APPENDIX C
Utilities Documentation and Water Supply Assessment

APPENDIX C1
Public Service and Utility Correspondence

CALIFORNIA
AMERICAN WATER

March 12, 2019

Jennifer Pierce
KHR Associates
4100 Newport Pl #200
Newport Beach, CA 92660

WILL-SERVE NOTICE

Subject: 1700 Business Center Drive, Duarte, CA 91010

Ms. Pierce

This is to advise that California American Water will supply water service, without exception to the subject property. However, arrangements **may** have to be made for the installation of water service(s) or other appurtenances. Any costs associated with the installation of water service(s) or other appurtenances will be the sole responsibility of the property owner.

Improvements to the existing source of supply will be required to meet on-site demands for domestic use and fire protection requirements set forth by the Los Angeles County Fire Department for this location. All costs for improvements will be the sole responsibility of the property owner/developer. Due to the size of this proposed project a Water Supply Assessment will be required to further evaluate supply, storage, pipeline, and infrastructure improvements necessary to serve the development.

To provide adequate water flow for fire protection, as may be required by the cognizant fire department, the exact size and length of any main, fire service or fire hydrant that may have to be installed will have to be determined by a qualified hydraulics engineer (by other than the Water Company).

The quality of water delivered by California American Water meets all requirements of the California State Department of Health Services and the Los Angeles County Health Department.

If you have any questions or concerns regarding this correspondence, please contact me at (626) 614-2533.

Regards,
CALIFORNIA AMERICAN WATER
SOUTHERN DIVISION, LOS ANGELES DISTRICT

Jessica Taylor
Operations Supervisor

c: Louie Romero, Operations Supervisor

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

December 19, 2018

Ref. Doc. No.: 4857598

Ms. Jennifer Pierce
Senior Associate
KHR Associates
20411 Birch Street
Suite 310
Newport Beach, CA 92660

Dear Ms. Pierce:

Will Serve Letter for the Highland Avenue Apartments

The Sanitation Districts of Los Angeles County (Districts) received your will serve letter request for the subject project on November 26, 2018. The proposed project is located within the jurisdictional boundaries of District No. 22. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Buena Vista Trunk Sewer, located in Three Ranch Road west of Duncannon Avenue. The Districts' 12-inch diameter trunk sewer has a capacity of 1.7 million gallons per day (mgd) and conveyed a peak flow of 0.6 mgd when last measured in 2015.

2. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 63.8 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.

3. The expected increase in average wastewater flow from the project, described in the request as 600 residential apartment units, is 89,379 gallons per day, after the structure on the project site is demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more

information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. In determining the impact to the Sewerage System and applicable connection fees, the Districts' Chief Engineer and General Manager will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: A. Schmidt
A. Howard

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

12/3/18

MW Investment Group

Highland Projecct: 600-Unit Residential Apartments

Your project is located in Southern California Edison (SCE) service territory. SCE will serve the above subject project's electrical requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs.

SCE may need to conduct utility studies, where applicable, to assess whether additions or modifications to the existing electric infrastructure are required to serve this project. Where applicable, SCE has attached Appendix (B) which not only describes the study, and permitting, but includes a Project Information Sheet that will need to be completed by you and submitted to SCE if your project is at a point where SCE has to determine the required electrical utility work. This Will-Serve letter does not imply that either: (i) these studies have been completed, or (ii) that any required California Environmental Quality Act (CEQA) analysis of project-related electric utility impacts has been conducted.

I am the SCE Design Representative currently assigned to this project. SCE or Applicant will design and construct all required electrical infrastructure to serve this project provided you enter into the applicable contractual agreements with SCE identify scope of electrical utility work required, and supply the following information:

- Site plans as required
- Required contracts and agreements (fully executed)
- Applicable fees
- Local permits
- Required easement documents

Your project will be scheduled for construction once SCE has all the necessary information for your project and you have submitted or agreed to the applicable requirements as stated above, and paid any necessary fees.

If your project will not require SCE services, please notify us so that we can update our records.

SCE appreciates your business. If you have any questions, please feel free to call me at (909) 824-4000.

Sincerely,

Antoine Williams

SCE Design Representative

Enclosure: Appendix B, where applicable

Appendix B

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

12/3/18

MW Investment Group

Highland Projecct: 600-Unit Residential Apartments

As your Southern California Edison (SCE) Design Representative for this project, I am committed to providing you with excellent customer service. The following information is intended to help explain SCE's planning and permitting process for the electric infrastructure needed to serve your Project.

Depending on the scope of work necessary to serve your project (electric facility installation, removal, relocation, rearrangement and/or replacement), it may be necessary for you to submit an Advanced Engineering Fee. This Fee will be applied to certain expenses associated with preliminary design and engineering work required to estimate the cost for SCE to perform the electric work associated with your project. Please note: Depending on factors such as resource constraints, construction or relocation of SCE facilities requirements, the need for environmental review, and so forth, delays in meeting your projected completion date may occur. To help minimize the potential for delays it is imperative that you provide all requested information as early as possible.

If the project results in the need for SCE to perform work on SCE electrical facilities that operate at between 50 and 200 kilovolts (kV), please be advised these facilities are subject to the California Public Utilities Commission's (CPUC's) General Order 131-D (GO 131-D) Permit to Construct (PTC) requirements. For the CPUC PTC review, the CPUC acts as the lead agency under the California Environmental Quality Act (CEQA). Depending on the scope of SCE's work, certain exemptions to the PTC requirements may be available. If no exemptions are available, the PTC application preparation and environmental approval process could take a minimum of 24 - 48 months.

If you anticipate that your project will require work to be performed on SCE electrical facilities operated at between 50 kV and 200 kV, please inform me at your earliest possible convenience for further assistance to determine the potential G.O.131-D permitting requirements and/or permitting exemption(s).

In order for SCE to determine the required electrical utility work necessary to support your project, and to determine any permitting requirements and costs associated with constructing these facilities, project plans and a completed Customer Project Information Sheet will need to be submitted.

If you have any additional questions, please feel free to call me at (909) 824-4000.

Sincerely,

Antoine Williams

SCE Design Representative

Southern California Gas Company
A Sempra Energy utility℠

Southern California Gas Company
1981 West Lugonia Avenue
Redlands, CA 92374
Mailing Address:
PO Box 3003
Redlands. CA 92373-0306

12/19/2018

KHR ASSOCIATES
Attn: Jennifer Pierce
20411 SW Birch Street, Suite 310
Newport Beach, California 92660

RE: Will Serve Letter Request for – Job I.D. #41-2018-11-00066
Location: 1700 Business Center Drive Duarte, California 91010, City of Duarte – APN# 8528-011-025

Dear Jennifer,

Thank you for inquiring about the availability of natural gas service for your project. We are pleased to inform you that Southern California Gas Company (SoCalGas) has facilities in the area where the above named project is being proposed. The service would be in accordance with SoCalGas' policies and extension rules on file with the California Public Utilities Commission (Commission) at the time contractual arrangements are made.

This letter should not be considered a contractual commitment to serve the proposed project, and is only provided for informational purposes only. The availability of natural gas service is based upon natural gas supply conditions and is subject to changes in law or regulation. As a public utility, SoCalGas is under the jurisdiction of the Commission and certain federal regulatory agencies, and gas service will be provided in accordance with the rules and regulations in effect at the time service is provided. Natural gas service is also subject to environmental regulations, which could affect the construction of a main or service line extension (for example, if hazardous wastes were encountered in the process of installing the line). Applicable regulations will be determined once a contract with SoCalGas is executed.

If you need assistance choosing the appropriate gas equipment for your project, or would like to discuss the most effective applications of energy efficiency techniques, please contact our area Service Center at 800-427-2200.

Thank you again for choosing clean, reliable, and safe natural gas, your best energy value.

Sincerely,

Jaime Perez
Work Order Supervisor

JP/JL
enc.

January 16, 2019

KHR Associates
20411 SW Birch Street, Suite 310
Newport Beach, California 92660
Attention: Jennifer Pierce

Preliminary Project Information:
Highland
1700 Business Center Drive
Duarte, California 91010

To Whom It May Concern;

Thank you for your request regarding the availability of Cable, Internet and Voice service for the above mentioned project. Spectrum, holder of the local cable television franchise, has facilities in the general area to the proposed project. The service provided will be in accordance with Spectrum's requirements set forth in the franchise and pursuant to applicable laws, rules & regulations.

This letter is provided only as a source of information and not a contractual commitment. Before Spectrum can begin work for any project, a right of entry agreement will need to be executed.

Please call me at (424) 220-0766 when you are ready to start the contract process or if you have any questions.

Sincerely,

Dave Rees | Account Executive | (424) 220-0766
3430 E. Miraloma Ave| Anaheim, CA 92806
david.rees@charter.com

APPENDIX C2
Water Supply Assessment

California-American Water Southern Division-
Los Angeles County District

Draft Water Supply Assessment

for the

Duarte Station Specific Plan

Prepared for:

Duarte Investment Partners, LLC

Prepared Under the Responsible Charge of:

Laine Carlson, PE

California R.C.E. No. 72424, Expires 6/30/2020

8/13/2019

WSC
WATER SYSTEMS CONSULTING, INC.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION AND PURPOSE

This Water Supply Assessment (WSA) was prepared on behalf of Duarte Investment Partners, LLC (Duarte Partners) for California-American Water (CAW) by Water Systems Consulting, Inc. (WSC) to satisfy the requirements of California Water Code (CWC) Section 10910 (Senate Bill 610) for the Duarte Station Specific Plan (Project), which is proposed by Duarte Partners. The Project lies within the city limits of the City of Duarte (City). The Project lies within CAW's Duarte water service area. The City is the Lead Agency for the Project's Environmental Impact Report (EIR) which is required by the California Environmental Quality Act (CEQA).

As required by Senate Bill 610 (SB 610), CAW is responsible for assessing whether the total projected water supplies available during average, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand for the Project, in addition to CAW's existing and planned future uses. A water supplier's Urban Water Management Plan (UMWP) serves as a foundational document for a WSA. The water demands of the proposed Project were not accounted for in CAW's *2015 Urban Water Management Plan for the Southern Division- Los Angeles County District* (2015 UWMP) (1), as submitted to the California Department of Water Resources (DWR) in June 2016. However, CAW intends to prepare an amendment to the 2015 UWMP to account for a minor revision to the water supply calculations presented in the 2015 UWMP and to address comments received from DWR. The 2015 UWMP will be amended to address these changes and will also incorporate the estimated demands from the proposed Project in the supply and demand analysis. Therefore, the demands of the proposed Project will be accounted for in the in 2015 UWMP, as amended. Content from the 2015 UWMP has been updated and incorporated into this document and reflects the supply and demand information that will be presented in the amended 2015 UWMP. Additional information from other sources is also incorporated into this WSA to document supplies from all sources, including groundwater and purchased water. Documentation includes identifying and quantifying water rights, contracts, and/or entitlements to the supply. CAW must provide the results of the assessment to the City, as the Lead Agency, for inclusion in the CEQA document for the project. This WSA includes the following:

- Description of the Project and proposed water demand (Section 3 & 4)
- Overview of CAW's Los Angeles County District water system (Section 2)
- Information on CAW's current and projected water demands in the Duarte water service area (Section 5)
- Information on CAW's current and projected Los Angeles County District water supplies (Section 6)
- Discussion of the Duarte water service area water supply reliability (Section 7)
- Comparison of the Duarte water service area water supplies and water demands for average, single dry, and multiple dry years (Section 8)
- Determination of the Duarte water service area water supply sufficiency (Section 9)

1.1 LEGISLATION

The City has determined that the Project is subject to review under CEQA (*Public Resources Code, Section 21000 et seq.*), and the state CEQA Guidelines (*California Code of Regulations, Section 15000 et. seq.*) The City has determined that the Project is a "project" as defined in CWC 10912 and has determined that an EIR is required for the Project.

SB 610 amended the Public Resources Code, effective January 1, 2002, to incorporate CWC requirements for certain types of development projects to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 seeks to promote more collaborative planning between local water suppliers, cities and counties by requiring detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects.

Under SB 610, water suppliers must prepare WSAs for projects meeting certain project size criteria and deliver them to local governments for inclusion in any environmental documentation. The Project requires a WSA because it proposes construction of uses that exceed the thresholds of a proposed residential development of more than 500 dwelling units.

1.2 DEFINITIONS

For the purposes of this WSA, the following defined terms are used:

- **Groundwater production:** The amount of water produced from CAW groundwater supply sources and put into the distribution system based on metered flows at each well. CAW provided annual groundwater production data for 1995-2018.
- **Purchased Water:** The amount of water purchased from CAW's wholesale supply sources and put into the distribution system based on metered flows at each supply connection. CAW provided annual purchased water data for 2005-2018.
- **Consumption:** The amount of billed metered water consumed by customers. CAW provided annual consumption data for 1995-2018.
- **Demand:** The amount of water distributed through the entire water system, which is the sum of groundwater production and purchased water. Demand includes non-revenue water, which is equal to the difference between water put into the distribution system and consumption.
- **Non-revenue water**: Unmetered water use and losses from the distribution system due to leaks, unauthorized connections, or theft.
- **Unit Factor:** The calculated amount of water demand per unit (e.g., acre, sqft, dwelling unit, etc.) of a specific type of use (e.g., land use, development type, business type, etc.).

2 PUBLIC WATER SYSTEM OVERVIEW

CAW's Southern Division - Los Angeles County District consists of the Baldwin Hills, Duarte, and San Marino water service areas. The water systems within these three service areas are not interconnected with each other and have independent water supplies. All three service areas of the Los Angeles County District are located in Los Angeles County, California. In 2018, the Los Angeles County District provided water to approximately 28,112 connections and served a population of approximately 102,759 people. In 2018, this population made up 1% of the Los Angeles County population. Figure 2-1 shows the location of all three service areas in Los Angeles County.

The Project is located entirely within CAW's Duarte water service area, which is shown in Figure 2-1 and Figure 2-2. The Duarte water service area encompasses approximately 6,459 acres and is located approximately 20 miles northeast of downtown Los Angeles. The Duarte water service area spans both sides of Interstate 210 immediately west of the Interstate 210 / Interstate 605 freeway interchange. The San Gabriel River runs along the eastern border of the Duarte water service area. In 2018, CAW's Duarte water service area provided water to approximately 7,500 connections and 29,500 customers in the cities of Azusa, Bradbury, Duarte, Irwindale, and Monrovia. Only the Duarte service area will be discussed in subsequent sections of this WSA because the Project is located in the Duarte water service area, which is operated separately from San Marino and Baldwin Hills service areas.

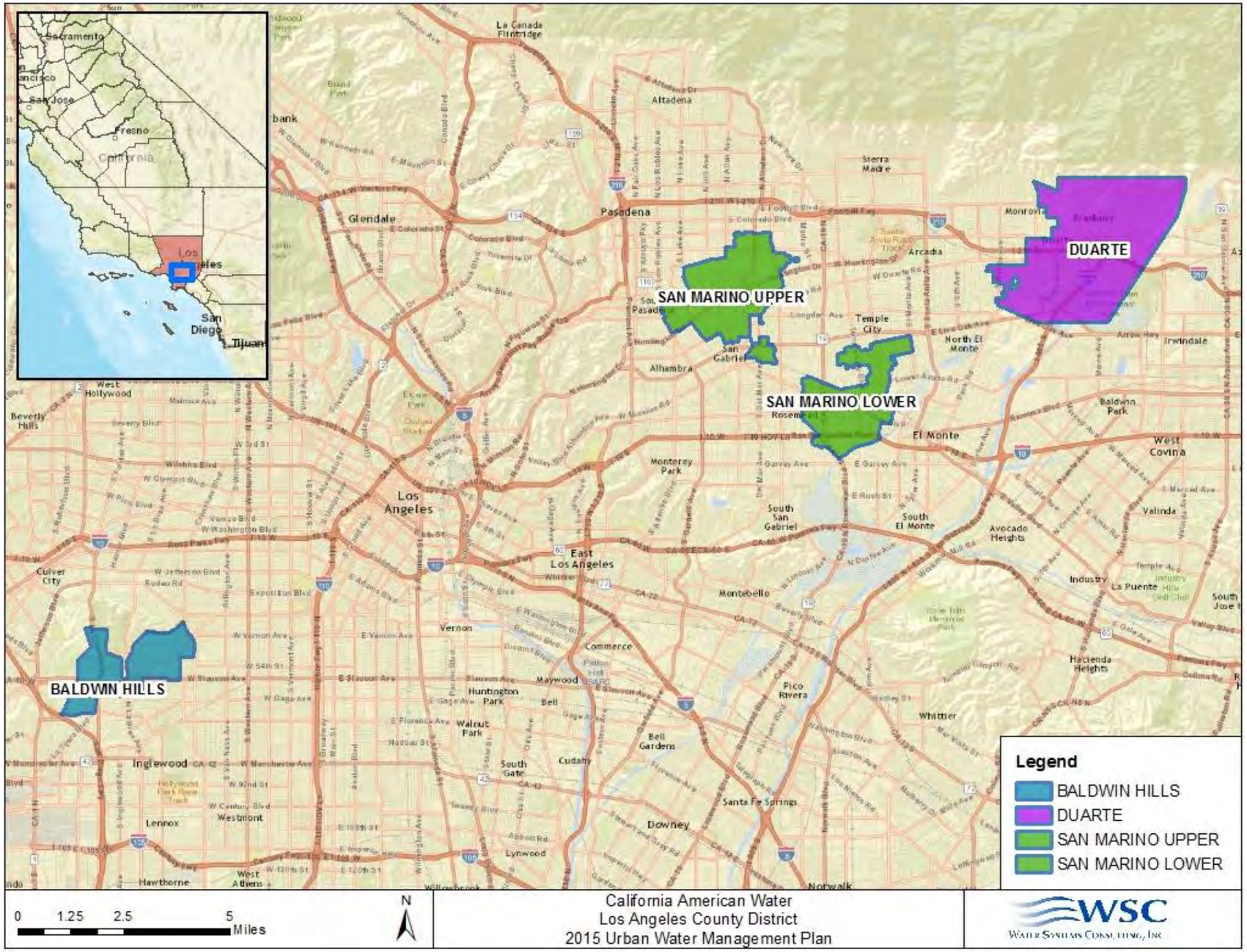


Figure 2-1. CAW Los Angeles County District Water Service Areas (1)

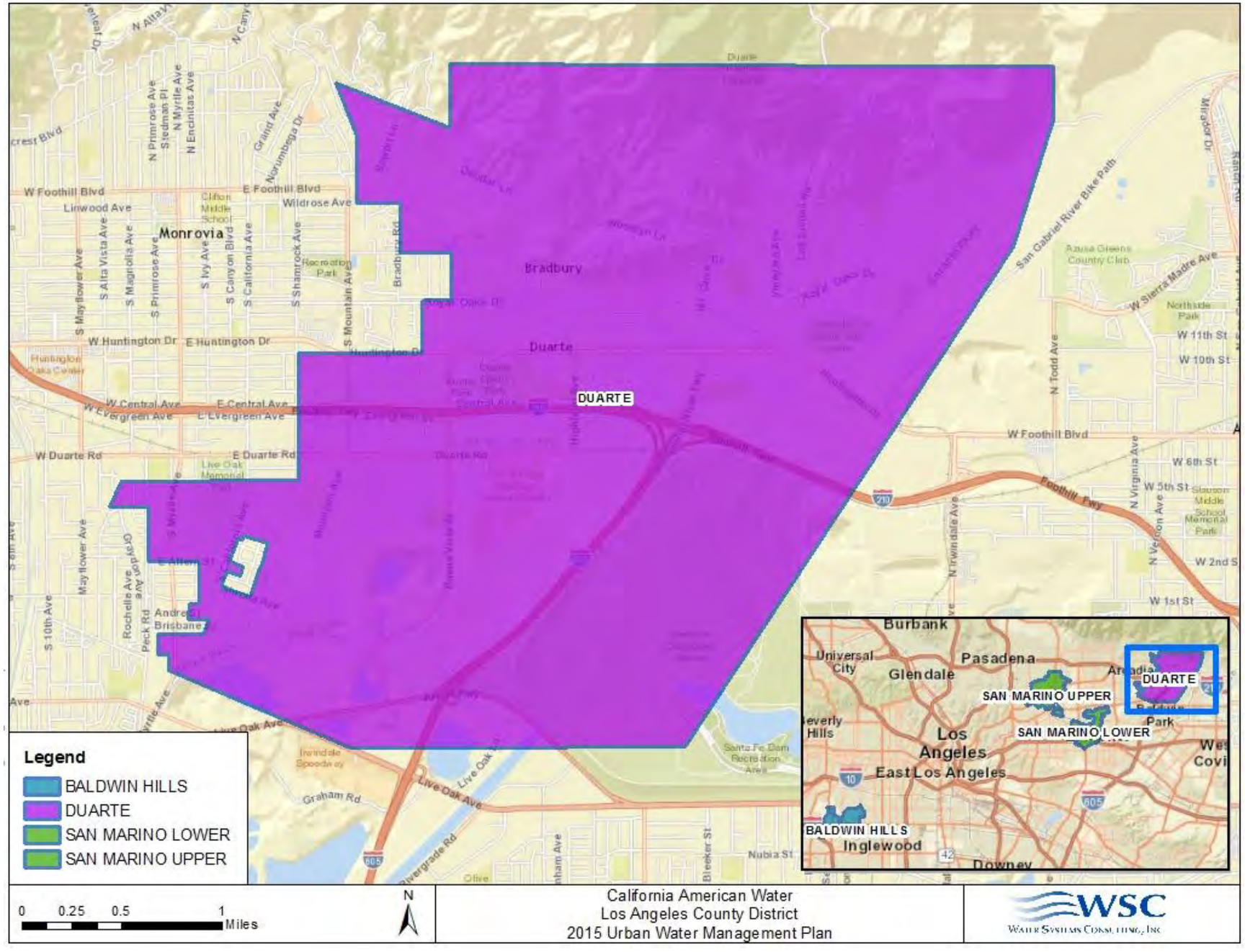


Figure 2-2. CAW Duarte Water Service Area (1)

2.1 CLIMATE

The Los Angeles County District has a Mediterranean climate as evidenced by its dry, warm to hot summers, and mild, somewhat rainy winters with modest transitions in temperature. The warmest month of the year is typically August and the coldest month is typically January. The average temperature is a mild 63.9 degrees Fahrenheit. On average, the weather station used to record climate data receives 20.2 inches of rainfall per year. Table 2-1 and Table 2-2 present monthly climate data in more detail.

Table 2-1. Precipitation and Evapotranspiration in the Los Angeles County District (January through June)

	January	February	March	April	May	June
Standard Average ETo, in[1]	2.23	2.41	3.67	4.28	5.02	5.62
Average Rainfall, in[2]	4.39	4.54	3.39	1.39	0.43	0.13
Average Temperature, °F[2]	54.55	55.95	57.9	61.1	64.25	68.7

[1] Data from California Irrigation Management Information System (CIMIS), Station 159 in Monrovia, (period of record is from January 2005 through November 2015) http://wwwcimis.water.ca.gov/cimis/data.jsp **(2)**
[2]Data from Western Regional Climate Center, Station:(046719) Pasadena, California, (1893-December 31, 2015) http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6719 **(3)**

Table 2-2. Precipitation and Evapotranspiration in the Los Angeles County District (July through December)

	July	August	Sept.	Oct.	Nov.	Dec.	Annual
Standard Average ETo, in[1]	6.30	6.14	5.86	3.47	2.44	1.82	57.06
Average Rainfall, in[2]	0.03	0.08	0.36	0.7	1.67	3.14	20.24
Average Temperature, °F[2]	74.15	74.75	72.8	67	60.5	55.2	63.9

[1] Data from California Irrigation Management Information System (CIMIS), Station 159 in Monrovia, (period of record is from October 1999 through April 2011) http://wwwcimis.water.ca.gov/cimis/data.jsp
[2]Data from Western Regional Climate Center, Station:(046719) Pasadena, California, (1893-December 31, 2015) http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6719 **(3)**

2.2 SERVICE AREA POPULATION

The historical, current, and projected populations for the Duarte water service area are shown in Table 2-3. The population projections were calculated based on 2000 and 2010 census block data as well as calculated growth rates from the Southern California Association of Governments (SCAG) population projections by census tract. It is anticipated that the Project will result in additional permanent residents within the Duarte water service area in excess of these projections.

Table 2-3. Historical, Current and Projected Population (1)

	2005	2010	2015	2020	2025	2030	2035	2040
CAW Duarte Water Service Area	29,302	29,643	29,156	29,625	30,208	30,801	31,407	32,024

2.2.1 Other Demographic Factors

The Duarte service area is located within the West San Gabriel Valley Planning Area and a small portion of the East San Gabriel Planning Area as defined in the Los Angeles County General Plan, shown in Figure 2-3. Within the unincorporated portion of the West San Gabriel Valley Planning Area, the projected population growth is 33% and the projected employment growth is 10% between 2010 and 2035 (4).

Most of the communities in the Los Angeles District service areas are approaching buildout and have little or no available vacant land left to develop. Most growth is anticipated to come from redevelopment and higher density development. The L.A. County General Plan Housing Element states:

> *"There will be a continued decrease in land available for new housing throughout the County, coupled with a continued increase in pressure to preserve open space and agricultural land; and higher density housing is needed to balance the shortages of land for development and the increasing needs for housing and commerce"* (5).

To make sure the demographic factors impacting the Duarte water service area are accurately captured, the growth rates utilized for projections calculated for this WSA are based on the most current and detailed data available from the SCAG population projections by census tract.

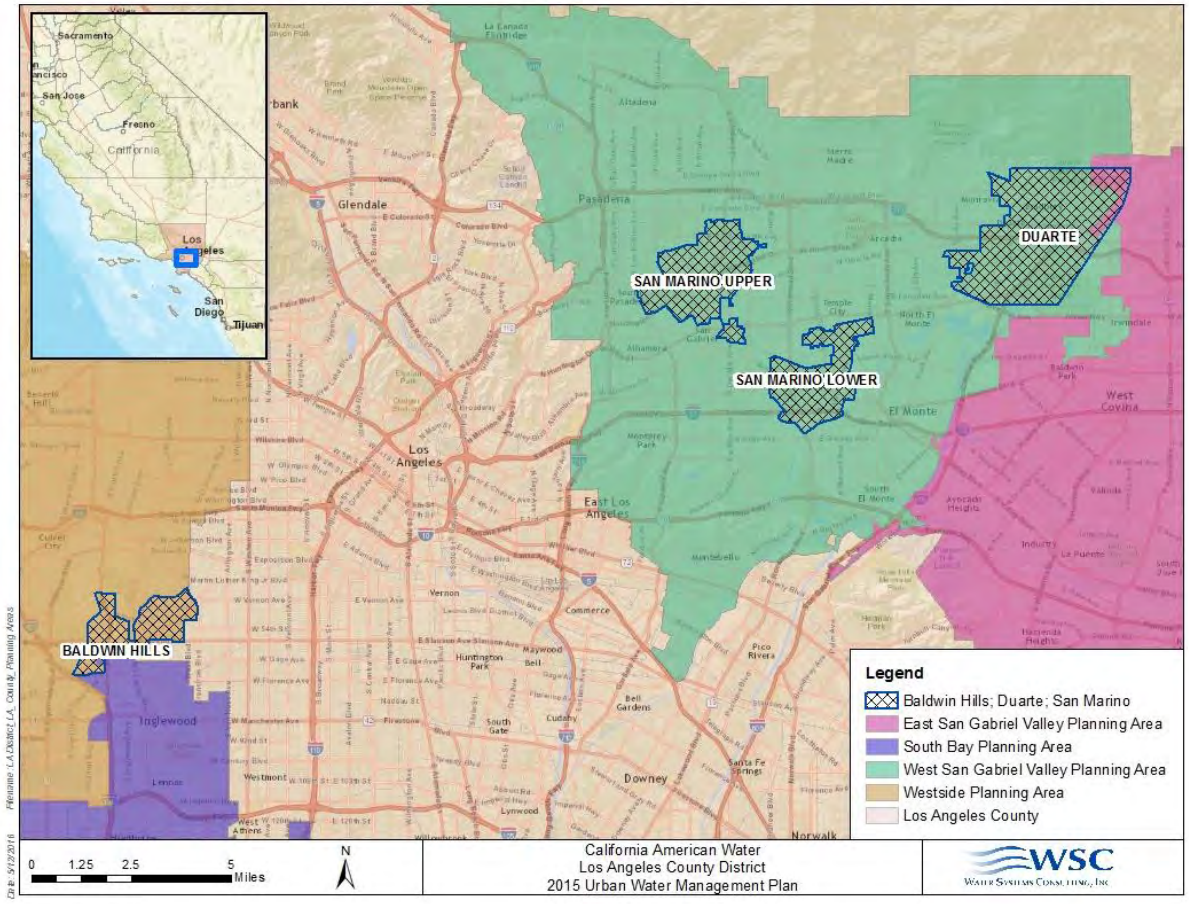


Figure 2-3. Los Angeles County Planning Areas (1)

3 PROJECT DESCRIPTION

The Project area consists of 19 acres on three parcels in the southern portion of the City of Duarte in Los Angeles County, California, south of Interstate 210, north of Duarte Road, and west of Highland Avenue. The Project site lies within CAW's Duarte water service area, a public water system as defined in CWC Section 10912. Figure 3-1 depicts the Project location relative to CAW's service area boundaries.

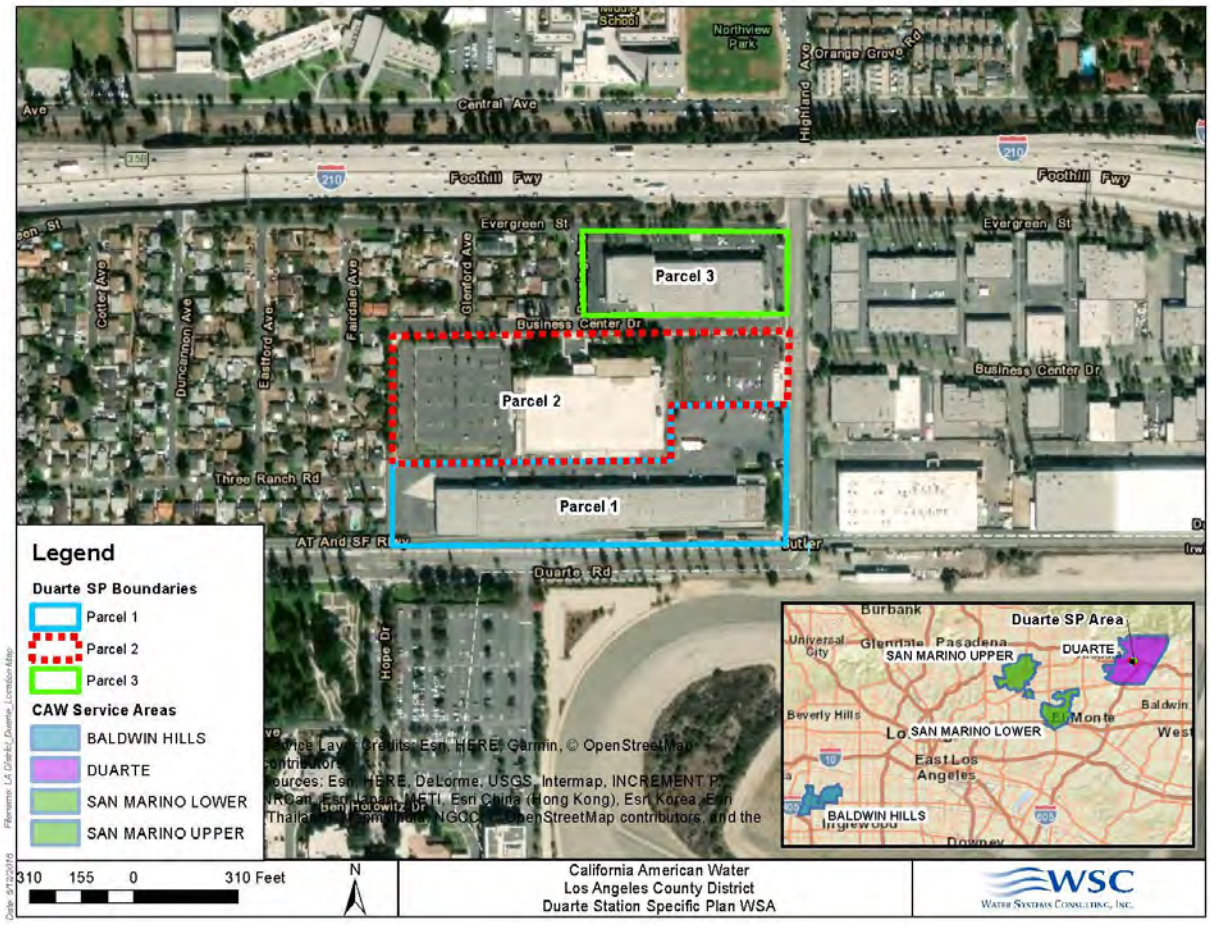


Figure 3-1. Project Vicinity

Existing land uses on the Project site consist of 313,995 square feet (SF) of Warehouse and Industrial uses. The Project proposes to replace the existing uses with 1,400 residential dwelling units (DU), 12,500 SF of Retail/Restaurant and 100,000 SF of Office uses by 2025, as shown in Table 3-1.

Table 3-1. Project Land Use and Development Units

Land Use	Residential (DU)	Non-Residential (SF)
Retail/Restaurant		12,500
Office		100,000
High Density Residential	1,400	
TOTAL	**1,400**	**112,500**

4 PROJECT WATER DEMAND

CAW's 2015 UWMP was based on existing and future water demands that did not include all of the Project's proposed demands. Per CWC Section 10910(c)(1), the Project's revised demands need to be accounted for in this WSA.

The 2015 UWMP water demand projections were based on the SCAG Growth Forecast (6), which was assumed to account for the 2013 Duarte Station Specific Plan (2013 SP) proposed new land uses through SCAG's local input process, which "provided an opportunity for jurisdictions to offer their local knowledge and input to inform SCAG's regional datasets" (6). Therefore, new demands for the Project need to be reconciled with the 2013 SP demands that were included in the 2015 UWMP demand projections. For the purposes of supply planning in this WSA, the net change in water demand caused by the Project is the projected Project demand minus the 2013 SP projected demand; this is referred to as the Net Project Demand in this report and represents the Project demands that are in excess of the demands included in the 2015 UWMP.

4.1 2013 SPECIFIC PLAN WATER DEMAND PROJECTIONS

The 2013 SP, which precedes this Project's SP, must be reconciled with updated water demand estimates that include the proposed Project's projections. The 2013 SP conceptual land development scenario and estimated water demands are shown in Table 4-1 and Figure 4-1.

Table 4-1. 2013 SP Water Demand Projections

Area	Land Use	SF	DU	Demand Factor	Demand Factor Unit	Projected Demand (AFY)
Parcel 1		108,000	215			93
F	Residential/ Mixed Use		83	300	gpd/DU	28
D	Residential/ Mixed Use		132	300	gpd/DU	44
E	Station Plaza Retail	12,000		642	gpd/ksf	9
B	Office Mixed Use	96,000		113	gpd/ksf	12
Parcel 2		304,000	260			126
H	Residential		95	300	gpd/DU	32
G	Residential/ Mixed Use		165	300	gpd/DU	55
C	Office Mixed Use	165,000		113	gpd/ksf	21
A	Office Mixed Use	139,000		113	gpd/ksf	18
Parcel 3			250			17
I	Hotel Mixed Use		250	60	gpd/Room (DU)	17
Total		**412,000**	**725**			**236**

Figure 4-1. 2013 SP Development Scenario (7)

4.2 PROJECT WATER DEMAND PROJECTIONS

At the time this report was prepared, the City had a conceptual development scenario from Duarte Partners for a portion of Parcel 2 (Building A & B) and conceptual interest from another developer to develop the remainder of Parcel 2 (Building C). The proposed land uses and specific development scenario for Parcels 1 and 3 areas were undefined. Therefore, WSC used: 1) Duarte Partners' conceptual site plans to analyze demand for Phase 1 of the Project (Parcel 2 Buildings A & B); 2) the other developer's conceptual site plan for Phase 2 (Parcel 2 Building C); and 3) the 2013 SP Land Use and Development Scenario for the new land uses and development units comprising remaining Phase 2 portions of the Project (Parcels 1 &3), as shown in Figure 4-2 and Table 4-2. Construction is anticipated to begin on Phase 1 in 2020 with delivery in 2021 and 2022. Based on City input, it is assumed that the Phase 2 areas will be redeveloped by 2025.

Figure 4-2. Project Vicinity Map

Table 4-2. Conceptual Development Scenario

Area	Land Use	Acreage	SF	DU	Year Complete	Phase
Parcel 1		***6.6***	***37,557***	***215***		***2***
Planning Area F- 2013 SP	*High Density Residential*			*83*	2025	2
Planning Area D- 2013 SP	*High Density Residential*			*132*	2025	2
Planning Area B- 2013 SP	*Office*		*25,057*		2025	2
Planning Area E- 2013 SP	*Retail/Restaurant*		*12,500*		2025	2
Parcel 2		***9.16***		***718***		***1 & 2***
Building A- 2019 SP	*High Density Residential*			*344*	2022	1
Building B- 2019 SP	*High Density Residential*			*275*	2022	1
Building C- 2019 SP	*High Density Residential*			*99*	2025	2
Parcel 3		***3.32***	***74,943***	***467***		2
Planning Area I- 2013 SP & 2019 SP	*Office*		*74,943*		2025	2
	High Density Residential			*467*	2025	2
Total		**19.08**	**112,500**	**1,400**		

Water demand factors were obtained from the 2013 SP WSA, which were compared to industry research references, planning documents of other water agencies, and other WSAs with comparable land uses. The 2015 UWMP included demand projections consistent with SCAG population projections by census tract developed using input from the City's approved planning documents and policies, which included the 2013 SP. The 2013 SP WSA's water demand factors, except for the residential factor, are within the normal range of factors and were used to be consistent with the 2013 SP methodology and 2015 UWMP. Residential demands have significantly decreased since the latest drought and implementation of permanent conservation measures are expected to sustain reduced, or "new normal", residential water use. Therefore, a lower residential water demand factor was used, based on recent water use studies from the Water Research Foundation. The estimated value applied for multi-family residential water use in this WSA is 156 gpd/DU, which is an average of values reported in two recent studies, 138 gpd/DU (8) and 174 gpd/DU (9)). Note that Los Angeles County Sanitation District also uses156 gpd/DU (10) to estimate wastewater generation from multi-unit residential developments, which represents indoor water use that is discharged to the sewer system.

Although there is potential for the Project's land uses to vary according to densities for each respective land use and zoning category, the land use and development units used to estimate Project water demands were based on the development units provided by the City, as shown in Table 3-1. As summarized in Table 4-3 and detailed in Table 4-4, the total estimated water demand for the Project is 266 AFY and the Net Project Demand is 30 AFY. The Net Project Demand is the total estimated Project water demand reduced by the previous assumed 2013 SP demand. If the actual land uses and development change from these assumptions, the associated water demand may change and would need to be reevaluated.

Table 4-3. Net Project Demand by Phase

Phase	Project Demand (AFY)	2013 SP Demand (AFY)	Net Project Demand (AFY)
1	108	108	0
2	158	128	30
Total	**266**	**236**	**30**

Table 4-4. Estimated Project Water Demands

Area	Land Use	SF	DU	Year Complete	Phase	Demand Factor	Demand Factor Unit	Project Demand (AFY)	2013 SP Demand (AFY)	Net Project Demand (AFY)
Parcel 1										
Planning Area F- 2013 SP	*High Density Residential*		*83*	2025	*2*	*156*	*gpd/DU*	*15*		
Planning Area D- 2013 SP	*High Density Residential*		*132*	2025	*2*	*156*	*gpd/DU*	*23*		
Planning Area B- 2013 SP	*Office*	*25,057*		2025	*2*	*113*	*gpd/ksf*	*3*		
Planning Area E- 2013 SP	*Retail/ Restaurant*	*12,500*		2025	*2*	*642*	*gpd/ksf*	*9*		
Subtotal		***37,557***	***215***		***2***			***50***	***93***	***-43***
Parcel 2										
Building A- 2019 SP	*High Density Residential*		*344*	2022	*1*	*156*	*gpd/DU*	*60*	*108*	*0*
Building B- 2019 SP	*High Density Residential*		*275*	2022	*1*	*156*	*gpd/DU*	*48*		
Building C- 2019 SP	*High Density Residential*		*99*	2025	*2*	*156*	*gpd/DU*	*17.3*	17.6	*-0.3*
Subtotal			***718***		***1 & 2***			***125***		***0***
Parcel 3										
Planning Area I- 2013 SP & 2019 SP	*Office*	*74,943*		2025	*2*	*113*	*gpd/ksf*	*10*		
Planning Area I- 2013 SP & 2019 SP	*High Density Residential*		*467*	2025	*2*	*156*	*gpd/DU*	*82*		
Subtotal		***74,943***	***467***		***2***			***91***	***17***	***74***
Total		**112,500**	**1,400**					**266**	**236**	**30**

[1] *All demand factors are based on the 2013 SP except for residential. The residential water demand factor is based on recent water use studies from the Water Research Foundation (156 gpd/DU, the average of 138 gpd/DU* **(8)** *and 174 gpd/DU* **(9)***) and factors from the Los Angeles County Sanitation District (156 gpd/DU* **(10)***).*

5 DUARTE WATER SERVICE AREA WATER DEMAND

As defined in Section 1, water demand is the sum of consumption and non-revenue water. For the demand estimates in the 2015 UWMP, historical non-revenue water was estimated by examining production and delivery records for each system from 2010 to 2015. The volume of non-revenue water was calculated as the difference between production and customer deliveries for each service area from 2011 through 2015. The average non-revenue water calculated from 2011-2015 was 14% of production and was used to project non-revenue water volumes for years 2020-2040. The Net Project Demand presented in Section 4 is sufficiently conservative and is assumed to include this non-revenue water volume; therefore, no adjustments to the Net Project Demand are needed to account for non-revenue water.

Table 5-1 and Figure 5-1 summarize actual and projected demand in the Duarte water service area, including and excluding the Net Project Demand. The Net Project Demand was added to the 2015 UWMP demands to determine the total service area demand, which is used in subsequent sections of this WSA. As described in detail in Appendix D and Appendix E of the 2015 UWMP, demands were calculated based on gallons per capita per day (GPCD) targets per the requirements of Senate Bill x 7-7 (SB7). The GPCD metric provides a way to gauge water use per person historically in order to project expected future demand patterns based on population projections. The Net Project Demand does not impact the District-wide GPCD or the Duarte water service area GPCD. CAW expects to meet or be below its required District-wide SB7 GPCD targets with or without the Net Project Demand.

Table 5-1. Historic and Projected Duarte Demand with the Project, AFY

	2005	2010	2015	2020	2025	2030	2035	2040
Water Demand	7,294	6,139	5,429	7,099	7,312	7,506	7,714	7,855
Net Project Demand	0	0	0	0	30	30	30	30
Total Duarte Demand[1]	7,294	6,139	5,429	7,099	7,342	7,536	7,744	7,886

[1] The Total Duarte Demand shown here, which includes the Net Project Demand, will be included in the amended 2015 UWMP.

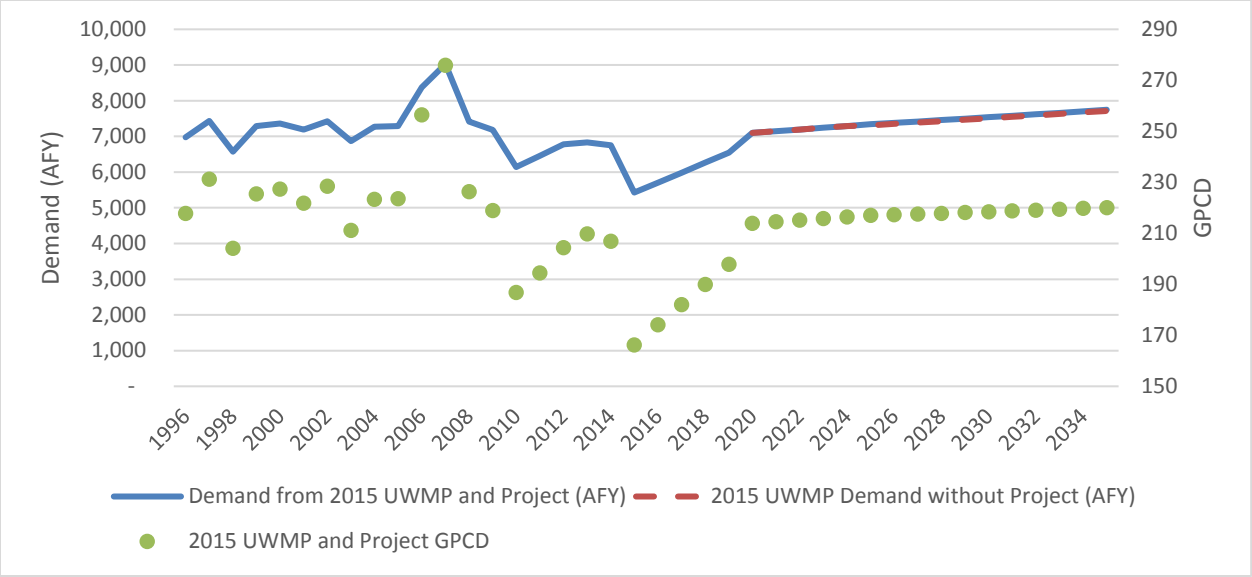


Figure 5-1. Duarte System Historic and Projected Demand and GPCD with and without the Project

6 WATER SUPPLY ANALYSIS

6.1 WATER SOURCES

The current and future water supplies for the Duarte service area consist of groundwater from the Main San Gabriel Basin (MSGB), non-potable surface water, and wholesale purchases. Groundwater is the primary source of supply. The amount of demand that is not met by groundwater allocations is met by surface water diversion, and by purchasing replacement water (also known as supplemental water) for indirect offset of over pumping groundwater in MSGB. The following sections describe each water source in more detail.

6.1.1 Groundwater

Groundwater is the primary source of supply for the Duarte service area. Projected groundwater supplies are determined by CAW's stipulated allocation as an Integrated Producer defined in the Judgment of the MSGB as well as CAW's ability to pump beyond their allocation in the MSGB.

6.1.1.1 Main San Gabriel Basin

The Duarte service area overlies the MSGB. The MSGB is an unconfined aquifer which provides up to 90 billion gallons of groundwater annually to San Gabriel Valley's 1.4 million residents. The total surface area of the MSGB is 167 square miles and contains about 2.8 trillion gallons of groundwater (11). The San Gabriel Mountains border the north with smaller hills including San Jose, Puente, Merced, and Repetto forming the east, south, and southwest borders. Figure 6-1 shows the MSGB boundary.

The MSGB is an adjudicated basin that is subject to an entry of judgment through the Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., Los Angeles County Case No. 924128, Judgment entered January 4, 1973 (MSGB Judgment). The MSGB Judgment states that "in each and every calendar year commencing with 1953, the Basin has been and is in Overdraft" (12). CAW's Duarte service area has an adjudicated right to 1.84634% of the annually determined Operating Safe Yield (OSY) for the MSGB as defined by the MSGB Judgment attached in Appendix A.

The amount of water parties of the MSGB Judgment may extract from the MSGB is not restricted, but the MSGB Judgment provides a means for replacing all annual extractions in excess of a Party's annual right with Supplemental Water. If a producer extracts water in excess of its portion of the annual OSY, it must pay a Replacement Water assessment, which will be used by the MSGB Watermaster to purchase Supplemental Water through three Responsible Agencies: Upper District, San Gabriel Valley Municipal Water District, and Three Valleys Municipal Water District. See Section 6.1.3.1 for more information on the replacement water mechanism.

The MSGB Watermaster's *Five-Year Water Quality and Supply Plan 2018-2019 to 2022-2023* (11) serves as the groundwater management plan for the MSGB and is attached in Appendix B. For the purposes of supply projection, it is assumed that CAW's MSGB groundwater allocation will be equal to 1.84634% of the annually adopted OSY, which is set each year based on the hydrologic conditions of the MSGB. The preliminary OSY for Fiscal Year (FY) 2018/19-2023/24 has been adopted by the MSGB Watermaster and is 150,000 AFY in FY 2019/20 and 130,000 AFY from FY 20/21 to 2023/24. For the purposes of supply projection, the 10-year average OSY (FY 2014/15 to 2023/24) of 142,000 AFY is used for all subsequent years and as the average year as shown in Table 6-1.

Table 6-1. MSGB OSY and CAW Allocations

Calendar Year [1]	MSGB Operating Safe Yield, AFY	CAW Allocation (1.84634%), AFY
CY 2004	170,000	3,139
CY 2005	205,000	3,785
CY 2006	240,000	4,431
CY 2007	225,000	4,154
CY 2008	195,000	3,600
CY 2009	175,000	3,231
CY 2010	170,000	3,139
CY 2011	190,000	3,508
CY 2012	205,000	3,785
CY 2013	190,000	3,508
CY 2014	165,000	3,046
CY 2015	150,000	2,770
CY 2016	150,000	2,770
CY 2017	150,000	2,770
CY 2018	150,000	2,585
CY 2019	150,000	2,400
CY 2020	140,000	2,400
CY 2021	130,000	2,400
CY 2022	130,000	2,400
CY 2023	130,000	2,400
10-Year Average (FY 14/15-FY 23/24)	**142,000**	**2,622**

[1] Based on Fiscal Year (FY) Operating Safe Yields from the *Report on Preliminary Determination of Operating Safe Yield for 2019-20 through 2023-24* **(13)**. Calendar year (CY) values calculated based on half of the previous FY plus half the subsequent FY. OSY values are preliminary mid-way through from CY 2019-2023.

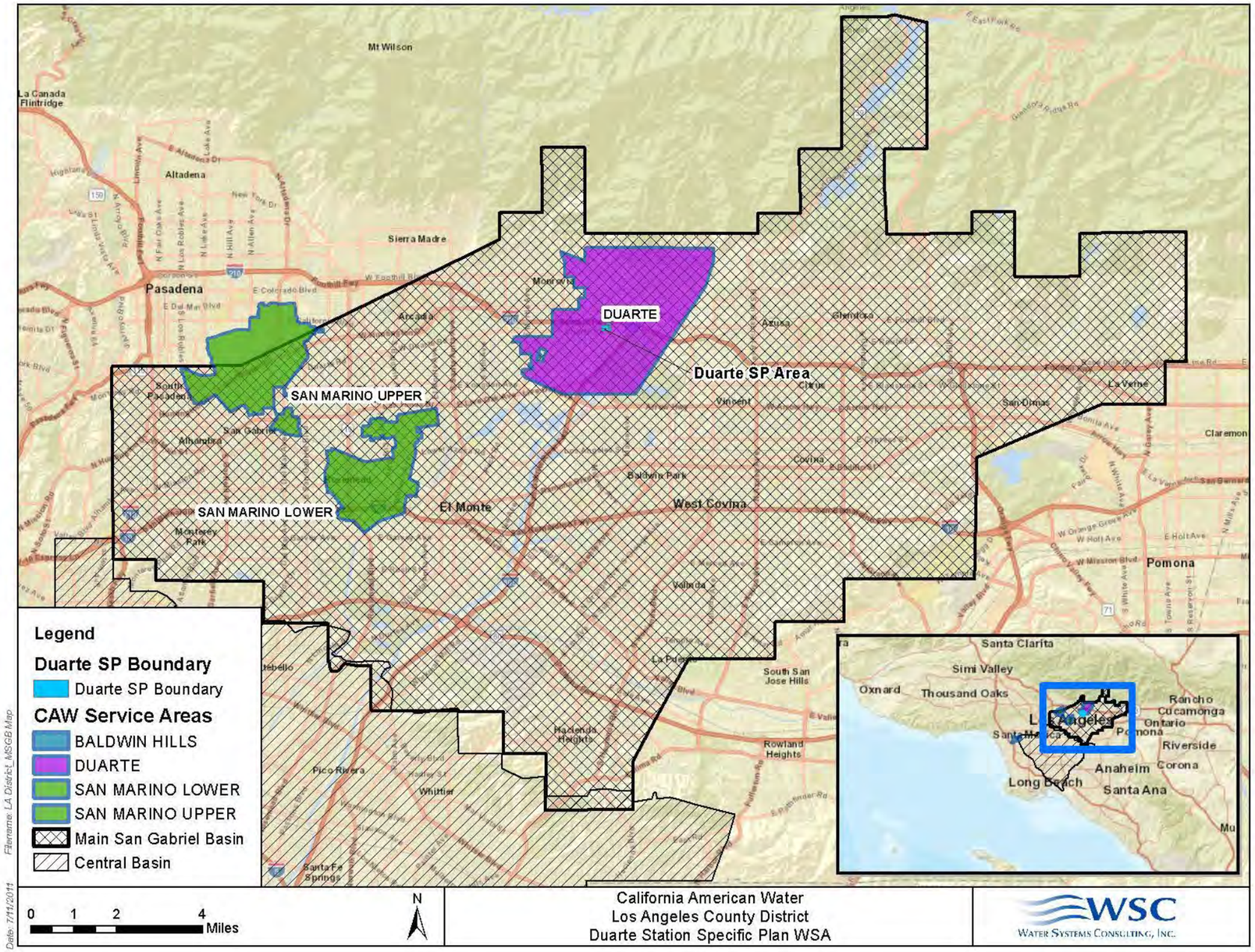


Figure 6-1. Main San Gabriel Basin Boundary (1)

Table 6-2 shows the volume of groundwater that has been pumped from the MSGB since 2011 and Table 6-3 shows the volume of groundwater that is projected to be pumped through 2040.

Table 6-2. Duarte Groundwater- Volume Pumped, AFY

Basin Name	2011	2012	2013	2014	2015	2016	2017	2018
MSGB	6,054	6,475	5,868	6,285	5,002	5,040	5,651	5,852
Groundwater as a percent of total water supply	94%	95%	86%	93%	92%	92%	96%	95%

Table 6-3. Duarte Groundwater-Projected to be Pumped, AFY

Basin Name [1]	2020	2025	2030	2035	2040
MSGB	7,099	7,342	7,536	7,744	7,886
Groundwater as a percent of total water supply	100%	100%	100%	100%	100%

[1] For more information on how these values were calculated, see Section 6.1. Includes Project additional demand.

6.1.2 Surface Water

In the Duarte service area, CAW is classified as an "Integrated Producer" in the MSGB Judgement that provides for two types of water allocation rights including a diversion component and a pumping component, which was discussed in Section 6.1.1.1. CAW has surface water diversion rights from the San Gabriel River. The surface water diversion right is fixed at an annual allocation of 1,672 AFY. Historically, the surface water has been diverted from the San Gabriel River located in the San Gabriel watershed. Surface water that is released from the San Gabriel Reservoir is delivered through a weir located adjacent to the City of Pasadena power plant and water from Morris Reservoir is diverted directly from the San Gabriel River. Water from both sources is intercepted by CAW's infrastructure and flows by gravity to the Woodlyn Lane and Lemon Irrigation reservoirs to supply Duarte's irrigation system. The use of surface water for non-potable irrigation is expected to be discontinued by 2020. The surface water rights allocation of 1,672 AFY will be used per CAW's Integrated Producer status within the MSGB. Integrated Producers can divert or pump their allocation provided that water produced in the beginning of each fiscal year will be classified as a diversion, and any production over the diversion allocation will be deemed pumped water for assessment purposes, regardless of how the water was produced.

6.1.3 Wholesale Water

CAW obtains wholesale water from Upper District, which is a member agency of MWD. MWD acquires water from the Colorado River Aqueduct and the California State Water Project (SWP) and distributes treated and untreated water to its member agencies. Untreated water from Upper District is used for groundwater replacement in the MSGB. The total current and projected supply from Upper District is shown in Table 6-4 and is equal to the difference in projected demand and groundwater plus surface water allocations.

Table 6-4. Current & Projected Wholesale Supplies, AFY

	2015	2020	2025	2030	2035	2040
Upper District Replacement Water[1]	987	2,805	3,048	3,242	3,450	3,592

[1] For more information on how these values were calculated, see Sections 6.1.1.1 and 6.1.3.1. Includes Net Project Demand.

6.1.3.1 MSGB Watermaster and Upper District

Water producers within the MSGB are subject to the terms of the MSGB Judgment. Per the MSGB Judgment (attached in Appendix A), parties are allowed to exceed their portion of the OSY, provided they pay an assessed replacement fee to the MSGB Watermaster. For more information regarding MSGB allocations and replacement water, see Section 6.1.1.1. Most years, the MSGB is over pumped because total demand from the various producers, including CAW, exceeds the available OSY established by the Watermaster. The Watermaster uses the funds generated from the replacement fees to purchase replacement water from Responsible Agencies that have access to supplemental water. The authorized Responsible Agency for CAW is the Upper District. Untreated MWD water is purchased from Upper District as Replacement Water and is delivered to spreading grounds to replenish the aquifer. According to the MSGB Judgment, "If any Responsible Agency shall, for any reason, be unable to deliver Supplemental Water to Watermaster when needed, Watermaster shall collect funds at an appropriate level and hold them in trust… …for purchase of such water when available" (12). Imported water has historically been available for this purpose. However, in recent years, drought mandated cutbacks from the SWP and the Colorado River Aqueduct have limited the availability of imported water. Water supply reliability is discussed in Section 7. The projected supply for Upper District is shown in Table 6-5.

Table 6-5. Upper District Projected Average Year Supply, AFY

Upper District Sources	2015	2020	2025	2030	2035	2040
Surface Water-Treated[1]	9,069	11,436	10,351	9,441	9,288	8,903
Surface Water-Untreated[2]	39,841	42,000	42,000	42,000	42,000	42,000
Recycled Water	0	18,984	19,896	20,332	20,731	21,124
Supply Totals	**51,499**	**72,420**	**72,247**	**71,773**	**72,019**	**72,027**
Demand Totals	**51,499**	**56,821**	**56,086**	**55,261**	**55,228**	**55,083**
Difference	**0**	**15,599**	**16,161**	**16,512**	**16,791**	**16,944**

Source: Table Adapted from Upper District Final 2015 UWMP, Table 6-8, 6-9 and 7-2 **(14)**
[1] Upper District Receives treated imported water from MWD
[2] Upper District receives untreated imported surface water from MWD for groundwater replenishment

6.2 TRANSFER OPPORTUNITIES

CAW leases unused portions of other purveyors' allocations in the MSGB, when available. Typically, these opportunities are available only when other purveyors experience well contamination or other production interruptions. This supply is not considered a reliable source and is not quantifiable as a projected future supply source.

6.3 FUTURE WATER PROJECTS

Other than rehabilitation and replacement of existing infrastructure, there are currently no planned future projects to bring in new supply sources to the Duarte system.

The Upper District, in coordination with MWD, is working to expand its existing recycled water program to include the South El Monte Recycled Water Expansion Project and the La Puente Valley County Water District Recycled Water Project as well as the Indirect Reuse Replenishment Project (IRRP). The IRRP will replenish the Main San Gabriel Groundwater Basin with up to 10,000 acre feet annually with highly treated recycled water. The project is currently in the permitting phase. It is anticipated that the IRRP will help Upper District improve supply reliability within the MSGB.

MWD and the Sanitation Districts of Los Angeles County are developing a multi-phased program called the Regional Recycled Water Program, to explore the potential of a water purification project to beneficially reuse water currently discharged to the Pacific Ocean for recharge of regional groundwater basins. MWD would build a new water purification plant at the Sanitation District's Joint Water Pollution Control Plant in Carson and distribution pipelines to recharge locations in Los Angeles and Orange Counties. The program will start with a 0.5 million gallon per day demonstration facility that will generate information needed for the potential future construction of a full-scale recycled water plant, which could ultimately result in a new purification plant to produce up to 150 million gallons per day of purified water for groundwater replenishment in several basins, including the MSGB. The demonstration facility is expected to begin operations in 2019. This program would represent the first in-region production of water by MWD and would diversify the region's water supply sources and likely result in increased supply reliability from MWD for Upper District.

6.4 WATER SUPPLY SUMMARY

Historically, CAW has been able to supply 100% of its demand in the Duarte service area through its groundwater and surface water sources. The 2015 UWMP presented historic water supplies from 2015 and projected water supplies from 2020-2035. The projected supplies presented in this WSA have been extended to 2040 and revised slightly from those presented in the 2015 UWMP due to a revised MSGB OSY assumption, as shown in Figure 6-2 and described in the previous sections. The 2015 UWMP will be amended to account for this revision and any others required by DWR, as discussed in Section 1.

CAW has historically exceeded its groundwater allocation in the MSGB and made up for the over production by purchasing replacement water from the Upper San Gabriel Valley Municipal Water District (Upper District). The use of surface water for non-potable irrigation is expected to be discontinued by 2020. The surface water diversion right not used for irrigation is transferred to the Los Angeles County spreading basins. It is assumed that once the irrigation system is retired, full allocation of 1,672 AFY will be utilized per CAW's status as an Integrated Producer, which is described in Sections 6.1.1 and 6.1.2. The surface water rights are recovered through additional pumping rights within the MSGB.

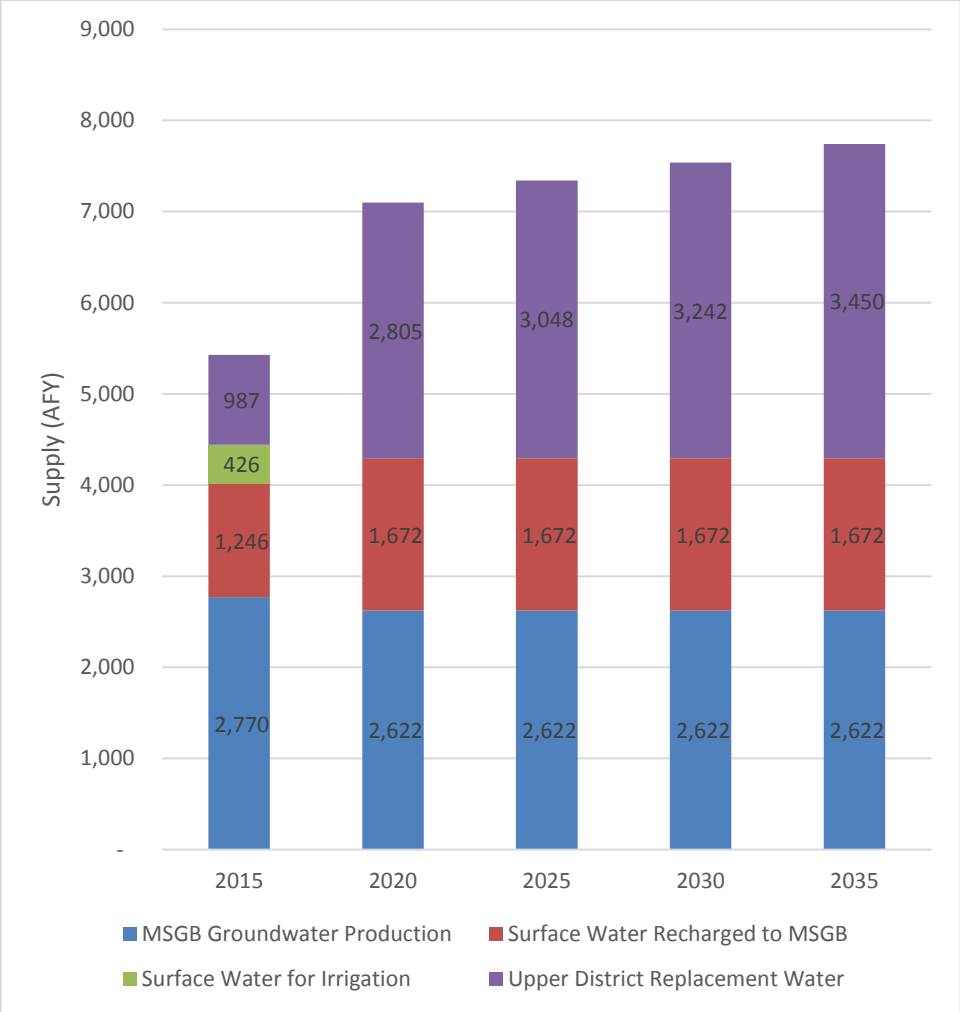


Figure 6-2. Duarte Water Supplies- Actual and Projected, AFY

Based on review of the 2015 UWMP, it was determined that a slight revision to the 2015 UWMP supply projection methodology is appropriate and will be applied for the purposes of this WSA. This WSA assumes that:

- The projected allocation of MSGB groundwater will be equal to 1.84634% of the operating safe yield (OSY). The OSY of 150,000 AFY for Fiscal Year (FY) 2015/16 through FY 2019/20 and 130,000 AFY from FY 2020/21 to 2023/24 was projected by the Watermaster (13). For the purposes of supply projection, the 10-year average OSY from FY 2014/15 to 2023/24 was converted to calendar year. The FY 10-year average OSY of 142,000 AFY is used for all subsequent years as the average year. See Section 6.1.1.1.
- The projected availability of surface water diversion rights from the San Gabriel River is fixed at an annual allocation of 1,672 AFY. Historically, the surface water has been diverted from the San Gabriel River located in the San Gabriel watershed. See Section 6.1.2.

- The remaining service area demand not met by groundwater allocations or surface water will be met through overpumping MSGB groundwater. As provided for in the MSGB Judgment, Replacement Water or pre-purchased Cyclic Storage water will be purchased from the MSGB Watermaster through Upper District for pumping beyond CAW's allocation. The supply required to serve the Project is included in the total Replacement Water volumes presented in subsequent sections of this WSA. See Section 6.1.3.1.

Total historic and projected water supplies are shown in Table 6-6. Details of how the projected supplies were developed are discussed further in Sections 6.1.1 and 6.1.3.

Table 6-6. Water Supplies- Historic and Projected, AFY

Water Supply Sources	2015[1]	2020	2025	2030	2035	2040
Duarte						
Groundwater – MSGB[2]	2,770	2,622	2,622	2,622	2,622	2,622
Surface Water/MSGB[2]	1,246	1,672	1,672	1,672	1,672	1,672
Surface Water for Irrigation[3]	426	-	0	0	0	0
Upper District Replacement Water[4]	987	2,805	3,048	3,242	3,450	3,592
Total	**5,429**	**7,099**	**7,342**	**7,536**	**7,744**	**7,886**

[1] The supplies from 2015 are based on actual production and purchases.
[2] For more information on the MSGB allocation see Section 6.1.1.1.
[3] For more information on MSGB Surface Water see Section 6.1.2. The irrigation system provides non-potable water from a surface water supply and CAW is in the process of retiring the irrigation system. The full allocation of 1,672 AFY will be utilized per CAW's status as an integrated producer within the MSGB.
[4] The amount of demand in each year not met by the allocations in the MSGB is assumed to be pumped from the MSGB and untreated replacement water will be purchased from MWD through Upper District. For more information, see Section 6.1.3.

7 WATER SUPPLY RELIABILITY

7.1 WATER SUPPLY RELIABILITY

Table 7-1 summarizes the primary factors affecting the supply reliability of the Duarte system. The legal factors affecting supply include groundwater adjudications, discussed in Appendix A, and Replacement Water purchases for excess pumping. Environmental factors related to wholesale supply reliability are reduced deliveries of SWP due to reduced pumping in the Sacramento Delta. The MWD UWMP states that the "listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (ESAs) have adversely impacted operations and limited the flexibility of the SWP" (15). Water quality factors influence groundwater production capacity and efficiency in the MSGB and Raymond Basin. All of the supplies are subject to reduction as a result of climatic factors.

Table 7-1. Factors resulting in Inconsistency of Supply

Water Supply Sources	Legal	Environmental	Water Quality	Climatic
MSGB	X		X	X
MWD	X	X		X

Table 7-2 shows the supply reliability base years used to approximate average, single dry and multiple dry years conditions for all supply sources of the Duarte system.

Table 7-2. Supply Reliability Base Years

Supply Reliability	Average Water Year	Single Dry	Multiple Dry Years
MSGB[1]	2014-2023	2021	2021-2023
Upper District[2]	FY 2005/2006	FY 2013/2014	FY 2011/12-2013/14

[1] Source: Drought conditions from 2013-2015 have reduced the operating safe yield in the MSGB to the lowest it's been since 1973-1974. **(16) (13)**
[2] Source: Upper District 2015 UWMP **(14)**

Table 7-3 shows supply availability during average, single dry and multiple dry years. The average, single dry and multiple dry years for the MSGB were calculated based on historic and projected OSYs. The values in Table 7-3 are based on historical and projected groundwater production records and allocations. However, groundwater production amounts and wholesale supplies could change in the future depending on OSY reductions and availability of wholesale supplies.

Table 7-3. Duarte Supply Reliability- Average, Single Dry Year & Multiple Dry Years Supply, AFY

			Multiple Dry Water Years		
Water Supply Sources	**Average / Normal Water Year**	**Single Dry Water Year (2021)**	**Year 1 (2021)**	**Year 2 (2022)**	**Year 3 (2023)**
MSGB[1]	2,668	2,400	2,400	2,400	2,400
Surface Water/MSGB[2]	1,672	1,672	1,672	1,672	1,672
Surface Water for Irrigation[2]	0	0	0	0	0
Upper District Replacement Water[3]	2,117	2,474	2,474	3,027	3,114
Total Water Supply	6,457	6,546	6,546	7,099	7,186
% of Normal[4]	100%	101%	101%	110%	111%

[1] The multiple dry years are based on projected safe yield for 2021, 2022, and 2023. The single dry year is based on the 1.84634% of the 2021 MSGB safe yield and the average year is based on 1.84634% of the 2014-2023 MSGB safe yield **(13)**.
[2] Available fixed surface water allocation of 1,672 AFY. The irrigation system provides non-potable water from a surface water supply and CAW is in the process of retiring the irrigation system. For more information on MSGB Surface Water see Section 6.1.2. The irrigation system provides non-potable water from a surface water supply and CAW is in the process of retiring the irrigation system. The full allocation of 1,672 AFY will be utilized per CAW's status as an integrated producer within the MSGB. The surface water rights are recovered through additional pumping rights within the MSGB.
[3] It is assumed that all demand not met by the allocations in the MSGB will be met by purchasing replacement water from Upper District as described in Section 7.1.1. Historic volumes of replacement were calculated based on total demands and actual OSYs. Future volumes of replacement water will vary depending upon OSYs and total demands in a given future year.
[4] Percentage of normal shown is based on actual year comparisons so the differences are a result of different demands in the respective years; however, it is assumed that all demand not met by the allocations in the MSGB will be met by purchasing replacement water from Upper District to supply 100% of demands each year, including single dry and multiple dry years. More information about reliability assumptions is available in Section 7.1.1.

Table 7-4 shows the three-year minimum supply available, which reflects the driest three-year historic sequence in the history of CAW's supply. The three-year minimum supply closely mirrors the multiple dry years established in Table 7-3. The driest three-year period on record for the groundwater sources is 2006-2008; however, since the MSGB is projected to have a lower OSY from 2021-2023 than for any year from 2006-2008, those values are used.

Table 7-4. Three-Year Minimum Supply, AFY

Supply Source	2021	2022	2023
MSGB[1]	2,400	2,400	2,400
Surface Water/MSGB[2]	1,672	1,672	1,672
Surface Water for Irrigation[2]	0	0	0
Upper District Replacement Water[3]	2,474	3,027	3,114
Subtotal	6,546	7,099	7,186

[1] The multiple dry years are based on projected safe yield for 2021, 2022, and 2023 MSGB safe yield (23).
[2] The full allocation of 1,672 AFY will be utilized per CAW's status as an integrated producer within the MSGB.
[3] It is assumed that all demand not met by the allocations in the MSGB will be met by purchasing replacement water from Upper District.

7.1.1 Wholesale Supply Reliability

The Duarte water system relies on wholesale supplies for indirect groundwater replacement. The historic average, single dry, and multiple dry years are shown in Table 7-2 for CAW's wholesale supply source. The single dry and multiple dry years supply for Upper District are shown in Figure 7-1 and Figure 7-2. Upper District's UWMP indicates a surplus supply for the UWMPs' planning horizon.

	2020	2025	2030	2035	2040 (Opt)
Supply totals	73,121	72,933	72,440	72,683	72,675
Demand totals	63,121	62,933	62,440	62,683	62,675
Difference	10,000	10,000	10,000	10,000	10,000
NOTES:					

Figure 7-1. Upper District Single Dry Year Supply (14)

		2020	2025	2030	2035	2040 (Opt)
First year	Supply totals	70,893	74,759	74,339	74,429	74,470
	Demand totals	60,893	64,759	64,339	64,429	64,470
	Difference	10,000	10,000	10,000	10,000	10,000
Second year	Supply totals	70,893	74,759	74,339	74,429	74,470
	Demand totals	60,893	64,759	64,339	64,429	64,470
	Difference	10,000	10,000	10,000	10,000	10,000
Third year	Supply totals	70,893	74,759	74,339	74,429	74,470
	Demand totals	60,893	64,759	64,339	64,429	64,470
	Difference	10,000	10,000	10,000	10,000	10,000
Fourth year *(optional)*	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0
Fifth year *(optional)*	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0
Sixth year *(optional)*	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0
NOTES:						

Figure 7-2. Upper District Multiple Dry Years Supply (14)

Additionally, the MSGB Watermaster and Upper District have multiple ongoing initiatives designed to manage and enhance supply reliability to continue to provide sufficient supply even in dry years. Based on the 2015 UWMP and the following supply reliability management plans and actions, it is anticipated that MSGB Replacement Water will be available from Upper District to meet CAW's total projected demands, including the Net Project Demand.

7.1.1.1 MSGB Watermaster Water Management Actions

The following ongoing water management actions are identified in the MSGB Annual Report (17).

- Established Financial Incentives to Encourage Pre-Purchase of Supplemental Water.
  - This new program provides a price incentive for those that pre-order and prepay for Supplemental Water. The incentive encourages producers to order water early, allowing Watermaster to better predict the amount of pre-purchase water that will be needed, and have the funds available to immediately purchase supply in a very competitive environment.
- Cyclic Storage Agreements with Responsible Agencies to Allow More Flexibility.
  - There were numerous cyclic storage actions every year, all helping the region get through drought. CAW has the ability to proactively purchase Replacement Water through the Cyclic Storage mechanism identified in the MSGB Judgment.
- Water Resource Development Assessment (RDA) Implemented to Store 100,000 Acre-Feet of Water.
  - On May 14, 2014, the MSGB Watermaster Board adopted Resolution No. 05-14-263 establishing the Water Resource Development Assessment for implementation on all FY 2014-15 production. This program began levying a $20 per acre-foot assessment on all production beginning in 2014-15, with planned incremental increases up to $25 per acre-foot over the following five years. The funds will be available to purchase supplemental water to store for future shortages, reaching a planned 100,000 acre-feet of imported water in storage over 10 years. The Watermaster expanded the original RDA to allow for the purchase of imported water to supplement the shortage of local stormwater runoff and natural replenishment under Development of the Stormwater Augmentation Program (RDA II).
- Increased flexibility for In-Lieu Program.
  - Watermaster has maintained an In-lieu Assessment of $10 an acre-foot on all water produced. This program paid a water producer the difference in cost to purchase treated surface water in-lieu of purchasing untreated imported water for Basin replenishment after over pumping. The result was to keep water in groundwater storage. The program will increase the In-Lieu Assessment depending on how low groundwater levels fall, while increasing the amount in storage.
- Continued Coordination on Flood Control.
  - Watermaster has been actively engaged in monthly meetings with LA County Department of Public Works, Upper District, and area municipalities to plan stormwater related activities. Six new stormwater capture projects have been identified with a potential of 15,000 acre-feet of new water.
- Supported SB 485 to Protect Rights to San Gabriel River Water.
  - Staff developed language to protect rights to the San Gabriel River for inclusion in SB 485 (Hernandez). The legislation, proposed by the Sanitation Districts of Los Angeles County, is intended to allow the Sanitation Districts to assist local jurisdictions in Los Angeles County in stormwater and dry weather runoff management projects.

7.1.1.2 Upper District Water Management Actions

The following ongoing water management actions are identified in the Upper District 2015 UWMP (14).

- Upper District's Water Use Efficiency Plan (WUE Plan)
  - The WUE Plan identifies key WUE programs to save up to 5,108 AFY by 2020 (18). The WUE Plan was prepared in coordination with the Integrated Resources Plan. These plans provide adaptive strategies for Upper District to meet water demand, reliability, and efficiency goals.
- Integrated Resources Plan (IRP)
  - Upper District's IRP incorporates and enhances demand and supply reliability analyses from the 2010 UWMP and WUE Plan. The IRP projects demand based on the most recent land use and demographic data from SCAG. Upper District determined the most beneficial strategy for reducing demands on imported water is through an adaptive management strategy that involves the implementation of a suite of projects including direct and indirect recycled water reuse, stormwater capture, water transfers, and conservation measures that can be phased over time. Upper District evaluated these options based on yield, cost, reliability, and impact to the environment in order to develop strategies to meet projected water demands.
- Recycled Water Programs
  - Upper District's direct use recycled water program has been developed as part of Upper District's continuing effort to augment MWD's imported water supply. As discussed in Section 6.5.4.1 of Upper District's 2015 UWMP, Upper District's direct use recycled water program is currently being expanded to include the South El Monte Recycled Water Expansion Project and the La Puente Valley County Water District Recycled Water Project. This project will reduce local demands on groundwater produced from the MSGB.
  - Upper District is also developing the Indirect Reuse Replenishment Project (IRRP) with the goal of replenishing the MSGB while offsetting imported water demands. The IRRP will provide up to 10,000 AFY of treated recycled water from the SJCWRP for groundwater replenishment at the Santa Fe Spreading Grounds to be used for indirect potable use. These recycled water supplies used for groundwater replenishment will augment imported water supplies currently used for groundwater replenishment in the MSGB.

The updated MSGB Replacement Water demands presented in this WSA will be provided to Upper District for review and a letter confirming the MSGB Replacement water supply analysis presented in this WSA will be requested. A copy of this letter will be attached in Appendix C upon receipt and finalization of this WSA.

Upper District is a member of MWD. MWD's 2015 UWMP, under the historic hydrology conditions, projects 100% reliability for its customers. During the historic dry year periods identified for each wholesale source, the Duarte water system's wholesale demands have always been met. Additionally, numerous water supply reliability management initiatives are underway to enhance and preserve local water supplies.

8 WATER SUPPLY AND DEMAND ANALYSIS

Based on analysis of Net Project Demand in addition to 2015 UWMP projected demands for existing customers (Table 5-1) and available supplies (Table 6-6), the projected availability of groundwater will be equal to 100% of average year allocations for the MSGB plus the amount required to replace water pumped in excess of CAW's MSGB allocation. In dry years when MSGB allocations are reduced due to OSY reductions, additional Replacement Water would be purchased to meet the total supply needs.

Note that there is an additional cost for MSGB Replacement Water so any new customer adds to the existing overproduction and further increases the cost of the overall water supply. Currently, these increased costs are spread over the entire customer base and are not charged to the new customers.

Table 8-1 shows a supply and demand comparison during an average year scenario. Table 8-2 shows a supply and demand comparison during a single dry year scenario. Table 8-3 shows a supply and demand comparison during a multiple dry year scenario.

Table 8-1. Duarte Supply and Demand Comparison- Average Year, AFY

	2020	2025	2030	2035	2040
Supply totals	7,099	7,342	7,536	7,744	7,886
Demand totals	7,099	7,342	7,536	7,744	7,886
Difference	0	0	0	0	0
Difference as % of Supply	0%	0%	0%	0%	0%
Difference as % of Demand	0%	0%	0%	0%	0%

Table 8-2. Duarte Supply and Demand Comparison- Single Dry Year, AFY

	2020	2025	2030	2035	2040
Supply totals	7,099	7,342	7,536	7,744	7,886
Demand totals	7,099	7,342	7,536	7,744	7,886
Difference	0	0	0	0	0
Difference as % of Supply	0%	0%	0%	0%	0%
Difference as % of Demand	0%	0%	0%	0%	0%

Table 8-3. Duarte Supply and Demand Comparison- Multiple Dry-Years, AFY

		2020	2025	2030	2035
Multiple-dry year first year supply	Supply totals	7,099	7,342	7,536	7,744
	Demand totals	7,099	7,342	7,536	7,744
	Difference	0	0	0	0
	Difference as % of Supply	0%	0%	0%	0%
	Difference as % of Demand	0%	0%	0%	0%
Multiple-dry year second year supply	Supply totals	7,099	7,342	7,536	7,744
	Demand totals	7,099	7,342	7,536	7,744
	Difference	0	0	0	0
	Difference as % of Supply	0%	0%	0%	0%
	Difference as % of Demand	0%	0%	0%	0%
Multiple-dry year third year supply	Supply totals	7,099	7,342	7,536	7,744
	Demand totals	7,099	7,342	7,536	7,744
	Difference	0	0	0	0
	Difference as % of Supply	0%	0%	0%	0%
	Difference as % of Demand	0%	0%	0%	0%

9 DETERMINATION OF WATER SUPPLY SUFFICIENCY

9.1 DETERMINATION OF WATER SUPPLY SUFFICIENCY

Subject to confirmation by Upper District that the required MSGB Replacement water supply presented in this Draft WSA will be available, this Draft WSA concludes that CAW's total projected water supplies available during average, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand for the Project, in addition to CAW's existing and planned future uses. CAW will coordinate with Duarte Partners and the City to pursue access of these supplies.

10 REFERENCES

1. **Water Systems Consulting, Inc.** *2015 Urban Water Management Plan for the Southern Division- Los Angeles County District Prepared for California American Water.* Adopted June 30, 2016.

2. **California Irrigation Management Information System, Station 159 in Monrovia.** [Online] http://wwwcimis.water.ca.gov/cimis/data.jsp.

3. **Western Regional Climate Center, Station:(046719) Pasadena, California, (1893-January 20, 2015).** [Online] http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6719.

4. **Los Angeles County.** *Los Angeles County General Plan 2035.* April 5, 2011.

5. **Los Angeles County Department of Regional Planning.** *Housing Element.* August 5, 2008.

6. **Southern California Association of Governments.** *2016 RTP SCS Demographics & Growth Forecast Appendix Draft.* December 2015.

7. **RBF Consulting, The Dahlin Group, Economic and Planning Solutions.** *Duarte Station Specific Plan.* Adopted December 10, 2013.

8. **Water Research Foundation.** *Fact Sheet Water Efficiency Water Use Estimates .* April 2017.

9. —. *Water Use in the Multi-Family Housing Sector Project #4554, Table ES.1 Estimated dwelling units and annual average unit usage rates for five water utilities.*

10. **Los Angeles County Sanitation District No. 3.** *Service Charge Report for Fiscal Year 2015-16, Table 1 Loadings for Each Class of Land Use.* 2015.

11. **Main San Gabriel Basin Watermaster.** *Five Year Water Quality and Supply Plan 2018-2019 to 2022-23.* November 2018.

12. ***Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., ,.*** **Case No. 924128, Los Angeles County : Superior Court of the State of California for the County of Los Angeles, Judgment entered January 4, 1973.**

13. Main San Gabriel Watermaster. *Report on Preliminary Determination of Operating Safe Yield for 2019-20 through 2023-24.* April 3, 2019.

14. Stetson Engineers, Inc. *Upper San Gabriel Valley Municipal Water District 2015 Urban Water Management Plan.* June 2016.

15. Metropolitan Water District of Southern California. *2015 Urban Water Management Plan DRAFT.* March 2016.

16. Main San Gabriel Basin Watermaster. *Annual Report 2016-2017.*

17. Main San Gabriel Watermaster. ***Main San Gabirel Watermaster Annual Report 2016-2017.***

18. A & N Technical Services, Inc. ***Upper San Gabriel Valley Municipal Water District Water Use Efficiency Master Plan.*** **July 18, 2012.**

APPENDIX A. MSGB ADJUDICATION

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

Plaintiff,

vs.

CITY OF ALHAMBRA, et al,

Defendants.

No. 924128

AMENDED JUDGMENT
(and Exhibits Thereto),

Honorable Florence T. Pickard
Assigned Judge Presiding

Original Judgment
Signed and Filed: December 29, 1972;
Entered: January 4, 1973
Book 6741, Page 197

JUDGMENT AS AMENDED AUGUST 24, 1989

Ralph B. Helm
Suite 214
4605 Lankershim Boulevard
North Hollywood, CA 91602
Telephone (818) 769-2002

Attorney for Watermaster

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, Plaintiff, vs. CITY OF ALHAMBRA, et al., Defendants.	No. 924128 AMENDED JUDGMENT (And Exhibits Thereto)

HONORABLE FLORENCE T. PICKARD

Assigned Judge Presiding

DEPARTMENT 38

August 24, 1989

AMENDED JUDGMENT
TABLE OF CONTENTS

And
Amended Judgment Sections
Identified With Prior Judgment
Section Numbers

EXHIBITS

Exhibits Continued

"B" -- Boundaries of Relevant Watershed

"C" -- Table Showing Base Annual Diversion Rights of Certain Diverters

"D" -- Table Showing Rights and Pumper's Share of Each Pumper

"E" -- Table Showing Production Rights of Each Integrated Producer

"F" -- Table Showing Special Category Rights

"G" -- Table Showing Non-consumptive Users

"H" -- Watermaster Operating Criteria

"J" -- Puente Narrows Agreement

"K" -- Overlying Rights

"L" -- List of Producers and Their Designees (New)

"M" -- Watermaster Members, Officers, and Staff Including Calendar Year 1989 (New)

Ralph B. Helm
Suite 214
4605 Lankershim Boulevard
North Hollywood, CA 91602
Telephone (818) 769-2002

Attorney for Watermaster

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, Plaintiff, vs. CITY OF ALHAMBRA, et al., Defendants.	No. 924128 AMENDED JUDGMENT Hearing: August 24, 1989 Department 38, 9:00 A.M.

The Petition of the MAIN SAN GABRIEL BASIN WATERMASTER for this AMENDED JUDGMENT herein, came on regularly for hearing in this Court before the HONORABLE FLORENCE T. PICKARD, ASSIGNED JUDGE PRESIDING, on August 24, 1989; Ralph B. Helm appeared as attorney for Watermaster - Petitioner; and good cause appearing, the following ORDER and AMENDED JUDGMENT are, hereby, made:

I. INTRODUCTION

1. Pleadings, Parties, and Jurisdiction. The complaint herein was filed on January 2, 1968, seeking an adjudication of water rights. By amendment of said complaint and dismissals of certain parties, said adjudication was limited to the Main San Gabriel Basin and its Relevant Watershed. Substantially all

defendants and the cross-defendant have appeared herein, certain defaults have been entered, and other defendants dismissed. By the pleadings herein and by Order of this Court, the issues have been made those of a full inter se adjudication of water rights as between each and all of the parties. This Court has jurisdiction of the subject matter of this action and of the parties herein.

2. Stipulation for Entry of Judgment. A substantial majority of the parties, by number and by quantity of rights herein Adjudicated, Stipulated for entry of a Judgment in substantially the form of the original Judgment herein.

3. Lis Pendens. (New) A Lis Pendens was recorded August 20, 1970, as Document 2650, in Official Records of Los Angeles County, California, in Book M 3554, Page 866.

4. Findings and Conclusions. (Prior Judgment Section 3) Trial was had before the Court, sitting without a jury, John Shea, Judge Presiding, commencing on October 30, 1972, and Findings of Fact and Conclusions of Law have been entered herein.

5. Judgment. (New) Judgment (and Exhibits Thereto), Findings of Fact and Conclusions of Law (and Exhibits thereto), Order Appointing Watermaster, and Initial Watermaster Order were signed and filed December 29, 1972, and Judgment was entered January 4, 1973, in Book 6791, Page 197.

6. Intervention After Judgment. (New) Certain defendants have, pursuant to the Judgment herein and the Court's continuing jurisdiction, intervened and appeared herein after entry of Judgment.

7. Amendments to Judgment. (New) The original Judgment herein was previously amended on March 29, 1979, by: (1) adding definition (r [1]) thereto, (2) amending definition (bb) therein, (3) adding Exhibit "K" thereto, (4) adding Sections 14.5 and 16.5 thereto, and (5) amending Sections 37(b), 37(c), 37(d), and Section 47 therein; it was again amended on December 21, 1979, by amending Section 38(c) thereof; again amended on February 21, 1980, by amending Section 24 thereof; again amended on September 12, 1980, by amending Sections 35(a), 37(a), and 38(a); again amended on December 22, 1987, by adding Section 37(e) thereto; and last amended on July 22, 1988 by amending Section 37(e) thereof and Ordering an Amended Judgment herein.

8. Transfers. (New) Since the entry of Judgment herein there have been numerous transfers of Adjudicated water rights. To the date hereof, said transfers are reflected in Exhibits "C", "D", and "E".

9. Producers and Their Designees. (New) The current status of Producers and their Designees is shown on Exhibit "L".

10. Definitions. (Prior Judgment Section 4) As used in this Judgment, the following terms shall have the meanings herein set forth:

(a) Base Annual Diversion Right -- The average annual quantity of water which a Diverter is herein found to have the right to Divert for Direct Use.

(b) Direct Use --Beneficial use of water other than for spreading or Ground Water recharge.

(c) Divert or Diverting -- To take waters of any surface stream within the Relevant Watershed.

(d) Diverter -- Any party who Diverts.

(e) Elevation -- Feet above mean sea level.

(f) Fiscal Year -- A period July 1 through June 30, following.

(g) Ground Water -- Water beneath the surface of the ground and within the zone of saturation.

(h) Ground Water Basin -- An interconnected permeable geologic formation capable of storing a substantial Ground Water supply.

(i) Integrated Producer -- Any party that is both a Pumper and a Diverter, and has elected to have its rights adjudicated under the optional formula provided in Section 18 of this Judgment.

(j) In-Lieu Water Cost -- The differential between a Producer's non-capital cost of direct delivery of Supplemental Water and the cost of Production of Ground Water (including depreciation on Production facilities) to a particular Producer who has been required by Watermaster to take direct delivery of Supplemental Water in lieu of Ground Water.

(k) Key Well -- Baldwin Park Key Well, being elsewhere designated as State Well No. 1S/10W-7R2, or Los Angeles County Flood Control District Well No. 3030-F. Said well has a ground surface Elevation of 386.7.

(l) Long Beach Case -- Los Angeles Superior Court Civil Action No. 722647, entitled, "Long Beach, et al., v. San Gabriel Valley Water Company, et al."

(m) Main San Gabriel Basin or Basin -- The Ground Water Basin underlying the area shown as such on Exhibit "A".

(n) Make-up Obligation -- The total cost of meeting the obligation of the Basin to the area at or below Whittier Narrows, pursuant to the Judgment in the Long Beach Case.

(o) Minimal Producer -- Any party whose Production in any Fiscal Year does not exceed five (5) acre feet.

(p) Natural Safe Yield -- The quantity of natural water supply which can be extracted annually from the Basin under conditions of long term average annual supply, net of the requirement to meet downstream rights as determined in the Long Beach Case (exclusive of Pumped export), and under cultural conditions as of a particular year.

(q) Operating Safe Yield -- The quantity of water which the Watermaster determines hereunder may be Pumped from the Basin in a particular Fiscal Year, free of the Replacement Water Assessment under the Physical Solution herein.

(r) Overdraft -- A condition wherein the total annual Production from the Basin exceeds the Natural Safe Yield thereof.

(s) Overlying Rights -- (Prior Judgment Section 4 (r) [1]) The right to Produce water from the Basin for use on Overlying Lands, which rights are exercisable only on specifically defined Overlying Lands and which cannot be separately conveyed or transferred apart therefrom.

(t) Physical Solution -- (Prior Judgment Section 4 (s)) The Court decreed method of managing the waters of the Basin so as to achieve the maximum utilization of the Basin and its water supply, consistent with the rights herein declared.

(u) Prescriptive Pumping Right -- (Prior Judgment

Section 4 (t)) The highest continuous extractions of water by a Pumper from the Basin for beneficial use in any five (5) consecutive years after commencement of Overdraft and prior to filing of this action, as to which there has been no cessation of use by that Pumper during any subsequent period of five (5) consecutive years, prior to the said filing of this action.

(v) Produce or Producing -- (Prior Judgment Section 4 (u)) To Pump or Divert water.

(w) Producer -- (Prior Judgment Section 4 (v)) A party who Produces water.

(x) Production -- (Prior Judgment Section 4 (w)) The annual quantity of water Produced, stated in acre feet.

(y) Pump or Pumping -- (Prior Judgment Section 4 (x)) To extract Ground Water from the Basin by Pumping or any other method.

(z) Pumper -- (Prior Judgment Section 4 (y)) Any party who Pumps water.

(aa) Pumper's Share -- (Prior Judgment Section 4 (z)) A Pumper's right to a percentage of the entire Natural Safe Yield, Operating Safe Yield and appurtenant Ground Water storage.

(bb) Relevant Watershed -- (Prior Judgment Section 4(aa)) That portion of the San Gabriel River watershed tributary to Whittier Narrows which is shown as such on Exhibit "A", and the exterior boundaries of which are described in Exhibit "B".

(cc) Replacement Water -- (Prior Judgment Section 4 (bb)) Water purchased by Watermaster to replace:

(1) Production in excess of a Pumper's Share of Operating Safe Yield; (2) The consumptive use portion resulting from the exercise of an Overlying Right; and (3) Production in excess of a Diverter's right to Divert for Direct Use.

(dd) Responsible Agency -- (Prior Judgment Section 4 (cc)) The municipal water district which is the normal and appropriate source from whom Watermaster shall purchase Supplemental Water for replacement purposes under the Physical Solution, being one of the following:

(1) Upper District -- Upper San Gabriel Valley Municipal Water District, a member public agency of The Metropolitan Water District of Southern California (MWD).

(2) San Gabriel District -- San Gabriel Valley Municipal Water District, which has a direct contract with the State of California for State Project Water.

(3) Three Valleys District -- Three Valleys Municipal Water District, formerly, "Pomona Valley Municipal Water District", a member public agency of MWD.

(ee) Stored Water -- (Prior Judgment Section 4 (dd)) Supplemental Water stored in the Basin pursuant to a contract with Watermaster as authorized by Section 34(m).

(ff) Supplemental Water -- (Prior Judgment Section 4 (ee)) Nontributary water imported through a Responsible Agency.

(gg) Transporting Parties -- (Prior Judgment Section 4 (ff)) Any party presently transporting water (i.e., during the 12 months immediately preceding the making of the findings herein) from the Relevant Watershed or Basin to an area outside

thereof, and any party presently or hereafter having an interest in lands or having a service area outside the Basin or Relevant Watershed contiguous to lands in which it has an interest or a service area within the Basin or Relevant Watershed. Division by a road, highway, or easement shall not interrupt contiguity. Said term shall also include the City of Sierra Madre, or any party supplying water thereto, so long as the corporate limits of said City are included within one of the Responsible Agencies and if said City, in order to supply water to its corporate area from the Basin, becomes a party to this action bound by this Judgment.

(hh) Water Level -- (Prior Judgment Section 4 (gg)) The measured Elevation of water in the Key Well, corrected for any temporary effects of mounding caused by replenishment or local depressions caused by Pumping.

(ii) Year -- (Prior Judgment Section 4 (hh)) A calendar year, unless the context clearly indicates a contrary meaning.

11. Exhibits. (Prior Judgment Section 5) The following exhibits are attached to this Judgment and incorporated herein by this reference:

Exhibit "A" -- Map entitled "San Gabriel River Watershed Tributary to Whittier Narrows", showing the boundaries and relevant geologic and hydrologic features in the portion of the watershed of the San Gabriel River lying upstream from Whittier Narrows.

Exhibit "B" -- Boundaries of Relevant Watershed.

Exhibit "C" -- Table Showing Base Annual Diversion

Rights of Certain Diverters.

Exhibit "D" -- Table Showing Prescriptive Pumping Rights and Pumper's Share of Each Pumper.

Exhibit "E" -- Table Showing Production Rights of Each Integrated Producer.

Exhibit "F" -- Table Showing Special Category Rights.

Exhibit "G" -- Table Showing Non-consumptive Users.

Exhibit "H" -- Watermaster Operating Criteria.

Exhibit "J" -- Puente Narrows Agreement.

Exhibit "K" -- Overlying Rights, Nature of Overlying Right, Description of Overlying Lands to which Overlying Rights are Appurtenant, Producers Entitled to Exercise Overlying Rights and their Respective Consumptive Use Portions, and Map of Overlying Lands.

Exhibit "L" -- (New) List of Producers And Their Designees, as of June 1988.

Exhibit "M" -- (New) Watermaster Members, Officers and Staff, Including Calendar Year 1989.

II. DECREE

NOW, THEREFORE, IT IS HEREBY DECLARED, ORDERED, ADJUDGED AND DECREED:

A. DECLARATION OF HYDROLOGIC CONDITIONS

12. Basin as Common Source of Supply. (Prior Judgment Section 6) The area shown on Exhibit "A" as Main San Gabriel Basin overlies a Ground Water basin. The Relevant Watershed is the watershed area within which rights are herein adjudicated. The waters of the Basin and Relevant Watershed constitute a common source of natural water supply to the parties herein.

13. Determination of Natural Safe Yield. (Prior Judgment Section 7) The Natural Safe Yield of the Main San Gabriel Basin is found and declared to be one hundred fifty-two thousand seven-hundred (152,700) acre feet under Calendar Year 1967 cultural conditions.

14. Existence of Overdraft. (Prior Judgment Section 8) In each and every Calendar Year commencing with 1953, the Basin has been and is in Overdraft.

B. DECLARATION OF RIGHTS

15. Prescription. (Prior Judgment Section 9) The use of water by each and all parties and their predecessors in interest has been open, notorious, hostile, adverse, under claim of right, and with notice of said overdraft continuously from January 1, 1953 to January 4, 1973. The rights of each party herein declared are prescriptive in nature. The following aggregate consequences of said prescription within the Basin and Relevant Watershed are hereby declared:

(a) Prior Prescription. Diversions within the Relevant Watershed have created rights for direct consumptive use within the Basin, as declared and determined in Sections 16 and 18 hereof, which are of equal priority inter se, but which are prior and paramount to Pumping Rights in the Basin.

(b) Mutual Prescription. The aggregate Prescriptive Pumping Rights of the parties who are Pumpers now exceed, and for many years prior to filing of this action, have exceeded, the Natural Safe Yield of the Basin. By reason of said condition, all rights of said Pumpers are declared

to be mutually prescriptive and of equal priority, inter se.

(c) Common Ownership of Safe Yield and Incidents Thereto. By reason of said Overdraft and mutual Prescription, the entire Natural Safe Yield of the Basin, the Operating Safe Yield thereof and the appurtenant rights to Ground Water storage capacity of the Basin are owned by Pumpers in undivided Pumpers' Shares as hereinafter individually declared, subject to the control of Watermaster, pursuant to the Physical Solution herein decreed. Nothing herein shall be deemed in derogation of the rights to spread water pursuant to rights set forth in Exhibit "G".

16. Surface Rights. (Prior Judgment Section 10) Certain of the aforesaid prior and paramount prescriptive water rights of Diverters to Divert for Direct Use stream flow within the Relevant Watershed are hereby declared and found in terms of Base Annual Diversion Right as set forth in Exhibit "C". Each Diverter shown on Exhibit "C" shall be entitled to Divert for Direct Use up to two hundred percent (200%) of said Base Annual Diversion Right in any one (1) Fiscal Year; provided that the aggregate quantities of water Diverted in any consecutive ten (10) Fiscal Year period shall not exceed ten (10) times such Diverter's Base Annual Diversion Right.

17. Ground Water Rights. (Prior Judgment Section 11) The Prescriptive Pumping Right of each Pumper, who is not an Integrated Producer, and his Pumper's Share are declared as set forth in Exhibit "D".

18. Optional Integrated Production Rights. (Prior Judgment Section 12) Those parties listed on Exhibit "E" have elected to be treated as Integrated Producers. Integrated Production Rights have two (2) historical components:

(1) a fixed component based upon historic Diversions for Direct Use; and

(2) a mutually prescriptive Pumper's Share component based upon Pumping during the period 1953 through 1967.

Assessment and other Watermaster regulation of the rights of such parties shall relate to and be based upon each such component. So far as future exercise of such rights is concerned, however, the gross quantity of the aggregate right in any Fiscal Year may be exercised, in the sole discretion of such party, by either Diversion or Pumping or any combination or apportionment thereof; provided, that for Assessment purposes the first water Produced in any Fiscal Year (other than "carry-over", under Section 49 hereof) shall be deemed an exercise of the Diversion component, and any Production over said quantity shall be deemed Pumped water, regardless of the actual method of Production.

19. Special Category Rights. (Prior Judgment Section 13) The parties listed on Exhibit "F" have water rights in the Relevant Watershed which are not ordinary Production rights. The nature of each such right is as described in Exhibit "F".

20. Non-consumptive Practices. (Prior Judgment Section 14) Certain Producers have engaged in Water Diversion and spreading practices which have caused such Diversions to have a

non-consumptive or beneficial impact upon the aggregate water supply available in the Basin. Said parties, and a statement of the nature of their rights, uses and practices, are set forth in Exhibit "G". The Physical Solution decreed herein, and particularly its provisions for Assessments, shall not apply to such non-consumptive uses. Watermaster may require reports on the operations of said parties.

21. Overlying Rights. (Prior Judgment Section 14.5) Producers listed in Exhibit "K" hereto were not parties herein at the time of the original entry of Judgment herein. They have exercised in good faith Overlying Rights to Produce water from the Basin during the periods subsequent to the entry of Judgment herein and have by self-help initiated or maintained appurtenant Overlying Rights. Such rights are exercisable without quantitative limit only on specifically described Overlying Land and cannot be separately conveyed or transferred apart therefrom. As to such rights and their exercise, the owners thereof shall become parties to this action and be subject to Watermaster Replacement Water Assessments under Section 45 (b) hereof, sufficient to purchase Replenishment Water to offset the net consumptive use of such Production and practices. In addition, the gross amount of such Production for such overlying use shall be subject to Watermaster Administrative Assessments under Section 45 (a) hereof and the consumptive use portion of such Production for overlying use shall be subject to Watermaster's In-Lieu Water Cost Assessments under Section 45 (d) hereof. The Producers presently entitled to exercise Overlying Rights, a description of the Overlying Land to which

Overlying Rights are appurtenant, the nature of use and the consumptive use portion thereof are set forth in Exhibit "K" hereto. Watermaster may require reports and make inspections of the operations of said parties for purposes of verifying the uses set forth in said Exhibit "K", and, in the event of a material change, to redetermine the net amount of consumptive use by such parties as changed in the exercise of such Overlying Rights. Annually, during the first two (2) weeks of June in each Calendar Year, such Overlying Rights Producers shall submit to Watermaster a verified statement as to the nature of the then current uses of said Overlying Rights on said Overlying Lands for the next ensuing Fiscal Year, whereupon Watermaster shall either affirm the prior determination or redetermine the net amount of the consumptive use portion of the exercise of such Overlying Right by said Overlying Rights Producer.

C. INJUNCTION

22. Injunction Against Unauthorized Production. (Prior Judgment Section 15) Effective July 1, 1973, each and every party, its officers, agents, employees, successors and assigns, to whom rights to waters of the Basin or Relevant Watershed have been declared and decreed herein is ENJOINED AND RESTRAINED from Producing water for Direct Use from the Basin or the Relevant Watershed except pursuant to rights and Pumpers' Shares herein decreed or which may hereafter be acquired by transfer pursuant to Section 55, or under the provisions of the Physical Solution in this Judgment and the Court's continuing jurisdiction, provided that no party is enjoined from Producing up to five (5) acre feet per Fiscal Year.

23. Injunction re Non-consumptive Uses. (Prior Judgment Section 16) Each party listed in Exhibit "G", its officers, agents, employees, successors and assigns, is **ENJOINED AND RESTRAINED** from materially changing said non-consumptive method of use.

24. Injunction Re Change in Overlying Use Without Notice Thereof To Watermaster. (Prior Judgment Section 16.5) Each party listed in Exhibit "K", its officers, agents, employees, successors and assigns, is **ENJOINED AND RESTRAINED** from materially changing said overlying uses at any time without first notifying Watermaster of the intended change of use, in which event Watermaster shall promptly redetermine the consumptive use portion thereof to be effective after such change.

25. Injunction Against Unauthorized Recharge. (Prior Judgment Section 17) Each party, its officers, agents, employees, successors and assigns, is **ENJOINED AND RESTRAINED** from spreading, injecting or otherwise recharging water in the Basin except pursuant to: (a) an adjudicated non-consumptive use, or (b) consent and approval of or Cyclic Storage Agreement with Watermaster, or (c) subsequent order of this Court.

26. Injunction Against Transportation From Basin or Relevant Watershed. (Prior Judgment Section 18) Except upon further order of Court, all parties, other than Transporting Parties and MWD in its exercise of its Special Category Rights, to the extent authorized therein, are **ENJOINED AND RESTRAINED** from transporting water hereafter Produced from the Relevant Watershed or Basin outside the areas thereof. For purposes of

this Section, water supplied through a city water system which lies chiefly within the Basin shall be deemed entirely used within the Basin. Transporting Parties are entitled to continue to transport water to the extent that any Production of water by any such party does not violate the injunctive provisions contained in Section 22 hereof; provided that said water shall be used within the present service areas or corporate or other boundaries and additions thereto so long as such additions are contiguous to the then existing service area or corporate or other boundaries; except that a maximum of ten percent (10%) of use in any Fiscal Year may be outside said then existing service areas or corporate or other boundaries.

D. CONTINUING JURISDICTION

27. Jurisdiction Reserved. (Prior Judgment Section 19) Full jurisdiction, power and authority are retained by and reserved to the Court for purposes of enabling the Court upon application of any party or of the Watermaster, by motion and upon at least thirty (30) days notice thereof, and after hearing thereon, to make such further or supplemental orders or directions as may be necessary or appropriate for interim operation before the Physical Solution is fully operative, or for interpretation, enforcement or carrying out of this Judgment, and to modify, amend or amplify any of the provisions of this Judgment or to add to the provisions thereof consistent with the rights herein decreed. Provided, that nothing in this paragraph shall authorize:

(1) modification or amendment of the quantities specified in the declared rights of any party;

(2) modification or amendment of the manner of exercise of the Base Annual Diversion Right or Integrated Production Right of any party; or

(3) the imposition of an injunction prohibiting transportation outside the Relevant Watershed or Basin as against any Transporting Party transporting in accordance with the provisions of this Judgment or against MWD as to its Special Category Rights.

E. WATERMASTER

28. Watermaster to Administer Judgment. (Prior Judgment Section 20) A Watermaster comprised of nine (9) persons, to be nominated as hereinafter provided and appointed by the Court, shall administer and enforce the provisions of this Judgment and any subsequent instructions or orders of the Court thereunder.

29. Qualification, Nomination and Appointment. (Prior Judgment Section 21) The nine (9) member Watermaster shall be composed of six (6) Producer representatives and three (3) public representatives qualified, nominated and appointed as follows:

(a) Qualification. Any adult citizen of the State of California shall be eligible to serve on Watermaster; provided, however, that no officer, director, employee or agent of Upper District or San Gabriel District shall be qualified as a Producer member of Watermaster.

(b) Nomination of Producer Representatives. A meeting of all parties shall be held at the regular meeting of Watermaster in November of each year, at the offices of Watermaster. Nomination of the six (6) Producer

representatives shall be by cumulative voting, in person or by proxy, with each Producer entitled to one (1) vote for each one hundred (100) acre feet, or portion thereof, of Base Annual Diversion Right or Prescriptive Pumping Right or Integrated Production Right.

(c) Nomination of Public Representatives. On or before the regular meeting of Watermaster in November of each year, the three (3) public representatives shall be nominated by the boards of directors of Upper District (which shall select two [2]) and San Gabriel District (which shall select one [1]). Said nominees shall be members of the board of directors of said public districts.

(d) Appointment. All Watermaster nominations shall be promptly certified to the Court, which will in ordinary course confirm the same by an appropriate order appointing said Watermaster; provided, however, that the Court at all times reserves the right and power to refuse to appoint, or to remove, any member of Watermaster.

30. Term and Vacancies. (Prior Judgment Section 22) Each member of Watermaster shall serve for a one (1) year term commencing on January 1, following his appointment, or until his successor is appointed. In the event of a vacancy on Watermaster, a successor shall be nominated at a special meeting to be called by Watermaster within ninety (90) days (in the case of a Producer representative) or by action of the appropriate district board of directors (in the case of a public representative).

31. Quorum. (Prior Judgment Section 23) Five (5) members

of the Watermaster shall constitute a quorum for the transaction of affairs of the Watermaster. Action by the affirmative vote of five (5) members shall constitute action by Watermaster, except that the affirmative vote of six (6) members shall be required:

(a) to approve the purchase, spreading or injection of water for Ground Water recharge, or

(b) to enter in any Agreement pursuant to Section 34 (m) hereof.

32. Compensation. (Prior Judgment Section 24) Each Watermaster member shall receive compensation of One Hundred Dollars ($100.00) per day for each day's attendance at meetings of Watermaster or for each day's service rendered as a Watermaster member at the request of Watermaster, together with any expenses incurred in the performance of his duties required or authorized by Watermaster. No member of the Watermaster shall be employed by or compensated for professional services rendered by him to Watermaster, other than the compensation herein provided, and any authorized travel or related expense.

33. Organization. (Prior Judgment Section 25) At its first meeting in each year, Watermaster shall elect a chairman and a vice chairman from its membership. It shall also select a secretary, a treasurer and such assistant secretaries and assistant treasurers as may be appropriate, any of whom may, but need not be, members of Watermaster.

(a) Minutes. Minutes of all Watermaster meetings shall be kept which shall reflect all actions taken by Watermaster. Draft copies thereof shall be furnished to

any party who files a request therefor in writing with Watermaster. Said draft copies of minutes shall constitute notice of any Watermaster action therein reported; failure to request copies thereof shall constitute waiver of notice.

(b) Regular Meetings. Watermaster shall hold regular meetings at places and times to be specified in Watermaster's rules and regulations to be adopted by Watermaster. Notice of the scheduled or regular meetings of Watermaster and of any changes in the time or place thereof shall be mailed to all parties who shall have filed a request therefor in writing with Watermaster.

(c) Special Meetings. Special meetings of Watermaster may be called at any time by the chairman or vice chairman or by any three (3) members of Watermaster by written notice delivered personally or mailed to each member of Watermaster and to each party requesting notice, at least twenty-four (24) hours before the time of each such meeting in the case of personal delivery, and forty-eight (48) hours prior to such meeting in the case of mail. The calling notice shall specify the time and place of the special meeting and the business to be transacted at such meeting. No other business shall be considered at such meeting.

(d) Adjournments. Any meeting of Watermaster may be adjourned to a time and place specified in the order of adjournment. Less than a quorum may so adjourn from time to time. A copy of the order or notice of adjournment

shall be conspicuously posted on or near the door of the place where the meeting was held within twenty-four (24) hours after adoption of the order of adjournment.

34. Powers and Duties. (Prior Judgment Section 26) Subject to the continuing supervision and control of the Court, Watermaster shall have and may exercise the following express powers, and shall perform the following duties, together with any specific powers, authority and duties granted or imposed elsewhere in this Judgment or hereafter ordered or authorized by the Court in the exercise of its continuing jurisdiction.

(a) Rules and Regulations. To make and adopt any and all appropriate rules and regulations for conduct of Watermaster affairs. A copy of said rules and regulations and any amendments thereof shall be mailed to all parties.

(b) Acquisition of Facilities. To purchase, lease, acquire and hold all necessary property and equipment; provided, however, that Watermaster shall not acquire any interest in real property in excess of year-to-year tenancy for necessary quarters and facilities.

(c) Employment of Experts and Agents. To employ such administrative personnel, engineering, geologic, accounting, legal or other specialized services and consulting assistants as may be deemed appropriate in the carrying out of its powers and to require appropriate bonds from all officers and employees handling Watermaster funds.

(d) Measuring Devices, etc. To cause parties, pursuant to uniform rules, to install and maintain in good

operating condition, at the cost of each party, such necessary measuring devices or meters as may be appropriate; and to inspect and test any such measuring device as may be necessary.

(e) Assessments. To levy and collect all Assessments specified in the Physical Solution.

(f) Investment of Funds. To hold and invest any and all funds which Watermaster may possess in investments authorized from time to time for public agencies in the State of California.

(g) Borrowing. To borrow in anticipation of receipt of Assessment proceeds an amount not to exceed the annual amount of Assessments levied but uncollected.

(h) Purchase of and Recharge with Supplemental Water. To purchase Supplemental Water and to introduce the same into the Basin for replacement or cyclic storage purposes, subject to the affirmative vote of six (6) members of Watermaster.

(i) Contracts. To enter into contracts for the performance of any administrative powers herein granted, subject to approval of the Court.

(j) Cooperation With Existing Agencies. To act jointly or cooperate with agencies of the United States and the State of California or any political subdivision, municipality or district to the end that the purposes of the Physical Solution may be fully and economically carried out. Specifically, in the event Upper District has facilities available and adequate to accomplish any of the

administrative functions of Watermaster, consideration shall be given to performing said functions under contract with Upper District in order to avoid duplication of facilities.

(k) Assumption of Make-up Obligation. Watermaster shall assume the Make-up Obligation for and on behalf of the Basin.

(m) Water Quality. Water quality in the Basin shall be a concern of Watermaster, and all reasonable steps shall be taken to assist and encourage appropriate regulatory agencies to enforce reasonable water quality regulations affecting the Basin, including regulation of solid and liquid waste disposal.

(n) Cyclic Storage Agreements. To enter into appropriate contracts, to be approved by the Court, for utilization of Ground Water storage capacity of the Basin for cyclic or regulatory storage of Supplemental Water by parties and non-parties, for subsequent recovery or Watermaster credit by the storing entity, pursuant to uniform rules and conditions, which shall include provision for:

(1) Watermaster control of all spreading or injection and extraction scheduling and procedures for such stored water;

(2) calculation by Watermaster of any special costs, damages or burdens resulting from such operations;

(3) determination by Watermaster of, and

accounting for, all losses in stored water, assuming that such stored water floats on top of the Ground Water supplies, and accounting for all losses of water which otherwise would have replenished the Basin, with priorities being established as between two or more such contractors giving preference to parties over non-parties; and

(4) payment to Watermaster for the benefit of the parties hereto of all special costs, damages or burdens incurred (without any charge, rent, assessment or expense as to parties hereto by reason of the adjudicated proprietary character of said storage rights, nor credit or offset for benefits resulting from such storage); provided, that no party shall have any direct interest in or control over such contracts or the operation thereof by reason of the adjudicated right of such party, the Watermaster having sole custody and control of all Ground Water storage rights in the Basin pursuant to the Physical Solution herein, and subject to review of the Court.

(o) Notice List. Maintain a current list of party designees to receive notice hereunder, in accordance with Section 54 hereof.

35. Policy Decisions -- Procedure. (Prior Judgment Section 27) It is contemplated that Watermaster will exercise discretion in making policy decisions relating to Basin management under the Physical Solution decreed herein. In order to assure full participation and opportunity to be heard for

those affected, no policy decision shall be made by Watermaster until thirty (30) days after the question involved has been raised for discussion at a Watermaster meeting and noted in the draft of minutes thereof.

36. Reports. (Prior Judgment Section 28) Watermaster shall annually file with the Court and mail to the parties a report of all Watermaster activities during the preceding year, including an audited statement of all accounts and financial activities of Watermaster, summary reports of Diversions and Pumping, and all other pertinent information. To the extent practical, said report shall be mailed to all parties on or before November 1.

37. Review Procedures. (Prior Judgment Section 29) Any action, decision, rule or procedure of Watermaster (other than a decision establishing Operating Safe Yield, see Section 43[c]) shall be subject to review by the Court on its own motion or on timely motion for an Order to Show Cause by any party, as follows:

(a) Effective Date of Watermaster Action. Any order, decision or action of Watermaster shall be deemed to have occurred on the date that written notice thereof is mailed. Mailing of draft copies of Watermaster minutes to the parties requesting the same shall constitute notice to all such parties.

(b) Notice of Motion. Any party may, by a regularly noticed motion, petition the Court for review of said Watermaster's action or decision. Notice of such motion shall be mailed to Watermaster and all parties. Unless so

ordered by the Court, such petition shall not operate to stay the effect of such Watermaster action.

(c) Time for Motion. Notice of motion to review any Watermaster action or decision shall be served and filed within ninety (90) days after such Watermaster action or decision.

(d) De Novo Nature of Proceeding. Upon filing of such motion for hearing, the Court shall notify the parties of a date for taking evidence and argument, and shall review de novo the question at issue on the date designated. The Watermaster decision or action shall have no evidentiary weight in such proceeding.

(e) Decision. The decision of the Court in such proceeding shall be an appealable Supplemental Order in this case. When the same is final, it shall be binding upon the Watermaster and the parties.

F. PHYSICAL SOLUTION

38. Purpose and Objective. (Prior Judgment Section 30) Consistent with the California Constitution and the decisions of the Supreme Court, the Court hereby adopts and Orders the parties to comply with this Physical Solution. The purpose and objective of these provisions is to provide a legal and practical means for accomplishing the most economic, long term, conjunctive utilization of surface, Ground Water, Supplemental Water and Ground Water storage capacity to meet the needs and requirements of the water users dependent upon the Basin and Relevant Watershed, while preserving existing equities.

39. Need for Flexibility. (Prior Judgment Section 31) In

Ralph B. Helm - Bar No. 022004
4605 Lankershim Boulevard, #214
North Hollywood, CA 91602

Telephone (818) 769-2002

Attorney for Watermaster - Petitioner

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, Plaintiff, vs. CITY OF ALHAMBRA, et al., Defendants.	No. 924129 ORDER AMENDING JUDGMENT TO EXPAND WATERMASTER'S POWERS TO INCLUDE MAINTENANCE, IMPROVEMENT, AND CONTROL OF BASIN WATER QUALITY WITH ALLOWABLE FUNDING THROUGH IN-LIEU ASSESSMENTS Hearing: August 7, 1990 Department 38, 9:15 A. M.

The Petition of the Main San Gabriel Basin Watermaster (Watermaster) for Amendment to Judgment herein to expand its powers to include maintenance, improvement, and control of Basin water quality by controlling pumping in the Basin, with allowable funding for associated costs to be paid through its In-Lieu Assessments, was continued on July 31, 1990, to August 7, 1990, when it duly and regularly came on for hearing, at 9:15 o'clock A. M. in Department 38 of the above entitled Court, the Honorable FLORENCE T. PICKARD, Assigned Judge Presiding. Ralph B. Helm appeared as Attorney for Watermaster - Petitioner; Wayne K. Lemieux appeared for Defendant, San Gabriel Valley Municipal Water District, in support of the Petition; Fred Vendig, General

Counsel, Karen L. Tachiki, Assistant General Counsel, and Victor E. Gleason, Senior Deputy General Counsel, by Victor E. Gleason, appeared for Defendant, The Metropolitan Water District of Southern California, in support of the Petition; Timothy J. Ryan appeared for Defendant, San Gabriel Valley Water Company, in opposition to the Petition; Lagerlof, Senecal, Drescher & Swift, by H. Jess Senecal, appeared for Defendants, Calmat Company, Livingston-Graham, Owl Rock Products, AZ-Two, Inc., and Sully-Miller Contracting Company, in opposition to the Petition; Ira Reiner, Los Angeles County District Attorney, by Jan Chatten-Brown, Special Assistant to the District Attorney, appeared in opposition to the Petition; and Sarah F. Bates and Laurens H. Silver, by Sarah F. Bates, appeared on behalf of Amicus Curiae Sierra Club, in opposition to the Petition.

The Court acknowledged receipt and consideration of: letters in support of the Petition by the California Regional Water Quality Control Board - Los Angeles Region and by the State Water Resources Control Board; a copy of a letter addressed to the Attorney for Petitioner, from the US Environmental Protection Agency - Region IX, by Mark J. Klaiman, Assistant Regional Counsel, regarding several matters of federal law which EPA believed might ultimately affect the subject Petition; a letter in opposition to the Petition by East Valleys Organization; and a FAX communication to the Court, in opposition to the Petition, from Congressman Esteban E. Torres, which was not communicated to nor seen by the parties.

Members of the public, present in Court, were invited to, and did, present oral testimony during the hearing.

Under date of December 10, 1990 the Court entered its Intended Decision Re Amendment To Judgment and, by minute order duly entered and mailed to Counsel for Petitioner, ordered copies thereof mailed forthwith to all appearing parties, including those appearing as friends of the court, and to all other affected parties on the case's current mailing list.

A Proof Of Service by mail on December 13, 1990, Of Intended Decision Re Amendment To Judgment, as ordered, has been filed with the Court.

Opposition to Petitioner's Proposed Order were filed by Amicus Curiae Sierra Club, Amicus Curiae Los Angeles District Attorney, and by Producer Parties Calmat Co., Livingston-Graham, Owl Rock Products Company, AZ-Two, Inc., and Sully-Miller Contracting Company.

Proof being made to the satisfaction of the Court and good cause appearing:

IT IS, HEREBY, ORDERED:

1. That the Amended Judgment herein be further amended by amending Subsection (j) of Section 10 thereof, Definitions, and Section 40 thereof, Division F, Physical Solution, to read as follows:

"10 (j) <u>In-Lieu Water Cost</u> - - The differential between a particular Producer's cost of Watermaster directed produced, treated, blended, substituted, or Supplemental Water delivered or substituted to, for, or taken by, such Producer in-lieu of his cost of otherwise normally Producing a like amount of Ground Water from the Basin.

"40. <u>Watermaster Control.</u> (Prior Judgment Section 32)

In order to develop an adequate and effective program of Basin management, it is essential that Watermaster have broad discretion in the making of Basin management decisions within the ambit hereinafter set forth. The maintenance, improvement, and control of the water quality and quantity of the Basin, withdrawal and replenishment of supplies of the Basin and Relevant Watershed, and the utilization of the water resources thereof, must be subject to procedures established by Watermaster in implementation of the Physical Solution provisions of this Judgment. Both the quantity and quality of said water resource are thereby preserved and its beneficial utilization maximized.

"(a) Watermaster shall develop an adequate and effective program of Basin management. The maintenance, improvement, and control of the water quality and quantity of the Basin, withdrawal and replenishment of supplies of the Basin and Relevant Watershed, and the utilization of the water resources thereof, must be subject to procedures established by Watermaster in implementation of the Physical Solution provisions of this Judgment. All Watermaster programs and procedures shall be adopted only after a duly noticed public hearing pursuant to Sections 37 and 40 of the Amended Judgment herein.

"(b) Watermaster shall have the power to control pumping in the Basin by water Producers therein for Basin cleanup and water quality control so that specific well production can be directed as to a lesser amount, to total cessation, as to an increased amount, and even to require pumping in a new location in the

Basin. Watermaster's right to regulate pumping activities of Producers shall be subordinate to any conflicting Basin cleanup plan established by the EPA or other public governmental agency with responsibility for ground water management or clean up.

"(c) Watermaster may act individually or participate with others to carry on technical and other necessary investigations of all kinds and collect data necessary to carry out the herein stated purposes. It may engage in contractual relations with the EPA or other agencies in furtherance of the clean up of the Basin and enter into contracts with agencies of the United States, the State of California, or any political subdivision, municipality, or district thereof, to the extent allowed under applicable federal or state statutes. Any cooperative agreement between the Watermaster and EPA shall require the approval of the appropriate Agency(s) of the State of California.

"(d) For regulation and control of pumping activity in the Basin, Watermaster shall adopt Rules and Regulations and programs to promote, manage and accomplish clean up of the Basin and its waters, including, but not limited to, measures to confine, move, and remove contaminants and pollutants. Such Rules and Regulations and programs shall be adopted only after a duly Noticed Public Hearing by Watermaster and shall be subject to Court review pursuant to Section 37 of the Amended Judgment herein.

"(e) Watermaster shall determine whether funds from local, regional, state or federal agencies are available for regulating pumping and the various costs associated with, or arising from such activities. If no public funds are available from local,

regional, state, or federal agencies, the costs shall be obtained and paid by way of an In-Lieu Assessment by Watermaster pursuant to Section 10 (j) of the Amended Judgment herein. Provided such In-Lieu Assessments become necessary, the costs shall be borne by all Basin Producers.

"(f) Watermaster is a Court empowered entity with limited powers, created pursuant to the Court's Physical Solution Jurisdiction under Article X, Section 2 of the California Constitution. None of the Powers granted herein to Watermaster shall be construed as designating Watermaster a political subdivision of the State of California or authorizing Watermaster to act as 'lead agency' to administer the federal Superfund for clean up of the Basin."

2. This Amended Judgment shall continue in full force and effect as hereby Ordered and Amended.

Dated: January 29, 1991.

/s/Florence T. Pickard
FLORENCE T. PICKARD
Judge of the Superior Court,
Specially Assigned

order that Watermaster may be free to utilize both existing and new and developing technological, social and economic concepts for the fullest benefit of all those dependent upon the Basin, it is essential that the Physical Solution hereunder provide for maximum flexibility and adaptability. To that end, the Court has retained continuing jurisdiction to supplement the broad discretion herein granted to the Watermaster.

40. Watermaster Control. (Prior Judgment Section 32) In order to develop an adequate and effective program of Basin management, it is essential that Watermaster have broad discretion in the making of Basin management decisions within the ambit hereinafter set forth. Withdrawal and replenishment of supplies of the Basin and Relevant Watershed and the utilization of the water resources thereof, and of available Ground Water storage capacity, must be subject to procedures established by Watermaster in implementation of the provisions of this Judgment. Both the quantity and quality of said water resource are thereby preserved and its beneficial utilization maximized.

41. General Pattern of Contemplated Operation. (Prior Judgment Section 33) In general outline (subject to the specific provisions hereafter and to Watermaster Operating Criteria set forth in Exhibit "H"), Watermaster will determine annually the Operating Safe Yield of the Basin and will notify each Pumper of his share thereof, stated in acre feet per Fiscal Year. Thereafter, no party may Produce in any Fiscal Year an amount in excess of the sum of his Diversion Right, if any, plus his Pumper's Share of such Operating Safe Yield, or his

Integrated Production Right, or the terms of any Cyclic Storage Agreement, without being subject to Assessment for the purpose of purchasing Replacement Water. In establishing the Operating Safe Yield, Watermaster shall follow all physical, economic, and other relevant parameters provided in the Watermaster Operating Criteria. Watermaster shall have Assessment powers to raise funds essential to implement the management plan in any of the several special circumstances herein described in more detail.

42. Basin Operating Criteria. (Prior Judgment Section 34) Until further order of the Court and in accordance with the Watermaster Operating Criteria, Watermaster shall not spread Replacement Water when the water level at the Key Well exceeds Elevation two hundred fifty (250), and Watermaster shall spread Replacement Water, insofar as practicable, to maintain the water level at the Key Well above Elevation two hundred (200).

43. Determination of Operating Safe Yield. (Prior Judgment Section 35) Watermaster shall annually determine the Operating Safe Yield applicable to the succeeding Fiscal Year and estimate the same for the next succeeding four (4) Fiscal Years. In making such determination, Watermaster shall be governed in the exercise of its discretion by the Watermaster Operating Criteria. The procedures with reference to said determination shall be as follows:

(a) Preliminary Determination. On or before Watermaster's first meeting in April of each year, Watermaster shall make a Preliminary Determination of the Operating Safe Yield of the Basin for each of the succeeding five Fiscal Years. Said determination shall be

made in the form of a report containing a summary statement of the considerations, calculations and factors used by Watermaster in arriving at said Operating Safe Yield.

(b) Notice and Hearing. A copy of said Preliminary Determination and report shall be mailed to each Pumper and Integrated Producer at least ten (10) days prior to a hearing to be held at Watermaster's regular meeting in May, of each year, at which time objections or suggested corrections or modifications of said determinations shall be considered. Said hearing shall be held pursuant to procedures adopted by Watermaster.

(c) Watermaster Determination and Review Thereof. Within thirty (30) days after completion of said hearing, Watermaster shall mail to each Pumper and Integrated Producer a final report and determination of said Operating Safe Yield for each such Fiscal Year, together with a statement of the Producer's entitlement in each such Fiscal Year stated in acre feet. Any affected party, within thirty (30) days of mailing of notice of said Watermaster determination, may, by a regularly noticed motion, petition the Court for an Order to Show Cause for review of said Watermaster finding, and thereupon the Court shall hear such objections and settle such dispute. Unless so ordered by the Court, such petition shall not operate to stay the effect of said report and determination. In the absence of such review proceedings, the Watermaster determination shall be final.

44. Reports of Pumping and Diversion. (Prior Judgment

Section 36) Each party (other than Minimal Producers) shall file with the Watermaster quarterly, on or before the last day of January, April, July and October, a report on a form to be prescribed by Watermaster showing the total Pumping and Diversion (separately for Direct Use and for non-consumptive use, if any,) of such party during the preceding calendar quarter.

45. Assessments -- Purpose. (Prior Judgment Section 37) Watermaster shall have the power to levy and collect Assessments from the parties (other than Minimal Producers, non-consumptive users, or Production under Special Category Rights or Cyclic Storage Agreements) based upon Production during the preceding Fiscal Year. Said Assessments may be for one or more of the following purposes:

(a) Watermaster Administration Costs. Within thirty (30) days after completion of the hearing on the Preliminary Determination of the Operating Safe Yield of the Basin and Watermaster's determination thereof, pursuant to Section 43 hereof, Watermaster shall adopt a proposed budget for the succeeding Fiscal Year and shall mail a copy thereof to each party, together with a statement of the level of Administration Assessment levied by Watermaster which will be collected for purposes of raising funds for said budget. Said Assessment shall be uniformly applicable to each acre foot of Production.

(b) Replacement Water Costs. Replacement Water Assessments shall be collected from each party on account of such party's Production in excess of its Diversion

Rights, Pumper's Share or Integrated Production Right, and on account of the consumptive use portion of Overlying Rights, computed at the applicable rate established by Watermaster consistent with the Watermaster Operating Criteria.

(c) Make-Up Obligation. An Assessment shall be collected equally on account of each acre foot of Production, which does not bear a Replacement Assessment hereunder, to pay all necessary costs of Administration and satisfaction of the Make-Up Obligation. Such Assessment shall not be applicable to water Production for an Overlying Right.

(d) In-Lieu Water Cost. Watermaster may levy an Assessment against all Pumping to pay reimbursement for In-Lieu Water Costs except that such Assessment shall not be applicable to the non-consumptive use portion of an Overlying Right.

(e) Basin Water Quality Improvement. For purposes of testing, protecting or improving the water quality in the Basin, Watermaster may, after a noticed hearing thereon, fix terms and conditions under which it may waive all or any part of its Assessments on such ground water Production and if such Production, in addition to his other Production, does not exceed such Producer's Share or entitlement for that Fiscal Year, such stated Production shall be allowed to be carried over for a part of such Producer's next Fiscal Year's Producer's Share or entitlement. In connection therewith, Watermaster may also

waive the provisions of Sections 25, 26 and 57 hereof, relating to Injunction Against Unauthorized Recharge, Injunction Against Transportation From Basin or Relevant Watershed, and Intervention After Judgment, respectively. Nothing in this Judgment is intended to allow an increase in any Producer's annual entitlement nor to prevent Watermaster, after hearing thereon, from entering into contracts to encourage, assist and accomplish the clean up and improvement of degraded water quality in the Basin by non-parties herein. Such contracts may include the exemption of the Production of such Basin water therefor from Watermaster Assessments and, in connection therewith, the waiver of the provisions of Judgment Sections 25, 26, and 57 hereof.

46. Assessments -- Procedure. (Prior Judgment Section 38) Assessments herein provided for shall be levied and collected as follows:

(a) Levy and Notice of Assessment. Within thirty (30) days of Watermaster's annual determination of Operating Safe Yield of the Basin for each Fiscal Year and succeeding four (4) Fiscal Years, Watermaster shall levy applicable Administration Assessments, Replacement Water Assessments, Make-up Water Assessments and In-Lieu Water Assessments, if any. Watermaster shall give written notice of all applicable Assessments to each party on or before August 15, of each year.

(b) Payment. Each Assessment shall be payable, and each party is Ordered to pay the same, on or before

September 20, following such Assessment, subject to the rights reserved in Section 37 hereof.

(c) Delinquency. Any Assessment which becomes delinquent after January 1, 1980, shall bear interest at the annual prime rate plus one percent (1%) in effect on the first business day of August of each year. Said prime interest rate shall be that fixed by the Bank of America NT&SA for its preferred borrowing customers on said date. Said prime interest rate plus one percent (1%) shall be applicable to any said delinquent Assessment from the due date thereof until paid. Provided, however, in no event shall any said delinquent Assessment bear interest at a rate of less than ten percent (10%) per annum. Such delinquent Assessment and interest may be collected in a Show Cause proceeding herein or any other legal proceeding instituted by Watermaster, and in such proceeding the Court may allow Watermaster its reasonable costs of collection, including attorney's fees.

47. Availability of Supplemental Water From Responsible Agencies. (Prior Judgment Section 39) If any Responsible Agency shall, for any reason, be unable to deliver Supplemental Water to Watermaster when needed, Watermaster shall collect funds at an appropriate level and hold them in trust, together with interest accrued thereon, for purchase of such water when available.

48. Accumulation of Replacement Water Assessment Proceeds. (Prior Judgment Section 40) In order to minimize fluctuation in Assessments and to give Watermaster flexibility in Basin

management, Watermaster may make reasonable accumulations of Replacement Water Assessments. Such moneys and any interest accrued thereon shall only be used for the purchase of Replacement Water.

49. Carry-over of Unused Rights. (Prior Judgment Section 41) Any Pumper's Share of Operating Safe Yield, and the Production right of any Integrated Producer, which is not Produced in a given Fiscal Year may be carried over and accumulated for one Fiscal Year, pursuant to reasonable rules and procedures for notice and accounting which shall be adopted by Watermaster. The first water Produced in the succeeding Fiscal Year shall be deemed Produced pursuant to such Carry-over Rights.

50. Minimal Producers. (Prior Judgment Section 42) In the interest of Justice, Minimal Producers are exempted from the operation of this Physical Solution, so long as such party's annual Production does not exceed five (5) acre feet. Quarterly Production reports by such parties shall not be required, but Watermaster may require, and Minimal Producers shall furnish, specific periodic reports. In addition, Watermaster may conduct such investigation of future operations of any Minimal Producer as may be appropriate.

51. Effective Date. (Prior Judgment Section 43) The effective date for commencing accounting and operation under this Physical Solution, other than for Replacement Water Assessments, shall be July 1, 1972. The first Assessment for Replacement Water shall be payable on September 20, 1974, on account of Fiscal Year 1973-74 Production.

G. MISCELLANEOUS PROVISIONS

52. Puente Narrows Flow. (Prior Judgment Section 44) The Puente Basin is tributary to the Main San Gabriel Basin. All Producers within said Puente Basin have been dismissed herein, based upon the Puente Narrows Agreement (Exhibit "J"), whereby Puente Basin Water Agency agreed not to interfere with surface inflow and to assure continuance of historic subsurface contribution of water to Main San Gabriel Basin. The Court declares said Agreement to be reasonable and fair and in full satisfaction of claims by Main San Gabriel Basin for natural water from Puente Basin.

53. San Gabriel District - Interim Order. (Prior Judgment Section 45) San Gabriel District has a contract with the State of California for State Project Water, delivered at Devil Canyon in San Bernardino County. San Gabriel District is HEREBY ORDERED to proceed with and complete necessary pipeline facilities as soon as practical.

Until said pipeline is built and capable of delivering a minimum of twenty-eight thousand eight-hundred (28,800) acre feet of State Project water per year, defendant cities of Alhambra, Azusa, and Monterey Park shall pay to Watermaster each Fiscal Year a Replacement Assessment at a uniform rate sufficient to purchase Replenishment Water when available, which rate shall be declared by San Gabriel District. When water is available through said pipeline, San Gabriel District shall make the same available to Watermaster, on his reasonable demand, at said specified rate per acre foot. Interest accrued on such funds shall be paid to San Gabriel

District.

54. Service Upon and Delivery to Parties of Various Papers. (Prior Judgment Section 46) Service of the Judgment on those parties who have executed the Stipulation for Judgment shall be made by first class mail, postage prepaid, addressed to the Designee and at the address designated for that purpose in the executed and filed counterpart of the Stipulation for Judgment, or in any substitute designation filed with the Court.

Each party who has not heretofore made such a designation shall, within thirty (30) days after the Judgment shall have been served upon that party, file with the Court, with proof of service of a copy thereof upon Watermaster, a written designation of the person to whom and the address at which all future notices, determinations, requests, demands, objections, reports and other papers and processes to be served upon that party or delivered to that party are to be so served or delivered.

A later substitute designation filed and served in the same manner by any party shall be effective from the date of filing as to the then future notices, determinations, requests, demands, objections, reports and other papers and processes to be served upon or delivered to that party.

Delivery to or service upon any party by Watermaster, by any other party, or by the Court, of any item required to be served upon or delivered to a party under or pursuant to the Judgment may be made by deposit thereof (or by copy thereof) in the mail, first class, postage prepaid, addressed to the Designee of the party and at the address shown in the latest

designation filed by that party.

55. Assignment, Transfer, etc., of Rights. (Prior Judgment Section 47) Any rights Adjudicated herein except Overlying Rights, may be assigned, transferred, licensed or leased by the owners thereof; provided however, that no such assignment shall be complete until the appropriate notice procedures established by Watermaster have been complied with. No water Produced pursuant to rights assigned, transferred, licensed, or leased may be transported outside the Relevant Watershed except by:

(1) a Transporting Party, or

(2) a successor in interest immediate or mediate to a water system on lands or portion thereof, theretofore served by such a Transporting Party, for use by such successor in accordance with limitations applicable to Transporting Parties, or

(3) a successor in interest to the Special Category rights of MWD.

The transfer and use of Overlying Rights shall be limited, as provided in Section 21 hereof, as exercisable only on the specifically defined Overlying Lands and they cannot be separately conveyed or transferred apart therefrom.

56. Abandonment of Rights. (Prior Judgment Section 48) It is in the interest of reasonable beneficial use of the Basin and its water supply that no party be encouraged to take and use more water in any Fiscal Year than is actually required. Failure to Produce all of the water to which a party is entitled hereunder shall not, in and of itself, be deemed or constitute

an abandonment of such party's right, in whole or in part. Abandonment and extinction of any right herein Adjudicated shall be accomplished only by:

(1) a written election by the party, filed in this case, or

(2) upon noticed motion of Watermaster, and after hearing.

In either case, such abandonment shall be confirmed by express subsequent order of this Court.

57. Intervention After Judgment. (Prior Judgment Section 49) Any person who is not a party or successor to a party and who proposes to Produce Water from the Basin or Relevant Watershed, may seek to become a party to this Judgment through a Stipulation For Intervention entered into with Watermaster. Watermaster may execute said Stipulation on behalf of the other parties herein but such Stipulation shall not preclude a party from opposing such Intervention at the time of the Court hearing thereon. Said Stipulation For Intervention must thereupon be filed with the Court, which will consider an order confirming said Intervention following thirty (30) days' notice to the parties. Thereafter, if approved by the Court, such Intervenor shall be a party bound by this Judgment and entitled to the rights and privileges accorded under the Physical Solution herein.

58. Judgment Binding on Successors, etc. (Prior Judgment Section 50) Subject to specific provisions hereinbefore contained, this Judgment and all provisions thereof are applicable to and binding upon and inure to the benefit of not

only the parties to this action, but as well to their respective heirs, executors, administrators, successors, assigns, lessees, licensees and to the agents, employees and attorneys in fact of any such persons.

59. Water Rights Permits. (Prior Judgment Section 51) Nothing herein shall be construed as affecting the relative rights and priorities between MWD and San Gabriel Valley Protective Association under State Water Rights Permits Nos. 7174 and 7175, respectively.

60. Costs. (Prior Judgment Section 52) No party shall recover any costs in this proceeding from any other party.

61. Entry of Judgment. (New) The Clerk shall enter this Judgment.

DATED: August 24, 1989.

s/ Florence T. Pickard
Florence T. Pickard, Judge
Specially Assigned

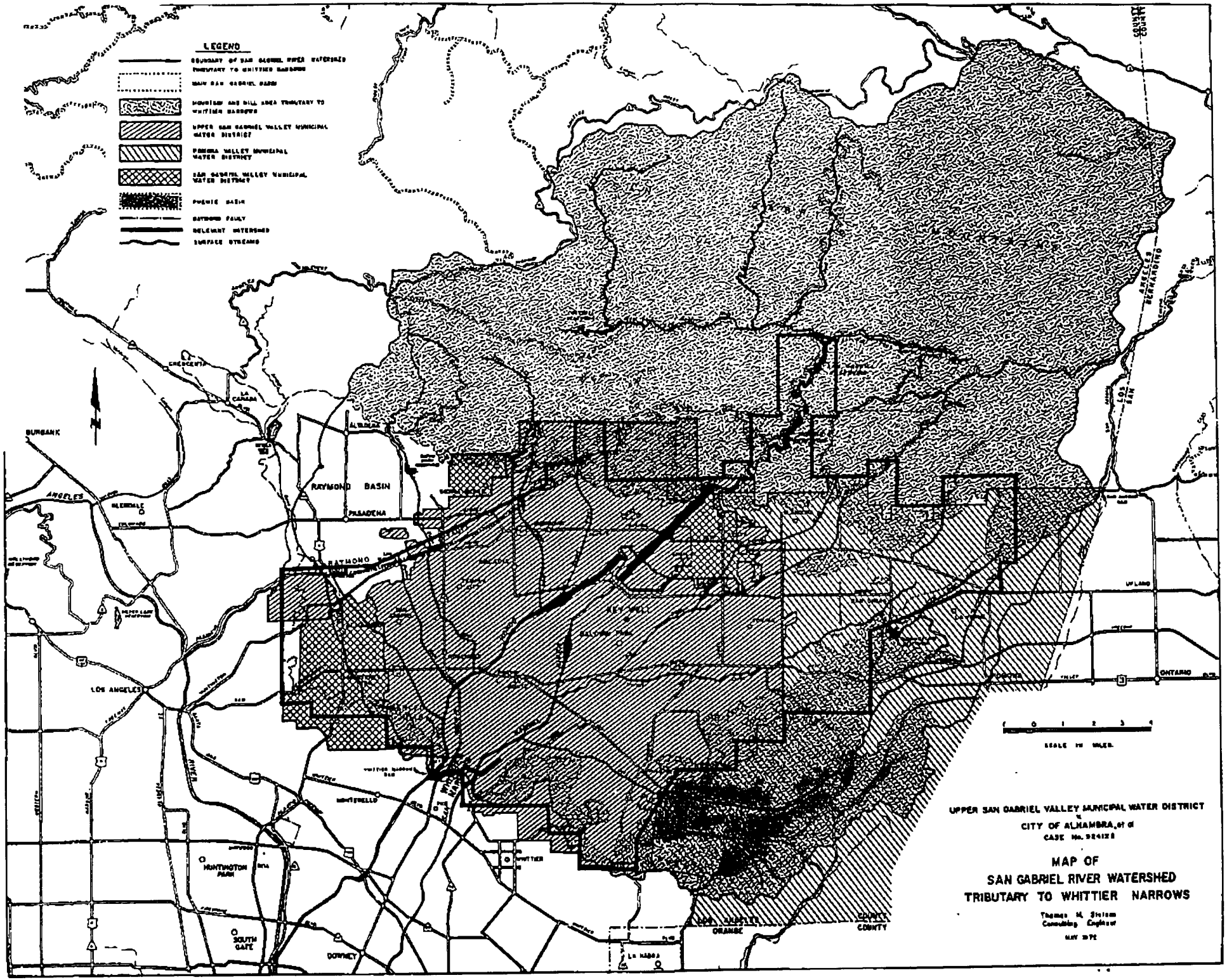

LEGEND
RAYMOND BASIN
BURBANK
PASADENA
LOS ANGELES
HUNTINGTON PARK
SOUTH GATE
DOWNEY
WHITTIER
ONTARIO
SCALE IN MILES
UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
vs
CITY OF ALHAMBRA, et al
CASE No. 924128
MAP OF
SAN GABRIEL RIVER WATERSHED
TRIBUTARY TO WHITTIER NARROWS
Thomas M. Steiner
Consulting Engineer
MAY 1972

Exhibit "B"

BOUNDARIES OF RELEVANT WATERSHED

The following described property is located in Los Angeles County, State of California:

Beginning at the Southwest corner of Section 14, Township 1 North, Range 11 West, San Bernardino Base and Meridian;

Thence Northerly along the West line of said Section 14 to the Northwest corner of the South half of said Section 14;

Thence Easterly along the North line of the South half of Section 14 to the East line of said Section 14;

Thence Northerly along the East line of said Section 14, Township 1 North, Range 11 West and continuing Northerly along the East line of Section 11 to the Northeast corner of said Section 11;

Thence Easterly along the North line of Section 12 to the Northeast corner of said Section 12;

Thence Southerly along the East line of said Section 12 and continuing Southerly along the East line of Section 13 to the Southeast corner of said Section 13, said corner being also the Southwest corner of Section 18, Township 1 North, Range 10 West;

Thence Easterly along the South line of Sections 18, 17, 16 and 15 of said Township 1 North, Range 10 West to the Southwest corner of Section 14;

Thence Northerly along the West line of Section 14 to the Northwest corner of the South half of Section 14;

Thence Easterly along the North line of the South half of Section 14 to the East line of said section;

Thence Northerly along the East line of said Section 14, and continuing Northerly along the West line of Section 12 of said Township 1 North, Range 10 West to the North line of said Section 12;

Thence Easterly along the North line of said Section 12, to the Northeast corner of said Section 12, said corner being also the Southwest corner of Section 6, Township 1 North, Range 9 West;

Thence Northerly along the West line of said Section 6 and continuing Northerly along West line of Sections 31 and 30, Township 2 North, Range 9 West to the Westerly prolongation of the North line of said Section 30;

Thence Easterly along said Westerly prolongation of the North line of said Section 30 and continuing Easterly along the North line of Section 29 to the Northeast corner of said Section 29;

Thence Southerly along the East line of said Section 29 and continuing Southerly along the East line of Section 32, Township 2 North, Range 9 West, and thence continuing Southerly along the East line of Section 5, Township 1 North, Range 9 West to the Southeast corner of said Section 5;

Thence Westerly along the South line of said Section 5 to the Southwest corner of said Section 5, said point being also the Northwest corner of Section 8;

Thence Southerly along the West line of said Section 8 and continuing Southerly along the West line of Section 17, to the Southwest corner of said Section 17, said corner being also the Northwest corner of Section 20;

Thence Easterly along the North line of Sections 20 and 21 to the Northwest corner of Section 22, said corner being also the Southwest corner of Section 15;

Thence Northerly along the West line of said Section 15 to the Northwest corner of the South half of said Section 15;

Thence Easterly along the North line of said South half of Section 15 to the Northeast corner of said South half of Section 15;

Thence Southerly along the East line of Section 15 and continuing Southerly along the East line of Section 22 to the Southeast corner of said Section 22, said point being also the Southwest corner of Section 23;

Thence Easterly along the South line of Sections 23 and 24 to the East line of the West half of said Section 24;

Thence Northerly along said East line of the West half of Section 24 to the North line thereof;

Thence Easterly along said North line of Section 24 to the Northeast corner thereof, said point also being the Northwest corner of Section 19, Township 1 North, Range 8 West;

Thence continuing Easterly along the North line of Section 19 and Section 20 of said Township 1 North, Range 8 West to the Northeast corner of said Section 20;

Thence Southerly along the East line of Sections 20, 29 and 32 of said Township 1 North, Range 8 West to the Southeast corner of said Section 32;

Thence Westerly along the South line of Section 32 to the Northwest corner of the East half of Section 5, Township 1 South, Range 8 West;

Thence Southerly along the West line of the East half of said Section 5 to the South line of said Section 5;

Thence West to the East line of the Northerly prolongation of Range 9 West;

Thence South 67° 30' West to an intersection with the Northerly prolongation of the West line of Section 27, Township 1 South, Range 9 West;

Thence Southerly along the Northerly prolongation of said West line of Section 27 and continuing Southerly along the West line of Section 27 to the Southwest corner of said Section 27, said point being also the Southeast corner of Section 28;

Thence Westerly along the South line and Westerly projection of the South line of said Section 28 to the Northerly prolongation of the West line of Range 9 West;

Thence Southerly along said prolongation of the West line of Range 9 West to the Westerly prolongation of the North line of Township 2 South;

Thence Westerly along said Westerly prolongation of the North line of Township 2 South, a distance of 8,500 feet;

Thence South a distance of 4,500 feet;

Thence West a distance of 10,700 feet;

Thence South 29° West to an intersection with the Northerly prolongation of the West line of Section 20, Township 2 South, Range 10 West;

Thence Southerly along said Northerly prolongation of the West line of said Section 20 and continuing Southerly along the West line of Section 20 to the Southwest corner of said Section 20;

Thence South a distance of 2,000 feet;

Thence West a distance of two miles, more or less, to an intersection with the East line of Section 26, Township 2 South, Range 11 West;

Thence Northerly along said East line of Section 26 and continuing Northerly along the East line of Section 23, Township 2 South, Range 11 West to the Northeast corner of said Section 23;

Thence Westerly along the North line of said Section 23 to the Northwest corner thereof, said point being also the Southeast corner of Section 15, Township 2 South, Range 11 West;

Thence Northerly and Westerly along the East and North lines, respectively, of said Section 15, Township 2 South, Range 11 West, to the Northwest corner thereof;

Thence continuing Westerly along the Westerly prolongation of said North line of Section 15, Township 2 South, Range 11 West to an intersection with a line parallel to and one mile East of the West line of Range 11 West;

Thence Northerly along said parallel line to an intersection with the Northerly boundary of the City of Pico Rivera as said City of Pico Rivera existed on July 17, 1970;

Thence Westerly along said City boundary to an intersection with the East line of Range 12 West;

Thence Northerly along said East line of Range 12 West to the North line of Township 2 South;

Thence Westerly along the North line of Township 2 South to an intersection with the Southerly prolongation of the East line of the West half of Section 26, Township 1 South, Range 12 West;

Thence Northerly along said Southerly prolongation of said East line of the West half of said Section 26 to the Southeast corner of said West half;

Thence Westerly along the South line of Sections 26, 27 and 28, Township 1 South, Range 12 West, to the Southeast corner of Section 29, Township 1 South, Range 12 West;

Thence Northerly along the East line of said Section 29 to the Northeast corner of the South half of said Section 29;

Thence Westerly along the North line of the South half of said Section 29 to the Northwest corner thereof;

Thence Northerly along the West line of Sections 29, 20, 17 and 8, Township 1 South, Range 12 West;

Thence continuing Northerly along the Northerly prolongation of the West line of Section 8, Township 1 South, Range 12 West to an intersection with the North line of Township 1 South;

Thence Easterly along said North line of Township 1 South to the Northeast corner of Section 3, Township 1 South, Range 12 West;

Thence North 64° 30′ East to an intersection with the West line of Section 23, Township 1 North, Range 11 West;

Thence Northerly along the West line of said Section 23 to the Northwest corner thereof, said point being the Southwest corner of Section 14, Township 1 North, Range 11 West and said point being also the point of beginning.

Exhibit "C"

TABLE
SHOWING BASE
ANNUAL DIVERSION
RIGHTS OF CERTAIN
DIVERTERS

	Base Annual Diversion Right Acre-Feet
Covell, Ralph (Successor to Rittenhouse, Catherine and Rittenhouse, James)	2.12
Maddock, A. G.	3.40
Rittenhouse, Catherine (Transferred to Covell, Ralph)	0
Rittenhouse, James (Transferred to Covell, Ralph)	0
Ruebhausen, Arline (Held in common with Ruebhausen, Victor) (Transferred to City of Glendale)	0
Ruebhausen, Victor (See Ruebhausen, Arline, above)	0
TOTAL	5.52

Exhibit "D"

TABLE
SHOWING PRESCRIPTIVE PUMPING RIGHTS
AND PUMPER'S SHARE OF EACH PUMPER
AS OF JUNE, 1988

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share Percent (%)
Adams Ranch Mutual Water Company	100.00	0.05060
A & E Plastik Pak Co., Inc. (Transferred to Industry Properties, Ltd.)	0	0
Alhambra, City of	8,812.05	4.45876
Amarillo Mutual Water Company	709.00	0.35874
Anchor Plating Co., Inc. (Successor to Bodger & Sons) (Transferred to Crown City Plating Co.)	0	0
Anderson, Ray L. and Helen T., Trustees (Successor to Covina-Valley Unified School District)	50.16	0.02538
Andrade, Marcario and Consuelo; and Andrade, Robert and Jayne (Successor to J. F. Isbell Estate, Inc.)	8.36	0.00423
Arcardia, City of	9,252.00	4.68137
(Successor to First National Finance Corporation)	60.90	0.03081
(Transferred to City of Monrovia)	951.00	0.48119
	8,361.90	4.23099
Associated Southern Investment Company (Transferred to Southern California Edison Company)	0	0
AZ-Two, Inc. (Lessee of Southwestern Portland Cement Co.)	0	0
Azusa, City	3,655.99	1.84988
Azusa-Western Inc. (Transferred to Southwestern Portland Cement Co.)	0	0
Bahnsen & Beckman Ind., Inc. (Transferred to Woodland, Richard)	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Bahnsen, Betty M. (Transferred to Dawes, Mary Kay)	0	0
Baldwin Park County Water District (See Valley County Water District)	-	-
Banks, Gale C. (Successor to Doyle, Mr. and Mrs.; and Madruga, Mr. and Mrs.)	50.00	0.02530
Base Line Water Company	430.20	0.21767
Beverly Acres Mutual Water Company	93.00	0.04706
Birenbaum, Max (Held in common with Birenbaum, Sylvia; Schneiderman, Alan; Schneiderman, Lydia; Wigodsky, Bernard; Wigodsky, Estera) (Transferred to City of Whittier)	0	0
Birenbaum, Sylvia (See Birenbaum, Max)	-	-
Blue Diamond Concrete Materials Div., The Flintkote Company (Transferred to Sully-Miller Contracting Co.)	0	0
Bodger & Sons DBA Bodger Seeds Ltd. (Transferred to Anchor Plating Co., Inc.)	0	0
Botello Water Company	0	0
Burbank Development Company	50.65	0.02563
Cadway, Inc. (Successor to:		
Corcoran, Jack S. and R. L.)	100.00	0.05060
Corcoran, Jack S. and R. L.)	100.00	0.05060
	200.00	0.10120
Cal Fin (Transferred to Suburban Water Systems)	0	0
California-American Water Company (San Marino System)	7,868.70	3.98144
California Country Club	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
California Domestic Water Company	11,024.82	5.57839
(Successor to:		
Cantrill Mutual Water Company	42.50	0.02150
Industry Properties, Ltd.	73.50	0.03719
Modern Accent Corporation	256.86	0.12997
Fisher, Russell)	19.00	0.00961
	11,416.68	5.77666
California Materials Company	0	0
Cantrill Mutual Water Company (Transferred to California Domestic Water Co.)	0	0
Cedar Avenue Mutual Water Company	121.10	0.06127
Champion Mutual Water Company	147.68	0.07472
Chronis, Christine (See Polopolus, et al)	-	-
Clayton Manufacturing Company	511.80	0.25896
Collison, E. O.	0	0
Comby, Erma M. (See Wilmott, Erma M.)	-	-
Conrock Company		
(Formerly Consolidated Rock Products Co.)	1,465.35	0.74144
(Successor to Manning Bros. Rock & Sand Co.)	328.00	0.16596
	1,793.35	0.90740
Consolidated Rock Products Co. (See Conrock Company)	-	-
Corcoran, Jack S.		
(Held in common with Corcoran, R. L.)		
(Transferred to:	747.00	0.37797
Cadway, Inc.	100.00	0.05060
Cadway, Inc.)	100.00	0.05060
	547.00	0.27677
Corcoran, R. L. (See Corcoran, Jack S.)	-	-
County Sanitation District No. 18 of Los Angeles County	4.50	0.00228

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Covell, et al. (Successor to Rittenhouse, Catherine and Rittenhouse, James) (Held in common with Jobe, Darr; Goedert, Lillian E.; Goedert, Marion W.; Lakin, Kendall R.; Lakin, Kelly R.; Snyder, Harry)	111.05	0.05619
Covina, City of	2,507.89	1.26895
(Transferred to Covina Irrigating Company)	1,734.00	0.87737
(Transferred to Covina Irrigating Company)	300.00	0.15179
	473.89	0.23979
Covina-Valley Unified School District (Transferred to Anderson, Ray)	0	0
Crevolin, A. J.	2.25	0.00114
Crocker National Bank, Executor of the Estate of A. V. Handorf (Transferred to Modern Accent Corp.)	0	0
Cross Water Company (Transferred to City of Industry)	0	0
Crown City Plating Company	190.00	0.09614
(Successor to Anchor Plating Co., Inc.)	10.00	0.00506
	200.00	0.10120
Davidson Optronics, Inc.	22.00	0.01113
Dawes, Mary Kay (Successor to Bahnsen, Betty M.)	441.90	0.22359
Del Rio Mutual Water Company	199.00	0.10069
Denton, Kathryn W., Trustee for San Jose Ranch Company (Transferred to White, June G., Trustee of the June G. White Share of the Garnier Trust)	0	0
Doyle, Mr. and Mrs.; and Madruga, Mr. and Mrs. (Successor to Sawpit Farms, Ltd.) (Transferred to Banks, Gale C.)	0	0
Driftwood Dairy	163.80	0.08288
Duhalde, L. (Transferred to El Monte Union High School District)	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Dunning, George (Held in common with Dunning, Vera H.) (Successor to Vera H. Dunning)	324.00	0.16394
Dunning, Vera H. (Transferred to George Dunning)	-	-
East Pasadena Water Company, Ltd.	1,407.69	0.71227
Eckis, Rollin (Successor to Sawpit Farms, Ltd.) (Transferred to City of Monrovia)	0	0
El Encanto Properties (Transferred to La Puente Valley County Water District)	0	0
El Monte, City of	2,784.23	1.40878
El Monte Cemetary Association	18.50	0.00936
El Monte Union High School District (Successor to Duhalde, L.) (Transferred to City of Whittier)	0	0
Everett, Mrs. Alda B. (Held in common with Everett, W. B., Executor of the Estate of I. Worth Everett)	0	0
Everett, W. B., Executor of the Estate of I. Worth Everett (See Everett, Mrs. Alda B.)	-	-
Faix, Inc. (Successor to Frank F. Pellissier & Sons, Inc.) (Transferred to Faix, Ltd.)	0	0
Faix, Ltd. (Successor to Faix, Inc.)	6,490.00	3.28384
First National Finance Corporation (Transferred to City of Arcadia)	0	0
Fisher, Russell (Held in common with Hauch, Edward and Warren, Clyde) (Transferred to California Domestic Water Company)	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Frank F. Pellissier & Sons, Inc. (Transferred to Faix, Inc.)	0	0
Fruit Street Water Company (Transferred to: Gifford, Brooks, Jr. City of La Verne)	0	0
Gifford, Brooks, Jr. (Successor to: Fruit Street Water Co., Mission Gardens Mutual Water Company) (Transferred to City of Whittier)	0	0
Gilkerson, Frank B. (Transferred to Jobe, Darr)	-	-
Glendora Unified High School District (Transferred to City of Glendora)	0	0
Goedert, Lillian E. (See Covell, et al)	-	-
Goedert, Marion W. (See Covell, et al)	-	-
Graham, William (Transferred to Darr Jobe)	-	-
Green, Walter	71.70	0.03628
Grizzle, Lissa B. (Held in common with Grizzle, Mervin A.; Wilson, Harold R.; Wilson, Sarah C.) (Transferred to City of Whittier)	0	0
Grizzle, Mervin A. (See Grizzle, Lissa B.)	0	0
Hansen, Alice	0.75	0.00038
Hartley, David	0	0
Hauch, Edward (See Fisher, Russell)	0	0
Hemlock Mutual Water Company	166.00	0.08399

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Hollenbeck Street Water Company (Transferred to Suburban Water Systems)	0	0
Hunter, Lloyd F. (Successor to R. Wade)	4.40	0.00223
Hydro-Conduit Corporation	0	0
Industry Waterworks System, City of (Successor to Cross Water Company)	1,103.00	0.55810
Industry Properties, Ltd. (Successor to A & E Plastik Pak Co., Inc.) (Transferred to California Domestic Water Co.)	0	0
J. F. Isbell Estate, Inc. (Transferred to Andrade, Macario and Consuelo; and Andrade, Robert and Jayne)	0	0
Jerris, Helen (See Polopolus, et al)	-	-
Jobe, Darr (See Covell, et al)	-	-
Kirklen Family Trust (Formerly Kirklen, Dawn L.) (Held in common with Kirklen, William R.)	375.00	0.18974
(Successor to San Dimas-La Verne Recreational Facilities Authority)	62.50	0.03162
	437.50	0.22136
Kirklen, Dawn L. (See Kirklen Family Trust)	-	-
Kirklen, William R. (See Kirklen, Dawn L.)	-	-
Kiyan, Hideo (Held in common with Kiyan, Hiro)	30.00	0.01518
Kiyan, Hiro (See Kiyan, Hideo)	-	-
Knight, Kathryn M. (Successor to William Knight)	227.88	0.11530
Knight, William (Transferred to Kathryn M. Knight)	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Lakin, Kelly R. (See Covell, et al)	-	-
Lakin, Kendall R. (See Covell, et al)	-	-
Landeros, John	0.75	0.00038
La Grande Source Water Company (Transferred to Suburban Water Systems)	0	0
Lang, Frank (Transferred to San Dimas-La Verne Recreational Facilities Authority)	0	0
La Puente Cooperative Water Company (Transferred to Suburban Water Systems)	0	0
La Puente Valley County Water District (Successor to El Encanto Properties)	1,097.00 33.40 1,130.40	0.55507 0.01690 0.57197
La Verne, City of (Successor to Fruit Street Water Co.)	250.00 105.71 355.71	0.12650 0.05349 0.17999
Lee, Paul M. and Ruth A.; Nasmyth, Virrginia; Nasmyth, John	0	0
Little John Dairy	0	0
Livingston-Graham, Inc.	1,824.40	0.92312
Los Flores Mutual Water Company (Transferred to City of Monterey Park)	0	0
Loucks, David	3.00	0.00152
Manning Bros. Rock & Sand Co. (Transferred to Conrock Company)	0	0
Maple Water Company	118.50	0.05996
Martinez, Frances Mercy (Held in common with Martinez, Jaime)	0.75	0.00038
Martinez, Jaime (See Martinez, Frances Mercy)	-	-
Massey-Ferguson Company	0	0

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Miller Brewing Company	111.01	0.05617
(Successor to:		
Maechtlen, Estate of J. J.	151.50	0.07666
Phillips, Alice B., et al)	50.00	0.02530
	312.51	0.15813
Mission Gardens Mutual Water Company		
(Transferred to Gifford, Brooks, Jr.)	0	0
Modern Accent Corporation		
(Successor to Crocker National Bank,		
Executor of the Estate of A. V. Handorf)		
(Transferred to California Domestic Water Co.)	0	0
Monterey Park, City of	6,677.48	3.37870
(Successor to Los Flores Mutual Water Co.)	26.60	0.01346
	6,704.08	3.39216
Murphy Ranch Mutual Water Company		
(Transferred to Southwest Suburban Water)	0	0
Namimatsu Farms		
(Transferred to California Cities Water Company)	0	0
Nick Tomovich & Sons	0.02	0.00001
No. 17 Walnut Place Mutual Water Co.		
(Transferred to San Gabriel Valley		
Water Company)	0	0
Orange Production Credit Association	0	0
Owl Rock Products Co.	715.60	0.36208
Pacific Rock & Gravel Co.		
(Transferred to:		
City of Whittier		
Rose Hills Memorial Park Association)	0	0
Park Water Company		
(Transferred to Valley County Water District)	0	0
Penn, Margaret		
(See Polopolus, et al)	-	-
Pico County Water District	0.75	0.00038
Polopolus, John		
(See Polopolus, et al)	-	-

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Polopolus, et al (Successor to Polopolus, Steve) (Held in common with Chronis, Christine; Jerris, Helen; Penn, Margaret; Polopolus, John)	22.50	0.01138
Polopolus, Steve (Transferred to Polopolus, et al)	-	-
Rados, Alexander (Held in common with Rados, Stephen and Rados, Walter)	43.00	0.02176
Rados, Stephen (See Rados, Alexander)	-	-
Rados, Walter (See Rados, Alexander)	-	-
Richwood Mutual Water Company	192.60	0.09745
Rincon Ditch Company	628.00	0.31776
Rincon Irrigation Company	314.00	0.15888
Rittenhouse, Catherine (Transferred to Covell, Ralph)	0	0
Rittenhouse, James (Transferred to Covell, Ralph)	0	0
Rose Hills Memorial Park Association	594.00	0.30055
(Successor to Pacific Rock & Gravel Co.)	200.00	0.10120
	794.00	0.40175
Rosemead Development, Ltd. (Successor to Thompson, Earl W.)	1.00	0.00051
Rurban Homes Mutual Water Company	217.76	0.11018
Ruth, Roy	0.75	0.00038
San Dimas-La Verne Recreational Facilities Authority (Successor to Lang, Frank) (Transferred to Kirklen, Dawn L. and William R.)	0	0
San Gabriel Country Club	286.10	0.14476
San Gabriel County Water District	4,250.00	2.15044

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
San Gabriel Valley Municipal Water District	0	0
San Gabriel Valley Water Company	16,659.00	8.42920
(Successor to:		
Vallecito Water Co.	2,867.00	1.45066
No. 17 Walnut Place Mutual Water Co.)	21.50	0.01088
	19,547.50	9.89074
Sawpit Farms, Limited		
(Transferred to:		
Eckis, Rollin		
Doyle and Madruga)	0	0
Schneiderman, Alan		
(See Birenbaum, Max)	-	-
Schneiderman, Lydia		
(See Birenbaum, Max)	-	-
Security Pacific National Bank, Co-Trustee for the Estate of Winston F. Stoody		
(See Stoody, Virginia A.)		
(Transferred to City of Whittier)	0	0
Sierra Madre, City of	0	0
Sloan Ranches	129.60	0.06558
Smith, Charles	0	0
Snyder, Harry		
(See Covell, et al)	-	-
Sonoco Products Company	311.60	0.15766
South Covina Water Service	992.30	0.50209
Southern California Edison Company	155.25	0.07855
(Successor to: Associated		
Southern Investment Company)	16.50	0.00835
	171.75	0.08690
Southern California Water Company, San Gabriel Valley District	5,773.00	2.92105
South Pasadena, City of	3,567.70	1.80520
Southwest Suburban Water		
(See Suburban Water Systems)	-	-

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Southwestern Portland Cement Company (Successor to Azusa Western, Inc.)	742.00	0.37544
Speedway 605, Inc.	0	0
Standard Oil Company of California	2.00	0.00101
Sterling Mutual Water Company	120.00	0.06072
Stoody, Virginia A., Co-Trustee for the Estate of Winston F. Stoody (See Security Pacific National Bank, Co-Trustee)	-	-
Suburban Water Systems (Formerly Southwest Suburban Water) (Successor to:	20,462.47	10.35370
Hollenbeck Street Water Company	646.39	0.32706
La Grande Source Water Company	1,078.00	0.54545
La Puente Cooperative Water Co.	1,210.90	0.61270
Valencia Valley Water Company	651.50	0.32965
Victoria Mutual Water Company	469.60	0.23761
Cal Fin	118.10	0.05976
Murphy Ranch Mutual Water Co.	223.23	0.11295
	24,860.19	12.57888
Sully-Miller Contracting Company (Successor to Blue Diamond Concrete Materials Division, The Flintkote Co.)	1,399.33	0.70804
Sunny Slope Water Company	2,228.72	1.12770
Taylor Herb Garden (Transferred to Covina Irrigating Company)	0	0
Texaco, Inc.	50.00	0.02530
Thompson, Earl W. (Held in common with Thompson, Mary) (Transferred to Rosemead Development, Ltd.)	0	0
Thompson, Mary (See Thompson, Earl W.)	-	-
Tyler Nursery	3.21	0.00162
United Concrete Pipe Corporation (See U. S. Pipe & Foundry Company)	-	-

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
U. S. Pipe & Foundry Company (Formerly United Concrete Pipe Corporation)	376.00	0.19025
Valencia Heights Water Company	861.00	0.43565
Valencia Valley Water Company (Transferred to Suburban Water Systems)	0	0
Vallecito Water Company (Transferred to San Gabriel Valley Water Company)	0	0
Valley County Water District (Formerly Baldwin Park County Water District)	5,775.00	2.92206
(Successor to Park Water Company)	184.01	0.09311
	5,959.01	3.01517
Valley Crating Company	0	0
Valley View Mutual Water Company	616.00	0.31169
Via, H. (See Via, H., Trust of)	-	-
Via, H., Trust of (Formerly Via, H.)	46.20	0.02338
Victoria Mutual Water Company (Transferred to Suburban Water Systems)	0	0
Wade, R. (Transferred to Lloyd F. Hunter)	0	0
Ward Duck Company	1,217.40	0.61599
Warren, Clyde (See Fisher, Russell)	-	-
W. E. Hall Company	0.20	0.00010
White, June G., Trustee of the June G. White Share of the Garnier Trust (Successor to Denton, Kathryn W., Trustee for the San Jose Ranch Company)	185.50	0.09386

Pumper	Prescriptive Pumping Right Acre-feet	Pumper's Share %
Whittier, City of	7,620.23	3.85572
(Successor to:		
Grizzle, Lissa B.	184.00	0.09310
Pacific Rock and Gravel Co.)	208.00	0.10524
Security Pacific National Bank,		
Co-Trustee for the Estate of Winston F. Stoody	38.70	0.01958
El Monte Union High School District	16.20	0.00820
Gifford, Brooks, Jr.	198.25	0.10031
Birenbaum, Max)	6.00	0.00304
	8,271.38	4.18519
Wigodsky, Bernard (See Birenbaum, Max)	-	-
Wigodsky, Estera (See Birenbaum, Max)	-	-
Wilmott, Erma M. (Formerly Comby, Erma M.)	0.75	0.00038
Wilson, Harold R. (See Grizzle, Lissa B.)	-	-
Wilson, Sarah C. (See Grizzle, Lissa B.)	-	-
Woodland, Frederick G.	-	-
Woodland, Richard (Successor to: Bahnsen and Beckman Ind., Inc.)	840.50	0.42528
Totals for Exhibit "D"	155,800.68	78.83276
Totals from Exhibit "E"	41 833.75 ~~38,826.25~~	21.16724 ~~19.54431~~
GRAND TOTALS	197,634.43	100.00000

TABLE
SHOWING PRODUCTION RIGHTS
OF EACH
INTEGRATED PRODUCER
AS OF JUNE 1988

Party	Diversion Component Acre-feet	Prescriptive Pumping Component Acre-feet	Pumping Component Share Percent (%)
Azusa Agricultural Water Company	1,000.00	1,732.20	0.87647
Azusa Foot-Hill Citrus Water Company (Transfered to Monrovia Nursery Company)	0	0	0
Azusa Valley Water Company	2,422.00	8,274.00	4.18652
California-American Water Company (Duarte System)	1,672.00	3,649.00	1.84634
California Cities Water Company (See Southern California Water Company, San Dimas District)	-	-	-
Covina Irrigating Company (Successor to:	2,514.00	4,140.00	2.09478
City of Covina,		1,734.00	0.87737
City of Covina, and		300.00	0.15179
Taylor Herb Garden)		6.00	0.00304
	2,514.00	6,180.00	3.12698
Glendora, City of (Successor to:	17.00	8,258.00	4.17842
Maechtlen, Estate of J. J.,		150.00	0.07590
Maechtlen, Trust of P. A.,		50.00	0.02530
Ruebhausen, Arline, and	18.34		
Glendora Unified High School District)		9.00	0.05009
	35.34	8,557.00	4.32971
Los Angeles, County of	310.00	3,721.30	1.88292
Maechtlen, Estate of J. J. (Transferred to:	0	301.50	0.15256
City of Glendora		-150.00	-0.07590
Miller Brewing Company)		-151.50	-0.07666
	0	0	0

Party	Diversion Componet Acre-feet	Prescriptive Pumping Component Acre-feet	Pumping Component Share %
Maechtlen, Estate of J. J.	1.49	0	0
Maechtlen, Trust of P. A.	0.50	100.50	0.05085
(Transferred to:			
City of Glendora		-50.00	-0.02530
Alice B. Phillips, et al)	-0.50	-50.50	-0.02555
	0	0	0
The Metropolitan Water District of Southern California	9.59	165.00	0.08349
Monrovia, City of	1,098.00	5,042.22	2.55129
(Sucessor to:			
Eckis, Rollin		123.00	0.06224
City of Arcadia)		951.00	0.48119
	1,098.00	6,116.22	3.09472
Monrovia, Nursery Company	239.50	0	0
(Successor to:			
Azusa Foot-Hill Citrus Co.)	718.50	0	
Phillips, Alice B., et al			
(Successor to:			
Maechtlen, Trust of P. A.)	0.50	50.50	0.02530
(Transferred to:			
Miller Brewing Company)		-50.00	-0.02530
	0.50	0.50	0.00025
Southern California Water Company (San Dimas Dist.)	500.00	3,242.53	1.64076
(Formerly California Cities Water Company)			
(Successor to:			
Namimatsu Farms)		196.00	0.09917
	500.00	3,438.53	1.73984
TOTAL for Exhibit "E"	10,520.92	41,833.75	21.16724

Exhibit "F"

TABLE SHOWING
SPECIAL CATAGORY RIGHTS

PARTY	Nature of Right
The Metropolitan Water District of Southern California	Morris Reservoir Storage and Withdrawal (a) A right to divert, store and use San Gabriel River Water, pursuant to Permit No. 7174. (b) Prior and paramount right to divert 72 acre-feet annually to offset Morris Reservoir evaporation and seepage losses and to provide the water supply necessary for presently existing incidential Morris Dam facilities.
Los Angeles County Flood Control District (Now Los Angeles County Department of Public Works)	Puddingstone Reservoir Prior Prescriptive right to divert water from San Dimas Wash for storage in Puddingstone Reservoir in quantities sufficient to offset annual evaporation and seepage losses of the reservoir at approximate elevation 942.

Exhibit "G"

TABLE SHOWING
NON-CONSUMPTIVE USERS

Party	Nature of Right
Covina Irrigating Company Azusa Valley Water Company Azusa Agricultural Water Co. Azusa Foot-Hill Citrus Co. Monrovia Nursery Company	"Committee-of-Nine" Spreading Right To continue to divert water from the San Gabriel River pursuant to the 1888 Settlement, and to spread in spreading grounds within the Basin all water thus diverted without the right to recapture water in excess of said parties' rights as adjudicated in Exhibit "E".
California-American Water Company (Duarte System)	Spreading Right To continue to divert water from the San Gabriel River pursuant to the 1888 Settlement, and to continue to divert water from Fish Canyon and to spread said waters in its spreading grounds in the Basin without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
City of Glendora	Spreading Right To continue to spread the water of Big and Little Dalton Washes, pursuant to License No. 2592 without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
San Gabriel Valley Protective Association	Spreading Right To continue to spread San Gabriel River water pursuant to License Nos. 9991 and 12,209, without the right to recapture said water.
California Cities Water Company	Spreading Right To continue to spread waters from San Dimas Wash without the right to recapture water in excess of said party's rights as adjudicated in Exhibit "E".
Los Angeles County Flood Control District	Temporary storage of storm flow for regulatory purposes; Spreading and conservation for general benefit in streambeds, reservoirs and spreading grounds without the right to recapture said water. Maintenance and operation of dams and other flood control works.

EXHIBIT "H"

WATERMASTER OPERATING CRITERIA

1. Basin Storage Capacity. The highest water level at the end of a water year during the past 40 years was reached at the Key Well on September 30, 1944 (elevation 316). The State of California, Department of Water Resources, estimates that as of that date, the quantity of fresh water in storage in the Basin was approximately 8,600,000 acre-feet. It is also estimated by said Department that by September 30, 1960, the quantity of fresh water in storage had decreased to approximately 7,900,000 acre-feet (elevation 237) at the Key Well).

The lowest water level at the end of a water year during the past 40 years was reached at the Key Well on September 30, 1965 (elevation 209). It is estimated that the quantity of fresh water in storage in the Basin on that date was approximately 7,700,000 acre-feet.

Thus, the maximum utilization of Basin storage was approximately 900,000 acre-feet, occurring between September 30, 1944, and September 30, 1965 (between elevations 316 and 209 at the Key Well). This is not to say that more than 900,000 acre-feet of storage space below the September 30, 1944 water levels cannot be utilized. However, it demonstrates that pumpers have deepened their wells and lowered their pumps so that such 900,000 acre-feet of storage can be safely and economically utilized.

The storage capacity of the Basin between elevations of 200 and 250 at the Key Well represents a usable volume of approximately 400,000 acre-feet of water.

2. Operating Safe Yield and Spreading. Watermaster in determining Operating Safe Yield and the importation of Replacement Water shall be guided by water level elevations in the Basin. He shall give recognition to, and base his operations on, the following general objectives insofar as practicable:

(a) The replenishment of ground water from sources of supplemental water should not cause excessively high levels of ground water and such replenishment should not cause undue waste of local water supplies.

(b) Certain areas within the Basin are not at the present time capable of being recharged with supplemental water. Efforts should be made to provide protection to such areas from excessive ground water lowering either through the "in lieu" provisions of the Judgment or by other means.

(c) Watermaster shall consider and evaluate the long-term consequences on ground water quality, as well as quantity, in determining and establishing Operating Safe Yield. Recognition shall be given to the enhancement of ground water quality insofar as practicable, especially in the area immediately upstream of Whittier Narrows where degradation of water quality may occur when water levels at the Key Well are maintained at or below elevation 200.

(d) Watermaster shall take into consideration the comparative costs of supplemental and Make-up Water in determining the savings on a present value basis of temporary or permanent lowering or raising of water levels and other economic data and analyses indicating both the short-term and long-term

propriety of adjusting Operating Safe Yield in order to derive optimum water levels during any period. Watermaster shall utilize the provisions in the Long Beach Judgment which will result in the least cost of delivering Make-up Water.

3. Replacement Water -- Sources and Recharge Criteria. The following criteria shall control purchase of Replacement Water and Recharge of the Basin by Watermaster.

(a) Responsible Agency From Which to Purchase. Watermaster, in determining the Responsible Agency from which to purchase supplemental water for replacement purposes, shall be governed by the following:

(1) Place of Use of Water which is used primarily within the Basin or by cities within San Gabriel District in areas within or outside the Basin shall control in determining the Responsible Agency. For purposes of this subparagraph, water supplied through a municipal water system which lies chiefly within the Basin shall be deemed entirely used within the Basin; and

(2) Place of production of water shall control in determining the Responsible Agency as to water exported from the Basin, except as to use within San Gabriel District.

Any Responsible Agency may, at the request of Watermaster, waive its right to act as the source for such supplemental water, in which case Watermaster shall be free to purchase such water from the remaining Responsible Agencies which are the most beneficial and appropriate sources; provided, however, that a Responsible Agency shall not

authorize any sale of water in violation of the California Constitution.

(b) Water Quality. Watermaster shall purchase the best quality of supplemental water available for replenishment of the Basin, pursuant to subsection (a) hereof.

(c) Reclaimed Water. It is recognized that the technology and economic and physical necessity for utilization of reclaimed water is increasing. The purchase of reclaimed water in accordance with the Long Beach Judgment to satisfy the Make-up Obligation is expressly authorized. At the same time, water quality problems involved in the reuse of water within the Basin pose serious questions of increased costs and other problems to the pumpers, their customers and all water users. Accordingly, Watermaster is authorized to gather information, make and review studies, and make recommendations on the feasibility of the use of reclaimed water for replacement purposes; provided that no reclaimed water shall be recharged in the Basin by Watermaster without the prior approval of the court, after notice to all parties and hearing thereon.

4. Replacement Assessment Rates. The Replacement Assessment rates shall be in an amount calculated to allow Watermaster to purchase one acre-foot of supplemental water for each acre-foot of excess Production to which such Assessment applies.

EXHIBIT "J"

PUENTE NARROWS AGREEMENT

THIS AGREEMENT is made and entered into as of the 8th day of May, 1972, by and between PUENTE BASIN WATER AGENCY, herein called "Puente Agency", and UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT, herein called "Upper District".

A. RECITALS

1. Puente Agency. Puente Agency is a joint powers agency composed of Walnut Valley Water District, herein called "Walnut District", and Rowland Area County Water District, herein called "Rowland District". Puente Agency is formed for the purpose of developing and implementing a ground water basin management program for Puente Basin. Pursuant to said purpose, said Agency is acting as a representative of its member districts and of the water users and water right claimants therein in the defense and maintenance of their water rights within Puente Basin.

2. Upper District. Upper District is a municipal water district overlying a major portion of the Main San Gabriel Basin. Upper District is plaintiff in the San Gabriel Basin Case, wherein it seeks to adjudicate rights and implement a basin management plan for the Main San Gabriel Basin.

3. Puente Basin is a ground water basin tributary to the Main San Gabriel Basin. Said area was included within the scope of the San Gabriel Basin Case and substantially

all water rights claimants within Puente Basin were joined as defendants therein. The surface contribution to the Main San Gabriel Basin from Puente Basin is by way of the paved flood control channel of San Jose Creek, which passes through Puente Basin from the Pomona Valley area. Subsurface outflow is relatively limited and moves from the Puente Basin to the Main San Gabriel Basin through Puente Narrows.

4. Intent of Agreement. Puente Agency is prepared to assure Upper District that no activity within Puente Basin will hereafter be undertaken which will (1) interfere with surface flows in San Jose Creek, or (2) impair the subsurface flow from Puente Basin to the Main San Gabriel Basin. Walnut District and Rowland District, by operation of law and by express assumption endorsed hereon, assume the covenants of this agreement as a joint and several obligation. Based upon such assurances and the covenants hereinafter contained in support thereof, Upper District consents to the dismissal of all Puente Basin parties from the San Gabriel Basin Case. By reason of said dismissals, Puente Agency will be free to formulate a separate water management program for Puente Basin.

B. DEFINITIONS AND EXHIBITS

5. Definitions. As used in this Agreement, the following terms shall have the meanings herein set forth:

(a) Annual or Year refers to the fiscal year July 1 through June 30.

(b) Base Underflow. The underflow through

Puente Narrows which Puente Agency agrees to maintain, and on which accrued debits and credits shall be calculated.

(c) Make-up Payment. Make-up payments shall be an amount of money payable to the Watermaster appointed in the San Gabriel Basin Case, sufficient to allow said Watermaster to purchase replacement water on account of any accumulated deficit as provided in Paragraph 9 hereof.

(d) Puente Narrows. The subsurface geologic constriction at the downstream boundary of Puente Basin, located as shown on Appendix "B".

(e) Main San Gabriel Basin, the ground water basin shown and defined as such in Exhibit "A" to the Judgment in the San Gabriel Basin Case.

(f) San Gabriel Basin Case. Upper San Gabriel Valley Municipal Water District v. City of Alhambra, et al., L. A. Sup. Ct. No. 924128, filed January 2, 1968.

6. Appendices. Attached hereto and by this reference made a part hereof are the following appendices:

"A" -- Location Map of Puente Basin, showing major geographic, geologic, and hydrologic features.

"B" -- Map of Cross-Section Through Puente Narrows, showing major physical features and location of key wells.

"C" -- Engineering Criteria, being a description of a method of measurement of subsurface outflow to be utilized for Watermaster purposes.

C. COVENANTS

7. Watermaster. There is hereby created a two member Watermaster service to which each of the parties to this agreement shall select one consulting engineer. The respective representatives on said Watermaster shall serve at the pleasure of the governing body of each appointing party and each party shall bear its own Watermaster expense.

a. Organization. Watermaster shall perform the duties specified herein on an informal basis, by unanimous agreement. In the event the two representatives are unable to agree upon any finding or decision, they shall select a third member to act, pursuant to the applicable laws of the State of California. Thereafter, until said issue is resolved, said three shall sit formally as a board of arbitration. Upon resolution of the issue in dispute, the third member shall cease to function further.

b. Availability of Information. Each party hereto shall, for itself and its residents and water users, use its best efforts to furnish all appropriate information to the Watermaster in order that the required determination can be made.

c. Cooperation With Other Watermasters. Watermaster hereunder shall cooperate and coordinate activities with the Watermasters appointed in the San Gabriel Basin Case and in Long Beach v. San Gabriel Valley Water Company, et al.

d. Determination of Underflow. Watermaster shall annually determine the amount of underflow from Puente Basin to the San Gabriel Basin, pursuant to Engineering Criteria.

e. Perpetual Accounting. Watermaster shall maintain a perpetual account of accumulated base underflow, accumulated subsurface flow, any deficiencies by reason of interference with surface flows, and the offsetting credit for any make-up payments. Said account shall annually show the accumulated credit or debit in the obligation of Puente Agency to Upper District.

f. Report. Watermaster findings shall be incorporated in a brief written report to be filed with the parties and with the Watermaster in the San Gabriel Basin Case. Said report shall contain a statement of the perpetual account heretofore specified.

8. Base Underflow. On the basis of a study and review of historic underflow from Puente Basin to the Main San Gabriel Basin, adjusted for the effect of the paved flood control channel and other relevant considerations, it is

mutually agreed by the parties that the base underflow is and shall be 580 acre feet per year, calculated pursuant to Engineering Criteria.

9. Puente Agency's Obligation. Puente Agency covenants, agrees and assumes the following obligation hereunder:

a. Noninterference with Surface Flow. Neither Puente Agency nor any persons or entities within the corporate boundaries of Walnut District or Rowland District will divert or otherwise interfere with or utilize natural surface runoff now or hereafter flowing in the storm channel of San Jose Creek; provided, however, that this covenant shall not prevent the use, under Watermaster supervision, of said storm channel by the Puente Agency or Walnut District or Rowland District for transmission within Puente Agency of supplemental or reclaimed water owned by said entities and introduced into said channel solely for transmission purposes. In the event any unauthorized use of surface flow in said channel is made contrary to the covenant herein provided, Puente Agency shall compensate Upper District by utilizing any accumulated credit or by make-up payment in the same manner as is provided for deficiencies in subsurface outflow from Puente Basin.

b. Subsurface Outflow. To the extent that

the accumulated subsurface outflow falls below the accumulated base underflow and the result thereof is an accumulated deficit in the Watermaster's annual accounting, Puente Agency agrees to provide make-up payments during the next year in an amount not less than one-third of the accumulated deficit.

c. Purchase of Reclaimed Water. To the extent that Puente Agency or Walnut District or Rowland District may hereafter purchase reclaimed water from the facilities of Sanitation District 21 of Los Angeles County, such purchaser shall use its best efforts to obtain waters originating within San Gabriel River Watershed.

10. Puente Basin Parties Dismissal. In consideration of the assumption of the obligation hereinabove provided by Puente Agency, Upper District consents to entry of dismissals as to all Puente Basin parties in San Gabriel Basin Case. This agreement shall be submitted for specific approval by the Court and a finding that it shall operate as full satisfaction of any and all claims by the parties within Main San Gabriel Basin against Puente Basin parties by reason of historic surface and subsurface flow.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed as of the day and date first above written.

Approved as to form:
CLAYSON, STARK, ROTHROCK & MANN

By _____
Attorneys for Puente Agency

PUENTE BASIN AGENCY

By _____
EDWARD M. BIEDERMAN
President

Approved as to form:

By _____
Attorney for Upper District

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

By _____
Howard H. Hawkins
President

The foregoing agreement is approved and accepted, and the same is acknowledged as the joint and several obligation of the undersigned.

Approved as to form:

_____
Attorney for Walnut District

WALNUT VALLEY WATER DISTRICT

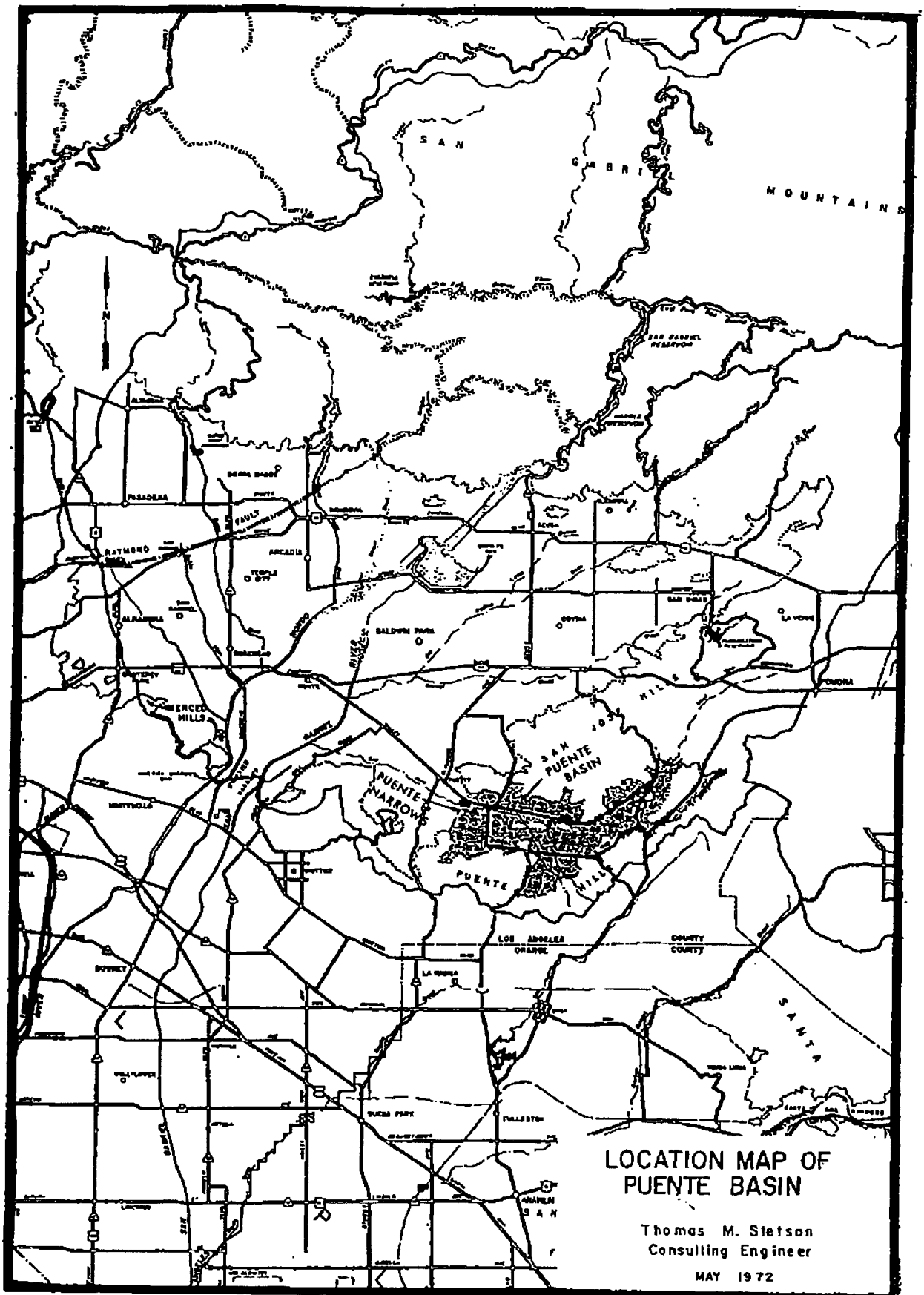
By _____
J. P. BOURDET
Vice President

Approved as to form:

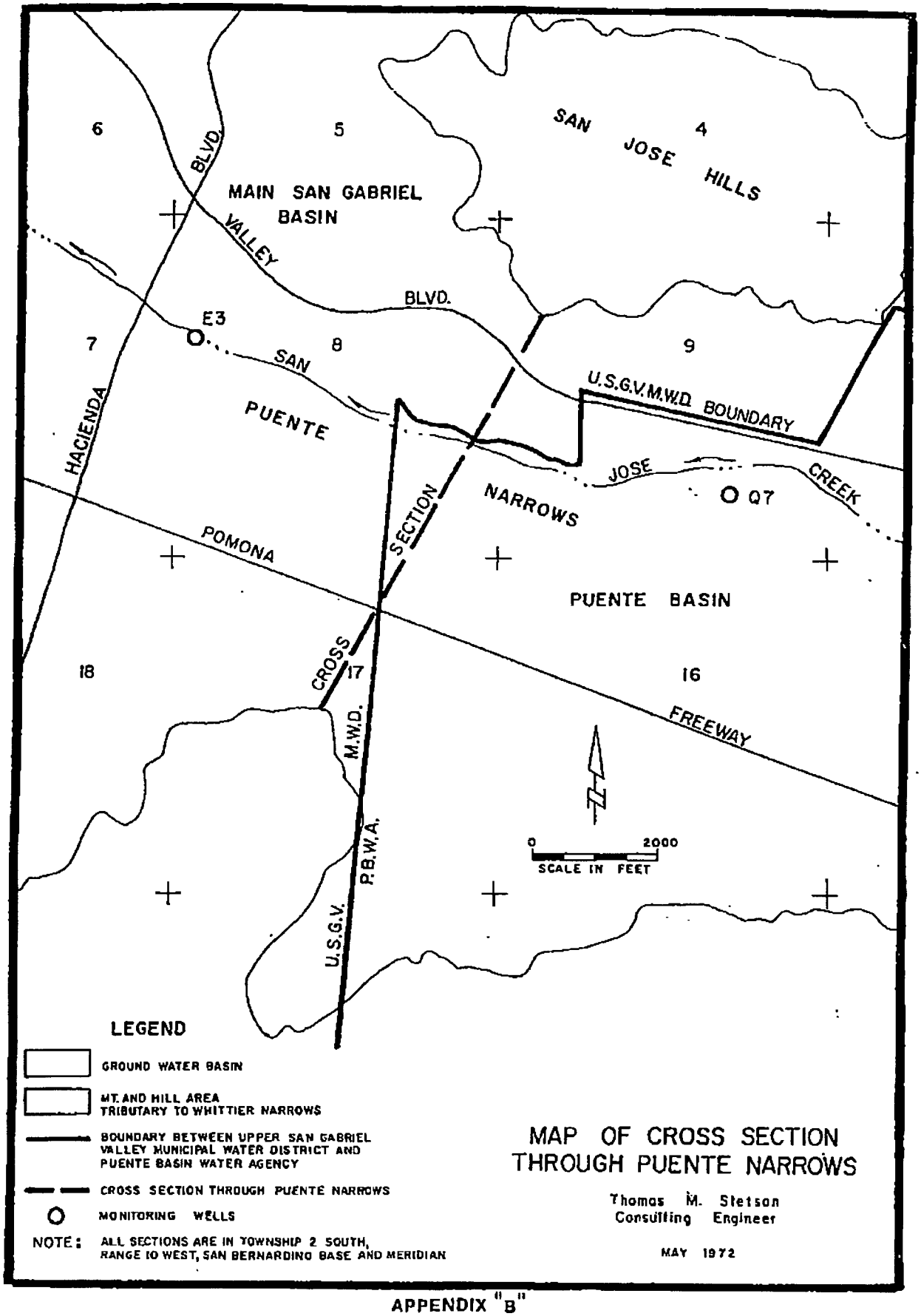
_____
Attorneys for Rowland District

ROWLAND AREA COUNTY WATER DISTRICT

By _____
President
Wm. A. Simmons



APPENDIX "A"
EXHIBIT "J"



MAP OF CROSS SECTION THROUGH PUENTE NARROWS

Thomas M. Stetson
Consulting Engineer

MAY 1972

APPENDIX "B"
EXHIBIT "J"
J - 10

ENGINEERING CRITERIA

APPENDIX "C"

1. Monitoring Wells. The wells designated as State Wells No. 2S/10W-9Q7 and 2S/10W-8E3 and Los Angeles County Flood Control District Nos. 3079M and 3048B, respectively, shall be used to measure applicable ground water elevations. In the event either monitoring well should fail or become unrepresentative, a substitute well shall be selected or drilled by Watermaster. The cost of drilling a replacement well shall be the obligation of the Puente Agency.

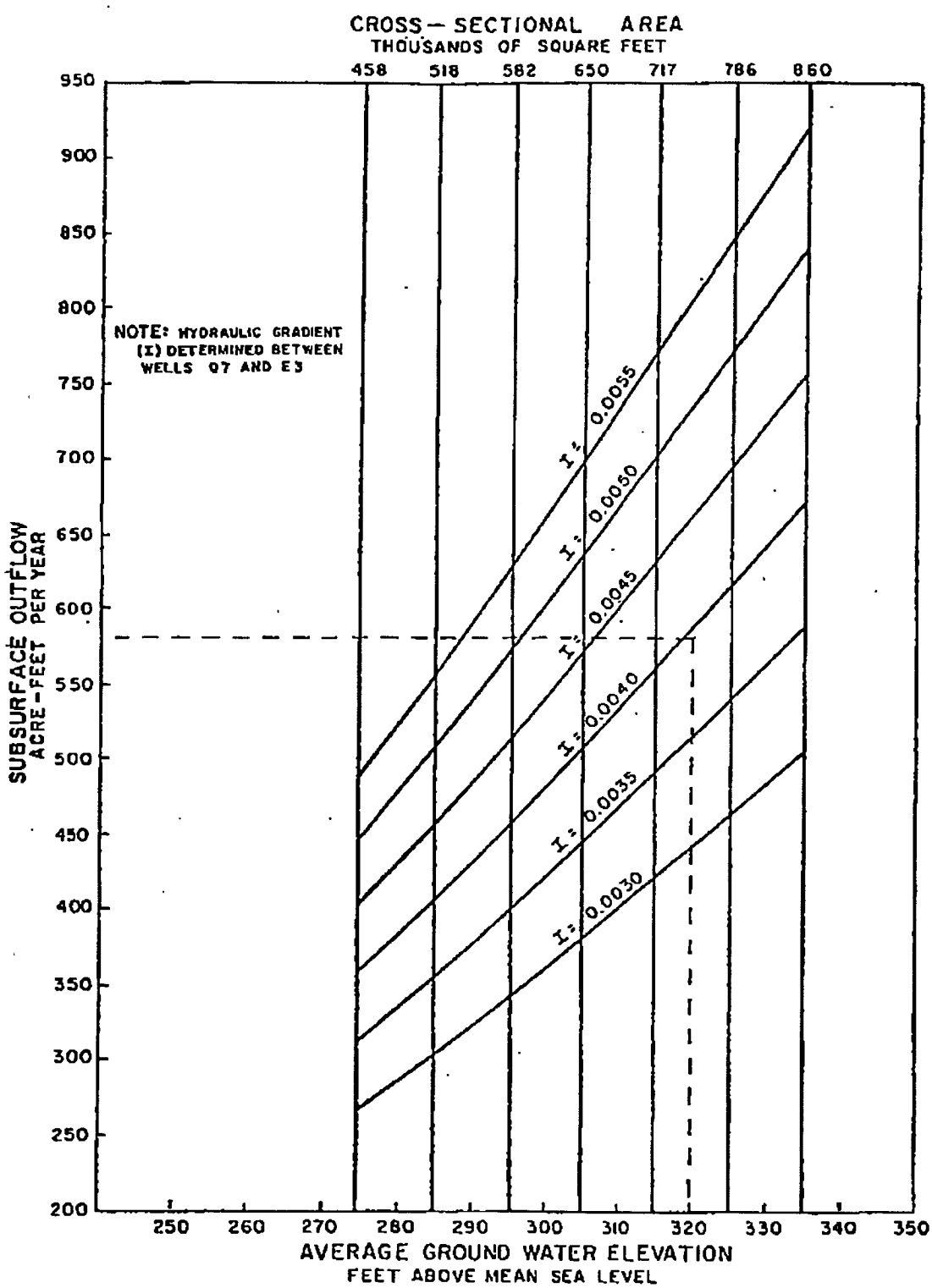
2. Measurement. Each monitoring well shall be measured and the ground water elevation determined semi-annually on or about April 1 and October 1 of each year. Prior to each measurement, the pump shall be turned off for a sufficient period to insure that the water table has recovered to a static or near equilibrium condition.

3. Hydraulic Gradient. The hydraulic gradient, or slope of the water surface through Puente Narrows, shall be calculated between the monitoring wells as the difference in water surface elevation divided by the distance, approximately 9,000 feet, between the wells. The hydraulic gradient shall be determined for the spring and fall and the average hydraulic gradient calculated for the year.

4. Ground Water Elevation at Puente Narrows Cross Section. The ground water elevation at the Puente Narrows

cross section midway between the monitoring wells shall be the average of the ground water elevation at the two wells. This shall be determined for the spring and fall and the average annual ground water elevation calculated for the year.

5. Determination of Underflow. The chart attached is a photo-reduction of a full scale chart on file with the Watermaster. By applying the appropriate average annual hydraulic gradient (I) to the average annual ground water elevation at the Puente Narrows cross section (involving the appropriate cross-sectional area [A]), it is possible to read on the vertical scale the annual acre feet of underflow.



RELATIONSHIP OF AVERAGE GROUND WATER ELEVATION AT PUENTE NARROWS AND APPLICABLE CROSS-SECTIONAL AREA WITH SUBSURFACE OUTFLOW THROUGH PUENTE NARROWS FOR VARIOUS HYDRAULIC GRADIENTS

Thomas M. Stetson
Consulting Engineer
MAY 1972

EXHIBIT "K"

OVERLYING RIGHTS

I. NATURE OF OVERLYING RIGHT

An "Overlying Right" is the right to Produce water from the Main San Gabriel Basin for use on the overlying lands hereinafter described. Such rights are exercisable without quantitative limit only on said overlying land and cannot be separately conveyed or transferred apart therefrom. The exerciser of such right is assessable by Watermaster as provided in Paragraph 21 of the Amended Judgment herein (prior Paragraph 14.5 of the Judgment herein) and is subject to the other provisions of said Paragraph.

II. OVERLYING LANDS (Description)

The overlying lands to which Overlying Rights are appurtenant are described as follows:

> "Those portions of Lots 1 and 2 of the lands formerly owned by W.A. Church, in the Rancho San Francisquito, in the City of Irwindale, County of Los Angeles, State of California, as shown on recorder's filed map No. 509, in the office of the County Recorder of said County, lying northeasterly of the northeasterly line and its southeasterly prolongation of Tract 1888, as shown on map recorded in Book 21 page 183 of Maps, in the office of the County Recorder of said County.
>
> "EXCEPT the portions thereof lying northerly and northwesterly of the center line of Arrow Highway described 'Sixth' and the center line of Live Oak Avenue described 'Third' in a final decree of condemnation, a certified copy of which was recorded August 18, 1933 as Instrument No. 354, in Book 12289, Page 277, Official Records.
>
> "ALSO EXCEPT that portion of said land described in the final decree of condemnation entered in Los Angeles County Superior Court Case No. 805008, a certified copy of which was recorded September 21, 1964, as Instrument No. 3730, in Book D-2634, Page 648, Official Records."

III. PRODUCERS ENTITLED TO EXERCISE OVERLYING RIGHTS AND THEIR RESPECTIVE CONSUMPTIVE USE PORTIONS

The persons entitled to exercise Overlying Rights are both the owners of Overlying Rights and persons and entities licensed by such owners to exercise such Overlying Rights. The persons entitled to exercise Overlying Rights and their respective Consumptive Use portions are as follows:

OWNER PRODUCERS	CONSUMPTIVE USE PORTION
BROOKS GIFFORD, SR. BROOKS GIFFORD, JR. PAUL MNOIAN JOHN MGRDICHIAN J. EARL GARRETT	3.5 acre-feet per year
Present User: Nu-Way Industries	
PRODUCERS UNDER LICENSE	
A. WILLIAM C. THOMAS and EVELYN F. THOMAS, husband and wife, and MALCOLM K. GATHERER and JACQUELINE GATHERER, husband and wife, doing business by and through B & B REDI-I-MIX CONCRETE, INC., a corporation	45.6 acre-feet per year
B. PRE-STRESS CRANE RIGGING & TRUCK CO., INC., a corporation	1.0 acre-foot per year
Present Users: Pre-Stress Crane Rigging & Truck Co., Inc., a corporation	
Total	50.1 acre-feet per year

IV. ANNUAL GROSS AMOUNT OF PRODUCTION FROM WHICH CONSUMPTIVE USE PORTIONS WERE DERIVED — 183.65 acre-feet

Exhibit "L"

LIST OF PRODUCERS AND THEIR DESIGNEES
June, 1989

Producer Name	Designee
A	
Adams Ranch Mutual Water Company	Goji Iwakiri
Alhambra, City of	T. E. Shollenberger
Amarillo Mutual Water Company	Ester Guadagnolo
Anderson, Ray	Ray Anderson
Andrade, Macario, et al.	Macario R. Andrade
Arcadia, City of	Eldon Davidson
AZ-Two, Inc.	R. S. Chamberlain
Azusa, City of	William H. Redcay
Azusa Ag. Water Company	Robert E. Talley
Azusa Valley Water Company	Edward Heck
B	
Baldwin Park County Water District (See Valley County Water District)	-
Banks, Gale C.	Gale C. Banks
Base Line Water Company	Everett W. Hughes, Jr.
Beverly Acres Mutual Water User's Assn. (Formerly Beverly Acres Mutual Water Co.)	Eloise A. Moore
Burbank Development Company	Darrell A. Wright
C	
Cadway, Inc.	P. Geoffrey Nunn
California-American Water Company (San Marino System)	Andrew A. Krueger
California-American Water Company (Duarte System)	Andrew A. Krueger
California Country Club	Henri F. Pellissier
California Domestic Water Company	P. Geoffrey Nunn
Cedar Avenue Mutual Water Company	Austin L. Knapp

Exhibit "L"

Producer Name	Designee
Champion Mutual Water Company	Margaret Bauwens
Chevron, USA, Inc.	Ms. Margo Bart
Clayton Manufacturing Company	Don Jones
Conrock Company	Gene R.Block
Corcoran Brothers	Ray Corcoran
County Sanitation District No. 18	Charles W. Curry
Covell, et al.	Darr Jobe
Covell, Ralph	Ralph Covell
Covina, City of	Wayne B. Dowdey
Covina Irrigating Company	William R. Temple
Crevolin, A. J.	A. J. Crevolin
Crown City Plating Company	N. G. Gardner
D	
Davidson Optronics, Inc.	James McBride
Dawes, Mary Kay	Mary Kay Dawes
Del Rio Mutual Water Company	Gonzalo Galindo
Driftwood Dairy	James E. Dolan
Dunning, George	George Dunning
E	
East Pasadena Water Company	Robert D. Mraz
El Monte, City of	Robert J. Pinniger
El Monte Cemetery Association	Linn E. Magoffin
F	
Faix, Ltd.	Henri F. Pellissier
G	
Glendora, City of	Arthur E. Cook
Green, Walter	Dr. Walter Green
H	
Hansen, Alice	Alice Hansen

Exhibit "L"

Producer Name	Designee
Hartley, David	David Hartley
Hemlock Mutual Water Company	Bud Selander
Hunter, Lloyd F.	Lloyd F. Hunter
I	
Industry Waterworks System, City of	Mary L. Jaureguy
K	
Kiyan Farm Kiyan, Hideo	Mrs. Hideo Kiyan
Kirklen Family Trust	Dawn Kirklen
Knight, Kathryn M.	William J. Knight
L	
Landeros, John	John Landeros
La Puente Valley County Water District	Mary L. Jaureguy
La Verne, City of	N. Kathleen Hamm
Livingston-Graham	Gary O. Tompkins
Los Angeles, County of	Robert L. Larson
Loucks, David	David Loucks
M	
Maddock, A. G.	Ranney Draper, Esq.
Maechtlen, Trust of J. J.	Jack F. Maechtlen
Maple Water Company, Inc.	Charles King
Martinez, Francis Mercy	Francis Mercy Martinez
Metropolitan Water District of Southern California	Fred Vendig, Esq.
Miller Brewing Company	Dennis B. Puffer
Mnoian, Paul, et al.	Mal Gatherer
Monrovia, City of	Robert K. Sandwick
Monrovia Nursery	Miles R. Rosedale
Monterey Park, City of	Nels Palm

Exhibit "L"

Producer Name	Designee
N	
Nick Tomovich & Sons	Nick Tomovich
O	
Owl Rock Products Company	Peter L. Chiu
P	
Phillips, Alice B., et al.	Jack F. Maechtlen
Pico County Water District	Robert P. Fuller
Polopolus, et al.	Christine Chronis
R	
Rados Brothers	Alexander S. Rados
Richwood Mutual Water Company	Bonnie Pool
Rincon Ditch Company	K. E. Nungesser
Rincon Irrigation Company	K. E. Nungesser
Rose Hills Memorial Park Association	Allan D. Smith
Rosemead Development, Ltd.	John W. Lloyd
Rurban Homes Mutual Water Company	George W. Bucey
Ruth, Roy	Roy Ruth
S	
San Dimas - La Verne Recreational Facilities Authority	R. F. Griszka
San Gabriel Country Club	Fran Wolfe
San Gabriel County Water District	Philip G. Crocker
San Gabriel Valley Municipal Water District	Bob Stallings
San Gabriel Valley Water Company	Robert H. Nicholson, Jr.
Sloan Ranches	Larry R. Sloan
Sonoco Products Company	Elaine Corboy
South Covina Water Service	Anton C. Garnier
Southern California Edison Company	S. R. Shermoen

Exhibit "L"

Producer Name	Designee
Southern California Water Company -San Dimas District	J. F. Young
Southern California Water Company -San Gabriel Valley District	J. F. Young
South Pasadena, City of	John Bernardi
Southwestern Portland Cement Company	Dale W. Heineck
Standard Oil Company of California	John A. Wild
Sterling Mutual Water Company	Bennie L. Prowett
Suburban Water Systems	Anton C. Garnier
Sully-Miller Contracting Company	R. R. Munro
Sunny Slope Water Company	Michael J. Hart
T	
Taylor Herb Garden	Paul S. Taylor
Texaco, Inc.	E. O. Wakefield
Tyler Nursery	James K. Mitsumori, Esq.
U	
United Concrete Pipe Corporation	Doyle H. Wadley
United Rock Products Corporation	William S. Capps, Esq.
V	
Valencia Heights Water Company	Herman Weskamp
Valley County Water District (Formerly Baldwin Park County Water District)	Stanley D. Yarbrough
Valley View Mutual Water Company	Robert T. Navarre
Via, H., Trust of	Marverna Parton
W	
Ward Duck Company	Richard J. Woodland
W. E. Hall Company	Thomas S. Bunn, Jr., Esq.
White, June G., Trustee	June G. Lovelady
Whittier, City of	Neil Hudson
Wilmott, Erma M.	Erma M. Wilmott

Exhibit "M"

WATERMASTER MEMBERS

FOR CALENDAR YEAR 1973

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

RICHARD L. ROWLAND (Producer Member), Secretary

BOYD KERN (Public Member), Treasurer

WALKER HANNON (Producer Member)

HOWARD H. HAWKINS (Public Member)

M. E. MOSLEY (Producer Member)

CONRAD T. REIBOLD (Public Member)

HARRY C. WILLS (Producer Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1974

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

RICHARD L. ROWLAND (Producer Member), Secretary

BOYD KERN (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

M. E. MOSLEY (Producer Member)

CONRAD T. REIBOLD (Public Member)

HARRY C. WILLS (Producer Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson. Engineer

FOR CALENDAR YEAR 1975

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

HARRY C. WILLS (Producer Member), Secretary

BOYD KERN (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

D. J. LAUGHLIN (Producer Member)

M. E. MOSLEY (Producer Member)

CONRAD T. REIBOLD (Public Member)

STAFF

Carl Fossette, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1976

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

HARRY C. WILLS (Producer Member), Secretary

BOYD KERN (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

D. J. LAUGHLIN (Producer Member)

M. E. MOSLEY (Producer Member)

CONRAD T. REIBOLD (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1977

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

HARRY C. WILLS (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

BOYD KERN (Public Member)

D. J. LAUGHLIN (Producer Member)

R. H. NICHOLSON, JR. (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer)
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1978

ROBERT T. BALCH (Producer Member), Chairman

LINN E. MAGOFFIN (Producer Member), Vice Chairman

D. J. LAUGHLIN (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

L. E. MOELLER (Producer Member)

R. H. NICHOLSON, JR. (Producer Member)

WILLIAM M. WHITESIDE (Public Member)

STAFF

Jane M. Bray, Assistant Secrretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1979

LINN E. MAGOFFIN (Producer Member), Chairman

D. J. LAUGHLIN (Producer Member), Vice Chairman

R. H. NICHOLSON, JR. (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

WALKER HANNON (Producer Member)

BURTON E. JONES (Public Member)

L. E. MOELLER (Producer Member)

WILLIAM M. WHITESIDE (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1980

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

WILLIAM M. WHITESIDE (Pulic Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

ROBERT G. BERLIEN (Producer Member)

ANTON C. GARNIER (Producer Member)

TRAVIS L. MANNING (Public Member)

L. E. MOELLER (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson. Engineer

FOR CALENDAR YEAR 1981

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

WILLIAM M. WHITESIDE (Public Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

ROBERT G. BERLIEN (Producer Member)

ANTON C. GARNIER (Producer Member)

TRAVIS L. MANNING (Public Member)

L. E. MOELLER (Producer Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1982

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

WILLIAM M. WHITESIDE (Public Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

ROBERT G. BERLIEN (Producer Member)

ANTON C. GARNIER (Producer Member)

L. E. MOELLER (Producer Member)

ALFRED F. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secrretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1983

LINN E, MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

ROBERT G. BERLIEN (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

DONALD F. CLARK (Public Member)

ANTON C. GARNIER (Producer Member)

L. E. MOELLER (Producer Member)

ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1984

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

ROBERT G. BERLIEN (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

DONALD F. CLARK (Public Member)

ANTON C. GARNIER (Producer Member)

L. E. MOELLER (Producer Member)

ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1985

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

ROBERT G. BERLIEN (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producr Member)

DONALD F. CLARK (Public Member)

ANTON C. GARNIER (Producer Member)

L. E. MOELLER (Producer Member)

ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1986

LINN E. MAGOFFIN (Producer Member), Chairman

R. H. NICHOLSON, JR. (Producer Member), Vice Chairman

ROBERT G. BERLIEN (Producer Member), Secretary

CONRAD T. REIBOLD (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

DONALD F. CLARK (Public Member)

L. E. MOELLER (Producer Member)

REGINOLD A. STONE (Producer Member)

ALFRED R. WITTIG (Public Member)

STAFF

Jane M. Bray, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1987

LINN E. MAGOFFIN (Producer Member), Chairman

REGINALD A. STONE (Producer Member), Vice Chairman

L. E. MOELLER (Producer Member), Secretary

ALFRED R. WITTIG (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

GERALD J. BLACK (Producer Member)

DONALD F. CLARK (Public Member)

EDWARD R. HECK (Producer Member)

JOHN E. MAULDING (Public Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1988

LINN E. MAGOFFIN (Producer Member), Chairman

REGINALD A. STONE (Producer Member), Vice Chairman

L. E. MOELLER (Producer Member), Secretary

ALFRED R. WITTIG (Public Member), Treasurer

ROBERT T. BALCH (Producer Member)

GERALD J. BLACK (Producer Member)

DONALD F. CLARK (Public Member)

EDWARD R. HECK (Producer Member)

JOHN E. MAULDING (Public Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

FOR CALENDAR YEAR 1989

LINN E. MAGOFFIN (Producer Member), Chairman

REGINALD A. STONE (Producer Member), Vice Chairman

GERALD G. BLACK (Producer Member), Secretary

ALFRED R. WITTIG (Public Member), Treasurer

ROBERT T. BALCH (Producer Member) *

DONALD F. CLARK (Public Member)

EDWARD R. HECK (Producer Member)

BURTON E. JONES (Public Member)

NELS PALM (Producer Member) **

THOMAS E. SCHOLLENBERGER (Producer Member)

STAFF

Robert G. Berlien, Assistant Secretary-Assistant Treasurer
Ralph B. Helm, Attorney
Thomas M. Stetson, Engineer

* DECEASED APRIL 25, 1989

** Appointed August 24, 1989, for the balance of the calendar year term, to replace deceased member, Robert T. Balch.

APPENDIX B. MSGB FIVE-YEAR WATER QUALITY AND SUPPLY PLAN

Five-Year
Water Quality and Supply Plan

Main San Gabriel Basin
WATERMASTER

2018–19 to 2022–23

DRAFT

"To assure that pumping does not lead to further degradation of water quality in the Basin, a Five-Year Water Quality and Supply Plan must be prepared and updated annually by Watermaster..."

Section 28 of Watermaster's Rules and Regulations

Cover photo of the Ira J. Chrisman Wind Gap Pumping Plant, which is part of the California Aqueduct that delivers imported water to the Basin. Photo is courtesy of California Department of Water Resources.

Five-Year Water Quality and Supply Plan

November 2018

Main San Gabriel Basin WATERMASTER

Telephone (626) 815-1300 • Fax (626) 815-1303
725 North Azusa Avenue • Azusa, California 91702
www.watermaster.org

CONTENTS

INTRODUCTION

The Main San Gabriel Basin Watermaster (Watermaster) annually prepares and updates this Five-Year Water Quality and Supply Plan (Five-Year Plan) in accordance with the requirements of Section 28 of its Rules and Regulations. The objective is to coordinate groundwater-related activities so that both water supply and water quality in the Main San Gabriel Basin (Basin) are protected and improved.

PURPOSE OF THE FIVE-YEAR PLAN

Many important issues are detailed in the Five-Year Plan, including Watermaster's plans for the following activities:

1. Monitor groundwater supply and quality.
2. Develop projections of future groundwater supply and quality.
3. Ensure adequate supplemental water is available for groundwater replenishment.
4. Review and cooperate on cleanup projects, and provide technical assistance to other agencies.
5. Assure that pumping does not lead to further degradation of water quality in the Basin.
6. Address emerging contaminants in the Basin.
7. Develop a cleanup and water supply program consistent with the U.S. Environmental Protection Agency (USEPA) plans for its San Gabriel Basin Superfund sites.
8. Continue to perform responsibilities under the Baldwin Park Operable Unit (BPOU) Project Agreement relating to project administration and performance evaluation.

WATERMASTER BACKGROUND AND HISTORY

The Los Angeles County Superior Court created the Main San Gabriel Basin Watermaster in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. At that time, Watermaster's mission was to generally manage the water supply of the Basin. During the late 1970s and early 1980s, significant concentrations of contaminants were detected in the groundwater Basin. The contamination was caused in part by past practices of local industries that had inappropriately disposed of industrial solvents, as well as by infiltration of nitrates from an earlier agricultural period. Cleanup efforts for industrial contamination were undertaken at the local, state, and federal levels.

WATERMASTER RECEIVES WATER QUALITY RESPONSIBILITIES

By 1989, local water agencies had adopted a joint resolution concerning water quality issues, which stated that Watermaster should coordinate local activities aimed at preserving and restoring the quality of groundwater in the Basin. The joint resolution also called for a Basin cleanup plan. In 1991, the Los Angeles County Superior Court granted Watermaster the authority to control pumping for water quality purposes. Accordingly, Watermaster added Section 28 to its Rules and Regulations regarding

water quality management. The new responsibilities included developing this Five-Year Water Quality and Supply Plan; updating it annually and submitting it to the California Regional Water Quality Control Board, Los Angeles Region (Regional Board); and making it available for public review by November 1 of each year.

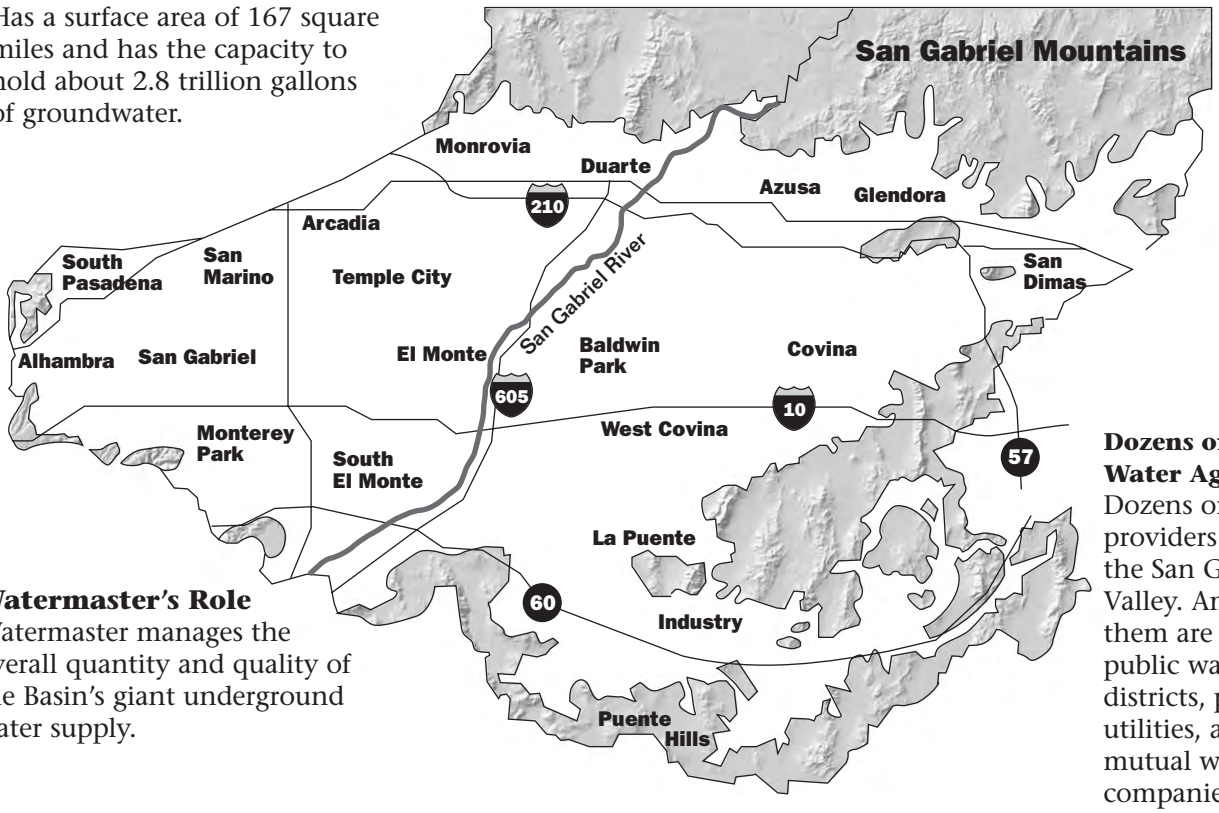
Watermaster adopted Resolution No. 05-14-263, which established a Water Resource Development Assessment (RDA) that was applied to all production during fiscal year 2014–15 and 2015–16. The purpose of the RDA is to establish a fund from which untreated imported water may be purchased and delivered to the Basin. It is intended to create a "reservoir" of water that is available to assist in the management of the Basin in the event untreated water is not available in the future as a result of a short-term statewide emergency.

The ongoing drought led to significant reductions in the quantity of local-stormwater replenishment to the Basin. As a result, during fiscal year 2016–17 Watermaster expanded the RDA Program into the Supplemental Water Stormwater Augmentation Program (RDA II), using the Water Resources Development Assessment.

Figure 1. AREA COVERED BY MAIN SAN GABRIEL BASIN

Precious Underground Water Supply
Provides up to 90 billion gallons of groundwater annually, enough to meet 80 percent or more of San Gabriel Valley's 1.4 million residents' demand for water.

2.8 Trillion Gallons
Has a surface area of 167 square miles and has the capacity to hold about 2.8 trillion gallons of groundwater.



Watermaster's Role
Watermaster manages the overall quantity and quality of the Basin's giant underground water supply.

Dozens of Water Agencies
Dozens of water providers serve the San Gabriel Valley. Among them are cities, public water districts, private utilities, and mutual water companies.

CURRENT WATER SUPPLY CONDITIONS

Drought conditions have persisted in the San Gabriel Valley for the past two decades. Commencing fiscal year 1998–99, annual rainfall has been below the long-term average annual amount of 18.52 inches in 16 of the past 20 years, including fiscal year 2017–18. Rainfall during fiscal year 2017–18 was 6.85 inches, which is about 40 percent of average. Replenishment of storm runoff was also about 40 percent of average due to below-average rainfall, much of which was absorbed by the San Gabriel River watershed before it could flow into rivers or channels.

Historically, Watermaster diligently managed groundwater supply and groundwater levels through the establishment of the Operating Safe Yield (OSY) and the resulting delivery of untreated imported water to replenish the Basin. Recognizing the persistent lack of stormwater runoff during fiscal year 2016–17, Watermaster and local Producers coordinated the delivery of about 76,000 acre-feet of untreated imported water for groundwater replenishment. At the same time, Watermaster and the local Producers implemented the RDA II on all production during fiscal year 2016–17, to be delivered during fiscal year 2017–18.

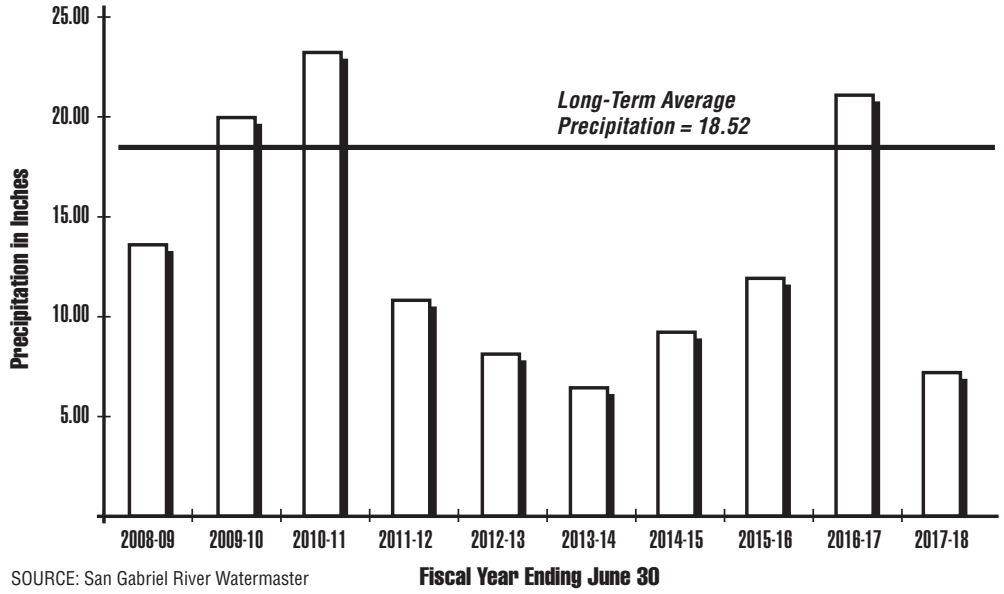
The new RDA II utilizes assessment funds to purchase imported replenishment water, as stormwater augmentation, to maintain the Key Well elevation above 180 feet in the event of future severe droughts. In addition, Watermaster and the Upper San Gabriel Valley Municipal Water District (Upper District) entered into an agreement with the Metropolitan Water District of Southern California (MWD) to pre-deliver up to 80,000 acre-feet of untreated imported water to complement the RDA II Program. Collectively, Watermaster coordinated the delivery of about 83,000 acre-feet of untreated water during fiscal year 2017–18. Despite significantly below-average rainfall and stormwater runoff, the groundwater level only decreased one foot during this fiscal year, due to the large imported water deliveries coordinated by Watermaster as well as continued conservation.

WATER SUPPLY INFLOWS DURING 2017–18

VALLEY RECEIVES BELOW-AVERAGE RAINFALL

In 2017–18, the San Gabriel Valley received about 7 inches of rain, which is about 40 percent of the long-term average of 18.52 inches.

Figure 2. RAINFALL BELOW LONG-TERM AVERAGE



SOURCE: San Gabriel River Watermaster

The long-term average rainfall is 18.52 inches. The rainfall total is made up of an average taken from four stations located in San Dimas, Diamond Bar, El Monte, and Pasadena.

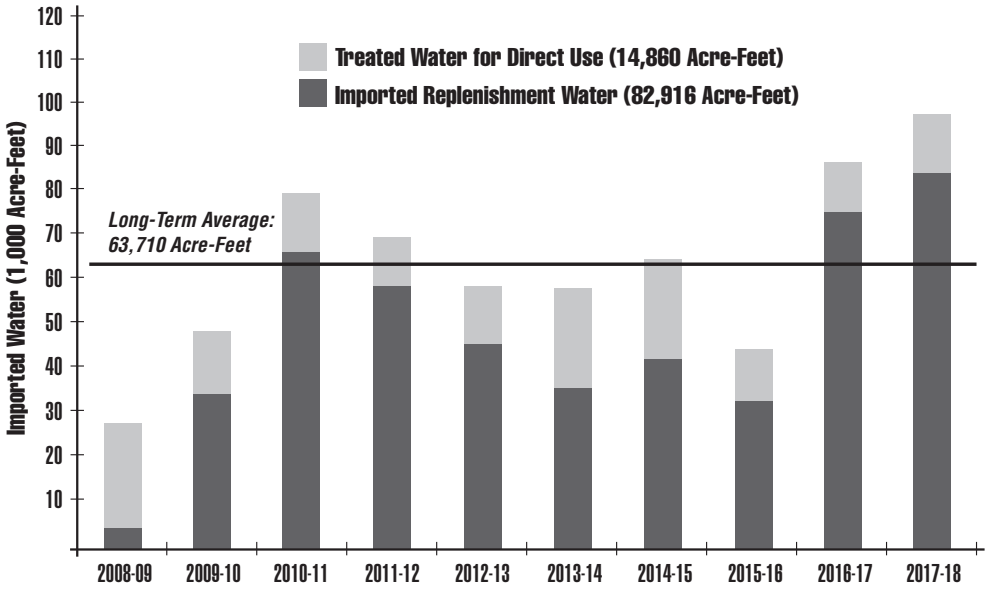
LOCAL STORMWATER CAPTURE 40 PERCENT OF LONG-TERM AVERAGE

Total rainfall over the past seven years has been well below average. As a result of seven straight years of drought conditions, the San Gabriel River watershed was very dry in 2017–18; consequently, the ground soaked up large amounts of stormwater, limiting flows to recharge basins. Thus, stormwater capture was only about 39,000 acre-feet, roughly 40 percent of the long-term average. In addition, as of the end of the fiscal year (June 30, 2018), only about 14,000 acre-feet of local stormwater run-off remained in storage in reservoirs in the San Gabriel Canyon. This stored water is used for groundwater replenishment—representing a potential 1.75-foot increase in Basin water levels to offset decreasing groundwater levels caused by pumping.

LOCAL WATER USE BELOW AVERAGE

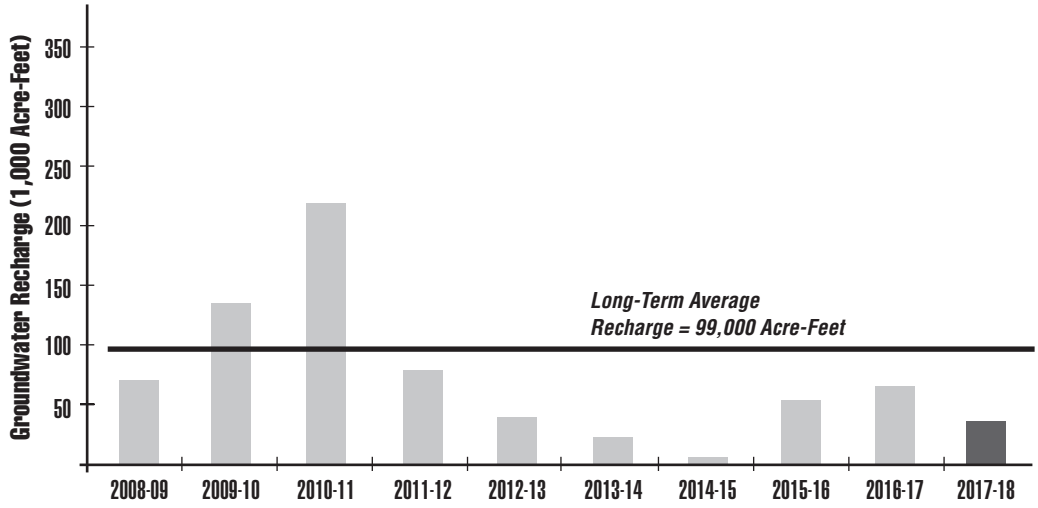
Total water use within the San Gabriel Valley consists of groundwater production, surface water diversions, treated imported water deliveries, and recycled water for irrigation projects. During the previous fiscal year (2016–17), total water use was about 214,000 acre-feet. During fiscal year 2017–18, total water use was about 229,000 acre-feet, consisting of about 197,500 acre-feet of groundwater production, 12,000 acre-feet of treated local surface water, 14,833 acre-feet of treated imported water, and 5,000 acre-feet of recycled water. In recent years, Watermaster has worked with stakeholders to promote retail water conservation, and water use has decreased due to a greater awareness by consumers of the drought conditions and increased water conservation by those consumers. Total water use during fiscal year 2017–18 is about 8 percent lower than the recent 10-year average of about 248,000 acre-feet, and also about 14 percent lower than fiscal year 2013–14, which preceded the governor's declaration mandating water conservation.

Figure 3. IMPORTED WATER DELIVERIES ABOVE LONG-TERM AVERAGE



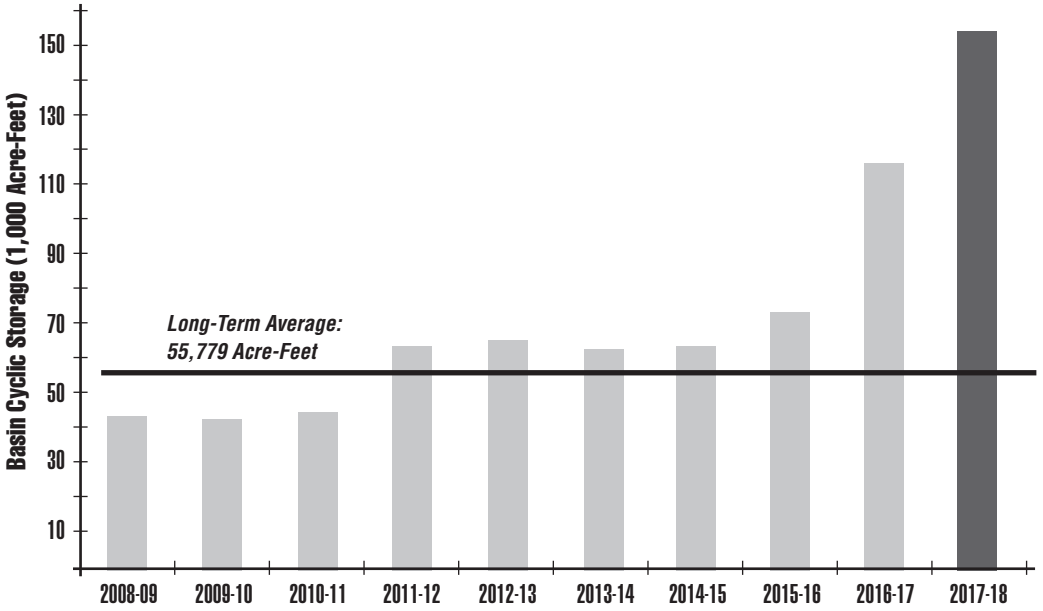
Imported water deliveries (treated and untreated) during 2017–18 totaled about 98,000 acre-feet for direct use and groundwater replenishment. This is about 55 percent higher than the recent 10-year average.

Figure 4. LOCAL WATER CONSERVED ABOUT 40% OF AVERAGE



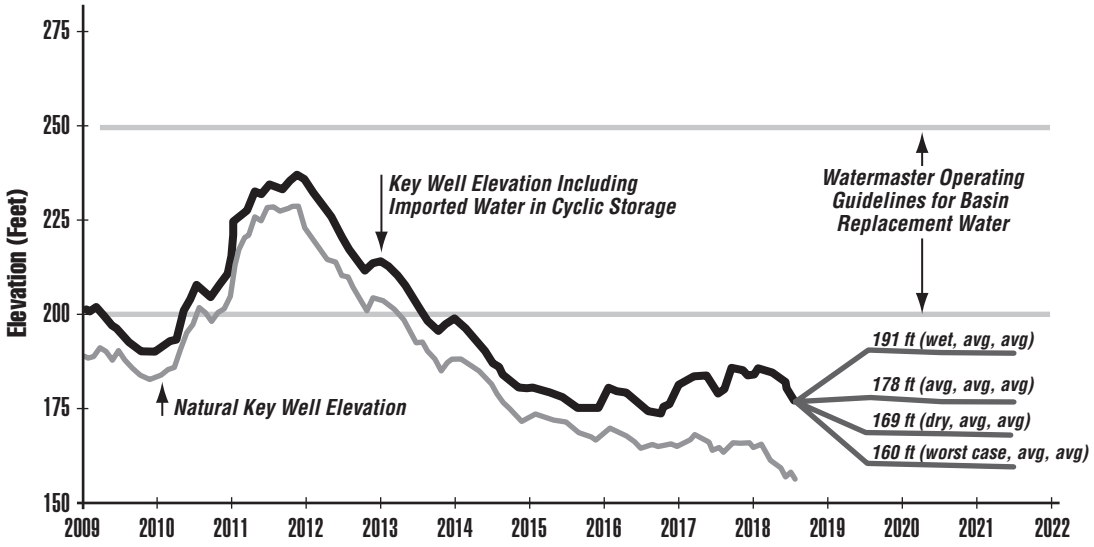
Approximately 39,000 acre-feet of local water was conserved during 2017–18, about 40 percent of the long-term average of 99,000 acre-feet.

Figure 5. CYCLIC STORAGE INCREASED



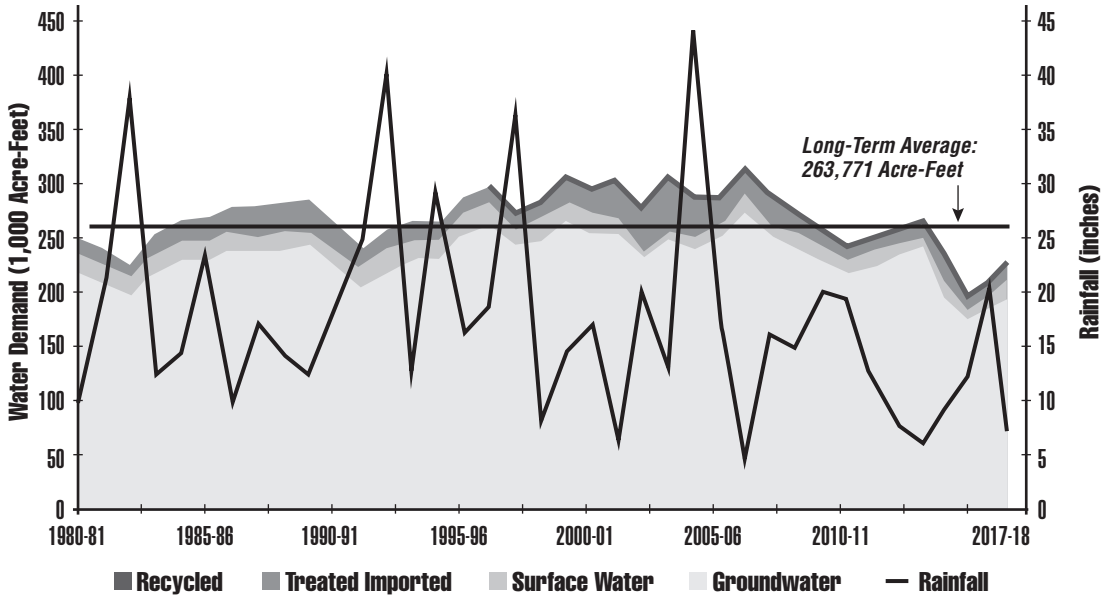
As of June 30, 2018, a total of about 154,100 acre-feet was in Cyclic Storage: Three Valleys Municipal Water District, 16,100 acre feet; San Gabriel Valley Municipal Water District, about 17,000 acre-feet; Upper San Gabriel Valley Municipal Water District, 6,700 acre-feet; Producer, 46,500 acre-feet; Water Resource Development storage, 12,700 acre-feet; MWD, 42,500 acre-feet; and Puente Basin Water Agency, 12,600 acre-feet. Cyclic Storage, as of June 30, 2017, increased by about 37,000 acre-feet above the previous year's total. Long-term average annual storage is about 55,779 acre-feet.

Figure 6. CYCLIC STORAGE AND RAINFALL IMPACTS ON KEY WELL



The additional water provided by Cyclic Storage (shown with the black line) helps local agencies meet their future Replacement Water obligations. This graph also forecasts Key Well elevations for four scenarios: wet years, average years, dry years, and drier years.

FIGURE 7. TOTAL WATER DEMAND INCREASED



Long-term average water demand is about 263,771 acre-feet. During fiscal year 2017–18, total demand was about 229,000 acre-feet, made up of groundwater (197,500 acre-feet), surface water (12,000 acre-feet), imported treated water (14,500 acre-feet), and recycled water (5,000 acre-feet).

OPERATING SAFE YIELD

Main San Gabriel Basin Watermaster annually establishes an Operating Safe Yield (OSY), which is based on prevailing hydrologic conditions in the San Gabriel Valley. Production in excess of the OSY is subject to an assessment that is used to purchase untreated imported water to replenish the Basin. Production in excess of water rights during fiscal year 2017–18 was about 39,900 acre-feet, which is about 8 percent higher than the long-term average of about 37,000 acre-feet. Watermaster aggressively responded to the decreasing trend of the groundwater level at the Key Well during fiscal year 2017–18 by establishing an OSY of 150,000 acre-feet for fiscal year 2018–19 (identical to the OSY for fiscal year 2017–18 and about 45,000 acre-feet below the long-term average of about 195,000 acre-feet). The reduced OSY provides Watermaster with a mechanism to purchase additional replenishment supplies for the Basin. During fiscal year 2017–18, the OSY was set using a management approach that seeks to set the OSY within a narrower range than previously. This is part of the overall effort to manage the Basin in a way that makes the water supply more stable, and costs more predictable, in both wet and dry years.

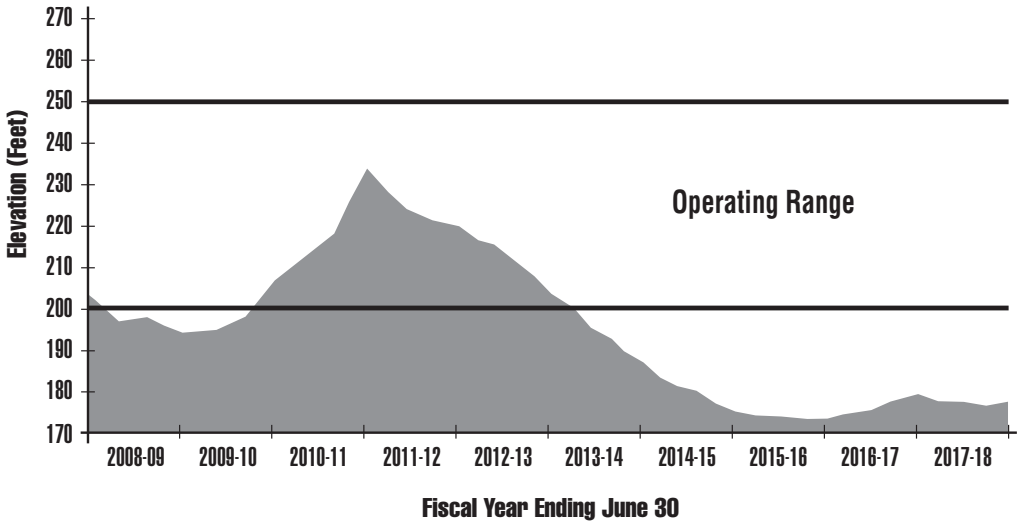
KEY WELL BELOW OPERATING RANGE

The Baldwin Park Key Well is used as the benchmark for determining how the groundwater supply for the entire Basin is trending. In accordance with the Judgment, Watermaster manages the Basin to maintain the groundwater level at the Key Well between 200 feet and 250 feet, to the extent possible. As of September 30, 2016, the groundwater level at the Baldwin Park Key Well declined to a historic

low of about 172 feet. Five consecutive years of below-average rainfall, below-average stormwater runoff, and local groundwater production resulted in a decrease in the groundwater elevation at the Key Well to 173.6 feet as of June 30, 2016. However, the recent decrease of the groundwater elevation at the Baldwin Park Key Well was only about four feet between July 1, 2015, and July 1, 2016. This was largely the result of delivery of about 31,000 acre-feet of untreated imported water and historic low groundwater production of about 174,000 acre-feet (compared to the long-term average of about 235,000 acre-feet). This level was about 28 feet below the "low" end of the operating range for Watermaster.

During fiscal year 2017–18, rainfall was about 40 percent of average while stormwater runoff was also about 40 percent of average. However, Watermaster coordinated with Producers and the Responsible Agencies to import about 83,000 acre-feet of untreated water to the Basin. In addition, groundwater production was only about 197,500 acre-feet, well below the 10-year average of 214,000 acre-feet. Collectively, these actions resulted in a Key Well elevation of 178.5 feet as of June 30, 2018. This elevation is about 22 feet below the "low" end of the operating range for Watermaster, but represents a only a one-foot decrease from the prior year, despite rainfall being only 40 percent of average.

Figure 8. KEY WELL ELEVATIONS DURING THE LAST TEN YEARS



The groundwater elevation at the Key Well on June 30, 2018, was about 178.5 feet, which is below the Basin's operating range of 200 to 250 feet.

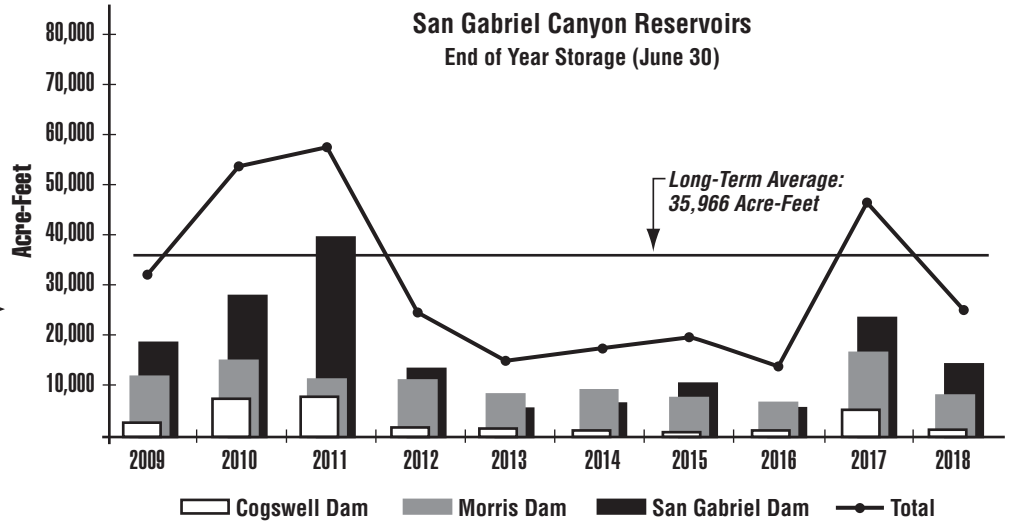
DECREASE IN WATER STORED IN CANYON RESERVOIRS

Cogswell, San Gabriel, and Morris reservoirs have a combined maximum storage capacity of about 85,000 acre-feet. At the end of the 2017–18 fiscal year, about 24,000 acre-feet of water was stored in these reservoirs. This is about 23,000 acre-feet less than the previous year, representing about 60 percent of the long-term average

of about 30,000 acre-feet of water in storage at the end of the fiscal year, and only about 30 percent of total reservoir capacity. In addition, about 39,000 acre-feet of local runoff was recharged into the groundwater basin during fiscal year 2017–18.

Total water stored in San Gabriel Canyon Reservoirs at the end of the fiscal year was 24,000 acre-feet, about 60 percent of the long-term average.

Figure 9. WATER STORED IN SAN GABRIEL CANYON RESERVOIRS



COORDINATED BASIN REPLENISHMENT ACTIVITIES

Historical Basin management practices encouraged Producers to pump local groundwater instead of relying on treated imported water to address water demands in excess of Producer's water rights. Under normal conditions, Watermaster quantifies groundwater production in excess of Producers' water rights, and arranges to have an equal amount of untreated imported water delivered to replenish the overproduction from the Basin at a "Full Service" untreated water rate. However, in response to the ongoing drought, Watermaster has implemented wide-ranging additional new tools to more intensely manage Basin groundwater supplies, refill the Basin, and ensure long-term water supply reliability. These new drought management tools are described in the following pages.

THREE-YEAR PURCHASED WATER PLAN

Watermaster annually prepares the "Three-Year Purchased Water Plan," in which it quantifies the amount of untreated imported water which will be purchased from each of the three municipal water districts within the San Gabriel Valley and delivered to replenish groundwater supplies within the Basin. Untreated imported water deliveries will be made to 1) augment the lack of local stormwater replenishment through the Water Resource Development program, 2) increase the amount of water held in Producer Cyclic Storage accounts, 3) satisfy the prior year's Replacement Water obligation, and 4) support other programs negotiated with Watermaster. Recognizing the quantity of untreated imported water anticipated to be delivered in the ensuing three years aids Watermaster's management of groundwater levels and supplies.

IMPLEMENTATION OF WATER RESOURCE DEVELOPMENT ASSESSMENT PROGRAM

Watermaster adopted Resolution No. 05-14-263, which established a Water Resource Development Assessment that was applied to all production during fiscal year 2014–15 and 2015–16 for the Supplemental Reliability Program. The purpose of RDA is to establish a fund from which untreated imported water may be purchased and delivered to the Basin. It is intended to create a "reservoir" of water that is available to assist in the management of the Basin in the event untreated water is not available in the future because of a short-term statewide emergency.

The severe seven-year drought, resulted in significant reductions of the quantity of local stormwater replenishment to the Basin during fiscal year 2016–17, Watermaster expanded the Supplemental Water Reliability Program into the Supplemental Water Stormwater Augmentation Program, using the Water Resources Development Assessment described below.

Watermaster developed (RDA II) to help manage Basin water supplies under potential "worst case" hydrologic conditions, which is assumed to be three consecutive five-year droughts with the same hydrologic conditions as the recent 2011–12 through 2015–16 severe drought (total of 15 years of drought). RDA II generates revenue to purchase untreated imported replenishment water for stormwater augmentation, to maintain the Key Well elevation above 180 feet by the end of the tenth year of the hypothetical 15-year drought cycle. Watermaster uses the RDA II funds to purchase untreated imported water to replenish the Basin for the "general benefit" of all Producers within the Basin. Unlike the original RDA I, which is a Watermaster pre-purchase of Replacement Water, the RDA II will supplement local stormwater replenishment and allow no "right of recovery" using a water right by any Basin Producer. A stabilized Key Well elevation will ensure continued Basin water supply to the Basin Producers under a potential worst case, 15-year sustained drought. The RDA II Program had an initial assessment of $40 per acre-foot on all fiscal year 2016–17 production and is planned to gradually increase to $175 per acre-foot on all fiscal year 2020–21 production, which at that time will generate sufficient revenue to purchase about 40,000 acre-feet of water, representing about a five-foot benefit to Basin groundwater levels.

PROACTIVE MEASURES TO INCREASE CYCLIC STORAGE

Both Watermaster and Producers recognize that prolonged drought conditions will adversely impact untreated imported water availability, which is essential to managing the Basin. Consequently, Watermaster has taken proactive measures to encourage Producers to increase the collective amount of water in their Cyclic Storage accounts from about 15,000 acre-feet as of the end of June 2010 to 46,500 acre-feet as of June 2018.

During fiscal year 2017–18, Watermaster, in conjunction with Upper District, entered into an agreement with MWD to have up to 80,000 acre-feet of untreated imported water delivered and stored in the Basin. In the ensuing five consecutive years (commencing December 2017), Watermaster has agreed to purchase one-fifth of the delivery (16,000 acre-feet per year). This agreement provides Watermaster with water supply reliability and provides MWD with delivery flexibility. As of June 2018, there was about 42,500 acre-feet in this storage account and Watermaster was negotiating with MWD to have an additional 16,000 acre-feet delivered to the Basin. In addition, Watermaster and the three municipal water districts collectively have 40,000 acre-feet of imported water in Cyclic Storage, which can be made available for Basin management. At the end of the fiscal year, there was about 129,000 acre-feet in all these Cyclic Storage accounts.

ACTIVELY PURSUING NEW REPLENISHMENT METHODS

In addition to those programs noted above, Watermaster is actively pursuing alternative means of Basin replenishment.

RETAIL WATER CONSERVATION

Watermaster is working with stakeholders across the Basin to encourage consumer-based conservation efforts to reduce groundwater production.

RECYCLED WATER

Watermaster is working with Sanitation Districts of Los Angeles County, MWD, and others to pursue a firm supply of treated recycled water for Basin replenishment.

INCREASE REPLENISHMENT

Watermaster is working with a range of stakeholders to implement tighter coordination and management to allow replenishment of imported water even during rainy periods, and finding new opportunities to deliver untreated imported water for Basin replenishment.

MORE FLEXIBLE FINANCIAL TOOLS

Watermaster has instituted new, more flexible financial tools to increase water imports, such as pre-purchase of water, and is evaluating others, including mid-year assessments.

DEVELOPING AND IMPLEMENTING STORAGE AND EXPORT PROGRAMS

Watermaster has developed criteria for new water storage and export programs, and implemented them for the first time in 2015. These programs will continue in future years.

PROJECTED GROUNDWATER DEMANDS

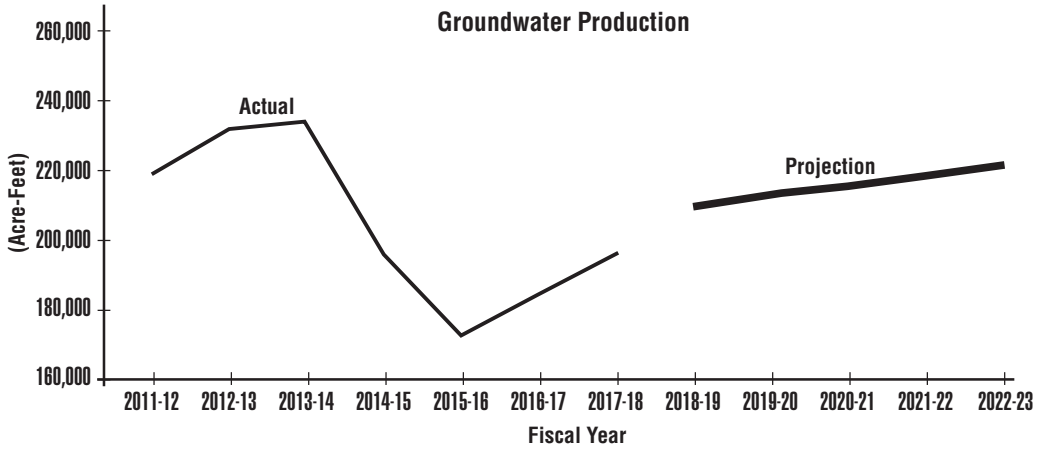
PRODUCER ESTIMATES

Section 28 directs each Producer to submit a report to Watermaster detailing its projected water demands and water production requirements over the following five years. Projections were received from 20 Producers (all municipal water suppliers), accounting for about 82 percent of the groundwater production from the Basin.

For those Producers who did not submit projections, Watermaster provided an estimate based on the assumption that each Producer had an aggregate projected growth rate that was the same as those Producers who did submit projections. Projected groundwater production is shown in Appendix A. Figure 10 shows the total projected and historical groundwater production from the Basin since 2011–12.

Figure 10. PROJECTED AND HISTORICAL WATER PRODUCTION

Water production has increased over the prior year, but is lower than the long-term average due in part to consumer water conservation.



Total groundwater production for the 2017–18 fiscal year from the Basin was 197,520 acre-feet, which is higher than the previous year's production of 184,400 acre-feet, but significantly lower than the 10-year average of 214,000 acre-feet. The decrease in groundwater production over time, as illustrated in Figure 7, is primarily the result of increased water conservation at the consumer level. Groundwater production is influenced by a variety of conditions, including population, seasonal precipitation, groundwater contamination, and availability of surface water. Excluding the impacts of seasonal precipitation, groundwater production had experienced a gradual long-term increase, consistent with increasing population, as shown on Figure 7. The impacts of groundwater contamination during the 1980s and 1990s resulted in reduced groundwater production, offset by an equal increase of treated imported water purchases. Since the late 1990s, groundwater production and treatment facilities have become operational, enabling water purveyors to resume use of groundwater. However, since the late-2000s there has been a significant decrease in groundwater (and overall) demand, which is likely the result of increased water conservation by consumers.

UPGRADE OF GROUNDWATER MODEL

The long-used and highly effective 2-D groundwater model is being updated in a multi-year process. It will provide advanced capabilities for identifying existing conditions, designing programs and testing outcomes. It will be useful for virtually every aspect of Basin management, from recycled water development, to water quality evaluations, to well performance analysis.

CURRENT WATER QUALITY CONDITIONS

Since the early 1990s, almost 1.6 million acre-feet of contaminated groundwater have been treated for beneficial use.

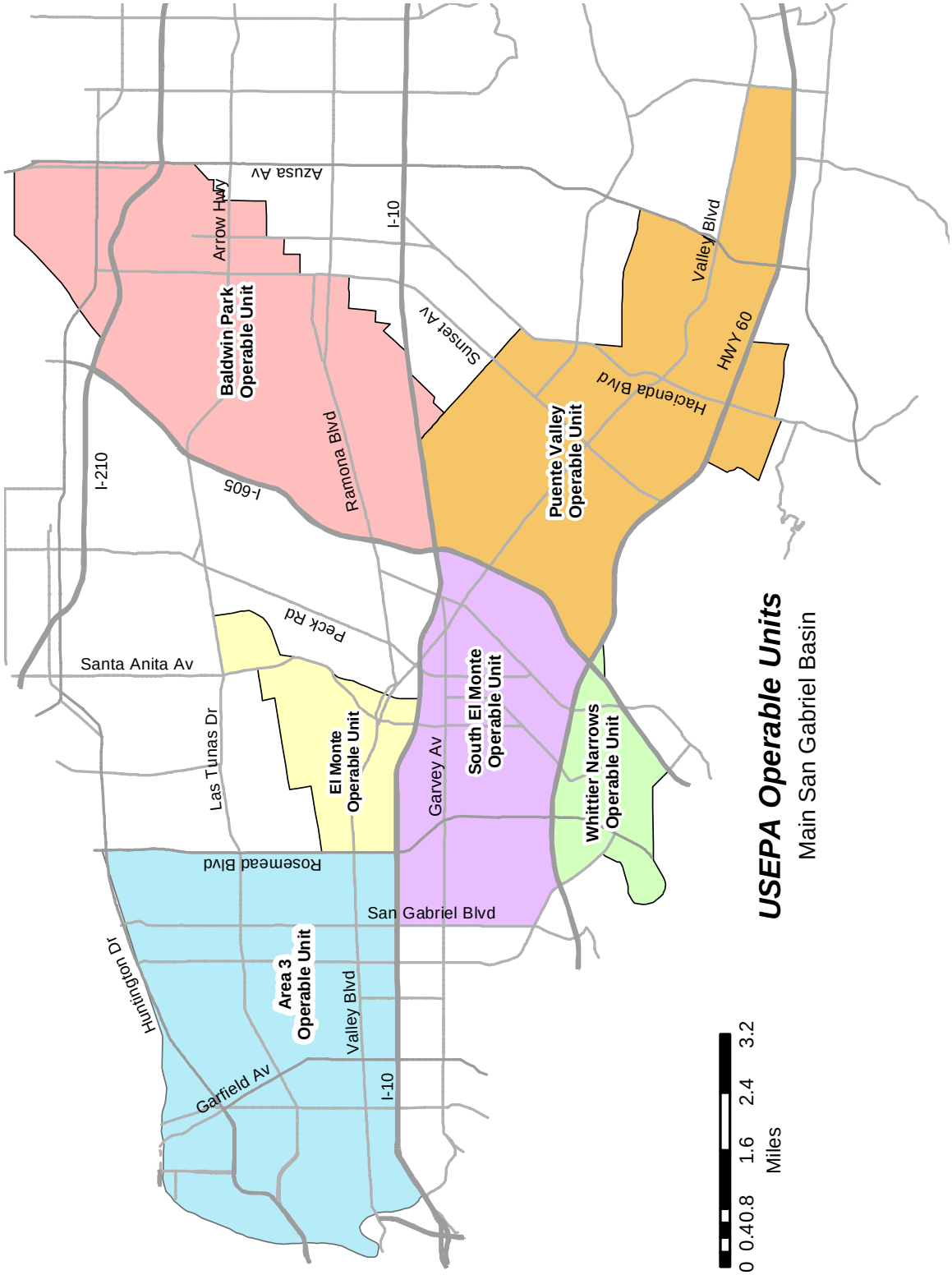
Groundwater delivered to customers continues to be of high quality and always meets state and federal drinking water standards. However, a number of contaminants in areas of the Basin require careful monitoring and treatment before the water is served for domestic use. These contaminants include a variety of industrial solvents referred to as Volatile Organic Compounds, or VOCs. Another common contaminant found in the Basin is nitrate, primarily from fertilizers used during the Valley's agricultural period. Since 1997, additional contaminants have been detected: perchlorate, a solid rocket fuel ingredient; N-nitrosodimethylamine (NDMA), associated with liquid rocket fuel; 1,2,3-trichloropropane (1,2,3-TCP), a degreasing agent; and 1,4-dioxane, a stabilizer for chlorinated solvents.

In response to the detection of these contaminants, Watermaster and local water entities aggressively pursued construction of treatment facilities to control the spread of contaminants and continue providing high-quality water meeting all state and federal drinking water standards. This policy of remediation and reuse preserves a valuable resource, particularly in the midst of the current drought, and reduces the overall cost of groundwater cleanup. Initially, a number of VOC treatment facilities were constructed, while excessive nitrate concentrations were blended with higher quality water to reach acceptable levels. Since the detection of perchlorate, NDMA, 1,2,3-TCP, and 1,4-dioxane, Watermaster has been instrumental in the successful operation of treatment facilities to treat those contaminants.

While only present in limited parts of the Basin, these chemicals pose difficult challenges to water Producers. When the chemicals were initially detected, Watermaster responded vigorously by working closely with the local water community to sponsor treatment research, and to design, fund, and construct cleanup projects as rapidly as possible rather than wait for the USEPA and the firms named as responsible for the contamination. Watermaster subsequently led negotiations that resulted in the Baldwin Park Operable Unit (BPOU) Project Agreement, including reimbursement for groundwater cleanup costs from certain parties responsible for the contamination. Under the BPOU Agreement, Watermaster is responsible for overall project coordination and administration, groundwater monitoring, and compliance with USEPA reporting requirements. Watermaster also participates in decisions regarding technology selection, construction, and operations. Now that all of the BPOU treatment facilities are operational, Watermaster also monitors the BPOU Project's performance in containing and removing contamination.

In addition to cleanup activities with the BPOU, Watermaster coordinates and maintains records on groundwater cleanup efforts within the Puente Valley Operable Unit (PVOU), the El Monte Operable Unit (EMOU), South El Monte Operable Unit (SEMOU), and the Area 3 Operable Unit (Area 3 OU). The location of these Operable Units is shown on Figure 11.

Figure 11. LOCATION MAP OF USEPA OPERABLE UNITS



PRIMARY CONTAMINANTS IN THE GROUNDWATER BASIN

VOLATILE ORGANIC COMPOUNDS AND NITRATES

VOCs and nitrates are the most prevalent contaminants found in the Basin. Intensive monitoring and research concerning these two types of contaminants have been underway for many years. The location of VOC contamination and cleanup methods for VOCs are generally well understood. During fiscal year 2017–18, 33 plants treated roughly 25.4 billion gallons (about 78,000 acre-feet) of VOC-contaminated water as shown in Appendix E. Note in Figure 12 that although VOC contamination is substantial, it is centered in just a few areas, leaving a large portion of the Basin unaffected. Water containing nitrates above the Maximum Contaminant Level (MCL) is either blended with other low-nitrate sources of water or not used. Figure 13 indicates that nitrates, similar to VOCs, are concentrated in a few areas and have the highest concentrations in the eastern portion of the Basin, away from the most productive pumping areas.

PERCHLORATE

In January 2002, the State Water Resources Control Board, Division of Drinking Water (DDW), previously the California Department of Public Health, lowered the Notification Level (NL) for perchlorate from 18 parts per billion to 4 parts per billion, and a total of 22 wells were removed from service due to unacceptable levels of perchlorate. DDW subsequently raised the NL to 6 parts per billion in March 2004, and later established an MCL of 6 parts per billion during October 2007. Watermaster played a key role in development of the first treatment facility to remove perchlorate from drinking water. On February 27, 2015, the Office of Environmental Health Hazard Assessment (OEHHA) published an updated Public Health Goal (PHG) of 1 part per billion for perchlorate in drinking water. Once OEHHA establishes or revises a PHG for a contaminant with an MCL, a determination will be made by DDW as to whether the MCL should be considered for possible revision. In anticipation of a possible revision to the perchlorate MCL, Watermaster coordinated with Producers to conduct "low-level" detection sampling for perchlorate, using a laboratory detection level of 0.1 part per billion, which allowed for detection of perchlorate below the current detection level of 4 parts per billion. Ion-exchange technology treatment facilities were operational at five sites in the BPOU and at two facilities in other parts of the Basin during fiscal year 2017–18.

NDMA

During 1998, eight local wells were found to contain levels of NDMA above the NL—at that time, 2 parts per trillion. Five of the wells with measurable levels of NDMA had already been taken out of service for other reasons, and the other three wells were put on inactive status once NDMA was detected. DDW subsequently raised the NL to 10 parts per trillion. As with perchlorate, Watermaster played a key role in the construction of NDMA treatment facilities in the BPOU area of the Basin. Five facilities were operational during fiscal year 2017–18.

Figure 12. VOLATILE ORGANIC COMPOUND LEVELS IN GROUNDWATER THROUGHOUT THE BASIN

Extensive cleanup programs are underway in the areas affected by VOC contamination. Because the main plumes of contamination are centered in just a few areas, much of the Basin remains unaffected.

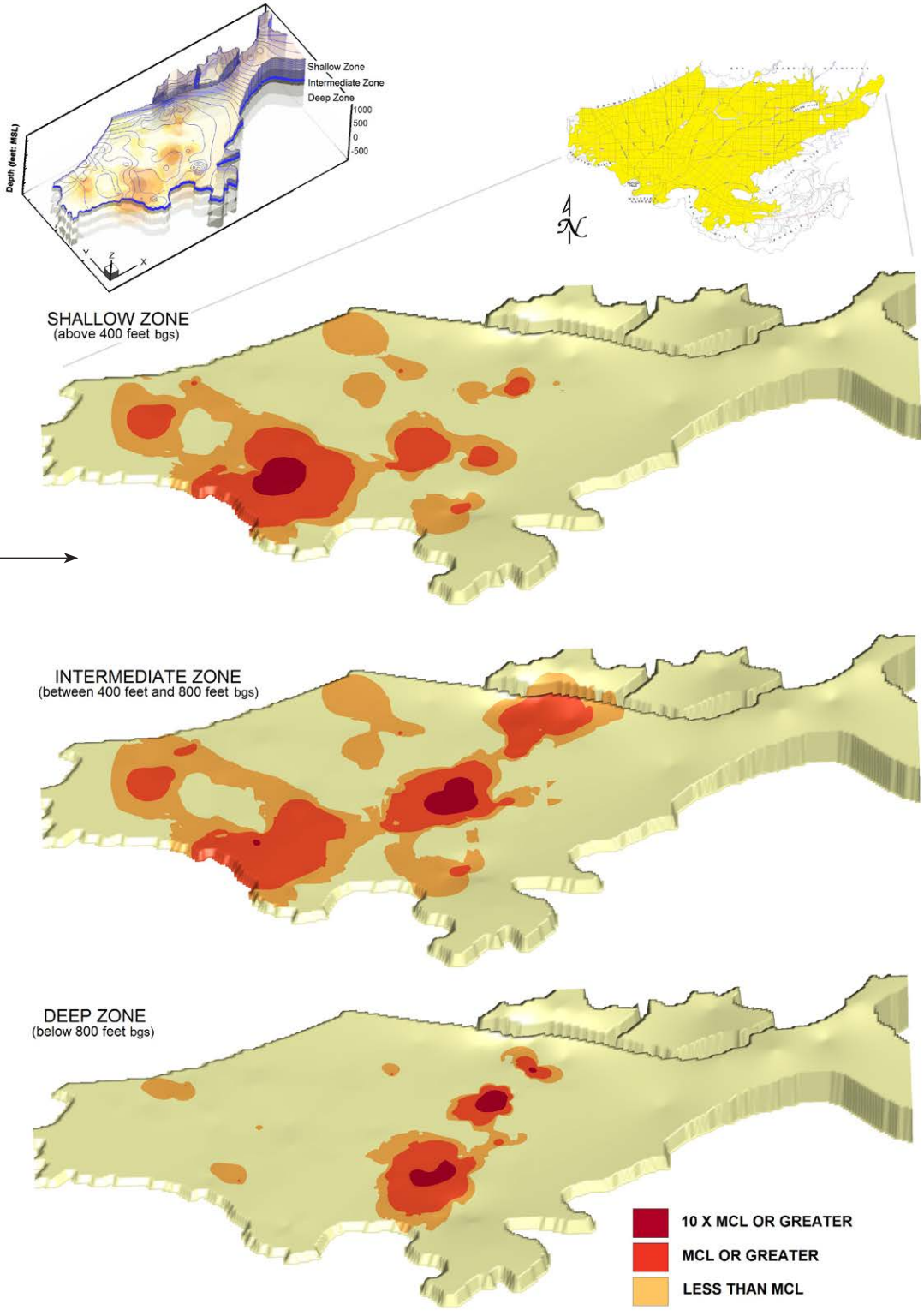
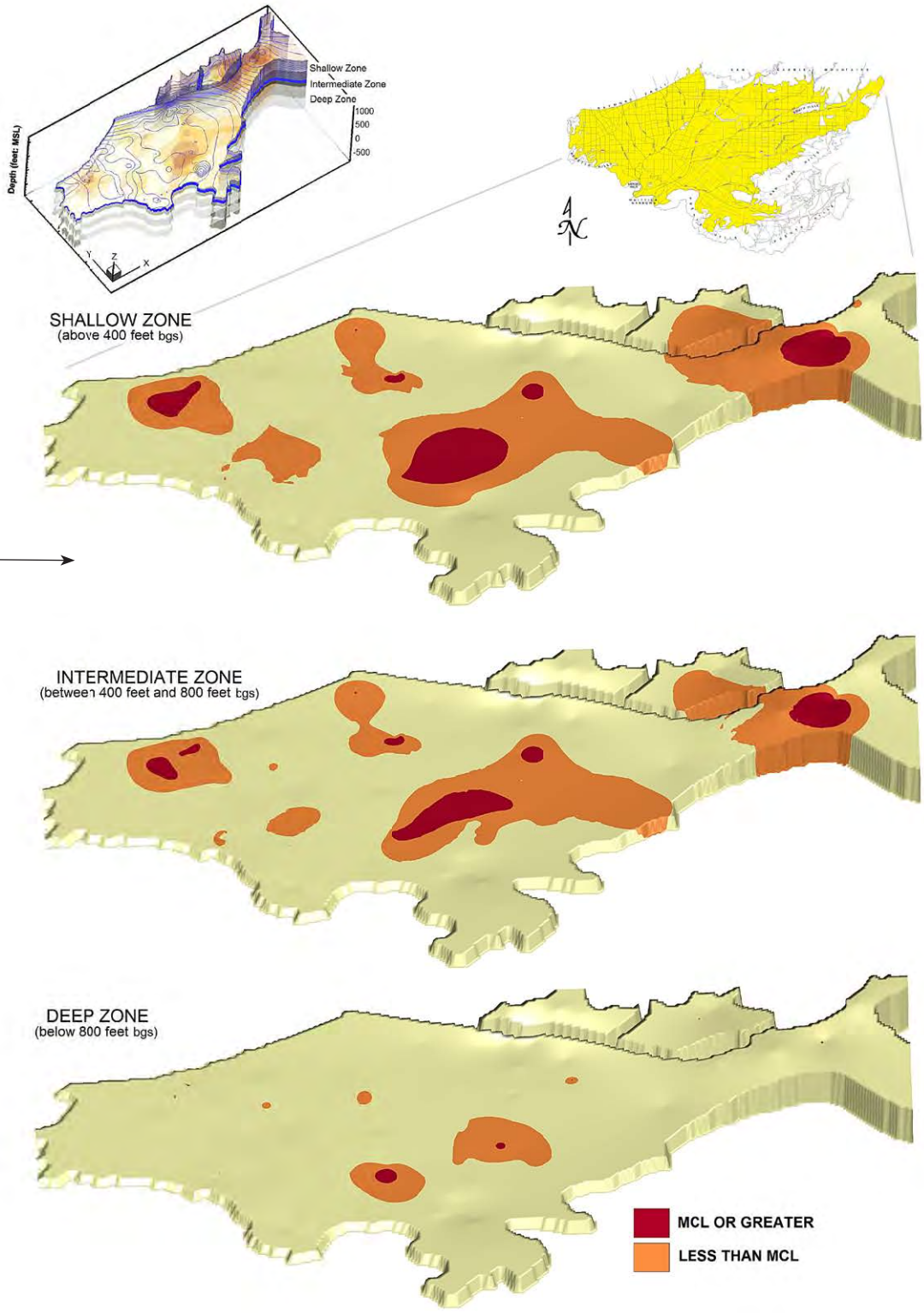


Figure 13. NITRATE LEVELS IN GROUNDWATER THROUGHOUT THE BASIN

Nitrate (NO3) contamination is highest in the eastern portion of the Basin, away from the San Gabriel River, the area of most intensive groundwater pumping.



TRICHLOROPROPANE (1,2,3-TCP)

The degreasing agent 1,2,3-TCP has been detected in the groundwater above the MCL of 5 parts per trillion, primarily in the BPOU and the Area 3 OU. This compound was detected in the BPOU during the winter of 2006, and its presence delayed use of one treatment facility for potable purposes. Following detection, Watermaster, in cooperation with its BPOU project partners, worked to construct treatment facilities to remove 1,2,3-TCP from the groundwater to make it suitable for potable uses. Those facilities were operational during fiscal year 2017–18.

WELLS ASSESSED FOR VULNERABILITY TO CONTAMINATION

One of the primary purposes of the Five-Year Plan is to identify wells in the Basin that are vulnerable to contamination. A well is considered vulnerable if the concentration of contaminants has ever reached 50 percent of the NL or MCL allowed by state drinking water regulations. In an effort to project which wells may be vulnerable over the next five years, Watermaster reviews water quality tests performed on each well, regional water quality conditions, and contaminant migration patterns. Watermaster also participates in plans to construct treatment facilities, as needed.

WATER QUALITY PROTECTION PLAN

Watermaster maintains a Water Quality Protection Plan that provides an early warning to Producers of potential increases in contaminant levels. The Water Quality Protection Plan also provides suggested alternative sources of supply, and proposes long-term actions to solve contamination problems without contributing to the migration of contaminants in the Basin.

FIVE-YEAR WATER QUALITY AND SUPPLY PLAN

The Main San Gabriel Basin's designation as a federal Superfund site was prompted by the discovery of widespread VOC contamination. Cleanup plans were developed to contain and remove VOCs from groundwater, and Watermaster, along with various other local water agencies, water Producers, and regulators, has worked to develop the expertise, financing, and treatment technologies to effectively address Basin-wide cleanup of VOCs.

Watermaster facilitates groundwater cleanup projects that also meet water supply needs.

The discovery of perchlorate and NDMA, however, complicated the existing VOC cleanup approach by creating a number of challenges. Most importantly, these new contaminants could not be removed using existing treatment facilities, and new treatment methods had to be identified, financed, and implemented.

This report provides a comprehensive water quality cleanup and water supply plan for the Main San Gabriel Basin, including each of the USEPA Operable Units. Watermaster's plan for each area is consistent with the USEPA plans, and its goal is to implement cleanup as promptly as possible, with or without the cooperation of the Responsible Parties.

GROUNDWATER MONITORING PROGRAMS

Monitoring includes measuring groundwater levels, groundwater quality, and groundwater flow. Watermaster continuously refines its understanding of the groundwater Basin to better define the safe yield of the Basin, and to protect and improve local water quality.

CONTINUE KEY WELL AND SUPPLEMENTAL KEY WELL OPERATION AND DATA PROCESSING

The entire 167-square-mile groundwater Basin is managed as one unit based on the groundwater levels as measured at a single Key Well in Baldwin Park. Water levels have been measured at this well since 1903 and are currently measured every three hours by an automated recorder.

Additional groundwater level recorders have been installed near the Santa Fe Spreading Grounds; adjacent to the San Gabriel River above the I-210 Freeway; in the City of Rosemead; in the City of Covina; and near Whittier Narrows Dam. These water level records are synchronized with the record in the Key Well. Collectively, water level data from these wells provides a better understanding of the impacts of recharge operations at the Santa Fe Spreading Grounds on Basin hydrogeology. Water elevation data are collected semi-annually at about 170 additional wells throughout the Basin, and water level recorders may be installed in some of those wells over the next five years.

CONTINUE BASINWIDE GROUNDWATER ELEVATION MONITORING PROGRAM (BGWEMP)

The purpose of the BGWEMP is to obtain groundwater level measurements from a large number of wells across the Basin. The information is used to prepare groundwater contour maps showing the direction of groundwater flow. The data are also used in the Basin computer model to simulate future groundwater flow patterns. Through implementation of the BGWEMP plan over the next five years, Watermaster will take the following steps:

- Take weekly measurements of water levels in 9 of the 170 primary wells.
- Gather semi-annual measurements of water levels at all 170 primary wells.
- Collect weekly measurements of water levels in 9 of the 170 primary wells.
- Obtain water levels in secondary wells from well owners or water Producers, the San Gabriel Valley Protective Association, Regional Board, USEPA, and others.
- Update the database with water level data.
- Prepare semi-annual groundwater contour maps of the entire Basin.
- Participate in the California Statewide Groundwater Elevation Monitoring (CASGEM) program.

IMPLEMENT PROVISIONS OF SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA)

The Sustainable Groundwater Management Act (SGMA) became effective on September 29, 2014. As manager of an adjudicated Basin with ongoing effective management, Watermaster's requirements are generally limited to reporting the following information, to the extent available, for the portion of the Basin subject to the adjudication:

(A) Groundwater elevation data

(B) Annual groundwater extractions for the preceding water year

(C) Surface water supply used or available for use for groundwater recharge or in-lieu use

(D) Total water use

(E) Change in groundwater storage

(F) The annual report submitted to the court

Watermaster intends to provide the following information to Department of Water Resources (DWR) over the next five years in compliance with SGMA.

(A) Groundwater elevation data. Watermaster is the "Monitoring Entity" for the Main Basin under the terms of the CASGEM program, and has submitted semi-annual static water elevations to DWR since the inception of CASGEM. Furthermore, Watermaster has collected static water elevations as part of the BGWEMP since the early 1990s. Watermaster uses the data to prepare semi-annual groundwater contour maps (which are available at Watermaster's website) and support the Watermaster's Main Basin groundwater computer model. Watermaster will continue to collect and review static groundwater elevation data on a regular basis.

(B) Annual groundwater extraction data. Watermaster includes quarterly groundwater extraction data for each groundwater well in its Annual Report. In addition, Watermaster provides a projection of groundwater production by each Producer over each of the upcoming five years, as shown in Appendix A of this Plan. Copies of Watermaster's current and prior annual reports are available on Watermaster's website.

(C) Surface water used for groundwater recharge or in-lieu use. Watermaster has included quarterly local surface water diversions for treated potable use in Appendix E of its Annual Report. Furthermore, Watermaster has presented a summary of local surface water, used for groundwater recharge, in the introduction to this Plan.

(D) Total water use. Water use in the Main Basin includes groundwater, treated local surface water, treated imported water, and recycled water. A summary of total water is included in the introduction of this Plan.

(E) Change in groundwater storage.
Groundwater storage in the Main Basin is referenced to the elevation as measured at the Baldwin Park Key Well (Key Well). The Main San Gabriel Basin Judgment (Exhibit H) notes groundwater in storage was about 7,700,000 acre-feet when the elevation at the Key Well was 209 feet above mean sea level (msl). In general, each foot of change in elevation equals about 8,000 acre-feet in storage.

The Key Well elevation was about 179.4 feet on July 1, 2017, and water in storage was about 7,470,000 acre-feet. The Key Well elevation on July 1, 2018, was about 178.5 feet above msl and water in storage was about 7,460,000 acre-feet. The net change in storage was a decrease of about 10,000 acre-feet.

(F) Submittal of Annual Report to the Court.
Watermaster submits its Annual Report to the Court by November 1 of each year.

GROUNDWATER QUALITY MONITORING

IMPLEMENT SALT AND NUTRIENT MANAGEMENT PLAN

During February 2009, the State Water Resources Control Board adopted the "Recycled Water Policy," which adopted goals for water recycling, water conservation, and replenishment of stormwater runoff to enhance water supplies throughout California. One component of the Recycled Water Policy requires all groundwater basins to develop a "Salt and Nutrient Management Plan" (SNMP). Watermaster took the lead role in developing the SNMP for the Main San Gabriel Basin. The SNMP identifies the existing water quality of the Main San Gabriel Basin (specifically Total Dissolved Solids [TDS]—Nitrate, Chloride, and Sulfate), which are not addressed by USEPA cleanup activities, and compares that water quality to standards established by the Regional Board. Each of the four water quality parameters comply with the standards established by the Regional Board resulting in significant flexibility to implement new programs to enhance groundwater replenishment and reliability. A final draft of the SNMP was submitted to the Regional Board in May 2016 to satisfy the submittal requirement, and was approved by the Regional Board in December 2016. Watermaster, in coordination with water purveyors, is implementing the SNMP through continued collection and review of TDS data. The water quality data are also included in the Watermaster database to facilitate review.

CONTINUE BASINWIDE GROUNDWATER QUALITY MONITORING PROGRAM

Under the Basinwide Groundwater Quality Monitoring Program (BGWQMP), all production wells in the Basin will be sampled at least once a year for VOCs, nitrates, and TDS. In addition, sulfate and chloride are sampled at least once every three years as required by DDW. The frequency of BGWQMP sampling complements the monitoring requirements under state law, and supplements information gathered through Regional Water Quality Control Board source investigations and USEPA remedial investigations. The data collected by BGWQMP are used to identify and evaluate the current locations and magnitude of contaminant levels, along with the effectiveness of the cleanup project.

CONTINUE TITLE 22 WATER QUALITY TESTING

Watermaster continues to perform DDW-mandated Title 22 water quality sampling of groundwater from approximately 200 active wells in the Basin. Watermaster also continues to track regulations and inform local water purveyors about regulatory issues and requirements. Information from centralized water quality testing is added to Watermaster's water quality database, which contains data from many sources. The centralized testing enables Watermaster to identify water quality trends on a regional scale that might otherwise go unnoticed at a specific well, and also lowers monitoring costs to Producers.

GROUNDWATER FLOW AND CONTAMINANT MIGRATION PROGRAMS

Groundwater level and quality data are entered into the Basin computer model, which simulates where contamination is projected to flow in the future. The goal is to project contaminant levels by areas in advance of the actual event, and identify remedial steps to be taken. The Basin computer model has been used to identify the area of contamination that may be captured (capture zone) under various groundwater pumping scenarios. The capture zone is also able to show the length of time it may take contamination to flow toward a well, and subsequently be treated for contaminant removal prior to use as a drinking water supply.

GROUNDWATER ELEVATION SIMULATIONS SHOW FUTURE GROUNDWATER ELEVATIONS BASED ON PROJECTED DEMANDS AND REPLENISHMENT

To determine the groundwater elevations throughout the Basin, Watermaster compiles the daily average 2017–18 production for each well, enters the data into the groundwater model, and simulates how production impacts water levels throughout the Basin, as shown on Figure 14 (see Appendix F). A computer simulation is then run using projected production for 2022–23, along with other water supply variables for the next five years (e.g., local water recharge, imported water recharge, subsurface inflow/outflow) assuming a five-year "dry hydrology" pattern. In addition to the historical hydrology, additional untreated imported water purchased with revenue from the RDA II assessment is projected to be replenished over each of the next five years. The simulated groundwater elevations are shown on Figure 15 (see Appendix F). The projected groundwater elevations reflect a general decrease of 20 to 30 feet throughout the Basin, which is primarily the result of insufficient stormwater runoff for replenishment and the projected increased groundwater production. However, these simulations indicate the estimated increase in groundwater production—based on projections by Producers and projected future "dry" hydrology—as of fiscal year 2022–23 will not significantly change the overall direction of Basin groundwater movement. This flow continues generally from east to west to a pumping trough in the western portion of the Basin, and also northeast to southwest, exiting through Whittier Narrows. The simulation for 2022–23 also shows localized pumping depressions in the Baldwin Park area, which are expected to be created by continuous pumping from groundwater extraction wells associated with the BPOU contaminant cleanup project to contain and control groundwater contaminant movement. Contaminated groundwater from those wells is treated at several treatment facilities and the DDW-permitted water is provided for potable use. Importantly, Figure 16 (see Appendix F) shows the net decrease in the groundwater elevations throughout the Basin despite of the replenishment of additional untreated imported water attributed to the RDA II deliveries. Figure 16 (see Appendix F) indicates groundwater elevations may be up to 50 feet lower in some parts of the Basin—directly impacting Producers by increasing energy costs to produce groundwater and in many cases adversely impacting well pump efficiency.

Simulations of the direction of groundwater flow in 2017–18 and projections for 2022–23 show that the estimated increase in groundwater pumping during this period would not significantly change the overall direction of Basin groundwater movement.

SIMULATE IMPACTS OF GROUNDWATER PUMPING ON CONTAMINANT MIGRATION

Simulations similar to the ones described above were used to make the finding that pumping from USEPA-mandated cleanup projects as managed by Watermaster helps to control and contain contaminant migration. Groundwater quality data collected during 2017–18 and projected quality data for 2022–23 were entered into the groundwater model for the contamination migration studies. The computer model is used to simulate how the flow of water would affect the migration of contamination. The simulation showed that changes in groundwater flow did not have major impacts on the migration of contaminants (refer to Figures 14 and 15 in Appendix F).

GROUNDWATER CLEANUP PROJECTS

Watermaster coordinates and provides technical assistance on many cleanup projects in the Basin, although the cleanup facilities are owned and operated by local water utilities. Watermaster's involvement includes coordinating proposed USEPA cleanup programs to ensure, to the extent feasible, that treated water is put to beneficial use within the Basin and that projects are consistent with the Judgment.

REVIEW OF SECTION 28 APPLICATIONS

Watermaster reviews every proposal to construct, destroy, or modify a well or build a treatment plant pursuant to Section 28 of its Rules and Regulations.

Watermaster's review ensures that any new or increased extractions from the Basin or any changes in production patterns are consistent with contamination cleanup efforts, and will not adversely affect Basin water quality. In conjunction with the evaluation of an application to construct a new well or a treatment facility, Watermaster uses a computer model to predict the potential future impacts of each project on contaminant migration and Basin cleanup.

BASIN CLEANUP PROJECTS/USEPA OPERABLE UNIT PLANS

The USEPA established Operable Units for the various areas within the Basin that have been contaminated and require groundwater cleanup. The Operable Units are Area 3 (Alhambra area), Baldwin Park, El Monte, Puente Valley, South El Monte, and Whittier Narrows (see Figure 11). USEPA has established a methodical process which includes a review of the extent of contamination (Remedial Investigation), development of cleanup alternatives (Feasibility Study), and selection of the most appropriate cleanup plan (Proposed Plan). Following these activities, the USEPA issues a report identifying the agreed-upon cleanup plan (Record of Decision). Subsequently, the project facilities are designed and constructed.

With USEPA plans generally in place, Watermaster continues to work with affected Producers, Responsible Parties, and others to implement solutions that provide effective cleanup, conform to the USEPA plans, and use the treated water to meet local water supply needs.

This Five-Year Plan describes each of the Operable Units along with the USEPA proposed cleanup plan. (A detailed description of the history and treatment facilities associated with each of the Operable Units is included in Appendix E.) In addition, Appendix A identifies current and projected groundwater production over the next five years, to address the contamination and to implement the cleanup plans. In areas where the groundwater supply has been affected by contamination, Watermaster works with affected Producers and other local water agencies to implement cleanup as quickly as possible, with or without the cooperation of the Responsible Parties. Watermaster and affected Producers continue to seek cost recovery from the Responsible Parties for any cleanup costs they incur.

BALDWIN PARK OPERABLE UNIT (BPOU)

BPOU BACKGROUND

The BPOU is a seven-mile-long, one-mile-wide area of groundwater contamination that lies east of the San Gabriel River, stretching from an area north of the I-210 Freeway in Azusa to south of the I-10 Freeway in Baldwin Park (see Figure 11). The contamination primarily has been the result of improper use and disposal of industrial chemicals in the Azusa area, and it continues to spread generally in a southwesterly direction.

BPOU CLEANUP PROGRESS

The USEPA originally issued its Record of Decision (ROD), or cleanup plan, for the BPOU in the mid-1990s. The ROD calls for pumping and treating groundwater in the northern area, where contaminant concentrations are highest, and also in the southern area to limit further migration of contaminants. The ROD initially involved pumping and treating an average of about 7,000 gallons per minute in the northern area and 16,000 gallons per minute in the southern area. During 2015, the extraction rates were modified and now require pumping and treating an average of about 6,000 gallons per minute in the northern area and 23,750 gallons per minute in the southern area. The ROD also recommends the use of existing water supply wells, treatment systems, and pipelines when feasible. Importantly, the plan encourages adding the treated water to the potable supply, rather than simply recharging it back into the ground or discharging it to storm drains.

In 2002, after several years of negotiation led by Watermaster, eight of the BPOU Responsible Parties (called Cooperating Respondents, or CRs) and seven Water Entities signed the BPOU Project Agreement. Under this landmark agreement, Watermaster provided overall project management and project coordination services. Under the original agreement, the CRs have paid the cost to construct the USEPA-required BPOU cleanup facilities, and are required to continue to provide funding to operate the facilities for about 15 years—through 2017.

Subsequently, the BPOU Project Agreement has been extended an additional ten years, through 2027.

Watermaster will continue to coordinate BPOU cleanup activities among the various parties to the BPOU Project Agreement through at least 2027, interfacing with USEPA and overseeing agreements between water purveyors to use the treated water. With all of the BPOU facilities now operational, Watermaster is also coordinating collection of field data, such as water production, water quality, and water levels, and is providing BPOU Project performance reports to USEPA in cooperation with the CRs. The projects will ensure that there is an adequate water supply for the BPOU area. These projects are consistent with the USEPA ROD, meet contaminant removal and containment requirements, and meet local water supply needs.

BPOU CURRENT AND UPCOMING ACTIVITIES

Watermaster regularly reviews water quality data to evaluate the impact the production wells and specially-constructed extraction wells have on control of contamination migration. It is difficult to develop a precise picture of the geographic extent of contamination because water quality is obtained from numerous wells that produce water from different depths below the groundwater table. Figure 17 (see Appendix F) shows the approximate extent of VOC contamination from about five years ago and from current data. In addition, the approximate geographic extent of VOC contamination, using engineering judgment, for five years into the future is shown on Figure 17 (see Appendix F). The 2017–18 plume indicates treatment facilities are controlling plume movement. Watermaster anticipates the area of the VOC plume will continue to decrease, as shown on the 2022–23 plume. Similarly, Figure 18 (see Appendix F) shows the approximate extent of perchlorate. The series of three plume characterizations indicates plume movement is expected to be controlled and, similar to VOCs, continue to decrease in the future (2022–23).

Watermaster, in coordination with BPOU Producers, the CRs, and USEPA, will continue to investigate, test, construct, and permit more efficient treatment facilities to continue to provide safe and reliable potable water supply at a reduced cost. This includes the use of different granular activated carbons to remove VOCs, ion-exchange resins to remove perchlorate, and pressurized ultraviolet light vessels to remove NDMA. Watermaster maintains records on all treatment facilities on a quarterly basis.

SOUTH EL MONTE OPERABLE UNIT (SEMOU)

SEMOU BACKGROUND

The SEMOU covers approximately eight square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway, the 60 Freeway, the I-605 Freeway, and San Gabriel Boulevard (see Figure 11).

SEMOU CLEANUP PROGRESS

A ROD for the SEMOU was issued in 2000, addressing VOC contamination in a limited area. Subsequently, additional water supply wells became contaminated, and new contaminants, including perchlorate, were detected in wells in the SEMOU area.

In November 2005, USEPA revisited its ROD and issued an Explanation of Significant Differences (ESD) indicating that SEMOU cleanup projects would also address treatment of perchlorate. The City of Monterey Park, San Gabriel Valley Water Company, and Golden State Water Company (GSWC) have all constructed new or additional treatment facilities within SEMOU. The San Gabriel Basin Water Quality Authority (WQA) has assisted the Producers by securing outside funding to help offset project costs.

SEMOU CURRENT AND UPCOMING ACTIVITIES

Over the next five years, Watermaster will continue to review all proposed modifications to the treatment facilities through the Section 28 permitting process. In addition, Watermaster will participate in planning/progress meetings which are held on a quarterly basis. Watermaster maintains records on all treatment facilities on a quarterly basis.

EL MONTE OPERABLE UNIT (EMOU)

EMOU BACKGROUND

The EMOU covers an area of about 10 square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway on the south, Rosemead Boulevard on the west, and Santa Anita Avenue and Rio Hondo on the east. The northern boundary generally follows Lower Azusa Road (see Figure 11). While shallow contamination is found throughout the EMOU, deep (intermediate-zone) contamination is found in the northwest and easterly area of the EMOU.

EMOU CLEANUP PROGRESS

The USEPA's ROD for the EMOU includes numerous small, shallow extraction wells and treatment, along with two areas of deep extraction and treatment. Due to generally poor water quality in the area, the shallow groundwater will not be used for a potable supply. The deep extractions are recommended for potable use by local water purveyors. The remediation efforts are separated into "Westside" and "Eastside" activities.

EMOU CURRENT AND UPCOMING ACTIVITIES

Over the next five years, Watermaster will continue to review all proposed modifications to the treatment facilities through the Section 28 permitting process. In addition, Watermaster will participate in planning/progress meetings which are held on a quarterly basis. Watermaster maintains records on all treatment facilities on a quarterly basis.

PUENTE VALLEY OPERABLE UNIT (PVOU)

PVOU BACKGROUND

The PVOU lies in the southeastern portion of the Basin, essentially bounded by the 60 Freeway on the south, Azusa Avenue on the east, and the I-10 Freeway on the north (see Figure 11). The PVOU encompasses the Puente Valley, which is tributary to the southeasterly portion of the Basin. Contamination in the PVOU includes various VOCs. All aquifers within the PVOU (shallow, intermediate, and deep) are considered sources for municipal water supplies.

PVOU CLEANUP PROGRESS

The USEPA has issued a ROD for the PVOU. The plan identified in the ROD includes extraction and treatment of groundwater within the shallow and intermediate zones from wells located in the center of the PVOU.

PVOU CURRENT AND UPCOMING ACTIVITIES

Over the next five years, it is anticipated that the intermediate-zone extraction wells and treatment facility will be permitted and begin supplying treated water for potable purposes. Watermaster will continue to review all proposed modifications to the treatment facilities through the Section 28 permitting process. In addition, Watermaster will participate in planning/progress meetings which are held on a quarterly basis. Watermaster maintains records on all treatment facilities on a quarterly basis.

WHITTIER NARROWS OPERABLE UNIT (WNOU)

WNOU BACKGROUND

The USEPA declared the WNOU is a "fund-lead" project, meaning that the USEPA (with the State) has funded the design, construction, and operation of the remedy, and will seek cost recovery from Responsible Parties later. The USEPA cleanup plan involves a series of shallow- and intermediate-zone extraction wells with treatment (see Figure 11).

WNOU CLEANUP PROGRESS

As of May 2013, the responsibility for the WNOU was transferred from USEPA to the California Department of Toxic Substances Control (DTSC). Furthermore, the WNOU Shallow Zone Project (as described in Appendix E) ceased operation during 2013 due to improved water quality.

WNOU CURRENT AND UPCOMING ACTIVITIES

Over the next five years, it is anticipated that San Gabriel Valley Water Company will operate the intermediate-zone extraction wells and treatment facility including a blend plan, and will take treated water for potable use in addition to continued deliveries to Legg Lake. This will enable the WNOU treatment facility to produce a greater amount of water and to put all the water to beneficial uses. Watermaster will continue to review all proposed modifications to the treatment facility through the Section 28 permitting process. In addition, Watermaster will participate in planning/progress meetings which are held on a quarterly basis. Watermaster maintains records on all treatment facilities on a quarterly basis.

AREA 3 OPERABLE UNIT

AREA 3 BACKROUND

The Area 3 Operable Unit is located in the westerly portion of the Basin. It is generally bounded on the south by the I-10 Freeway, on the east by Rosemead Boulevard, on the north by Huntington Drive, and on the west by the boundary of the Main Basin (see Figure 11).

AREA 3 CLEANUP PROGRESS

USEPA has installed a series of monitoring wells to collect water quality data to supplement data collected from water supply wells and has initiated a Remedial Investigation and Feasibility Study to identify the extent of the contamination and to evaluate appropriate cleanup remedies.

AREA 3 CURRENT AND UPCOMING ACTIVITIES

Watermaster will continue to review all proposed modifications to the treatment facility through the Section 28 permitting process. In addition, Watermaster will participate in planning/progress meetings which are held on a quarterly basis. Watermaster maintains records on all treatment facilities on a quarterly basis.

WATER SUPPLY PLANNING

The Main San Gabriel Groundwater Basin is very complex, covering 167 square miles, and has the capacity to hold about 2.8 trillion gallons of water. Water enters the Basin from countless natural and man-made locations, and is extracted by over 200 wells operated by dozens of independent Producers. Watermaster conducts special studies to identify projected water demands and to increase understanding of the Basin, so that it can be managed in a way that preserves and improves water supply and quality. In addition, Watermaster routinely reviews available data and is prepared to construct new monitoring wells to obtain supplemental water level and water quality data to better manage the Basin. As a result of these activities, and the cooperative activities with the Regional Board (noted below), there is no longer ongoing VOC or perchlorate contamination occurring; rather the focus is on cleanup activities.

DROUGHT MANAGEMENT PLANNING

Watermaster coordinates and maintains records on production, stormwater, and untreated imported water deliveries for groundwater replenishment, and impacts on the groundwater levels throughout the Basin, particularly at the Baldwin Park Key Well. In that capacity, Watermaster has coordinated deliveries of untreated imported water into Cyclic Storage accounts and implemented the RDA II assessment, which is used to purchase untreated imported water to augment stormwater replenishment. Watermaster has developed a 3-D computer model, which will be used to identify the groundwater levels throughout the Basin, including wells in which water supply reliability may be impacted by decreasing groundwater levels. Throughout the upcoming five years, Watermaster will maintain records on existing and proposed water system interconnections, water levels in production wells, and Producer plans to develop new sources of supply in anticipation of a prolonged drought.

Watermaster has been advised that Producers propose to construct four new wells and two treatment plants during the next five years. Watermaster will continue providing the following services to assist Producers in meeting water demand:

- Investigate all new or increased water extractions.
- Provide computer modeling and technical support on treatment issues concerning the impact of extractions on contaminant migration.
- Prioritize areas requiring further investigation, and coordinate with Producers on water supply modifications.
- Direct changes in pumping or treatment as necessary.

WATER QUALITY PROTECTION PLAN

Watermaster's Water Quality Protection Plan provides early warning to Producers before their wells are found to exceed drinking water quality standards. The Plan also contains pre-analyzed suggestions to the Producers for responding to the presence of contaminants.

LANDFILL INSPECTIONS

Watermaster routinely conducts on-site inspections of area landfills to ensure they are operated in a way that does not allow contaminants to seep into the groundwater. Watermaster reports any violations of Waste Discharge Requirements to the Regional Board for enforcement.

IDENTIFY AND REDUCE POTENTIAL SOURCES OF CONTAMINATION, COOPERATE WITH THE REGIONAL WATER QUALITY CONTROL BOARD

Since 1993, Watermaster has obtained information from the Regional Board about sources of VOC contamination in the Basin as part of the Regional Board's investigations of potential contaminated sites. The information includes a description of all potential sources of contamination investigated by the Regional Board, including:

- Maps showing the location of all investigation sites.
- Available cause-and-effect relationships between pollution sources and contaminated wells.
- Plans and tentative schedules to abate the source of pollution and to clean up the soil and water.

Watermaster has reviewed a large amount of information gathered in Regional Board files and entered it into a database. This information is used in Watermaster's Section 28 process to help evaluate changes in pumping practices in relation to known contamination sources.

AQUIFER PERFORMANCE TESTS

Watermaster has developed a groundwater flow model for the entire Basin that assists in evaluating the potential impacts of changes in groundwater production. Although Watermaster completed its three-year Aquifer Performance Test investigation, additional tests will be conducted as required for Section 28 applications or for other needs. A tabulation of potential Aquifer Performance Test investigation sites is included in Appendix D. The sites identified include a pumping well and at least one monitoring well. The tests provide information on the characteristics of the aquifer, such as transmissivity, hydraulic conductivity, and coefficient of storage. The information gathered on aquifer characteristics will support cleanup activities, including groundwater model development and calibration (see Appendix D).

DIRECTORY TO APPENDICES

The Following Appendices Are Found in This Section:

A. Projected Groundwater Demands from 2018–19 to 2022–23

B. Simulated Changes in Groundwater Elevations at Wells or Wellfields in Main San Gabriel Basin

C. Highlights of Volatile Organic Compounds and Nitrate Concentrations and Wells Vulnerable to Contamination

D. Potential Sites for Aquifer Performance Tests

E. Summary of Treatment Facility Activity in the Main San Gabriel Basin

F. Simulated Basin Groundwater Contours 2017–18 and 2022–23 (Figures 14 and 15),

   Simulated Groundwater Elevation Changes Between FY 2017–18 and FY 2022–23 (Figure 16),

   VOC Plume Map in BPOU and Perchlorate Plume Map in BPOU (Figures 17 and 18)

APPENDIX A.

Projected Groundwater Demands from 2018–19 to 2022–23

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
ADAMS RANCH MUTUAL WATER COMPANY (CALIFORNIA AMERICAN WATER COMPANY)									
1902106	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902689	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000182	3	379	235	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
ALHAMBRA, CITY OF (2)									
1900010	MOELR (8)	3,387	2,100	996.69	1,014.23	1,052.09	1,066.67	1,081.54	1,096.42
1900011	9	798	495	11.25	11.45	11.88	12.04	12.21	12.38
1900012	10	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900013	12	807	500	13.48	13.72	14.23	14.43	14.63	14.83
1900014	13	1,048	650	267.15	271.85	282.00	285.91	289.89	293.88
1900015	14	1,532	950	1,214.70	1,236.07	1,282.22	1,299.98	1,318.11	1,336.24
1900016	15	1,774	1,100	1,312.30	1,335.39	1,385.24	1,404.43	1,424.02	1,443.61
1900017	2 LON	1,589	985	1,660.25	1,689.46	1,752.53	1,776.81	1,801.59	1,826.37
1900018	GARF	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902789	1 LON	1,613	1,000	1,063.75	1,082.47	1,122.88	1,138.43	1,154.31	1,170.19
1903014	11	1,032	640	93.72	95.37	98.93	100.30	101.70	103.10
1903097	7	1,250	775	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		14,832	9,195	6,633.29	6,750.00	7,002.00	7,099.00	7,198.00	7,297.00
AMARILLO MUTUAL WATER COMPANY (SAN GABRIEL VALLEY WATER COMPANY) (2)									
1900791	SOUTH (1)	644	399	185.78	393.75	401.62	409.65	417.84	426.20
1900792	NORTH (2)	424	263	149.74	0.77	0.77	0.77	0.77	0.77
SUBTOTAL:		1,068	662	335.52	394.52	402.39	410.42	418.61	426.97
ANDERSON, RAY L. AND HELEN									
8000085	NA	18	11	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		18	11	0.00	0.00	0.00	0.00	0.00	0.00
ARCADIA, CITY OF (2)									
1901013	1 LON	1,613	1,000	23.47	123.00	120.00	118.00	116.00	113.00
1901014	2 LON	1,613	1,000	0.00	0.00	0.00	0.00	0.00	0.00
1901015	1 BAL	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902077	1 CAM	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902078	2 CAM	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902084	2 LGY	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902358	1 STJ	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902791	2 BAL	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902854	1 PEC	5,968	3,700	4,125.65	4,045.00	3,965.00	3,888.00	3,811.00	3,737.00
8000127	1 LO	6,613	4,100	2,179.75	2,137.00	2,095.00	2,054.00	2,014.00	1,974.00
8000177	2 STJ	1,452	900	0.00	0.00	0.00	0.00	0.00	0.00
8000213	3 CAM	4,355	2,700	4,136.01	4,055.00	3,975.00	3,897.00	3,821.00	3,746.00
8000214	3 LGY	2,903	1,800	1,634.95	1,603.00	1,571.00	1,541.00	1,510.00	1,481.00
SUBTOTAL:		24,518	15,200	12,099.83	11,963.00	11,726.00	11,498.00	11,272.00	11,051.00
ARCADIA RECLAMATION									
8000229	NA	NA	NA	36.43	50.00	50.00	50.00	50.00	50.00
SUBTOTAL:		NA	NA	36.43	50.00	50.00	50.00	50.00	50.00
ATTALLA, MARY L.									
8000119	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
AZUSA, CITY OF (AZUSA AGRICULTURAL WATER COMPANY, AZUSA VALLEY WATER COMPANY) (2)									
1902533	5 (1)	1,613	1,000	390.10	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
1902535	6 (3)	4,839	3,000	412.86	550.00	550.00	550.00	550.00	550.00
1902536	GENESIS 1 (4)	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902537	GENESIS 2 (5)	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902538	GENESIS 3 (6)	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000072	1 (7)	4,839	3,000	1,897.44	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
8000086	3 (8)	4,678	2,900	3,580.07	2,380.00	2,380.00	2,380.00	2,380.00	2,380.00
1902457	2 (1 NORTH)	3,226	2,000	1,090.41	1,370.00	1,370.00	1,370.00	1,370.00	1,370.00
1902458	4 (2 SOUTH)	4,516	2,800	1,174.30	2,160.00	2,160.00	2,160.00	2,160.00	2,160.00
1902113	AVWC 1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902114	AVCW 2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902115	8 (AVWC 4)	3,065	1,900	432.50	300.00	300.00	300.00	300.00	300.00
1902116	7 (AVWC 5)	1,613	1,000	755.79	550.00	550.00	550.00	550.00	550.00
1902117	9 (AVWC 6)	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902425	AVWC 7	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000103	10 (AVWC 8)	4,194	2,600	73.94	70.00	70.00	70.00	70.00	70.00
8000178	11	2,581	1,600	1,712.84	1,600.00	1,600.00	1,600.00	1,600.00	1,600.00
8000179	12	2,420	1,500	1,685.18	1,450.00	1,450.00	1,450.00	1,450.00	1,450.00
1903119	VULCAN	NA	NA	112.76	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		13,872	8,600	13,318.19	13,130.00	13,130.00	13,130.00	13,130.00	13,130.00
AZUSA ASSOCIATES LLC (COVELL, ET AL)									
1900390	DALTON	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
B & B RED-I-MIX CONCRETE INC.									
1902589	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
BANKS, GALE & VICKI (1)									
1900415	NA	560	347	31.42	32.00	32.00	32.00	32.00	32.00
SUBTOTAL		560	347	31.42	32.00	32.00	32.00	32.00	32.00
BASELINE WATER COMPANY									
1901200	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901201	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901202	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
BEVERLY ACRES MUTUAL									
8000004	ROSE HILLS	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
BIRENBAUM, MAX									
8000005	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
BROOKS, GIFFORD JR.									
1902144	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
BURBANK DEVELOPMENT COMPANY									
1900093	BURB	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
CALIFORNIA-AMERICAN WATER COMPANY/DUARTE SYSTEM (2)									
1900354	STA FE	1,694	1,050	222.14	254.61	255.39	256.18	256.92	257.71
1900355	B V	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900356	MT AVE	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900357	LAS L	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900358	FISH C	484	300	0.00	0.00	0.00	0.00	0.00	0.00
1902907	WILEY	2,420	1,500	1,309.33	1,500.72	1,505.34	1,509.95	1,514.34	1,518.96
1903018	CR HV	2,097	1,300	1,952.07	2,237.41	2,244.29	2,251.17	2,257.72	2,264.60
8000139	ENCTO	2,903	1,800	1,210.97	1,387.98	1,392.25	1,396.52	1,400.58	1,404.85
8000140	LASL 2	2,258	1,400	716.54	821.28	823.81	826.33	828.73	831.26
1900497	BACON	484	300	2.78	3.19	3.20	3.21	3.22	3.23
8000216	B V 2	3,549	2,200	545.99	625.80	627.72	629.65	631.48	633.40
SUBTOTAL:		15,888	9,850	5,959.82	6,831.00	6,852.00	6,873.00	6,893.00	6,914.00
CALIFORNIA-AMERICAN WATER COMPANY/SAN MARINO SYSTEM (2)									
1900917	HALL	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900918	GUESS	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900919	MISVW	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900920	MISVW	1,774	1,100	0.00	0.00	0.00	0.00	0.00	0.00
1900921	RIC-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900922	RIC-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900923	IVR-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900924	MAR-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900925	MAR-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900926	GRAND	1,532	950	789.65	1,828.49	1,834.03	1,839.57	1,845.12	1,850.66
1900927	ROSE	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900934	ROAN	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900935	LONG	1,548	960	0.00	63.89	64.08	64.27	64.47	64.66
1901441	BR-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902424	HOWL	968	600	570.49	827.08	829.59	832.10	834.60	837.11
1902787	BR-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902867	IVR-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903019	MAR-3	1,936	1,200	915.10	934.31	937.14	939.97	942.80	945.63
1903059	DELMAR	1,613	1,000	1,145.05	690.99	693.08	695.18	697.27	699.37
8000175	HALL-2	1,936	1,200	1,184.13	1,121.11	1,124.51	1,127.91	1,131.30	1,134.70
8000222	RIC-3	2,581	1,600	2,166.90	3,773.13	3,784.57	3,796.00	3,807.44	3,818.87
8000182	ADA-3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		11,307	8,610	6,771.32	9,239.00	9,267.00	9,295.00	9,323.00	9,351.00
CALIFORNIA COUNTRY CLUB (1)									
1902529	CLUB	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902531	ARTES	1,129	700	0.00	0.00	0.00	0.00	0.00	0.00
1903084	SYC	1,290	800	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		2,420	1,500	0.00	0.00	0.00	0.00	0.00	0.00
CALIFORNIA DOMESTIC WATER COMPANY (2)									
1901181	2	5,404	3,350	2,894.76	2,718.29	3,126.03	3,126.03	3,493.00	3,493.00
1901182	1-E	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901183	5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901185	13-N	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902967	6	6,452	4,000	1,898.60	1,782.86	2,050.28	2,050.28	2,290.97	2,290.97
1903057	3	7,259	4,500	6,427.92	6,036.06	6,941.46	6,941.46	7,756.33	7,756.33
1903081	8	4,839	3,000	3,439.30	3,229.63	3,714.08	3,714.08	4,150.08	4,150.08
8000100	5A	6,452	4,000	5,158.20	4,843.74	5,570.30	5,570.30	6,224.21	6,224.21
8000174	14	4,516	2,800	0.00	0.00	0.00	0.00	0.00	0.00
8000223	10	8,065	5,000	1,479.63	1,389.43	1,597.84	1,597.84	1,785.41	1,785.41
1900092	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		42,986	26,650	21,298.41	20,000.00	23,000.00	23,000.00	25,700.00	25,700.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
CARRIER CORPORATION (1)									
--	--	--	--	22.44	30.00	30.00	30.00	30.00	30.00
SUBTOTAL:		--	--	22.44	30.00	30.00	30.00	30.00	30.00
CEDAR AVENUE MUTUAL WATER COMPANY									
1901411	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902783	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		0	0	0.00	0.00	0.00	0.00	0.00	0.00
CEMEX CONSTRUCTION MATERIALS L.P. (AZ-TWO INC.)									
1900038	2	2,305	1,429	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		2,305	1,429	0.00	0.00	0.00	0.00	0.00	0.00
CHAMPION MUTUAL WATER COMPANY (SAN GABRIEL VALLEY WATER COMPANY)									
1900908	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902816	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000121	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		0	0	0.00	0.00	0.00	0.00	0.00	0.00
CHEVRON USA									
1900250	TEMP1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
CITRUS VALLEY MEDICAL CENTER, QUEEN OF THE VALLEY CAMPUS (QUEEN OF THE VALLEY HOSPITAL) (1)									
8000138	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
CLAYTON MANUFACTURING COMPANY									
1901055	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000170	MW-4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
COINER, JAMES W., DBA COINER NURSERY (WOODLAND FARMS INC.) (1)									
1902951	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903072	5R	NA	NA	12.40	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	12.40	0.00	0.00	0.00	0.00	0.00
COLLISON, E.O.									
1902968	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
CORCORAN BROS.									
1902814	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
COUNTY SANITATION DISTRICT NO. 18 (1)									
8000008	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000009	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000104	LE 1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000105	LE 2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000106	LE 3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000107	LE 4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000128	EO8A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000129	E09A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000130	E10A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000131	E11A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000141	EX1	NA	NA	0.30	0.26	0.26	0.26	0.26	0.26
8000142	EX2	NA	NA	0.02	0.02	0.02	0.02	0.02	0.02
8000143	EX3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000144	EX4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000153	E16A	NA	NA	0.56	0.49	0.49	0.49	0.49	0.49
8000154	E17A	NA	NA	3.68	3.23	3.23	3.23	3.23	3.23
8000155	E18A	NA	NA	0.60	0.53	0.53	0.53	0.53	0.53
8000156	E19A	NA	NA	0.92	0.81	0.81	0.81	0.81	0.81
8000173	E20A	NA	NA	0.80	0.70	0.70	0.70	0.70	0.70
8000161	E01R	NA	NA	0.12	0.11	0.11	0.11	0.11	0.11
8000162	E03R	NA	NA	0.04	0.04	0.04	0.04	0.04	0.04
8000163	E05R	NA	NA	0.55	0.48	0.48	0.48	0.48	0.48
8000164	E07R	NA	NA	0.96	0.84	0.84	0.84	0.84	0.84
8000165	E02R	NA	NA	1.32	1.16	1.16	1.16	1.16	1.16
8000166	E04R	NA	NA	0.30	0.26	0.26	0.26	0.26	0.26
8000167	E06R	NA	NA	0.16	0.14	0.14	0.14	0.14	0.14
8000168	E08R	NA	NA	0.43	0.38	0.38	0.38	0.38	0.38
NA	WRP FL E	NA	NA	103.18	90.56	90.56	90.56	90.56	90.56
SUBTOTAL:		NA	NA	113.94	100.00	100.00	100.00	100.00	100.00
COVINA, CITY OF									
1901685	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901686	2	968	600	0.00	0.00	0.00	0.00	0.00	0.00
1901687	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		968	600	0.00	0.00	0.00	0.00	0.00	0.00
COVINA IRRIGATING COMPANY (2)									
1900881	CONTR	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900882	3 BAL	2,903	1,800	0.00	1,000.00	1,200.00	1,300.00	1,600.00	1,800.00
1900883	2 BAL	2,581	1,600	0.00	750.00	1,000.00	1,200.00	1,200.00	1,600.00
1900885	1 BAL	2,097	1,300	0.00	800.00	1,000.00	1,200.00	1,600.00	1,600.00
1900880	VALEN	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		7,581	4,700	0.00	2,550.00	3,200.00	3,700.00	4,400.00	5,000.00
CREVOLIN, A.J.									
8000011	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
CROWN CITY PLATING COMPANY									
8000012	01	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
DAVIDSON OPTRONICS INC.									
8000013	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
DAWES, MARY K.									
1902952	04	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
DEFALCO, JOHN & CAROLE									
8000194	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
DEL RIO MUTUAL WATER COMPANY (1)									
1900331	BURKE	261	162	111.00	100.00	100.00	100.00	100.00	100.00
1900332	KLING	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		261	162	111.00	100.00	100.00	100.00	100.00	100.00
DRIFTWOOD DAIRY									
1902924	01	298	185	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		298	185	0.00	0.00	0.00	0.00	0.00	0.00
DUNNING, GEORGE									
1900091	1910	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
EAST PASADENA WATER COMPANY, LTD. (2)									
1901508	9	2,420	1,500	272.11	168.10	159.34	159.42	159.50	159.58
8000217	11	2,420	1,500	1,298.26	1,339.04	1,269.25	1,269.89	1,270.53	1,271.16
SUBTOTAL:		4,839	3,000	1,570.37	1,507.14	1,428.59	1,429.31	1,430.03	1,430.74
EL MONTE, CITY OF (1)									
1901692	2A	1,532	950	856.10	767.01	767.01	767.01	767.01	767.01
1901693	3	807	500	0.00	0.00	0.00	0.00	0.00	0.00
1901694	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901695	5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901699	10	2,420	1,500	1,039.60	931.41	931.41	931.41	931.41	931.41
1901700	11	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902612	MT VW	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903137	12	3,468	2,150	298.50	267.44	267.44	267.44	267.44	267.44
8000066	--	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000101	13	4,678	2,900	155.31	139.15	139.15	139.15	139.15	139.15
SUBTOTAL:		12,904	8,000	2,349.51	2,105.00	2,105.00	2,105.00	2,105.00	2,105.00
EL MONTE CEMETERY ASSOCIATION									
8000017	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
FRUIT STREET WATER COMPANY									
1901199	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
GATES, JAMES RICHARD (1)									
8000215	NA	NA	NA	0.83	5.00	5.00	5.00	5.00	5.00
SUBTOTAL:		NA	NA	0.83	5.00	5.00	5.00	5.00	5.00
GLENDORA, CITY OF (1)									
1900826	11-E	1,452	900	36.10	36.11	36.11	36.11	36.11	36.11
1900827	12-G	3,226	2,000	3,809.98	3,810.51	3,810.51	3,810.51	3,810.51	3,810.51
1900828	10-E	1,048	650	29.62	29.62	29.62	29.62	29.62	29.62
1900829	8-E	2,742	1,700	2,029.70	2,029.98	2,029.98	2,029.98	2,029.98	2,029.98
1900830	9-E	2,742	1,700	1,996.49	1,996.77	1,996.77	1,996.77	1,996.77	1,996.77
1900831	7-G	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901523	1-E	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901524	4-E	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901525	3-G	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901526	2-E	807	500	238.01	238.04	238.04	238.04	238.04	238.04
8000003	--	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000149	5-E	2,903	1,800	1,959.38	1,959.65	1,959.65	1,959.65	1,959.65	1,959.65
8000184	13-E	1,290	800	699.22	699.32	699.32	699.32	699.32	699.32
SUBTOTAL:		16,211	10,050	10,798.50	10,800.00	10,800.00	10,800.00	10,800.00	10,800.00
GOEDERT, LILLIAN									
8000027	GOEDERT	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN DIMAS DISTRICT (3)									
1902148	BAS-3	968	600	445.99	626.06	656.56	659.02	661.48	663.94
1902149	BAS-4	1,210	750	0.00	0.00	0.00	0.00	0.00	0.00
1902150	HIGHWAY	1,129	700	669.67	940.05	985.84	989.54	993.24	996.93
1902151	ART-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902152	ART-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902154	L H-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902266	COL-1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902267	COL-2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902268	COL-4	726	450	19.34	27.15	28.47	28.58	28.68	28.79
1902269	COL-5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902270	COL-6	686	425	0.00	0.00	0.00	0.00	0.00	0.00
1902271	COL-7	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902272	COL-8	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902286	CITY	323	200	173.52	243.58	255.44	256.40	257.36	258.32
1902842	ART-3	403	250	3.63	5.10	5.34	5.36	5.38	5.40
1902287	MALON	605	375	431.18	605.27	634.75	637.13	639.51	641.89
8000212	HIGHWAY 2	1,613	1,000	792.45	1,112.40	1,166.59	1,170.97	1,175.34	1,179.72
SUBTOTAL:		7,662	4,750	2,535.78	3,559.60	3,733.00	3,747.00	3,761.00	3,775.00
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN GABRIEL DISTRICT (3)									
1900510	1 S G	1,774	1,100	1,119.21	1,321.22	1,379.58	1,384.57	1,389.57	1,394.56
1900511	2 S G	1,452	900	383.02	452.15	472.12	473.83	475.54	477.25
1900512	2 GAR	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900513	1 GAR	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900514	3 SAX	565	350	258.00	304.57	318.02	319.17	320.32	321.47
1900515	1 SAX	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000146	4 SAX	1,532	950	1.21	1.43	1.49	1.50	1.50	1.51
1902144	1 EAR	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902017	1 JEF	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902018	2 JEF	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902019	3 JEF	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902020	1 AZU	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902024	1 ENC	1,936	1,200	713.81	842.65	879.87	883.05	886.24	889.42
1902027	1 PER	697	432	101.72	120.08	125.38	125.84	126.29	126.75
1902030	1 GRA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902031	2 GID	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902032	1 GID	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902034	1 FAR	1,936	1,200	167.11	197.27	205.99	206.73	207.48	208.22
1902035	2 ENC	968	600	616.96	728.32	760.49	763.24	765.99	768.75
1902461	2 GRA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902948	2 FAR	1,210	750	75.63	89.28	93.22	93.56	93.90	94.24
8000073	3 ENC	1,048	650	636.88	751.83	785.04	787.88	790.72	793.57
8000111	4 JEF	2,097	1,300	692.87	817.93	854.06	857.15	860.24	863.33
8000221	3 GAR			656.92	775.49	809.74	812.67	815.61	818.54
SUBTOTAL:		9,891	6,132	5,423.34	6,402.20	6,685.00	6,709.20	6,733.40	6,757.60

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
GOULD ELECTRONICS INC. AND JOHNSON CONTROLS INC. (1)									
	SEW	NA	NA	34.26	32.65	32.65	32.65	32.65	32.65
	DEW	NA	NA	884.77	843.14	843.14	843.14	843.14	843.14
SUBTOTAL:		NA	NA	919.03	875.79	875.79	875.79	875.79	875.79
GREEN, WALTER									
8000027	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000028	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
HANSEN, ALICE									
8000029	2946	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
HANSON AGGREGATES WEST, INC. (LIVINGSTON-GRAHAM) (1)									
1900961	1 DUA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900963	1 KIN	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901492	1 EL	3,302	2,047	98.81	89.53	89.53	89.53	89.53	89.53
1901493	3 EL	4,563	2,829	121.92	110.47	110.47	110.47	110.47	110.47
1903006	4 EL	356	221	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		8,221	5,097	220.73	200.00	200.00	200.00	200.00	200.00
HARTLEY, DAVID									
8000029	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
HEMLOCK MUTUAL WATER COMPANY (1)									
1901178	NORTH	219	136	27.08	26.21	26.21	26.21	26.21	26.21
1902806	SOUTH	516	320	44.74	43.30	43.30	43.30	43.30	43.30
SUBTOTAL:		736	456	71.82	69.51	69.51	69.51	69.51	69.51
HERMETIC SEAL CORPORATION (1)									
--	--	NA	NA	53.21	49.72	49.72	49.72	49.72	49.72
SUBTOTAL:		NA	NA	53.21	49.72	49.72	49.72	49.72	49.72
INDUSTRY WATERWORKS SYSTEM, CITY OF (2)									
1902581	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902582	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902583	5TH AVE	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000078	3	2,420	1,500	0.00	0.00	0.00	0.00	0.00	0.00
8000096	4	3,871	2,400	0.00	0.00	0.00	0.00	0.00	0.00
8000097	5	1,936	1,200	1,671.05	1,920.00	1,920.00	1,920.00	1,920.00	1,920.00
SUBTOTAL:		8,226	5,100	1,671.05	1,920.00	1,920.00	1,920.00	1,920.00	1,920.00
KIYAN, HIDEO									
1902970	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
LA PUENTE VALLEY COUNTY WATER DISTRICT (1)									
1901459	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901460	2	2,016	1,250	186.65	4.00	4.00	4.00	4.00	4.00
1902859	3	2,016	1,250	216.30	4.00	4.00	4.00	4.00	4.00
8000062	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000209	5	4,033	2,500	3,233.75	3,628.00	3,628.00	3,628.00	3,628.00	3,628.00
SUBTOTAL:		8,065	5,000	3,636.70	3,636.00	3,636.00	3,636.00	3,636.00	3,636.00
LA VERNE, CITY OF									
1902322	SNIDO	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
LAKIN, KELLY									
8000158	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
LANDEROS, JOHN									
8000031	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
LOS ANGELES, COUNTY OF (1)									
1902579	1 WHI	2,710	1,680	0.00	0.00	0.00	0.00	0.00	0.00
1902580	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902663	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902664	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902665	5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902666	6	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000070	1 SF	3,349	2,076	917.26	842.40	842.40	842.40	842.40	842.40
8000074	2 SF	458	284	22.24	20.43	20.43	20.43	20.43	20.43
8000088	B RED	174	108	0.00	0.00	0.00	0.00	0.00	0.00
8000089	N LK	1,323	820	0.00	0.00	0.00	0.00	0.00	0.00
8000090	600	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902158	BN PK	2,087	1,294	0.00	0.00	0.00	0.00	0.00	0.00
8000150	3A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	WNOU	NA	NA	3,204.19	2,942.70	2,942.70	2,942.70	2,942.70	2,942.70
SUBTOTAL:		10,101	6,262	4,143.69	3,805.53	3,805.53	3,805.53	3,805.53	3,805.53
LOS FLORES MUTUAL WATER COMPANY									
1902098	1-LO	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
21902098	1-HI	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
LOUCKS, DAVID									
8000032	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
MAECHTLEN, J.J. TRUSTEE									
1902321	OLD60	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902322	SNIDO	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902323	M & N	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
MANNING BROS. ROCK & SAND COMPANY									
1900117	36230	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
MAPLE WATER COMPANY (SUBURBAN WATER SYSTEMS)									
1900042	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000109	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
MARTINEZ, FRANCES MERCY									
8000033	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA									
1900693	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900694	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
MILLERCOORS LLC (MILLER BREWERIES WEST, L.P. /MILLER BREWING COMPANY) (1)									
8000034	--	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000075	2	5,533	3,430	429.44	400.00	400.00	400.00	400.00	400.00
8000076	--	5,533	3,430	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		11,065	6,860	429.44	400.00	400.00	400.00	400.00	400.00
MONROVIA, CITY OF (1)									
1900417	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900418	2	2,742	1,700	7.26	6.95	6.95	6.95	6.95	6.95
1900419	3	2,742	1,700	770.01	736.88	736.88	736.88	736.88	736.88
1900420	4	2,903	1,800	1,962.69	1,878.25	1,878.25	1,878.25	1,878.25	1,878.25
1940104	5	3,871	2,400	2,243.23	2,146.72	2,146.72	2,146.72	2,146.72	2,146.72
8000171	6	3,871	2,400	2,216.86	2,121.48	2,121.48	2,121.48	2,121.48	2,121.48
SUBTOTAL:		16,130	10,000	7,200.05	6,890.29	6,890.29	6,890.29	6,890.29	6,890.29
MONROVIA NURSERY									
1902456	DIV 4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
MONTEREY PARK, CITY OF (2)									
1900453	1	968	600	171.18	246.21	246.21	246.21	246.21	246.21
1900454	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900455	3	968	600	0.00	0.00	0.00	0.00	0.00	0.00
1900456	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900457	5	2,903	1,800	524.66	754.63	754.63	754.63	754.63	754.63
1900458	6	968	600	0.00	0.00	0.00	0.00	0.00	0.00
1902372	7	1,290	800	0.00	0.00	0.00	0.00	0.00	0.00
1902373	8	2,903	1,800	0.00	0.00	0.00	0.00	0.00	0.00
1902690	9	2,903	1,800	8.93	12.84	12.84	12.84	12.84	12.84
1902818	10	2,903	1,800	998.40	1,436.02	1,436.02	1,436.02	1,436.02	1,436.02
1903033	12	3,226	2,000	2,902.34	4,174.51	4,174.51	4,174.51	4,174.51	4,174.51
1903092	14	1,129	700	0.00	0.00	0.00	0.00	0.00	0.00
8000126	FERN	1,613	1,000	329.94	474.56	474.56	474.56	474.56	474.56
8000196	15	3,226	2,000	2,518.36	3,622.22	3,622.22	3,622.22	3,622.22	3,622.22
SUBTOTAL:		25,002	15,500	7,453.81	10,721.00	10,721.00	10,721.00	10,721.00	10,721.00
MOON VALLEY NURSERY OF CALIFORNIA, INC. (1)									
1903072	5R	NA	NA	29.84	50.00	50.00	50.00	50.00	50.00
SUBTOTAL:		NA	NA	29.84	50.00	50.00	50.00	50.00	50.00
MUNOZ, RALPH (1)									
MUNOZ	8000219	NA	NA	2.42	5.00	5.00	5.00	5.00	5.00
SUBTOTAL:		NA	NA	2.42	5.00	5.00	5.00	5.00	5.00
NAMIMATSU FARMS INC.									
1901034	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
NICK TOMOVICH & SON									
8000037	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NO. 17 WALNUT PLACE MUTUAL WATER COMPANY									
8000038	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
OWL ROCK PRODUCTS (ROBERTSON'S READY MIX)									
1900043	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902241	NA	3,205	1,987	0.00	0.00	0.00	0.00	0.00	0.00
1903119	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		3,205	1,987	0.00	0.00	0.00	0.00	0.00	0.00
PARK WATER CO.									
1901307	26-A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000039	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
PICO COUNTY WATER DISTRICT									
8000040	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
POLOPOLUS, ET AL									
1902169	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
RICHWOOD MUTUAL WATER COMPANY									
1901521	1 SOUTH	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901522	2 NORTH	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
ROWLAND WATER DISTRICT (1)									
--	--	NA	NA	30.72	65.00	65.00	65.00	65.00	65.00
SUBTOTAL:		NA	NA	30.72	65.00	65.00	65.00	65.00	65.00
RURBAN HOMES MUTUAL WATER COMPANY (1)									
1900120	1-NORTH	726	450	184.14	164.06	164.06	164.06	164.06	164.06
1900121	2-SOUTH	484	300	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		1,210	750	184.14	164.06	164.06	164.06	164.06	164.06
RUTH, ROY									
8000041	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
S.L.S. & N. INC. (1)									
8000151	NA	NA	NA	28.48	18.16	18.16	18.16	18.16	18.16
SUBTOTAL:		NA	NA	28.48	18.16	18.16	18.16	18.16	18.16
SAN GABRIEL COUNTRY CLUB (1)									
1900547	1	226	140	56.55	65.94	65.94	65.94	65.94	65.94
1902979	2	750	465	200.71	234.06	234.06	234.06	234.06	234.06
SUBTOTAL:		976	605	257.26	300.00	300.00	300.00	300.00	300.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
SAN GABRIEL COUNTY WATER DISTRICT (2)									
1901669	5 BRA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901670	6 BRA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901671	7	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901672	8	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902785	9	1,613	1,000	1,506.76	1,547.91	1,547.91	1,547.91	1,547.91	1,547.91
1902786	10	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000067	11	1,387	860	7.68	7.89	7.89	7.89	7.89	7.89
8000123	12	4,274	2,650	1,368.36	1,405.73	1,405.73	1,405.73	1,405.73	1,405.73
8000133	14	3,871	2,400	1,243.19	1,277.14	1,277.14	1,277.14	1,277.14	1,277.14
8000220	15	3,871	2,400	1,325.15	1,361.34	1,361.34	1,361.34	1,361.34	1,361.34
SUBTOTAL:		15,017	9,310	5,451.14	5,600.00	5,600.00	5,600.00	5,600.00	5,600.00
SAN GABRIEL VALLEY WATER COMPANY (2)									
1900725	G4A	1,519	942	247.29	210.00	260.00	280.00	280.00	280.00
1900733	5A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902635	B1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000112	B5C	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000038	--	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900729	1B	2,471	1,532	14.15	40.00	40.00	40.00	40.00	40.00
1902946	1C	3,268	2,026	1.14	0.00	0.00	0.00	0.00	0.00
8000081	1B4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000082	1B5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000102	1D	3,902	2,419	2,110.46	1,940.00	2,032.00	2,110.00	2,110.00	2,110.00
1900749	2C	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902857	2D	3,653	2,265	1,784.72	1,270.00	1,306.00	1,370.00	1,370.00	1,370.00
8000065	2E	3,758	2,330	4.42	100.00	100.00	100.00	100.00	100.00
1900736	8A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900746	8B	1,887	1,170	7.36	4.00	4.00	4.00	4.00	4.00
1900747	8C	2,420	1,500	1,297.33	1,050.00	1,050.00	1,050.00	1,050.00	1,050.00
1903103	8D	4,370	2,709	1,633.24	1,050.00	1,050.00	1,050.00	1,050.00	1,050.00
8000113	8E	4,412	2,735	29.84	20.00	20.00	20.00	20.00	20.00
1900739	11A	3,574	2,216	1,526.77	1,428.00	1,670.00	1,750.00	1,750.00	1,750.00
1900745	11B	2,894	1,794	13.64	20.00	20.00	20.00	20.00	20.00
1902713	11C	1,665	1,032	124.72	20.00	20.00	20.00	20.00	20.00
8000083	11B7	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902858	B4B	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902947	B4C	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900718	B5A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900719	B5B	4,624	2,867	4,364.97	5,646.00	5,646.00	5,646.00	5,646.00	5,646.00
1900721	B6B	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903093	B6C	3,268	2,026	0.00	0.00	0.00	0.00	0.00	0.00
8000084	B6B2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000098	B6D	3,184	1,974	0.45	0.00	0.00	0.00	0.00	0.00
1902525	B2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000122	B7E	807	500	112.40	50.00	110.00	110.00	110.00	110.00
1901435	B7A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901436	B8	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901437	B9	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901439	B11A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901440	B7B	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000068	B7C	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000094	B7D	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000099	B9B	1,079	669	248.63	50.00	110.00	110.00	110.00	110.00
8000108	B11B	3,371	2,090	1,313.29	1,215.00	1,365.00	1,460.00	1,460.00	1,460.00
8000172	1E	4,666	2,893	711.78	787.00	867.00	1,035.00	1,035.00	1,035.00
8000160	B5D	3,755	2,328	148.33	100.00	100.00	100.00	100.00	100.00
8000169	8F	4,983	3,089	110.69	20.00	20.00	20.00	20.00	20.00
NA	G4B	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	1F	NA	NA	0.00	20.00	50.00	50.00	50.00	50.00
8000197	2F	NA	1,887	1,033.64	120.00	120.00	120.00	120.00	120.00
NA	B11C	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000203	B24A	3,992	2,475	298.99	50.00	100.00	100.00	100.00	100.00
8000204	B24B	3,763	2,333	22.76	50.00	50.00	50.00	50.00	50.00
8000187	B25A	3,041	1,885	3,920.79	4,033.00	4,033.00	4,033.00	4,033.00	4,033.00
8000188	B25B	4,589	2,845	3,839.58	4,033.00	4,033.00	4,033.00	4,033.00	4,033.00
8000189	B26A	1,195	741	1,103.47	1,210.00	1,210.00	1,210.00	1,210.00	1,210.00
8000190	B26B	2,197	1,362	1,845.12	1,210.00	1,210.00	1,210.00	1,210.00	1,210.00
8000205	B5E	5,212	3,231	3,218.68	5,646.00	5,646.00	5,646.00	5,646.00	5,646.00
NA	11D	NA	NA	0.00	20.00	50.00	50.00	50.00	50.00
NA	B24C	NA	NA	0.00	20.00	20.00	20.00	20.00	20.00
NA	B24D	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		93,519	59,865	31,088.65	31,432.00	32,312.00	32,817.00	32,817.00	32,817.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
SLOAN RANCHES									
1901198	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000045	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SIERRA LA VERNE COUNTRY CLUB (1)									
8000124	1	NA	NA	0.00	4.25	4.25	4.25	4.25	4.25
8000125	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000192	15 OFFSITE	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	4.25	4.25	4.25	4.25	4.25
SIERRA MADRE, CITY OF (1)									
8000193	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SONOCO PRODUCTS COMPANY (1)									
1912786	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902971	2	NA	NA	71.56	70.49	70.49	70.49	70.49	70.49
8000137	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	71.56	70.49	70.49	70.49	70.49	70.49
SOUTH COVINA WATER SERVICE									
1901606	102	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SOUTH PASADENA, CITY OF (2)									
1901679	GRAV 2	1,137	705	0.00	0.00	0.00	130.00	130.00	130.00
1901681	2 WIL	1,936	1,200	0.00	0.00	0.00	0.00	0.00	0.00
1901682	3 WIL	3,161	1,960	1,984.91	2,495.95	2,495.95	2,495.95	2,495.95	2,495.95
1903086	4 WIL	1,774	1,100	635.45	799.05	799.05	799.05	799.05	799.05
SUBTOTAL:		8,009	4,965	2,620.36	3,295.00	3,295.00	3,425.00	3,425.00	3,425.00
SOUTHERN CALIFORNIA EDISON COMPANY (1)									
1900342	1EB86	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900343	2EB76	211	131	0.00	0.00	0.00	0.00	0.00	0.00
8000046	110RH	NA	NA	0.27	0.60	0.60	0.60	0.60	0.60
8000047	MURAT	2,420	1,500	0.00	0.00	0.00	0.00	0.00	0.00
11900344	38EIS	1,415	877	0.00	0.00	0.00	0.00	0.00	0.00
21900344	38W	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		4,045	2,508	0.27	0.60	0.60	0.60	0.60	0.60

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
STERLING MUTUAL WATER COMPANY (1)									
1902085	SOUTH	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902096	NORTH	397	246	44.12	40.21	40.21	40.21	40.21	40.21
8000132	NEW SO	436	270	61.36	55.92	55.92	55.92	55.92	55.92
SUBTOTAL:		832	516	105.48	96.13	96.13	96.13	96.13	96.13
SUBURBAN WATER SYSTEMS (2)									
1900337	152W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901429	201W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901430	201W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901431	201W3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901432	201W5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901433	201W4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901434	201W6	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901596	147W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901597	142W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901598	139W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901599	139W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901600	139W3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901602	140W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901604	148W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901608	105W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901609	106W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901610	111W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901611	112W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901612	113W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901613	114W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901614	117W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901615	120W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901616	122W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901617	123W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901618	124W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901619	125W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901620	126W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901621	131W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901622	133W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901623	134W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901624	135W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901625	136W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901627	202W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902119	149W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902519	150W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902760	147W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902761	153W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902762	154W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902763	157W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903067	140W3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000069	139W4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000077	147W3	1,936	1,200	19.87	17.34	17.34	17.34	17.34	17.34
8000087	125W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000092	126W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000093	140W4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000145	140W5	4,516	2,800	1,009.75	881.23	881.23	881.23	881.23	881.23
8000095	139W5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000152	139W6	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902518	151W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902819	155W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902820	155W2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901605	101W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901607	103W1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000181	121W1	2,742	1,700	1,565.24	1,366.02	1,366.02	1,366.02	1,366.02	1,366.02
8000183	142W2	4,033	2,500	4,025.25	3,512.92	3,512.92	3,512.92	3,512.92	3,512.92
8000195	201W7	4,839	3,000	5,339.11	4,659.56	4,659.56	4,659.56	4,659.56	4,659.56
8000198	201W8	4,516	2,800	1,835.62	1,601.99	1,601.99	1,601.99	1,601.99	1,601.99
8000207	151W2	5,162	3,200	4,286.03	3,740.51	3,740.51	3,740.51	3,740.51	3,740.51
8000208	201W9	5,162	3,200	3,707.73	3,235.82	3,235.82	3,235.82	3,235.82	3,235.82
8000210	201W10	5,807	3,600	414.07	361.37	361.37	361.37	361.37	361.37
SUBTOTAL:		38,712	24,000	22,202.67	19,376.75	19,376.75	19,376.75	19,376.75	19,376.75

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
SUNNY SLOPE WATER COMPANY (2)									
1900026	8	2,724	1,689	312.19	356.59	356.59	356.59	356.59	356.59
1902792	9	2,710	1,680	103.35	118.05	118.05	118.05	118.05	118.05
8000048	10	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000157	13	2,845	1,764	1,835.49	2,096.53	2,096.53	2,096.53	2,096.53	2,096.53
SUBTOTAL:		8,280	5,133	2,251.03	2,571.17	2,571.17	2,571.17	2,571.17	2,571.17
TEXACO INC.									
1900001	14	519	322	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		519	322	0.00	0.00	0.00	0.00	0.00	0.00
TRAN, HIEU (1)									
TRAN	8000218	NA	NA	4.56	5.00	5.00	5.00	5.00	5.00
SUBTOTAL:		NA	NA	4.56	5.00	5.00	5.00	5.00	5.00
TYLER NURSERY									
8000049	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
UNITED CONCRETE PIPE CORPORATION									
8000067	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
UNITED ROCK PRODUCTS CORPORATION (1)									
1900106	IRW-1	NA	NA	428.80	284.70	284.70	284.70	284.70	284.70
1902532	SIERRA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1903062	IRW-2	NA	NA	23.05	15.30	15.30	15.30	15.30	15.30
SUBTOTAL:		NA	NA	451.85	300.00	300.00	300.00	300.00	300.00
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY									
NA	EW4-3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	EW4-4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	EW4-8	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	EW4-9	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		0	0	0.00	0.00	0.00	0.00	0.00	0.00
VALENCIA HEIGHTS WATER COMPANY (2)									
8000051	1	NA	NA	583.71	0.00	0.00	0.00	0.00	0.00
8000052	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000054	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000055	3A	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000120	5	565	350	0.00	0.00	0.00	0.00	0.00	0.00
8000180	6	1,129	700	0.00	342.86	342.86	342.86	457.14	457.14
8000211	7	1,371	850	0.00	257.14	257.14	257.14	342.86	342.86
SUBTOTAL:		3,065	1,900	583.71	600.00	600.00	600.00	800.00	800.00
VALECITO WATER COMPANY									
1901435	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901436	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901437	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901438	4	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901439	5	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901440	6	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
VALLEY COUNTY WATER DISTRICT (3)									
1900027	E MAIN	3,226	2,000	1,561.22	1,655.25	1,655.25	1,655.25	1,655.25	1,655.25
1900028	W MAIN	1,855	1,150	1,268.64	951.77	951.77	951.77	951.77	951.77
1900029	MORADA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900031	PADDY	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900032	E NIXON (JOAN)	4,194	2,600	1,728.42	2,151.83	2,151.83	2,151.83	2,151.83	2,151.83
1900034	ARROW	NA	3,400	17.71	4,033.00	4,033.00	4,033.00	4,033.00	4,033.00
1900035	B DAL	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901307	11	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902356	W NIXON (JOAN)	3,629	2,250	2,612.80	1,862.16	1,862.16	1,862.16	1,862.16	1,862.16
8000039	PALM	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000060	LANTE (SA1-3)	5,484	3,400	4,301.61	4,033.00	4,033.00	4,033.00	4,033.00	4,033.00
8000185	SA1-1	3,871	2,400	415.08	1,613.00	1,613.00	1,613.00	1,613.00	1,613.00
8000186	SA1-2	0	0	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		22,259	17,200	11,905.48	16,300.00	16,300.00	16,300.00	16,300.00	16,300.00
VALLEY VIEW MUTUAL WATER COMPANY (2)									
1900363	1	310	192	0.00	0.00	0.00	0.00	0.00	0.00
1900364	2	766	475	590.50	511.00	511.00	511.00	511.00	511.00
1900365	3	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		1,076	667	590.50	511.00	511.00	511.00	511.00	511.00
VIA TRUST									
1903012	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
VIETNAMESE AMERICAN BUDDHIST TEMPLE (1)									
8000191	NA	NA	NA	6.37	5.00	5.00	5.00	5.00	5.00
SUBTOTAL		NA	NA	6.37	5.00	5.00	5.00	5.00	5.00
VULCAN MATERIALS COMPANY (CALMAT COMPANY) (1)									
1902920	E DUR	6,386	3,959	0.00	0.00	0.00	0.00	0.00	0.00
1903088	1 REL	4,068	2,522	275.06	250.61	250.61	250.61	250.61	250.61
8000063	W DUR	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
NA	TEMP/NEW PERM	NA	NA	441.55	402.30	402.30	402.30	402.30	402.30
SUBTOTAL:		10,454	6,481	716.61	652.91	652.91	652.91	652.91	652.91
WHITTIER, CITY OF (2)									
1901745	9	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901746	10	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901747	11	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901748	12	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1901749	13	645	400	592.17	695.67	776.65	776.65	776.65	776.65
8000021	FROM	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
8000071	15	2,081	1,290	2,216.90	2,604.37	2,907.55	2,907.55	2,907.55	2,907.55
8000110	16	2,081	1,290	846.88	994.90	1,110.72	1,110.72	1,110.72	1,110.72
8000135	17	6,452	4,000	0.06	0.07	0.08	0.08	0.08	0.08
8000136	18	6,452	4,000	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		17,711	10,980	3,656.01	4,295.00	4,795.00	4,795.00	4,795.00	4,795.00

APPENDIX A

PROJECTED GROUNDWATER DEMANDS FROM 2018-19 TO 2022-23

RECORDATION NUMBER	WELL NAME	WELL CAPACITY		2017-18 PRODUCTION	PROJECTED GROUNDWATER DEMANDS				
		ACRE-FEET	GPM		2018-19	2019-20	2020-21	2021-22	2022-23
WILMOTT, ERMA M.									
8000006	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
WOODLAND, RICHARD									
1902949	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1902950	2	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
WORKMAN MILL INVESTMENT COMPANY (RINCON DITCH COMPANY) (1)									
1902790	4	2,153	1,335	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		2,153	1,335	0.00	0.00	0.00	0.00	0.00	0.00
WORKMAN MILL INVESTMENT COMPANY (RINCON IRRIGATION COMPANY) (1)									
1900132	1	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
1900095	2	1,428	885	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		1,428	885	0.00	0.00	0.00	0.00	0.00	0.00
WORKMAN MILL INVESTMENT COMPANY (ROSE HILLS MEMORIAL PARK) (1)									
1900052	3	1,192	739	0.00	0.00	0.00	0.00	0.00	0.00
1900094	1	673	417	0.00	0.00	0.00	0.00	0.00	0.00
SUBTOTAL:		1,865	1,156	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		**528,074**	**333,473**	**197,460.98**	**209,833.81**	**215,313.33**	**216,413.28**	**219,981.39**	**220,555.65**

NOTES :

GROUNDWATER PRODUCTION AND DEMANDS IN ACRE-FEET
GPM : GALLONS PER MINUTE
NA : NOT AVAILABLE
(1) GROUNDWATER DEMANDS PROJECTED BY WATERMASTER
(2) PROJECTED GROUNDWATER DEMANDS PROVIDED BY PRODUCER
(3) PROJECTED GROUNDWATER DEMANDS PROVIDED BY PRODUCER AND ADJUSTED BY WATERMASTER

APPENDIX B.

SIMULATED CHANGES IN GROUNDWATER ELEVATIONS AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
ADAMS RANCH MUTUAL WATER COMPANY						
01	1902106	Inactive	147.20	120.20	-27.00	
02	1902689	Inactive	147.20	120.20	-27.00	
03	8000182	Inactive	146.70	119.70	-27.00	
ALHAMBRA, CITY OF						
MOEL (08)	1900010	Active	133.00	111.30	-21.70	Projected Groundwater Demands Provided by Producer
09	1900011	Active	136.10	115.20	-20.90	Projected Groundwater Demands Provided by Producer
10	1900012	Inactive	137.00	115.60	-21.40	
12	1900013	Active	136.70	115.80	-20.90	Projected Groundwater Demands Provided by Producer
13	1900014	Inactive	135.90	113.70	-22.20	
14	1900015	Active	132.50	111.20	-21.30	Projected Groundwater Demands Provided by Producer
15	1900016	Active	135.60	111.60	-24.00	Projected Groundwater Demands Provided by Producer
LON 1	1903014	Active	134.80	112.10	-22.70	Projected Groundwater Demands Provided by Producer
LON 2	1900017	Active	123.00	97.40	-25.60	Projected Groundwater Demands Provided by Producer
GARF	1900018	Inactive	138.50	119.90	-18.60	
11	1903014	Active	134.80	112.10	-22.70	Projected Groundwater Demands Provided by Producer
07	1903097	Active	135.10	113.10	-22.00	Projected Groundwater Demands Provided by Producer
AMARILLO MUTUAL WATER COMPANY						
01	1900791	Active	144.60	118.10	-26.50	Projected Groundwater Demands Provided by Producer
02	1900792	Active	144.60	118.10	-26.50	Projected Groundwater Demands Provided by Producer
ARCADIA, CITY OF						
LON 1	1901013	Active	169.10	141.50	-27.60	Projected Groundwater Demands Provided by Producer
LON 2	1901014	Active	169.00	141.50	-27.50	Projected Groundwater Demands Provided by Producer

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
CAM REAL 3	8000213	Active	160.90	136.10	-24.80	Projected Groundwater Demands Provided by Producer
ST JO 2	8000177	Active	170.50	145.30	-25.20	Projected Groundwater Demands Provided by Producer
BAL 2	1902791	Inactive	153.20	128.30	-24.90	
PECK 1	1902854	Active	161.70	135.60	-26.10	Projected Groundwater Demands Provided by Producer
L OAK 1	8000127	Active	165.80	136.80	-29.00	Projected Groundwater Demands Provided by Producer
LGY 3	8000214	Active	153.50	131.90	-21.60	Projected Groundwater Demands Provided by Producer
AZUSA, CITY OF (AZUSA AGRICULTURE WATER COMPANY, AZUSA VALLEY WATER COMPANY)						
05 (01)	1902533	Active	545.20	534.10	-11.10	Projected Groundwater Demands Provided by Producer
06 (03)	1902535	Active	545.60	533.60	-12.00	Projected Groundwater Demands Provided by Producer
GENESIS 2 (05)	1902537	Inactive	195.30	164.80	-30.50	
01 (07)	8000072	Active	546.80	535.30	-11.50	Projected Groundwater Demands Provided by Producer
03 (08)	8000086	Active	546.10	534.90	-11.20	Projected Groundwater Demands Provided by Producer
02 (1 NORTH)	1902457	Active	547.50	536.40	-11.10	Projected Groundwater Demands Provided by Producer
04 (2 SOUTH)	1902458	Active	546.90	535.70	-11.20	Projected Groundwater Demands Provided by Producer
08 (AVWC 04)	1902115	Active	545.60	533.70	-11.90	Projected Groundwater Demands Provided by Producer
07 (AVWC 05)	1902116	Active	545.60	533.40	-12.20	Projected Groundwater Demands Provided by Producer
09 (AVWC 06)	1902117	Inactive	195.70	165.20	-30.50	
10 (AVWC 08)	8000103	Active	195.30	164.80	-30.50	Projected Groundwater Demands Provided by Producer
11	8000178	Active	547.60	536.40	-11.20	Projected Groundwater Demands Provided by Producer
12	8000179	Active	548.20	537.30	-10.90	Projected Groundwater Demands Provided by Producer
CALIFORNIA-AMERICAN WATER COMPANY/DUARTE SYSTEM						
STA FE	1900354	Active	185.50	153.50	-32.00	Projected Groundwater Demands Provided by Producer

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
B V	1900355	Standby	179.60	149.70	-29.90	
B V 2	8000216	Active	179.60	149.70	-29.90	Projected Groundwater Demands Provided by Producer
FISH C	1900358	Standby	548.20	535.80	-12.40	
WILEY	1902907	Active	544.30	528.20	-16.10	Projected Groundwater Demands Provided by Producer
CR HV	1903018	Active	186.90	153.90	-33.00	Projected Groundwater Demands Provided by Producer
ENCANTO	8000139	Active	540.40	526.00	-14.40	Projected Groundwater Demands Provided by Producer
LAS L2	8000140	Active	534.70	520.00	-14.70	Projected Groundwater Demands Provided by Producer
BACON	1900497	Active	536.80	522.60	-14.20	Projected Groundwater Demands Provided by Producer
CALIFORNIA-AMERICAN WATER COMPANY/SAN MARINO SYSTEM						
GUESS	1900918	Inactive	146.60	119.90	-26.70	
MIVW 2	1900920	Active	147.60	122.30	-25.30	Projected Groundwater Demands Provided by Producer
GRAND	1900926	Active	142.00	111.40	-30.60	Projected Groundwater Demands Provided by Producer
ROSEMEAD	1900927	Inactive	141.30	113.90	-27.40	
ROANOKE	1900934	Inactive	136.10	115.90	-20.20	
LONGDEN	1900935	Active	129.00	104.50	-24.50	Projected Groundwater Demands Provided by Producer
HOWLAND	1902424	Active	152.80	125.30	-27.50	Projected Groundwater Demands Provided by Producer
MAR 3	1903019	Active	150.60	124.40	-26.20	Projected Groundwater Demands Provided by Producer
DELMAR	1903059	Active	127.20	105.30	-21.90	Projected Groundwater Demands Provided by Producer
HALL 2	8000175	Active	152.00	128.70	-23.30	Projected Groundwater Demands Provided by Producer
CALIFORNIA COUNTRY CLUB						
ARTES	1902531	Standby	161.50	131.60	-29.90	
SYCAMORE	1903084	Standby	161.50	131.70	-29.80	
CALIFORNIA DOMESTIC WATER COMPANY						

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
02	1901181	Active	161.10	130.30	-30.80	Projected Groundwater Demands Provided by Producer
06	1902967	Active	162.50	132.80	-29.70	Projected Groundwater Demands Provided by Producer
03	1903057	Active	160.40	130.10	-30.30	Projected Groundwater Demands Provided by Producer
08	1903081	Active	160.10	130.20	-29.90	Projected Groundwater Demands Provided by Producer
05A	8000100	Active	161.10	129.70	-31.40	Projected Groundwater Demands Provided by Producer
14	8000174	Active	160.70	130.80	-29.90	Projected Groundwater Demands Provided by Producer
CHAMPION MUTUAL WATER COMPANY						
02	1902816	Inactive	165.70	137.40	-28.30	Impact from SGVWC Extraction
03	8000121	Inactive	165.70	137.40	-28.30	Impact from SGVWC Extraction
CITRUS VALLEY MEDICAL CENTER, QUEEN OF THE VALLEY CAMPUS (QUEEN OF THE VALLEY HOSPITAL)						
NA	8000138	Inactive	177.40	149.20	-28.20	
COINER, JAMES W., DBA COINER NURSERY (WOODLAND FARM INC.)						
03	1902951	Inactive	162.30	131.90	-30.40	
05R	1903072	Active	162.70	132.10	-30.60	Groundwater Demands Projected by Watermaster
COVINA, CITY OF						
01	1901685	Inactive	290.90	252.30	-38.60	
02 (GRAND)	1901686	Inactive	290.90	252.30	-38.60	
COVINA IRRIGATING COMPANY						
BAL 3	1900882	Standby	181.00	150.00	-31.00	
BAL 1	1900885	Standby	181.20	150.20	-31.00	
BAL 2	1900883	Standby	181.10	150.00	-31.10	
CROWN CITY PLATING COMPANY						
01	8000012	Inactive	153.00	125.90	-27.10	
DEL RIO MUTUAL WATER COMPANY						
BURKETT	1900331	Active	160.30	131.00	-29.30	Groundwater Demands Projected by Watermaster
DRIFTWOOD DAIRY						

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
01	1902924	Inactive	160.80	133.70	-27.10	
EAST PASADENA WATER COMPANY, LTD.						
09	1901508	Active	135.00	114.50	-20.50	Projected Groundwater Demands Provided by Producer
11	8000217	Active	135.00	114.50	-20.50	Projected Groundwater Demands Provided by Producer
EL MONTE, CITY OF						
02A	1901692	Active	158.00	130.10	-27.90	Groundwater Demands Projected by Watermaster
03	1901693	Standby	159.80	131.50	-28.30	
04	1901694	Standby	159.20	130.80	-28.40	
10	1901699	Active	159.90	131.60	-28.30	Groundwater Demands Projected by Watermaster
12	1903137	Active	157.20	129.60	-27.60	Groundwater Demands Projected by Watermaster
13	8000101	Active	158.00	130.10	-27.90	Groundwater Demands Projected by Watermaster
GLENDORA, CITY OF						
11-E	1900826	Active	549.90	537.70	-12.20	Groundwater Demands Projected by Watermaster
08-E	1900829	Active	541.20	532.20	-9.00	Groundwater Demands Projected by Watermaster
09-E	1900830	Active	543.30	533.60	-9.70	Groundwater Demands Projected by Watermaster
12-G	1900827	Active	541.20	532.20	-9.00	Groundwater Demands Projected by Watermaster
10-E	1900828	Active	549.10	536.40	-12.70	Groundwater Demands Projected by Watermaster
07-G	1900831	Inactive	195.00	164.50	-30.50	
13-E	8000184	Active	543.00	527.80	-15.20	Groundwater Demands Projected by Watermaster
02-E	1901526	Active	542.70	529.00	-13.70	Groundwater Demands Projected by Watermaster
03-G	1901525	Inactive	193.00	162.50	-30.50	
04-E	1901524	Inactive	193.30	162.90	-30.40	
05-E	8000149	Active	545.50	532.40	-13.10	Groundwater Demands Projected by Watermaster

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN

(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN DIMAS DISTRICT						
BAS-3	1902148	Active	729.30	677.60	-51.70	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
BAS-4	1902149	Active	725.50	674.40	-51.10	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
HIGHWAY	1902150	Active	729.60	677.20	-52.40	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
HIGHWAY 2	8000212	Active	730.20	678.00	-52.20	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
ART-3	1902842	Active	727.40	676.00	-51.40	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
COL-4	1902268	Active	542.50	489.00	-53.50	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
COL-6	1902270	Inactive	543.90	490.40	-53.50	
COL-8	1902272	Inactive	652.10	598.20	-53.90	
CITY	1902286	Active	1083.00	1066.00	-17.00	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
MALON	1902287	Active	1081.00	1063.00	-18.00	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN GABRIEL VALLEY DISTRICT						
S G 1	1900510	Active	139.30	111.00	-28.30	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
S G 2	1900511	Active	139.80	111.70	-28.10	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
SAX 3	1900514	Active	139.60	114.70	-24.90	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
SAX 4	8000146	Active	139.60	114.70	-24.90	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
JEF 1	1902017	Inactive	169.40	141.90	-27.50	
JEF 4	8000111	Active	169.40	141.90	-27.50	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
ENC 1	1902024	Active	145.30	118.20	-27.10	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
ENC 2	1902035	Active	144.90	117.70	-27.20	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
ENC 3	8000073	Active	144.30	117.10	-27.20	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
PER 1	1902027	Active	160.30	133.50	-26.80	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
GRA 2	1902461	Inactive	171.30	144.10	-27.20	
FAR 1	1902034	Active	164.00	136.90	-27.10	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
FAR 2	1902948	Active	163.90	136.80	-27.10	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
GOULD ELECTRONICS INC. AND JOHNSON CONTROLS INC.						
SEW	NA	Active	154.86	127.92	-26.94	Groundwater Demands Projected by Watermaster
DEW	NA	Active	147.37	120.80	-26.57	Groundwater Demands Projected by Watermaster
HANSON AGGREGATES WEST, INC. (LIVINGSTON-GRAHAM)						
EL 4	1903006	Active	172.30	143.80	-28.50	Groundwater Demands Projected by Watermaster
EL 1	1901492	Active	172.40	143.90	-28.50	Groundwater Demands Projected by Watermaster
EL 3	1901493	Active	172.60	144.10	-28.50	Groundwater Demands Projected by Watermaster
HEMLOCK MUTUAL WATER COMPANY						
NORTH	1901178	Active	166.80	138.90	-27.90	Groundwater Demands Projected by Watermaster
SOUTH	1902806	Active	166.70	138.80	-27.90	Groundwater Demands Projected by Watermaster
INDUSTRY WATERWORKS SYSTEM, CITY OF						
01	1902581	Inactive	162.90	132.50	-30.40	
03	8000078	Inactive	162.90	132.50	-30.40	
04	8000096	Inactive	162.70	132.40	-30.30	
02	1902582	Inactive	163.00	132.60	-30.40	
05	8000097	Active	162.70	131.40	-31.30	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
LA PUENTE VALLEY COUNTY WATER DISTRICT						
02	1901460	Active	172.60	144.00	-28.60	BPOU Extraction Well Groundwater Demands Projected by Watermaster
04	8000062	Inactive	172.70	143.70	-29.00	
03	1902859	Active	172.90	144.30	-28.60	BPOU Extraction Well Groundwater Demands Projected by Watermaster

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
05	8000209	Active	172.70	143.70	-29.00	BPOU Extraction Well Groundwater Demands Projected by Watermaster
LOS ANGELES, COUNTY OF						
KEY WELL	3030F	Monitoring	177.60	148.10	-29.50	
WHI 1	1902579	Inactive	153.50	125.80	-27.70	
SF 1	8000070	Active	186.60	155.50	-31.10	Groundwater Demands Projected by Watermaster
BIG RED	8000088	Inactive	155.90	127.90	-28.00	
NEW LAKE	8000089	Inactive	152.70	125.30	-27.40	
MILLERCOORS LLC (MILLER BREWERIES WEST, L.P./MILLER BREWING COMPANY)						
01	8000075	Active	188.20	156.70	-31.50	Groundwater Demands Projected by Watermaster
02	8000076	Inactive	188.50	156.60	-31.90	
MONROVIA, CITY OF						
02	1900418	Active	169.10	141.60	-27.50	Groundwater Demands Projected by Watermaster
03	1900419	Active	168.70	141.30	-27.40	Groundwater Demands Projected by Watermaster
04	1900420	Active	169.90	142.20	-27.70	Groundwater Demands Projected by Watermaster
05	1940104	Active	168.90	141.40	-27.50	Groundwater Demands Projected by Watermaster
06	8000171	Active	168.30	141.00	-27.30	Groundwater Demands Projected by Watermaster
MONTEREY PARK, CITY OF						
01	1900453	Active	142.70	114.80	-27.90	Projected Groundwater Demands Provided by Producer
03	1900455	Inactive	142.70	114.60	-28.10	
05	1900457	Active	141.10	113.10	-28.00	Projected Groundwater Demands Provided by Producer
06	1900458	Inactive	143.10	115.10	-28.00	
07	1902372	Inactive	146.60	118.60	-28.00	
08	1902373	Inactive	147.60	119.70	-27.90	
09	1902690	Active	145.90	117.20	-28.70	Projected Groundwater Demands Provided by Producer

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
10	1902818	Active	139.90	111.20	-28.70	Projected Groundwater Demands Provided by Producer
12	1903033	Active	141.00	111.80	-29.20	Projected Groundwater Demands Provided by Producer
14	1903092	Inactive	146.20	118.20	-28.00	
FERN	8000126	Active	142.70	114.10	-28.60	Projected Groundwater Demands Provided by Producer
15	8000196	Active	141.30	112.80	-28.50	Projected Groundwater Demands Provided by Producer
OWL ROCK PRODUCTS COMPANY						
NA	1902241	Inactive	176.80	147.40	-29.40	
NA	1903119	Inactive	545.90	532.20	-13.70	Impact from Glendora Extraction
POLOPOLUS ET AL.						
01	1902169	Inactive	180.20	150.00	-30.20	
RURBAN HOMES MUTUAL WATER COMPANY						
NORTH 1	1900120	Active	167.00	138.90	-28.10	Groundwater Demands Projected by Watermaster
SOUTH 2	1900121	Inactive	166.90	138.70	-28.20	
SAN GABRIEL COUNTRY CLUB						
01	1900547	Active	128.40	103.90	-24.50	Impact from Alhambra Extraction Groundwater Demands Projected by Watermaster
SAN GABRIEL COUNTY WATER DISTRICT						
05 BRA	1901669	Inactive	138.20	112.70	-25.50	
08	1901672	Inactive	134.60	111.40	-23.20	
09	1902785	Active	130.30	106.20	-24.10	Projected Groundwater Demands Provided by Producer
10	1902786	Inactive	136.70	112.00	-24.70	
11	8000067	Active	138.00	112.60	-25.40	Projected Groundwater Demands Provided by Producer
12	8000123	Active	137.30	111.60	-25.70	Projected Groundwater Demands Provided by Producer
14	8000133	Active	135.70	112.00	-23.70	Projected Groundwater Demands Provided by Producer
15	8000220	Active	125.40	100.40	-25.00	Projected Groundwater Demands Provided by Producer
SAN GABRIEL VALLEY WATER COMPANY						

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
G4A	1900725	Active	144.30	117.70	-26.60	Projected Groundwater Demands Provided by Producer
B1	1902635	Inactive	157.20	129.00	-28.20	
B5A	1900718	Inactive	159.60	128.90	-30.70	
B5B	1900719	Active	159.60	128.90	-30.70	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B5C	8000112	Inactive	161.60	131.30	-30.30	
B5D	8000160	Active	159.60	128.90	-30.70	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B5E	8000205	Active	160.70	129.20	-31.50	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B25A	8000187	Active	165.40	135.90	-29.50	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B25B	8000188	Active	165.40	135.90	-29.50	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B26A	8000189	Active	170.50	141.80	-28.70	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B26B	8000190	Active	170.50	141.80	-28.70	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
8A	1900736	Inactive	149.60	122.80	-26.80	
8B	1900746	Active	148.40	121.80	-26.60	SEMOU Extraction Well Projected Groundwater Demands Provided by Producer
8C	1900747	Active	145.80	120.20	-25.60	SEMOU Extraction Well Projected Groundwater Demands Provided by Producer
8E	8000113	Active	145.80	120.20	-25.60	SEMOU Extraction Well Projected Groundwater Demands Provided by Producer
8D	1903103	Active	145.80	121.10	-24.70	SEMOU Extraction Well Projected Groundwater Demands Provided by Producer
8F	8000169	Active	148.40	121.90	-26.50	SEMOU Extraction Well Projected Groundwater Demands Provided by Producer
1B	1900729	Active	164.60	135.80	-28.80	Projected Groundwater Demands Provided by Producer
1C	1902946	Inactive	164.60	135.80	-28.80	

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
1D	8000102	Active	164.60	135.80	-28.80	Projected Groundwater Demands Provided by Producer
1E	8000172	Active	164.40	135.90	-28.50	Projected Groundwater Demands Provided by Producer
2C	1900749	Destroyed	160.70	134.50	-26.20	
2D	1902857	Active	159.10	133.70	-25.40	Projected Groundwater Demands Provided by Producer
2E	8000065	Active	160.90	134.50	-26.40	Projected Groundwater Demands Provided by Producer
2F	8000197	Active	160.90	134.50	-26.40	Projected Groundwater Demands Provided by Producer
11A	1900739	Active	160.00	130.40	-29.60	Projected Groundwater Demands Provided by Producer
11B	1900745	Active	160.20	130.70	-29.50	Projected Groundwater Demands Provided by Producer
11C	1902713	Active	160.30	130.80	-29.50	Projected Groundwater Demands Provided by Producer
B4B	1902858	Inactive	168.00	139.20	-28.80	
B4C	1902947	Inactive	168.00	139.20	-28.80	
B6C	1903093	Active	172.10	143.70	-28.40	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B6D	8000098	Active	172.10	143.70	-28.40	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B7C	8000068	Destroyed	178.70	153.10	-25.60	
B7E	8000122	Active	178.70	153.10	-25.60	Projected Groundwater Demands Provided by Producer
B2	1902525	Inactive	157.40	129.10	-28.30	
B11A	1901439	Destroyed	175.40	149.00	-26.40	
B11B	8000108	Active	175.20	148.90	-26.30	Projected Groundwater Demands Provided by Producer
B9B	8000099	Active	175.50	149.10	-26.40	Projected Groundwater Demands Provided by Producer
B24A	8000203	Active	179.90	154.50	-25.40	BPOU Extraction Well Projected Groundwater Demands Provided by Producer
B24B	8000204	Active	179.30	153.70	-25.60	BPOU Extraction Well Projected Groundwater Demands Provided by Producer

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
SIERRA LA VERNE COUNTRY CLUB						
01	8000124	Inactive	1085.00	1070.00	-15.00	
SONOCO PRODUCTS COMPANY						
02	1902971	Active	166.90	137.90	-29.00	Groundwater Demands Projected by Watermaster
03	8000137	Active	166.20	137.20	-29.00	Groundwater Demands Projected by Watermaster
SOUTH PASADENA, CITY OF						
GRAV 2	1901679	Active	137.70	118.60	-19.10	Projected Groundwater Demands Provided by Producer
WIL 2	1901681	Inactive	133.30	107.40	-25.90	
WIL 3	1901682	Active	132.80	103.20	-29.60	Projected Groundwater Demands Provided by Producer
WIL 4	1903086	Active	133.20	105.60	-27.60	Projected Groundwater Demands Provided by Producer
SOUTHERN CALIFORNIA EDISON COMPANY						
110RH	8000046	Active	175.00	146.00	-29.00	Groundwater Demands Projected by Watermaster
STERLING MUTUAL WATER COMPANY						
NEW SO.	8000132	Active	164.10	135.60	-28.50	Groundwater Demands Projected by Watermaster
NORTH	1902096	Active	164.10	135.60	-28.50	Groundwater Demands Projected by Watermaster
SUBURBAN WATER SYSTEMS						
121W-1	8000181	Active	180.00	151.30	-28.70	Projected Groundwater Demands Provided by Producer
125W-2	8000087	Inactive	206.80	178.20	-28.60	
126W-2	8000092	Inactive	208.60	179.90	-28.70	
139W-2	1901599	Inactive	177.80	149.00	-28.80	
139W-4	8000069	Standby	177.70	148.90	-28.80	
139W-5	8000095	Inactive	177.60	148.80	-28.80	
139W-6	8000152	Inactive	177.90	149.20	-28.70	
140W-3	1903067	Standby	173.30	145.50	-27.80	
140W-4	8000093	Inactive	173.30	145.50	-27.80	

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
140W-5	8000145	Active	173.20	145.20	-28.00	Projected Groundwater Demands Provided by Producer
142W-2	8000183	Active	177.20	147.90	-29.30	Projected Groundwater Demands Provided by Producer
147W-3	8000077	Active	176.40	150.10	-26.30	Projected Groundwater Demands Provided by Producer
151W-2	8000207	Active	175.30	147.70	-27.60	Projected Groundwater Demands Provided by Producer
155W-1	1902819	Inactive	242.60	227.70	-14.90	
201W-9	8000208	Active	152.30	125.20	-27.10	Projected Groundwater Demands Provided by Producer
201W-4	1901433	Standby	152.40	125.50	-26.90	
201W-7	8000195	Active	150.40	123.90	-26.50	Projected Groundwater Demands Provided by Producer
201W-8	8000198	Active	151.60	125.10	-26.50	Projected Groundwater Demands Provided by Producer
201W-10	8000210	Active	151.80	125.00	-26.80	Projected Groundwater Demands Provided by Producer
SUNNY SLOPE WATER COMPANY						
08	1900026	Active	136.10	111.50	-24.60	Projected Groundwater Demands Provided by Producer
09	1902792	Active	135.80	111.80	-24.00	Projected Groundwater Demands Provided by Producer
10	8000048	Inactive	145.90	122.30	-23.60	
13	8000157	Active	128.90	104.80	-24.10	Projected Groundwater Demands Provided by Producer
TYLER NURSERY						
NA	8000049	Inactive	156.70	128.60	-28.10	
UNITED CONCRETE PIPE CORPORATION						
NA	8000067	Active	138.00	112.60	-25.40	Projected Groundwater Demands Provided by Producer
UNITED ROCK PRODUCTS CORPORATION						
IRW-1	1900106	Active	176.00	147.10	-28.90	Groundwater Demands Projected by Watermaster
IRW-2	1903062	Active	176.10	147.10	-29.00	Groundwater Demands Projected by Watermaster
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY						

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
EW4-3	EPAEW403	Remedial	153.80	126.20	-27.60	WNOU Extraction (Inactive)
EW4-4	EPAEW404	Remedial	153.00	125.70	-27.30	WNOU Extraction (Inactive)
EW4-5	EPAEW405	Remedial	152.40	125.30	-27.10	WNOU Extraction (Active) Groundwater Demands Projected by Watermaster
EW4-9	EPAEW409	Remedial	152.40	125.30	-27.10	WNOU Extraction (Inactive)
EW4-6	8000201	Remedial	150.50	124.40	-26.10	WNOU Extraction (Active) Groundwater Demands Projected by Watermaster
EW4-7	EPAEW407	Remedial	153.10	125.80	-27.30	WNOU Extraction (Active) Groundwater Demands Projected by Watermaster
EW4-8	EPAEW408	Remedial	154.00	126.30	-27.70	WNOU Extraction (Inactive)
VALENCIA HEIGHTS WATER COMPANY						
01	8000051	Inactive	215.30	186.20	-29.10	
02	8000052	Inactive	215.30	186.20	-29.10	
03A	8000055	Inactive	223.40	193.80	-29.60	
04	8000054	Inactive	206.00	176.90	-29.10	
05	8000120	Active	224.40	194.60	-29.80	Projected Groundwater Demands Provided by Producer
06	8000180	Active	215.60	186.40	-29.20	Projected Groundwater Demands Provided by Producer
07	8000211	Active	224.60	194.80	-29.80	Projected Groundwater Demands Provided by Producer
VALLEY COUNTY WATER DISTRICT						
E MAINE	1900027	Active	177.70	147.90	-29.80	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
W MAINE	1900028	Active	177.70	147.90	-29.80	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
MORADA	1900029	Inactive	190.10	159.50	-30.60	
E NIXON (JOAN)	1900032	Active	177.10	147.30	-29.80	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
W NIXON (JOAN)	1902356	Active	176.60	147.30	-29.30	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
ARROW	1900034	Inactive	183.00	150.00	-33.00	BPOU Extraction
LANTE (SA1-3)	8000060	Active	182.30	149.90	-32.40	Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
PALM	8000039	Inactive	175.00	146.00	-29.00	
B DALTON	1900035	Inactive	176.80	147.80	-29.00	

APPENDIX B

SIMULATED CHANGES IN GROUNDWATER ELEVATION AT WELLS OR WELLFIELDS IN MAIN SAN GABRIEL BASIN
(ASSUMES "DRY" HYDROLOGICAL CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT DELIVERIES)

WELL OR WELLFIELD	RECORDATION NUMBER	WELL STATUS	SIMULATED ELEVATION (1)		CHANGE (2) (FEET)	REMARKS
			2017-18	2022-23		
PADDY LN	1900031	Inactive	173.50	144.90	-28.60	
SA1-1	8000185	Active	185.10	153.40	-31.70	BPOU Extraction Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
SA1-2	8000186	Standby	183.40	152.40	-31.00	BPOU Extraction Projected Groundwater Demands Provided by Producer and Adjusted by Watermaster
VALLEY VIEW MUTUAL WATER COMPANY						
01	1900363	Active	174.00	145.10	-28.90	Projected Groundwater Demands Provided by Producer
02	1900364	Active	174.00	145.10	-28.90	Projected Groundwater Demands Provided by Producer
VULCAN MATERIALS COMPANY (CALMAT COMPANY)						
REL 1	1903088	Active	191.00	158.90	-32.10	Groundwater Demands Projected by Watermaster
WHITTIER, CITY OF						
13	1901749	Active	153.20	125.70	-27.50	Projected Groundwater Demands Provided by Producer
15	8000071	Active	153.00	125.10	-27.90	Projected Groundwater Demands Provided by Producer
16	8000110	Active	152.70	125.10	-27.60	Projected Groundwater Demands Provided by Producer
17	8000135	Active	152.90	125.30	-27.60	Projected Groundwater Demands Provided by Producer
18	8000136	Active	152.50	125.20	-27.30	Projected Groundwater Demands Provided by Producer
WORKMAN MILL INVESTMENT COMPANY (RINCON DITCH COMPANY)						
04	1902790	Inactive	153.10	126.30	-26.80	
WORKMAN MILL INVESTMENT COMPANY (RINCON IRRIGATION COMPANY)						
02	1900095	Inactive	153.40	126.30	-27.10	
WORKMAN MILL INVESTMENT COMPANY (ROSE HILLS MEMORIAL PARK)						
03	1900052	Inactive	153.30	126.30	-27.00	
01	1900094	Inactive	153.10	126.40	-26.70	
				AVERAGE CHANGE	**-26.97**	

(1) SIMULATED ELEVATION IN FEET ABOVE MEAN SEA LEVEL
(2) DIFFERENCE BETWEEN 2022-23 AND 2017-18 SIMULATED ELEVATIONS

APPENDIX C.

HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS AND NITRATE CONCENTRATIONS AND WELLS VULNERABLE TO CONTAMINATION

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
ADAMS RANCH MUTUAL WATER COMPANY								
01	MUNICIPAL	INACTIVE	TCE	2.2	05/88	ND	02/97	
			NITRATE (N)	21.9	04/92	8.8	02/97	
			CLO4	NA	NA	NA	NA	
02	MUNICIPAL	INACTIVE	TCE	3.5	08/86	2.5	09/86	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
03	MUNICIPAL	INACTIVE	TCE	22.0	05/15	14.0	02/16	
			PCE	10.0	05/15	6.6	02/16	
			NITRATE (N)	4.7	03/04	5	05/15	
			CLO4	ND	08/08	ND	02/16	
			AS	ND	05/03	ND	05/15	
			CR6	1.1	08/13	1.1	08/13	
ALHAMBRA, CITY OF								
07	MUNICIPAL	ACTIVE	TCE	14.0	04/18	14.0	04/18	VULNERABLE
			PCE	0.8	04/07	0.6	04/18	(VOC,NO3(N))
			C-1,2-DCE	2.0	04/18	2.0	04/18	
			CTC	0.6	02/85	ND	04/18	
			NITRATE (N)	12.0	04/18	12.0	04/18	
			CLO4	2.4	10/07	ND	04/18	
			AS	0.7	07/96	ND	05/17	
			CR6	9.0	07/01	8.3	05/17	
09	MUNICIPAL	STANDBY	TCE	21.1	08/08	12.0	04/18	VULNERABLE
			C-1,2-DCE	2.3	10/07	1.5	04/18	(CLO4,VOC,NO3(N))
			NITRATE (N)	14.0	12/16	13.0	05/17	
			CLO4	4.7	02/14	ND	05/17	
			AS	0.9	07/96	ND	01/17	
			CR6	5.7	12/05	4.7	01/17	
10	IRRIGATION	INACTIVE	TCE	30.1	02/09	22.0	10/10	
			C-1,2-DCE	5.8	03/05	ND	10/10	
			1,1-DCE	0.5	03/05	ND	10/10	
			NITRATE (N)	12.7	01/07	12.4	10/10	
			CLO4	ND	08/97	ND	08/97	
11	MUNICIPAL	ACTIVE	PCE	4.7	05/12	2.6	04/18	VULNERABLE
			TCE	4.2	05/89	0.5	07/17	(VOC,NO3(N))
			C-1,2-DCE	1.5	04/08	ND	07/17	
			NITRATE (N)	10.8	10/12	8.6	04/18	
			CLO4	ND	08/97	ND	04/18	
			AS	0.8	07/96	ND	04/18	
			CR6	7.7	06/01	6.9	04/18	
12	MUNICIPAL	STANDBY	TCE	39.4	08/08	20.0	09/17	VULNERABLE
			PCE	1.7	01/14	1.4	04/18	(NO3(N),VOC)
			C-1,2-DCE	41.0	05/17	26.0	09/17	
			1,1-DCE	0.8	09/08	0.5	04/18	
			T-1,2-DCE	0.9	09/08	0.6	04/18	
			NITRATE (N)	9.5	01/14	6.9	09/17	
			CLO4	ND	08/08	ND	04/18	
			AS	ND	08/89	ND	09/17	
			CR6	4.5	09/17	4.5	09/17	
13	MUNICIPAL	INACTIVE	TCE	0.5	08/07	ND	04/14	
			NITRATE (N)	13.3	07/13	13.3	07/13	
			CLO4	ND	03/97	ND	01/14	
			AS	8.0	06/78	ND	11/10	
			CR6	7.1	08/01	4.6	09/13	
14	MUNICIPAL	ACTIVE	TCE	2.4	08/08	1.0	04/18	VULNERABLE
			NITRATE (N)	10.4	08/12	2.9	05/17	(NO3(N))
			CLO4	ND	08/97	ND	04/18	
			AS	0.6	07/96	ND	10/16	
			CR6	5.8	06/01	4.8	10/16	
15	MUNICIPAL	ACTIVE	PCE	0.8	10/14	ND	04/18	VULNERABLE
			NITRATE (N)	6.3	10/12	2.3	05/17	(NO3(N))
			CLO4	ND	08/97	ND	04/18	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			AS	1.5	07/96	ND	04/16	
			CR6	4.1	12/00	3.2	04/16	
GARF	MUNICIPAL	INACTIVE	TCE	11.0	08/82	ND	09/93	
			PCE	0.5	11/87	ND	09/93	
			CTC	0.1	04/80	ND	09/93	
			1,1,2,2-PCA	1.0	11/87	ND	09/93	
			NITRATE (N)	15.4	08/89	12.1	09/93	
			AS	ND	06/80	ND	08/92	
			CLO4	NA	NA	NA	NA	
LON 1	MUNICIPAL	ACTIVE	PCE	0.3	07/81	ND	07/17	VULNERABLE
			NITRATE (N)	7.5	09/11	6.3	05/17	(NO3(N),CLO4)
			CLO4	5.0	12/97	ND	05/18	
			AS	2.4	07/95	ND	07/16	
			CR6	7.2	06/01	6.4	07/16	
LON 2	MUNICIPAL	ACTIVE	PCE	1.3	06/10	0.6	04/18	VULNERABLE
			NITRATE (N)	11.4	04/86	5.3	02/17	(NO3(N),CLO4)
			CLO4	5.6	07/97	ND	04/18	
			AS	0.8	07/96	ND	04/17	
			CR6	9.5	06/01	6.8	04/17	
MOEL (8)	MUNICIPAL	ACTIVE	TCE	23.0	07/14	16.0	07/17	VULNERABLE
			PCE	1.6	07/08	0.7	04/18	(VOC,NO3(N))
			C-1,2-DCE	2.6	05/17	1.6	04/18	
			NITRATE (N)	17.2	07/08	12.0	07/17	
			CLO4	ND	12/99	ND	04/18	
			AS	0.9	07/96	ND	07/17	
			CR6	7.2	07/17	7.2	07/17	
AMARILLO MUTUAL WATER COMPANY								
01	MUNICIPAL	ACTIVE	PCE	5.5	10/99	2.9	05/18	VULNERABLE
			TCE	2.1	11/17	1.7	05/18	(VOC,NO3(N))
			CTC	0.1	08/82	ND	11/17	
			NITRATE (N)	6.2	10/99	4.5	11/17	
			CLO4	ND	08/97	ND	08/17	
			AS	0.5	07/96	ND	08/16	
			CR6	8.6	08/16	8.6	08/16	
02	MUNICIPAL	ACTIVE	PCE	6.3	08/16	5.2	05/18	VULNERABLE
			TCE	3.1	05/18	3.1	05/18	(NO3(N),VOC)
			NITRATE (N)	6.8	02/96	4.8	05/18	
			CLO4	ND	08/97	ND	08/17	
			AS	0.4	07/96	ND	08/16	
			CR6	6.9	08/13	5.9	08/16	
ANDERSON FAMILY MARITAL TRUST								
01	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
ARCADIA, CITY OF								
BAL 1	MUNICIPAL	DESTROYED	VOCS	ND	09/98	ND	09/98	
			NITRATE (N)	11.7	04/78	0.7	09/98	
			CLO4	NA	NA	NA	NA	
BAL 2	MUNICIPAL	INACTIVE	VOCS	ND	05/89	ND	06/09	
			NITRATE (N)	7.5	05/08	6.3	06/09	
			CLO4	ND	08/97	ND	07/08	
			AS	0.7	08/96	ND	03/09	
			CR6	11.1	06/01	11.1	06/01	
CAM REAL 1	MUNICIPAL	DESTROYED	VOCS	ND	01/85	ND	05/92	
			NITRATE (N)	6.3	05/91	5.1	08/92	
			CLO4	NA	NA	NA	NA	
			AS	ND	03/09	ND	08/92	
CAM REAL 2	MUNICIPAL	DESTROYED	VOCS	ND	05/89	ND	06/98	
			NITRATE (N)	13.1	05/92	8.8	05/98	
			CLO4	ND	08/97	ND	12/97	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			AS	0.4	08/96	ND	06/98	
CAM REAL 3	MUNICIPAL	ACTIVE	VOCS	ND	03/11	ND	10/17	
			NITRATE (N)	4.4	01/16	4.0	01/18	
			CLO4	ND	03/11	ND	07/17	
			AS	ND	03/10	ND	01/16	
			CR6	6.4	09/13	4.4	01/16	
L OAK 1	MUNICIPAL	ACTIVE	PCE	1.4	01/08	ND	04/17	VULNERABLE
			TCE	6.0	02/15	5.0	01/18	(VOC,NO3(N))
			NITRATE (N)	7.0	05/15	6.7	04/18	
			CLO4	ND	08/97	ND	07/17	
			AS	0.6	08/96	ND	04/17	
			CR6	3.1	04/17	3.1	04/17	
LGY	MUNICIPAL	DESTROYED	VOCS	ND	01/08	ND	01/08	
			NITRATE (N)	23.5	01/08	23.5	01/08	
			CLO4	6.0	01/08	6.0	01/08	
LGY 3	MUNICIPAL	ACTIVE	VOCS	ND	06/11	ND	10/17	
			NITRATE (N)	2.1	01/15	1.4	01/18	
			CLO4	ND	06/11	ND	07/17	
			AS	ND	03/11	ND	01/17	
			CR6	8.7	01/17	8.7	01/17	
LON 1	MUNICIPAL	ACTIVE	TCE	30.0	07/87	ND	04/18	VULNERABLE
			PCE	2.7	07/87	ND	04/18	(VOC,NO3(N))
			1,1-DCE	4.1	06/87	ND	07/17	
			1,2-DCA	1.4	07/87	ND	07/17	
			1,1,1-TCA	4.6	07/87	ND	07/17	
			NITRATE (N)	14.0	07/16	8.5	04/18	
			CLO4	ND	12/97	ND	07/17	
			AS	ND	04/85	ND	06/17	
			CR6	3.3	06/17	3.3	06/17	
LON 2	MUNICIPAL	ACTIVE	TCE	62.0	01/85	ND	04/18	VULNERABLE
			PCE	7.7	01/82	ND	04/18	(VOC,NO3(N))
			CTC	2.6	09/87	ND	07/17	
			1,1-DCE	0.9	05/87	ND	07/17	
			1,1,1-TCA	12.0	01/85	ND	07/17	
			NITRATE (N)	24.6	05/85	18.0	04/18	
			CLO4	ND	07/97	ND	07/17	
			AS	0.7	08/96	ND	01/16	
			CR6	4.7	01/16	4.7	01/16	
PECK 1	MUNICIPAL	ACTIVE	VOCS	ND	05/89	ND	04/18	
			NITRATE (N)	2.5	08/09	0.4	04/18	
			CLO4	ND	08/97	ND	07/17	
			AS	2.4	09/94	ND	06/17	
			CR6	1.0	11/00	ND	06/17	
ST JO 1	MUNICIPAL	DESTROYED	TCE	5.4	01/02	4.8	02/02	
			PCE	2.7	08/91	2.2	02/02	
			NITRATE (N)	13.6	06/96	10.4	06/02	
			CLO4	1.0	08/97	ND	01/02	
			AS	0.3	08/96	ND	06/01	
ST JO 2	MUNICIPAL	INACTIVE	TCE	2.4	12/09	1.1	07/17	
			PCE	9.8	09/16	7.8	07/17	
			NITRATE (N)	11.5	12/04	10.0	07/17	
			CLO4	8.6	06/02	ND	07/17	
			AS	ND	06/02	ND	04/17	
			CR6	3.2	11/02	2.6	04/17	
ATTALLA, MARY L.								
NA	IRRIGATION	INACTIVE	VOCS	ND	09/96	ND	04/98	
			NITRATE (N)	4.4	04/98	4.4	04/98	
			CLO4	ND	04/98	ND	04/98	
AZUSA ASSOCIATES LLC								
DALTON	IRRIGATION	INACTIVE	VOCS	ND	03/98	ND	03/98	
			NITRATE (N)	1.1	03/98	1.1	03/98	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	ND	03/98	ND	03/98	
AZUSA, CITY OF								
AVWC 01	MUNICIPAL	DESTROYED	VOCS	ND	09/97	ND	09/97	
			NITRATE (N)	12.4	08/87	7.3	09/97	
			CLO4	5.6	09/97	5.6	09/97	
AVWC 02	MUNICIPAL	DESTROYED	VOCS	ND	01/98	ND	01/98	
			NITRATE (N)	9.7	01/98	9.7	01/98	
			CLO4	6.9	01/98	6.9	01/98	
AVWC 07	MUNICIPAL	DESTROYED	TCE	4.5	01/80	ND	03/85	
			NITRATE (N)	24.2	02/77	8.9	12/85	
			CLO4	NA	NA	NA	NA	
GENESIS 1	MUNICIPAL	DESTROYED	MTBE	1.2	11/98	1.1	11/98	
(OLD 04)			NITRATE (N)	28.6	06/87	24.8	11/98	
			CLO4	7.2	11/98	7.2	11/98	
			AS	5.0	08/79	ND	02/88	
GENESIS 2	MUNICIPAL	INACTIVE	TCE	250.0	12/79	3.7	02/08	
(OLD 05)			PCE	95.0	04/80	1.0	02/08	
			1,1-DCE	18.0	02/08	18.0	02/08	
			1,1,1-TCA	2.5	02/08	2.5	02/08	
			NITRATE (N)	23.8	02/93	3.6	02/08	
			CLO4	ND	11/98	ND	02/08	
			AS	ND	12/89	ND	02/08	
GENESIS 3	MUNICIPAL	DESTROYED	PCE	3.5	03/97	ND	03/97	
(OLD 06)			TCE	0.1	01/80	ND	03/97	
			NITRATE (N)	25.5	06/86	ND	04/01	
			CLO4	NA	NA	NA	NA	
01	MUNICIPAL	ACTIVE	VOCS	ND	06/87	ND	11/17	VULNERABLE
(OLD 07)			NITRATE (N)	1.2	08/17	1.2	08/17	(AS)
			CLO4	ND	07/97	ND	08/17	
			AS	5.1	08/95	2.3	08/16	
			CR6	1.0	11/00	ND	08/16	
02	MUNICIPAL	ACTIVE	VOCS	ND	06/89	ND	08/17	
(01 NORTH)			NITRATE (N)	1.2	03/92	ND	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	4.3	07/96	4.1	08/17	
			CR6	1.0	11/00	ND	08/17	
03	MUNICIPAL	ACTIVE	VOCS	ND	06/87	ND	08/17	
(OLD 08)			NITRATE (N)	1.0	03/95	ND	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	5.0	08/06	2.9	08/15	
			CR6	1.0	11/00	ND	08/15	
04	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	08/17	
(02 SOUTH)			NITRATE (N)	1.2	06/89	ND	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	5.0	08/05	4.5	08/17	
			CR6	1.0	11/00	ND	08/17	
05	MUNICIPAL	ACTIVE	TCE	1.0	12/80	ND	05/18	VULNERABLE
(OLD 01)			PCE	0.3	12/80	ND	05/18	(NO3(N))
			NITRATE (N)	5.2	07/95	2.5	05/18	
			CLO4	ND	07/97	ND	05/18	
			AS	2.6	07/95	ND	08/16	
			CR6	1.0	11/00	ND	08/16	
06	MUNICIPAL	ACTIVE	VOCS	ND	03/85	ND	08/17	
(OLD 03)			NITRATE (N)	3.2	03/95	0.8	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	3.5	07/95	ND	08/16	
			CR6	1.0	11/00	ND	08/16	
07	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	08/17	VULNERABLE
(AVWC 05)			NITRATE (N)	5.6	04/95	0.9	08/17	(NO3(N))

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	ND	06/97	ND	08/17	
			AS	3.5	08/14	2.2	08/17	
			CR6	1.0	11/00	ND	08/17	
08	MUNICIPAL	ACTIVE	TCE	0.8	03/94	ND	08/17	
(AVWC 04)			NITRATE (N)	2.7	09/94	1.0	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	4.2	07/95	2.4	08/16	
			CR6	1.0	11/00	ND	08/16	
09	MUNICIPAL	INACTIVE	PCE	7.4	12/87	0.6	01/99	
(AVWC 06)			NITRATE (N)	26.6	12/89	19.0	01/99	
			CLO4	NA	NA	NA	NA	
			AS	ND	02/87	ND	01/99	
10	MUNICIPAL	ACTIVE	PCE	1.0	05/15	0.6	05/18	VULNERABLE
(AVWC 08)			NITRATE (N)	14.9	05/08	12.0	05/18	(CLO4,NO3(N))
			CLO4	12.6	08/05	4.4	05/18	
			AS	1.8	07/96	ND	11/15	
			CR6	2.5	11/15	2.5	11/15	
11	MUNICIPAL	ACTIVE	VOCS	ND	06/02	ND	08/17	
			NITRATE (N)	0.8	08/08	0.8	08/17	
			CLO4	ND	06/02	ND	08/17	
			AS	4.0	08/05	2.8	08/17	
			CR6	0.2	08/13	ND	08/17	
12	MUNICIPAL	ACTIVE	VOCS	ND	06/02	ND	08/17	
			NITRATE (N)	0.9	08/08	0.6	08/17	
			CLO4	ND	06/02	ND	08/17	
			AS	4.0	08/05	2.9	08/17	
			CR6	0.5	08/13	ND	08/17	
B & B RED-I-MIX CONCRETE INC.								
03	INDUSTRIAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
BANKS, GALE & VICKI								
NA	IRRIGATION	ACTIVE	VOCS	ND	08/96	ND	10/17	
			NITRATE (N)	4.7	10/98	3.4	10/17	
			CLO4	ND	09/97	ND	09/97	
BASELINE WATER COMPANY								
01	IRRIGATION	DESTROYED	VOCS	ND	02/98	ND	02/98	
			NITRATE (N)	22.5	02/98	22.5	02/98	
			CLO4	12.9	02/98	12.9	02/98	
02	IRRIGATION	DESTROYED	VOCS	ND	11/98	ND	11/98	
			NITRATE (N)	16.8	11/98	16.8	11/98	
			CLO4	10.6	11/98	10.6	11/98	
03	IRRIGATION	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
BEVERLY ACRES MUTUAL WATER USERS ASSOCIATION								
ROSE HILLS	MUNICIPAL	DESTROYED	TCE	8.4	10/88	2.5	03/93	
			PCE	6.0	10/88	2.8	03/93	
			C-1,2-DCE	8.0	08/86	2.4	03/93	
			NITRATE (N)	5.1	08/86	3.3	09/90	
			CLO4	NA	NA	NA	NA	
			AS	ND	09/89	ND	08/91	
BIRENBAUM, MAX								
NA	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
BOTELLO WATER COMPANY								
NA	MUNICIPAL	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
BURBANK DEVELOPMENT COMPANY								
BURB	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
CALIFORNIA-AMERICAN WATER COMPANY/DUARTE SYSTEM								
B V	MUNICIPAL	STANDBY	VOCS	ND	02/85	ND	08/16	VULNERABLE
			NITRATE (N)	0.9	10/10	0.7	08/16	(AS)
			CLO4	ND	06/97	ND	06/17	
			AS	6.0	07/93	3.0	08/16	
			CR6	1.0	12/00	0.5	03/13	
B V 2	MUNICIPAL	ACTIVE	VOCS	ND	03/12	ND	12/17	
			NITRATE (N)	0.9	12/14	0.7	09/17	
			CLO4	ND	09/12	ND	06/17	
			AS	ND	12/14	ND	08/16	
			CR6	1.0	04/11	ND	12/16	
BACON	MUNICIPAL	ACTIVE	VOCS	ND	09/15	ND	09/17	VULNERABLE
			NITRATE (N)	2.3	10/81	1.6	09/17	(AS)
			CLO4	ND	06/97	ND	06/17	
			AS	6.0	09/93	ND	09/16	
			CR6	0.4	06/11	ND	12/16	
CR HV	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	09/17	
			NITRATE (N)	1.9	12/13	1.4	09/17	
			CLO4	ND	06/97	ND	06/17	
			AS	3.0	09/04	ND	09/16	
			CR6	1.0	12/00	ND	09/16	
ENCANTO	MUNICIPAL	ACTIVE	VOCS	ND	12/92	ND	12/17	
			NITRATE (N)	2.6	12/92	1.0	09/17	
			CLO4	ND	06/97	ND	06/17	
			AS	4.6	08/95	2.5	09/16	
			CR6	1.0	12/00	ND	09/16	
FISH C	MUNICIPAL	STANDBY	VOCS	ND	02/85	ND	03/14	
			NITRATE (N)	1.5	11/94	0.6	12/13	
			CLO4	ND	06/97	ND	09/14	
			AS	13.0	09/80	ND	10/10	
			CR6	1.0	12/00	0.1	03/13	
LAS L	MUNICIPAL	DESTROYED	VOCS	ND	02/85	ND	06/91	
			NITRATE (N)	2.7	08/80	0.9	09/91	
			CLO4	NA	NA	NA	NA	
			AS	18.0	06/78	ND	11/94	
LAS L2	MUNICIPAL	ACTIVE	TCE	1.6	08/96	ND	09/17	
			NITRATE (N)	3.7	12/92	1.3	09/17	
			CLO4	ND	06/97	ND	06/17	
			AS	3.1	08/95	2.0	09/16	
			CR6	1.0	06/01	ND	09/16	
MT AVE	MUNICIPAL	DESTROYED	TCE	16.5	07/87	ND	09/93	
			PCE	1.0	08/82	ND	09/93	
			1,1,1-TCA	8.4	04/85	ND	09/93	
			1,1-DCE	3.4	07/87	ND	09/93	
			T-1,2-DCE	2.0	04/85	ND	09/93	
			NITRATE (N)	14.7	05/89	2.3	09/93	
			CLO4	NA	NA	NA	NA	
			AS	ND	05/89	ND	05/89	
STA FE	MUNICIPAL	ACTIVE	TCE	3.3	04/84	ND	09/17	VULNERABLE
			NITRATE (N)	13.3	01/80	ND	09/17	(VOC,NO3(N))
			CLO4	ND	06/97	ND	06/17	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			AS	3.0	08/79	ND	09/16	
			CR6	1.0	12/00	ND	09/16	
WILEY	MUNICIPAL	ACTIVE	VOCS	ND	09/01	ND	09/17	
			NITRATE (N)	2.5	03/81	1.5	09/17	
			CLO4	ND	06/97	ND	06/17	
			AS	2.0	09/09	ND	09/16	
			CR6	1.0	12/00	ND	09/16	
CALIFORNIA-AMERICAN WATER COMPANY/SAN MARINO SYSTEM								
BR 1	MUNICIPAL	DESTROYED	CTC	0.5	12/96	0.5	12/96	
			TCE	27.0	07/93	27.0	12/96	
			PCE	9.0	07/93	7.7	12/96	
			NITRATE (N)	7.1	12/96	7.1	12/96	
			CLO4	NA	NA	NA	NA	
			AS	1.0	03/81	ND	10/81	
BR 2	MUNICIPAL	DESTROYED	TCE	17.0	12/96	17.0	12/96	
			PCE	6.4	12/96	6.4	12/96	
			NITRATE (N)	5.7	07/93	5.7	12/96	
			CLO4	NA	NA	NA	NA	
			AS	ND	03/81	ND	10/81	
DELMAR	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	09/17	VULNERABLE
			NITRATE (N)	4.5	06/14	4.4	09/17	(AS)
			CLO4	ND	06/97	ND	06/17	
			AS	5.0	07/96	2.9	09/16	
			CR6	5.7	09/16	5.7	09/16	
GRAND	MUNICIPAL	ACTIVE	TCE	4.8	03/07	2.6	12/17	VULNERABLE
			PCE	2.1	12/08	1.4	12/17	(VOC)
			NITRATE (N)	2.5	09/03	1.8	09/17	
			CLO4	ND	08/97	ND	06/17	
			AS	0.4	07/96	ND	09/16	
			CR6	10.4	11/16	10.0	12/17	
GUESS	MUNICIPAL	INACTIVE	TCE	5.2	09/99	5.2	12/01	
			PCE	5.4	12/01	5.4	12/01	
			NITRATE (N)	4.5	05/01	4.3	09/01	
			CLO4	ND	08/97	ND	03/00	
			AS	0.4	07/96	ND	02/01	
			CR6	7.8	10/00	4.8	06/01	
HALL	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
HALL 2	MUNICIPAL	ACTIVE	VOCS	ND	03/01	ND	06/17	VULNERABLE
			NITRATE (N)	6.6	06/16	6.5	03/18	(NO3(N))
			CLO4	ND	03/00	ND	06/17	
			AS	ND	09/01	ND	09/16	
			CR6	9.6	03/18	9.6	03/18	
HOWLAND	MUNICIPAL	ACTIVE	TCE	6.9	07/89	0.6	03/18	VULNERABLE
			PCE	3.6	03/01	ND	03/18	(VOC)
			C-1,2-DCE	3.3	11/87	ND	09/17	
			NITRATE (N)	4.7	09/16	2.2	03/18	
			CLO4	ND	08/97	ND	06/17	
			AS	0.7	07/96	ND	01/17	
			CR6	6.7	11/16	6.7	11/16	
IVAR 1	MUNICIPAL	DESTROYED	PCE	7.4	06/99	6.2	06/00	
			TCE	1.7	06/99	ND	06/00	
			NITRATE (N)	6.6	09/94	5.9	09/01	
			CLO4	ND	08/97	ND	03/01	
			AS	0.5	10/96	0.5	10/96	
IVAR 2	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	5.4	12/84	5.4	12/84	
			CLO4	NA	NA	NA	NA	
			AS	ND	10/81	ND	10/81	
LONGDEN	MUNICIPAL	ACTIVE	PCE	15.0	03/18	15.0	03/18	VULNERABLE

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			TCE	0.9	03/18	0.9	03/18	(CLO4,VOC,NO3(N))
			NITRATE (N)	16.0	03/18	16.0	03/18	
			CLO4	5.5	06/16	ND	03/17	
			AS	4.6	06/01	ND	09/16	
			CR6	4.3	05/15	4.0	11/16	
MAR 1	MUNICIPAL	DESTROYED	VOCS	ND	01/85	ND	01/85	
			NITRATE (N)	20.1	03/79	8.8	01/84	
			CLO4	NA	NA	NA	NA	
			AS	2.0	03/81	ND	10/81	
MAR 2	MUNICIPAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	7.5	01/84	7.5	01/84	
			CLO4	NA	NA	NA	NA	
			AS	1.0	03/81	ND	10/81	
MAR 3	MUNICIPAL	ACTIVE	VOCS	ND	01/85	ND	09/17	
			NITRATE (N)	3.9	09/17	3.9	09/17	
			CLO4	ND	06/97	ND	06/17	
			AS	1.0	05/00	ND	09/16	
			CR6	9.6	09/17	8.5	03/18	
MIVW 1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	7.0	03/01	7.0	03/01	
			CLO4	NA	NA	NA	NA	
MIVW 2	MUNICIPAL	INACTIVE	VOCS	ND	07/87	ND	09/16	
			NITRATE (N)	10.0	03/16	8.6	12/16	
			CLO4	ND	06/97	ND	09/16	
			AS	0.6	07/96	ND	09/16	
			CR6	10.1	12/00	8.8	11/16	
RIC 1	MUNICIPAL	DESTROYED	VOCS	ND	02/85	ND	12/90	
			NITRATE (N)	5.3	08/89	2.7	11/94	
			CLO4	NA	NA	NA	NA	
			AS	ND	09/80	ND	11/94	
RIC 2	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
RIC 3	MUNICIPAL	ACTIVE	TCE	0.9	11/16	0.8	03/18	
			PCE	0.6	12/17	0.6	03/18	
			NITRATE (N)	2.8	03/18	2.8	03/18	
			CLO4	NA	NA	ND	06/17	
			AS	NA	NA	ND	09/16	
			CR6	9.5	09/17	9.2	03/18	
ROANOKE	MUNICIPAL	INACTIVE	TCE	5.0	06/00	4.7	12/00	
			PCE	1.2	04/90	ND	09/00	
			C-1,2-DCE	0.5	09/00	ND	12/00	
			NITRATE (N)	7.5	05/89	6.6	12/00	
			CLO4	5.6	06/97	ND	03/00	
			AS	0.8	07/96	ND	02/01	
			CR6	5.0	10/00	4.9	06/01	
ROSEMEAD	MUNICIPAL	INACTIVE	TCE	6.1	03/12	3.8	05/14	
			PCE	3.4	03/09	ND	05/14	
			NITRATE (N)	8.6	12/13	6.6	05/14	
			CLO4	ND	08/97	ND	05/14	
			AS	0.4	07/96	ND	05/14	
			CR6	11.0	10/00	5.2	06/11	
CALIFORNIA COUNTRY CLUB								
ARTES	IRRIGATION	STANDBY	VOCS	ND	05/87	ND	10/10	
			NITRATE (N)	6.6	10/10	6.6	10/10	
			CLO4	NA	NA	NA	NA	
CLUB	IRRIGATION	INACTIVE	PCE	189.0	11/87	189.0	11/87	
			1,1,2,2-PCA	24.0	11/87	24.0	11/87	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
SYCAMORE	IRRIGATION	STANDBY	PCE	7.1	09/02	0.6	10/10	
			TCE	0.7	09/01	ND	10/10	
			NITRATE (N)	28.9	10/07	4.3	10/10	
			CLO4	ND	02/98	ND	02/98	
CALIFORNIA DOMESTIC WATER COMPANY								
01-E	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	MUNICIPAL	ACTIVE	CTC	0.7	09/96	ND	04/18	VULNERABLE
			PCE	3.7	09/12	0.7	04/18	(VOC,NO3(N),CLO4,AS)
			TCE	4.0	10/99	0.6	04/18	
			NITRATE (N)	6.1	02/15	5.8	04/18	
			CLO4	5.6	10/99	ND	05/17	
			AS	7.4	12/11	ND	05/17	
			CR6	3.0	10/16	1.9	04/17	
03	MUNICIPAL	ACTIVE	CTC	5.3	02/01	1.4	04/18	VULNERABLE
			PCE	32.0	11/12	20.0	04/18	(NO3(N),VOC,CLO4)
			TCE	43.0	10/13	31.0	04/18	
			1,1-DCE	6.4	01/14	3.4	04/18	
			C-1,2-DCE	4.2	04/13	2.3	04/18	
			NITRATE (N)	10.8	01/07	5.4	04/18	
			CLO4	13.0	10/16	11.0	05/17	
			AS	3.3	12/11	ND	05/17	
			CR6	3.3	11/00	2.6	04/17	
05	MUNICIPAL	DESTROYED	PCE	2.0	02/85	ND	12/90	
			NITRATE (N)	2.9	03/84	2.9	03/84	
			CLO4	NA	NA	NA	NA	
			AS	40.0	06/78	ND	03/84	
05A	MUNICIPAL	ACTIVE	CTC	1.9	08/96	ND	04/18	VULNERABLE
			PCE	20.0	11/15	7.3	04/18	(NO3(N),VOC)
			TCE	19.0	11/15	8.1	04/18	
			1,1-DCE	2.7	10/08	1.2	04/18	
			C-1,2-DCE	1.6	10/08	0.6	04/18	
			NITRATE (N)	6.6	04/01	2.2	04/18	
			CLO4	ND	06/97	ND	05/17	
			AS	3.8	08/95	ND	05/17	
			CR6	2.0	04/17	1.6	04/17	
06	MUNICIPAL	ACTIVE	CTC	3.5	12/06	ND	04/18	VULNERABLE
			PCE	39.0	10/14	ND	04/18	(VOC,NO3(N),CLO4)
			TCE	44.0	10/14	ND	04/18	
			1,1-DCE	6.2	10/14	ND	04/18	
			C-1,2-DCE	4.5	10/14	ND	04/18	
			NITRATE (N)	7.7	04/11	6.3	04/18	
			CLO4	7.1	04/17	5.3	05/17	
			AS	3.2	04/04	ND	05/17	
			CR6	2.2	04/17	1.8	04/17	
08	MUNICIPAL	ACTIVE	PCE	9.8	02/09	0.9	04/18	VULNERABLE
			TCE	12.0	02/09	ND	04/18	(VOC,NO3(N),CLO4,AS)
			CTC	1.1	09/93	ND	04/18	
			NITRATE (N)	5.4	08/02	2.5	04/18	
			CLO4	5.6	08/02	ND	05/17	
			AS	6.0	09/94	ND	05/17	
			CR6	3.2	11/00	2.1	04/17	
10	MUNICIPAL	ACTIVE	PCE	52.0	10/16	8.7	04/18	VULNERABLE
			TCE	55.0	10/16	10.0	04/18	(NO3(N),CLO4,VOC)
			CTC	1.0	08/16	0.6	04/18	
			1,1-DCE	9.4	10/16	1.5	04/18	
			C-1,2-DCE	6.5	10/16	0.7	04/18	
			NITRATE (N)	6.9	09/16	1.6	04/18	
			CLO4	8.3	09/16	ND	04/18	
			AS	2.6	11/16	ND	05/17	
			CR6	2.7	10/16	ND	01/18	
13-N	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
14	MUNICIPAL	ACTIVE	CTC	4.4	10/07	ND	04/18	VULNERABLE
			PCE	16.0	11/12	5.0	04/18	(NO3(N),CLO4,VOC)
			TCE	20.0	11/12	5.2	04/18	
			1,2-DCA	1.0	06/08	ND	04/18	
			C-1,2-DCE	1.6	10/12	0.5	04/18	
			1,1-DCE	1.9	10/12	0.8	04/18	
			NITRATE (N)	16.9	12/14	2.4	04/18	
			CLO4	16.0	12/12	ND	05/17	
			AS	4.5	04/01	ND	05/17	
			CR6	5.1	04/17	5.1	04/17	
CEDAR AVENUE MUTUAL WATER COMPANY								
01 SOUTH	MUNICIPAL	DESTROYED	PCE	2.2	09/90	ND	06/94	
			NITRATE (N)	6.1	08/93	2.0	06/94	
			CLO4	NA	NA	NA	NA	
			AS	NA	09/89	ND	08/93	
02 NORTH	MUNICIPAL	DESTROYED	PCE	0.8	04/92	ND	06/94	
			NITRATE (N)	4.5	01/86	1.7	08/93	
			CLO4	NA	NA	NA	NA	
			AS	ND	09/89	ND	09/92	
CEMEX CONSTRUCTION MATERIALS L.P. (AZ TWO)								
02	INDUSTRIAL	DESTROYED	PCE	700.0	01/85	2.8	09/03	
			TCE	940.0	04/85	6.3	09/03	
			CTC	2.2	09/02	ND	09/03	
			1,1-DCE	350.0	01/87	7.2	09/03	
			1,1-DCA	1.0	08/01	ND	09/03	
			1,1,1-TCA	430.0	01/87	3.6	09/03	
			VC	19.0	12/87	ND	09/03	
			NITRATE (N)	17.8	09/02	16.5	09/03	
			CLO4	4.2	06/97	ND	09/98	
CHAMPION MUTUAL WATER COMPANY								
01	MUNICIPAL	DESTROYED	PCE	3.0	09/86	ND	06/98	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	MUNICIPAL	DESTROYED	PCE	0.6	06/88	ND	09/13	
			NITRATE (N)	6.3	09/10	5.0	06/14	
			CLO4	ND	09/97	ND	09/13	
			AS	3.6	08/98	2.4	09/13	
			CR6	1.0	06/01	0.7	09/13	
03	MUNICIPAL	DESTROYED	PCE	1.3	09/96	ND	12/14	
			FREON 113	18.0	03/07	ND	03/15	
			NITRATE (N)	5.4	03/09	4.1	03/15	
			CLO4	ND	03/98	ND	12/14	
			AS	13.2	05/98	2.8	03/15	
			CR6	1.0	06/01	ND	09/14	
CHEVRON USA INC.								
TEMP 1	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
CITRUS VALLEY MEDICAL CENTER, QUEEN OF THE VALLEY CAMPUS								
01	NON-POTABLE	INACTIVE	VOCS	ND	09/96	ND	10/10	
			NITRATE (N)	23.7	02/98	18.7	10/10	
			CLO4	24.0	02/98	24.0	02/98	
CLAYTON MANUFACTURING COMPANY								
02	INDUSTRIAL	DESTROYED	TCE	150.0	08/01	47.0	09/03	
			PCE	30.0	08/01	ND	09/03	
			1,1-DCE	10.0	08/01	1.7	09/03	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			C-1,2-DCE	1.7	08/01	ND	09/03	
			1,1-DCA	15.0	08/01	ND	09/03	
			1,2-DCA	13.0	08/01	ND	09/03	
			1,1,1-TCA	1.1	08/01	ND	09/03	
			NITRATE (N)	19.7	08/01	9.0	09/03	
			CLO4	4.0	09/97	4.0	09/97	
CORCORAN BROTHERS								
01	NON-POTABLE	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
COUNTY SANITATION DISTRICT NO. 18								
E08A	REMEDIAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
E09A	REMEDIAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
E10A	REMEDIAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
E11A	REMEDIAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EX1	REMEDIAL	ACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EX2	REMEDIAL	ACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EX3	REMEDIAL	ACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EX4	REMEDIAL	ACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LE1	REMEDIAL	DESTROYED	TCE	4.2	06/86	3.7	09/86	
			PCE	0.8	09/86	0.8	09/86	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LE2	REMEDIAL	DESTROYED	TCE	0.1	06/86	ND	09/86	
			PCE	NA	06/86	ND	09/86	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LE3	REMEDIAL	DESTROYED	TCE	1.5	06/86	1.2	09/86	
			PCE	1.6	06/86	0.8	09/86	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LE4	REMEDIAL	DESTROYED	TCE	5.1	09/86	5.1	09/86	
			PCE	2.0	09/86	2.0	09/86	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
COVINA, CITY OF								
01	MUNICIPAL	INACTIVE	PCE	0.6	01/99	0.6	01/99	
			NITRATE (N)	27.1	01/99	27.1	01/99	
			CLO4	NA	NA	NA	NA	
02 (GRAND)	MUNICIPAL	INACTIVE	VOCS	ND	06/88	ND	09/98	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			NITRATE (N)	26.2	08/89	23.3	04/99	
			CLO4	23.0	09/97	22.0	09/98	
			AS	3.3	08/97	3.3	08/97	
03	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	16.3	10/73	16.3	10/73	
			CLO4	NA	NA	NA	NA	
COVINA IRRIGATING COMPANY								
BAL 1	MUNICIPAL	STANDBY	TCE	200.0	07/80	ND	10/13	VULNERABLE
			PCE	7.6	07/80	ND	10/13	(VOC,NO3(N))
			1,1-DCE	0.5	10/06	ND	10/13	
			NITRATE (N)	8.0	12/89	0.9	09/14	
			CLO4	1.5	10/06	ND	09/14	
			AS	4.7	12/89	3.5	01/14	
			CR6	1.0	10/00	0.2	07/13	
BAL 2	MUNICIPAL	STANDBY	TCE	195.0	06/80	ND	11/15	VULNERABLE
			PCE	7.9	06/80	ND	11/15	(VOC,NO3(N),CLO4)
			1,1-DCE	0.8	07/07	ND	11/15	
			NITRATE (N)	10.6	03/10	4.5	07/15	
			CLO4	5.5	03/09	ND	11/15	
			AS	4.0	08/76	3.4	07/15	
			CR6	1.0	10/00	0.5	07/13	
BAL 3	MUNICIPAL	STANDBY	TCE	225.0	01/80	ND	10/14	VULNERABLE
			PCE	10.0	02/85	ND	10/14	(VOC,NO3(N),CLO4)
			CTC	3.0	04/85	ND	10/14	
			1,1-DCA	4.0	04/85	ND	10/14	
			1,2-DCA	3.7	02/85	ND	10/14	
			1,1-DCE	2.1	04/85	ND	10/14	
			T-1,2-DCE	2.9	02/85	ND	10/14	
			1,1,1-TCA	5.2	04/85	ND	10/14	
			NITRATE (N)	12.9	08/89	5.9	07/15	
			CLO4	5.6	09/08	ND	07/15	
			AS	3.1	07/15	3.1	07/15	
			CR6	1.0	11/00	0.8	07/13	
CONTR	MUNICIPAL	DESTROYED	PCE	1.4	12/92	1.3	03/94	
			NITRATE (N)	28.3	12/89	24.4	03/94	
			CLO4	NA	NA	NA	NA	
			AS	ND	12/89	ND	12/92	
VALEN	MUNICIPAL	DESTROYED	PCE	2.4	08/85	0.6	09/97	
			NITRATE (N)	16.5	06/81	15.7	09/97	
			CLO4	6.4	09/97	6.4	09/97	
CREVOLIN, A.J.								
NA	DOMESTIC	DESTROYED	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
CROWN CITY PLATING COMPANY								
01	INDUSTRIAL	INACTIVE	TCE	1.2	09/04	1.2	09/04	
			T-1,2-DCE	1.4	05/87	ND	09/04	
			NITRATE (N)	1.7	09/04	0.8	09/08	
			CLO4	ND	09/97	ND	10/07	
DAVIDSON OPTRONICS INC.								
NA	INDUSTRIAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
DAWES, MARY K.								
04	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
DEL RIO MUTUAL WATER COMPANY								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
BURKETT	MUNICIPAL	ACTIVE	TCE	2.2	06/90	ND	09/17	VULNERABLE
			PCE	3.7	03/97	ND	09/17	(VOC,NO3(N))
			NITRATE (N)	7.0	12/03	0.8	09/17	
			CLO4	ND	09/97	ND	12/15	
			AS	2.6	03/02	2.1	09/17	
			CR6	3.4	07/01	ND	09/17	
KLING	MUNICIPAL	INACTIVE	PCE	1.3	08/86	ND	02/89	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
DRIFTWOOD DAIRY								
01	INDUSTRIAL	INACTIVE	PCE	13.9	06/98	13.9	06/98	
			1,1,1-TCA	0.3	03/93	ND	06/98	
			NITRATE (N)	14.7	03/93	10.6	06/98	
			CLO4	ND	06/98	ND	06/98	
DUNNING, GEORGE								
1910	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EAST PASADENA WATER COMPANY, LTD.								
09	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	07/17	
			NITRATE (N)	1.4	09/12	1.0	03/17	
			CLO4	ND	07/97	ND	03/17	
			AS	0.9	08/96	ND	04/15	
			CR6	9.4	07/01	8.4	10/14	
11	MUNICIPAL	ACTIVE	VOCS	ND	12/11	ND	04/18	
			NITRATE (N)	0.8	09/16	0.7	03/17	
			CLO4	ND	12/11	ND	03/17	
			AS	ND	05/14	ND	04/15	
			CR6	5.9	10/14	5.9	10/14	
EL MONTE, CITY OF								
02A	MUNICIPAL	ACTIVE	PCE	13.0	03/98	3.8	04/18	VULNERABLE
			TCE	5.3	01/95	ND	04/18	(VOC,NO3(N),AS)
			NITRATE (N)	8.5	06/16	5.2	04/18	
			CLO4	ND	07/97	ND	08/17	
			AS	10.0	03/73	ND	08/17	
			CR6	2.6	08/17	2.6	08/17	
03	MUNICIPAL	STANDBY	PCE	23.6	12/00	3.3	04/18	VULNERABLE
			1,1,1-TCA	1.0	11/93	ND	12/17	(VOC,NO3(N),AS)
			NITRATE (N)	16.2	08/89	3.5	12/17	
			CLO4	ND	07/97	ND	12/17	
			AS	10.0	03/73	ND	12/17	
			CR6	3.2	12/17	3.2	12/17	
04	MUNICIPAL	STANDBY	PCE	16.2	03/84	0.6	01/08	VULNERABLE
			TCE	7.8	02/80	ND	12/07	(VOC,NO3(N),AS)
			NITRATE (N)	13.1	11/14	7.2	03/18	
			CLO4	ND	07/97	ND	07/03	
			AS	10.0	03/73	ND	12/07	
			CR6	2.8	07/01	1.2	11/14	
05	MUNICIPAL	DESTROYED	TCE	150.0	07/93	70.0	12/96	
			PCE	51.0	07/93	32.0	12/96	
			CTC	4.3	07/93	1.4	12/96	
			NITRATE (N)	12.2	12/96	5.9	06/99	
			CLO4	5.9	06/97	5.9	06/97	
			AS	10.0	04/73	10.0	04/73	
10	MUNICIPAL	ACTIVE	TCE	7.2	09/81	ND	04/18	VULNERABLE
			PCE	17.7	12/93	3.2	04/18	(VOC,NO3(N),AS)
			NITRATE (N)	9.3	04/16	2.3	04/18	
			CLO4	ND	06/97	ND	08/17	
			AS	20.0	03/73	ND	04/17	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CR6	1.6	04/17	1.6	04/17	
11	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	4.9	07/79	4.9	07/79	
			CLO4	NA	NA	NA	NA	
			AS	20.0	03/73	3.0	08/79	
12	MUNICIPAL	ACTIVE	TCE	67.0	08/17	57.0	04/18	VULNERABLE
			PCE	29.0	04/17	28.0	04/18	(NO3(N),VOC)
			CTC	1.0	06/92	0.7	04/18	
			C-1,2-DCE	0.9	10/16	0.6	04/18	
			NITRATE (N)	9.3	06/05	7.6	04/18	
			CLO4	ND	06/97	ND	08/17	
			AS	ND	05/84	ND	07/16	
			CR6	4.8	07/16	4.8	07/16	
13	MUNICIPAL	ACTIVE	PCE	7.5	04/16	3.6	04/18	VULNERABLE
			TCE	15.0	04/16	5.4	04/18	(NO3(N),VOC)
			NITRATE (N)	5.3	06/16	3.3	08/17	
			CLO4	ND	07/97	ND	08/17	
			AS	1.3	08/96	ND	07/16	
			CR6	5.3	07/16	5.3	07/16	
MT VW	IRRIGATION	DESTROYED	PCE	2.1	08/85	ND	01/01	
			TCE	2.0	01/85	ND	01/01	
			NITRATE (N)	6.8	02/87	2.3	01/01	
			CLO4	ND	09/97	ND	11/97	
			AS	ND	02/84	ND	02/84	
EL MONTE CEMETERY ASSOCIATION								
NA	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
FRUIT STREET WATER COMPANY								
NA	IRRIGATION	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
GATES, JAMES RICHARD								
GATES 1	IRRIGATION	ACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
01	NA	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
GLENDORA, CITY OF								
01-E	MUNICIPAL	DESTROYED	TCE	0.8	12/80	ND	09/07	
			NITRATE (N)	8.6	10/88	7.9	08/08	
			CLO4	ND	06/97	ND	03/03	
			AS	2.8	07/98	ND	03/08	
			CR6	1.0	05/01	1.0	05/01	
02-E	MUNICIPAL	ACTIVE	VOCS	ND	03/85	ND	03/18	VULNERABLE
			NITRATE (N)	15.8	05/78	1.4	09/17	(NO3(N))
			CLO4	ND	07/97	ND	03/18	
			AS	0.7	08/96	ND	09/16	
			CR6	1.3	09/16	1.3	09/16	
03-G	MUNICIPAL	INACTIVE	TCE	0.5	12/79	ND	05/97	
			PCE	0.5	05/97	0.5	05/97	
			NITRATE (N)	36.7	08/83	25.1	08/99	
			CLO4	NA	NA	NA	NA	
04-E	MUNICIPAL	INACTIVE	TCE	0.7	08/80	ND	08/91	
			PCE	0.1	07/81	ND	08/91	
			NITRATE (N)	28.5	06/83	12.8	08/91	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	NA	NA	NA	NA	
			AS	ND	07/74	ND	07/74	
05-E	MUNICIPAL	ACTIVE	VOCS	ND	02/95	ND	09/17	
			NITRATE (N)	0.7	05/95	ND	06/17	
			CLO4	ND	07/97	ND	09/17	
			AS	5.3	04/98	3.1	06/16	
			CR6	1.0	11/00	ND	06/16	
07-G	MUNICIPAL	INACTIVE	TCE	302.0	01/81	ND	04/98	
			PCE	25.0	01/81	1.9	04/98	
			1,1-DCE	435.0	05/84	ND	04/98	
			C-1,2-DCE	21.0	05/82	ND	04/98	
			1,1-DCA	5.0	05/84	ND	04/98	
			1,2-DCA	12.1	12/93	ND	04/98	
			1,1,1-TCA	3200.0	05/84	64	04/98	
			NITRATE (N)	23.9	04/98	17.14581	04/98	
			CLO4	5.3	04/98	5.3	04/98	
			AS	ND	07/74	ND	08/95	
08-E	MUNICIPAL	ACTIVE	VOCS	ND	08/02	ND	03/18	
			NITRATE (N)	1.5	08/86	ND	09/17	
			CLO4	ND	07/97	ND	09/17	
			AS	3.2	08/96	2.4	09/17	
			CR6	1.0	11/00	ND	09/17	
09-E	MUNICIPAL	ACTIVE	VOCS	ND	05/89	ND	09/17	
			NITRATE (N)	0.9	08/96	ND	09/17	
			CLO4	ND	07/97	ND	09/17	
			AS	2.6	09/17	2.6	09/17	
			CR6	1.0	11/00	ND	09/17	
10-E	MUNICIPAL	ACTIVE	VOCS	ND	07/97	ND	03/18	VULNERABLE
			NITRATE (N)	17.6	05/77	7.1	03/18	(NO3(N),AS)
			CLO4	ND	07/97	ND	03/18	
			AS	7.0	08/79	ND	03/17	
			CR6	1.2	03/17	1.2	03/17	
11-E	MUNICIPAL	ACTIVE	VOCS	ND	05/82	ND	09/17	VULNERABLE
			NITRATE (N)	26.5	08/73	8.7	03/18	(NO3(N),CLO4)
			CLO4	4.9	12/10	ND	03/18	
			AS	3.2	07/98	ND	09/16	
			CR6	1.8	09/16	1.8	09/16	
12-G	MUNICIPAL	ACTIVE	TCE	0.9	12/80	ND	09/17	
			NITRATE (N)	1.1	07/98	ND	09/17	
			CLO4	ND	06/97	ND	09/17	
			AS	4.4	07/97	2.2	09/15	
			CR6	1.0	11/00	ND	09/15	
13-E	MUNICIPAL	ACTIVE	VOCS	ND	06/04	ND	03/18	VULNERABLE
			NITRATE (N)	6.6	12/09	1.4	03/18	(NO3(N))
			CLO4	ND	06/04	ND	09/17	
			AS	2.2	09/15	ND	06/16	
			CR6	0.6	09/13	ND	06/16	
GOEDERT, LILLIAN								
GOEDERT	IRRIGATION	DESTROYED	VOCS	ND	06/98	ND	06/98	
			NITRATE (N)	1.6	06/98	1.6	06/98	
			CLO4	ND	06/98	ND	06/98	
GOLDEN STATE WATER COMPANY/SAN DIMAS DISTRICT								
ART-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	13.6	10/74	13.6	10/74	
			CLO4	NA	NA	NA	NA	
			AS	ND	07/74	ND	07/74	
ART-2	MUNICIPAL	DESTROYED	VOCS	ND	06/89	ND	05/07	
			NITRATE (N)	5.9	08/07	2.1	09/07	
			CLO4	ND	08/97	ND	09/07	
			AS	0.8	08/96	ND	05/07	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
ART-3	MUNICIPAL	ACTIVE	VOCS	ND	05/89	ND	12/17	VULNERABLE
			NITRATE (N)	31.6	05/14	7.9	05/18	(NO3(N),CLO4)
			CLO4	21.0	05/14	ND	05/18	
			AS	0.7	08/96	ND	05/16	
			CR6	1.8	05/16	1.8	05/16	
BAS-3	MUNICIPAL	ACTIVE	VOCS	ND	06/89	ND	05/18	VULNERABLE
			NITRATE (N)	28.0	05/16	22.0	05/18	(NO3(N),CLO4)
			CLO4	21.0	10/14	9.5	05/18	
			AS	4.0	08/76	ND	05/16	
			CR6	1.8	05/16	1.8	05/16	
BAS-4	MUNICIPAL	INACTIVE	VOCS	ND	03/85	ND	06/16	
			NITRATE (N)	24.8	01/13	12.0	12/16	
			CLO4	23.0	03/13	7.6	12/16	
			AS	1.0	08/96	ND	05/16	
			CR6	2.3	05/16	2.3	05/16	
CITY	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	05/08	VULNERABLE
			NITRATE (N)	10.1	09/93	7.0	11/08	(NO3(N))
			CLO4	ND	08/97	ND	08/08	
			AS	0.7	08/96	ND	08/06	
			CR6	0.2	12/00	ND	07/01	
COL-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	21.0	09/75	2.3	10/76	
			CLO4	NA	NA	NA	NA	
COL-2	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	26.5	10/76	26.5	10/76	
			CLO4	NA	NA	NA	NA	
			AS	18.0	06/78	18.0	06/78	
COL-4	MUNICIPAL	ACTIVE	VOCS	ND	09/97	ND	05/18	VULNERABLE
			NITRATE (N)	14.5	03/83	5.9	05/18	(NO3(N))
			CLO4	2.9	04/11	ND	05/18	
			AS	0.7	08/96	ND	03/16	
			CR6	1.0	07/01	ND	03/16	
COL-5	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
COL-6	MUNICIPAL	INACTIVE	PCE	7.2	07/85	ND	02/11	
			NITRATE (N)	12.7	06/85	8.1	03/11	
			CLO4	2.1	03/11	2.1	03/11	
			AS	4.0	08/76	ND	05/10	
			CR6	1.0	07/01	1.0	07/01	
COL-7	MUNICIPAL	DESTROYED	PCE	22.0	12/87	3.1	11/99	
			TCE	9.9	01/80	ND	09/99	
			1,1-DCE	1.1	03/85	ND	09/99	
			1,1,1-TCA	1.7	07/85	ND	09/99	
			NITRATE (N)	26.7	05/79	15.38379	01/00	
			CLO4	4.2	01/02	4.2	01/02	
			AS	0.9	08/96	ND	01/00	
COL-8	MUNICIPAL	INACTIVE	PCE	0.2	09/80	ND	12/96	
			NITRATE (N)	27.1	06/83	11.5	12/96	
			CLO4	NA	NA	NA	NA	
			AS	6.0	08/79	ND	03/85	
HIGHWAY	MUNICIPAL	ACTIVE	TCE	0.6	12/80	ND	08/17	VULNERABLE
			PCE	0.1	12/80	ND	08/17	(NO3(N),CLO4)
			NITRATE (N)	19.0	08/15	9.4	05/18	
			CLO4	12.0	08/15	4.0	05/18	
			AS	0.8	08/96	ND	09/16	
			CR6	1.0	07/01	ND	09/16	
HIGHWAY 2	MUNICIPAL	ACTIVE	VOCS	ND	10/10	ND	02/18	VULNERABLE
			NITRATE (N)	6.1	11/15	4.8	05/18	(NO3(N))
			CLO4	ND	10/10	ND	05/18	
			AS	ND	10/10	ND	01/17	
			CR6	1.7	10/10	ND	01/17	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
L HILL 2	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MALON	MUNICIPAL	ACTIVE	VOCS	ND	08/96	ND	05/18	VULNERABLE
			NITRATE (N)	9.5	09/87	5.3	05/18	(NO3(N))
			CLO4	ND	08/97	ND	08/17	
			AS	0.7	08/96	ND	09/15	
			CR6	1.0	07/01	ND	09/15	
GOLDEN STATE WATER COMPANY/SAN GABRIEL VALLEY DISTRICT (SOUTH ARCADIA)								
AZU 1	MUNICIPAL	DESTROYED	TCE	15.0	07/93	0.6	01/95	
			PCE	1.9	07/93	ND	01/95	
			NITRATE (N)	16.5	12/90	7.9	07/02	
			CLO4	NA	NA	NA	10/02	
			AS	0.6	08/96	0.6	08/96	
EARL 1	MUNICIPAL	DESTROYED	PCE	6.0	09/03	6.0	09/03	
			NITRATE (N)	1.6	08/03	1.6	09/03	
			CLO4	ND	08/97	ND	08/03	
			AS	0.5	08/96	ND	07/01	
ENC 1	MUNICIPAL	ACTIVE	TCE	21.0	04/03	3.1	05/18	VULNERABLE
			PCE	3.5	04/03	1.1	05/18	(VOC,NO3(N),CLO4)
			NITRATE (N)	17.5	08/91	2.8	05/18	
			CLO4	5.7	02/13	ND	11/17	
			AS	ND	07/89	ND	06/16	
			CR6	8.2	07/01	7.6	06/16	
ENC 2	MUNICIPAL	ACTIVE	TCE	29.1	02/01	3.8	05/18	VULNERABLE
			PCE	6.4	02/15	1.5	05/18	(VOC)
			NITRATE (N)	4.7	02/09	1.6	05/18	
			CLO4	1.5	03/10	ND	08/17	
			AS	0.7	08/96	ND	08/17	
			CR6	7.9	08/17	7.9	08/17	
ENC 3	MUNICIPAL	ACTIVE	TCE	19.0	03/17	18.0	05/18	VULNERABLE
			PCE	7.8	03/17	7.5	05/18	(NO3(N),AS,VOC)
			NITRATE (N)	9.8	07/93	5.4	05/18	
			CLO4	1.9	03/10	ND	05/18	
			AS	16.3	07/90	ND	08/17	
			CR6	8.0	09/01	7.8	08/17	
FAR 1	MUNICIPAL	ACTIVE	TCE	11.9	10/80	ND	05/18	VULNERABLE
			PCE	3.1	10/87	ND	02/18	(VOC)
			NITRATE (N)	2.9	07/89	0.5	05/18	
			CLO4	ND	08/97	ND	05/18	
			AS	2.7	08/97	ND	05/16	
			CR6	1.6	05/16	1.6	05/16	
FAR 2	MUNICIPAL	ACTIVE	TCE	12.9	07/80	ND	05/18	VULNERABLE
			PCE	2.6	10/87	ND	08/17	(VOC)
			NITRATE (N)	2.8	07/90	1.3	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	0.9	08/96	ND	08/17	
			CR6	1.9	11/14	2.6	08/17	
GAR 1	MUNICIPAL	DESTROYED	VOCS	ND	08/99	ND	07/03	
			PCE	4.5	10/03	4.5	10/03	
			NITRATE (N)	1.9	08/03	1.7	09/03	
			CLO4	ND	08/97	ND	08/03	
			AS	0.5	08/96	ND	08/03	
GAR 2	MUNICIPAL	DESTROYED	PCE	12.0	07/03	11.0	08/03	
			TCE	2.2	08/03	2.2	08/03	
			NITRATE (N)	1.6	08/97	1.0	07/02	
			CLO4	ND	08/97	ND	08/03	
			AS	0.5	08/96	ND	08/00	
GAR 3	MUNICIPAL	ACTIVE	TCE	0.8	02/17	ND	05/18	VULNERABLE
			PCE	7.8	02/17	3.1	05/18	(VOC)
			NITRATE (N)	3.8	02/17	1.7	05/18	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	ND	06/16	ND	05/18	
			AS	NA	NA	ND	06/16	
			CR6	NA	NA	6.2	06/16	
GID 1	MUNICIPAL	DESTROYED	TCE	6.6	04/85	4.1	09/93	
			PCE	0.9	09/93	0.9	09/93	
			NITRATE (N)	9.2	09/93	9.2	09/93	
			CLO4	NA	NA	NA	NA	
GID 2	MUNICIPAL	DESTROYED	TCE	86.0	05/87	5.2	09/93	
			PCE	20.0	05/87	1.5	09/93	
			CTC	3.0	05/87	ND	09/93	
			NITRATE (N)	10.3	09/93	10.3	09/93	
			CLO4	NA	NA	NA	NA	
GRA 1	MUNICIPAL	DESTROYED	TCE	33.0	09/88	25.4	11/94	
			PCE	2.5	11/93	0.6	11/94	
			NITRATE (N)	19.6	08/89	10.0	07/95	
			CLO4	NA	NA	NA	NA	
			AS	18.0	06/78	ND	08/94	
GRA 2	MUNICIPAL	INACTIVE	TCE	31.3	08/89	24.6	08/94	
			PCE	3.3	09/94	3.3	09/94	
			1,1-DCE	4.8	08/94	4.8	08/94	
			NITRATE (N)	18.5	07/90	10.0	07/95	
			CLO4	NA	NA	NA	NA	
			AS	ND	01/89	ND	08/94	
JEF 1	MUNICIPAL	INACTIVE	TCE	340.0	01/80	98.0	01/85	
			PCE	23.0	03/81	8.0	01/85	
			1,1,1-TCA	31.0	01/85	31.0	01/85	
			NITRATE (N)	11.7	07/83	11.0	03/86	
			CLO4	NA	NA	NA	NA	
JEF 2	MUNICIPAL	DESTROYED	TCE	260.0	01/80	140.0	01/85	
			PCE	15.0	03/81	6.0	01/85	
			1,1-DCE	20.0	01/85	20.0	01/85	
			1,1,1-TCA	54.0	01/85	54.0	01/85	
			NITRATE (N)	15.4	06/77	13.8	06/79	
			CLO4	NA	NA	NA	NA	
JEF 3	MUNICIPAL	DESTROYED	TCE	121.0	02/81	4.9	08/92	
			PCE	12.0	03/81	0.6	08/92	
			1,1,1-TCA	29.0	04/85	ND	08/92	
			T-1,2-DCE	2.4	04/85	ND	08/92	
			NITRATE (N)	11.7	12/84	5.3	08/92	
			CLO4	NA	NA	NA	NA	
			AS	ND	12/84	ND	08/86	
JEF 4	MUNICIPAL	ACTIVE	VOCS	ND	08/89	ND	08/17	
			NITRATE (N)	3.3	07/89	0.9	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	0.7	08/96	ND	08/15	
			CR6	1.3	07/01	ND	08/15	
PER 1	MUNICIPAL	ACTIVE	TCE	25.8	10/80	1.0	05/18	VULNERABLE
			PCE	6.8	07/87	ND	05/18	(VOC,NO3(N))
			NITRATE (N)	8.6	12/11	3.0	05/18	
			CLO4	ND	08/97	ND	11/17	
			AS	0.9	08/96	ND	08/15	
			CR6	5.6	08/15	5.6	08/15	
S G 1	MUNICIPAL	ACTIVE	PCE	46.0	04/06	10.0	05/18	VULNERABLE
			TCE	6.8	12/03	1.0	05/18	(NO3(N),CLO4,VOC)
			C-1,2-DCE	1.8	11/04	ND	05/18	
			1,1-DCA	1.8	06/04	ND	11/17	
			1,1-DCE	0.7	11/04	ND	05/18	
			FREON 11	1.2	08/03	ND	08/17	
			NITRATE (N)	6.1	04/02	2.6	05/18	
			CLO4	8.1	08/03	ND	05/18	
			AS	2.7	08/94	ND	08/16	
			CR6	5.9	12/01	5.6	08/16	
S G 2	MUNICIPAL	ACTIVE	PCE	28.0	05/11	2.1	05/18	VULNERABLE

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			TCE	3.6	06/99	ND	05/18	(VOC,CLO4,NO3(N))
			1,1-DCE	0.7	04/11	ND	11/17	
			C-1,2-DCE	1.2	02/01	ND	05/18	
			NITRATE (N)	17.0	08/16	11.0	05/18	
			CLO4	7.0	02/03	ND	05/18	
			AS	0.8	08/96	ND	08/15	
			CR6	8.0	08/15	8.0	08/15	
SAX 1	MUNICIPAL	DESTROYED	PCE	1.4	04/97	0.9	12/97	
			NITRATE (N)	7.5	10/97	7.5	10/97	
			CLO4	ND	08/97	ND	12/97	
			AS	0.3	08/96	0.3	08/96	
SAX 3	MUNICIPAL	ACTIVE	VOCS	ND	04/89	ND	08/17	VULNERABLE
			NITRATE (N)	6.2	11/96	1.0	08/17	(NO3(N))
			CLO4	ND	08/97	ND	08/17	
			AS	0.4	08/96	ND	08/16	
			CR6	5.8	08/16	5.8	08/16	
SAX 4	MINICIPAL	ACTIVE	PCE	0.8	12/16	ND	03/18	
			TCE	0.5	12/16	ND	03/18	
			NITRATE (N)	2.7	08/99	ND	03/18	
			CLO4	ND	08/97	ND	03/18	
			AS	5.2	12/09	3.5	12/16	
			CR6	4.8	11/14	4.3	12/16	
GREEN, WALTER								
NA	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
NA	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
HALL (W.E.) COMPANY								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
HANSEN, ALICE								
2946C	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
HANSON AGGREGATES WEST, INC.								
DUA 1	INDUSTRIAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
EL 1	INDUSTRIAL	ACTIVE	VOCS	ND	05/98	ND	10/17	
			NITRATE (N)	3.8	02/93	1.0	10/17	
			CLO4	ND	03/98	ND	03/98	
EL 3	INDUSTRIAL	ACTIVE	VOCS	ND	06/98	ND	10/17	
			NITRATE (N)	5.0	05/93	1.0	10/17	
			CLO4	ND	03/98	ND	03/98	
EL 4	INDUSTRIAL	ACTIVE	VOCS	ND	12/87	ND	10/17	
			NITRATE (N)	1.4	06/98	1.0	10/17	
			CLO4	NA	NA	NA	NA	
KIN 1	INDUSTRIAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
HARTLEY, DAVID								
NA	DOMESTIC	INACTIVE	VOCS	ND	10/95	ND	10/95	
			NITRATE (N)	25.1	01/96	16.9	04/96	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	NA	NA	NA	NA	
HEMLOCK MUTUAL WATER COMPANY								
NORTH	MUNICIPAL	ACTIVE	PCE	51.7	04/82	ND	09/17	VULNERABLE
			TCE	0.7	12/87	ND	09/17	(VOC)
			NITRATE (N)	4.3	12/06	1.4	12/17	
			CLO4	ND	09/97	ND	09/17	
			AS	2.7	12/08	ND	12/17	
			CR6	1.0	12/00	ND	12/17	
SOUTH	MUNICIPAL	ACTIVE	PCE	210.0	12/87	ND	03/18	VULNERABLE
			TCE	0.9	04/89	ND	09/17	(VOC,NO3(N))
			NITRATE (N)	7.4	12/94	1.9	03/18	
			CLO4	ND	09/97	ND	09/17	
			AS	2.1	08/96	ND	12/17	
			CR6	1.1	12/00	ND	12/17	
INDUSTRY WATERWORKS SYSTEM, CITY OF								
01	MUNICIPAL	INACTIVE	TCE	40.0	01/80	1.7	10/92	
			PCE	9.0	04/80	5.0	10/92	
			CTC	5.7	10/92	5.7	10/92	
			1,1-DCE	15.3	10/92	15.3	10/92	
			1,2-DCA	0.6	10/92	0.6	10/92	
			NITRATE (N)	13.6	10/92	13.6	10/92	
			CLO4	NA	NA	NA	NA	
			AS	ND	01/80	ND	01/80	
02	MUNICIPAL	INACTIVE	TCE	19.0	01/80	2.3	04/81	
			PCE	10.0	04/81	10.0	04/81	
			NITRATE (N)	12.5	02/86	12.5	02/86	
			CLO4	100.0	04/99	100.0	04/99	
			AS	ND	01/80	ND	01/80	
03	MUNICIPAL	INACTIVE	PCE	2.6	09/80	1.6	07/06	
			TCE	12.0	07/06	12.0	07/06	
			CTC	0.5	07/06	0.5	07/06	
			1,2-DCA	0.5	07/06	0.5	07/06	
			NITRATE (N)	7.0	08/00	ND	07/06	
			CLO4	120.0	04/99	ND	07/06	
			AS	5.4	07/95	ND	08/04	
			CR6	6.9	11/00	6.9	11/00	
04	MUNICIPAL	INACTIVE	PCE	2.4	08/01	0.5	07/06	
			TCE	8.0	11/01	1.7	07/06	
			1,1-DCE	0.9	09/02	0.6	07/06	
			1,2-DCA	1.0	11/01	ND	07/06	
			CTC	0.7	11/01	ND	07/05	
			NITRATE (N)	9.5	06/02	7.5	04/07	
			CLO4	14.8	06/01	6.5	01/06	
			AS	6.9	07/95	2.8	08/01	
			CR6	8.9	11/00	8.4	06/01	
05	MUNICIPAL	ACTIVE	PCE	13.0	11/17	9.8	05/18	VULNERABLE
			TCE	6.8	04/96	2.9	05/18	(NO3(N),CLO4,AS,VOC)
			1,2-DCA	0.7	09/02	ND	08/17	
			1,1-DCE	2.5	11/17	1.6	05/18	
			NITRATE (N)	7.3	07/16	6.4	05/18	
			CLO4	11.0	04/04	ND	05/17	
			AS	6.8	07/95	2.3	12/15	
			CR6	8.3	05/11	6.5	12/15	
05TH AVE	MUNICIPAL	DESTROYED	TCE	0.3	12/80	0.3	12/80	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
KNIGHT, KATHRYN M.								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LANDEROS, JOHN								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LA PUENTE VALLEY COUNTY WATER DISTRICT								
01	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	MUNICIPAL	ACTIVE	TCE	120.0	12/12	84.0	05/17	VULNERABLE
			PCE	6.6	03/00	4.4	05/17	(NO3(N),VOC,CLO4)
			CTC	8.5	12/02	3.4	05/17	
			1,1-DCA	2.1	11/03	0.7	05/17	
			1,2-DCA	6.1	03/00	2.4	05/17	
			1,1-DCE	1.6	12/00	ND	05/17	
			C-1,2-DCE	1.9	04/10	1.5	05/17	
			NITRATE (N)	8.0	05/17	8.0	05/17	
			CLO4	183.0	02/98	34.0	05/17	
			AS	1.9	04/06	ND	06/16	
			CR6	3.7	04/06	3.5	10/16	
03	MUNICIPAL	ACTIVE	TCE	72.0	03/11	0.5	06/17	VULNERABLE
			PCE	6.3	04/85	ND	06/17	(VOC,NO3(N),CLO4)
			CTC	8.5	11/04	ND	06/17	
			1,1-DCE	0.9	10/95	ND	06/17	
			1,2-DCA	6.7	02/99	ND	06/17	
			C-1,2-DCE	1.4	01/97	ND	06/17	
			1,1-DCA	0.5	09/01	ND	06/17	
			NITRATE (N)	21.5	01/80	9.9	05/17	
			CLO4	174.0	02/98	6.6	05/17	
			AS	2.1	08/04	ND	10/16	
			CR6	4.3	06/01	4.0	10/16	
04	MUNICIPAL	INACTIVE	TCE	84.3	03/00	46.0	04/04	
			PCE	6.6	03/00	2.9	04/04	
			CTC	7.6	04/95	1.9	04/04	
			1,1-DCA	0.7	04/04	0.7	04/04	
			1,2-DCA	8.1	03/00	4.4	04/04	
			1,1-DCE	1.3	04/97	0.5	04/04	
			C-1,2-DCE	15.6	11/98	1.7	04/04	
			NITRATE (N)	5.6	04/95	4.1	04/04	
			CLO4	159.0	06/97	71.2	04/04	
			AS	2.3	09/94	ND	11/98	
			CR6	4.3	11/00	4.3	11/00	
05	MUNICIPAL	ACTIVE	TCE	43.0	03/08	12.0	12/17	VULNERABLE
			PCE	3.8	03/08	1.0	12/17	(NO3(N),VOC,CLO4)
			CTC	2.3	03/08	ND	12/17	
			1,1-DCA	0.5	03/08	ND	12/17	
			1,2-DCA	2.7	03/08	ND	12/17	
			1,1-DCE	0.5	03/08	ND	12/17	
			C-1,2-DCE	0.8	11/08	ND	12/17	
			NITRATE (N)	7.8	12/16	7.2	03/18	
			CLO4	65.0	03/08	14.0	05/17	
			AS	1.1	03/08	ND	03/18	
			CR6	3.7	03/18	3.7	03/18	
LA VERNE, CITY OF								
SNIDO	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
W15-L	MUNICUPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
W24-L	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LEE, PAUL								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
01	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
03	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
04	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LOS ANGELES, COUNTY OF								
02	NON POTABLE	DESTROYED	PCE	6.6	09/04	6.6	09/04	
			TCE	1.3	09/04	1.3	09/04	
			1,2-DCA	0.5	01/96	ND	09/04	
			NITRATE (N)	2.4	09/04	2.4	09/04	
			CLO4	ND	08/97	ND	08/97	
03	IRRIGATION	DESTROYED	PCE	2.1	06/94	2.1	06/94	
			TCE	0.7	06/94	0.7	06/94	
			NITRATE (N)	1.1	06/94	1.1	06/94	
			CLO4	NA	NA	NA	NA	
03A	IRRIGATION	DESTROYED	PCE	2.5	11/99	ND	10/08	
			NITRATE (N)	0.5	08/96	ND	10/08	
			CLO4	ND	08/97	ND	08/97	
04	IRRIGATION	DESTROYED	1,1,1-TCA	0.7	05/87	ND	11/87	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
05	IRRIGATION	DESTROYED	PCE	39.0	09/03	35.7	10/08	
			TCE	1.3	09/03	ND	10/08	
			NITRATE (N)	4.1	09/03	3.2	10/08	
			CLO4	ND	08/97	ND	08/97	
06	IRRIGATION	DESTROYED	PCE	7.4	08/96	2.8	11/99	
			TCE	8.3	08/96	2.9	11/99	
			1,1-DCA	2.0	08/96	ND	11/99	
			1,1-DCE	1.4	08/96	ND	11/99	
			C-1,2-DCE	4.5	08/96	0.8	11/99	
			NITRATE (N)	2.6	08/96	1.9	11/99	
			CLO4	NA	NA	NA	NA	
600	IRRIGATION	INACTIVE	VOCS	ND	07/98	ND	07/98	
			NITRATE (N)	1.1	07/98	1.1	07/98	
			CLO4	ND	07/98	ND	07/98	
BIG RED	NON POTABLE	INACTIVE	1,2-DCA	0.6	01/96	ND	10/09	
			NITRATE (N)	2.7	09/02	ND	10/09	
			CLO4	ND	08/97	ND	08/97	
NEW LAKE	NON POTABLE	INACTIVE	PCE	19.7	02/00	ND	11/10	
			TCE	0.9	02/00	ND	11/10	
			NITRATE (N)	5.0	02/00	4.1	11/10	
			CLO4	ND	08/97	ND	08/97	
SF 1	NON POTABLE	ACTIVE	TCE	4.3	09/04	ND	10/17	
			PCE	7.6	09/04	ND	10/17	
			VC	1.4	12/87	ND	10/17	
			NITRATE (N)	3.6	09/02	1.6	10/17	
			CLO4	ND	06/97	ND	05/10	
WHI 1	NON POTABLE	INACTIVE	PCE	3.8	09/04	1.4	11/10	
			TCE	1.0	09/04	ND	11/10	
			NITRATE (N)	1.7	10/09	1.2	11/10	
			CLO4	ND	08/97	ND	08/97	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
LOS FLORES MUTUAL WATER COMPANY								
HI 1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LO 1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
LOUCKS, DAVID								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MAECHTLEN ESTATE								
M-N	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
OLD60	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
SNIDO	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MANNING BROTHERS ROCK AND SAND COMPANY								
36230	INDUSTRIAL	DESTROYED	TCE	520.0	12/79	100.0	01/80	
			CLO4	NA	NA	NA	NA	
MAPLE WATER COMPANY								
01	MUNICIPAL	DESTROYED	VOCS	ND	06/89	ND	07/96	
			NITRATE (N)	15.4	09/94	12.5	07/96	
			CLO4	NA	NA	NA	NA	
			AS	1.3	07/96	1.3	07/96	
02	MUNICIPAL	DESTROYED	VOCS	ND	06/89	ND	07/96	
			NITRATE (N)	14.2	11/89	12.5	07/96	
			CLO4	NA	NA	NA	NA	
			AS	1.3	07/96	1.3	07/96	
MARTINEZ, FRANCES M.								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA								
02	NON-POTABLE	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
03	NON-POTABLE	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MILLERCOORS LLC (MILLER BREWERIES WEST, L.P. /MILLER BREWING COMPANY)								
01	INDUSTRIAL	INACTIVE	VOCS	ND	01/92	ND	10/09	
			NITRATE (N)	2.2	01/93	1.0	10/09	
			CLO4	ND	06/97	ND	06/08	
			AS	3.9	06/08	3.9	06/08	
02	INDUSTRIAL	ACTIVE	VOCS	ND	01/92	ND	02/18	
			NITRATE (N)	3.2	10/92	0.9	06/16	
			CLO4	ND	06/97	ND	06/14	
			AS	3.5	05/08	3.3	06/13	
			CR6	ND	12/14	ND	12/14	
N BREWER	INDUSTRIAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	NA	NA	NA	NA	
MOON VALLEY NURSERY (COINER, JAMES W., DBA COINER NURSERY)								
03	NON-POTABLE	INACTIVE	PCE	293.5	02/98	170.0	10/01	
			TCE	10.2	11/87	3.4	10/01	
			CTC	1.6	08/87	1.6	10/01	
			1,1-DCE	6.7	02/98	4.6	10/01	
			C-1,2-DCE	6.8	07/96	2.7	10/01	
			1,1,1-TCA	22.0	02/98	12.0	10/01	
			NITRATE (N)	15.1	10/01	10.1	09/07	
			CLO4	9.0	02/98	ND	09/98	
05R	NON-POTABLE	ACTIVE	PCE	7.7	02/98	1.5	10/17	
			TCE	1.6	10/01	ND	10/17	
			CTC	2.7	07/96	ND	10/17	
			1,1-DCE	5.5	10/01	ND	10/17	
			NITRATE (N)	24.8	10/09	3.7	10/17	
			CLO4	9.0	02/98	4.0	09/98	
MONROVIA, CITY OF								
01	MUNICIPAL	DESTROYED	TCE	46.8	11/92	12.0	04/02	
			PCE	3.9	03/81	0.8	04/02	
			1,1-DCE	1.2	08/96	0.9	04/02	
			1,1,1-TCA	2.1	08/87	ND	07/01	
			NITRATE (N)	17.6	02/01	13.6	03/02	
			CLO4	11.1	02/01	8.4	04/02	
			AS	2.5	10/00	2.5	10/00	
02	MUNICIPAL	ACTIVE	TCE	167.0	08/82	2.2	04/18	VULNERABLE
			PCE	11.0	08/82	ND	04/18	(VOC,CLO4,NO3(N))
			1,1,1-TCA	7.1	02/87	ND	08/17	
			1,1-DCE	3.4	06/87	ND	04/18	
			1,2-DCA	1.5	02/87	ND	08/17	
			NITRATE (N)	16.0	04/18	16.0	04/18	
			CLO4	6.9	04/15	4.2	04/18	
			AS	0.9	08/96	ND	04/16	
			CR6	7.1	04/16	7.1	04/16	
03	MUNICIPAL	ACTIVE	TCE	18.0	08/82	1.6	04/18	VULNERABLE
			PCE	17.0	08/82	ND	04/18	(NO3(N),VOC)
			1,1-DCE	0.8	12/08	ND	04/18	
			NITRATE (N)	11.2	05/76	1.7	04/18	
			CLO4	ND	08/97	ND	08/17	
			AS	3.6	08/97	ND	04/16	
			CR6	5.8	08/13	1.7	04/16	
04	MUNICIPAL	ACTIVE	TCE	6.5	02/91	1.7	04/18	VULNERABLE
			PCE	1.0	02/91	0.5	04/18	(VOC,NO3(N))
			1,1-DCE	1.1	01/05	ND	04/18	
			NITRATE (N)	6.5	06/91	3.3	04/18	
			CLO4	ND	08/97	ND	10/18	
			AS	3.8	08/97	ND	12/16	
			CR6	1.1	07/01	ND	12/16	
05	MUNICIPAL	ACTIVE	TCE	6.5	06/16	4.6	04/18	VULNERABLE
			PCE	1.0	10/02	ND	04/18	(VOC,NO3(N))
			1,1-DCE	1.0	10/02	ND	04/18	
			NITRATE (N)	6.6	01/91	2.8	04/18	
			CLO4	ND	08/97	ND	08/17	
			AS	1.0	08/96	ND	04/16	
			CR6	1.5	04/16	1.5	04/16	
06	MUNICIPAL	ACTIVE	TCE	23.0	04/14	13.0	04/18	VULNERABLE
			PCE	2.3	01/10	2.0	04/18	(NO3(N),CLO4,VOC)
			1,1-DCE	0.8	10/07	0.5	04/18	
			NITRATE (N)	9.5	06/14	6.9	04/18	
			CLO4	4.9	06/14	ND	08/17	
			AS	ND	10/99	ND	04/16	
			CR6	3.5	04/16	3.5	04/16	
MONROVIA NURSERY								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
DIV 4	IRRIGATION	DESTROYED	VOCS	ND	08/96	ND	02/07	
			NITRATE (N)	48.1	09/04	45.6	02/07	
			CLO4	ND	02/98	ND	02/98	
DIV 8	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MONTEREY PARK, CITY OF								
01	MUNICIPAL	ACTIVE	PCE	64.1	12/08	4.6	05/18	VULNERABLE
			TCE	4.1	05/04	ND	05/18	(NO3(N),CLO4,VOC)
			1,1-DCE	0.6	05/04	ND	05/18	
			1,1-DCA	1.0	05/04	ND	02/18	
			C-1,2-DCE	1.0	03/04	ND	05/18	
			NITRATE (N)	5.4	12/12	1.9	05/18	
			CLO4	4.7	05/04	ND	08/17	
			AS	0.5	07/96	ND	08/17	
			CR6	6.2	11/00	5.1	08/17	
02	MUNICIPAL	DESTROYED	PCE	6.4	04/98	6.4	04/98	
			NITRATE (N)	4.1	07/95	2.9	07/97	
			CLO4	3.0	07/97	ND	03/98	
			AS	0.4	07/96	0.4	07/96	
03	MUNICIPAL	INACTIVE	PCE	25.0	08/11	22.0	05/12	
			TCE	2.7	05/04	1.3	05/12	
			C-1,2-DCE	0.8	05/04	ND	05/12	
			NITRATE (N)	3.0	07/97	1.2	05/12	
			CLO4	4.2	05/04	ND	08/11	
			AS	12.9	08/89	4.1	08/11	
			CR6	3.2	05/04	2.5	01/10	
04	MUNICIPAL	DESTROYED	PCE	0.4	01/80	ND	11/87	
			NITRATE (N)	1.4	09/87	1.4	09/87	
			CLO4	NA	NA	NA	NA	
05	MUNICIPAL	ACTIVE	PCE	40.0	06/13	19.0	05/18	VULNERABLE
			TCE	7.0	01/92	0.6	05/18	(NO3(N),CLO4,VOC)
			C-1,2-DCE	2.0	11/01	ND	05/18	
			1,1-DCA	1.1	11/01	ND	05/18	
			1,1-DCE	0.7	11/01	ND	05/18	
			NITRATE (N)	6.1	11/15	5.3	05/18	
			CLO4	6.5	02/01	ND	05/18	
			AS	1.5	10/12	ND	11/15	
			CR6	4.7	11/14	4.7	11/15	
06	MUNICIPAL	INACTIVE	PCE	13.6	03/01	3.1	05/05	
			TCE	6.4	05/89	3.1	05/05	
			C-1,2-DCE	1.3	01/99	1.2	05/05	
			1,1-DCA	0.8	11/01	0.6	05/05	
			NITRATE (N)	6.8	06/03	5.6	05/05	
			CLO4	5.9	04/02	5.9	04/02	
			AS	2.2	09/00	ND	08/02	
			CR6	4.1	11/00	3.4	05/01	
07	MUNICIPAL	INACTIVE	PCE	6.0	09/10	6.0	09/10	
			NITRATE (N)	2.9	08/89	0.6	08/10	
			CLO4	ND	08/97	ND	08/10	
			AS	28.4	07/96	2.1	08/09	
			CR6	5.3	02/07	5.1	01/10	
08	MUNICIPAL	INACTIVE	PCE	2.5	02/05	1.9	03/09	
			NITRATE (N)	3.8	08/05	ND	11/08	
			CLO4	ND	08/97	ND	11/08	
			AS	45.0	03/09	45.0	03/09	
			CR6	6.7	12/01	6.7	12/01	
09	MUNICIPAL	ACTIVE	PCE	13.0	05/15	ND	05/18	VULNERABLE
			TCE	1.3	04/97	ND	05/18	(VOC,AS)
			NITRATE (N)	4.1	07/12	ND	05/18	
			CLO4	ND	08/97	ND	05/18	
			AS	15.0	06/07	12.0	04/17	
			CR6	3.4	11/00	2.4	02/16	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
10	MUNICIPAL	ACTIVE	PCE	17.0	02/12	9.7	05/18	VULNERABLE
			TCE	2.6	05/04	0.8	05/18	(NO3(N),CLO4,AS,VOC)
			C-1,2-DCE	0.8	05/04	ND	05/18	
			NITRATE (N)	6.5	05/18	6.5	05/18	
			CLO4	4.3	05/04	ND	08/17	
			AS	6.7	07/98	3.1	05/17	
			CR6	6.6	11/00	5.7	08/16	
12	MUNICIPAL	ACTIVE	PCE	85.0	05/02	45.0	05/18	VULNERABLE
			TCE	5.4	10/95	2.2	05/18	(NO3(N),CLO4,VOC)
			1,1-DCA	1.3	05/12	0.7	11/17	
			1,1-DCE	0.5	05/12	ND	05/18	
			C-1,2-DCE	1.4	05/12	ND	05/18	
			NITRATE (N)	6.1	08/07	2.8	05/18	
			CLO4	15.0	09/97	ND	05/18	
			AS	ND	04/81	ND	05/17	
			CR6	4.6	02/07	3.8	02/16	
14	MUNICIPAL	INACTIVE	PCE	2.2	05/02	0.7	05/06	
			TCE	2.9	11/02	1.5	05/06	
			1,1-DCA	0.8	08/02	ND	05/06	
			C-1,2-DCE	1.0	11/02	ND	05/06	
			NITRATE (N)	2.3	10/06	2.3	10/06	
			CLO4	ND	08/97	ND	05/03	
			AS	41.0	08/05	39.0	03/06	
			CR6	1.0	11/00	1.0	05/01	
15	MUNICIPAL	ACTIVE	PCE	190.0	02/12	84.0	05/18	VULNERABLE
			TCE	3.6	03/15	2.2	05/18	(NO3(N),VOC)
			C-1,2-DCE	0.8	08/16	ND	05/18	
			1,1-DCA	0.7	08/16	ND	11/17	
			NITRATE (N)	5.2	11/08	4.0	05/18	
			CLO4	2.4	07/06	ND	05/18	
			AS	ND	09/06	ND	05/17	
			CR6	2.9	02/07	ND	08/15	
FERN	MUNICIPAL	ACTIVE	PCE	12.0	08/10	ND	05/18	VULNERABLE
			TCE	2.8	10/16	ND	05/18	(VOC,AS)
			C-1,2-DCE	0.7	03/04	ND	05/18	
			NITRATE (N)	1.5	03/04	ND	08/17	
			CLO4	2.0	08/97	ND	08/17	
			AS	16.0	07/16	15.0	05/17	
			CR6	1.5	11/00	ND	08/16	
NAMIMATSU FARMS								
NA	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
OWL ROCK PRODUCTS COMPANY								
NA	INDUSTRIAL	INACTIVE	VOCS	ND	05/87	ND	10/09	
			NITRATE (N)	2.0	08/89	ND	10/09	
			CLO4	NA	NA	NA	NA	
NA	INDUSTRIAL	INACTIVE	VOCS	NA	NA	ND	10/17	
			NITRATE (N)	NA	NA	ND	10/17	
			CLO4	NA	NA	NA	NA	
NA	INDUSTRIAL	INACTIVE	VOCS	ND	10/02	ND	11/04	
			NITRATE (N)	NA	NA	NA	11/04	
			CLO4	NA	NA	NA	NA	
PICO COUNTY WATER DISTRICT								
NA	MUNICIPAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
POLOPOLUS ET AL.								
01	IRRIGATION	INACTIVE	PCE	330.0	10/96	270.0	03/98	
			TCE	498.9	09/92	180.0	03/98	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			1,1-DCA	22.0	03/98	22.0	03/98	
			1,2-DCA	1.2	06/96	0.9	03/98	
			1,1-DCE	115.3	09/92	22.0	03/98	
			T-1,2-DCE	1.5	06/87	ND	03/98	
			1,1,1-TCA	53.0	09/92	12.0	03/98	
			CTC	0.8	06/96	0.6	03/98	
			NITRATE (N)	11.5	07/91	6.7	03/98	
			CLO4	ND	03/98	ND	03/98	
RICHWOOD MUTUAL WATER COMPANY								
NORTH 2	MUNICIPAL	DESTROYED	PCE	93.0	05/83	4.0	12/93	
			TCE	3.0	03/81	ND	05/92	
			CTC	0.2	10/80	ND	05/92	
			NITRATE (N)	5.6	02/84	4.5	06/99	
			CLO4	NA	NA	NA	NA	
			AS	ND	06/90	ND	09/92	
SOUTH 1	MUNICIPAL	DESTROYED	PCE	96.0	05/83	3.4	12/93	
			TCE	0.7	12/82	ND	05/92	
			NITRATE (N)	6.5	06/99	6.5	06/99	
			CLO4	NA	NA	NA	NA	
			AS	ND	06/90	ND	09/92	
ROY, RUTH								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
RURBAN HOMES MUTUAL WATER COMPANY								
NORTH 1	MUNICIPAL	ACTIVE	PCE	16.0	11/80	ND	03/18	VULNERABLE
			1,1-DCE	0.9	09/08	ND	03/18	(VOC,NO3(N))
			FREON 11	13.3	05/04	ND	03/18	
			FREON 113	64.4	05/04	ND	03/18	
			NITRATE (N)	6.8	03/01	1.9	09/17	
			CLO4	ND	09/97	ND	09/17	
			AS	3.0	08/03	2.5	09/15	
			CR6	1.0	06/01	ND	09/15	
SOUTH 2	MUNICIPAL	INACTIVE	PCE	24.3	02/81	ND	03/13	
			1,1-DCE	1.7	10/08	ND	03/13	
			FREON 11	14.1	05/04	ND	03/13	
			FREON 113	54.2	05/04	ND	03/13	
			NITRATE (N)	8.6	03/07	4.7	03/13	
			CLO4	ND	09/97	ND	06/11	
			AS	3.0	08/03	2.1	09/12	
			CR6	1.0	06/01	ND	12/01	
SAN GABRIEL COUNTRY CLUB								
01	IRRIGATION	ACTIVE	VOCS	ND	05/85	ND	10/17	
			NITRATE (N)	15.1	07/96	13.0	10/17	
			CLO4	8.5	07/97	5.4	08/05	
02	IRRIGATION	ACTIVE	VOCS	ND	05/87	ND	10/17	
			NITRATE (N)	7.9	10/17	7.9	10/17	
			CLO4	1.4	12/97	1.1	08/05	
SAN GABRIEL COUNTY WATER DISTRICT								
05 BRA	MUNICIPAL	INACTIVE	TCE	0.9	01/97	ND	03/01	
			PCE	1.9	02/99	1.0	03/01	
			NITRATE (N)	19.0	08/89	16.0	03/01	
			CLO4	ND	09/97	ND	09/00	
			AS	0.6	08/96	ND	08/98	
			CR6	7.0	12/00	7.0	12/00	
06 BRA	MUNICIPAL	DESTROYED	VOCS	ND	02/99	ND	02/99	
			NITRATE (N)	24.6	08/72	13.0	03/00	
			CLO4	3.0	02/99	3.0	02/99	
07	MUNICIPAL	DESTROYED	VOCS	ND	09/89	ND	10/11	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			NITRATE (N)	10.8	03/03	7.9	10/11	
			CLO4	5.6	03/03	ND	10/11	
			AS	1.3	08/96	ND	07/09	
			CR6	4.5	07/01	4.5	07/01	
08	MUNICIPAL	INACTIVE	VOCS	ND	01/90	ND	03/91	
			NITRATE (N)	17.2	01/82	5.3	08/93	
			CLO4	NA	NA	NA	NA	
			AS	ND	06/78	ND	08/90	
09	MUNICIPAL	ACTIVE	PCE	2.7	01/16	2.5	04/18	VULNERABLE
			NITRATE (N)	11.5	03/03	4.7	04/18	(VOC,NO3(N))
			CLO4	ND	09/97	ND	07/18	
			AS	ND	09/89	ND	07/15	
			CR6	8.1	12/02	7.8	07/15	
10	MUNICIPAL	INACTIVE	PCE	18.0	08/93	1.9	11/98	
			NITRATE (N)	11.3	05/89	7.0	11/98	
			CLO4	5.5	11/98	5.5	11/98	
			AS	ND	06/78	ND	11/98	
11	MUNICIPAL	ACTIVE	PCE	3.9	01/18	3.9	01/18	VULNERABLE
			TCE	0.7	04/12	ND	01/18	(VOC,NO3(N))
			NITRATE (N)	14.0	01/18	14.0	01/18	
			CLO4	ND	09/97	ND	07/17	
			AS	ND	06/78	ND	07/16	
			CR6	25.0	12/00	7.3	07/16	
12	MUNICIPAL	ACTIVE	TCE	0.8	09/02	ND	07/17	VULNERABLE
			PCE	1.1	07/17	0.9	04/18	(AS)
			NITRATE (N)	2.0	06/16	2.0	10/17	
			CLO4	ND	09/97	ND	07/18	
			AS	7.0	10/96	4.5	10/17	
			CR6	7.6	07/01	6.2	10/17	
14	MUNICIPAL	ACTIVE	PCE	0.6	09/02	ND	07/17	
			NITRATE (N)	4.4	02/17	1.0	07/17	
			CLO4	ND	09/97	ND	07/17	
			AS	3.1	07/08	2.5	07/17	
			CR6	4.6	07/01	2.7	07/17	
15	MUNICIPAL	ACTIVE	PCE	3.0	04/18	3.0	04/18	VULNERABLE
			NITRATE (N)	7.5	03/17	6.9	04/18	(NO3(N))
			CLO4	ND	12/14	ND	10/17	
			AS	ND	06/14	ND	04/17	
			CR6	3.6	11/14	2.9	04/17	
SAN GABRIEL VALLEY WATER COMPANY								
1B	MUNICIPAL	ACTIVE	PCE	46.0	04/81	ND	05/18	VULNERABLE
			TCE	1.8	02/80	ND	08/17	(VOC,NO3(N))
			FREON 113	22.3	08/08	ND	08/17	
			NITRATE (N)	5.1	05/08	0.8	05/18	
			CLO4	ND	08/97	ND	08/17	
			AS	2.9	07/96	2.1	08/17	
			CR6	1.0	05/14	ND	08/17	
1C	MUNICIPAL	INACTIVE	VOCS	ND	07/98	ND	08/17	
			NITRATE (N)	1.9	08/11	1.1	08/17	
			CLO4	ND	10/99	ND	08/17	
			AS	2.6	09/94	2.1	08/15	
			CR6	1.0	05/01	ND	08/15	
1D	MUNICIPAL	ACTIVE	VOCS	ND	07/98	ND	08/17	
			NITRATE (N)	1.1	07/89	0.9	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	2.0	11/06	ND	11/15	
			CR6	1.0	05/01	ND	11/15	
1E	MUNICIPAL	ACTIVE	PCE	0.7	09/02	ND	05/18	VULNERABLE
			NITRATE (N)	1.1	11/16	1.0	11/17	(CLO4)
			CLO4	5.0	06/00	ND	08/17	
			AS	2.7	11/08	2.0	11/17	
			CR6	1.0	05/01	ND	11/17	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
2C	MUNICIPAL	DESTROYED	TCE	15.2	12/80	ND	11/05	
			PCE	3.0	10/87	ND	11/05	
			NITRATE (N)	3.7	08/04	1.2	08/05	
			CLO4	ND	08/97	ND	02/03	
			AS	ND	07/89	ND	08/05	
2D	MUNICIPAL	ACTIVE	TCE	25.0	12/80	ND	05/18	VULNERABLE
			PCE	0.9	03/17	ND	05/18	(VOC)
			NITRATE (N)	1.9	08/15	1.6	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	ND	07/89	ND	08/17	
			CR6	3.2	08/17	3.2	08/17	
2E	MUNICIPAL	ACTIVE	TCE	18.0	01/80	ND	05/18	VULNERABLE
			PCE	3.6	09/16	2.5	05/18	(VOC)
			NITRATE (N)	4.5	08/15	3.3	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	ND	07/89	ND	08/17	
			CR6	3.8	08/17	3.8	08/17	
2F	MUNICIPAL	ACTIVE	TCE	1.3	02/15	ND	05/18	
			PCE	1.3	09/16	ND	05/18	
			NITRATE (N)	2.5	08/15	1.8	08/17	
			CLO4	ND	09/06	ND	08/17	
			AS	0.7	03/06	ND	08/15	
			CR6	3.1	08/15	3.1	08/15	
8A	MUNICIPAL	INACTIVE	PCE	0.6	11/87	ND	02/97	
			NITRATE (N)	9.1	02/97	9.1	02/97	
			CLO4	NA	NA	NA	NA	
			AS	ND	07/89	ND	07/89	
8B	MUNICIPAL	ACTIVE	PCE	220.0	02/09	130.0	05/18	VULNERABLE
			TCE	1.2	11/15	0.7	05/18	(NO3(N),VOC)
			NITRATE (N)	5.2	08/08	4.0	08/17	
			CLO4	3.0	08/97	ND	08/17	
			AS	0.4	07/96	ND	08/15	
			CR6	2.9	11/02	2.4	08/15	
8C	MUNICIPAL	ACTIVE	PCE	170.0	05/09	63.0	05/18	VULNERABLE
			TCE	0.8	05/09	ND	05/18	(CLO4,VOC)
			NITRATE (N)	4.5	07/98	4.0	08/17	
			CLO4	4.0	03/08	ND	08/17	
			AS	0.5	07/96	ND	08/15	
			CR6	3.4	08/15	3.4	08/15	
8D	MUNICIPAL	ACTIVE	PCE	160.0	08/17	120.0	05/18	VULNERABLE
			TCE	1.0	02/14	0.6	05/18	(NO3(N),AS,VOC)
			C-1,2 DCE	0.8	05/04	ND	05/18	
			CTC	0.6	06/88	ND	05/18	
			NITRATE (N)	6.6	06/09	4.1	05/18	
			CLO4	2.3	03/08	ND	08/17	
			AS	29.5	09/94	ND	05/17	
			CR6	3.3	11/00	2.9	05/17	
8E	MUNICIPAL	ACTIVE	PCE	10.0	03/03	<0.5	05/18	VULNERABLE
			NITRATE (N)	1.6	07/01	ND	08/17	(VOC)
			CLO4	ND	08/97	ND	08/17	
			AS	2.8	08/95	ND	08/16	
			CR6	4.8	08/16	4.8	08/16	
8F	MUNICIPAL	ACTIVE	VOCS	ND	10/98	ND	08/17	
			NITRATE (N)	4.3	11/10	0.9	11/17	
			CLO4	ND	01/99	ND	08/17	
			AS	2.2	11/01	2.1	11/16	
			CR6	7.0	11/16	7.0	11/16	
11A	MUNICIPAL	ACTIVE	PCE	1.5	02/08	ND	05/18	
			NITRATE (N)	3.3	07/89	1.8	08/17	
			CLO4	ND	08/97	ND	08/17	
			AS	3.9	07/96	2.9	08/15	
			CR6	6.8	05/01	5.4	08/15	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
11B	MUNICIPAL	ACTIVE	PCE	17.8	04/90	ND	05/18	VULNERABLE
			TCE	4.0	04/90	ND	05/18	(VOC)
			1,1-DCE	0.2	04/89	ND	12/17	
			C-1,2-DCE	3.0	04/89	ND	12/17	
			NITRATE (N)	4.1	08/06	1.6	12/17	
			CLO4	ND	06/97	ND	12/17	
			AS	4.8	09/94	2.4	12/15	
			CR6	6.1	11/00	2.4	12/15	
11C	MUNICIPAL	ACTIVE	PCE	4.1	12/91	ND	05/18	VULNERABLE
			TCE	0.6	12/91	ND	08/17	(VOC,AS)
			1,1-DCE	1.1	08/08	ND	08/17	
			C-1,2-DCE	2.5	03/92	ND	05/18	
			NITRATE (N)	2.7	08/06	1.7	08/17	
			CLO4	ND	08/97	ND	08/16	
			AS	7.5	07/96	3.0	08/15	
			CR6	4.8	05/01	1.0	08/15	
B1	MUNICIPAL	INACTIVE	TCE	12.0	04/85	ND	08/06	
			PCE	7.3	05/88	ND	08/06	
			C-1,2-DCE	7.2	12/92	ND	08/06	
			1,1-DCE	2.1	08/89	ND	08/06	
			NITRATE (N)	3.9	02/87	0.8	03/05	
			CLO4	ND	08/97	ND	02/03	
			AS	2.8	07/96	2.3	02/05	
B2	MUNICIPAL	INACTIVE	TCE	17.0	03/80	ND	11/98	
			PCE	15.8	06/80	0.7	11/98	
			CTC	1.7	05/82	ND	11/98	
			1,2-DCA	7.7	07/82	ND	11/98	
			1,1,1-TCA	7.6	07/82	ND	11/98	
			C-1,2-DCE	2.6	08/93	ND	11/98	
			NITRATE (N)	2.0	11/98	2.0	11/98	
			CLO4	ND	11/98	ND	11/98	
B4B	MUNICIPAL	INACTIVE	TCE	25.2	02/08	25.2	02/08	
			PCE	43.0	11/07	5.8	02/08	
			CTC	10.0	11/03	6.6	02/08	
			1,2-DCA	1.0	09/07	0.5	02/08	
			1,1-DCE	3.2	11/07	2.3	02/08	
			C-1,2-DCE	4.2	11/07	2.7	02/08	
			NITRATE (N)	3.0	11/07	3.0	11/07	
			CLO4	24.5	04/08	24.5	04/08	
			AS	6.3	08/95	2.0	02/08	
			CR6	4.1	05/01	4.1	05/01	
B4C	MUNICIPAL	INACTIVE	CTC	22.3	02/01	14.0	08/01	
			TCE	15.5	02/01	9.3	08/01	
			PCE	3.4	02/01	2.2	08/01	
			1,1-DCE	2.3	09/01	2.3	09/01	
			C-1,2-DCE	2.4	09/01	2.4	09/01	
			NITRATE (N)	3.2	02/01	3.2	02/01	
			CLO4	6.0	06/00	ND	07/00	
			AS	5.8	08/95	ND	03/99	
			CR6	3.3	05/01	3.3	05/01	
B5A	MUNICIPAL	INACTIVE	PCE	17.5	03/91	ND	11/05	
			TCE	5.2	03/98	ND	11/05	
			1,1-DCE	2.5	03/85	ND	08/05	
			CTC	1.1	12/91	ND	11/05	
			1,1,1-TCA	3.7	03/90	ND	08/05	
			NITRATE (N)	10.4	07/96	5.7	11/05	
			CLO4	14.0	06/97	4.0	08/05	
			AS	2.8	07/96	2.0	08/05	
			CR6	6.4	11/00	6.2	05/01	
B5B	MUNICIPAL	ACTIVE	TCE	5.8	02/97	2.2	05/18	VULNERABLE
			PCE	4.3	10/16	3.7	05/18	(VOC,NO3(N),CLO4)
			CTC	2.3	02/85	ND	05/18	
			1,1-DCE	0.6	12/17	0.6	05/18	
			1,2-DCA	0.6	09/07	ND	05/18	
			NITRATE (N)	12.7	12/12	9.5	05/18	
			CLO4	12.0	06/97	4.6	05/18	
			AS	2.4	08/16	2.4	08/16	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CR6	7.1	08/16	7.1	08/16	
B5C	MUNICIPAL	INACTIVE	VOCS	ND	05/89	ND	08/07	
			NITRATE (N)	0.9	05/07	0.9	05/07	
			CLO4	ND	06/97	ND	03/08	
			AS	5.8	08/95	2.0	08/07	
			CR6	5.8	05/01	5.8	05/01	
B5D	MUNICIPAL	ACTIVE	CTC	1.2	11/15	0.7	05/18	VULNERABLE
			NITRATE (N)	1.1	08/08	0.7	08/17	(VOC)
			CLO4	ND	12/97	ND	08/17	
			AS	2.4	09/10	2.4	08/16	
			CR6	4.6	05/01	3.2	08/16	
B5E	MUNICIPAL	ACTIVE	TCE	21.0	10/16	18.0	05/18	VULNERABLE
			PCE	3.8	08/15	3.0	05/18	(NO3(N),VOC,CLO4)
			CTC	5.2	05/07	1.8	05/18	
			1,2-DCA	1.2	10/16	0.9	05/18	
			1,1-DCE	1.1	08/16	0.7	05/18	
			C-1,2-DCE	1.6	10/16	0.8	05/18	
			NITRATE (N)	5.9	08/15	4.4	05/18	
			CLO4	21.0	11/14	12.0	05/18	
			AS	3.0	08/07	2.9	08/16	
			CR6	7.0	02/09	6.6	08/16	
B6B	MUNICIPAL	DESTROYED	TCE	111.0	02/85	35.8	09/92	
			PCE	6.4	10/81	4.3	09/92	
			CTC	17.0	02/85	5.0	09/92	
			1,1-DCE	1.1	04/85	0.5	09/92	
			1,1-DCA	0.6	09/92	0.6	09/92	
			1,2-DCA	8.3	09/92	8.3	09/92	
			NITRATE (N)	19.3	02/91	12.9	09/92	
			CLO4	NA	NA	NA	NA	
B6C	MUNICIPAL	INACTIVE	TCE	84.0	03/88	1.3	08/16	VULNERABLE
			PCE	12.0	11/81	ND	08/16	(VOC,NO3(N),CLO4)
			CTC	13.0	02/85	ND	08/16	
			1,2-DCA	9.0	05/88	ND	08/16	
			1,1-DCE	1.5	06/94	ND	08/16	
			C-1,2-DCE	6.2	04/88	ND	08/16	
			NITRATE (N)	22.0	08/16	22.0	08/16	
			CLO4	370.0	11/05	18.0	08/16	
			AS	3.7	07/96	2.2	08/14	
			CR6	3.9	03/10	2.3	10/14	
B6D	MUNICIPAL	INACTIVE	TCE	140.0	05/11	45.0	05/17	VULNERABLE
			PCE	7.1	05/09	2.3	05/17	(NO3(N),VOC,CLO4)
			CTC	14.0	05/11	4.9	05/17	
			1,1-DCA	1.1	05/09	ND	05/17	
			1,2-DCA	3.7	05/11	1.1	05/17	
			1,1-DCE	1.0	08/08	ND	05/17	
			C-1,2-DCE	2.8	05/09	0.9	05/17	
			NITRATE (N)	6.6	05/15	5.5	08/17	
			CLO4	390.0	11/05	23.0	05/17	
			AS	3.1	07/96	2.4	08/17	
			CR6	2.9	10/14	2.6	08/17	
B7B	MUNICIPAL	DESTROYED	TCE	2.4	03/85	2.4	03/85	
			PCE	1.4	03/85	1.2	03/85	
			NITRATE (N)	2.8	08/87	2.8	08/87	
			CLO4	NA	NA	NA	NA	
B7C	MUNICIPAL	DESTROYED	TCE	15.0	11/10	4.8	11/14	
			PCE	35.0	03/03	15.0	11/14	
			1,1-DCE	6.7	12/89	2.9	11/14	
			C-1,2-DCE	4.7	12/93	0.9	11/14	
			CTC	0.6	02/89	ND	08/14	
			NITRATE (N)	6.4	08/92	3.4	08/14	
			CLO4	ND	06/97	ND	08/14	
			AS	2.0	08/05	ND	08/14	
			CR6	5.0	05/01	3.5	05/11	
B7D	MUNICIPAL	DESTROYED	PCE	5.3	07/87	3.5	09/87	
			TCE	3.9	07/87	3.3	09/87	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			1,1-DCE	5.3	05/87	5.0	09/87	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
B7E	MUNICIPAL	ACTIVE	PCE	1.1	08/15	ND	05/18	
			NITRATE (N)	3.6	11/08	0.7	05/18	
			CLO4	ND	06/97	ND	08/17	
			AS	4.6	03/97	2.9	05/18	
			CR6	4.6	05/18	4.6	05/18	
B8	MUNICIPAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
B9	MUNICIPAL	INACTIVE	TCE	37.0	02/85	34.7	01/87	
			PCE	4.9	01/87	4.9	01/87	
			CTC	8.3	01/87	8.3	01/87	
			NITRATE (N)	19.1	02/86	15.4	02/87	
			CLO4	NA	NA	NA	NA	
B9B	MUNICIPAL	ACTIVE	VOCS	ND	06/87	ND	09/17	
			NITRATE (N)	1.0	06/87	0.7	09/17	
			CLO4	1.2	03/08	ND	09/17	
			AS	3.5	08/95	ND	08/16	
			CR6	9.8	05/01	7.1	03/17	
B11A	MUNICIPAL	DESTROYED	TCE	9.8	08/01	5.8	08/04	
			PCE	21.7	05/92	8.5	08/04	
			1,1-DCE	14.0	08/01	2.8	08/04	
			CTC	0.9	01/88	ND	08/04	
			C-1,2-DCE	1.5	08/01	0.6	09/04	
			1,1-DCA	1.0	08/01	ND	08/04	
			NITRATE (N)	8.5	03/00	8.2	08/04	
			CLO4	8.0	12/97	ND	08/04	
			AS	2.7	07/96	ND	09/02	
			CR6	10.0	06/01	10.0	06/01	
B11B	MUNICIPAL	ACTIVE	TCE	33.0	11/14	3.9	05/18	VULNERABLE
			PCE	34.5	06/92	4.3	05/18	(VOC,NO3(N),CLO4)
			CTC	0.8	08/16	0.5	05/18	
			1,1-DCE	64.0	11/14	6.4	05/18	
			1,1-DCA	4.7	11/14	ND	11/17	
			1,1,1-TCA	2.9	10/88	ND	08/17	
			C-1,2-DCE	5.1	11/14	0.7	05/18	
			NITRATE (N)	10.4	11/14	3.2	05/18	
			CLO4	7.0	06/00	ND	08/17	
			AS	2.2	07/96	ND	08/14	
			CR6	10.3	05/01	9.7	08/17	
B24A	MUNICIPAL	ACTIVE	VOCS	ND	01/07	ND	02/18	
			NITRATE (N)	2.9	02/15	0.7	02/18	
			CLO4	ND	01/07	ND	08/17	
			AS	2.4	02/16	2.4	02/16	
			CR6	1.2	08/13	ND	02/16	
B24B	MUNICIPAL	ACTIVE	PCE	2.1	05/07	1.1	02/18	
			TCE	0.7	05/07	ND	02/18	
			NITRATE (N)	3.4	02/14	1.2	02/18	
			CLO4	ND	01/07	ND	08/17	
			AS	2.8	02/16	2.8	02/16	
			CR6	3.3	08/13	1.1	02/16	
B25A	MUNICIPAL	ACTIVE	TCE	73.0	05/17	64.0	05/18	VULNERABLE
(SA3-1S)			PCE	35.0	08/13	27.0	05/18	(VOC,NO3(N),CLO4)
			CTC	5.9	10/07	2.0	05/18	
			1,1-DCA	0.7	05/17	0.7	11/17	
			1,2-DCA	1.7	08/16	1.3	05/18	
			1,1-DCE	6.6	02/08	4.5	05/18	
			C-1,2-DCE	6.3	08/07	4.2	05/18	
			NITRATE (N)	17.6	05/09	11.0	05/18	
			CLO4	50.0	11/17	30.0	05/18	
			AS	3.2	03/10	ND	05/16	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CR6	3.2	08/14	3.1	05/16	
B25B	MUNICIPAL	ACTIVE	TCE	43.0	11/15	36.0	05/18	VULNERABLE
(SA3-1D)			PCE	13.0	08/16	7.5	05/18	(NO3(N),VOC,CLO4)
			CTC	10.0	09/04	4.3	05/18	
			1,1-DCA	1.2	10/07	ND	11/17	
			1,2-DCA	0.7	05/17	0.7	05/18	
			1,1-DCE	4.8	08/14	1.7	05/18	
			C-1,2-DCE	3.1	08/16	1.9	05/18	
			NITRATE (N)	6.1	05/09	2.0	05/18	
			CLO4	25.0	02/18	15.0	05/18	
			AS	3.0	03/06	2.4	05/16	
			CR6	2.4	08/06	2.4	05/16	
B26A	MUNICIPAL	ACTIVE	TCE	57.0	05/09	28.0	05/18	VULNERABLE
(SA3-2S)			PCE	6.8	12/10	2.1	05/18	(VOC,NO3(N),CLO4)
			CTC	5.4	12/10	1.0	05/18	
			1,1-DCA	0.8	05/09	ND	11/17	
			1,2-DCA	4.3	11/04	1.2	05/18	
			1,1-DCE	2.0	12/10	ND	05/18	
			C-1,2-DCE	3.3	05/06	0.7	05/18	
			NITRATE (N)	16.0	05/17	13.0	05/18	
			CLO4	87.0	07/06	22.0	05/18	
			AS	3.0	03/06	2.1	02/15	
			CR6	4.3	02/18	4.3	02/18	
B26B	MUNICIPAL	ACTIVE	TCE	100.0	05/17	78.0	05/18	VULNERABLE
(SA3-2D)			PCE	3.0	05/17	2.4	05/18	(VOC,CLO4)
			CTC	17.0	08/16	8.4	05/18	
			1,2-DCA	3.6	08/16	2.3	05/18	
			1,1-DCE	0.6	08/16	ND	05/18	
			C-1,2-DCE	1.8	08/16	1.1	05/18	
			NITRATE (N)	3.7	10/16	3.6	05/18	
			CLO4	68.0	11/17	41.0	05/18	
			AS	2.9	11/04	2.2	02/18	
			CR6	3.7	02/06	3.5	02/18	
EW4-5	MUNICIPAL	ACTIVE	PCE	29.0	10/06	22.0	12/11	VULNERABLE
			TCE	4.1	10/06	1.6	12/11	(VOC)
			NITRATE (N)	3.6	12/05	2.9	11/11	
			CLO4	ND	12/05	ND	11/11	
			AS	1.1	08/09	1.1	08/09	
EW4-6	MUNICIPAL	INACTIVE	PCE	8.1	06/06	4.7	12/11	
			TCE	1.1	10/06	0.7	12/11	
			NITRATE (N)	3.4	11/06	3.4	11/11	
			CLO4	ND	05/06	ND	11/11	
			AS	1.0	08/09	1.0	08/09	
EW4-7	MUNICIPAL	INACTIVE	PCE	8.2	01/06	2.0	12/11	
			TCE	1.8	02/06	ND	12/11	
			NITRATE (N)	4.1	01/06	2.9	11/11	
			CLO4	ND	12/05	ND	11/11	
			AS	1.8	08/09	1.8	08/09	
G4A	MUNICIPAL	ACTIVE	PCE	9.4	05/14	5.7	05/18	VULNERABLE
			TCE	1.3	11/97	0.8	05/18	(NO3(N),VOC)
			NITRATE (N)	6.3	05/14	5.1	05/18	
			CLO4	1.0	03/08	ND	02/18	
			AS	0.5	07/96	ND	11/15	
			CR6	4.4	11/00	3.7	11/15	
SIERRA LA VERNE COUNTRY CLUB								
01	IRRIGATION	INACTIVE	VOCS	ND	08/96	ND	10/07	
			NITRATE (N)	2.4	05/99	ND	10/07	
			CLO4	ND	03/98	ND	03/98	
02	IRRIGATION	INACTIVE	VOCS	ND	10/08	ND	10/10	
			NITRATE (N)	3.9	08/96	ND	10/10	
			CLO4	28.0	03/98	ND	04/98	
SLOAN RANCHES								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
01	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
SONOCO PRODUCTS COMPANY								
01	INDUSTRIAL	INACTIVE	TCE	28.6	12/99	1,9	10/17	
			PCE	8.5	12/99	3.4	10/17	
			1,1-DCE	113.0	12/99	4.3	10/17	
			1,1,1-TCA	71.8	12/99	ND	10/17	
			CTC	1.2	07/96	ND	10/17	
			NITRATE (N)	16.4	12/05	14.0	10/17	
			CLO4	ND	06/98	ND	07/04	
02	INDUSTRIAL	ACTIVE	TCE	16.0	10/03	1.0	10/17	
			PCE	1.8	10/03	1.6	10/17	
			1,1-DCE	5.9	02/98	2.0	10/17	
			1,1,1-TCA	2.0	11/87	ND	10/17	
			CTC	0.9	11/87	ND	10/17	
			NITRATE (N)	16.8	12/05	15.0	10/17	
			CLO4	10.0	02/98	ND	07/04	
SOUTH COVINA WATER SERVICE								
102W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
SOUTHERN CALIFORNIA EDISON COMPANY								
110RH	NON-POTABLE	ACTIVE	VOCS	ND	08/89	ND	02/07	
			NITRATE (N)	2.0	02/07	2.0	02/07	
			CLO4	ND	11/97	ND	11/97	
			AS	ND	08/98	ND	08/98	
1EB86	NON-POTABLE	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
2EB76	IRRIGATION	DESTROYED	PCE	4.3	09/04	4.1	02/07	
			TCE	1.3	09/04	0.7	02/07	
			NITRATE (N)	11.6	09/98	6.0	02/07	
			CLO4	2.0	11/97	2.0	11/97	
38EIS	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
38W	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
MURAT	IRRIGATION	DESTROYED	PCE	4.1	09/02	0.6	10/08	
			TCE	0.9	09/02	ND	10/08	
			NITRATE (N)	6.1	09/04	3.2	10/08	
			CLO4	ND	04/98	ND	04/98	
			AS	ND	04/98	ND	04/98	
SOUTH PASADENA, CITY OF								
GRAV 2	MUNICIPAL	INACTIVE	PCE	16.0	07/08	5.0	11/16	VULNERABLE
			CTC	0.9	07/08	ND	11/16	(VOC,NO3(N),CLO4)
			NITRATE (N)	13.1	04/87	10.0	11/16	
			CLO4	6.9	02/03	ND	11/16	
			AS	0.7	07/96	ND	08/15	
			CR6	4.0	06/01	2.9	08/15	
WIL 2	MUNICIPAL	INACTIVE	PCE	23.0	01/88	9.1	03/01	
			TCE	4.6	03/00	4.6	03/01	
			NITRATE (N)	19.6	03/00	17.6	02/01	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	5.0	07/97	ND	12/99	
			AS	0.6	07/96	ND	08/99	
WIL 3	MUNICIPAL	ACTIVE	PCE	9.5	08/94	ND	05/18	VULNERABLE
			TCE	1.9	04/13	ND	05/18	(VOC,NO3(N))
			NITRATE (N)	14.9	01/83	ND	05/18	
			CLO4	ND	07/97	ND	08/17	
			AS	2.2	08/01	ND	08/16	
			CR6	3.7	08/16	3.7	08/16	
WIL 4	MUNICIPAL	ACTIVE	PCE	8.1	06/00	ND	05/18	VULNERABLE
			TCE	2.1	05/07	ND	05/18	(VOC,NO3(N))
			NITRATE (N)	6.8	02/03	ND	05/18	
			CLO4	ND	07/97	ND	08/17	
			AS	2.0	02/03	ND	05/18	
			CR6	3.9	06/01	1.2	05/18	
SPEEDWAY 605 INC.								
NA	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
STERLING MUTUAL WATER COMPANY								
NEW SO.	MUNICIPAL	ACTIVE	VOCS	ND	06/91	ND	11/17	VULNERABLE
			NITRATE (N)	7.9	02/10	4.5	08/17	(NO3(N))
			CLO4	ND	10/97	ND	08/16	
			AS	2.9	12/00	2.2	08/17	
			CR6	1.0	06/01	ND	08/17	
NORTH	MUNICIPAL	ACTIVE	VOCS	ND	06/88	ND	08/17	VULNERABLE
			NITRATE (N)	9.8	02/07	4.7	08/17	(NO3(N))
			CLO4	ND	09/97	ND	08/16	
			AS	4.6	08/95	2.8	08/16	
			CR6	1.0	06/01	1.0	08/16	
SOUTH	MUNICIPAL	DESTROYED	VOCS	ND	01/85	ND	06/91	
			NITRATE (N)	3.7	03/91	4.5	08/17	
			CLO4	NA	NA	NA	NA	
			AS	2.6	08/11	2.2	08/17	
SUBURBAN WATER SYSTEMS								
101W-1	MUNICIPAL	DESTROYED	TCE	1.5	07/87	ND	08/89	
			NITRATE (N)	12.2	08/89	12.2	08/89	
			CLO4	NA	NA	NA	NA	
			AS	ND	02/88	ND	08/89	
102W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
102W-2	MUNICIPAL	DESTROYED	TCE	2.0	01/80	ND	06/85	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
103W-1	MUNICIPAL	DESTROYED	TCE	2.5	06/80	ND	07/82	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
105W-1	MUNICIPAL	DESTROYED	PCE	1.4	01/96	1.4	01/96	
			NITRATE (N)	10.4	04/95	10.4	04/95	
			CLO4	NA	NA	NA	NA	
			AS	ND	06/88	ND	06/94	
106W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
111W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	18.6	03/73	18.6	03/73	
			CLO4	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
112W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	22.4	07/69	22.4	07/69	
			CLO4	NA	NA	NA	NA	
113W-1	MUNICIPAL	DESTROYED	TCE	0.7	02/80	0.5	03/85	
			NITRATE (N)	19.2	10/85	15.3	02/88	
			CLO4	NA	NA	NA	NA	
114W-1	MUNICIPAL	DESTROYED	TCE	2.9	01/80	ND	07/95	
			PCE	0.5	12/93	ND	07/95	
			NITRATE (N)	10.5	08/91	9.0	04/95	
			CLO4	NA	NA	NA	NA	
			AS	ND	11/88	ND	11/94	
117W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
120W-1	MUNICIPAL	DESTROYED	TCE	0.3	07/82	ND	08/96	
			NITRATE (N)	14.9	07/88	13.7	08/96	
			CLO4	NA	NA	NA	NA	
121W-1	MUNICIPAL	ACTIVE	VOCS	ND	10/02	ND	05/17	VULNERABLE
			NITRATE (N)	6.1	04/17	3.8	08/17	(NO3(N),CLO4)
			CLO4	10.0	02/17	5.3	05/17	
			AS	1.6	02/04	ND	08/17	
			CR6	9.6	02/05	6.4	04/13	
122W-1	MUNICIPAL	DESTROYED	TCE	2.6	08/96	2.6	08/96	
			NITRATE (N)	20.3	05/86	13.7	08/96	
			CLO4	NA	NA	NA	NA	
			AS	3.0	08/79	ND	05/85	
123W-1	MUNICIPAL	DESTROYED	TCE	26.8	04/81	ND	08/96	
			PCE	33.0	04/81	ND	08/96	
			NITRATE (N)	10.6	05/76	0.9	08/96	
			CLO4	NA	NA	NA	NA	
124W-1	MUNICIPAL	DESTROYED	TCE	0.5	06/83	ND	08/89	
			NITRATE (N)	13.6	09/84	12.1	08/89	
			CLO4	NA	NA	NA	NA	
			AS	ND	06/80	ND	08/89	
125W-1	MUNICIPAL	DESTROYED	VOCS	ND	01/80	ND	09/81	
			NITRATE (N)	6.8	05/76	4.7	05/79	
			CLO4	NA	NA	NA	NA	
125W-2	MUNICIPAL	INACTIVE	VOCS	ND	03/83	ND	07/95	
			NITRATE (N)	11.3	08/87	9.2	03/95	
			CLO4	NA	NA	NA	NA	
			AS	ND	05/88	ND	08/94	
126W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	4.1	05/75	4.1	05/75	
			CLO4	NA	NA	NA	NA	
126W-2	MUNICIPAL	INACTIVE	VOCS	ND	03/85	ND	08/00	
			NITRATE (N)	8.8	07/91	7.9	03/01	
			CLO4	4.8	07/97	ND	01/98	
			AS	1.3	07/96	ND	08/00	
131W-1	MUNICIPAL	DESTROYED	TCE	56.0	10/93	56.0	10/93	
			PCE	227.0	04/80	52.0	10/93	
			CTC	2.7	10/93	2.7	10/93	
			1,1-DCE	40.0	10/93	40.0	10/93	
			1,1,1-TCA	5.3	10/93	5.3	10/93	
			NITRATE (N)	14.0	09/81	12.5	10/93	
			CLO4	NA	NA	NA	NA	
133W-1	MUNICIPAL	DESTROYED	TCE	0.5	07/87	ND	08/89	
			CTC	0.5	08/89	0.5	08/89	
			NITRATE (N)	11.1	08/89	10.8	09/89	
			CLO4	NA	NA	NA	NA	
			AS	ND	04/81	ND	08/89	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
134W-1	MUNICIPAL	DESTROYED	TCE	56.0	10/93	56.0	10/93	
			PCE	0.1	12/80	ND	10/93	
			1,1-DCE	8.6	10/93	8.6	10/93	
			1,1,1-TCA	13.2	03/83	ND	10/93	
			NITRATE (N)	9.7	06/87	9.2	10/93	
			CLO4	NA	NA	NA	NA	
			AS	ND	03/88	ND	07/89	
135W-1	MUNICIPAL	DESTROYED	TCE	0.8	03/85	0.3	05/85	
			NITRATE (N)	13.3	02/86	10.7	09/86	
			CLO4	NA	NA	NA	NA	
136W-1	MUNICIPAL	DESTROYED	PCE	335.0	03/80	66.0	10/93	
			TCE	53.0	03/80	9.1	10/93	
			CTC	2.4	10/93	2.4	10/93	
			1,1-DCE	15.0	10/93	15.0	10/93	
			NITRATE (N)	10.8	01/77	8.5	10/93	
			CLO4	NA	NA	NA	NA	
			AS	5.0	08/79	5.0	08/79	
139W-1	MUNICIPAL	DESTROYED	TCE	34.8	06/81	ND	01/97	
			PCE	5.0	02/88	ND	01/97	
			CTC	0.8	09/80	ND	07/96	
			NITRATE (N)	22.4	05/94	21.0	07/96	
			CLO4	NA	NA	NA	NA	
			AS	3.6	07/95	2.6	07/96	
139W-2	MUNICIPAL	INACTIVE	TCE	18.7	09/80	ND	05/10	
			PCE	12.1	03/80	ND	05/10	
			CTC	0.8	09/80	ND	05/10	
			NITRATE (N)	23.4	10/08	13.2	05/10	
			CLO4	34.0	10/08	15.0	05/10	
			AS	3.2	07/95	2.6	08/01	
139W-4	MUNICIPAL	STANDBY	TCE	4.7	04/97	ND	11/11	
			NITRATE (N)	12.0	12/15	12.0	12/17	
			CLO4	13.0	12/17	13.0	12/17	
			AS	1.5	07/96	ND	12/14	
			CR6	4.1	11/00	3.5	12/14	
139W-5	MUNICIPAL	INACTIVE	TCE	19.0	08/01	19.0	08/01	
			PCE	10.8	05/99	0.7	08/01	
			CTC	1.0	08/01	1.0	08/01	
			1,2-DCA	1.0	02/00	ND	08/01	
			NITRATE (N)	8.2	06/01	8.2	10/09	
			CLO4	12.0	09/97	12.0	10/09	
			AS	1.6	07/96	ND	08/01	
139W-6	MUNICIPAL	INACTIVE	TCE	51.2	02/01	ND	05/10	
			PCE	2.8	02/01	ND	05/10	
			CTC	1.9	02/01	ND	05/10	
			1,2-DCA	1.6	02/01	ND	05/10	
			NITRATE (N)	9.7	10/08	8.2	05/10	
			CLO4	35.4	11/00	2.0	05/10	
			AS	2.7	05/96	ND	05/99	
140W-1	MUNICIPAL	DESTROYED	TCE	1.0	01/80	1.0	01/80	
			NITRATE (N)	19.6	04/73	15.4	05/75	
			CLO4	NA	NA	NA	NA	
			AS	ND	01/02	ND	01/02	
140W-3	MUNICIPAL	STANDBY	TCE	13.6	03/80	ND	12/11	VULNERABLE
			PCE	1.0	06/88	ND	12/11	(VOC,NO3(N),CLO4)
			CTC	1.0	09/81	ND	12/11	
			1,1-DCE	1.1	10/09	ND	12/11	
			NITRATE (N)	17.6	03/85	12.0	12/17	
			CLO4	16.0	12/05	6.6	12/17	
			AS	4.0	08/76	2.5	12/14	
			CR6	12.7	06/01	8.7	12/14	
140W-4	MUNICIPAL	INACTIVE	TCE	7.0	01/96	1.5	11/06	
			NITRATE (N)	8.2	10/03	8.2	12/04	
			CLO4	12.6	10/03	11.6	12/04	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			AS	2.4	07/95	ND	12/04	
140W-5	MUNICIPAL	ACTIVE	TCE	21.0	02/91	ND	05/18	VULNERABLE
			PCE	1.0	06/07	ND	05/18	(NO3(N),VOC,CLO4)
			NITRATE (N)	8.1	02/14	5.1	05/18	
			CLO4	15.0	10/12	ND	05/18	
			AS	1.9	07/96	ND	11/15	
			CR6	9.8	02/05	6.8	04/13	
142W-1	MUNICIPAL	DESTROYED	VOCS	ND	02/80	ND	07/82	
			NITRATE (N)	16.7	06/81	16.7	06/81	
			CLO4	NA	NA	NA	NA	
142W-2	MUNICIPAL	ACTIVE	VOCS	ND	03/04	ND	05/18	VULNERABLE
			NITRATE (N)	3.7	05/18	3.7	05/18	(CLO4)
			CLO4	4.1	01/17	ND	05/18	
			AS	1.6	07/04	ND	07/15	
			CR6	12.0	02/05	6.8	04/13	
147W-1	MUNICIPAL	DESTROYED	TCE	23.0	03/85	23.0	03/85	
			PCE	1.2	03/85	1.2	03/85	
			NITRATE (N)	22.6	03/85	22.6	03/85	
			CLO4	NA	NA	NA	NA	
147W-2	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	12.2	09/74	12.2	09/74	
			CLO4	NA	NA	NA	NA	
147W-3	MUNICIPAL	DESTROYED	TCE	4.1	01/92	2.7	11/16	VULNERABLE
			PCE	4.4	04/89	1.9	11/16	(VOC)
			1,1-DCE	8.9	01/89	3.6	11/16	
			1,1-DCA	4.8	05/89	ND	11/16	
			NITRATE (N)	4.5	09/88	2.0	11/16	
			CLO4	3.0	04/10	ND	11/16	
			AS	1.8	07/04	ND	08/14	
			CR6	13.0	04/05	11.0	11/16	
148W-1	MUNICIPAL	DESTROYED	TCE	0.8	06/80	ND	04/97	
			NITRATE (N)	10.6	02/76	7.9	04/97	
			CLO4	NA	NA	NA	NA	
			AS	26.0	06/78	26.0	06/78	
149W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
150W-1	MUNICIPAL	DESTROYED	TCE	6.0	09/81	ND	08/93	
			NITRATE (N)	12.0	03/86	3.0	08/94	
			CLO4	NA	NA	NA	NA	
			AS	ND	07/89	ND	08/94	
151W-1	MUNICIPAL	DESTROYED	VOCS	ND	01/80	ND	03/98	
			NITRATE (N)	26.2	03/98	26.2	03/98	
			CLO4	21.6	03/98	21.6	03/98	
			AS	7.0	08/79	7.0	08/79	
151W-2	MUNICIPAL	ACTIVE	TCE	3.8	05/18	3.8	05/18	VULNERABLE
			NITRATE (N)	2.4	05/18	2.4	05/18	(VOC,CLO4)
			CLO4	5.5	01/17	ND	05/18	
			AS	1.3	12/06	ND	02/16	
			CR6	12.0	04/05	8.1	04/13	
152W-1	MUNICIPAL	DESTROYED	TCE	12.8	11/82	8.0	03/85	
			PCE	0.8	11/82	0.3	03/85	
			NITRATE (N)	9.8	05/86	9.8	05/86	
			CLO4	NA	NA	NA	NA	
153W-1	MUNICIPAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
154W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	18.3	05/79	18.3	05/79	
			CLO4	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
155W-1	MUNICIPAL	INACTIVE	PCE	190.0	11/80	90.0	11/98	
			TCE	50.0	07/81	24.0	11/98	
			CTC	19.0	02/82	ND	11/98	
			1,1-DCE	16.0	03/85	13.0	11/98	
			NITRATE (N)	13.6	11/80	11.2	11/98	
			CLO4	5.4	11/98	5.4	11/98	
			AS	4.0	08/76	ND	03/85	
155W-2	MUNICIPAL	DESTROYED	PCE	190.0	09/93	76.0	11/98	
			TCE	39.0	04/80	22.0	11/98	
			1,1-DCE	21.0	09/93	11.0	11/98	
			1,1-DCA	3.0	09/93	1.4	11/98	
			C-1,2-DCE	16.0	03/85	1.8	11/98	
			NITRATE (N)	11.1	11/98	11.1	11/98	
			CLO4	4.3	11/98	ND	11/98	
157W-1	MUNICIPAL	DESTROYED	TCE	12.2	02/80	ND	03/85	
			NITRATE (N)	13.1	02/86	13.1	02/86	
			CLO4	NA	NA	NA	NA	
201W-1	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
201W-2	MUNICIPAL	DESTROYED	TCE	6.8	04/89	1.7	08/06	
			PCE	3.9	09/88	1.4	08/06	
			1,1-DCE	3.2	08/89	ND	08/06	
			C-1,2-DCE	6.1	02/91	4.3	08/06	
			NITRATE (N)	1.5	08/94	1.4	08/06	
			CLO4	ND	08/97	ND	09/03	
			AS	8.5	08/97	3.0	08/06	
201W-3	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
201W-4	MUNICIPAL	STANDBY	TCE	6.4	09/89	ND	06/14	
			PCE	4.1	09/88	ND	06/14	
			1,1-DCE	2.0	07/88	ND	06/14	
			C-1,2-DCE	5.2	05/97	ND	06/14	
			NITRATE (N)	4.7	11/14	4.7	11/14	
			CLO4	ND	06/97	ND	07/14	
			AS	4.0	08/97	ND	06/14	
			CR6	1.9	05/01	ND	11/14	
201W-5	MUNICIPAL	DESTROYED	TCE	6.4	09/89	ND	03/08	
			PCE	3.8	09/89	ND	03/08	
			1,1-DCE	2.9	09/88	ND	03/08	
			C-1,2-DCE	4.9	08/88	ND	03/08	
			NITRATE (N)	2.7	08/94	2.7	08/07	
			CLO4	ND	06/97	ND	06/03	
			AS	8.9	09/89	4.0	09/05	
201W-6	MUNICIPAL	DESTROYED	TCE	3.9	05/88	ND	09/05	
			PCE	3.3	05/88	ND	09/05	
			1,1-DCE	3.2	09/88	ND	09/05	
			C-1,2-DCE	8.7	05/88	ND	09/05	
			NITRATE (N)	4.5	06/85	1.7	05/05	
			CLO4	ND	06/97	ND	06/03	
			AS	9.2	08/95	2.0	09/04	
201W-7	MUNICIPAL	ACTIVE	PCE	0.6	08/08	ND	05/18	
			C-1,2-DCE	0.9	08/08	ND	05/18	
			NITRATE (N)	3.3	08/16	3.3	08/16	
			CLO4	ND	08/08	ND	08/16	
			AS	2.0	08/08	ND	08/14	
			CR6	0.8	04/13	0.8	04/13	
201W-8	MUNICIPAL	ACTIVE	TCE	0.5	05/07	ND	05/18	
			C-1,2-DCE	1.1	05/07	ND	05/18	
			NITRATE (N)	3.6	08/16	ND	08/18	
			CLO4	2.1	07/06	ND	08/16	
			AS	2.7	08/09	ND	08/15	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CR6	1.1	05/07	0.9	04/13	
201W-9	MUNICIPAL	ACTIVE	PCE	0.9	04/12	0.7	05/18	
			NITRATE (N)	4.3	02/15	4.0	02/18	
			CLO4	ND	03/08	ND	08/16	
			AS	1.5	05/07	ND	02/17	
			CR6	0.6	04/13	0.6	04/13	
201W-10	MUNICIPAL	ACTIVE	TCE	1.4	09/07	ND	05/18	
			PCE	1.3	09/07	ND	05/18	
			C-1,2-DCE	3.0	09/07	ND	05/18	
			NITRATE (N)	1.8	05/17	0.7	05/18	
			CLO4	ND	09/07	ND	05/18	
			AS	2.1	09/07	ND	05/18	
			CR6	0.3	09/07	ND	05/18	
202W-1	MUNICIPAL	DESTROYED	TCE	4.3	09/81	ND	01/89	
			PCE	15.0	10/88	12.1	01/89	
			NITRATE (N)	5.4	07/87	5.2	10/88	
			CLO4	NA	NA	NA	NA	
			AS	ND	09/88	ND	09/88	
SUNNY SLOPE WATER COMPANY								
08	MUNICIPAL	ACTIVE	VOCS	ND	01/87	ND	09/17	VULNERABLE
			NITRATE (N)	6.1	08/16	6.1	09/17	(NO3(N))
			CLO4	ND	07/97	ND	09/17	
			AS	ND	09/89	ND	09/17	
			CR6	7.1	12/00	5.4	09/17	
09	MUNICIPAL	ACTIVE	VOCS	ND	01/85	ND	03/18	VULNERABLE
			NITRATE (N)	8.1	06/03	3.7	05/17	(NO3(N))
			CLO4	ND	07/97	ND	09/17	
			AS	3.6	08/96	ND	09/15	
			CR6	7.0	03/17	7.0	03/17	
10	MUNICIPAL	INACTIVE	VOCS	ND	01/85	ND	08/96	
			NITRATE (N)	14.4	12/94	11.5	08/96	
			CLO4	NA	NA	NA	NA	
			AS	0.7	08/96	0.7	08/96	
13	MUNICIPAL	ACTIVE	VOCS	ND	08/96	ND	06/17	
			NITRATE (N)	1.6	09/09	1.3	05/18	
			CLO4	ND	07/97	ND	06/17	
			AS	3.2	06/15	3.2	06/15	
			CR6	13.0	03/17	11.0	03/18	
TAYLOR HERB GARDEN								
NA	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
TEXACO INC.								
14	INDUSTRIAL	DESTROYED	PCE	40.0	07/01	2.8	09/03	
			TCE	5.0	05/85	ND	09/03	
			1,2-DCA	0.6	01/96	ND	09/03	
			NITRATE (N)	7.5	07/01	1.4	09/03	
			CLO4	ND	09/97	ND	09/97	
THOMPSON, EARL W.								
01	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
TOMOVICH (NICK) & SON								
NA	DOMESTIC	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
TYLER NURSERY								
NA	IRRIGATION	INACTIVE	TCE	12.9	12/99	1.2	09/04	
			PCE	44.6	12/99	1.2	09/04	
			1,1-DCE	0.6	09/02	ND	09/04	
			1,1-DCA	0.9	09/02	ND	09/04	
			C-1,2-DCE	8.7	09/02	ND	09/04	
			NITRATE (N)	7.0	09/02	ND	09/04	
			CLO4	NA	NA	NA	NA	
UNITED CONCRETE PIPE CORPORATION								
NA	INDUSTRIAL	DESTROYED	VOCS	ND	08/89	ND	10/08	
			NITRATE (N)	1.0	08/89	1.0	08/89	
			CLO4	NA	NA	NA	NA	
UNITED ROCK PRODUCTS CORPORATION								
IRW-1	INDUSTRIAL	ACTIVE	VOCS	ND	08/89	ND	10/17	
			NITRATE (N)	1.4	07/96	0.7	10/17	
			CLO4	ND	02/98	ND	02/98	
			AS	ND	04/98	ND	04/98	
IRW-2	INDUSTRIAL	ACTIVE	VOCS	ND	07/96	ND	10/17	
			NITRATE (N)	1.0	10/04	0.7	10/17	
			CLO4	ND	02/98	ND	02/98	
SIERRA	INDUSTRIAL	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
VALENCIA HEIGHTS WATER COMPANY								
01	MUNICIPAL	INACTIVE	VOCS	ND	06/89	ND	07/09	
			NITRATE (N)	10.5	04/99	7.4	07/07	
			CLO4	8.5	08/00	ND	07/09	
			AS	0.7	08/96	ND	07/07	
02	MUNICIPAL	INACTIVE	TCE	0.2	01/80	ND	07/08	
			NITRATE (N)	12.1	07/97	6.1	07/06	
			CLO4	8.0	10/98	4.2	07/08	
			AS	0.9	08/96	ND	07/06	
03A	MUNICIPAL	INACTIVE	VOCS	ND	03/85	ND	03/92	
			NITRATE (N)	7.9	09/89	2.7	08/92	
			CLO4	NA	NA	NA	NA	
04	MUNICIPAL	INACTIVE	PCE	1.0	09/99	ND	09/01	
			NITRATE (N)	20.3	11/97	17.6	03/02	
			CLO4	32.6	11/00	28.0	03/02	
			AS	2.2	07/00	ND	08/00	
			CR6	5.0	11/00	5.0	11/00	
05	MUNICIPAL	ACTIVE	VOCS	ND	06/90	ND	04/17	VULNERABLE
			NITRATE (N)	9.5	08/12	5.4	08/17	(NO3(N),CLO4)
			CLO4	7.2	11/00	ND	03/18	
			AS	0.9	08/96	ND	01/17	
			CR6	1.7	08/13	1.3	01/17	
6	MUNICIPAL	ACTIVE	VOCS	ND	12/02	ND	07/17	VULNERABLE
			NITRATE (N)	11.1	06/04	11.0	10/17	(CLO4,NO3(N))
			CLO4	8.9	01/07	5.1	04/18	
			AS	ND	12/02	ND	10/17	
			CR6	8.0	12/02	3.4	10/17	
07	MUNICIPAL	ACTIVE	VOCS	ND	05/08	ND	07/17	VULNERABLE
			NITRATE (N)	7.6	05/18	7.6	05/18	(NO3(N),CLO4)
			CLO4	5.4	10/12	ND	04/18	
			AS	ND	12/09	ND	10/15	
			CR6	1.2	08/13	1.2	08/13	
VALLEY COUNTY WATER DISTRICT								

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
ARROW	MUNICIPAL	INACTIVE	TCE	700.0	07/82	600.0	12/96	
			PCE	980.0	12/96	980.0	12/96	
			1,1-DCE	64.0	12/96	64.0	12/96	
			C-1,2-DCE	59.0	12/96	59.0	12/96	
			CTC	14.5	09/92	8.0	12/96	
			1,2-DCA	9.0	02/92	7.3	12/96	
			1,1,1-TCA	45.0	12/96	45.0	12/96	
			1,1-DCA	2.9	02/95	2.7	12/96	
			NITRATE (N)	6.0	08/96	6.0	08/96	
			CLO4	NA	NA	NA	NA	
			AS	1.5	08/96	1.5	08/96	
B DALTON	MUNICIPAL	INACTIVE	TCE	137.0	04/85	ND	05/11	
			PCE	8.0	04/85	ND	05/11	
			1,1-DCA	0.9	05/96	ND	05/11	
			C-1,2-DCE	2.0	11/95	ND	05/11	
			CTC	9.9	04/85	ND	05/11	
			1,2-DCA	11.0	12/98	ND	05/11	
			NITRATE (N)	16.3	10/09	16.3	05/11	
			CLO4	99.1	12/98	11.0	05/11	
			AS	5.0	11/95	2.7	09/07	
E NIXON (E JOAN)	MUNICIPAL	ACTIVE	TCE	7.0	11/08	ND	02/18	VULNERABLE (VOC)
			PCE	11.0	10/04	ND	02/18	
			1,1-DCE	1.3	10/04	ND	02/18	
			C-1,2-DCE	1.7	10/04	ND	02/18	
			NITRATE (N)	3.1	02/05	0.8	02/18	
			CLO4	ND	05/97	ND	06/17	
			AS	3.0	08/06	2.0	06/16	
			CR6	1.0	05/01	ND	06/16	
E MAINE	MUNICIPAL	ACTIVE	TCE	36.0	10/04	ND	05/18	VULNERABLE (VOC,CLO4)
			PCE	110.0	10/04	1.0	05/18	
			1,1-DCE	10.1	02/91	ND	05/18	
			1,2-DCA	1.4	10/04	ND	05/18	
			1,1,1-TCA	9.1	02/91	ND	05/18	
			C-1,2-DCE	13.0	06/03	ND	05/18	
			NITRATE (N)	4.7	02/11	1.8	02/18	
			CLO4	7.8	10/04	ND	08/17	
			AS	4.4	08/89	2.0	08/17	
			CR6	1.0	05/01	ND	08/17	
LANTE (SA1-3)	MUNICIPAL	ACTIVE	TCE	1315.0	04/98	27.0	05/18	VULNERABLE (NO3(N),VOC,CLO4)
			PCE	1200.0	11/96	66.0	05/18	
			1,1-DCE	110.0	11/96	5.9	05/18	
			C-1,2-DCE	90.0	11/96	1.3	05/18	
			T-1,2-DCE	110.0	04/85	ND	05/18	
			1,1-DCA	18.0	08/04	ND	05/18	
			1,2-DCA	12.5	01/92	ND	05/18	
			CTC	17.6	01/92	ND	05/18	
			1,1,1-TCA	170.0	04/85	ND	05/18	
			NITRATE (N)	10.2	05/15	8.9	05/18	
			CLO4	94.0	04/98	7.5	05/17	
			AS	2.4	01/05	ND	05/18	
			CR6	18.0	01/05	<2	05/18	
MORADA	MUNICIPAL	INACTIVE	TCE	770.0	03/80	ND	05/11	
			PCE	100.0	02/85	2.2	05/11	
			CTC	29.0	04/84	ND	05/11	
			1,1-DCE	2.5	04/88	ND	05/11	
			1,1-DCA	8.5	02/85	ND	05/11	
			1,2-DCA	0.7	04/88	ND	05/11	
			C-1,2-DCE	8.1	08/95	ND	05/11	
			NITRATE (N)	25.0	11/90	19.3	05/11	
			CLO4	21.0	02/04	11.0	05/11	
			AS	3.6	08/95	3.6	08/95	
PADDY LN	MUNICIPAL	INACTIVE	TCE	166.0	04/94	29.0	05/11	
			PCE	42.0	11/93	3.5	05/11	
			CTC	15.0	12/87	1.0	05/11	
			1,1-DCE	17.2	11/93	1.6	05/11	
			C-1,2-DCE	23.8	11/93	1.9	05/11	
			1,2-DCA	6.6	02/04	2.6	05/11	
			NITRATE (N)	14.2	05/10	8.9	05/11	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			CLO4	154.0	02/98	38.0	05/11	
			AS	ND	06/80	ND	11/94	
PALM	MUNICIPAL	INACTIVE	CTC	48.0	07/82	0.8	02/04	
			TCE	56.0	02/04	56.0	02/04	
			PCE	51.0	02/04	51.0	02/04	
			C-1,2-DCE	7.1	02/04	7.1	02/04	
			1,1,1-TCA	1.8	02/04	1.8	02/04	
			NITRATE (N)	2.5	12/94	2.3	02/04	
			CLO4	5.6	02/04	5.6	02/04	
			AS	ND	10/87	ND	11/92	
W NIXON (W JOAN)	MUNICIPAL	ACTIVE	TCE	4.0	11/04	0.5	05/18	VULNERABLE (VOC)
			PCE	8.0	11/04	1.3	05/18	
			NITRATE (N)	1.9	08/13	1.0	05/18	
			CLO4	ND	05/97	ND	08/17	
			AS	3.1	08/95	ND	08/16	
			CR6	1.0	05/01	ND	08/16	
W MAINE	MUNICIPAL	ACTIVE	TCE	47.3	02/91	0.8	05/18	VULNERABLE (VOC,CLO4)
			PCE	70.0	02/03	2.2	05/18	
			1,1-DCE	14.2	02/91	ND	05/18	
			1,2-DCA	0.8	08/04	ND	05/18	
			1,1,1-TCA	10.6	02/91	ND	05/18	
			C-1,2-DCE	9.0	02/03	ND	05/18	
			NITRATE (N)	4.7	05/90	1.1	05/18	
			CLO4	6.3	10/04	ND	08/17	
			AS	2.6	07/96	2.0	08/17	
			CR6	1.0	05/01	ND	08/17	
SA1-1	MUNICIPAL	ACTIVE	TCE	34.0	07/05	1.8	05/18	VULNERABLE (VOC,CLO4,NO3(N))
			PCE	47.0	04/07	1.6	05/18	
			1,1-DCA	11.0	07/05	ND	05/18	
			1,1-DCE	110.0	07/05	1.6	05/18	
			1,2-DCA	1.0	07/05	ND	05/18	
			C-1,2-DCE	4.1	07/05	ND	05/18	
			1,1,1-TCA	6.0	05/06	ND	05/18	
			FREON 11	5.8	02/12	ND	05/18	
			NITRATE (N)	19.7	01/05	20.0	05/18	
			CLO4	17.0	01/05	6.0	05/17	
			AS	1.3	06/03	ND	05/18	
			CR6	2.4	03/06	1.7	05/18	
SA1-2	MUNICIPAL	STANDBY	TCE	25.0	04/06	2.0	12/09	
			PCE	37.0	05/06	4.8	12/09	
			1,1-DCA	8.7	07/05	ND	12/09	
			1,1-DCE	62.0	04/06	1.2	12/09	
			1,2-DCA	1.0	07/05	ND	12/09	
			C-1,2-DCE	6.2	07/05	ND	12/09	
			1,1,1-TCA	2.2	05/06	ND	12/09	
			NITRATE (N)	16.3	03/05	16.3	05/12	
			CLO4	15.0	03/05	11.0	12/09	
			AS	2.0	03/06	ND	02/09	
			CR6	2.6	03/06	2.0	09/07	
VALLEY VIEW MUTUAL WATER COMPANY								
01	MUNICIPAL	ACTIVE	VOCS	ND	06/89	ND	09/10	
			NITRATE (N)	1.4	09/09	1.3	09/10	
			CLO4	ND	08/97	ND	09/10	
			AS	3.0	09/07	ND	09/10	
			CR6	1.0	11/00	1.0	05/01	
02	MUNICIPAL	ACTIVE	PCE	2.1	09/16	ND	03/18	
			TCE	0.7	09/16	ND	03/18	
			NITRATE (N)	1.8	09/15	1.3	09/17	
			CLO4	ND	08/97	ND	09/17	
			AS	2.0	09/96	2.0	09/16	
			CR6	2.5	05/01	ND	09/16	
03	MUNICIPAL	INACTIVE	TCE	1.3	01/80	ND	03/98	
			NITRATE (N)	6.1	03/98	6.1	03/98	
			CLO4	18.6	03/98	18.6	03/98	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
VIA TRUST								
01	NON-POTABLE	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
VULCAN MATERIALS COMPANY (CALMAT COMPANY)								
DUR E	INDUSTRIAL	DESTROYED	TCE	32.0	11/04	ND	10/10	
			PCE	27.0	11/04	0.9	10/10	
			1,1-DCE	5.3	11/04	ND	10/10	
			C-1,2-DCE	2.8	11/04	ND	10/10	
			1,1,1-TCA	0.7	11/04	ND	10/10	
			NITRATE (N)	3.7	10/04	1.6	10/10	
			CLO4	ND	04/98	ND	10/08	
			AS	ND	04/98	ND	04/98	
DUR W	INDUSTRIAL	DESTROYED	PCE	0.8	02/07	ND	10/09	
			NITRATE (N)	3.6	07/01	3.2	10/09	
			CLO4	4.0	05/98	4.0	05/98	
			AS	2.9	05/98	2.9	05/98	
REL 1	INDUSTRIAL	ACTIVE	VOCS	ND	05/94	ND	10/17	
			NITRATE (N)	1.5	09/02	0.9	10/17	
			CLO4	ND	05/98	ND	05/98	
			AS	4.8	05/94	3.5	07/94	
WADE, RICHARD I.								
NA	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
WEST COVINA VENTURE LIMITED								
NA	NA	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
WHITTIER, CITY OF								
09	MUNICIPAL	DESTROYED	TCE	1.4	04/85	ND	08/89	
			PCE	1.9	10/88	0.6	08/89	
			NITRATE (N)	2.0	08/89	2.0	08/89	
			CLO4	NA	NA	NA	NA	
			AS	ND	07/74	ND	08/89	
10	MUNICIPAL	DESTROYED	VOCS	NA	NA	NA	NA	
			NITRATE (N)	1.5	01/74	1.5	01/74	
			CLO4	NA	NA	NA	NA	
11	MUNICIPAL	DESTROYED	VOCS	ND	06/87	ND	11/90	
			NITRATE (N)	2.3	01/90	2.3	01/90	
			CLO4	NA	NA	NA	NA	
			AS	ND	04/80	ND	08/89	
12	MUNICIPAL	INACTIVE	TCE	1.5	07/88	1.5	07/88	
			PCE	0.7	07/88	0.7	07/88	
			NITRATE (N)	2.3	12/84	1.9	12/85	
			CLO4	NA	NA	NA	NA	
13	MUNICIPAL	ACTIVE	PCE	4.9	11/87	ND	12/17	VULNERABLE
			TCE	1.1	06/87	ND	12/17	(VOC)
			MTBE	6.4	03/02	ND	12/17	
			NITRATE (N)	3.8	03/11	2.8	03/18	
			CLO4	ND	08/97	ND	12/17	
			AS	4.1	03/02	ND	03/17	
			CR6	1.0	05/01	ND	03/17	
15	MUNICIPAL	ACTIVE	PCE	9.4	03/03	1.7	12/17	VULNERABLE
			TCE	0.7	09/04	ND	12/17	(VOC)
			C-1,2-DCE	2.5	12/93	ND	12/17	
			NITRATE (N)	2.9	08/89	1.8	09/17	
			CLO4	ND	08/97	ND	09/17	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS
AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			AS	3.5	03/02	ND	09/16	
			CR6	2.2	10/00	ND	09/16	
16	MUNICIPAL	ACTIVE	PCE	3.4	12/02	1.0	03/18	VULNERABLE
			TCE	1.4	01/97	ND	03/18	(VOC)
			C-1,2-DCE	2.5	10/96	ND	03/18	
			NITRATE (N)	3.0	03/16	2.9	03/18	
			CLO4	ND	08/97	ND	09/17	
			AS	5.8	03/02	ND	03/17	
			CR6	2.5	05/01	ND	03/17	
17	MUNICIPAL	ACTIVE	PCE	12.0	12/02	9.7	03/18	VULNERABLE
			TCE	2.2	05/92	0.8	03/18	(VOC)
			C-1,2-DCE	1.2	04/95	ND	03/18	
			NITRATE (N)	2.9	03/03	2.4	03/18	
			CLO4	ND	08/97	ND	09/17	
			AS	3.4	03/02	ND	03/16	
			CR6	1.6	10/00	ND	03/16	
18	MUNICIPAL	ACTIVE	PCE	9.2	09/08	4.5	03/18	
			TCE	2.4	11/95	ND	03/18	
			C-1,2-DCE	0.7	10/96	ND	03/18	
			NITRATE (N)	3.4	03/17	3.1	03/18	
			CLO4	ND	08/97	ND	09/17	
			AS	4.1	03/02	ND	03/18	
			CR6	1.0	10/00	ND	03/18	
WILMOTT, ERMA M.								
01	DOMESTIC	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
WOODLAND, RICHARD								
01	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	NON-POTABLE	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
WORKMAN MILL INVESTMENT COMPANY (ROSE HILLS MEMORIAL PARK)								
04	IRRIGATION	INACTIVE	PCE	5.3	08/87	ND	10/09	
			TCE	11.0	04/85	ND	10/09	
			1,1-DCE	14.0	04/85	ND	10/09	
			1,1,1-TCA	3.3	04/85	ND	10/09	
			NITRATE (N)	11.9	02/07	9.7	10/10	
			CLO4	ND	06/98	ND	06/98	
01	IRRIGATION	INACTIVE	VOCS	NA	NA	NA	NA	
			NITRATE (N)	NA	NA	NA	NA	
			CLO4	NA	NA	NA	NA	
02	IRRIGATION	INACTIVE	PCE	8.6	04/85	ND	10/04	
			TCE	11.0	04/85	ND	10/04	
			NITRATE (N)	20.6	10/04	20.6	10/04	
			CLO4	ND	06/98	ND	06/98	
01	IRRIGATION	INACTIVE	TCE	6.1	04/87	ND	10/10	
			PCE	6.4	11/87	1.1	10/10	
			1,2-DCA	0.8	01/96	ND	10/10	
			1,1-DCE	1.0	04/87	ND	10/10	
			C-1,2-DCE	2.6	05/85	ND	10/10	
			NITRATE (N)	10.2	02/98	7.0	10/10	
			CLO4	ND	02/98	ND	02/98	
			AS	3.0	06/95	2.1	06/96	
03	IRRIGATION	INACTIVE	TCE	21.0	05/85	ND	09/05	
			PCE	7.4	05/85	ND	09/05	
			1,1-DCE	2.7	05/85	ND	09/05	
			C-1,2-DCE	28.0	05/85	ND	09/05	

APPENDIX C
HIGHLIGHTS OF VOLATILE ORGANIC COMPOUNDS, NITRATE, AND PERCHLORATE CONCENTRATIONS AND WELLS VULNERABLE TO CONTAMINATION (AS OF MAY 31, 2018)

WELL NAME	USAGE	STATUS	CONCENTRATION (NITRATE IN MG/L, OTHERS IN UG/L)					REMARKS
			CONTAMINANT OF CONCERN	HISTORIC HIGH		MOST RECENT		
				VALUE	DATE	VALUE	DATE	
			1,1-DCA	1.1	05/85	ND	09/05	
			1,1,1-TCA	7.5	05/85	ND	09/05	
			NITRATE (N)	10.5	08/00	5.8	09/05	
			CLO4	ND	02/98	ND	02/98	

NOTES	CONTAMINANT	MAXIMUM CONTAMINANT LEVEL	REPORTING LIMIT	REMARKS	
	1,1-Dichloroethane (1,1-DCA)	5 micrograms per liter (ug/L)	0.5 ug/L	(1)	Existing VOC treatment
	1,1-Dichloroethylene (1,1-DCE)	6 ug/L	0.5 ug/L	(2)	VOC treatment under construction
	1,1,1-Trichloroethane (1,1,1-TCA)	200 ug/L	0.5 ug/L	(3)	VOC treatment proposed
	1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	1 ug/L	0.5 ug/L	(4)	Existing CLO4 treatment
	1,2-Dichloroethane (1,2-DCA)	0.5 ug/L	0.5 ug/L	(5)	CLO4 treatment proposed
	Arsenic (AS)	10 ug/L	2.0 ug/L		
	Perchlorate (CLO4)	6 ug/L	4.0 ug/L	NA	Not Available
	Carbon Tetrachloride (CTC)	0.5 ug/L	0.5 ug/L	ND	Not Detected above Reporting Limit
	Cis-1,2-Dichloroethylene (c-1,2-DCE)	6 ug/L	0.5 ug/L	NL	Notification Level
	Hexavalent Chromium (CR6)	10 ug/L	1.0 ug/L	VOCS	Volatile Organic Compounds
	Trichlorofluoromethane (Freon 11)	150 ug/L	5.0 ug/L		
	Trichlorotrifluoroethane (Freon 113)	1200 ug/L	10.0 ug/L		
	Methyl Tert-Butyl Ether (MTBE)	13 ug/L	3.0 ug/L		
	Nitrate as Nitrogen (NITRATE [N])	10 mg/L	0.4 mg/L		
	Tetrachloroethylene (PCE)	5 ug/L	0.5 ug/L		
	Trichloroethylene (TCE)	5 ug/L	0.5 ug/L		
	Trans-1,2-Dichloroethylene (t-1,2-DCE)	10 ug/L	0.5 ug/L		
	Vinyl Chloride (VC)	0.5 ug/L	0.5 ug/L		

APPENDIX D.

POTENTIAL SITES FOR AQUIFER PERFORMANCE TESTS

APPENDIX D

POTENTIAL SITES FOR AQUIFER PERFORMANCE TESTS

NAME	RECORD.	USAGE	STATUS	PERF. (1)	FUNCTION	REMARKS
ALHAMBRA, CITY OF						
LON 1	1902789	MUNICIPAL	ACTIVE	411-800	MONITORING	
LON 2	1900017	MUNICIPAL	ACTIVE	296-563	PUMPING	
AZUSA, CITY OF						
NO. 12	8000179	MUNICIPAL	ACTIVE	206-311	PUMPING	
NO. 11	8000178	MUNICIPAL	ACTIVE	200-320	MONITORING	
CALIFORNIA AMERICAN WATER COMPANY/DUARTE						
B V	1900035	MUNICIPAL	STANDBY	300-580	PUMPING	
B V 2	8000216	MUNICIPAL	ACTIVE	300-700	MONITORING	
CALIFORNIA DOMESTIC WATER COMPANY						
05A	8000100	MUNICIPAL	ACTIVE	?-920	PUMPING	
06	1902967	MUNICIPAL	ACTIVE	200-800	MONITORING	
GLENDORA, CITY OF						
05-E	8000149	MUNICIPAL	ACTIVE	150-400	PUMPING	
NA	1903119	INDUSTRIAL	INACTIVE	?-220	MONITORING	OWL ROCK PRODUCTS WELL
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN DIMAS DISTRICT						
COL-4	1902268	MUNICIPAL	ACTIVE	122-190	PUMPING	
COL-6	1902270	MUNICIPAL	INACTIVE	?-414	MONITORING	
GOLDEN STATE WATER COMPANY (SOUTHERN CALIFORNIA WATER COMPANY)/SAN GABRIEL VALLEY DISTRICT						
FAR 1	1902034	MUNICIPAL	ACTIVE	274-455	PUMPING	
FAR 2	1902948	MUNICIPAL	ACTIVE	229-600	MONITORING	
SG 1	1900510	MUNICIPAL	ACTIVE	190-411	MONITORING	
SG 2	1900511	MUNICIPAL	ACTIVE	209-393	PUMPING	
RURBAN HOMES MUTUAL WATER COMPANY						
NORTH 1	1900120	MUNICIPAL	ACTIVE	140-190	MONITORING	
SOUTH 2	1900121	MUNICIPAL	INACTIVE	125-165	PUMPING	
SAN GABRIEL COUNTY WATER DISTRICT						
05 BRA	1901669	MUNICIPAL	INACTIVE	450-800	MONITORING	
11	8000067	MUNICIPAL	ACTIVE	350-800	PUMPING	
12	8000123	MUNICIPAL	ACTIVE	470-1320	MONITORING	
SAN GABRIEL VALLEY WATER COMPANY						
B24A	8000203	MUNICIPAL	ACTIVE	600-1150	PUMPING	
B24B	8000204	MUNICIPAL	ACTIVE	600-1150	MONITORING	

APPENDIX D

POTENTIAL SITES FOR AQUIFER PERFORMANCE TESTS

NAME	RECORD.	USAGE	STATUS	PERF. (1)	FUNCTION	REMARKS
SUBURBAN WATER SYSTEMS						
201W-9	8000208	MUNICIPAL	ACTIVE	260-650	PUMPING	
201W-7	8000195	MUNICIPAL	ACTIVE	200-650	MONITORING	
201W-8	8000198	MUNICIPAL	ACTIVE	200-650	MONITORING	
201W-10	8000210	MUNICIPAL	ACTIVE	NA	MONITORING	
VALLEY COUNTY WATER DISTRICT						
E NIXON (JOANBRIDGE)	1900032	MUNICIPAL	ACTIVE	300-586	MONITORING	ALTERNATE FOR MAINE SITE
W NIXON (JOANBRIDGE)	1902356	MUNICIPAL	ACTIVE	300-584	PUMPING	
E MAINE	1900027	MUNICIPAL	ACTIVE	250-580	PUMPING	ALTERNATE FOR NIXON SITE
W MAINE	1900028	MUNICIPAL	ACTIVE	250-580	MONITORING	
VALLEY VIEW MUTUAL WATER COMPANY						
01	1900363	MUNICIPAL	ACTIVE	300-585	MONITORING	
02	1900364	MUNICIPAL	ACTIVE	300-535	PUMPING	
03	1900365	MUNICIPAL	INACTIVE	100-200	MONITORING	
WORKMAN MILL INVESTMENT COMPANY (ROSE HILLS MEMORIAL PARK)						
01	1900094	IRRIGATION	INACTIVE	137-264	PUMPING	
ROSE HILLS	8000004	MUNICIPAL	INACTIVE	?-200	MONITORING	BEVERLY ACRES MWC

NOTES

NA: NOT AVAILABLE
RECORD.: RECORDATION NUMBER
PERF.: PERFORATION INTERVAL
(1) TOP OF THE TOP INTERVAL - BOTTOM OF THE BOTTOM INTERVAL (DEPTH BELOW GROUND SURFACE IN FEET)

APPENDIX E.

SUMMARY OF TREATMENT FACILITY ACTIVITY IN THE MAIN SAN GABRIEL BASIN

Appendix E
Summary of Treatment Facility Activity in the Main San Gabriel Basin

The summary below of Operable Unit activities provides supplemental detail to the brief information found in the body of the document in the section titled BASIN CLEANUP PROJECTS / USEPA OPERABLE UNIT PLANS.

BALDWIN PARK OPERABLE UNIT (BPOU)

BPOU BACKGROUND

The BPOU is a seven-mile-long, one-mile-wide area of groundwater contamination that lies east of the San Gabriel River, stretching from an area north of the I-210 Freeway in Azusa to south of the I-10 Freeway in Baldwin Park (see Figure 11). The contamination primarily has been the result of improper use and disposal of industrial chemicals in the Azusa area, and it continues to spread generally in a south-westerly direction.

BPOU CLEANUP PROGRESS

In 2002, after several years of negotiation led by Watermaster, eight of the BPOU Responsible Parties (called Cooperating Respondents, or CRs) and seven Water Entities signed the BPOU Project Agreement. Under this landmark agreement, Watermaster provided overall project management and project coordination services. The CRs paid the cost to construct, and were required to continue to provide funding to operate, the USEPA-required BPOU cleanup facilities for a total of about 15 years under the original agreement through 2017.

During fiscal year 2016–17, Watermaster, the Water Entities, and the CRs negotiated a ten-year extension of the BPOU Project Agreement (Including amendments) which will run through 2027.

Several water purveyors own and operate the facilities, and they use the highly treated water in their water systems. WQA has also obtained outside funds to help construct necessary BPOU treatment facilities, extraction wells, and pipelines.

BPOU TREATMENT FACILITIES

The BPOU Project consists of four centralized treatment facilities with a combined extraction and treatment capacity of up to 33,900 gallons per minute (gpm). Those treatment facilities are located at Valley County Water District's Lante Plant (7,800 gpm), San Gabriel Valley Water Company's Plant B6 (7,800 gpm) and Plant B5 (7,800 gpm), California Domestic Water Company's Bassett Plant (8,000 gpm), and La Puente Valley County Water District's site (2,500 gpm).

Valley County Water District (VCWD) Project. In the northerly portion of the BPOU, the VCWD Project consists of three extraction wells, including two wells, pumping up to 7,800 gpm (average annual rate of 6,000 gpm) to a centralized treatment facility at the VCWD Lante Plant. The VCWD Project consists of separate facilities to treat VOCs, 1,2,3-TCP, perchlorate, NDMA, and 1,4-dioxane. In addition, a treated-water pipeline provides up to 6,000 gpm of fully treated water to Suburban Water Systems (SWS) to offset production lost due to contamination of some of its wells; VCWD can use the remaining portion of the treated water. The VCWD Project began operation for contamination cleanup in 2006 and received its DDW operating permit in July 2007 to provide potable water to customers. Since operation began in 2006, the VCWD treatment facility has treated about 75,400 acre-feet and has removed about 42,400 pounds of contaminants, as shown in the table at the end of Appendix E.

VCWD and its BPOU partners are coordinating the construction of a new single-pass ion exchange facility that will remove perchlorate more cost effectively. Construction of the new system is complete, but start-up has been pushed back while the parties determine the most cost-effective way to address high nitrate concentrations. Meanwhile, the existing VCWD treatment facility continues to provide treated water for municipal use.

La Puente Valley County Water District (LPVCWD) Project. The LPVCWD Project consists of three existing production wells. Well-pumping capacity is limited to 2,500 gpm to equal the capacity of the treatment facility (average annual rate of 2,250 gpm). The LPVCWD Project consists of separate facilities to treat VOCs, perchlorate, NDMA, and 1,4-dioxane. The LPVCWD Project is permitted by DDW and has been operating since March 2001. Treated water in excess of LPVCWD's needs is provided to SWS to enable the treatment facility to be operated on a continuous basis. Since operation began, the LPVCWD treatment facility has treated about 71,700 acre-feet (including prior operations with only VOC treatment) and removed about 12,000 pounds of contaminants, as shown in the table at the end of Appendix E.

San Gabriel Valley Water Company (SGVWC) B6 Project. The SGVWC B6 project is permitted by DDW and has been operational since July 2005. The B6 project consists of four extraction wells and a centralized treatment facility that treats up to 7,800 gpm (average annual rate of 6,500 gpm). The facility treats the contaminated groundwater for VOCs, perchlorate, NDMA, and 1,4-dioxane. The treated water is provided to SGVWC customers. Since operation began, the SGVWC B6 treatment facility has treated about 133,000 acre-feet, (including prior operations with only VOC treatment), and removed about 23,900 pounds of contaminants, as shown in the table at the end of Appendix E.

SGVWC B5 Project. The SGVWC B5 Project consists of one extraction well and two existing wells that provide up to 7,800 gpm (average annual rate of 7,000 gpm) to a centralized treatment facility located at the SGVWC B5 site. The treatment facility treats the contaminated water for VOCs, perchlorate, NDMA, and 1,4-dioxane. The treated water is provided to City of Industry customers (1,000 gpm) and the balance (6,000 gpm) is provided to SGVWC customers. The SGVWC B5 Project was permitted by DDW in fiscal year 2007–08. Since operation began in 2007, the SGVWC B5 treatment facility has treated about 115,000 acre-feet and has removed about 4,700 pounds of contaminants, as shown in the table at the end of Appendix E.

California Domestic Water Company (CDWC) Project. The CDWC Project consists of four existing wells that provide up to 17,500 gpm (average annual rate of 8,000 gpm) to a centralized treatment facility located at the CDWC Bassett site. The treatment facility treats the contaminated water for VOCs, perchlorate, and NDMA. The treated water is provided to CDWC customers. The CDWC Project was permitted by DDW in 1993. Since operation began in 1993, the CDWC treatment facility has treated about 355,700 acre-feet and has removed about 17,400 pounds of contaminants, as shown in the table at the end of Appendix E.

Purveyor Projects. In addition to the USEPA-required BPOU facilities, Watermaster has issued permits under Section 28 of its Rules and Regulations to SWS to construct new wells that also are being used to blend with wells impacted by contaminants. These activities reduce reliance on expensive imported water, and contribute to contaminant removal.

SOUTH EL MONTE OPERABLE UNIT (SEMOU)

SEMOU BACKGROUND

The SEMOU covers approximately eight square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway, the 60 Freeway, the I-605 Freeway, and San Gabriel Boulevard (see Figure 11).

SEMOU CLEANUP PROGRESS

A ROD for the SEMOU was issued in 2000, addressing VOC contamination in a limited area. Subsequently, additional water supply wells became contaminated, and new contaminants, including perchlorate, were detected in wells in the SEMOU area.

In November 2005, USEPA revisited its ROD and issued an Explanation of Significant Differences (ESD) indicating that SEMOU cleanup projects would also address treatment of perchlorate. Because a

perchlorate source has not yet been identified in that area, the Responsible Parties objected to a requirement to pay for perchlorate treatment, and negotiations for the Responsible Parties to fund SEMOU groundwater cleanup activities have been moving slowly.

SEMOU TREATMENT FACILITIES

In the meantime, area water purveyors who were impacted by contaminant migration and new perchlorate detections were forced to construct new or additional treatment facilities to maintain safe, reliable water supplies. The City of Monterey Park, SGVWC, and GSWC have all constructed new or additional treatment facilities within SEMOU. WQA has assisted these Producers by securing outside funding to help offset project costs.

Monterey Park Project. Monterey Park constructed a water treatment facility at its Delta Plant to treat VOCs and perchlorate. Monterey Park Well No. 9 (which only had detectable concentrations of VOCs) began operating through the VOC treatment facility in April 2002. Following construction and permitting of the perchlorate treatment facility, Monterey Park Well No. 12 began operation in spring 2005. Monterey Park began operation of Well No. 15 in summer 2006. Production is from Monterey Park Wells No. 12 and No. 15 in order to operate consistent with the SEMOU ROD. Watermaster and Monterey Park maintain data on water quality in monitoring wells located up-gradient of Wells No. 9, 12, and 15. Since the treatment facility began operation, over 78,600 acre-feet of water have been treated and about 13,300 pounds of contaminants removed from the groundwater, as shown in the table at the end of Appendix E.

SGVWC Plant 8 Project. SGVWC Plant 8 VOC Treatment Facility has a capacity of 5,000 gpm and has been

in operation since fiscal year 2001–02. In response to increasing VOC concentrations, SGVWC voluntarily constructed supplemental VOC treatment at Plant 8. The supplemental VOC treatment facility was permitted by DDW in September 2006 and went online in December 2006. SGVWC plans to construct a 1,4-Dioxane Treatment Facility within the next five years. Since the original VOC treatment facility began operation, over 44,500 acre-feet of water have been treated and about 6,700 pounds of contaminants have been removed from the groundwater, as shown in the table at the end of Appendix E.

GSWC Project. GSWC VOC treatment facility at San Gabriel Wells No. 1 and 2 had been permitted and operating. However, with the establishment of the revised Perchlorate NL in 2002, GSWC voluntarily removed the wells from operation. Subsequently, GSWC installed an ion-exchange system to remove perchlorate and has resumed operation at its San Gabriel Well No. 1. The treatment facility has treated about 21,200 acre-feet of water and removed about 600 pounds of contaminants, as shown in the table at the end of Appendix E.

EL MONTE OPERABLE UNIT (EMOU)

EMOU BACKGROUND

The EMOU covers an area of about 10 square miles in the south-central portion of the Basin. It is bounded by the I-10 Freeway on the south, Rosemead Boulevard on the west, and Santa Anita Avenue and Rio Hondo on the east. The northern boundary generally follows Lower Azusa Road (see Figure 11). While shallow contamination is found throughout the EMOU, deep (intermediate-zone) contamination is found in the northwest and easterly area of the EMOU.

EMOU CLEANUP PROGRESS

The USEPA's ROD for the EMOU includes numerous small, shallow extraction wells and treatment, along with two areas of deep extraction and treatment. Due to generally poor water quality in the area, the shallow groundwater will not be used for a potable supply. The deep extractions are recommended for potable use by local water purveyors. The remediation efforts are separated into "Westside" and "Eastside" activities.

EMOU Westside Projects. On the Westside, there are plans to clean up contaminants occurring in the shallow aquifer. The shallow-zone water is treated for VOCs and discharged to an adjacent channel, and the fully treated water is infiltrated back into the Basin. The treatment facility (Hermetic Seal) has treated about 300 acre-feet and removed about 30 pounds of contaminants, as shown in the table at the end of Appendix E. The deep-zone extraction and treatment in the northwest area is being accomplished by the existing Encinita Wellfield and Treatment Facility owned by GSWC, which began operation during 1998. The GSWC treatment facility has treated about 28,200 acre-feet of water and has removed about 670 pounds of contaminants, as shown in the table at the end of Appendix E. During July 2002, USEPA issued an ESD which indicated that perchlorate, NDMA, 1,4-dioxane, and hexavalent chromium had been detected in excess of DDW notification levels. In the event water from extraction wells cannot be blended to acceptable levels, additional treatment facilities will need to be installed, significantly increasing cleanup costs. Thus far, extraction and treatment of VOCs at GSWC Encinita Plant have not been impacted.

EMOU Eastside Projects. On the Eastside, there are plans to clean up contaminants occurring in the shallow aquifer. The shallow-zone water is treated for VOCs and discharged to an adjacent channel, and the fully treated water is infiltrated back into the Basin. The treatment facility (Gould/Johnson Controls) has treated about 100 acre-feet and removed about 20 pounds of contaminants, as shown in the table at the end of Appendix E. The deep-zone extraction and treatment in the northwest area is being accomplished by three new extraction wells which began operation during 2015–16. The treatment facility has treated about 2,000 acre-feet of water and has removed about 90 pounds of contaminants, as shown in the table at the end of Appendix E.

PUENTE VALLEY OPERABLE UNIT (PVOU)

PVOU BACKGROUND

The PVOU lies in the southeastern portion of the Basin, essentially bounded by the 60 Freeway on the south, Azusa Avenue on the east, and the I-10 Freeway on the north (see Figure 11). The PVOU encompasses the Puente Valley, which is tributary to the southeasterly portion of the Basin. Contamination in the PVOU includes various VOCs. All aquifers within the PVOU (shallow, intermediate, and deep) are considered sources for municipal water supplies.

PVOU CLEANUP PROGRESS

USEPA has issued a ROD for the PVOU. The plan identified in the ROD includes extraction and treatment of groundwater within the shallow and intermediate zones from wells located in the center of the PVOU.

PVOU CURRENT AND UPCOMING ACTIVITIES

PVOU Shallow Zone Project. The cleanup plan for shallow-zone contamination includes nine wells that will collectively produce about 1,000 gpm. Due to the poor quality of shallow-zone water (which is high in naturally-occurring dissolved solids), the water will not be used as drinking water, but will instead be treated to remove VOCs and will then be recharged back into the Basin. Watermaster is currently working with USEPA and the Responsible Party to develop an agreement to allow production and discharge of the PVOU shallow-zone water.

PVOU Intermediate Zone. Watermaster is working with USEPA, Responsible Parties, and local water entities to develop a cleanup solution that meets potable water supply needs. Approximately 1,000 gpm will be produced from the intermediate-zone extraction wells, treated, and used for potable purposes by a local water purveyor.

WHITTIER NARROWS OPERABLE UNIT (WNOU)

WNOU BACKGROUND

USEPA declared the WNOU is a "fund-lead" project, meaning that USEPA (with the State) has funded the design, construction, and operation of the remedy, and will seek cost recovery from Responsible Parties later. The USEPA cleanup plan involves a series of shallow- and intermediate-zone extraction wells with treatment (see Figure 11).

WNOU CLEANUP PROGRESS

As of May 2013, the responsibility for the WNOU was transferred from USEPA to the California Department of Toxic Substances Control (DTSC). Furthermore, the WNOU Shallow Zone Project (as described below) ceased operation during 2013 due to improved water quality.

WNOU Shallow Zone Project. During fiscal year 2002–03, NDMA was detected in some of the shallow extraction wells, prolonging the testing and review process for the shallow-zone water through June 2007. Studies indicated the shallow-zone contamination could be adequately contained at an extraction rate of 2,500 gpm. Treated shallow-zone water has been discharged for conservation and recreational use at Legg Lake, and Watermaster entered into a production agreement with USEPA and the County of Los Angeles regarding the accounting of that water. Since production began at the WNOU facility, over 30,000 acre-feet of groundwater have been treated, and over 1,620 pounds of contaminants have been removed. During fiscal year 2012–13 the WNOU's Shallow Zone Project ceased operation.

WNOU Intermediate Zone Project. The City of Whittier obtained a DDW permit to use the 6,000 gpm of treated intermediate-zone water for municipal use instead of producing water from its existing wells. During April 2013, the City of Whittier ceased taking treated intermediate-zone water. Subsequently, the treated intermediate-zone water has been delivered to Legg Lake, while DTSC negotiates with a municipal water supplier to accept additional treated intermediate-zone water. Since production began in late 2005, about 52,000 acre-feet of groundwater have been treated and about 1,800 pounds of contaminants removed, as shown in the table at the end of Appendix E.

AREA 3 OPERABLE UNIT

AREA 3 BACKROUND

The Area 3 Operable Unit is located in the westerly portion of the Basin. It is generally bounded on the south by the I-10 Freeway, on the east by Rosemead Boulevard, on the north by Huntington Drive, and on the west by the boundary of the Main Basin (see Figure 11).

AREA 3 CURRENT AND UPCOMING ACTIVITIES

USEPA has installed a series of monitoring wells to collect water quality data to supplement data collected from water supply wells and has initiated a Remedial Investigation and Feasibility Study to identify the extent of the contamination and to evaluate appropriate cleanup remedies.

In addition, Watermaster issued a permit during 2005–06 to the City of Alhambra to construct a treatment facility to remove VOCs from Wells No. 7, 8, 11, and 12. The treatment facility became operational in April 2009, prior to USEPA's development of a final remedy, but is necessary for Alhambra to receive a reliable source of supply from the groundwater basin. The facility has treated about 25,700 acre-feet and has removed about 850 pounds of contaminants, as shown in the table at the end of Appendix E.

APPENDIX E

SUMMARY OF TREATMENT FACILITY ACTIVITY
IN THE MAIN SAN GABRIEL BASIN
AS OF JUNE 30, 2018

Operable Unit	Treatment Facility Owner	Treatment Facility(s)	Start Date 1/	Total Water Treated: Fiscal Year 2017-18 (Acre-feet)	Total Water Treated: Accum. Total (Acre-feet)	Total Contaminants Removed: Fiscal Year 2017-18 (Pounds)	Total Contaminants Removed: Accum. Total (Pounds)
AREA 3							
	ALHAMBRA, CITY OF	Well No. 7	July 2001	—	7,582.35	—	130.1
		Well No. 7, 8, 11 & 12	April 2009	1,119.00	25,745.80	50.5	856.0
BPOU							
	CALIFORNIA DOMESTIC WATER COMPANY	Well No. 3, Well No. 5A Well No. 6, & Well No. 10	September 1993 April 1997	14,964.34	355,661.10	1,251.6	17,418.2
	LA PUENTE VALLEY COUNTY WATER DISTRICT	Well No. 2, 3 & 4	August 1992	—	11,493.13	—	826.9
		Well No. 2, 3 & 5 (BPOU)	January 2000	3,636.69	60,218.53	297.6	11,166.6
	SAN GABRIEL VALLEY WATER COMPANY	Well B6C 5/	April 1994	—	5,194.17	—	856.2
		Well B6D 5/	April 1994	—	14,526.27	—	421.7
		Plant B5 (BPOU)	January 2007	9,403.11	114,946.11	400.5	4,696.8
		Plant B6 (BPOU)	September 2004	10,709.40	112,424.24	2,174.6	22,603.9
	VALLEY COUNTY WATER DISTRICT	Lante	June 1984	—	7,719.61	—	10,356.7
		Lante, SA1-1 & SA1-2 (BPOU)	December 2004	4,716.69	75,450.33	1,174.4	42,381.2
EMOU							
	ADAMS RANCH MUTUAL WATER COMPANY	Well No. 3 5/	November 2003	—	881.58	—	32.7
	HERMETIC SEAL CORPORATION	Hermetic Seal	May 2012	53.21	354.33	5.4	32.3
	GOULD AND JOHNSON CONTROLS	EMOU (Deep Zone)	October 2015	884.77	2,049.61	41.6	94.8
		EMOU (Shallow Zone)	October 2015	34.26	113.40	5.0	23.3
	GOLDEN STATE WATER COMPANY (SGV)	Encinita No. 1, 2 & 3	April 1998	1,967.52	28,169.76	48.5	670.1
PVOU							
	BDP - CARRIER	Carrier	April 1988	53.17	6,771.19	4.8	2,841.8
SEMOU							
	MONTEREY PARK, CITY OF	Well No. 5	September 1999	524.66	18,241.17	24.6	1,338.7
		Well No. 9 & 12, 15	April 2002	5,429.63	78,552.12	1,035.3	13,312.9
	SAN GABRIEL VALLEY WATER COMPANY	Well 8B, 8C, 8D & 8E	August 2002	2,967.66	44,511.81	763.5	6,660.4
	GOLDEN STATE WATER COMPANY (SGV)	San Gabriel No.1 & 2	November 2001	1,502.21	21,163.63	38.2	615.3
WNOU							
	EPA	WNOU (Shallow Zone) 5/	December 1999	—	30,065.52	—	1,618.9
	SAN GABRIEL VALLEY WATER COMPANY	WNOU (Intermediate Zone) 2/	December 2005	2,390.96	52,020.09	14.8	1,798.1
PRODUCER FACILITY							
	ARCADIA, CITY OF	Longden 1 & 2	January 1985	23.44	70,242.88	0.1	740.0
	BOZUNG	Well B36, F38, F39 & BC34 3/	October 1994	—	233.00	—	131.3
	EL MONTE, CITY OF	Well No. 12	February 1997	253.15	16,054.30	45.0	1,082.8
		Well No. 10 5/	May 2004	—	6,380.82	—	43.4
		Well No. 2A	July 1999	772.96	10,386.57	10.3	147.6
	EPA	Richwood (North Well) 4/	April 1990	—	451.98	—	5.8
		Richwood (South Well) 4/	April 1990				
	GOLDEN STATE WATER COMPANY (SD)	Art 2 & 3, Base 3 & 4, Hwy 1	May 2005	1,119.18	19,482.26	23.2	365.0
	GOLDEN STATE WATER COMPANY (SGV)	Garvey No. 3	June 2016	656.96	1,279.25	5.3	10.6
	HEMLOCK MUTUAL WATER COMPANY	Hemlock (North Well) 5/	April 1986	—	2,553.65	—	44.6
		Hemlock (South Well) 5/	April 1986				
	MONROVIA, CITY OF	Wells No. 2 & 6	March 1996	2,216.86	47,517.36	63.9	952.9
		Wells No. 3, 4 & 5	October 2007	2,243.28	19,657.39	23.5	182.8
	MONTEREY PARK, CITY OF	Well No. 1, 3, 10 & Fern	June 2004	1,499.53	28,625.89	33.3	1,700.6
	SAN GABRIEL VALLEY WATER COMPANY	Well 11B	March 1991	13.65	44,897.38	0.0	319.7
		Well B11B	March 1993	1,313.29	48,450.33	54.9	3,235.0
		Well B7C 6/	March 1993	—	46,711.28	—	1,824.2
		Well B4B & B4C	January 1999	—	24,093.04	—	1,233.5
		Well G4A	December 2005	247.25	4,411.21	4.7	69.9
	SUBURBAN WATER SYSTEMS	Well No. 140W-4 5/	May 2001	—	2,247.59	—	16.2
	VALLEY COUNTY WATER DISTRICT	Maine East & West	June 1990	2,829.86	55,264.09	14.4	1,819.5
		Nixon East & West	January 2004	4,353.34	49,803.29	17.6	316.9
	WATER QUALITY AUTHORITY	Arrow (Project No. 1) 5/	February 1992	—	7,250.41	—	17,423.0
		Big Dalton (Project No. 2) 5/	March 1997	—	1,229.02	—	82.5
		Whitmore Street	January 2008	14.61	312.69	8.9	179.3
		SEMOU	July 1999	—	3,885.19	—	1,558.5
			TOTAL	77,914.64	1,585,276.72	7,636.0	174,239.1

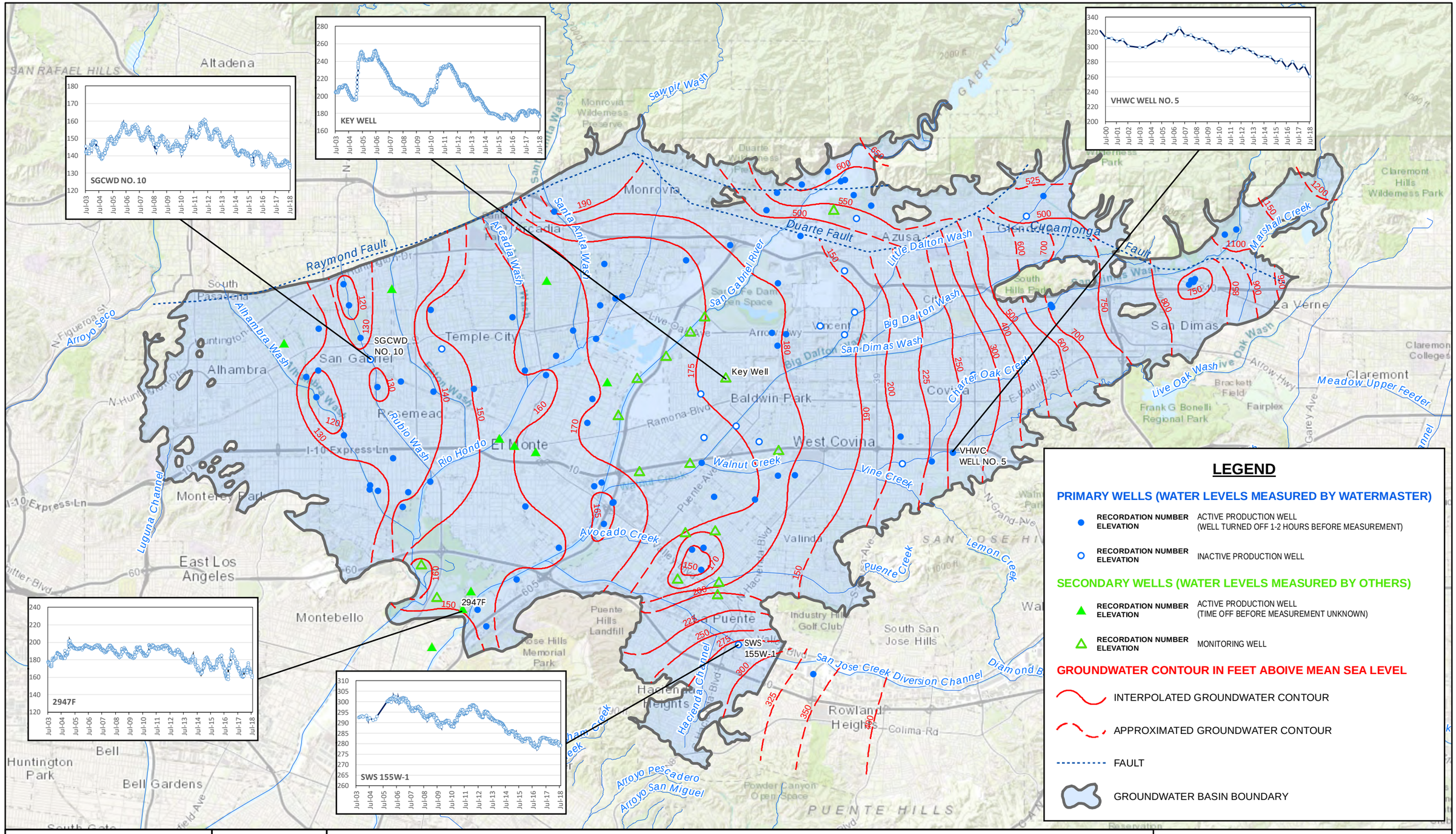
Footnotes:
1/ From date of beginning of operation.
2/ Previously operated by City of Whittier from December 2005 to May 2013.
3/ Treatment facility has been permanently dismantled.
4/ Wells destroyed in June 1999.
5/ Wellfield no longer pumps to treatment facility.
6/ Well destroyed in October 2016.

APPENDIX F.

Simulated Basin Groundwater Contours 2017–18 and 2022–23 (Figures 14 and 15),

Simulated Groundwater Elevation Changes Between FY 2017–18 and FY 2022–23 (Figure 16),

VOC Plume Map in BPOU and Perchlorate Plume Map in BPOU (Figures 17 and 18)



STETSON ENGINEERS INC.
861 VILLAGE OAKS DRIVE, SUITE 100
COVINA, CALIFORNIA 91724
TEL: (626) 967-6202
FAX: (626) 331-7065
2171 E Francisco Blvd., Suite K
San Rafael California 94901
2651 W Guadalupe Rd., Suite A209
Mesa Arizona 85202

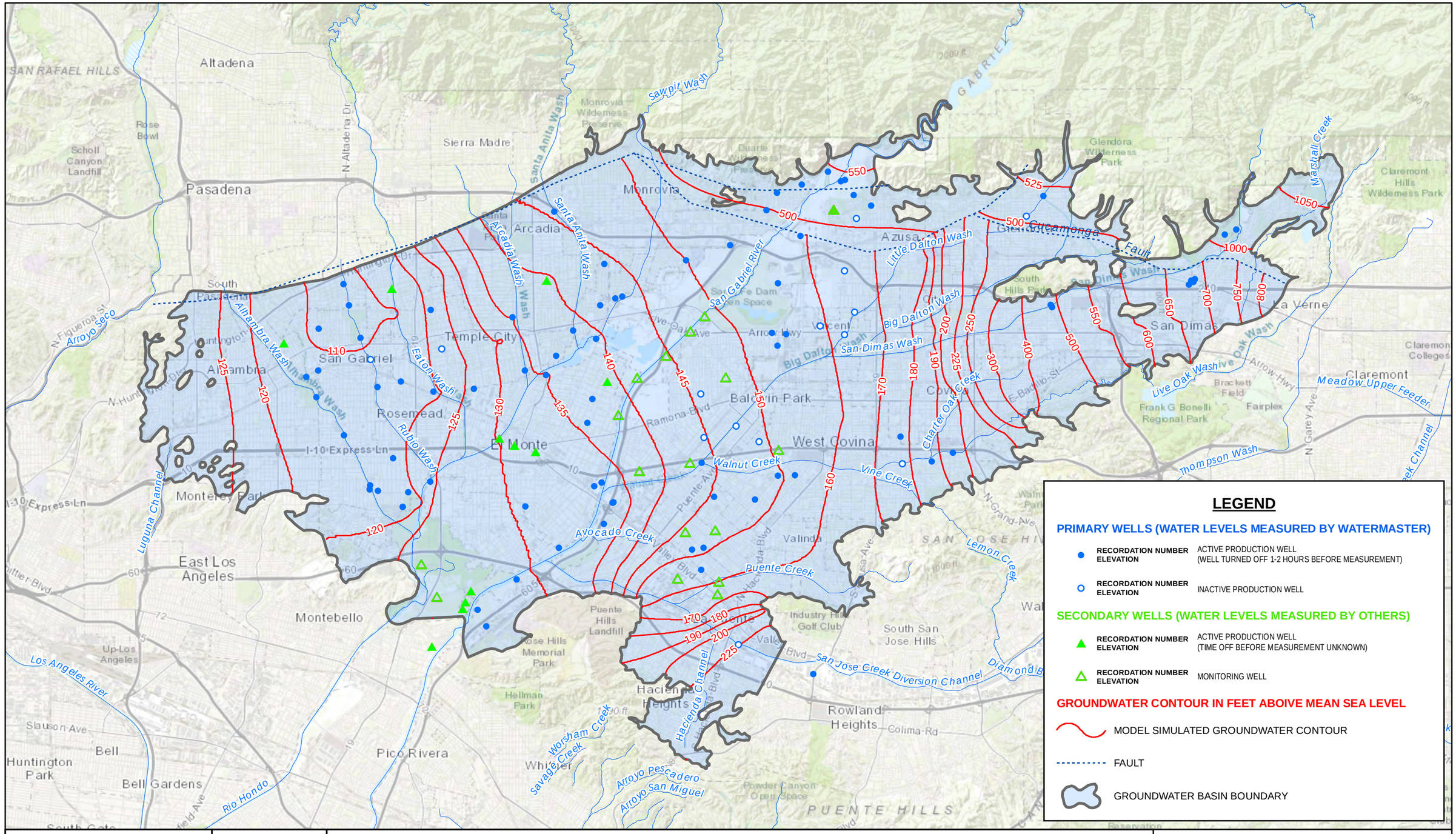
N

0 1 2
Miles

MAIN SAN GABRIEL BASIN WATERMASTER

2017-18 SAN GABRIEL BASIN GROUNDWATER CONTOUR MAP

MainSanGabrielBasin WATERMASTER



LEGEND

PRIMARY WELLS (WATER LEVELS MEASURED BY WATERMASTER)

- **RECORDATION NUMBER / ELEVATION** — ACTIVE PRODUCTION WELL (WELL TURNED OFF 1-2 HOURS BEFORE MEASUREMENT)
- **RECORDATION NUMBER / ELEVATION** — INACTIVE PRODUCTION WELL

SECONDARY WELLS (WATER LEVELS MEASURED BY OTHERS)

- **RECORDATION NUMBER / ELEVATION** — ACTIVE PRODUCTION WELL (TIME OFF BEFORE MEASUREMENT UNKNOWN)
- **RECORDATION NUMBER / ELEVATION** — MONITORING WELL

GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL

- MODEL SIMULATED GROUNDWATER CONTOUR
- FAULT
- GROUNDWATER BASIN BOUNDARY

STETSON ENGINEERS INC.
861 VILLAGE OAKS DRIVE, SUITE 100
COVINA, CALIFORNIA 91724
TEL: (626) 967-6202
FAX: (626) 331-7065

2171 E Francisco Blvd., Suite K
San Rafael California 94901

2651 W Guadalupe Rd., Suite A209
Mesa Arizona 85202

N

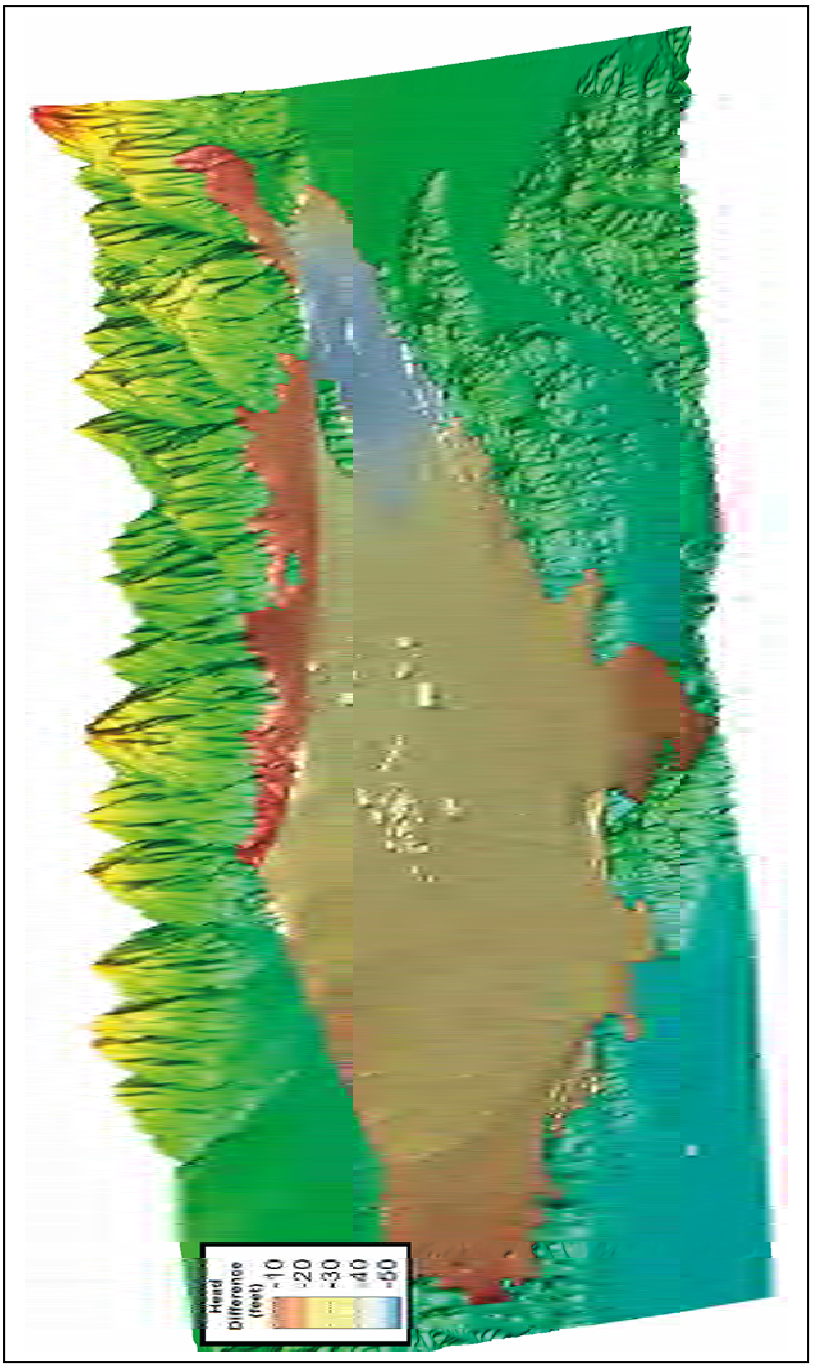
0 1 2
Miles

MAIN SAN GABRIEL BASIN WATERMASTER

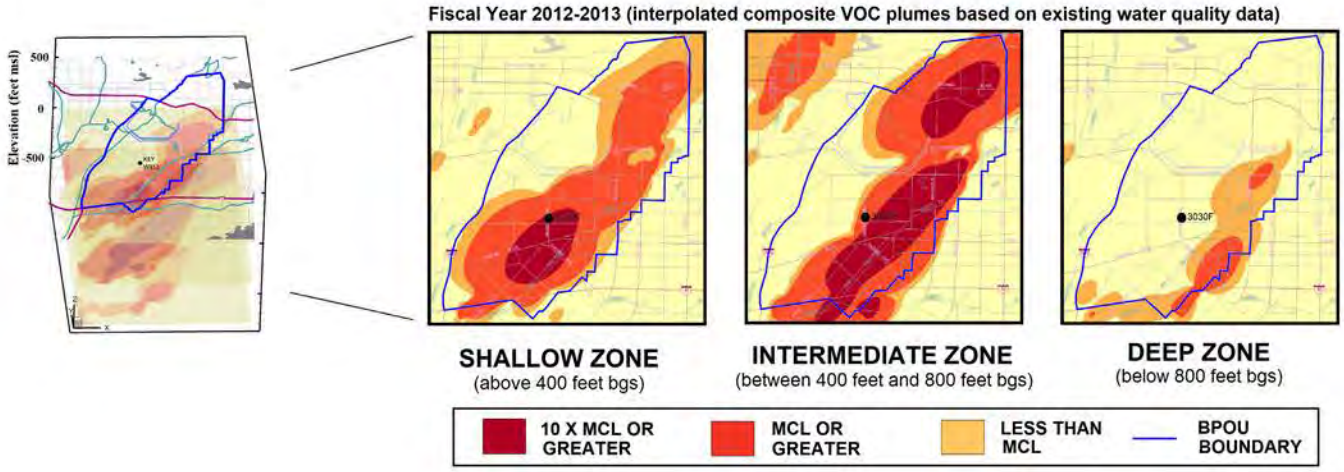
SIMULATED 2022-23 BASIN GROUNDWATER CONTOURS (DRY HYDROLOGIC CONDITIONS WITH WATER RESOURCE DEVELOPMENT ASSESSMENT)

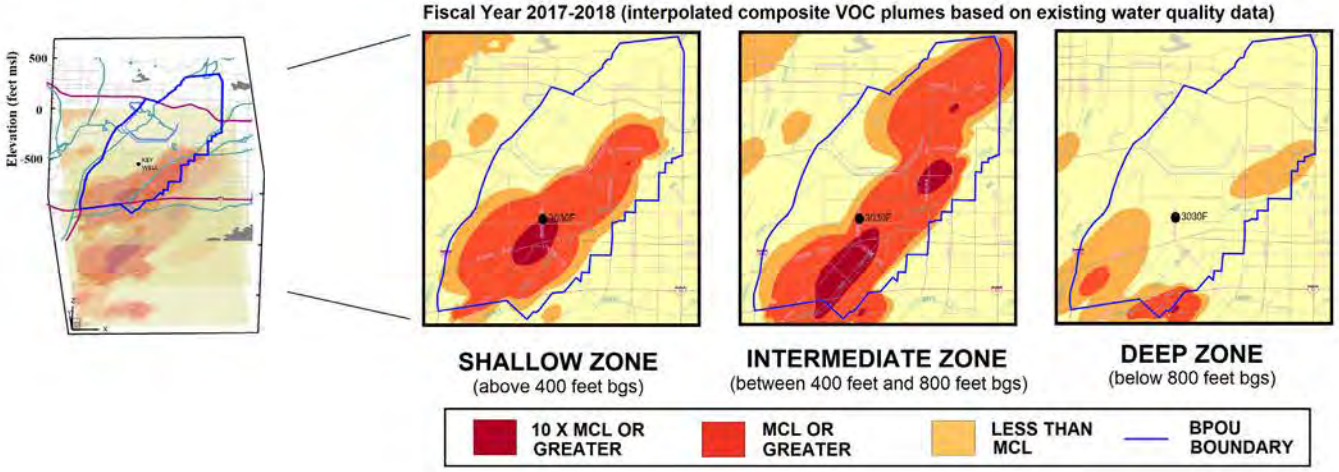
MainSanGabrielBasin WATERMASTER

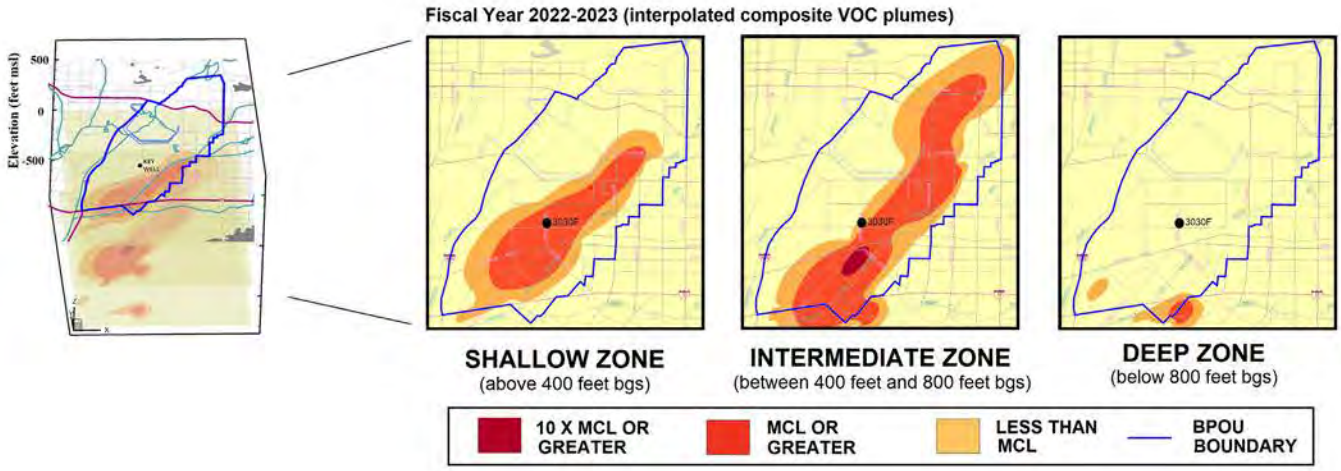
Simulated Ground Water Elevation Changes
Between FY 2017–18 and FY 2022–23



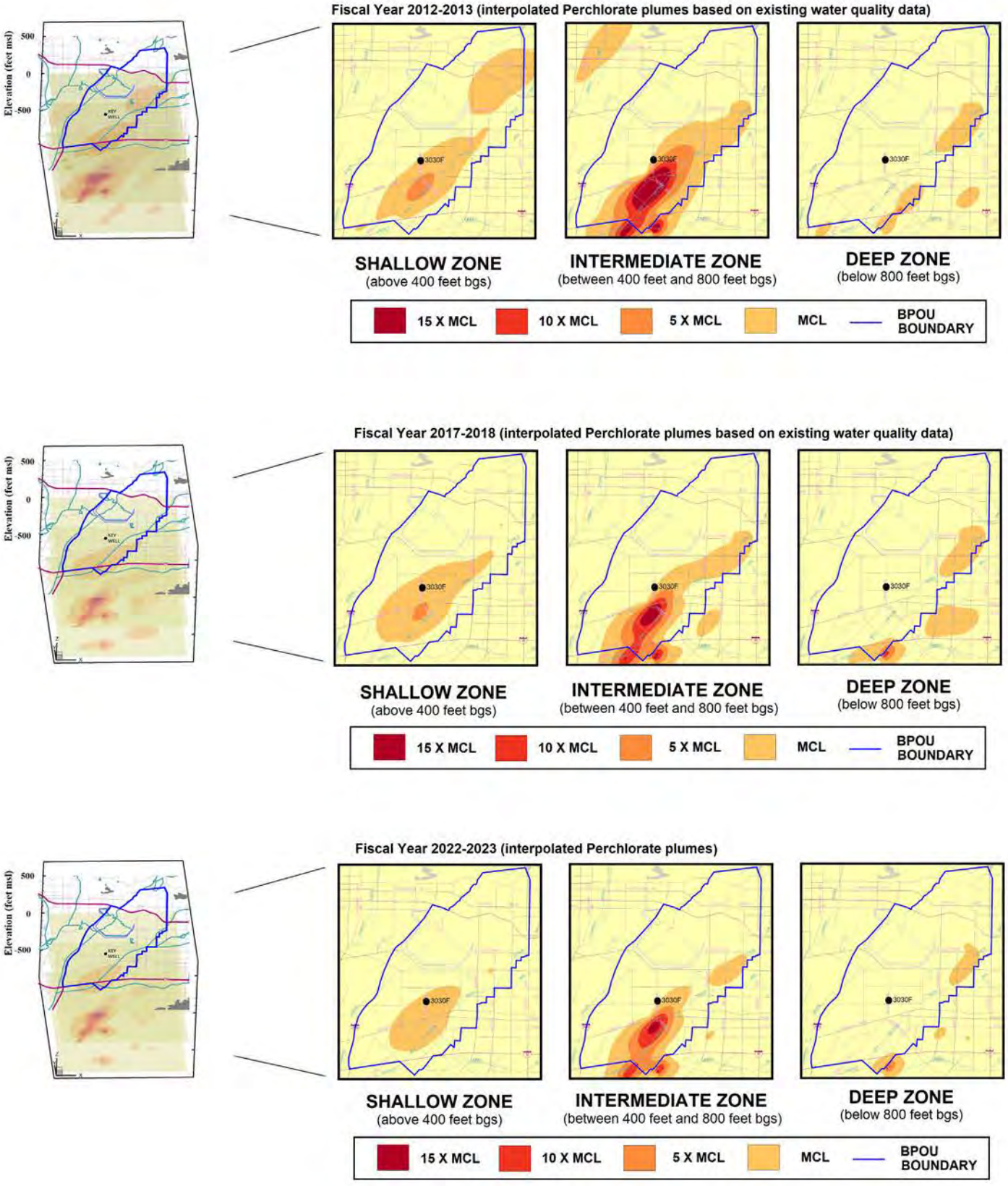
VOC Plume Map in BPOU

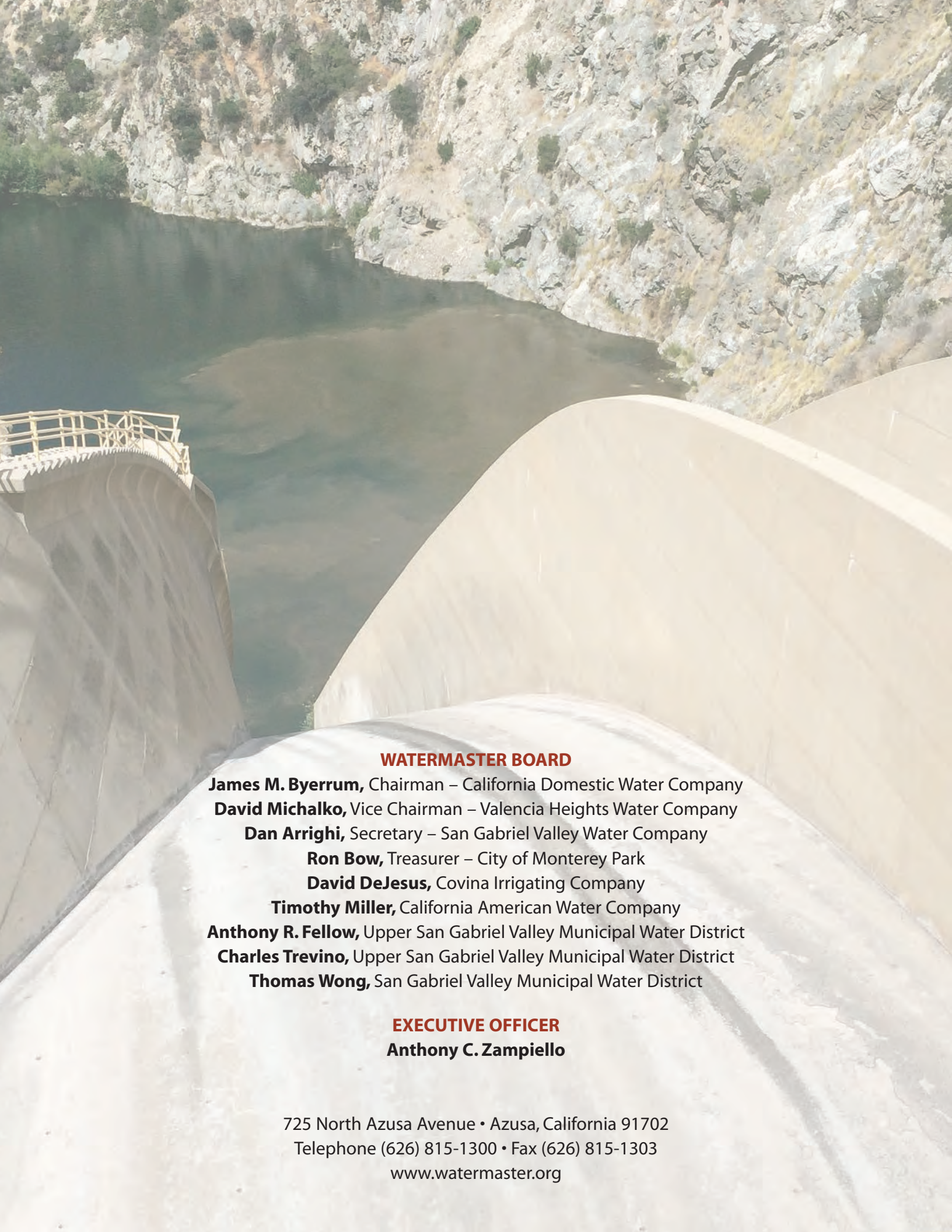






Perchlorate Plume Map in BPOU





725 North Azusa Avenue • Azusa, California 91702
Telephone (626) 815-1300 • Fax (626) 815-1303
www.watermaster.org

APPENDIX C. UPPER DISTRICT SUPPLY VERIFICATION LETTER

Not available at the time this report was developed. Subject to confirmation by Upper District that the required MSGB Replacement water supply presented in this Draft WSA will be available.