- groundwater injection with purified water from Livermore, and
- pond percolation and groundwater injection using purified water from a regional wastewater plant located at DSRSD’s existing reclamation plant.

6.8.3.2 *Direct Potable Reuse*

Direct potable reuse (DPR) can generally be defined as purifying water from a wastewater treatment plant, and then conveying it to the intake side of an existing drinking water treatment plant or pumping it directly into a distribution or transmission system to meet potable water demands. DPR has no environmental barriers; all treatment is done at engineered treatment facilities. Five potential DPR projects for the Tri-Valley area were identified in the WSE Update⁴ that may provide 5,370 to 7,770 AFA:

- sending purified water from Livermore to PPWTP’s raw water reservoir
- sending purified water from Livermore to DVWTP via Cope Lake
- sending purified water from a regional plant located at DSRSD’s existing reclamation plant to DVWTP via Cope Lake

- sending purified water from Livermore directly to Zone 7's transmission system, and
- sending purified water from a regional plant located at DSRSD's existing reclamation plant to Zone 7's transmission system.

6.9 SUMMARY OF EXISTING AND PLANNED SOURCES OF WATER

Each year, Zone 7 provides a status report of water in storage and available water for use during the upcoming five years. An example of the data presented in this Annual Review of Sustainable Water Supply is contained in **Tables 6-6 and 6-7**, which show Zone 7's existing water storage volumes and actual supply sources for 2015.

Table 6-6. Zone 7's Water Storage Volumes

Storage Option		Water in Storage through December 2015 (Acre-Feet)	Operational Storage Capacity (Acre-Feet)
Local	Lake Del Valle	100	7,500
	Main Basin	85,000	126,000
Non-Local Groundwater Banks	Semitropic	59,200	78,000
	Cawelo	15,200	120,000
Other Non-Local	SWP – Carryover	13,400	Varies
Total Storage		172,900	At least 331,500

**Table 6-7. Actual Water Supplies in 2015
[DWR Table 6-8 W]**

Water Supply	Additional Detail on Water Supply	Actual Volume (Acre-Feet)	Water Quality
Purchased or Imported Water	<i>SWP Table A at 20%</i>	16,100	Raw Water
Purchased or Imported Water	<i>Yuba Accord</i>	280	Raw Water
Purchased or Imported Water	<i>Multi-Year Pool</i>	100	Raw Water
Supply from Storage	<i>SWP Carryover</i>	9,100	Raw Water
Groundwater	<i>Main Basin</i>	2,000	Raw Water
Surface water	<i>Arroyo Valle</i>	2,860	Raw Water
Supply from Storage	<i>Non-Local Storage</i>	17,460	Raw Water
Total		47,900	

Table 6-8 presents a summary of Zone 7's average projected water supplies available during a normal hydrologic water year. Under dry, drought, or emergency conditions, the percentage distribution of sources used by Zone 7 to meet demands may shift; in particular, Zone 7 is likely to tap into water stored in the various storage facilities listed in **Table 6-6**.

As shown in **Table 6-8**, it was assumed that a potential combination of future desalination and/or potable reuse would provide approximately 10,000 AFA in addition to restored supplies from the California WaterFix. As discussed in **Section 7.2.7**, as much as 13,400 AFA of new water supply might be available from these projects; however, there is uncertainty surrounding their implementation. Consequently, the analysis in the UWMP assumed that up to 10,000 AF (i.e., only 75% of current estimates) of new supply may be available between 2021 and 2025. Both desalination and potable reuse are considered drought-resistant water supplies.

Table 6-8 also shows that Zone 7's total projected normal year water supplies range from 80,945 AF in 2020 to 112,045 AF by 2030.

**Table 6-8. Summary of Projected Normal Year Water Supplies^a
[DWR Table 6-9 W]**

Water Supply	Additional Detail on Water Supply	Reasonably Available Volume (AFA)			
		2020	2025	2030	2035
Purchased or Imported Water	State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	50,000	50,000	50,000	50,000
Purchased or Imported Water	Yuba Accord ^c	145	145	N/A	N/A
Purchased or Imported Water	Byron Bethany Irrigation District ^d	2,000	2,000	2,000	2,000
Surface Water	Arroyo Valle ^b	7,300	7,300	10,300	10,300
Purchased or Imported Water	California WaterFix ^e	N/A	N/A	8,000	8,000
Other New Water Supplies	Per WSE Update, could include desalination and/or potable reuse ^f	N/A	10,000	10,000	10,000
Supply from Storage	Groundwater	9,200	9,200	9,200	9,200
Supply from Storage	Semitropic (used mainly in Dry Years)	0	0	0	0
Supply from Storage	Cawelo (used mainly in Dry Years)	0	0	0	0
Supply from Storage	State Water Project - Carryover	10,000	10,000	10,000	10,000
Total		78,645	88,645	99,500	99,500

- a. Based on average runoff or allocation levels and patterns.
- b. Yield assumed to increase to 10,300 AFA by 2030 upon completion the of Chain of Lakes facilities.
- c. Current contract ends in 2025.
- d. Current contract ends in 2039.
- e. Assumed in-place by 2028.
- f. Assumed in-place by 2025.



6.10 CLIMATE CHANGE IMPACTS

As shown in **Table 6-8**, the SWP is the main source of Zone 7's water supplies. In 2020, for example, the supplies derived from the SWP (SWP – existing supplies, groundwater [stored SWP water], and SWP carryover) represent nearly 90% of Zone 7's supplies. In 2035, this percentage remains high at 80%. The scenarios in the 2015 SWP Delivery Capability Report that were used for this UWMP account for climate change impacts based on 2025 emissions level and 15 cm sea level rise; therefore, these impacts have been incorporated into Zone 7's water supply planning efforts. Zone 7 has also evaluated the impacts of climate change to local water supplies for the WSE Update, which incorporates a more conservative risk-based analysis; as downscaling of climate change data is refined further, local climate change impacts will be incorporated in future UWMPs.



7 WATER SUPPLY RELIABILITY ASSESSMENT

Water Code Section 10635

The purpose of this chapter is to describe the long-term reliability of Zone 7's water supplies. Shorter-term water supply reliability issues that may require immediate action—such as drought or a catastrophic supply interruption—are addressed in **Chapter 8**.

This chapter presents the results of Zone 7's risk-based analysis of water supply reliability. Zone 7 developed a model that uses probability curves for key water system variables (e.g., rainfall or local runoff). The dynamic model also allows for a year-by-year analysis of water system operations in response to hydrologic conditions (e.g., drought). Data from DWR's 2015 SWP Delivery Capability Report⁵ were also incorporated into the model to represent the reliability of the SWP, the source of most of Zone 7's supply. The 2015 Delivery Capability Report accounts for projected climate change impacts on the SWP system. Zone 7 also included potential climate change impacts on its local surface water supply.

On October 17, 2012, the Zone 7 Board of Directors approved a revised Water Supply Reliability Policy (Resolution No. 13-4230, included as **Appendix B**), which adopts the following level of service goals to guide the management of Zone 7's treated water supplies as well as its Capital Improvement Program (CIP):

Goal 1. Zone 7 will meet its treated water customers' water supply needs, in accordance with Zone 7's most current Contracts for M&I Water Supply, including existing and projected demands as specified in Zone 7's most recent Urban Water Management Plan (UWMP), during normal, average, and drought conditions, as follows:

- At least 85% of M&I water demands 99% of the time
- 100% of M&I water demands 90% of the time

Goal 2: Provide sufficient treated water production capacity and infrastructure to meet at least 80% of the maximum month M&I contractual demands should any one of Zone 7's major supply, production, or transmission facilities experience an extended unplanned outage of at least one week.

The water supply reliability analysis presented here is consistent with the above Zone 7 policy.

7.1 CONSTRAINTS ON WATER SOURCES

This section discusses the constraints on water supply sources that affect their reliability, and Zone 7's strategies for managing the risks associated with each supply.



7.1.1 Imported Water: State Water Project

Zone 7's long-term contract with DWR for SWP water provides Zone 7 access to Table A water (and Article 56c water or carryover), Article 21 water, Article 56d water, and Yuba Accord water. As a SWP contractor, Zone 7 is also able to use SWP facilities for conveying exchange water, in particular water from BBID. SWP water moves through the Sacramento-San Joaquin Delta (Delta) before it is conveyed by the California Aqueduct and the South Bay Aqueduct (SBA) to Zone 7's water facilities.

The instability of the aging levees in the Delta (including their vulnerability to seismic events and climate change), regulatory uncertainty, water quality issues including saltwater intrusion, and the declining health of the Delta ecosystem all challenge the long-term reliability of the SWP and, more generally, the water conveyance capability of the Delta. These issues directly challenge the Tri-Valley's long-term water supply reliability since a majority of Zone 7's water supply is and will continue to be tied to the SWP.⁴

As noted in **Section 6.8.1**, Zone 7 and other SWP contractors are currently working with DWR and other key stakeholders to address the many complex issues undermining the Delta through the proposed California WaterFix. The proposed new diversion structure in the northern Delta, which allows for a dual-conveyance system, provides alternative intakes in case the Delta is affected by an earthquake, levee failure, or some other catastrophic event that impacts water quantity and quality in the Delta. DWR is working closely with regulatory and fish agencies to address regulatory uncertainty and protect the Delta ecosystem under an adaptive management framework based on the best available science. Finally, the dual conveyance system provides a tool for protecting fish during sensitive periods in the Delta. With these benefits, the California WaterFix is expected to significantly alleviate constraints on SWP operation.

As noted above, there are some important water quality considerations associated with the water that moves through the Delta. In 1982, DWR formed the Interagency Delta Health Aspects Monitoring Program to monitor water quality in the Delta for human health protection. The program was renamed the Municipal Water Quality Investigations Program (MWQI Program) in 1990. From a municipal water supply perspective, water quality issues in the Delta are associated with salinity from seawater intrusion; wastewater effluent discharges; agricultural drainages from the islands; and recreational activities. Water quality issues of specific concern to Zone 7 are:

- *algal byproducts* – Parameters of concern include compounds that cause taste-and-odor (T&O) and algal toxins. T&O is primarily a problem in the warmer months, when algal blooms may be present. It can affect supplies from the Delta and from Lake Del Valle. Algae produce geosmin and 2-methylisoborneol (MIB), which are key T&O-causing compounds in surface water supply. Algal toxins derived from blue-green algae can also be a concern. Zone 7 currently treats algal byproducts using powdered activated carbon (PAC), which is of limited effectiveness under high levels of such algal byproducts. Ozonation, a more effective treatment process, is in



Zone 7's Capital Improvement Program. A switch to groundwater supplies may be necessary under high levels of algal byproducts in surface water.

- *total and dissolved organic carbon (TOC/DOC)* – levels of organic carbon affect the amounts of coagulant and disinfectant chemicals used at Zone 7's water treatment plants (WTPs), and therefore result in higher costs. In addition, the formation of disinfectant byproducts (DBPs)—which are regulated compounds in drinking water—is dependent upon the amount of TOC/DOC. Zone 7's WTPs have been able to manage high TOC/DOC by increasing coagulant dosages. However, this operational change results in greater sludge production and limits plant production. Ozone will reduce coagulant and chlorine demands, thus reducing typical chlorination DBPs, but will create other ozonation DBPs such as bromate.
- *turbidity* – like TOC/DOC, turbidity affects the amounts of chemicals used at the WTPs, and Zone 7's ability to meet drinking water standards. It also can affect the production capacities of Zone 7's WTPs, requiring increased groundwater production under high demands. This happens occasionally after big storms. Coagulant dosages can be adjusted to address high turbidity but if filters still need to be backwashed more frequently, then production may be decreased. Ozone could help improve settled water turbidity.
- *salinity or total dissolved solids (TDS)* – salinity is a water quality parameter that has significant impacts on SWP operations and the availability of water. To meet the salinity objectives in the Delta, water exports from the Delta may be restricted, reducing the amount of water supply available during certain times of the year.
- *algal blooms* – in addition to T&O and the threat of algal toxins, can significantly impact the performance of the filters through clogging, reducing plant production capacities, and requiring additional groundwater use.

Zone 7 plans to install ozonation facilities at DVWTP in 2019 and at PPWTP in 2030; these facilities will provide improved treatment of T&O, TOC/DOC, turbidity, and algal blooms; the facilities are expected to result in more reliable production capacities from the surface water treatment plants.

To protect water quality once the water from the Delta reaches the SBA, recipients of water from the SBA (Alameda County Water District, Santa Clara Valley Water District, and Zone 7; known collectively as the SBA Contractors) developed the SBA Watershed Protection Program Plan in 2008¹⁹. The SBA Watershed Protection Program Plan is designed to protect the SBA system, including Lake Del Valle and Bethany Reservoir, from identified potential contaminant sources (e.g., septic tanks) for urban water supply purposes, as well as agricultural, recreational, and environmental uses.

¹⁹ ESA, 2008. SBA Watershed Protection Program Plan.



7.1.2 Groundwater

Section 6.3.2 provides a discussion of the issues affecting Zone 7's use of the Main Basin, namely, salt and nutrient management, and prevention of overdraft. Zone 7 is continuing to study the groundwater basin and developing new tools (such as an improved groundwater model) to better understand the levels of groundwater extraction possible under various conditions while maintaining levels above historic lows. Zone 7 also plans to augment its ability to recharge the Main Basin (e.g., through the Chain of Lakes) to maintain higher levels of local storage and allow for more pumping when necessary, which will improve both water supply reliability and salt management. Zone 7 plans to build an additional demineralization facility to continue to decrease the salt content of the Main Basin. Finally, Zone 7 is managing Cr(VI) levels in groundwater through blending, with consideration of treatment facilities in the future, if required.

7.1.3 Arroyo Valle

As discussed in **Section 6.5**, Alameda County Water District (ACWD) and Zone 7 both have water rights to divert water from the Arroyo Valle. This water is captured and stored in Lake Del Valle, which is owned and operated by DWR. Lake Del Valle is used for water supply storage, flood control, and recreation, and access to water from the lake needs to be coordinated with the lake's operation for other uses. Typically, after Labor Day, the lake elevation is lowered for flood control purposes, which also allows Zone 7 and ACWD to put runoff from the Arroyo Valle to beneficial use. In the summer months, lake elevations are raised for recreational purposes. Historically, access to Zone 7's stored water in Lake Del Valle has not been problematic, unless there is an outage on the Del Valle Branch pipeline. Zone 7 closely coordinates use of Arroyo Valle water with both ACWD and DWR.

Unlike ACWD, Zone 7 is still perfecting its water right. With the construction of the Chain of Lakes (**Section 6.5**) allowing for stormwater capture and storage, Zone 7 expects an average increase of 3,000 AFA from Arroyo Valle.

Water collected from the local watershed is protected under the SBA Watershed Protection Program Plan. In general, the water quality of Arroyo Valle runoff is good, and does not affect the reliability of this water supply; however, as noted above, T&O can also affect supplies from Lake Del Valle. Zone 7 treats T&O using PAC, although a switch to groundwater supplies is sometimes necessary under excessive levels of T&O compounds. Algal blooms in the lake can also reduce production capacities. A new ozonation facility at DVWTP planned for 2019 will help address these issues.

7.1.4 Byron Bethany Irrigation District

Zone 7's other imported surface water supply, transfer water from BBID, is also linked to the Delta and SWP facilities. This exchange water is diverted from the Delta and delivered to Zone 7 via the SBA. Consequently, the conveyance challenges related to possible shutdown of Delta pumping due to a facility outage, levee failure, earthquake, water quality (e.g., salinity intrusion), and fish impacts apply to the BBID transfer water. Physical



limitations in the SWP conveyance capacity could also affect delivery of this supply. These conveyance issues should be addressed by the California WaterFix. Curtailment of BBID's pre-1914 water rights during extremely dry hydrologic conditions (like in 2015) also affects the availability of this supply.

As discussed in **Section 6.4**, Zone 7's transfer agreement is currently being reviewed by Zone 7, BBID, and DWR. The outcome of this review, along with increasing demands in the BBID service area, may lead to lower water supplies available from BBID than originally anticipated in the Zone 7/BBID agreement.

7.1.5 Local Storage

Zone 7 has three options for local storage: Lake Del Valle, the Main Basin, and, in the future, Chain of Lakes (COLs). Constraints related to Lake Del Valle and the Main Basin are discussed in **Sections 7.13 and 6.2.2/7.1.2**, respectively. The key constraint on the use of the Chain of Lakes for storage is the duration of mining activities, which affects when the remainder of the Chain of Lakes will be transferred to Zone 7 ownership and how much storage is available over time. Zone 7 continues to work closely with the mining companies and quarry operators so planning efforts can be coordinated.

7.1.6 Non-Local Storage

Access to banked water in Semitropic Water Storage District (Semitropic) and Cawelo Water District (Cawelo)—both located downstream of Zone 7—requires exchange/s with other SWP contractors located south of Kern County (e.g., Metropolitan Water District). There must be sufficient water flowing through the Delta to facilitate these exchanges, which could be a challenging condition to meet during a drought. Furthermore, the banked water must be conveyed through the Delta, rendering this supply susceptible to the Delta disruptions described in **Section 7.1.1**.

During the recent drought, access to banked water became uncertain because of the historically low Table A allocation, leading to minimal amounts of water moving through the SWP, and the potential cessation of pumping in the Delta to control salinity intrusion. Ultimately, DWR was able to manage salinity so that pumping in the Delta could continue, and with coordination among Zone 7, other SWP contractors, DWR, and banking partners, DWR prioritized the delivery of banked water to Zone 7 and other SBA contractors. Ultimately, even during the serious drought conditions in 2014 and the minimal 5% SWP allocation, Zone 7 was able to successfully recover almost 15,000 AF, or approximately 78% of the maximum recovery requested by Zone 7. In 2015, Zone 7 anticipates recovering approximately 18,500 AF from storage.

Zone 7 will continue to coordinate closely with DWR, other SWP contractors, Semitropic, and Cawelo to ensure the future reliability of the banked water supplies.

Some of Semitropic's wells are affected by arsenic. This is currently being managed through treatment before the affected groundwater water is pumped into the California Aqueduct.



Arsenic criteria have been established for this “pump-in” by the DWR Facilitation Group to mitigate any impacts to the downstream SWP contractors. Semitropic and the banking partners have developed a coordination process for discussing arsenic treatment. While the presence of arsenic in the Semitropic groundwater bank is likely to increase the cost of this water storage option, it is not likely to affect its overall reliability.

7.2 RELIABILITY BY TYPE OF YEAR

The quantity of supply available from each of Zone 7’s water supply sources varies from one year to the next depending on hydrologic conditions. Consequently, Zone 7 reviewed historical data and developed a projected yield for each water supply source under three conditions: (1) normal water year, (2) single-dry year, and (3) multiple-dry years. Each condition was defined as follows:

- *Normal Water Year:* The year in the historical sequence most closely representing average runoff or allocation levels and patterns.
- *Single-Dry Year:* The year with the lowest annual runoff or allocation in the historical sequence.
- *Multiple-Dry Year:* The lowest runoff or allocation for a consecutive three-year period in the historical sequence.²⁰

7.2.1 State Water Project

7.2.1.1 Table A Water

The current reliability of SWP supplies is derived from the 2015 Delivery Capability Report⁵ (2015 DCR). DWR’s estimates of SWP deliveries are based on a computer model that simulates monthly operations of the SWP and Central Valley Project systems. Key assumptions and inputs to the model include the facilities included in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and projected contractor demands for SWP water. For example, the 2015 DCR uses the following assumptions to model current conditions: existing facilities, hydrologic inflows to the model based on 82 years of historical inflows (1922 through 2003), current regulatory and operational constraints, and contractor demands at maximum Table A amounts.

To evaluate SWP supply availability under future conditions, the 2015 DCR included four model studies. The first of the future-conditions studies, the EC-ELT scenario, used all of the same model assumptions for current conditions, but reflected changes expected to occur from climate change, specifically, a 2025 emission level and a 15 cm sea level rise. The other three scenarios (Existing Conveyance – Low Outflow [EC-LO], Existing Conveyance – High Outflow [EC-HO], and Bay Delta Conservation Plan Alternative 4 H3)

²⁰ The WSE Update evaluates the impacts of droughts that last longer than five years.



include varying model assumptions related to the Bay Delta Conservation Plan/California WaterFix, such as changes to facilities and/or regulatory and operational constraints.

In spring 2015, DWR announced a revised approach to addressing problems in the Delta, switching from a Section 10 permit to a Section 7 permit process under the Federal Endangered Species Act for the new conveyance facilities and ecosystem restoration efforts. This new approach is two-pronged: the California WaterFix (Alternative 4A), which is the conveyance portion, and California EcoRestore, the restoration portion. California WaterFix is Alternative 4A in the recirculated environmental document, and the preferred alternative. Alternative 4A is different from any of the future scenarios modeled by DWR in the 2015 DCR. While there is widespread support for the California WaterFix, it would be speculative at this time to assume it will move forward. Plans are currently in flux with environmental review ongoing and not anticipated to be final until Fall 2016, and several regulatory and legal requirements must be met prior to construction. The California WaterFix's impact on SWP reliability and Zone 7's future water supplies is therefore more appropriately included under "Future Water Projects" (**Section 6.8.1**) as part of a future portfolio of water supply projects to address identified shortages.

For the purposes of the 2015 UWMP, the EC-ELT scenario is deemed to be the most appropriate basis for long-term planning estimates of current SWP supply availability or reliability. The EC-ELT scenario, based on existing facilities and current operations, adjusted for the expected effects of climate change, is consistent with the studies DWR has used in its previous SWP Delivery Reliability Reports for supply availability under future conditions. Zone 7 will continue to monitor potential changes in regulations—particularly related to flow requirements in the Delta—which could lead to the other future conditions presented in the 2015 DCR (EC-LO and EC-HO) before any new conveyance system is constructed. Under EC-ELT, the long-term average yield from the SWP is 62% of Zone 7's Table A amount, or approximately 50,000 AFA.

Figure 7-1 illustrates projected SWP allocations from 1922 to 2003 using the results presented in the 2015 Delivery Capability Report⁵. As shown on **Figure 7-1**, a year representative of the average allocation (62%) is 1964, while the lowest three-year average (22%) occurs over 1990 to 1992.

Figure 7-1 also indicates that the lowest allocation over the modeling period used by DWR (1922-2003) occurs in 1977 at 7% Table A allocation; however, the 2014 allocation was actually lower at 5%. The extremely dry sequence from the beginning of January 2013 through the end of 2014 was one of the driest two-year periods in the historical record. Water year 2013 was a year with two hydrologic extremes.²¹ October through December 2012 was one of the wettest fall periods on record, but was followed by the driest consecutive 12 months on record. Accordingly, the 2013 State Water Project (SWP) supply allocation was a low 35% of SWP Table A Amounts. The 2013 hydrology ended up being even drier than DWR's conservative hydrologic forecast, so the SWP began 2014 with reservoir storage lower than targeted levels and less stored water available for 2014

²¹ A water year begins in October and runs through September. For example, water year 2013 is October 2012 through September 2013.



supplies. Compounding this low storage situation, 2014 also was an extremely dry year, with runoff for water year 2014 the fourth driest on record. The extraordinarily dry conditions in 2013 and 2014 resulted in the historically lowest 5% Table A allocation that was only available starting in the Fall of 2014.

The dry hydrologic conditions that led to the low 2014 SWP water supply allocation were extremely unusual, and to date have not been included in the SWP delivery estimates presented in DWR's 2015 Delivery Capability Report.²² It is anticipated that the hydrologic record used in the DWR model will be extended to include the period through 2014 during the next update of the model, which is expected to be completed prior to issuance of the next update to the biennial SWP Delivery Capability Report. For the reasons stated above, this UWMP uses a conservative assumption that a 5% allocation of SWP Table A Amounts represents the worst-case single dry year scenario.

Table 7-1 summarizes the basis of water year and available supply for Zone 7 from the SWP. It combines DWR's CalSIM modeling results with Zone 7's modeling for carryover quantities.

²² SWP delivery estimates from DWR's 2015 SWP Delivery Capability Report are from computer model studies which use 82 years of historical hydrologic inflows from 1922 through 2003.



Figure 7-1. Projected Table A Allocations of State Water Project Water and Selected Years Based on Water Supply Conditions

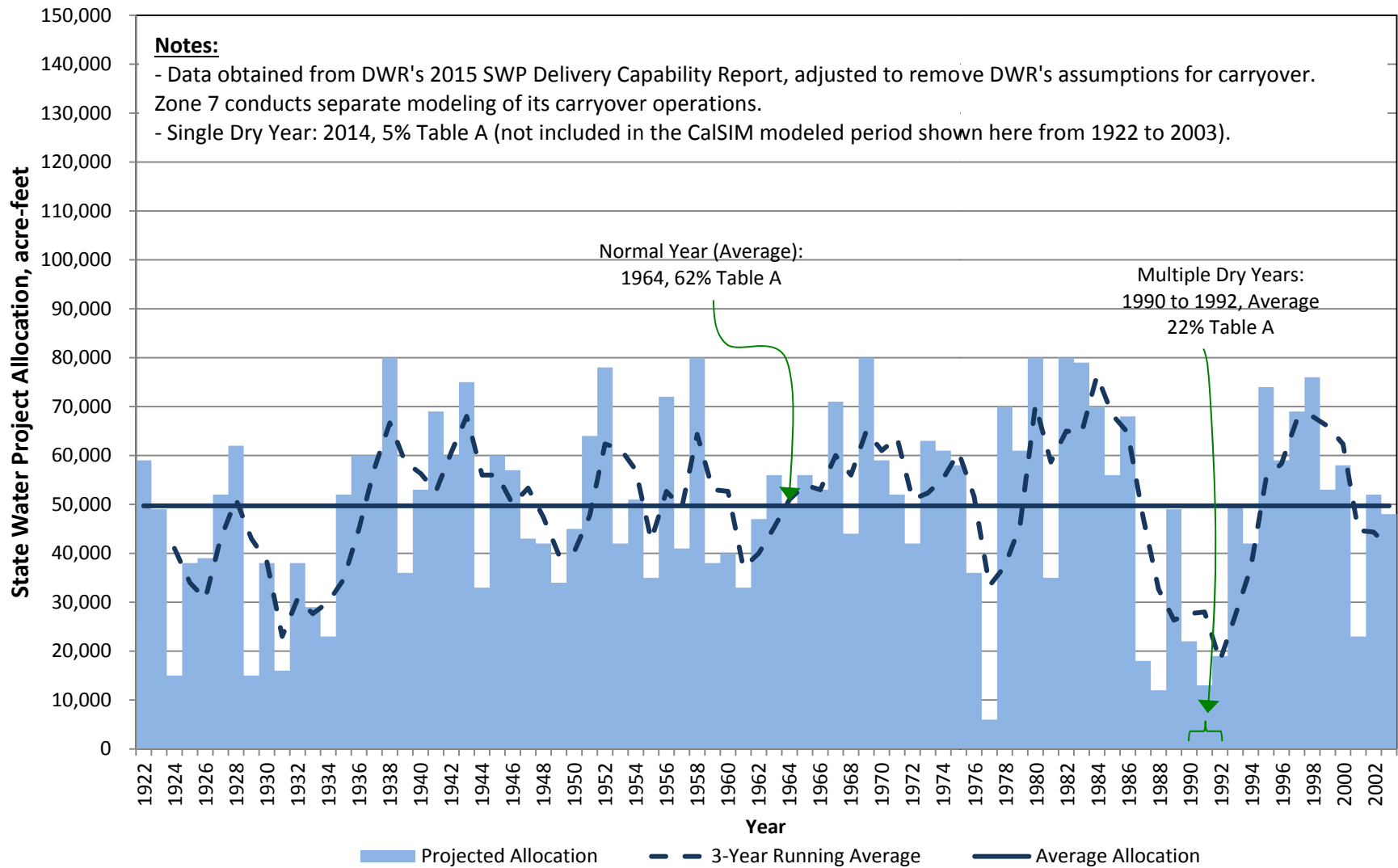


Table 7-1. Basis of Water Year and Available Supply: SWP Table A Water^a
[DWR Table 7-1 W]

Water Year Type	Base Year(s)	2020 to 2035		
		% Table A	Yield, AFA	% of Normal
Normal	1964	62%	50,000	100%
Single-Dry	2014	5%	4,000	8%
Multiple-Dry	Year 1 (1990)	27%	21,800	42%
	Year 2 (1991)	16%	12,900	25%
	Year 3 (1992)	24%	19,300	37%

a. Based on DWR’s 2015 Delivery Capability Report: Existing Conveyance - Early Long-Term (EC-ELT) Scenario.

7.2.1.2 Article 21 Water and Turnback Pool Water

As a contractor of the SWP, Zone 7 also has access to Article 21 water (formerly called surplus water) and Article 56d water (turnback pool water). Zone 7 generally incorporates any Article 21 water into its year-to-year operations; however, the projected yield from Article 21 water will likely be very low due to pumping restrictions in the Delta, and was not included in this UWMP for conservative planning-level purposes.

Article 56d is a provision that allows contractors with excess water to sell their water to contractors that have water needs. Typically, there is very little water available in dry years but more available in wet years. However, Zone 7 staff does not expect a significant amount of Article 56d water to be available in the future until there is a resolution to existing pumping restrictions in the Delta; therefore, Article 56d water was not included in this UWMP for conservative planning-level purposes.

7.2.1.3 Carryover

As a SWP contractor, Zone 7 has the ability to carry water from one year to the next in San Luis Reservoir – also called Article 56(c) water. The amount that Zone 7 can carry from one year to the next depends on DWR’s allocation for that year. For example, if allocations are equal to or less than 50 percent of Zone 7’s Table A amount, then carryover is limited to 25% of Zone 7’s total Table A amount, or approximately 20,200 AFA (25% of 80,619 AF). However, if allocations are equal to or greater than 75% of Zone 7’s Table A amount, then carryover is limited to 50% of Zone 7’s total Table A amount, or approximately 40,300 AFA (50% of 80,619 AF). If San Luis Reservoir level gets too high, a portion of Zone 7’s carryover can be lost; this condition is more likely when the reservoir is relatively full and hydrologic conditions are above normal. Zone 7 manages carryover to avoid or minimize losses. As part of its operating agreement with DWR, Zone 7 also has the ability to carry inflow from Arroyo Valle in Lake Del Valle from one year to the next.



Typically, any carryover into a normal water year would be used in that year; however, a similar amount of current year supply would also be carried over for use in the following year. Zone 7 typically carries about 10,000 AF of water from one year into the next. In the past, Zone 7 had significant carryover water available (greater than 15,000 AF), but much of this supply was used during the current drought. Even under the more recent record drought conditions, Zone 7 was able to carryover close to 10,000 AF in San Luis Reservoir. For conservative planning-level purposes in this UWMP, total carryover (both SWP and Arroyo Valle runoff) was limited to 10,000 AF.

Table 7-2 summarizes the maximum available carryover that would likely be available under normal, single-dry, and multiple-dry years; base years were chosen to match those for the SWP. The actual availability of carryover during a multiple-dry year event was determined using a newly developed water supply model; the results of this modeling are reflected in **Chapter 16**.

**Table 7-2. Maximum Carryover Available to Zone 7 for Use in Following Year^a
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal	1964	10,000	100%
Single-Dry	2014	10,000	100%
Multiple-Dry	Year 1 (1990)	10,000	100%
	Year 2 (1991)	10,000	100%
	Year 3 (1992)	10,000	100%

a. Carryover includes both SWP and Del Valle supplies. Maximum carryover limited to 10,000 acre-feet for conservative planning-level purposes in this UWMP.

7.2.1.4 Yuba Accord Supply

Water is primarily available during dry years under the Yuba Accord, and the amount is relatively small: 400 AF in 2014 and approximately 300 AF in 2015. For planning purposes, Zone 7 currently assumes a long-term average yield of 145 AFA under the Yuba Accord and 676 AF during dry conditions. These amounts may increase given the recently renegotiated terms in 2014. Any such increase will be reflected in future planning efforts. For planning-level purposes, Zone 7 included a projected average yield of 145 AFA for this UWMP.²³ **Table 7-3** summarizes the available supply under each water year type. Base years were chosen to match those of the SWP.

²³ The average is based on varying the maximum yield of 676 acre-feet (only Components 2 and 3) during critically dry years to no water in wet years without considering Component 4 water.



**Table 7-3. Basis of Water Year and Available Supply: Yuba Accord Water
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2025	
		Yield, AFA	% of Normal
Normal	1964	145	100%
Single-Dry	2014	676	470%
Multiple-Dry	Year 1 (1990)	676	470%
	Year 2 (1991)	676	470%
	Year 3 (1992)	676	470%

7.2.2 Local Surface Water: Arroyo Valle

Zone 7, along with Alameda County Water District (ACWD), has a water right permit²⁴ to put runoff from Arroyo Valle to beneficial use. This runoff is stored in Lake Del Valle (under operating agreement with DWR) and in the Main Basin of the Livermore Valley Groundwater Basin via artificial recharge.

A review of historical runoff from Arroyo Valle over 1913 to 2015 indicates that the average total inflow into Lake Del Valle has been approximately 23,000 AFA (**Figure 7-2**). A maximum annual inflow of 126,000 AF was observed in 1983. Inflows into Lake Del Valle, after accounting for permit conditions, are equally divided between ACWD and Zone 7; however, total diversions combined from both agencies cannot exceed 60,000 AFA. Based on historical conditions and existing facilities, the average yield to Zone 7 is projected to be 7,300 AFA. This yield may increase to 10,300 AFA once the water right is fully perfected through the use of the Chain of Lakes.

Based on water supply yields to Zone 7, the year closest to the average supply is 1919, while the lowest 3-year average is from 1988 to 1990. The analysis in this UWMP assumes that no inflow is available during a single dry year and uses a base year of 1977.

Table 7-4 summarizes the basis of water year and available supply for Zone 7 from local runoff under the Arroyo Valle water right permit.²⁵

²⁴ Permit 11319 (Application 17002)

²⁵ Zone 7 should have the ability to increase the yield under this permit once quarry operations are completed in the Chain of Lakes.



**Table 7-4. Basis of Water Year and Available Supply: Arroyo Valle^a
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal ^b	1919	7,300 to 10,300	100%
Single-Dry	1977	0	0%
Multiple-Dry	Year 1 (1988)	350	10.2%
	Year 2 (1989)	520	15.1%
	Year 3 (1990)	150	4.4%

- a. Based on inflow from 1913 to 2015 (USGS gauge 11176400)—using actual and estimated data—and existing diversion or facility constraints.
- b. Long-term average is approximately 7,300 AF under existing conditions. In the future, the yield may increase to 10,300 AF once the future Chain of Lakes is complete.

7.2.3 BBID Contract

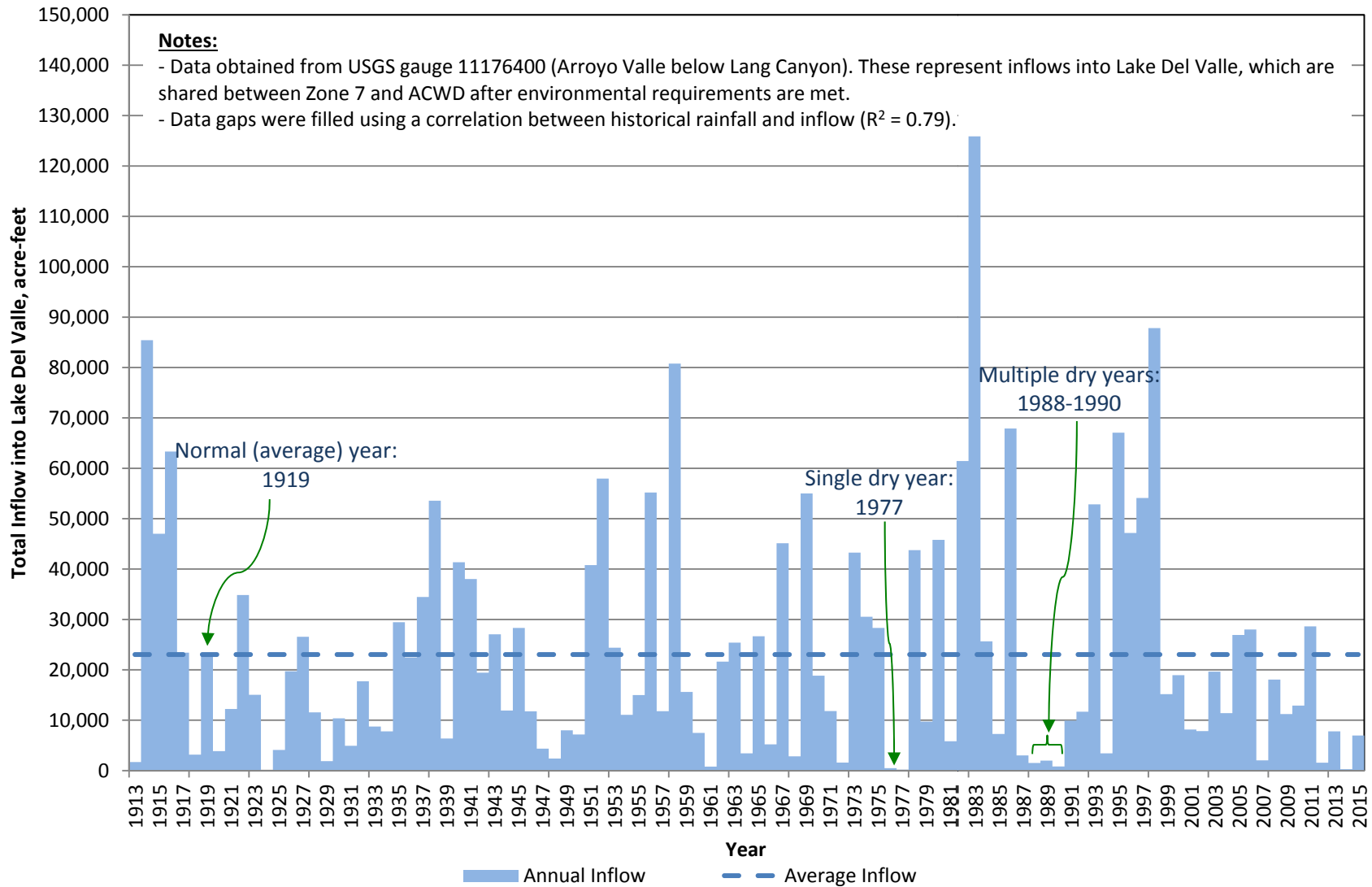
As discussed in **Sections 6.4** and **7.1.4**, Zone 7’s transfer agreement with BBID is currently under review. At this time, 2,000 AFA of water is assumed to be available under this contract under normal and multiple-dry year conditions through 2039; this amount is similar to the latest BBID transfer amount of 2,200 AF approved in 2013. For a single dry year, the yield is assumed to be zero to reflect curtailment of BBID pre-1914 water supply in 2015. Error! Reference source not found. summarizes the available supply under each water year type. Base years were chosen to match those of the SWP except for the single dry year.

**Table 7-5. Basis of Water Year and Available Supply: BBID
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal	1964	2,000	100%
Single-Dry	2015	0	0%
Multiple-Dry	Year 1 (1990)	2,000	100%
	Year 2 (1991)	2,000	100%
	Year 3 (1992)	2,000	100%



Figure 7-2. Historical Inflows from Arroyo Valle and Selected Years Based on Water Supply Conditions



7.2.4 Local Storage

As mentioned previously, Zone 7 has three options for local storage: Lake Del Valle, the Main Basin, and, in the future, the COLs. The use of Lake Del Valle is tied to SWP reliability, discussed under **Section 7.2.1**, and to the availability of local water from the Arroyo Valle, discussed under **Section 7.1.3**. The future use of the COLs (discussed in **Section 6.5**) has been incorporated into the analysis of future water supply projects discussed in **Section 6.8**, including estimates of future water supply available. This section therefore focuses on the reliability of the groundwater supply from the Main Basin,

Based on a review of current well capacities and groundwater modeling, Zone 7 estimates that it has the ability to pump approximately 28,000 AF over a one-year period assuming the Main Basin is approximately 80% full; this annual limit is projected to increase to as high as 34,400 AF once all of the Well Master Plan²⁶ wells are completed. For conservative planning-level purposes in this UWMP, Zone 7 staff included limits on the total volume of groundwater pumped during multiple dry years to ensure that water surface elevations remain above historic lows during a multiple-dry year event. The pumping limit used in the analysis (14,000 AFA for three years of a multiple dry-year event, or 42,000 acre-feet) was based on preliminary modeling conducted by Zone 7 staff.²⁷ The pumping for each year of the multiple-year drought depended on need, but never exceeded 42,000 AF over the three-year period. Pumping during normal water years was limited to the recharge capacity (9,200 AFA) of existing arroyos.

Table 7-6 summarizes the available supply under each water year type. Base years were chosen to match those of the SWP.

²⁶ CH2M Hill, 2003. Well Master Plan. <http://www.zone7water.com/index.php/36-public/content/117-well-master-plan>.

²⁷ Zone 7 conducted a preliminary analysis using the calibrated groundwater model to determine the average annual pumping limit that maximizes the recovery of groundwater basin storage during a more extensive six-year drought, assuming average conditions that existed between 1987 and 1992, and only with existing facilities.

**Table 7-6. Basis of Water Year and Available Supply from Storage: Main Basin^a
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal	1964	9,200	100%
Single-Dry	2014	28,000 to 34,400	304-374%
Multiple-Dry ^b	Year 1 (1990)	12,400	135%
	Year 2 (1991)	16,200	175%
	Year 3 (1992)	13,400	147%

a. From previously recharged surface water.

b. Total amount available during three-year drought capped at 42,000 AF over three years, based on groundwater modeling.

7.2.5 Non-Local Storage

7.2.5.1 *Semitropic Water Storage District*

Zone 7 has 78,000 AF of groundwater banking storage capacity available through Semitropic Water Storage District (Semitropic) to augment water supplies during drought conditions. During non-drought periods, Zone 7 can store up to 5,883 AFA into the Semitropic groundwater bank. During droughts, Zone 7 has the ability to request 9,100 AF of pumpback and anywhere from 0 to 8,645 AF of exchange water; the availability of exchange water depends on projected SWP deliveries. Zone 7 does not rely on water stored in Semitropic during normal water years.

However, due to limited exchange opportunities on the SWP caused by the low Table A allocation in 2014, Zone 7 was only able to recover a combined 15,000 AF from Semitropic and Cawelo, with 9,900 AF delivered from Semitropic. To reflect this condition, 7,200 AF of Semitropic supply was assumed to be available under a single dry year, with the remaining 7,800 AF recovered from Cawelo for a combined total of 15,000 AF.

Table 7-7 summarizes the projected Semitropic stored water that would likely be available under normal, single-dry, and multiple-dry years. Base years were chosen to match those of the SWP.

**Table 7-7. Maximum Pumpback and Exchange Water Available from Semitropic^a
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal	1964	0	100%
Single-Dry	2014	7,200	N/A
Multiple-Dry	Year 1 (1990)	10,400 ^b	N/A
	Year 2 (1991)	9,100	N/A
	Year 3 (1992)	9,100	N/A

a. Maximum supply available to Zone 7 includes 9,100 AF of pumpback plus exchange water. Exchange water availability depends on SWP allocations. Allocations used to predict maximum carryover were based on DWR's 2015 DCR.

b. Year 1 yield includes 1,300 AF of exchange water. No exchange water is expected in Years 2 or 3.

7.2.5.2 Cawelo Water District

Zone 7 has 120,000 AF of groundwater banking storage capacity available with Cawelo Water District (Cawelo) to augment water supplies during drought conditions. During non-drought periods, Zone 7 can put 5,000 AFA into the bank.²⁸ During droughts, Zone 7 has the ability to request 10,000 AFA of pumpback.

However, due to limited exchange opportunities on the SWP caused by the low Table A allocation in 2014, Zone 7 was only able to recover a combined 15,000 AF from Semitropic and Cawelo, with about 4,900 AF delivered by Cawelo. To reflect this condition, 7,800 AF of Cawelo supply was assumed to be available under a single dry year, with the remaining 7,200 AF recovered from Semitropic for a combined total of 15,000 AF.

Table 7-8 summarizes the maximum Cawelo stored water supply that would be available under normal, single-dry, and multiple-dry years. Base years were chosen to match those of the SWP.

²⁸ Zone 7 only gets storage credit for 50% of the water provided to Cawelo. Per the existing contract, Zone 7 can only send 10,000 acre-feet in any given year to Cawelo; therefore, the maximum contractual credit is 5,000 acre-feet (10,000 divided by 2).



**Table 7-8. Maximum Stored Water Available from Cawelo
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2020 to 2035	
		Yield, AFA	% of Normal
Normal	1964	0	100%
Single-Dry	2014	7,800	N/A
Multiple-Dry	Year 1 (1990)	10,000	N/A
	Year 2 (1991)	10,000	N/A
	Year 3 (1992)	10,000	N/A

7.2.6 California WaterFix

The California WaterFix would be one of the most complex projects ever undertaken by the State, and much work remains before it can be fully defined and implemented. However, the latest modeling indicates that the project may restore SWP reliability from the current average allocation of 62% to an average allocation of 72%, resulting in 8,000 AFA of restored SWP supply for Zone 7. Allocations during a Single Dry year may increase from 5% (i.e., 2014 conditions) to as high as 11%, resulting in 4,800 AF of additional dry-year supply. Allocations during the lowest consecutive three-year period (1990 to 1992) are not expected to change. **Table 7-9** summarizes the water supply assumptions for the California WaterFix used in this UWMP, with water supplies assumed to be available by 2030.

**Table 7-9. Basis of Water Year and Additional Supply from California WaterFix^a
[DWR Table 7-1 W]**

Water Year Type	Base Year(s)	2030 to 2035 ^b	
		Yield, AFA	% of Normal
Normal	1966	8,000	100%
Single-Dry	2014	4,800	60%
Multiple-Dry	Year 1 (1990)	0	0%
	Year 2 (1991)	0	0%
	Year 3 (1992)	0	0%

- a. Quantities are based on difference between EC-ELT and California WaterFix allocations in year types presented; i.e., these amounts are in addition to existing SWP Table A supply shown in **Table 7-1**. Allocations during the lowest consecutive three-year period (1990 to 1992) are not expected to change.
- b. Assumed in-place by 2028.



7.2.7 Other New Water Supplies

As discussed in **Section 6.8** (Future Water Supply Projects), Zone 7 is working with the Retailers to investigate the feasibility of potable reuse projects within Zone 7’s service area that may provide up to 7,800 AFA of water supply. Zone 7 is also working with five other bay area water agencies on the BARDP, which could provide up to 5,600 AFA to Zone 7.

Although both of these new efforts could result in as much as 13,400 AFA of new water supply, there is no guarantee that either of them will happen. Similar to the California WaterFix, there is uncertainty surrounding these projects. For instance, water supply yields for potable reuse could be greatly reduced by dilution requirements for brine disposal.

Consequently, the analysis in the UWMP assumed that approximately 10,000 AFA (i.e., only 75% of current estimates) of new supply may be available by 2025. Both sources of water supply are considered drought-resistant.

Table 7-10 summarizes the water supply assumptions for other new water supplies used in this UWMP.

Table 7-10. Basis of Water Year and Additional Supply from Other New Water Supplies
[DWR Table 7-1 W]

Water Year Type	Base Year(s)	2025 to 2035 ^a	
		Yield, AFA	% of Normal
Normal	1964	10,000	100%
Single-Dry	2014	10,000	100%
Multiple-Dry	Year 1 (1990)	10,000	100%
	Year 2 (1991)	10,000	100%
	Year 3 (1992)	10,000	100%

a. Assumed in-place by 2025.

7.3 SUPPLY AND DEMAND ASSESSMENT

In summary, Zone 7 currently relies on incoming surface water supplies from contracts and local water rights, previously stored surface water in the local groundwater basin, and two non-local groundwater banking programs to meet its demands. Zone 7 is also pursuing new water supplies through active participation in the California WaterFix and BARDP, and partnership with the Retailers in the development of potential potable reuse options.

The estimated average amounts of water available during various hydrologic conditions are summarized in Error! Reference source not found. below; the values presented reflect the expected range of water supply available based on historical use records, hydrologic



records, and existing supplies and storage options, or expected increases in yield or capacity due to new facilities and supplies.

Table 7-11. Summary of Estimated Available Water Supply

Water Source	Yields (Acre-Feet Annually)		
	Normal Year ^a	Single Dry Year ^b	Multiple Dry Years ^c
Arroyo Valle ^d	7,300-10,300	0	200 to 400
SWP – Table A	50,000	4,000	12,900 to 21,800
SWP – Carryover	10,000	10,000	10,000
SWP – Yuba Accord ^f	145	676	676
BBID ^g	2,000	2,000	2,000
California WaterFix ^h	0 to 8,000	0 to 4,800	0
Other New Water Supplies ⁱ	0 to 10,000	0 to 10,000	0 to 10,000
From storage:			
Main Basin	9,200	28,000 to 34,400	12,400 to 16,200
Semitropic ^e	0	7,200	9,100 to 10,400
Cawelo ^e	0	7,800	10,000

- a. Based on average runoff or allocation levels and patterns.
- b. Based on the lowest annual runoff or allocation in the historical sequence.
- c. Based on the lowest runoff or allocation for a consecutive 3-year period in the historical sequence.
- d. Yield assumed to increase to 10,300 AFA by 2030 upon completion the of Chain of Lakes facilities.
- e. Combined Semitropic and Cawelo supplies during a single dry year reflect the 15,000 AF Zone 7 received in 2014.
- f. Current contract ends in 2025.
- g. Current contract ends in 2039.
- h. Assumed in-place by 2028.
- i. Assumed in-place by 2025.

To perform the assessment of the reliability of Zone 7’s water supplies during normal, single-dry year, and multiple-dry years, projected water supplies were compared against projected water demands from 2015 to 2035. Projected water use or demands are described in **Chapter 4**.

Table 7-12 compares water supplies and demands under normal hydrologic conditions. As shown in **Table 7-12**, with existing and planned water supplies, Zone 7 does not anticipate



any difficulty in meeting projected water demands under normal conditions. Note that a portion of the water demand during a normal water year includes the storage of water supply for use during dry years.

**Table 7-12. Comparison of Normal Year Water Supplies and Demands
[DWR Table 7-2 W]**

PROJECTIONS	2020	2025	2030	2035
SUPPLIES				
State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	50,000	50,000	50,000	50,000
Yuba Accord	145	145		
Byron Bethany Irrigation District	2,000	2,000	2,000	2,000
Arroyo Valle	7,300	7,300	10,300	10,300
California Water Fix			8,000	8,000
Per WSE Update, could include desalination and/or potable reuse		10,000	10,000	10,000
Groundwater	9,200	9,200	9,200	9,200
State Water Project - Carryover	10,000	10,000	10,000	10,000
Total Supplies	78,645	88,645	99,500	99,500
DEMANDS				
Retailer Demand	41,300	44,700	46,600	47,600
Untreated Water Demand	6,200	6,600	7,800	8,300
Direct Retail Demand	300	300	300	300
Local Groundwater Basin	9,200	9,200	9,200	9,200
Kern County Groundwater Banking Programs	0	300	7,300	9,000
Surface Water Storage - SWP Carryover or Other Storage	10,000	10,000	10,000	10,000
Transmission System	2,100	2,200	2,300	2,400
Storage Losses	3,000	4,000	6,000	6,000
Total Demands	72,100	77,300	89,500	92,800
DIFFERENCE (SUPPLIES – DEMANDS)	6,545	11,345	10,000	6,700

Table 7-13 compares water supplies and demands in a single dry year. As shown in **Table 7-13**, with existing and planned water supplies, Zone 7 does not anticipate any difficulty in meeting projected water demands in single dry years.

**Table 7-13. Comparison of Single Dry Year Water Supplies and Demands
[DWR Table 7-3 W]**

PROJECTIONS	2020	2025	2030	2035
SUPPLIES^b				
State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	4,000	4,000	4,000	4,000
State Water Project - Carryover	10,000	10,000	10,000	10,000
Yuba Accord	676	676		
Byron Bethany Irrigation District	0	0	0	0
Arroyo Valle	0	0	0	0
California Water Fix			4,800	4,800
Per WSE Update, could include desalination and/or potable reuse		10,000	10,000	10,000
Groundwater	28,000	32,000	34,400	34,400
Semitropic	7,200	7,200	7,200	7,200
Cawelo	7,800	7,800	7,800	7,800
Total Supplies	57,676	71,676	78,200	78,200
DEMANDS^a				
Retailer Demand	35,100	38,000	39,600	40,500
Untreated Water Demand	5,300	5,600	6,600	7,100
Direct Retail Demand	300	300	300	300
Local Groundwater Basin	0	0	0	0
Kern County Groundwater Banking Programs	0	0	0	0
Surface Water Storage - SWP Carryover or Other Storage	0	0	0	0
Transmission System Losses	1,800	1,900	2,000	2,000
Storage Losses	0	0	0	0
Total Demands	42,500	45,800	48,500	49,900
DIFFERENCE (SUPPLIES – DEMANDS)	15,176	25,876	29,700	28,300

a. Demands are derived from **Table 4-3** without groundwater recharge, groundwater banking, and storage losses; storage is not expected to occur in a critically dry year; demands were also reduced by 15% consistent with Zone 7's Reliability Policy.

b. 2025 supplies include new other supplies (10,000 AF) plus additional groundwater from new wells (4,000 AF). 2030 to 2035 supplies include California Water Fix plus additional groundwater from new wells (2,400 AF).

Tables 7-14a to 7-14c compare water supplies and demands in multiple-dry years. As shown in these tables, with existing and planned water supplies, Zone 7 does not anticipate any difficulty in meeting projected water demands.

**Table 7-14. Comparison of Multiple-Dry Year Water Supplies and Demands
[DWR Table 7-4 W]**

Table 7-14a. First Year of Drought

PROJECTIONS - FIRST YEAR	2018	2023	2028	2033
SUPPLIES				
State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	21,800	21,800	21,800	21,800
State Water Project - Carryover	10,000	10,000	10,000	10,000
Yuba Accord	676	676		
Byron Bethany Irrigation District	2,000	2,000	2,000	2,000
Arroyo Valle	350	350	350	350
California Water Fix			0	0
Per WSE Update, could include desalination and/or potable reuse		10,000	10,000	10,000
Groundwater ^a	12,400	12,400	12,400	12,400
Semitropic	10,400	10,400	10,400	10,400
Cawelo	10,000	10,000	10,000	10,000
Total Supplies	67,626	77,626	76,950	76,950
DEMANDS^b				
Retailer Demand	39,500	43,400	46,100	47,300
Untreated Water Demand	6,200	6,200	7,300	8,300
Direct Retail Demand	300	300	300	300
Local Groundwater Basin	0	0	0	0
Kern County Groundwater Banking Programs	0	0	0	0
Surface Water Storage - SWP Carryover or Other Storage	0	0	0	0
Transmission System Losses	2,000	2,200	2,300	2,400
Storage Losses	0	0	0	0
Total Demands	48,000	52,100	56,000	58,300
DIFFERENCE (SUPPLIES – DEMANDS)	19,626	25,526	20,950	18,650

- a. Groundwater pumping may vary year-to-year, but the total volume over three years (see **Table 7-6**) is capped for a multiple-year drought for planning purposes.
- b. Demands do not include groundwater recharge, groundwater banking, and storage losses, as storage would not likely occur in drought years (see **Table 4-3**). They also do not account for potential voluntary and mandatory water conservation savings.

Table 7-14b. Second Year of Drought

PROJECTIONS - SECOND YEAR	2019	2024	2029	2034
SUPPLIES				
State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	12,900	12,900	12,900	12,900
State Water Project - Carryover	10,000	10,000	10,000	10,000
Yuba Accord	676	676		
Byron Bethany Irrigation District	2,000	2,000	2,000	2,000
Arroyo Valle	520	520	520	520
California Water Fix			0	0
Per WSE Update, could include desalination and/or potable reuse		10,000	10,000	10,000
Groundwater ^a	16,200	16,200	16,200	16,200
Semitropic	9,100	9,100	9,100	9,100
Cawelo	10,000	10,000	10,000	10,000
Total Supplies	61,396	71,396	70,720	70,720
DEMANDS^b				
Retailer Demand	40,200	44,100	46,400	47,400
Untreated Water Demand	6,200	6,400	7,600	8,300
Direct Retail Demand	300	300	300	300
Local Groundwater Basin	0	0	0	0
Kern County Groundwater Banking Programs	0	0	0	0
Surface Water Storage - SWP Carryover or Other Storage	0	0	0	0
Transmission System Losses	2,000	2,200	2,300	2,400
Storage Losses	0	0	0	0
Total Demands	48,700	53,000	56,600	58,400
DIFFERENCE (SUPPLIES – DEMANDS)	12,696	18,396	14,120	12,320

- a. Groundwater pumping may vary year-to-year, but the total volume over three years (see Table 7-6) is capped for a multiple-year drought for planning purposes.
- b. Demands do not include groundwater recharge, groundwater banking, and storage losses, as storage would not likely occur in drought years (see **Table 4-3**). They also do not account for potential voluntary and mandatory water conservation savings.

Table 7-14c. Third Year of Drought

PROJECTIONS - THIRD YEAR	2020	2025	2030	2035
SUPPLIES				
State Water Project [Existing Conveyance – Early Long-Term (EC-ELT)]	19,300	19,300	19,300	19,300
State Water Project - Carryover	10,000	10,000	10,000	10,000
Yuba Accord	676	676		
Byron Bethany Irrigation District	2,000	2,000	2,000	2,000
Arroyo Valle	150	150	150	150
California Water Fix			0	0
Per WSE Update, could include desalination and/or potable reuse		10,000	10,000	10,000
Groundwater ^a	13,400	13,400	13,400	13,400
Semitropic	9,100	9,100	9,100	9,100
Cawelo	10,000	10,000	10,000	10,000
Total Supplies	64,626	74,626	73,950	73,950
DEMANDS^b				
Retailer Demand	41,300	44,700	46,600	47,600
Untreated Water Demand	6,200	6,600	7,800	8,300
Direct Retail Demand	300	300	300	300
Local Groundwater Basin	0	0	0	0
Kern County Groundwater Banking Programs	0	0	0	0
Surface Water Storage - SWP Carryover or Other Storage	0	0	0	0
Transmission System Losses	2,100	2,200	2,300	2,400
Storage Losses	0	0	0	0
Total Demands	49,900	53,800	57,000	58,600
DIFFERENCE (SUPPLIES – DEMANDS)	14,726	20,826	16,950	15,350

- a. Groundwater pumping may vary year-to-year, but the total volume over three years (see **Table 7-6**) is capped for a multiple-year drought for planning purposes.
- b. Demands do not include groundwater recharge, groundwater banking, and storage losses, as storage would not likely occur in drought years (see **Table 4-3**). They also do not account for potential voluntary and mandatory water conservation savings.

7.4 REGIONAL SUPPLY RELIABILITY

As previously described, Zone 7 is evaluating and pursuing new water supply options, including potable reuse, which would maximize reuse of locally-generated wastewater (**Section 6.8.3**). Zone 7 also continues to support the expansion of recycled water use for irrigation. Additional supplies from reuse would reduce the percentage of Zone 7's water supply derived from imported water supplies. Zone 7 also continues to work closely with the Retailers on the implementation of an active conservation program, which—similar to recycled water use—also reduces the demand on imported supplies. Optimization and expansion of local storage options allow Zone 7 to minimize use of imported water supplies, when necessary, during droughts, sensitive fish periods, and other events. The COLs will play a critical role in this, as described in **Section 6.5**.

Zone 7 is a member of the Bay Area Regional Reliability Partnership, which brings together nine Bay Area water agencies aiming to improve regional water supply reliability. In addition to Zone 7, these agencies include: Alameda County Water District, San Francisco Public Utilities Commission (SFPUC), the Bay Area Water Supply and Conservation Agency (BAWSCA), Contra Costa Water District (CCWD), East Bay Municipal Utility District (EBMUD), Marin Municipal Water District (MMWD), and Santa Clara Valley Water District (SCVWD). The BARR partners have agreed to work cooperatively to address water supply reliability concerns and drought preparedness on a mutually beneficial and regionally focused basis. Near- and long-term joint water supply reliability projects may be evaluated through BARR, such as use of the capacity of existing facilities, changes to infrastructure including new interties, recycled water, water conservation, expanded treatment, regional desalination, water transfers and exchanges, and other projects or institutional arrangements that encourage a regional approach to achieving water supply reliability in the Bay Area.

As part of its existing Capital Improvement Program (CIP), Zone 7 is planning to construct a reliability intertie with another major water agency (e.g., EBMUD or SFPUC) to help mitigate some of the risk during a major water supply interruption from the Delta and to create opportunities for transfers/exchanges. This intertie could allow Zone 7 to acquire emergency water supplies to help meet minimum health and safety water supply needs during a major Delta outage, assuming the partnering agency has available supply and the transmission capacity available during the emergency period. A conceptual 24 to 30-inch intertie with EBMUD could connect to the west side of Zone 7's transmission system and convey up to 10 to 15 MGD of supply. The intertie could be completed as early as 2022.

8 WATER SHORTAGE CONTINGENCY PLANNING

Water Code Section 10632 (a) to (i)

The purpose of this chapter is to present Zone 7's Water Shortage Contingency Plan, which was updated to reflect experiences with the current drought and Zone 7's Reliability Policy (**Appendix B**).

On October 17, 2012, Zone 7 adopted an updated Water Supply Reliability Policy (Resolution 13-4230), which continues to require the preparation of the "Annual Review of the Sustainable Water Supply Report" including the following information:

- an estimate of the current annual average water demand for M&I water as well as a five-year projection based on the same information used to prepare the UWMP and CIP;
- a summary of available water supplies to Zone 7 at the beginning of the calendar year;
- a comparison of current water demand with the available water supplies; and
- a discussion of water conservation requirements and other long-term supply programs needed to meet Zone 7 M&I water demands for single-dry and multiple-dry year conditions, as specified in Zone 7's UWMP.

As described above, the annual review covers near-term planning of water supplies over the upcoming five years. Furthermore, as part of its contingency planning, Zone 7 factors into its *Annual Operational Plan* the possibility of a dry or critically dry year occurring within the current calendar year with consequent reductions in SWP deliveries. Long-term water supply planning (over twenty years) is described in **Chapter 7**, which essentially covers water demand conditions through build-out of Zone 7's service area. This chapter is focused on staged responses to a water shortage, such as a drought that occurs over a period of time, as well as catastrophic supply interruptions that occur suddenly.

Note that Zone 7's 2010 Water Shortage Contingency Plan was adopted by the Zone 7 Board in 2010 as part of the 2010 UWMP. This Water Shortage Contingency Plan supersedes that document.

8.1 STAGES OF ACTION

In response to the lessons learned from the recent drought, Zone 7 has modified the water shortage stages previously presented in the 2010 UWMP. Working with the retailers, Zone 7 has established four stages of action for the purposes of water supply shortage contingency planning, ranging from minimal shortage to critical shortage. Stage 4, critical shortage, includes a 50% water shortage as required by DWR. **Table 8-1** describes the demand reduction targets and water supply conditions associated with each stage. A water



shortage stage requires formal declaration by the Zone 7 Board; **Appendix C** presents an example of a resolution for such a declaration.

Table 8-1. Water Shortage Stages, Demand Reduction Targets, and Water Supply Conditions
[DWR Table 8-1]

STAGES	DEMAND REDUCTION TARGETS ⁺	WATER SUPPLY CONDITIONS
1 Minimal Shortage	Up to 20% (Voluntary)	Specific events (e.g., sequential low SWP allocations, low storage levels) lead to a reasonable probability that, <i>in the next few years</i> , Zone 7 water supplies may not be sufficient to meet the projected normal water demands* from the Retailers and/or water supply storage may need to be replenished to protect against future shortages (e.g., during drought recovery). This may also be triggered by an Executive Order from the Governor due to state-level conditions.
2 Moderate Shortage	Up to 20% (Mandatory)	Specific events (e.g., sequential low SWP allocations, low storage levels) lead to a reasonable probability that, <i>in the current or upcoming year</i> , Zone 7 water supplies may not be sufficient to meet the projected normal water demands* from the Retailers. The Zone 7 Board will consider the findings from the Annual Sustainability Report in deciding whether to declare voluntary or mandatory reductions (Stage 1 vs Stage 2). This stage may also be independently triggered by an emergency (e.g., earthquake) or an Executive Order from the Governor due to state-level conditions.
3 Severe Shortage	Up to 35% (Mandatory)	Specific events (e.g., catastrophic loss of the Delta/South Bay Aqueduct, historically low SWP allocation and historically low storage levels) lead to a reasonable conclusion that, <i>in the current year</i> , Zone 7 water supplies will not be sufficient to meet the projected normal water demands* from the Retailers, requiring a demand reduction from 21% to 35%. This stage may also be independently triggered by an emergency (e.g., earthquake) or an Executive Order from the Governor due to state-level conditions.
4 Critical Shortage	>35% (Mandatory)	Specific events (e.g., catastrophic loss of the Delta/ South Bay Aqueduct, sequential historically low SWP allocation and historically low storage levels) lead to a reasonable conclusion that, <i>in the current year</i> , Zone 7 water supplies will not be sufficient to meet the projected normal water demands from the Retailers requiring greater than 35% demand reduction. This is a critical condition in which indoor water use may need to be curtailed and demands may need to be reduced to health and safety requirements. This stage may also be independently triggered by an emergency (e.g., earthquake) or an Executive Order from the Governor due to state-level conditions.

*As documented in the Annual Sustainability Report, which provides a five-year outlook of water supply conditions. This report is typically presented to the Zone 7 Board in April, allowing the report to account for winter/spring conditions of the current water year. +“Supply reduction” is more appropriately interpreted as “demand reduction” by Zone 7. This ties the water supply conditions (as described in the narrative) to anticipated water shortages and need for demand reduction. Stage 4 includes 50% water shortage.

Table 8-2 describes the actions associated with each stage. Since Zone 7 operates as a wholesale water agency, it has not adopted ordinances that set or enforce consumption limits at the customer level (e.g., at the household level). As a result, this contingency plan does not include per capita allotment, penalties, or customer incentives for conservation for any customer sector. The development of such mechanisms is left to the authority of the Retailers.

Table 8-2. Water Shortage Stages and Associated Actions

STAGES	ACTIONS
<p>1 Minimal Shortage</p>	<ul style="list-style-type: none"> - Zone 7 Board declaration based on findings from the Annual Sustainability Report to determine voluntary vs mandatory reductions (Stage 1 vs Stage 2). - Public outreach to support voluntary conservation. - Retailers asked to voluntarily reduce demands up to 20%.
<p>2 Moderate Shortage</p>	<ul style="list-style-type: none"> - Zone 7 Board declaration based on findings from the Annual Sustainability Report to determine voluntary vs mandatory reductions (Stage 1 vs Stage 2), and Retailers required to reduce demands accordingly up to 20%. - Water Shortage Surcharge may be implemented as determined by the Board. - Expanded public outreach to support conservation. - Specific practices may be prohibited as determined by the Board.
<p>3 Severe Shortage</p>	<ul style="list-style-type: none"> - Zone 7 Board declaration based on findings from the Annual Sustainability Report with mandatory demand reduction between 20% and up to 35% and Retailers asked to reduce demands accordingly. - Water Shortage Surcharge may be implemented as determined by the Board. - Intensified public outreach to support conservation. - Specific practices are prohibited as determined by the Board.
<p>4 Critical Shortage</p>	<ul style="list-style-type: none"> - Zone 7 Board declaration based on findings from the Annual Sustainability Report with mandatory demand reduction greater than 35% and Retailers asked to reduce demands accordingly. - Water Shortage Surcharge may be implemented as determined by the Board. - Intensified public outreach to support conservation. - Specific practices are prohibited as determined by the Board.

8.2 CONSUMPTION REDUCTION METHODS BY AGENCIES

As described above, Zone 7 has the authority to ask Retailers to reduce demands when there is insufficient supply available.



Zone 7 will maximize use of groundwater from the Main Basin to meet demands while managing levels such that historic lows are not reached. Zone 7 will also make use of available water from Lake Del Valle, including local water and SWP water. As during the current drought, Zone 7 will work with DWR, other SWP contractors, and banking partners to maintain access to stored water in groundwater banks in Kern County. Zone 7 is also in the process of planning an intertie with another agency, which could allow wheeling of transfer or SWP water during an emergency or drought. Finally, Zone 7 is working with other Bay Area agencies through the Bay Area Regional Reliability partnership to bolster regional water supply through various strategies, including construction of such interties (see **Section 7.4**).

8.3 DETERMINING REDUCTIONS

The UWMP Act requires a mechanism for determining actual reductions in water use in response to conservation measures implemented under this Water Shortage Contingency Plan.

As previously noted, Zone 7 has not adopted ordinances that set or enforce consumption limits at the customer level (e.g., at the household level). However, Zone 7 is committed to working with and supporting the Retailers in the implementation of their Water Shortage Contingency Plans.

Zone 7 staff continuously monitors water production rates and water deliveries at the turnouts to Retailers. Records of total water volumes provided to each retailer are prepared daily. These monitoring systems assist Zone 7 and the Retailers in evaluating whether reduction targets are being met in case of drought or other emergencies.

8.4 REVENUE AND EXPENDITURE IMPACTS

The UWMP, per California Water Code Section 10632 (a)(7), requires urban water suppliers to analyze the impacts of a water shortage on revenues and to propose measures to overcome those impacts, such as the development/use of reserves and rate adjustments.

Zone 7 anticipates revenue losses and increased expenses during the potential water shortages described in this plan. Revenue losses result from lower volume of water sales due to conservation and/or lower amounts of water supply available to sell. Increased expenses can include supplemental water supply purchases, drilling of new wells to increase groundwater production, higher water transfer costs, etc. Conservation directly affects Zone 7's revenue stability as approximately 100% of Zone 7's revenue is recovered through variable or consumption-based rates, even though the majority of Zone 7's costs are fixed. Zone 7 prepares for these events through prudent financial planning and the establishment of reserves to offset revenue losses, smooth rates, and fund capital improvement projects. A water shortage surcharge may also be used to address revenue impacts.

8.4.1 Drought Rate Structures and Surcharges

In the event that a declared water shortage stage generates a reduction in water usage and corresponding sales, Zone 7 will use reserves and water shortage surcharges to maintain fiscal health. Reserves will cover a percentage of the revenue loss and the remainder of loss not covered through reserves will be generated through a water shortage surcharge in accordance with **Table 8-3** below. The Zone 7 Board will determine when such a surcharge is necessary.

Table 8-3. Water Shortage Surcharges

STAGES	DEMAND REDUCTION TARGETS	WATER SHORTAGE SURCHARGES (per Hundred Cubic Feet [CCF])
1 Minimal Shortage	Up to 20% (Voluntary)	N/A (Use of Reserves)
2 Moderate Shortage	Up to 20% (Mandatory)	\$0.35
3 Severe Shortage	Up to 35% (Mandatory)	\$0.75
4 Critical Shortage	>35% (Mandatory)	\$1.40

A water shortage surcharge adopted by the Zone 7 Board becomes effective on the first day of the month following thirty days after adoption. The adopted water shortage surcharge will sunset after six months, unless extended or modified by action of the Zone 7 Board. A sample Zone 7 Board resolution is included in **Appendix D** for the implementation of a water shortage surcharge.

8.4.2 Use of Financial Reserves

In 2013, the Zone 7 Board adopted an updated interim reserve policy establishing four reserves within the Water Enterprise fund, two of which apply directly to water supply contingency planning. The Drought Contingency Reserve is designed to supplement water sales losses resulting from drought conditions and the Rate Stabilization Reserve tempers the need for significant rate increases, drawing down on the reserve to smooth rate increases.



During the current drought, Zone 7's Retailers have been required to meet mandatory conservation as stated in the Governor's Executive Order B-29-15 issued on April 1, 2015. This followed several calls for voluntary conservation by the Governor, starting with the State of Emergency Proclamation on January 17, 2014. The April 2015 Executive Order set mandatory conservation goals for each retailer throughout the State to achieve an overall statewide 25% reduction in water usage through February 2016. Executive Order B-36-15, which was issued on November 13, 2015, extends conservation restrictions until October 31, 2016. Zone 7's Retailers have been very successful in implementing conservation, and achieved approximately 40% conservation in 2015. As a result of voluntary and mandated conservation efforts, Zone 7 reduced reserves by \$16M within the Water Enterprise Fund during Fiscal Year (FY) 2014-2015.

The current drought provides an example of the financial impacts of water shortages on Zone 7 and the associated use of financial reserves. Moving forward, a combination of rate increase, water shortage surcharge, and the use of reserves is planned until "new normal" demand patterns can be established—the revised demand patterns reflecting any permanent conservation impacts due to the current drought and SBX7-7 (20% by 2020). Use of reserves shall be authorized by the Zone 7 Board during the budget, rate-setting, and declaration of a water shortage stage to address decreased water sales. As of June 2015, there are no funds available in the Drought Contingency Reserve. The Rate Stabilization Reserve has a balance of \$9M and will continue to be used through FY 2018-2019. Eventual replenishment of these reserves will continue to be discussed by the Zone 7 Board.

8.4.3 Other Measures

Zone 7 maintains a practice of annually reviewing its Capital Improvement Program (CIP) and re-prioritizing projects as needed due to changing needs, lack of resources and/or funding. In some cases, projects may be accelerated or deferred. For example, in 2014, Zone 7 accelerated the construction of a new well and a pipeline in order to better meet water demands during the drought.

Zone 7 will continue to evaluate its CIP and pursue grant opportunities where possible to meet demands and overcome impacts to revenue and expenditures.

8.5 **ADOPTION RESOLUTION**

This 2015 UWMP, including the Water Shortage Contingency Plan presented in this chapter, was adopted by the Zone 7 Board under Resolution No. 16-122 (**Appendix E**) on March 16, 2016 in accordance with California Water Code 10632 (a)(8). However, the Water Shortage Contingency Plan is considered a stand-alone document, and could be modified separately from the 2015 UWMP in the future, if necessary.

8.6 **CATASTROPHIC WATER SUPPLY INTERRUPTION**

A catastrophic water supply interruption due to a regional power outage, an earthquake, or other disaster would likely trigger Stage 3 or Stage 4, as described in **Section 8.1**.



Zone 7 has prepared an Emergency Operations Plan that deals with a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster. Zone 7 also has an Emergency Operations Center (EOC) and EOC Staff made up of personnel representing different skills and disciplines within Zone 7. The EOC Staff would respond in the event of a natural or man-made emergency.

Even if there were a complete interruption of deliveries from the SBA, Zone 7 would still be able to meet its current water demands with existing facilities during non-summer months using groundwater and water stored in Lake Del Valle. Deliveries to Retailers would be reduced as necessary during the summer months. The retailers' Water Shortage Contingency Plans and the associated voluntary and mandatory water consumption reductions would go into effect. Under this scenario, untreated water customers reliant on the SBA would receive no water.

Zone 7 has emergency generators (both portable and dedicated) at strategic locations in preparation for any regional power outage. These generators would allow both the Del Valle Water Treatment Plant and the Patterson Pass Water Treatment Plant to continue operating even under a power outage. Assuming no interruptions in surface water supply, Zone 7 would be able to provide service to all treated water contractors. If warranted by demand, Zone 7 would also operate the wells, which have either a dedicated generator in place (Mocho 1) or have the necessary hook-ups installed for connection to a portable generator. If the power failure were to occur during high demand season (i.e., summer months), Zone 7 may be unable to meet hourly peak demands throughout the transmission system.

The 2009 break in the Del Valle Branch pipeline, which is owned and operated by DWR as part of the SWP and delivers water from Lake Del Valle to the SBA, is a good illustration of how Zone 7 has handled catastrophic interruption in water supply from the SWP during non-summer months. For the third year in a row, expansion work was being performed on the portion of the SBA between the South Bay Pumping Plant and Del Valle Check 7, interrupting the delivery of water from the Delta. This



Damage to the Del Valle Branch Pipeline in December 2009

This shutdown was scheduled for mid-November through mid-January, when demands are lower and water could be released from Lake Del Valle. In late December 2009, sudden failure of the Del Valle Branch pipeline near the surge tank resulted in the complete cut-off of supply from Lake Del Valle within hours. Combined with the SBA repairs, this essentially resulted in 100% supply loss from the SWP. In response, Zone 7 switched to 100% groundwater supply until the planned SBA outage ended in mid-January 2010; Zone 7 continued to rely on a combination of Delta-derived SWP water and groundwater until the Del Valle Branch pipeline was back online in mid-April 2010. During this time, no

reductions in water supply to the Retailers were necessary, and Zone 7 coordinated with the Retailers on a regular basis.

8.7 MINIMUM WATER SUPPLY FOR NEXT THREE YEARS

An estimate of the minimum water supply available during the next three years based on the driest three-year historic sequence for Zone 7's water supplies is presented in **Table 8-4**. The amounts shown in Table 8-4 are based on the multiple-dry year scenarios evaluated in **Section 7.3**, but revised to account for currently available supplies and storage for 2016.

Table 8-4. Three-Year Estimated Minimum Water Supply (Acre-Feet Annually)
[DWR Table 8-4 W]

Year	2016	2017	2018
Minimum Available Water Supply (Acre-Feet)	60,000	48,000	51,000

9 DEMAND MANAGEMENT MEASURES

The purpose of this chapter is to provide a comprehensive description of the water conservation programs that Zone 7 has implemented, is currently implementing, and plans to implement in order to meet water use reduction targets—set forth in SBX7-7—in the Tri-Valley area.

Zone 7 is a member of the California Urban Water Conservation Council (CUWCC) and is in full compliance with the CUWCC's Memorandum of Understanding; as such, Zone 7 is opting to include a copy of the 2014 CUWCC Best Management Practice (BMP) Wholesale Coverage Report, which certifies that Zone 7 is “on track” with the applicable BMPs, in **Appendix F** to address the requirements of this chapter.

As a wholesaler, Zone 7 provides regional coordination of conservation programs in the Tri-Valley area. For detailed descriptions of the individual conservation programs implemented by the Retailers, see the 2015 UWMPs of the City of Livermore, City of Pleasanton, Cal Water Service Company – Livermore District, and Dublin San Ramon Services District.



10 PLAN ADOPTION, SUBMITTAL & IMPLEMENTATION

This chapter describes the public hearing and adoption process, the submittal to the Department of Water Resources, public access to the 2015 UWMP, and the process for amending this document.

10.1 INCLUSION OF ALL 2015 DATA

This UWMP includes all actual data for calendar year 2015 as required.

10.2 NOTICE OF PUBLIC HEARING

As required, Zone 7 held a public hearing prior to adopting the 2015 UWMP. Zone 7 provided notifications (**Appendix A**) to the cities and counties listed in **Table 10-1** regarding the UWMP review on January 15, 2016, which is at least 60 days prior to the public hearing on March 16, 2016; other agencies were also notified as listed in **Table 2-1**. The public hearing was also noticed in three local newspapers (**Appendix A**), including the time and place of the public hearing, as specified in Government Code 6066. In the newspaper ads, the public was also informed of the availability of the Public Draft 2015 UWMP for review. Two ads were published in each newspaper over two consecutive weeks (February 11/12 and 18/19, 2016).

Table 10-1. Notification to Cities and Counties and Other Agencies
[DWR Table 10-1 W]

	60-Day Notice	Notice of Public Hearing
CITY		
Dublin	✓	✓
Livermore	✓	✓
Pleasanton	✓	✓
San Ramon	✓	✓
COUNTY		
Alameda	✓	✓
Contra Costa	✓	✓

10.3 PUBLIC HEARING AND ADOPTION

Zone 7 conducted a public hearing and adoption hearing on March 16, 2016, when the Zone 7 Board received and considered input from the public before adopting the 2015 UWMP. The adoption resolution (Resolution No. 16-122 is included in **Appendix E**.



10.4 PLAN SUBMITTAL

This 2015 UWMP, along with the required data tables, was electronically submitted to DWR in accordance with its requirements.

10.5 PUBLIC AVAILABILITY

The California Urban Water Management Planning Act (UWMP Act) requires each water agency to encourage the active involvement of the public in the development of the UWMP. Zone 7 sought public participation by allowing any interested member of the general community in the service area to have access to the Draft 2015 UWMP starting in early February 2016. The Draft 2015 UWMP was made available for public inspection at local libraries (as listed in **Table 2-1**), as well as on Zone 7's website. In addition, Zone 7 had a hard copy of the Draft 2015 UWMP available for public review at the Zone 7 Administrative Office in Livermore, California. Copies were also sent for review and comment to all Zone 7 Retailers as described in **Section 2.4.1**. Furthermore, the development of the 2015 UWMP was presented to the Zone 7 Board's Water Resources Committee on November 9, 2015 and January 12, 2016; both meetings were open to the public.

The adopted 2015 UWMP is posted on the Zone 7 website for public review at any time. A hard copy is also available for public review at the Zone 7 Administrative Office in Livermore, California during business hours.

On April 1, 2016, within thirty days of adoption on March 16, 2016, Zone 7 submitted copies of this 2015 UWMP to the California State Library and the cities listed in **Table 10-1**, as well as Alameda County.

10.6 PLAN IMPLEMENTATION

Water supply management is one of Zone 7's core functions. As such, Zone 7 is continuously evaluating how best to improve Zone 7's water supply conditions and implementing planned projects to achieve water supply goals. Every five years, the UWMP encapsulates the latest results of Zone 7's water supply planning efforts.

Zone 7 will continue to coordinate with the Retailers on water supply planning as described in previous sections, including evaluation of the feasibility of expanding use of recycled water as described in **Sections 6.7.2** and **6.8.3**. Zone 7 will also continue to work with the Department of Water Resources on the California WaterFix and with the Bay Area Regional Desalination Project partners on desalination in eastern Contra Costa County to determine the costs and benefits of these options and to determine how best to overcome any remaining issues. Zone 7's participation in the Bay Area Regional Reliability (BARR) partnership, and the upcoming development of the BARR Drought Contingency Plan, will support Zone 7 efforts to secure water supply reliability for the Tri-Valley area. Conservation will continue to play a big role in water supply reliability, and Zone 7's conservation program and membership in the California Urban Water Conservation Council will help ensure implementation of demand management measures.



Water supply and facility projects that are deemed critical to water supply reliability are incorporated in Zone 7's Capital Improvement Program (CIP), which is updated every two years. The CIP reflects Zone 7's implementation priorities over the upcoming ten years.

10.7 AMENDING AN ADOPTED UWMP

If Zone 7 amends this 2015 UWMP, the required notification, public hearing, adoption, and submittal process will be followed for the amended plan.



Appendix A

Public Notices

Brewer, Boni

From: Brewer, Boni
Sent: Friday, January 15, 2016 1:14 PM
To: 'lolive@cityofpleasantonca.gov'; kyurchak@cityofpleasantonca.gov;
'dggreenwood@cityoflivermore.net'; 'hfling@cityoflivermore.net';
'mcintyre@dsrsd.com'; 'archer@dsrsd.com'; fvallejo; 'chris.foss@dublin.ca.gov';
albert.lopez@acgov.org; 'rbartlett@sanramon.ca.gov';
'ryan.hernandez@dcd.cccounty.us'; 'jami.napier@cob.cccounty.us'; 'weir@lavwma.com';
info@lavwma.com
Cc: Mahoney, Carol; Flores, Amparo
Subject: Urban Water Management Plan notice



NOTICE OF REVIEW & POTENTIAL AMENDMENTS
Urban Water Management Plan
January 15, 2016

Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

This is to notify cities and counties within which Zone 7 provides water that on March 16, 2016, the Zone 7 Board of Directors plans to conduct a public meeting on, and consider adoption of, the Agency's draft Urban Water Management Plan as required under section 10610 et seq. of the California Water Code. The hearing will be part of a regularly scheduled Board meeting to begin at 7 p.m. at Zone 7 Administrative Offices, 100 North Canyons Parkway, Livermore.

Zone 7 plans to make a copy of the Draft Urban Water Management Plan available for download from its website, www.zone7water.com, on or around February 3, 2016. Written comments on the draft Urban Water Management Plan prior to the public hearing can be provided to Amparo Flores at aflores@zone7water.com, by 5 p.m. on February 26, 2016; the public is also welcome to provide comments at the public hearing on March 16, 2016.

If you would prefer a copy to be mailed to you, please contact Boni Brewer, Communications Specialist, at (925) 454-5015.

LEGAL NOTICES/CLASSIFIEDS

www.independentnews.com



name listed above.
Signature of Registrants
:s/: Nancy Jane Mueller
This statement was filed with the County Clerk of Alameda on January 8, 2016. Expires January 8, 2021.
The Independent Legal No. 3904. Published February 4, 11, 18, 25, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 514156

The following person(s) doing business as: Valley Premier Locations, 2487 Bay Meadows Circle, Pleasanton, CA 94566, is hereby registered by the following owner(s): Susan Ann Valley, 2487 Bay Meadows Circle, Pleasanton, CA 94566
This business is conducted by an individual
The registrant has not yet begun to transact business using the fictitious business name listed above.

Signature of Registrants
:s/: Susan Ann Valley
This statement was filed with the County Clerk of Alameda on February 2, 2016. Expires February 2, 2021.
The Independent Legal No. 3905. Published February 11, 18, 25, March 3, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 514224

The following person(s) doing business as: DMK & Company, 469 Kensington Common, Livermore, CA 94551, is hereby registered by the following owner(s): Dena M. Falkenstein, 469 Kensington Common, Livermore, CA 94551
This business is conducted by an individual
The registrant has not yet begun to transact business using the fictitious business name listed above.

Signature of Registrants
:s/: Tracy L. Schmidt
This statement was filed with the County Clerk of Alameda on January 26, 2016. Expires

:s/: Dena M. Falkenstein
This statement was filed with the County Clerk of Alameda on February 3, 2021. The Independent Legal No. 3906. Published February 11, 18, 25, March 3, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 513358

The following person(s) doing business as: Barb Wired Designs, 1421 Hopyard Road, Pleasanton, CA 94566, is hereby registered by the following owner(s): Barbara Santos, 1421 Hopyard Road, Pleasanton, CA 94566
This business is conducted by an individual
The registrant began to transact business using the fictitious business name listed above on October 1, 2008.

Signature of Registrants
:s/: Barbara Santos, Owner
This statement was filed with the County Clerk of Alameda on January 11, 2016. Expires January 11, 2021.

The Independent Legal No. 3907. Published February 11, 18, 25, March 3, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 513852

The following person(s) doing business as: Pampered Tail Waggers Pet Care, 3136 Bridle Ct., Livermore, CA 94551, is hereby registered by the following owner(s): Tracy L. Schmidt, 3136 Bridle Ct., Livermore, CA 94551
This business is conducted by an individual
The registrant has not yet begun to transact business using the fictitious business name listed above.

Signature of Registrants
:s/: Tracy L. Schmidt
This statement was filed with the County Clerk of Alameda on January 26, 2016. Expires

January 26, 2021.
The Independent Legal No. 3908. Published February 11, 18, 25, March 3, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 514314-16

The following person(s) doing business as: Home Loan Funding, The Home Mart, Trupro Real Estate Services, 5820 Stoneridge Mall Road, #110-28, Pleasanton, CA 94588, is hereby registered by the following owner(s): Gary Stange, 4103 Stanley Blvd, Pleasanton, CA 94566
This business is conducted by an individual
The registrant began to transact business using the fictitious business name listed above on August 8, 1993.

Signature of Registrants
:s/: Gary Stange
This statement was filed with the County Clerk of Alameda on February 5, 2016. Expires February 5, 2021.

The Independent Legal No. 3909. Published February 11, 18, 25, March 3, 2016.

NOTICE OF PUBLIC HEARING AND PUBLIC REVIEW PERIOD

Urban Water Management Plan

Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban

Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

As required under Section 10642 et seq. of the California Water Code, this is to notify the public that at its meeting to begin at 7 p.m. on March 16, 2016, the Zone 7 Water Agency Board of Directors plans to conduct a public hearing on, and consider adoption of, the Agency's Draft 2015 Urban Water Management Plan. The hearing will be held at Zone 7 Administrative Offices, 100 North Canyons Parkway, Livermore.

A copy of the Draft 2015 Urban Water Management Plan is available for public review at the Zone 7 Water Agency office at 100 North Canyons Parkway in Livermore, on the website, www.zone7water.com, and at the following local libraries:

Alameda County Public Library in Dublin
200 Civic Plaza, Dublin

Livermore Public Library
1188 South Livermore Ave., Livermore

Pleasanton Public Library
400 Old Bernal Ave., Pleasanton

Public comment will be welcome at the hearing and you are encouraged to comment before then, if possible, by contacting Amparo Flores at aflores@zone7water.com. If you have any questions regarding this notice, contact Boni Brewer, Communication

Specialist, at (925) 454-5015.

ANIMALS

2) CATS/ DOGS

Everlasting Connection Having Only...LOVE ECHOING back from our HEARTS... JASON, JANET and the Boys, JAKOB & JAXON.

ADOPT A DOG OR CAT, for adoption information contact Valley Humane Society at (925)426-8656.

ADOPT a new best friend: TVAR, the Tri-Valley Animal Rescue, offers animals for adoption every Saturday and Sunday, excluding most holidays. On Saturdays from 9:30 am to 1:00 pm, dogs are available at the Pleasanton Farmers Market at W. Angela and First Streets. Two locations will showcase cats only: Petsmart in Dublin from 12:00 to 4:00 and the Pet Extreme in Livermore from 12:00 to 4:00. On Sundays, cats are available at Petsmart in Dublin from 1:00 to 4:00, and Pet Extreme in Livermore from 12:00 to 4:00. For more information, call Terry at (925)487-7279 or visit our website at www.tvr.org

FERAL CAT FOUNDATION Cat & kitten adoptions now at the new Livermore Petco on Saturdays from 10:00AM to 2:30PM. We have many adorable, tame kittens that have been tested for FIV & FELV, altered & vaccinated. We also have adult cats & ranch cats for adoption.

EMPLOYMENT

BE WARY of out of area

companies. Check with the local Better Business Bureau before you send money or fees. Read and understand your contracts before you sign. Shop around for rates.

TO PLACE A CLASSIFIED AD OR LEGAL NOTICE IN THE INDEPENDENT
Call (925)243-8000

MERCHANDISE

18) FREE SECTION

FREE WOOD
Pine & Oak
You cut it & haul it
Mines Road
(408)897-3156

FREE MAGAZINES
Smithsonian
National Geographic
Time
All like new
(408)897-3156

FREE
55-gallon FISH TANK
With everything
No fish
Please call if interested
(925)447-3126

27) LOST/ FOUND

FOUND
on Humboldt Way
Livermore
Portfolio of Greek music
CD's
Please call
(925)447-3857

ANNOUNCEMENTS

155) NOTICES

"NOTICE TO READERS: California law requires that contractors taking jobs that total \$500 or more (labor and/or materials) be licensed by the Contractors State License Board. State law also requires that contractors include their license numbers on all advertising. Check your contractor's status at www.cslb.ca.gov or (800)321-CSLB (2752). Unlicensed persons taking jobs less than \$500 must state in their advertisements that they are not licensed by the Contractors State License Board."

REAL ESTATE

Inland Valley Publishing Co.
Client Code:04126-00001
Re: Legal Notice for Classified Ads
The Federal Fair Housing Act, Title VII of the Civil Rights Act of 1964, and state law prohibit advertisements for housing and employment that contain any preference, limitation or discrimination based on protected classes, including race, color, religion, sex, handicap, marital status or national origin. IVPC does not knowingly accept any advertisements that are in violation of the law.

Commercial Cable Technician
Immediate Openings for Installers! Will train. \$5,000 hiring bonus. Full benefits offered, must have a clean DL, min 21 yrs old. Bring current DMV rpt when applying. Call (916) 215-9309.

TO PLACE A LEGAL NOTICE OR CLASSIFIED AD IN THE INDEPENDENT, CALL 925-243-8000

Professionals Choice Real Estate Directory
Local guide to the Valley's Leading Real Estate Professionals & Services

<p>Mike Fracisco (925) 998-8131 Residential • Commercial • Property Mgmt Fracisco Realty & Investments www.MikeFracisco.com CalBRE #01378428</p>	<p>Top Producing Livermore Realtor since 1999 www.IvyLoGerfo.com (925) 998-5312 Ivy REALTOR® RE/MAX Accord</p>
<p>Cindy Williams Gene Williams REALTOR®, CRS & GRI REALTOR® (925) 918-2045 (510) 390-0325 www.WilliamsReGroup.com Over Two Decades of Experience!</p>	<p>Sandee Utterback (925) 487-0524 WWW.SANDEEU.COM Specializing in Livermore's Finest Homes</p>
<p>Gail Henderson BROKER ASSOCIATE, MPA COMMERCIAL • RESIDENTIAL (925) 980-5648 www.gailhenderson.com Cal BRE #01709171</p>	<p>SABRINA BASCOM (925) 337-0194 sabrina.bascom@bhghome.com Cal BRE#01849451</p>
<p>THE PAM COLE TEAM Your Real Estate Resource Pam Cole CalBRE#01291147 (925) 337-2461 pam@pamcole4homes.com www.PamCole4Homes.com</p>	<p>DONNA GARRISON SUSAN SCHALL 925.980.0273 925.519.8226 Search Tri-Valley Homes for Sale at FabulousProperties.net Venture Sotheby's</p>
<p>Cindy Greci Dominic Greci (925) 784-1243 (925) 525-0864 www.GreciGroup.com</p>	<p>Rebecca L. Evans Team Evans Excellence in Real Estate 925.784.2870 www.rebeccalevans.com Livermore Valley Expert CalBRE # 01498025</p>
<p>KRISTY PEIXOTO AND COMPANY Estates, Ranches & Land Realtors (925) 251-2536 kpeixoto@rockcliff.com Estatesandranches.com CalBRE #01256255</p>	<p>Kelly Franco Luxury Real Estate 925.200.9979 kelly@kellyfranco.com www.kellyfranco.com BRE Lic#01476710</p>
<p>MICHELLE ELLIOTT Mortgage Banker National Achiever 925-212-6907 michelle.d.elliott@chase.com homeloans.chase.com/michelle.d.elliott NMLS ID: 694685</p>	<p>Yvette Larson REALTOR (925) 667-0055 doors2dreams.com RE/MAX Accord CalBRE#0171056</p>
<p>RYAN ANDERSON (925) 371-RYAN (7926) www.371RYAN.com ryan@371ryan.com DRE#01254257-4257</p>	<p>Golden Pacific Home Loans Lisette Bridges MORTGAGE CONSULTANT (925) 998-2964 HomeLoansbyBridges@gmail.com LoansbyBridges.com NMLS #285652 and BRE #00907443 Se Habla Espanol</p>
<p>371-RYAN Real Estate Sales</p>	<p>PREFERRED BROKERS Wanda Thompson 925.858.9128 411 So L St, Suite E, Livermore BRE#00983781 / NMLS#244633</p>

Self employed? Rate too high, paying PMI? Home purchase? Low FICO score? No down payment? CALL US!

ALAIN PINEL REALTORS

<p>Sally Blaze REALTOR® 925.998.1284 sblaze@apr.com apr.com/sblaze</p>	<p>Karen Crowson REALTOR® 925.784.6208 kcrowson@apr.com KarenCrowsonHomes.com</p>
<p>Cherie Doyle REALTOR® 925.580.2552 cdoyle@apr.com apr.com/cdoyle</p>	<p>Leslie Fought REALTOR® 925.784.7979 leslie@apr.com LeslieFought.com</p>
<p>Linda Futral Broker/REALTOR® 925.980.3561 linda@apr.com LindaFutral.com</p>	<p>Dan Gamache REALTOR® 925.918.0332 dangamache@apr.com TriValleyHomeSearch.com</p>
<p>Kat Gaskins REALTOR® 925.963.7940 kgaskins@apr.com KatGaskins.com</p>	<p>Marti Gilbert REALTOR® Blaise Lofland Real Estate Group 925.216.4063 mgilbert@apr.com</p>
<p>Linda Goveia REALTOR® 925.989.9811 lgoveia@apr.com apr.com/lgoveia</p>	<p>Gail Henneberry REALTOR® 925.980.1900 ghenneberry@apr.com apr.com/ghenneberry</p>
<p>Gina Huggins Broker Associate 925.640.3762 ghuggins@apr.com apr.com/ghuggins</p>	<p>Kelly King REALTOR® 510.714.7231 lkking@apr.com apr.com/lkking</p>
<p>Mark Kotch REALTOR® 925.989.1581 markkotch@apr.com MarkKotch.com</p>	<p>Jo Ann Luisi REALTOR® 925.321.6104 jluisi@apr.com JoAnnLuisi.com</p>
<p>Tim McGuire REALTOR® 925.463.SOLD tmcguire@apr.com TimMcGuire.net</p>	<p>Maureen Nokes Broker Associate 925.577.2700 mnokes@apr.com apr.com/mnokes</p>
<p>Kim Ott REALTOR® 510.220.0703 kim@kimott.com KimOtt.com</p>	<p>Diane Smugeresky REALTOR® 925.872.1276 diane@apr.com HomeBuyerSearch.com</p>
<p>Judy Turner REALTOR® 925.518.3115 jturner@apr.com apr.com/jturner</p>	<p>Pleasanton/Livermore Valley /alainpinelrealtors @alainpinelrealtors</p>

apr.com

To Place Your Ad, Call Your Account Representative At (925) 243-8001

objections with the court before the hearing. Your appearance may be in person or by your attorney.

If you are a creditor or a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either (1) **four months** from the date of first issuance of letters to a general personal representative, as defined in section 58(b) of the California Probate Code, or (2) **60 days** from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.

Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.

You may examine the file kept by the court. If you are a person interested in the estate, you may file with the court a Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.

Petitioner:
Lisa Marie Maneatis (Davis)
1423 Nilda Ave.
Mountain View, CA 94040
650-823-2297

Gregory Phillip Davis
1334 Chelsea Way
Livermore, CA 94550
TVH#5673615
Feb. 18, 27, 2016

NOTICE OF PUBLIC HEARING AND PUBLIC REVIEW PERIOD Urban Water Management Plan

Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

As required under Section 10642 et seq. of the California Water Code, this is to notify the public that at its meeting to begin at 7 p.m. on March 16, 2016, the Zone 7 Water Agency Board of Directors plans to conduct a public hearing on, and consider adoption of, the Agency's Draft 2015 Urban Water Management Plan. The hearing will be held at Zone 7 Administrative Offices, 100 North Canyons Parkway, Livermore.

A copy of the Draft 2015 Urban Water Management Plan is available for public review at the Zone 7 Water Agency office at 100 North Canyons Parkway in Livermore, on the website, www.zone7water.com, and at the following local libraries:

Alameda County Public Library in Dublin
200 Civic Plaza, Dublin

Livermore Public Library
1188 South Livermore Ave., Livermore

Pleasanton Public Library
400 Old Bernal Ave., Pleasanton

Public comment will be welcome at the hearing and you are encouraged to comment before then, if possible, by contacting Amparo Flores at aflores@zone7water.com. If you have any questions regarding this notice, contact Boni Brewer, Communication Specialist, at (925) 454-5015.

VT/SRVT #5663606; February 11, 18, 2016

Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.

Attorney for Petitioner
AMBER C. HASKETT, ESQ.
HASKETT LAW FIRM, P.C.
5820 STONERIDE MALL RD #207
PLEASANTON CA 94588
2/18, 2/19, 2/25/16
CNS-2845684#
TRI-VALLEY HERALD
TVH 5670206
Feb. 18, 19, 25, 2016

FILED ASSESSOR RECORDER COUNTY CLERK
Steve J. Bestolarides
February 10, 2016
San Joaquin County
By: Deputy
FILE NO. 2016-016209
FICTITIOUS BUSINESS NAME STATEMENT

The following person (persons) is (are) doing business as:
Koundinya Mudalodu Foundation
164 W. Invitar Lane
Mountain House, CA 95391

In San Joaquin County, is hereby registered by the following owner(s):
Mudalodu V. Vasudevan
164 W. Invitar Lane
Mountain House, CA 95391
Omshee Vasudevan
197 W. Invitar Lane
Mountain House, CA 95391

This business is conducted by an unincorporated association other than a partnership.

The registrant commenced to transact business under the fictitious business name or names listed above on N/A
/s/ Mudalodu Vasudevan, Director
This statement was

Professions Code Sections 17900-17930. The name of the business: **NEWARK PET CLINIC** located at 3832 PERALTA BLVD. in FREMONT, CA 94541, Alameda County is hereby registered by the following owner(s):
EASTBAY VETERINARY ASSOCIATES INC.
2630 S. TRACY BLVD. #110
TRACY, CA 95376

This business is conducted by a corporation
/s/ Baltej Singh
This statement was filed with the County Clerk of Alameda County on date indicated by file stamp above.

The registrant has not yet begun to transact business under the fictitious business name listed above.
Expires FEB 16, 2021
PT/VT#5673587
Feb 18, 25;
Mar 3, 10, 2016

FILED Jan 13, 2016
Steve J. Bestolarides
Recorder County Clerk
County of San Joaquin
FILE NO. 2016-004923

FICTITIOUS BUSINESS NAME STATEMENT

The name of the business: **1) MOUNTAIN HOUSE PIZZA COMPANY, 2) MONO PIZZA CO.** located at 231 W. PROSPERIDAD WAY in MOUNTAIN HOUSE, CA 95391. San Joaquin County, is hereby registered by the following owner(s):
LINDSAY STOKES MUNSON VAN KEUREN
231 W. PROSPERIDAD WAY
MOUNTAIN HOUSE, CA 95391
TRAVIS RICHARD VAN KEUREN
231 W. PROSPERIDAD WAY
MOUNTAIN HOUSE, CA 95391

This business is conducted by: A Married Couple
/s/ Lindsay Van Keuren

This statement was filed with the Recorder / County Clerk of San Joaquin County. Business commenced on N/A
Expires JAN 13, 2021
SJH#5660562
Jan 28; Feb 4, 11, 18, 2016

FILED FEB 05, 2016
STEVE MANNING,
County Clerk
ALAMEDA COUNTY
By ---, Deputy
FILE NO. 514283-514284
FICTITIOUS BUSINESS NAME STATEMENT

Pursuant To Business and Professions Code Sections 17900-17930. The name of the business: **1) SFBAY724, 2) SF BAY 724** located at 3736 FALLON ROAD #408 in DUBLIN, CA 94568, Alameda County is hereby registered by the following owner(s):
STAINLESSLUX, INC.
3736 FALLON RD. #408
DUBLIN, CA 94568

This business is conducted by a corporation
/s/ Man Shun Ho
This statement was filed with the County Clerk of Alameda County on date indicated by file stamp above.

The registrant has not yet begun to transact business under the fictitious business name listed above.
Expires FEB 05, 2021
PT/VT#5673732
Feb 18, 25;
Mar 3, 10, 2016

ESCALATA AVE. IN TRACY, CA 95377, San Joaquin County, is hereby registered by the following owner(s):
REBECCA SANTARINA
4116 ESCALATA AVE.
TRACY, CA 95377

This business is conducted by: An Individual
/s/ Rebecca Santarina

This statement was filed with the Recorder / County Clerk of San Joaquin County. Business commenced on 12/22/15
Expires FEB 01, 2021
SJH#5668488
Feb 11, 18, 25;
Mar 3, 2016

FILED Jan 29, 2016
Steve J. Bestolarides
Recorder County Clerk
County of San Joaquin
FILE NO. 2016-011090

FICTITIOUS BUSINESS NAME STATEMENT

The name of the business: **STAVE & STEEL WINE CO.** located at 17000 E. HWY 120 in RIPON, CA 95366, San Joaquin County, is hereby registered by the following owner(s):
THE WINE GROUP LLC
4596 S. TRACY BLVD.
TRACY, CA 95377

This business is conducted by: Limited Liability Company
/s/ David Johnson

This statement was filed with the Recorder / County Clerk of San Joaquin County. Business commenced on N/A
Expires JAN 29, 2021
SJH#5673585
Feb 18, 25;
Mar 3, 10, 2016

Pursuant to the California Self-Service Storage Facility Act, (B&P Code 21700 et seq.) the undersigned will sell at public auction, on **February 29, 2016** personal property including but not limited to furniture, clothing, tools, and/or other household items located at:
Public Storage 20482
3716 Stanley Blvd
Pleasanton, CA 94566-6242

(925)462-0592
Time: 10:30 AM
Stored by the following person (s):
F51 Dan Dumas
Public Storage 22310
3470 Boulder St.
Pleasanton, CA, 94566-4769
(925)846-2896
10:45AM
C122 Althea Tan
Public Storage 24445
2500 Santa Rita Rd.
Pleasanton, CA, 94566-4140
(925) 462-7916
11:00AM
Stored by the following person (s):
A020B Alice Sawdey
A124 Cecilia Jason
C059 stephanie mudd
D051 Cami Lucas

All sales are subject to prior cancellation. Terms, rules and regulations are available at sale.

Dated **February 11, 2016 and February 18, 2016**

by PS Orangeo, Inc., 701 Western Avenue, Glendale, CA 91201, (818) 244-8080, Bond No. 5857632
2/11, 2/18/16
CNS-2842975#
TRI-VALLEY HERALD
TVH 5666067
Feb. 11, 18, 2016

Quick Cash Now!
Clean your Garage & Closets Order Your GARAGE SALE AD TODAY!
1-800-733-3933

existence, priority, and size of outstanding liens that may exist on this property by contacting the county recorder's office or a title insurance company, either of which may charge you a fee for this information. If you consult either of these resources, you should be aware that the same lender may hold more than one mortgage or deed of trust on the property. NOTICE TO PROPERTY OWNER: The sale date shown on this notice of sale may be postponed one or more times by the mortgagee, beneficiary, trustee, or a court, pursuant to Section 2924g of the California Civil Code. The law requires that information about trustee sale postponements be made available to you and to the public, as a courtesy to those not present at the sale. If you wish to learn whether your sale date has been postponed, and, if applicable, the rescheduled time and date for the sale of this property, you may call 916.939.0772 for information regarding the trustee's sale or visit this Internet Web site <http://www.qualityloan.com>, using the file number assigned to this foreclosure by the Trustee: CA-15-688792-AB. Information about postponements that are very short in duration or that occur close in time to the scheduled sale may not immediately be reflected in the telephone information or on the Internet Web site. The best way to verify postponement information is to attend the scheduled sale. The undersigned Trustee disclaims any liability for any incorrectness of the property address or other common designation, if any, shown herein. If no street address or other common designation is shown, directions to the location of the property may be obtained by sending a written request to the beneficiary within 10 days of the date of first publication of this Notice of Sale. If the Trustee is unable to convey title for any reason, the successful bidder's sole and exclusive remedy shall be the return of monies paid to the Trustee, and the successful bidder shall have no further recourse. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled only to a return of the deposit paid. The Purchaser shall have no further recourse against the Mortgagee, or the Mortgagee's Attorney. If you have previously been discharged through bankruptcy, you may have been released of personal liability for this loan in which case this letter is intended to exercise the note holders right's against the real property only. As required by law, you are hereby notified that a negative credit report reflecting on your credit record may be submitted to a credit reporting agency if you fail to fulfill the terms of

by said interest thereon, as provided in said note(s), advances, under the terms of said Deed of Trust, fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. The total amount of the unpaid balance of the obligation secured by the property to be sold and reasonable estimated costs, expenses and advances at the time of the initial publication of the Notice of Sale is \$331,751.73. The beneficiary under said Deed of Trust has deposited all documents evidencing the obligations secured by the Deed of Trust and has declared all sums secured thereby immediately due and payable, and has caused a written Notice of Default and Election to Sell to be executed. The undersigned caused said Notice of Default and Election to Sell to be recorded in the County where the real property is located. NOTICE TO POTENTIAL BIDDERS: If you are considering bidding on this property lien, you should understand that there are risks involved in bidding at a trustee auction. You will be bidding on a lien, not on the property itself. Placing the highest bid at a trustee auction does not automatically entitle you to free and clear ownership of the property. You should also be aware that the lien may be a junior lien. If you are the highest bidder at the auction, you are or may be responsible for paying off all liens senior to the lien being auctioned off, before you can receive clear title to the property. You are encouraged to investigate the existence, priority, and size of outstanding liens that may exist on this property by contacting the county recorder's office or a title insurance company, either of which may charge you a fee for this information. If you consult either of these resources, you should be aware that the same lender may hold more than one mortgage or deed of trust on the property. NOTICE TO PROPERTY OWNER: The sale date shown on this notice of sale may be postponed one or more times by the mortgagee, beneficiary, trustee, or a court, pursuant to Section 2924g of the California Civil Code. The law requires that information about trustee sale postponements be made available to you and to the public, as a courtesy to those not present at the sale. If you wish to learn whether your sale date has been postponed, and, if applicable, the rescheduled time and date for the sale of this property, you may call 916.939.0772 or visit this Internet Web site <http://www.qualityloan.com/propertySearchTerms.aspx>, using the file number assigned to this case CA1500271448. Information about postponements that are very short in dura-

Bulletin Board

115 Announcements

DID YOU KNOW
That Most Loyal Voters read newspapers and nearly 77% also contribute to political organizations. If you are a Political Candidate or Advocate looking to connect with voters and potential contributors, CNPA can help. For free brochure call Cecelia @ 916.288.6011 or cecelia@cnpa.com (CalSCAN)

Pregnant?
Thinking of adoption? Talk with caring agency specializing in matching Birthmothers with Families Nationwide. LIVING EXPENSES PAID. Call 24/7 Abby's One True Gift Adoptions. 866-413-6293. Void in Illinois/New Mexico/Indiana (AAN CAN)

PREGNANT?
Considering adoption? Call us first. Living expenses, housing, medical, and continued support afterwards. Choose adoptive family of your choice. Call 24/7. 1-877-879-4709 (CalSCAN)

130 Classes & Instruction

AIRLINE CAREERS
begin here - Get started by training as FAA certified Aviation Technician. Financial aid for qualified students. Job placement assistance. Call Aviation Institute of Maintenance, 800-725-1563 (AAN CAN)

Accent Reduction Instruction
Accent reduction classes to improve your communication skills. Individual and/or group and corporate instruction taught by speech therapist. WWW.Speakonpar.com

135 Group Activities

Every Business Has a Story
to tell! Get your message out with California's PRMedia Release - the only Press Release Service operated by the press to get press! For more info contact Cecelia @ 916-288-6011 or http://prmediarelease.com/california (CalSCAN)

For Sale

202 Vehicles Wanted

A-1 Donate Your Car
for breast cancer! Help United Breast Foundation education, prevention, and support programs. FAST FREE PICKUP - 24 HR RESPONSE - TAX DEDUCTION 855-403-0215(AAN CAN)

CARS/TRUCKS WANTED
We Buy Like New or Damaged. Running or Not. Get Paid! Free Towing! We're Local! Call For Quote: 1-888-420-3808 (AAN CAN)

Donate Your Car, Truck, Boat
to Heritage for the Blind. FREE 3 Day Vacation, Tax Deductible, Free Towing, All Paperwork Taken Care of. Call 800-731-5042 (Cal-SCAN)

Got an Older Car, Boat
or RV? Do the humane thing. Donate it to the Humane Society. Call 1-800-743-1482 (Cal-SCAN)

Old Porsches
356/911/912 for restoration by hobbyist 1948-1973 Only. Any condition, top \$ paid. (707) 965-9546 (Cal-SCAN)

203 Bicycles

Bikes Wanted
Old 10 speed road bikes wanted any condition. Dale 925 989 1751

245 Miscellaneous

AT&T U-Verse Internet
starting at \$15/month or TV & Internet starting at \$49/month for 12 months with 1-year agreement. Call 1-800-453-0516 to learn more. (Cal-SCAN)

DirecTV
Switch and get a FREE Whole-Home Genie HD/DVR upgrade. Starting at \$19.99/mo. FREE 3 months of HBO, SHOWTIME and STARZ. New Customers Only. Don't settle for cable. Call Now 1-800-385-9017. (Cal-SCAN)

Mind & Body

425 Health Services

CPAP/BIPAP Supplies
at little or no cost from Allied Medical Supply Network! Fresh supplies delivered right to your door. Insurance may cover all costs. 800-421-4309. (Cal-SCAN)

ELIMINATE CELLULITE
and Inches in weeks! All natural. Odor free. Works for men or women. Free month supply on select packages. Order now! 844-244-7149 (M-F 9am-8pm central) (AAN CAN)

Got Knee Pain? Back Pain?

Shoulder Pain? Get a pain-relieving brace - little or NO cost to you. Medicare Patients Call Health Hotline Now! 1-800-796-5091 (Cal-SCAN)

Life Alert 24/7

One press of a button sends help FAST! Medical, Fire, Burglar. Even if you can't reach a phone! FREE Brochure. CALL 800-714-1609. (Cal-SCAN)

Xarelto Users

Have you had complications due to internal bleeding (after January 2012)? If so, you MAY be due financial compensation. If you don't have an attorney, CALL Injuryfone today! 1-800-425-4701. (Cal-SCAN)

495 Yoga

DID YOU KNOW
7 IN 10 Americans or 158 million U.S. Adults read content from newspaper media each week? Discover the Power of Newspaper Advertising. For a free brochure call 916-288-6011 or email cecelia@cnpa.com (Cal-SCAN)

Jobs

500 Help Wanted

RF Engineers
HQ, Pleasanton, CA (Roving Employees/ Unanticipated Client Locs w/in the US) Multiple openings. Dsgn and Optimize LTE/UMTS/GSM/EVDO and CDMA Wireless Networks, incl overlay projects, traffic planning, BSS planning for cell site integration, KPI analysis. Prep/revise RF affidavits and documents to support site dvlpmnt and zoning reqmts. Provide analysis of dsgn restrictions and solutions (i.e. physical limitations, co-los, EMF limitations). Create and validate frequency plans for large area/clusters. Conduct neighbor audits and analysis for extensive areas/dual band/dual vendor system balance, timing advance, h/ware issues, etc. Create and present RF performance reports to internal and external customers. Participate in creation/dvlpmnt of in-house tools (Excel, Access) to speed up analysis of RF performance data (i.e. scripts, macros, etc.). Create and evaluate procedures for improving network performance analysis and mgmt. Req: Bachelor's (or foreign equiv) in Mechanical Eng, or Electrical Eng, or Electronic Eng, or Communication Eng, or Comp Sci, or dsly rtd deg. Also reqd: Working knowl of standard concepts, practices and procedures w/in wireless communications/data industry. *** Roving Employee(s) - Will req travel &/ or relocation to unanticipated client locs throughout U.S.*** Resume to: Telecom Technology Services Inc., Attn: HR-RF Engineer, rfrresumes@ttswireless.com

Sr. RF Engineers

HQ, Pleasanton, CA (Roving Employees/ Unanticipated Client Locs w/in the US) Multiple openings. Sr. Position. Dsgn and Optimize LTE/UMTS/GSM and CDMA Wireless Networks. Prep/review RF affidavits and documentation to support site dvlpmnt and zoning reqmts. Provide detailed analysis of difficult/dsgn restrictions and solutions (i.e. physical limitations, co-locations, EMF limitations). Dsgn recommendations for overlay networks such as: LTE / UMTS / CDMA / EVDO / GSM. Dsgn recommendations for integrated/converted networks (i.e. blue to orange, Nokia to Ericsson, etc). Assist w/traffic planning, BSS planning for new cell integration. Provide detailed analysis of counters to determine network performance fixes, incl high level analysis of system performance and counters to affect positive change in KPIs. Analyze network parameters for optimization of KPIs. Create and validate frequency plans for large area/clusters. Conduct neighbor audits and analysis for extensive areas/dual band/dual vendor systems balance, timing advance, h/ware issues, etc. Create and present RF performance reports to internal and external customers. Participate in creation/dvlpmnt of in-house tools (MS Excel, Access) to speed up analysis of RF performance data (i.e. scripts, macros, etc.). Create and evaluate procedures for improving network performance analysis and mgmt. Req: Bachelor's (or foreign equiv) in Mechanical Eng, or Electrical Eng, or Electronic Eng, or Communication Eng, or Comp Sci, or dsly rtd + 60 mos of resp progressive exp in job offd or as Network Consultant, RF Consultant, Electronics/Electrical Eng, CIS, or dsly rtd. Alternate req: Master's (or foreign equiv) in Mechanical Eng, or Electrical Eng, or Electronic Eng, or Communication Eng, or Comp Sci, or dsly rtd + 24 mos of resp progressive exp in job offd or as Network Consultant, RF Consultant, Electronics/Electrical Eng, CIS, or dsly rtd. Also req. (both educ. options): knowl of MS Excel, MS Access, Windows and Linux Operating Systems Envrmts, CAD (Computer Aided Design) S/ware. *** Roving Employee(s) - Will req travel &/ or relocation to unanticipated client locs throughout U.S.*** Resume to: Telecom Technology Services Inc., Attn: HR-SrRF Engineer, rfrresumes@ttswireless.com

560 Employment Information

Drivers
\$2K Sign-On Bonus! Make \$60K+ a Year! Great Benefits + 401K. Paid Orientation + Tuition Reimb. CDL-A Req - (877) 258-8782 drive4melton.com (Cal-SCAN)

PAID IN ADVANCE!

Make \$1000 A Week Mailing Brochures From Home! No Experience Required. Helping home workers since 2001! Genuine Opportunity. Start Immediately! www.TheIncomeHub.com (AAN CAN)

Business Services

601 Accounting/Bookkeeping

Need Help With Quickbooks?
No job too big or too small. Call Linda at (925) 918-2233.

602 Automotive Repair

Does Your Auto Club
offer no hassle service and rewards? Call Auto Club of America (ACA) and Get \$200 in ACA Rewards! (New members only) Roadside Assistance and Monthly Rewards. Call 1-800-242-0697 (CalSCAN)

604 Adult Care Offered

A PLACE FOR MOM
The nation's largest senior living referral service. Contact our trusted, local experts today! Our service is FREE/no obligation. CALL 1-800-550-4822. (Cal-SCAN) SERVICES

619 Consultants

DID YOU KNOW
144 million U.S. Adults read a Newspaper print copy each week? Discover the Power of Newspaper Advertising. For a free brochure call 916-288-6011 or email cecelia@cnpa.com (Cal-SCAN)

624 Financial

Big Trouble With IRS?
Are you in BIG trouble with the IRS? Stop wage and bank levies, liens and audits, unfiled tax returns, payroll issues, and resolve tax debt FAST. Call 844-753-1317 (AAN CAN)

Get the IRS Off Your Back!
They do not give up until you pay. Tax Solutions Now will get you the best deal. Call 800-691-1655 (AAN CAN)

Owe Over \$10K to IRS?
or State in back taxes? Our firm works to reduce the tax bill or zero it out completely FAST. Call now 855-993-5796 (Cal-SCAN)

SOCIAL SECURITY DISABILITY
benefits. Unable to work? Denied benefits? We Can Help! WIN or Pay Nothing! Contact Bill Gordon & Associates at 1-800-966-1904 to start your application today! (Cal-SCAN)

Structured Settlement
Sell your structured settlement or annuity payments for CASH NOW. You don't have to wait for your future payments any longer! Call 1-800-673-5926 (Cal-SCAN)

640 Legal Services

DID YOU KNOW
Information is power and content is King? Do you need timely access to public notices and remain relevant in today's hostile business climate? Gain the edge with California Newspaper Publishers Association new innovative website capublicnotice.com and check out the FREE One-Month Trial Smart Search Feature. For more information call Cecelia @ (916) 288-6011 or www.capublicnotice.com (Cal-SCAN)

Home Services

751 General Contracting

A NOTICE TO READERS:
It is illegal for an unlicensed person to perform contracting work on any project valued at \$500.00 or more in labor and materials. State law also requires that contractors include their license numbers on all advertising. Check your contractor's status at www.cslb.ca.gov or 800-321-CSLB (2752). Unlicensed persons taking jobs that total less than \$500.00 must state in their advertisements that they are not licensed by the Contractors State License Board.

761 Masonry/Brick

easybrick123.com
Residential masonry expert. John Pensanti at (408) 209-6668.

fogster.com™

781 Pest Control



Attic Clean-Up & Rodent Removal

Are you in the Bay Area? Do you have squeaky little terrors living in your attic or crawlspace? What you are looking for is right here! Call Attic Star now to learn about our rodent removal services and cleaning options. You can also get us to take out your old, defunct insulation and install newer, better products. Call (866) 391-3308 now and get your work done in no time!

Real Estate

809 Shared Housing/Rooms

ALL AREAS: ROOMMATES.COM
Lonely? Bored? Broke? Find the perfect roommate to complement your personality and lifestyle at Roommates.com! (AAN CAN)

845 Out of Area



4 homes on 30 acres
Vacation where you live in Nevada City!! Looks like Disneyland with rock walls, manicured gardens, private lake, HUGE outdoor entertaining area and even its own mining museum!! 15 car garages for all your toys!! Priced to sell only \$2M!! Seller financing. Call Edie 530-913-0150 cell

855 Real Estate Services

DID YOU KNOW
Information is power and content is King? Do you need timely access to public notices and remain relevant in today's highly competitive market? Gain an edge with California Newspaper Publishers Association new innovative website capublicnotice.com and check out the Smart Search Feature. For more information call Cecelia @ (916) 288-6011 or www.capublicnotice.com (Cal-SCAN)

Legal Notices

995 Fictitious Name Statement

Little Caesars
FICTITIOUS BUSINESS NAME STATEMENT
File No: 513097
The following person(s) doing business as: Little Caesars, 3283 Bernal Avenue #103, Pleasanton, CA 94566, is hereby registered by the following owner(s): Panesar Kapila Inc, 1396 W. Lagoon Road, Pleasanton, CA 94566. This business is conducted by a Corporation. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Davinder Pal Singh, President. This statement was filed with the County Clerk of Alameda on 01/04/16. (Pleasanton Weekly, Jan. 22, 29 Feb. 5, 12, 2016)

TEA BREEZE
FICTITIOUS BUSINESS NAME STATEMENT
File No: 513621
The following person(s) doing business as: TEA BREEZE, 4215 ROSEWOOD DRIVE, SUITE 20, PLEASANTON, CA 94588, is hereby registered by the following owner(s): Miao Fen Cen, 16131 Ashland Ave, San Lorenzo, CA 94578; Jing En Pan, 3756 Anza Way, San Leandro, CA 94578. This business is conducted by a Joint venture. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Jing En Pan, Partner. This statement was filed with the County Clerk of Alameda on 01/19/2016. (Pleasanton Weekly, Feb. 5, 12, 19, 26, 2016)

VITALITY BOWLS BERNAL PLAZA
FICTITIOUS BUSINESS NAME STATEMENT
File No: 514034
The following person(s) doing business as: VITALITY BOWLS BERNAL PLAZA, 6654 KOLL CENTER PARKWAY, SUITE 335, PLEASANTON, CA 94566, is hereby registered by the following owner(s): M&J Suverte Enterprises, Inc, 4621 Valley Vista Drive, Dublin, CA 94568. This business is conducted by a Corporation. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Mylene M. Munjal, President. This statement was filed with the County Clerk of Alameda on 01/29/2016. (Pleasanton Weekly, Feb. 12, 19, 26, March 4, 2016)

INVITA CONSULTING
FICTITIOUS BUSINESS NAME STATEMENT
File No: 514335
The following person(s) doing business as: INVITA CONSULTING, 3679 CENTRAL PARKWAY, DUBLIN, CA 94568, is hereby registered by the following owner(s): Mark A. Case, 3679 Central Parkway, Dublin, CA 94568; Matthew D. Dom, 3240 Maguire Way #300, Dublin, CA 94568. This business is conducted by a General partnership. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Matthew D. Dom, Partner. This statement was filed with the County Clerk of

Alameda on 02/08/2016. (Pleasanton Weekly, Feb. 12, 19, 26, March 4, 2016)

STATEMENT OF ABANDONMENT OF USE OF FICTITIOUS BUSINESS NAME
File No. 489153
The following person(s) has/have abandoned the use of the fictitious business name(s). The information given below is as it appeared on the fictitious business statement that was filed at the County Clerk-Recorder's Office. FICTITIOUS BUSINESS NAME(S): CASE CONSULTING, 3679 CENTRAL PARKWAY, DUBLIN, CA 94568 FILED IN ALAMEDA COUNTY ON: 03/13/2014 UNDER FILE NO. 489153 REGISTRANT'S NAME(S): Mark A. Case, 3679 Central Parkway, Dublin, CA 94568; Barbara J. Case, 3679 Central Parkway, Dublin, CA 94568 THIS BUSINESS WAS CONDUCTED BY a Married couple. Signature of Registrant: Mark A. Case. This statement was filed with the County Clerk Recorder of Alameda County on 02/08/2016. (Pleasanton Weekly Feb. 12, 19, 26, March 4, 2016)

997 All Other Legals

NOTICE OF PUBLIC HEARING AND PUBLIC REVIEW PERIOD: Urban Water Management Plan
Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

As required under Section 10642 et seq. of the California Water Code, this is to notify the public that at its meeting to begin at 7 p.m. on March 16, 2016, the Zone 7 Water Agency Board of Directors plans to conduct a public hearing on, and consider adoption of, the Agency's Draft 2015 Urban Water Management Plan. The hearing will be held at Zone 7 Administrative Offices, 100 North Canyons Parkway, Livermore.

A copy of the Draft 2015 Urban Water Management Plan is available for public review at the Zone 7 Water Agency office at 100 North Canyons Parkway in Livermore, on the website, www.zone7water.com, and at the following local libraries:

Alameda County Public Library in Dublin, 200 Civic Plaza, Dublin

Livermore Public Library, 1188 South Livermore Ave., Livermore

Pleasanton Public Library, 400 Old Bernal Ave., Pleasanton

Public comment will be welcome at the hearing and you are encouraged to comment before then, if possible, by contacting Amparo Flores at aflores@zone7water.com. If you have any questions regarding this notice, contact Boni Brewer, Communication Specialist, at (925) 454-5015.

OPEN HOMES THIS WEEKEND

Livermore		Pleasanton	
2 Bedrooms		3 Bedrooms	
6630 Forget Me Not	\$460,000	5906 Bryce Canyon Court	\$850,000
Sat/Sun 1-4 Weiner McDowell Group	872-1416/209-0343	Sat/Sun 1-4 Weiner McDowell Group	872-1416/209-0343
3 Bedrooms		540 Division St.	\$579,950
337 Mulqueeny St.	\$550,000	Sun 1-4 Bob & Deb Cilk	487-8734
Sat/Sun 1-4 Kelly King	455-5464	255 Birch Creek Drive	\$759,000
152 Heligan Lane #7	\$600,000	Sat/Sun 1-4 DeAnna Armario & Liz Venema	260-2220/413-6544
Sat/Sun 1-4 Brad & Ann Walker	899-4084	7608 Chestnut Way	Call for price
4 Bedrooms		Sat 1-3 Dave & Sue Flashberger	463-0436
3923 Pestana Way	\$649,000	4594 Lin Gate St.	\$875,000
Sat/Sun 1-4 Joyce Jones	998-3398	Sat/Sun 1-4 Weiner McDowell Group	872-1416/209-0343
		5 Bedrooms	
		838 Sunny Brook Way	\$2,079,000
		Sat/Sun 1-4 Blaise Loffand	846-6500

540 DIVISION ST., PLEASANTON

OPEN HOUSE, SUNDAY, FEBRUARY 14, 1-4 PM

NEW ON THE MARKET!!!
Built in 1900, this cozy, 3-bedroom, 1-bath Queen Anne-style cottage retains the charm of yesterday. Walking distance to Main Street. Features include the quaint front porch, basement & so much potential! Open House, Sunday, February 14th from 1-4.

Offered for \$579,950

Bob & Deb Cilk
(925) 487-8734
Email: bob.cilk@remax.net
BRE#00971331
5950 Stoneridge Drive, Pleasanton

Serving our clients' real estate needs since 1988

Recipients of Pleasanton's Community of Character Commendation

LEGAL NOTICES/CLASSIFIEDS

www.independentnews.com



by the following owner(s): Tracy L. Schmidt, 3136 Bridle Ct., Livermore, CA 94551 This business is conducted by an individual. The registrant has not yet begun to transact business using the fictitious business name listed above. Signature of Registrants :s/ Tracy L. Schmidt This statement was filed with the County Clerk of Alameda on January 26, 2016. Expires January 26, 2021. The Independent Legal No. 3908. Published February 11, 18, 25, March 3, 2016.

FICTITIOUS BUSINESS NAME STATEMENT FILE NO. 514314-16

The following person(s) doing business as: Home Loan Funding, The Home Mart, Trupro Real Estate Services, 5820 Stoneridge Mall Road, #110-28, Pleasanton, CA 94588, is hereby registered by the following owner(s): Gary Stange, 4103 Stanley Blvd., Pleasanton, CA 94566 This business is conducted by an individual. The registrant began to transact business using the fictitious business name listed above on August 8, 1993. Signature of Registrants :s/ Gary Stange This statement was filed with the County Clerk of Alameda on February 5, 2016. Expires February 5, 2021. The Independent Legal No. 3909. Published February 11, 18, 25, March 3, 2016.

NOTICE OF PUBLIC HEARING AND PUBLIC REVIEW PERIOD Urban Water Management Plan

Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

As required under Section 10642 et seq. of the California Water Code, this is to notify the public that at its meeting to begin at 7 p.m. on March 16, 2016, the Zone 7 Water Agency Board of Directors plans to conduct a public hearing on, and consider adoption of, the Agency's Draft 2015 Urban Water Management Plan. The hearing will be held at Zone 7 Administrative Offices, 100 North Canyons Parkway, Livermore.

A copy of the Draft 2015 Urban Water Management Plan is available for public review at the Zone 7 Water Agency office at 100 North Canyons Parkway in Livermore, on the website, www.zone7water.com, and at the following local libraries:

Alameda County Public Library in Dublin
200 Civic Plaza, Dublin

Livermore Public Library
1188 South Livermore Ave., Livermore

Pleasanton Public Library
400 Old Bernal Ave., Pleasanton

Public comment will be welcome at the hearing and you are encouraged to comment before then, if possible, by contacting Amparo Flores at aflores@zone7water.com. If you have any questions regarding this notice, contact Boni Brewer, Communication Specialist, at (925) 454-5015.

ANIMALS

2) CATS/ DOGS
ADOPT A DOG OR CAT, for adoption information contact Valley Humane Society at (925)426-8656.

Adopt a new best friend: TVAR, the Tri-Valley Animal Rescue, offers animals for adoption every Saturday and Sunday, excluding most holidays. On Saturdays from 9:30 am to 1:00 pm, dogs are available at the Pleasanton Farmers Market at W. Angela and First Streets. Two locations will showcase cats only: Petsmart in Dublin from 12:00 to 4:00 and the Pet Extreme in Livermore from 12:00 to 4:00. On Sundays, cats are available at Petsmart in Dublin from 1:00 to 4:00, and Pet Extreme in Livermore from 12:00 to 4:00. For more information, call Terry at (925)487-7279 or visit our website at www.tvvar.org

FERAL CAT FOUNDATION Cat & kitten adoptions now at the new Livermore Petco on Saturdays from 10:00AM to 2:30PM. We have many adorable, tame kittens that have been tested for FIV & FELV, altered & vaccinated. We also have adult cats & ranch cats for adoption.

EMPLOYMENT

65) HELP WANTED



WANTED- Recreation Leaders!

Are you looking for a FUN and REWARDING job? Livermore Area Recreation and Park District is currently seeking individuals to join our team.

Our mission is to provide the people of the Livermore area with outstanding recreation programs and a system of parks, trails, recreation areas and facilities that stimulate, educate and enrich lives. Come be a part of where the "FUN" is created!

Currently seeking qualified candidates for the following positions:

- Recreation Leader II-Sports
- Recreation Leader II-Party Attendant
- Senior Recreation Leader-Party Attendant
- Senior Recreation Leader-Elementary School
- Recreation Leader I - Youth Services/PAL
- Senior Recreation Leader I - Youth Services
- Recreation Maintenance Worker I - Facilities

For more information and to apply, please visit our website at www.larpdp.org

JANITOR

Cleans once a week
3 1/2 hours
in Livermore
\$200/month
Please call
(510)460-9640

BE WARY of out of area companies. Check with the local Better Business Bureau before you send money or fees. Read and understand any contracts before you sign. Shop around for rates.

TO PLACE A CLASSIFIED AD OR LEGAL NOTICE IN THE INDEPENDENT, Call (925)243-8000

MERCHANDISE

115) ESTATE/ GARAGE/ YARD SALES

ANNUAL GARAGE SALE
Rotary Club of Pleasanton
Saturday, 2/27
8:00AM - 1:00PM
4455 Del Valle Parkway
Pleasanton
Funds benefit
Wheelchair Project

118) FREE SECTION

FREE WOOD
Pine & Oak
You cut it & haul it
Mines Road
(408)897-3156

FREE MAGAZINES

Smithsonian
National Geographic
Time
All like new
(408)897-3156

FREE

55-gallon FISH TANK
With everything
No fish
Please call if interested
(925)447-3126

127) LOST/ FOUND

FOUND
on Humboldt Way
in Livermore
Portfolio of Greek music
CD's
Please call
(925)447-3857

ANNOUNCEMENTS

155) NOTICES

"NOTICE TO READERS: California law requires that contractors taking jobs that total \$500 or more (labor and/or materials) be licensed by the Contractors State License Board. State law also requires that contractors include their license numbers on all advertising. Check your contractor's status at www.cslb.ca.gov or (800)321-CSLB (2752). Unlicensed persons taking jobs less than \$500 must state in their advertisements that they are not licensed by the Contractors State License Board."

REAL ESTATE

Inland Valley Publishing Co.
Client Code:04126-00001
Re: Legal Notice for Classified Ads

The Federal Fair Housing Act, Title VII of the Civil Rights Act of 1964, and state law prohibit advertisements for housing and employment that contain any preference, limitation or discrimination based on protected classes, including race, color, religion, sex, handicap, familial status or national origin. IVPC does not knowingly accept any advertisements that are in violation of the law.

ARKGROUP
The Best Choice Logistics Partner For Silicon Valley

CAREER OPPORTUNITIES

- **Class C Driver** (Fremont)
- **Material Handler** (Fremont)
- **Glass Handler** (Fremont)
- **Warehouse Lead - Graveyard** (Livermore)
- **Warehouse Supervisors** (Livermore)
- **Operations Manager** (Livermore & Fremont)

Logistics or similar experience preferred
Email resume and cover letter with salary requirements to HR@arklogisticsgroup.com

REAL ESTATE NEWS & NOTICES

Deduct This, Not That: Tax Tips for Homeowners

By Cher Wollard

Homeownership brings with it significant tax benefits, and a few potential pitfalls.

Every homeowner's financial situation is different, of course, so you'll want to consult with a tax professional regarding which tax breaks you are – or are not – entitled to.

1. Deduct this: Interest paid on up to \$1 million of the first mortgage on your primary residence or second home, such as vacation property. If you are married but filing separate returns, you may each deduct interest on up to \$500,000 in mortgage debt. Not this: Interest on mortgage debt beyond \$1 million. Interest on debt that is not secured by the home. Interest on mortgage debt for real estate other than your legal primary residence or second home. Interest on mortgage debt paid by someone else, even if it's on your home.

2. Deduct this: Interest paid on up to \$100,000 of a refinance loan, home equity loan or home equity line of credit on your primary or second home. Again, for married persons who file separate returns, you can only deduct interest on \$50,000. Not this: There are restrictions if your mortgage debt exceeds the property's fair market value.

3. Deduct this: Mortgage insurance, sometimes called MI or PMI, which protect the lender, and is usually required on loans for more than 80 percent of the value of the home. If you purchased your home with less than a 20 percent downpayment, chances are you were required to carry mortgage insurance. This insurance can be pricey – hundreds of dollars each month. Being able to write it off against your income at least saves a bit on federal and state taxes. The deduction is phased out by 10 percent for each \$1,000 by which your adjusted gross income tops \$100,000 for married couples or \$50,000 for single people or married people filing separately. So you can't use the deduction if your adjusted gross income exceeds \$110,000 for married people or \$55,000 for singles and married people filing separately. Not this: Mortgage insurance is not the same as homeowner's insurance, which is a policy you take out to cover your home in case of fire, flood or other disaster.

4. Deduct this: Property taxes, which you pay to the county either directly or through an impound account with your mortgage payment. Not this: Property taxes that you owe but either haven't paid yet or paid in a previous year. The IRS operates on a Jan. 1 through Dec. 31 calendar. The county assessor's office uses July 1 through June 30 as its fiscal year. To add to the confusion, impound accounts are usually padded by a few extra months' worth of property taxes so it never runs short.

You may deduct property taxes you actually paid in the calendar year, if you paid them directly; or that the impound account paid on your behalf for that year. So, for example, for fiscal year 2015-16, you probably paid one installment in November or December with the second one due before April 1. So you can deduct the first installment – because you made that payment in 2015, but not the second one. If you owned your home during the 2014-15 fiscal year, you can also deduct the payment you made last Spring.

5. Deduct this: Discount points. If you took out a mortgage in 2015 to purchase property or refinance your mortgage, you probably paid discount points, sometimes just called "points," to lower your rate. When you purchase property, discount points may be deducted in full in the year in which they were paid. Not this: When you refinance, the discount points usually must be amortized over the life of the loan. So, for example, if you paid \$1,500 in discount points on a 15-year home equity loan, you could likely deduct \$100 per year for the life of the loan. The deduction for points is subject to certain criteria, so consult with your tax advisor as to whether or not you can claim this advantage.

6. Deduct this: Certain home improvements. If you renovate your home to accommodate the needs of a chronically ill or disabled person, and the renovations do not add to the overall value of the home, the cost of that project may be tax deductible. Installing qualifying alternative energy improvements may allow you to claim a deduction or even a modest energy tax credit. Not this: Paint, flooring, roofing, room additions, kitchen remodels and most other costs of maintaining and improving your home are not tax deductible. If you met the lifetime cap on energy-efficiency credits in a previous year, you may not claim another one.

7. Deduct this: Home offices. Some people who work from home may be able to deduct the expenses of creating and maintaining a home office. Regulations regarding home office deductions are very specific, so be sure to consult your tax advisor. Not this: If you turn a profit when you sell your home, you may have recapture the deduction on a future return.

8. Deduct this: First-time homebuyers who earned a mortgage credit certificate or MCC before purchasing their home are entitled to an MCC credit. Not this: If you used the original homebuyer tax credit of 2008, you must repay 1/15th of that credit each year through 2023.

Those who sold a home last year have other tax issues to consider. Profits made on the sale of real estate are generally considered to be capital gains, rather than income. But if the property was your primary residence, you are likely entitled to a hefty exemption in your capital gains tax.

If you bought or sold a home in 2015, you'll need a copy of the end-of-year statement from your mortgage company as well as the escrow statement.

Your real estate agent or escrow officer should be able to provide you with a copy of the statement if you do not have yours handy.

For information and advice on which deductions and credits you may be eligible to claim, consult a tax professional. Or see details at www.irs.gov and www.ftb.ca.gov

Cher Wollard is a Realtor with Berkshire Hathaway HomeServices, Drysdale Properties, in Livermore.

ALAIN PINEL REALTORS

<p>Sally Blaze REALTOR® 925.998.1284 sblaze@apr.com apr.com/sblaze</p>	<p>Karen Crowson REALTOR® 925.784.6208 kcrowson@apr.com KarenCrowsonHomes.com</p>
<p>Cherie Doyle REALTOR® 925.580.2552 cdoyle@apr.com apr.com/cdoyle</p>	<p>Leslie Faught REALTOR® 925.784.7979 leslie@apr.com LeslieFaught.com</p>
<p>Linda Futral Broker/REALTOR® 925.980.3561 linda@apr.com LindaFutral.com</p>	<p>Dan Gamache REALTOR® 925.918.0332 dangamache@apr.com TriValleyHomeSearch.com</p>
<p>Kat Gaskins REALTOR® 925.963.7940 kgaskins@apr.com KatGaskins.com</p>	<p>Martí Gilbert REALTOR® Blaise Lofland Real Estate Group 925.216.4063 mgilbert@apr.com</p>
<p>Linda Goveia REALTOR® 925.989.9811 lgoveia@apr.com apr.com/lgoveia</p>	<p>Gail Henneberry REALTOR® 925.980.1900 ghenneberry@apr.com apr.com/ghenneberry</p>
<p>Gina Huggins Broker Associate 925.640.3762 ghuggins@apr.com apr.com/ghuggins</p>	<p>Kelly King REALTOR® 510.714.7231 lkking@apr.com apr.com/lkking</p>
<p>Mark Kotch REALTOR® 925.989.1581 markkotch@apr.com MarkKotch.com</p>	<p>Jo Ann Luisi REALTOR® 925.321.6104 jluisi@apr.com JoAnnLuisi.com</p>
<p>Tim McGuire REALTOR® 925.463.SOLD tmcguire@apr.com TimMcGuire.net</p>	<p>Maureen Nokes Broker Associate 925.577.2700 mnokes@apr.com apr.com/mnokes</p>
<p>Kim Ott REALTOR® 510.220.0703 kim@kimott.com KimOtt.com</p>	<p>Diane Smugeresky REALTOR® 925.872.1276 diane@apr.com HomeBuyerSearch.com</p>
<p>Judy Turner REALTOR® 925.518.3115 jturner@apr.com apr.com/jturner</p>	<p>Pleasanton/Livermore Valley</p> <p>f /alainpinelrealtors @alainpinelrealtors</p>

apr.com

fogster.com THE TRI-VALLEY'S FREE CLASSIFIEDS WEB SITE

Fogster.com offers **FREE** • postings online and the opportunity for your ad to appear in print to more than 80,000 readers. You can log on to fogster.com 24/7, and your online ad starts immediately. Some ads require payment.



TO RESPOND TO ADS WITHOUT PHONE NUMBERS GO TO **FOGSTER.COM**

PLACE AN AD

ONLINE
fogster.com

E-MAIL
ads@fogster.com

PHONE
925.600.0840

Fogster.com is a unique Web site offering postings from communities throughout the Bay Area and an opportunity for your ad to appear in the Pleasanton Weekly.

Now you can log on to fogster.com, day or night and get your ad started immediately online.

So, the next time you have an item to sell, barter, give away or buy, get the perfect combination: print ads in your local newspapers, reaching more than 35,000 readers, and unlimited free web postings reaching hundreds of thousands additional people!

INDEX

- BULLETIN BOARD 100-155
- FOR SALE 200-270
- KIDS STUFF 330-355
- MIND & BODY 400-499
- JOBS 500-585
- BUSINESS SERVICES 600-690
- HOME SERVICES 700-799
- FOR RENT/ FOR SALE REAL ESTATE 801-899
- PUBLIC/LEGAL NOTICES 995-997

The publisher waives any and all claims or consequential damages due to errors Embarcadero Media cannot assume responsibility for the claims or performance of its advertisers. Embarcadero Media right to refuse, edit or reclassify any ad solely at its discretion without prior notice.

Bulletin Board

115 Announcements

DID YOU KNOW

That Most Loyal Voters read newspapers and nearly 77% also contribute to political organizations. If you are a Political Candidate or Advocate looking to connect with voters and potential contributors, CNPA can help. For free brochure call Cecelia @ 916.288.6011 or cecelia@cnpa.com (CalSCAN)

PREGNANT?

THINKING OF ADOPTION? Talk with caring agency specializing in matching Birthmothers with Families Nationwide. LIVING EXPENSES PAID. Call 24/7 Abby's One True Gift Adoptions. 866-413-6293. Void in Illinois/New Mexico/Indiana (AAN CAN)

PREGNANT?

CONSIDERING ADOPTION? Call us first. Living expenses, housing, medical, and continued support afterwards. Choose adoptive family of your choice. Call 24/7. 1-877-879-4709 (CalSCAN)

130 Classes & Instruction

AIRLINE CAREERS

begin here -Get started by training as FAA certified Aviation Technician. Financial aid for qualified students. Job placement assistance. Call Aviation Institute of Maintenance 800-725-1563 (AAN CAN)

Accent Reduction Instruction

Accent reduction classes to improve your communication skills. Individual and/or group and corporate instruction taught by speech therapist. WWW.Speakonpar.com

For Sale

202 Vehicles Wanted

A-1 DONATE YOUR CAR

FOR BREAST CANCER! Help United Breast Foundation education, prevention, & support programs. FAST FREE PICKUP - 24 HR RESPONSE - TAX DEDUCTION 855-403-0215 (AAN CAN)

CARS/TRUCKS WANTED!!!

We Buy Like New or Damaged. Running or Not. Get Paid! Free Towing! We're Local! Call For Quote: 1-888-420-3808 (AAN CAN)

Donate Your Car, Truck, Boat

to Heritage for the Blind. FREE 3 Day Vacation, Tax Deductible, Free Towing, All Paperwork Taken Care of. Call 800-731-5042 (Cal-SCAN)

Old Porsches

356/911/912 for restoration by hobbyist 1948-1973 Only. Any condition, top \$ paid. 707 965-9546 (Cal-SCAN)

Older Car, Boat, RV?

Got an older car, boat or RV? Do the humane thing. Donate it to the Humane Society. Call 1-800-743-1482 (Cal-SCAN)

Classified Deadlines:

4PM TUESDAY

Legal Notices

995 Fictitious Name Statement

TEA BREEZE
FICTITIOUS BUSINESS NAME STATEMENT
File No: 513621

The following person(s) doing business as: TEA BREEZE, 4215 ROSEWOOD DRIVE, SUITE 20, PLEASANTON, CA 94588, is hereby registered by the following owner(s): Miao Fen Cen, 16131 Ashland Ave., San Lorenzo, CA 94578; Jing En Pan, 3756 Anza Way, San Leandro, CA 94578. This business is conducted by a Joint venture. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Jing En Pan,

203 Bicycles

Bikes Wanted

Old 10 speed road bikes wanted any condition. Dale 925 989 1751

210 Garage/Estate Sales

Pleasanton, 309 Neal St., Feb. 20, 9-3
Huge estate sale located in a 100 year old historic home in Downtown Pleasanton. Items for sale include: vintage gold, sterling, costume jewelry; coins; vintage art; vintage purses, hats, books, cameras, photo equipment, and typewriters; garden statuary and pottery; lots of tools; dolls; 30s,40s,50s dishes, glassware, serving pieces, vases; vintage trunks, military uniform; furniture, dozens of cat themed items; loads of items from QVC, and much more!

Pleasanton, 4455 Del Valle Parkway, Feb. 27, 8 - 1

Rotary Club of Pleasanton - proceeds to its wheelchair distribution project.

240 Furnishings/ Household items

DID YOU KNOW

7 IN 10 Americans or 158 million U.S. Adults read content from newspaper media each week? Discover the Power of Newspaper Advertising. For a free brochure call 916-288-6011 or email cecelia@cnpa.com (Cal-SCAN)

245 Miscellaneous

AT&T U-Verse Internet

starting at \$15/month or TV & Internet starting at \$49/month for 12 months with 1-year agreement. Call 1-800-453-0516 to learn more. (Cal-SCAN)

Dish Network

Get MORE for LESS! Starting \$19.99/month (for 12 months.) PLUS Bundle & SAVE (Fast Internet for \$15 more/month.) CALL Now 1-800-357-0810 (Cal-SCAN)

HOME BREAK-INS

take less than 60 SECONDS. Don't wait! Protect your family, your home, your assets NOW for as little as 70¢ a day! Call 855-404-7601 (Cal-SCAN)

Switch to DIRECTV

and get a FREE Whole-Home Genie HD/ DVR upgrade. Starting at \$19.99/mo. FREE 3 months of HBO, SHOWTIME & STARZ. New Customers Only. Don't settle for cable. Call Now 1-800-385-9017. (Cal-SCAN)

260 Sports & Exercise Equipment

DID YOU KNOW

144 million U.S. Adults read a Newspaper print copy each week? Discover the Power of Newspaper Advertising. For a free brochure call 916-288-6011 or email cecelia@cnpa.com (Cal-SCAN)

Kid's Stuff

330 Child Care Offered

EVERY BUSINESS

has a story to tell! Get your message out with California's PRMedia Release - the only Press Release Service operated by the press to get press! For more info contact Cecelia @ 916-288-6011 or http://prmediarelease.com/california (Cal-SCAN)

Partner. This statement was filed with the County Clerk of Alameda on 01/19/2016. (Pleasanton Weekly, Feb. 5, 12, 19, 26; 2016)

VITALITY BOWLS BERNAL PLAZA
FICTITIOUS BUSINESS NAME STATEMENT
File No: 514034

The following person(s) doing business as: VITALITY BOWLS BERNAL PLAZA, 6654 KOLL CENTER PARKWAY, SUITE 335, PLEASANTON, CA 94566, is hereby registered by the following owner(s): M&J Suwerte Enterprises, Inc., 4621 Valley Vista Drive, Dublin, CA 94568. This business is conducted by a Corporation. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Mylene M. Munjal, President. This statement was filed with the County Clerk of Alameda on 01/29/2016. (Pleasanton Weekly, Feb. 12, 19, 26, March 4; 2016)

INVITA CONSULTING
FICTITIOUS BUSINESS NAME STATEMENT
File No: 514335

The following person(s) doing business as: INVITA CONSULTING, 3679 CENTRAL PARKWAY, DUBLIN, CA 94568, is hereby registered by the following owner(s): Mark A.

Mind & Body

425 Health Services

CPAP/BIPAP supplies

at little or no cost from Allied Medical Supply Network! Fresh supplies delivered right to your door. Insurance may cover all costs. 800-421-4309. (Cal-SCAN)

ELIMINATE CELLULITE

and Inches in weeks! All natural. Odor free. Works for men or women. Free month supply on select packages. Order now! 844-244-7149 (M-F 9am-8pm central) (AAN CAN)

Got Knee Pain? Shoulder Pain?

Shoulder Pain? Get a pain-relieving brace -little or NO cost to you. Medicare Patients Call Health Hotline Now! 800-796-5091 (Cal-SCAN)

Life Alert. 24/7.

One press of a button sends help FAST! Medical, Fire, Burglar. Even if you can't reach a phone! FREE BROCHURE. CALL 800-714-1609. (Cal-SCAN)

Safe Step Walk-In Tub!

Alert for Seniors. Bathroom falls can be fatal. Approved by Arthritis Foundation. Therapeutic Jets. Less Than 4 Inch Step-In. Wide Door. Anti-Slip Floors. American Made. Installation Included. Call 800-799-4811 for \$750 Off. (Cal-SCAN)

Tired of dieting?

Lose up to 1 pound a day NATURALLY! Ask for Chris and get \$100 off! Call for a consultation, 720.619.2950. www.ocksinny.com (Cal-SCAN)

Jobs

560 Employment Information

Drivers - \$2K Sign-On Bonus!

\$\$ RECENT PAY INCREASE \$\$ Make Over \$60,000 your first year! Newer KW T660 and T680's. CDL-A Req - (877) 258-8782 Drive4melton.com (Cal-SCAN)

PAID IN ADVANCE!

Make \$1000 A Week Mailing Brochures From Home! No Experience Required. Helping home workers since 2001! Genuine Opportunity. Start Immediately! www.TheIncomeHub.com (AAN CAN)

Business Services

601 Accounting/ Bookkeeping

Need Help With Quickbooks?

No job too big or too small. Call Linda at (925) 918-2233.

602 Automotive Repair

Auto Club of America (ACA)

Does your auto club offer no hassle service and rewards? Call Auto Club of America (ACA) & Get \$200 in ACA Rewards! (New members only) Roadside Assistance and Monthly Rewards. Call 1-800-242-0697 (CalSCAN)

Case, 3679 Central Parkway, Dublin, CA 94568; Matthew D. Dorn, 3240 Maguire Way #300, Dublin, CA 94568. This business is conducted by a General partnership. Registrant has not yet begun to transact business under the fictitious business name(s) listed herein. Signature of Registrant: Matthew D. Dorn, Partner. This statement was filed with the County Clerk of Alameda on 02/08/2016. (Pleasanton Weekly, Feb. 12, 19, 26, March 4; 2016)

STATEMENT OF ABANDONMENT OF USE OF FICTITIOUS BUSINESS NAME
File No. 489153

The following person(s) has/have abandoned the use of the fictitious business name(s). The information given below is as it appeared on the fictitious business statement that was filed at the County Clerk-Recorder's Office. FICTITIOUS BUSINESS NAME(S): CASE CONSULTING, 3679 CENTRAL PARKWAY, DUBLIN, CA 94568 FILED IN ALAMEDA COUNTY ON: 03/13/2014 UNDER FILE NO. 489153 REGISTRANT'S NAME(S): Mark A. Case, 3679 Central Parkway, Dublin, CA 94568; Barbara J. Case, 3679 Central Parkway, Dublin, CA 94568 THIS BUSINESS WAS CONDUCTED BY a Married couple. Signature of Registrant:

604 Adult Care Offered

A PLACE FOR MOM.

The nation's largest senior living referral service. Contact our trusted, local experts today! Our service is FREE/no obligation. CALL 1-800-550-4822. (Cal-SCAN)

624 Financial

Big Trouble with IRS?

Are you in BIG trouble with the IRS? Stop wage & bank levies, liens & audits, unfiled tax returns, payroll issues, & resolve tax debt FAST. Call 844-753-1317 (AAN CAN)

IRS Off Your Back?

Get the IRS off your back! They do not give up until you pay. Tax Solutions Now will get you the best deal. Call 800-691-1655 (AAN CAN)

Owe Over \$10K to IRS?

Do you owe over \$10,000 to the IRS or State in back taxes? Our firm works to reduce the tax bill or zero it out completely FAST. Call now 855-993-5796 (Cal-SCAN)

SOCIAL SECURITY DISABILITY

BENEFITS. Unable to work? Denied benefits? We Can Help! WIN or Pay Nothing! Contact Bill Gordon & Associates at 1-800-966-1904 to start your application today! (Cal-SCAN)

Structured Settlement?

Sell your structured settlement or annuity payments for CASH NOW. You don't have to wait for your future payments any longer! Call 1-800-673-5926 (Cal-SCAN)

636 Insurance

Health and Dental Insurance

Lowest Prices. We have the best rates from top companies! Call Now! 888-989-4807. (CalSCAN)

640 Legal Services

DID YOU KNOW

Information is power and content is King? Do you need timely access to public notices and remain relevant in today's hostile business climate? Gain the edge with California Newspaper Publishers Association new innovative website capublicnotice.com and check out the FREE One-Month Trial Smart Search Feature. For more information call Cecelia @ (916) 288-6011 or www.capublicnotice.com (Cal-SCAN)

Xarelto Users

have you had complications due to internal bleeding (after January 2012)? If so, you MAY be due financial compensation. If you don't have an attorney, CALL Injuryfone today! 1-800-425-4701. (Cal-SCAN)

Home Services

751 General Contracting

A NOTICE TO READERS:

It is illegal for an unlicensed person to perform contracting work on any project valued at \$500.00 or more in labor and materials. State law also requires that contractors include their license numbers on all advertising. Check your contractor's status at www.cslb.ca.gov or 800-321-CSLB (2752). Unlicensed persons taking jobs that total less than \$500.00 must state in their advertisements that they are not licensed by the Contractors State License Board.

Mark A. Case. This statement was filed with the County Clerk Recorder of Alameda County on 02/08/2016. (Pleasanton Weekly Feb. 12, 19, 26, March 4; 2016)

997 All Other Legals

NOTICE OF PUBLIC HEARING AND PUBLIC REVIEW PERIOD: Urban Water Management Plan

Zone 7 Water Agency is a water wholesaler serving over 220,000 people in Pleasanton, Livermore and Dublin in Alameda County, and the Dougherty Valley area of San Ramon in Contra Costa County. It sells treated water to four retailers: the City of Pleasanton, City of Livermore, Dublin San Ramon Services District and California Water Service Company.

As an urban water provider, Zone 7 prepares an Urban Water Management Plan aimed at analyzing and planning for a reliable water supply over a 20-year planning horizon considering normal, dry and multiple dry years.

As required under Section 10642 et seq. of the California Water Code, this is to notify the public that at its meeting to begin at 7

761 Masonry/Brick

easybrick123.com

Residential masonry expert. John Pensanti at (408) 209-6668.

781 Pest Control



Attic Clean-Up & Rodent Removal

Are you in the Bay Area? Do you have squeaky little rodents living in your attic or crawlspace? What you are looking for is right here! Call Attic Star now to learn about our rodent removal services and cleaning options. You can also get us to take out your old, defunct insulation and install newer, better products. Call (866) 391-3308 now and get your work done in no time!

Real Estate

809 Shared Housing/ Rooms

ALL AREAS ROOMMATES.COM.

Lonely? Bored? Broke? Find the perfect roommate to complement your personality and lifestyle at Roommates.com! (AAN CAN)

845 Out of Area



4 homes on 30 acres

Vacation where you live in Nevada City!! Looks like Disneyland with rock walls, manicured gardens, private lake, HUGE outdoor entertaining area and even its own mining museum!! 15 car garages for all your toys!! Priced to sell only \$2M!! Seller financing. Call Edie 530-913-0150 cell

855 Real Estate Services

DID YOU KNOW

Information is power and content is King? Do you need timely access to public notices and remain relevant in today's highly competitive market? Gain an edge with California Newspaper Publishers Association new innovative website capublicnotice.com and check out the Smart Search Feature. For more information call Cecelia @ (916) 288-6011 or www.capublicnotice.com (Cal-SCAN)

Fogster.com is a unique website offering **FREE** postings from communities throughout the Bay Area and an opportunity for your ad to appear in the Pleasanton Weekly.

p.m. on March 16, 2016, the Zone 7 Water Agency Board of Directors plans to conduct a public hearing on, and consider adoption of, the Agency's Draft 2015 Urban Water Management Plan. The hearing will be held at Zone 7 Administrative Offices, 100 North Canyon Parkway, Livermore.

A copy of the Draft 2015 Urban Water Management Plan is available for public review at the Zone 7 Water Agency office at 100 North Canyon Parkway in Livermore, on the website, www.zone7water.com, and at the following local libraries: Alameda County Public Library in Dublin, 200 Civic Plaza, Dublin

Livermore Public Library, 1188 South Livermore Ave., Livermore
Pleasanton Public Library, 400 Old Bernal Ave., Pleasanton

Public comment will be welcome at the hearing and you are encouraged to comment before then, if possible, by contacting Amparo Flores at aflores@zone7water.com. If you have any questions regarding this notice, contact Boni Brewer, Communication Specialist, at (925) 454-5015.

Appendix B

Zone 7 Water Agency Water Supply
Reliability Policy (Resolution 13-4230)

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS

RESOLUTION NO 13-4230

INTRODUCED BY DIRECTOR QUIGLEY
SECONDED BY DIRECTOR STEVENS

Water Supply Reliability Policy

WHEREAS, the Zone 7 Board of Directors desires to maintain a highly reliable Municipal and Industrial (M&I) water supply system so that existing and future M&I water demands can be met during varying hydrologic conditions; and

WHEREAS, the Board has an obligation to communicate to its M&I customers and municipalities within its service area the ability of Zone 7's water supply system to meet projected water demands; and

WHEREAS, the Board on August 18, 2004 adopted Resolution No. 04-2662 setting forth its Reliability Policy for Municipal & Industrial Water Supplies; and

WHEREAS, the Board desires to revise the Reliability Policy to reflect recent data, analysis, and studies.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby rescinds Resolution No. 04-2662 adopting the August 18, 2004 Reliability Policy for Municipal & Industrial Water Supplies; and

BE IT FURTHER RESOLVED that the Board hereby adopts the following level of service goals to guide the management of Zone 7's M&I water supplies as well as its Capital Improvement Program (CIP):

Goal 1. Zone 7 will meet its treated water customers' water supply needs, in accordance with Zone 7's most current Contracts for M&I Water Supply, including existing and projected demands as specified in Zone 7's most recent Urban Water Management Plan (UWMP), during normal, average, and drought conditions, as follows:

- At least 85% of M&I water demands 99% of the time
- 100% of M&I water demands 90% of the time

Goal 2: Provide sufficient treated water production capacity and infrastructure to meet at least 80% of the maximum month M&I contractual demands should any one of Zone 7's major supply, production, or transmission facilities experience an extended unplanned outage of at least one week.

BE IT FURTHER RESOLVED that to ensure that this Board policy is carried out effectively, the Zone 7 General Manager will provide a water supply status report to the Board every five years with the Zone 7 Urban Water Management Plan that specifies how these goals will be, or are being, achieved.

If the General Manager finds that the goals cannot be met during the first five years of the Urban Water Management Plan, then the Board will hold a public hearing within two months of the General Manager's finding to consider remedial actions that will bring Zone 7 into substantial compliance with the stated level of service goals. Remedial actions may include, but are not limited to, voluntary conservation or mandatory rationing to reduce water demands, acquisition of additional water supplies, and/or a moratorium on new water connections. After reviewing staff analyses and information gathered at the public hearing, the Board shall, as expeditiously as is feasible, take any additional actions that are necessary to meet the level of service goals during the following five-year period; and

BE IT FURTHER RESOLVED that the Zone 7 General Manager shall prepare an Annual Review of the Sustainable Water Supply Report which includes the following information:

- (1) An estimate of the current annual average water demand for M&I water as well as a five-year projection based on the same information used to prepare the UWMP and CIP;
- (2) A Summary of available water supplies to Zone 7 at the beginning of the calendar year;
- (3) A comparison of current water demand with the available water supplies; and
- (4) A discussion of water conservation requirements and other long-term supply programs needed to meet Zone 7 M&I water demands for single-dry and multiple-dry year conditions, as specified in the Zone 7's UWMP.

A summary of this review will be provided to M&I customers.

Definitions

Level of Service for Annual Water Supply Needs—the level of service is the percent of existing or projected water demand that Zone 7's water supply system can meet during two key conditions: (1) during various hydrologic conditions and (2) during unplanned outages of major facilities.

Capital Improvement Program (CIP)—the CIP is Zone 7's formal program for developing surface and ground water supplies, along with associated infrastructure, including import water conveyance facilities, surface water treatment plants, groundwater wells, and M&I water transmission system to meet projected water demands.

Normal conditions—conditions that most closely represent median runoff or allocation from all normally contracted or available water supplies from the historic record.

Average conditions—conditions that most closely represent the average runoff or allocation from all normally contracted or legally available water supplies from the historic record.

Drought conditions—conditions that most closely represent reduced runoff or allocation level from the historic record from all normally contracted or legally available water supplies, including both single-dry and multiple-dry year conditions.

Single-dry year condition—a condition that most closely represents the lowest yield over a one-year period from the historic record from all normally contracted or legally available supplies.

Multiple-dry year condition—a condition that most closely represents three or more consecutive dry years from the historic record that represent the lowest yields from all normally contracted or legally available supplies.

Available water supplies—consist solely of (1) water supplies that Zone 7 has contracted for (e.g., listed under Schedule A of the State Water Contract, dry-year water options, special contracts with other water districts, etc.) and (2) water actually stored in surface and subsurface reservoirs.

Maximum Month—the largest monthly average water use.

ADOPTED BY THE FOLLOWING VOTE:

AYES: DIRECTORS FIGUERS, GRECI, MACHAEVICH, PALMER, QUIGLEY, RAMIREZ HOLMES STEVENS

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on October 17, 2012.

By 
President, Board of Directors

Appendix C

Example Resolution for Declaration of
Water Shortage Stage

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO

INTRODUCED BY

SECONDED BY

DECLARATION OF A STAGE X WATER SHORTAGE EMERGENCY

WHEREAS, the California Urban Water Management Planning Act (“Act”) requires urban water suppliers to adopt an Urban Water Management Plan every five years; and

WHEREAS, Zone 7 adopted its Urban Water Management Plan in accordance with the provisions of the Act in July 2016; and

WHEREAS, a required component of the Urban Water Management Plan is a Water Shortage Contingency Plan, which establishes criteria and guidelines for operations and water conservation during a water shortage condition; and

WHEREAS, on April X, 201X the Zone 7 Board was presented with the Annual Review of Sustainable Water Supply; and

WHEREAS, the review determined that Zone 7 can only deliver XX% of expected water demands in 20XX due to [cite conditions: e.g., critically dry conditions]. ***And/Or***

WHEREAS, on X/XX/20XX, the Governor of the State of California declared a drought state of emergency [asking/requiring] residents to reduce water use by XX%. ***And/Or***

WHEREAS, on X/XX/20XX, the Department of Water Resources announced a X% allocation from the State Water Project. ***And/Or***

WHEREAS, the Board has determined that water shortage emergency conditions exist within the Zone 7 service area due to [cite event: e.g., supply disruption from the Delta due to an earthquake]; and

WHEREAS, the Water Shortage Contingency Plan in the 2015 Urban Water Management Plan adopted by the Board on X/XX/2016 identifies stages of water shortages and demand reduction targets, water supply conditions and required actions associated with each stage.

WHEREAS, current conditions warrant declaration of a Stage X water shortage which requires a XX% [voluntary/mandatory] reduction in water use.

NOW, THEREFORE BE IT RESOLVED, the Board hereby declares a Stage X water shortage and actions applicable to Stage X are, put into effect immediately.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on [DATE]

By _____
President, Board of Directors

Appendix D

Example Resolution for Declaration of
Water Shortage Surcharge

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO

INTRODUCED BY
SECONDED BY

IMPLEMENTATION OF WATER SHORTAGE SURCHARGE RATE

WHEREAS, the Zone 7 Board has declared a Stage Y water shortage which requires a XX% [voluntary/mandatory] reduction in water use.

WHEREAS, the Water Shortage Contingency Plan in the 2015 Urban Water Management Plan adopted by the Board on XX/XX/2016 identifies stages of water shortages and demand reduction targets, water supply conditions, required actions and fiscal measures associated with each stage.

WHEREAS, said fiscal measures include use of reserves, deferral/acceleration of capital projects, grants and other cost cutting measures.

WHEREAS, the Water Shortage Contingency Plan identifies both water shortage surcharges and use of reserves to ensure full revenue recovery for each water shortage stage.

NOW, THEREFORE BE IT RESOLVED, that Stage Y water shortage surcharge in accordance with the table below shall take effect on the first day of the month following thirty days after the adoption of this resolution.

BE IT FURTHER RESOLVED, that the Stage Y water shortage surcharge will sunset after six months unless extended or modified by action of the Board.

Stage	Demand Reduction Targets	Water Shortage Surcharge Rate (per CCF)
1 - Minimal Shortage	Up to 20% (Voluntary)	Use of Reserves
2 - Moderate Shortage	Up to 20% (Mandatory)	\$0.35
3 - Severe Shortage	Up to 35% (Mandatory)	\$0.75
4 - Critical Shortage	Greater than 35% (Mandatory)	\$1.40

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ABSTAIN:

I certify that the foregoing is a correct copy of a resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on DATE

By _____
President, Board of Directors

Appendix E

Zone 7 Water Agency Adoption of the
2015 UWMP and Water Shortage
Contingency Plan (Resolution 16-122)

ZONE 7
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
BOARD OF DIRECTORS

RESOLUTION NO 16-122

INTRODUCED BY DIRECTOR STEVENS
SECONDED BY DIRECTOR McGRAIL

Adoption of the 2015 Urban Water Management Plan,
Including the Water Shortage Contingency Plan

WHEREAS, the Urban Water Management Planning Act (Water Code Division 6, Part 2.6, Sections 10610 through 10650), requires all urban water suppliers serving more than 3,000 customers either directly or indirectly, or more than 3,000 acre-feet of water annually, to prepare and submit a plan, or plan update, once every five years; and

WHEREAS, said plan is for the purpose of evaluating and developing water management policies to achieve conservation and efficient use of urban water supplies; and

WHEREAS, Zone 7 Water Agency is the overall water management agency for the Livermore-Amador Valley, including the cities of Dublin, Livermore, Pleasanton and a portion of San Ramon; and

WHEREAS, Zone 7 Water Agency's 2010 Urban Water Management Plan was approved by the California Department of Water Resources in September 2011; and

WHEREAS, Zone 7 Water Agency has prepared and circulated for public review an updated Draft 2015 Urban Water Management Plan, which includes the required Water Shortage Contingency Plan; and

WHEREAS, a public hearing regarding the Draft 2015 Urban Water Management Plan was properly noticed and held to receive comments.

NOW, THEREFORE, BE IT RESOLVED that the Draft 2015 Urban Water Management Plan be approved and adopted as the 2015 Urban Water Management Plan for the Zone 7 Water Agency; and

BE IT FURTHER RESOLVED that Zone 7 reaffirms its commitment to maintain the long-term reliability of its water supply; and

BE IT FURTHER RESOLVED that the 2015 Urban Water Management Plan be filed with the California Department of Water Resources.

ADOPTED BY THE FOLLOWING VOTE:

AYES: DIRECTORS FIGUERS, GRECI, McGRAIL, PALMER, QUIGLEY, RAMIREZ HOLMES, STEVENS

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of Alameda County Flood Control and Water Conservation District on

March 16, 2016

By 
President, Board of Directors

Appendix F

2014 CUWCC Best Management Practice
(BMP) Wholesale Coverage Report



CUWCC BMP Wholesale Coverage Report 2014

Foundational Best Management Practices for Urban Water Efficiency

BMP 1.1 Wholesale Agency Assistance Programs

ON TRACK

7031 Zone 7 Water Agency

Name: Robyn Navarra Email: rnavarra@zone7water.com

a) Financial Investments and Building Partnerships

BMP Section	Monetary Amount for Financial Incentives	Monetary Amount for Equivalent Resources	
BMP 3 Residential	539751.00		
BMP 2.2 School Education Program	0	100000.00	
BMP 2.1 Public Outreach		75000.00	
BMP 4 CII	96000.00		
BMP 5 Landscape	32725.00		
Other		30000.00	

b) Technical Support

c) Retail Agency

d) Water Shortage Allocation

Adoption Date: 4/15/2015

File Name: Zone 7 conducts monthly audits of water production and delivery records to determine any losses within the transmission system.

e) Non signatory Reporting of BMP implementation by non-signatory Agencies

City of Livermore \$25,706 and City of Pleasanton \$91,038.

f) Encourage CUWCC Membership List Efforts to Recruit Retailers

Zone 7 continues to support CUWCC membership. During the Tri-Valley meeting encourages non-member to join CUWCC.

At Least As effective As

Funding for the conservation incentive programs are provided through water rates, capital improvement projects and grant funding. Zone 7 maintains all data by program in an database. The 4 retailers receive weekly performance measure reports.

Exemption

Comments:



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control

ON TRACK

7031 Zone 7 Water Agency

Completed Standard Water Audit Using AWWA Software? No

AWWA File provided to CUWCC? No

AWWA Water Audit Validity Score?

Complete Training in AWWA Audit Method Yes

Complete Training in Component Analysis Process? Yes

Component Analysis? No

Repaired all leaks and breaks to the extent cost effective? Yes

Locate and Repair unreported leaks to the extent cost effective? Yes

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair. No

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)

At Least As effective As

Zone 7 conducts monthly audits of water production and delivery records to determine any losses within the transmission system. All leaks are reported and repairs are prioritized.

Exemption

Comments:



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

7031 Zone 7 Water Agency

Numbered Unmetered Accounts No

Metered Accounts billed by volume of use Yes

Number of CII Accounts with Mixed Use Meters

Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? No

Feasibility Study provided to CUWCC? No

Date:

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters Yes

At Least As effective As

Zone 7 conducts monthly audits of water production and delivery records to determine any losses within the transmission system. All leaks are reported and repairs are prioritized.

Exemption

Comments:

Zone 7 conducts monthly audits of water production and delivery records to determine any losses within the transmission system.



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

7031 Zone 7 Water Agency

Wholesale

Does your agency perform Public Outreach programs? Yes

The list of retail agencies your agency assists with public outreach

California Water Service Company - Livermore, Dublin San Ramon Services District
City of Pleasanton Rita Di Candia (rdicandia@ci.pleasanton.ca.us) ; City of Livermore D'Angelo, Dana (dkdangelo@cityoflivermore.net)

The name of agency, contact name and email address if not CUWCC Group 1 members

Did at least one contact take place during each quarter of the reporting year? No

Public Outreach Program List	Number
General water conservation information	40000
Landscape water conservation media campaigns	60000
Website	38500
Newsletter articles on conservation	6000
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	222000
Total	366500

Did at least one contact take place during each quarter of the reporting year? Yes

Number Media Contacts	Number
Articles or stories resulting from outreach	20
Total	20

Did at least one website update take place during each quarter of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Education	48200
Giveaways	6600
Advertising	2000
Drought Mailers	26000
Radio Campaign for Drought	10000
Total Amount:	92800

Description of all other Public Outreach programs

StopWaste.org and Alameda County Clean Water Program



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

7031 Zone 7 Water Agency

Wholesale

Does your agency implement School Education programs? Yes

The list of retail agencies your agency assists with public outreach

California Water Service Company - Livermore, Dublin San Ramon Services District

City of Pleasanton Rita Di Candia (rdicandia@ci.pleasanton.ca.us) ; City of Livermore D'Angelo, Dana (dkdangelo@cityoflivermore.net)

Agencies Name	ID number
California Water Service Company - Livermore	5008
Dublin San Ramon Services District	112

Materials meet state education framework requirements? Yes

CALIFORNIA STATE STANDARD COVERED:
EARTH SCIENCE 3d: Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling.

Materials distributed to K-6? Yes

Conservation magnets, pencils, drinking cups w/conservation message

Materials distributed to 7-12 students? Yes (Info Only)

GRADES 6-8th (I Choose to Conserve)
CALIFORNIA STATE STANDARD COVERED:
EARTH SCIENCE 3d: Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited.

Annual budget for school education program: 75000.00

Description of all other water supplier education programs

LARPD children's Fair, Take Our Children to Work Day, Participation in Alameda County Science and Engineering Fair

Comments:

At Least As effective As No

Exemption No 0