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February 11, 2016

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Kurt Berchtold

3737 Main Street, Suite 500
Riverside, California 92501-3348

**Subject: Chino Basin Recycled Water Groundwater Recharge Program:
Quarterly Monitoring Report for October through December 2015**

Dear Mr. Berchtold,

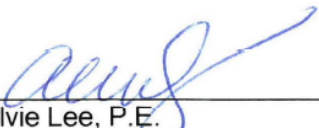
Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the fourth quarter of 2015 (4Q15), October 1 through December 31, 2015, for the *Chino Basin Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report. During 4Q15, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of exceedances of total nitrogen (TN) at Banana Basin and RP3 Basin; and an exceedance of the 4-quarter running average for odor (secondary MCL).

Chino Basin Watermaster hereby certifies that, during the period of October 1 through December 31, 2015, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time from each of the recharge sites using recycled water, namely 8th Street, Banana, Brooks, Declez, Ely, Hickory, RP3, San Sevaime, Turner, and Victoria Basins. In point of fact, there are no domestic or municipal production wells in the buffer zones of the aforementioned recharge sites.

DECLARATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments thereto; and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Executed on the 11th day of February in the Cities of Chino and Rancho Cucamonga.



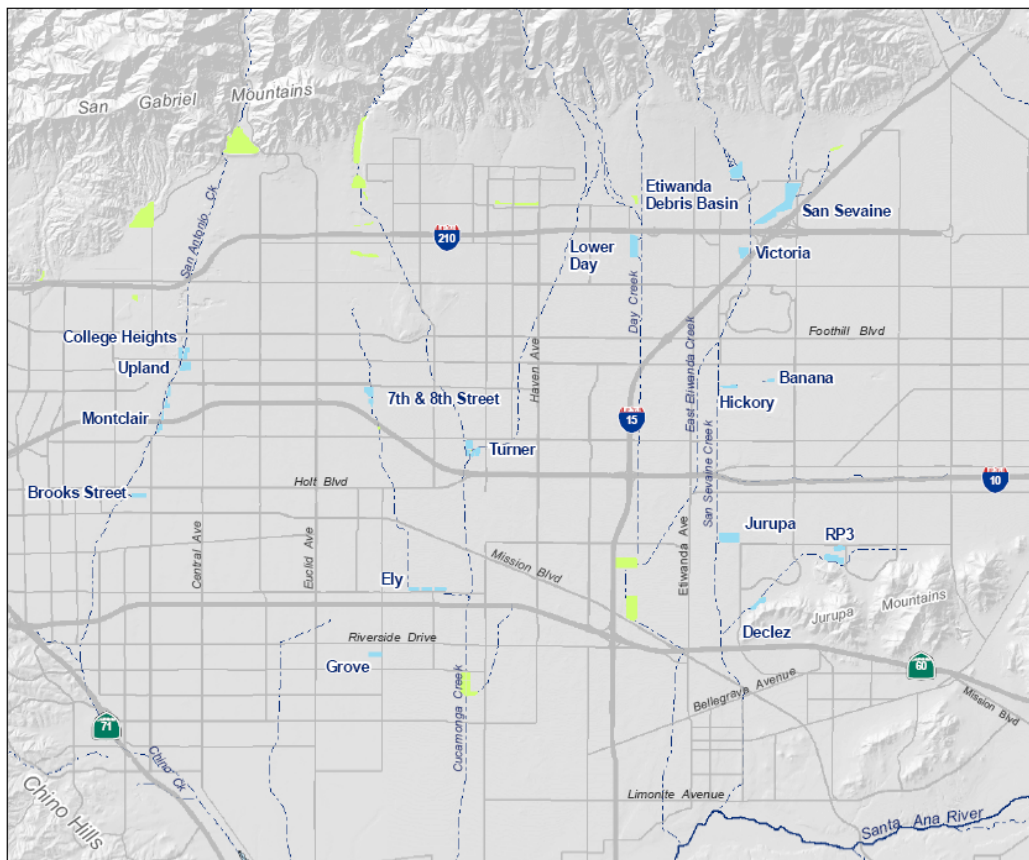
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Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report October 1 through December 31, 2015



Prepared by:



February 15, 2016

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1. Introduction

Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster (Watermaster), Chino Basin Water Conservation District, and San Bernardino County Flood Control District are partners in the implementation of the Chino Basin Recycled Water Groundwater Recharge Program. This is part of a comprehensive water supply program to enhance water supply reliability and improve the groundwater quality in local drinking water wells throughout the Chino Groundwater Basin by increasing the recharge of stormwater, imported water and recycled water. This program is an integral part of Watermaster's Optimum Basin Management Plan (OBMP).

A. Order No. R8-2007-0039

On June 29, 2007, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Order No. R8-2007-0039 (Order) which prescribes the requirements for recycled water use for groundwater recharge in 13 recharge sites within the Chino-North Management Zone. The locations of recharge basins in the Chino Basin Groundwater Recharge Program are shown in Figure 1-1.

As a provision of this Order, IEUA and Watermaster must also comply with Monitoring and Reporting Program No. R8-2007-0039 (MRP). The MRP includes the water quality monitoring requirements of the Chino Basin Recycled Water Groundwater Recharge Program and the requirement for the submittal of quarterly and annual reports. This document is the quarterly report for the fourth quarter of 2015 (4Q15).

The quarterly report includes the following elements as prescribed in the MRP:

- Monitoring results for recycled water (including lysimeter monitoring), diluent water, and groundwater.
- Recycled water and diluent water volumes recharged at each basin.
- Reporting of any non-compliance events due to water quality, including records of any operational problems, plant upset and equipment breakdowns or malfunctions, and any diversion(s) of off-specification recycled water and the location(s) of final disposal. All corrective or preventive action(s) taken.
- Certification that no groundwater has been pumped for domestic water supply use from the buffer zone that extends 500 feet and 6-months underground travel time from the recharge basin(s) where recycled water is applied.

B. Order No. R8-2009-0057

On October 23, 2009, the Regional Board adopted Order No. R8-2009-0057, which amended the recharge permit (Order No. R8-2007-0039) by extending the previously 60-month averaging period to 120 months for determining a recharge site's recycled water contribution (RWC). The Order No. R8-2009-0057 also allowed a fraction of the groundwater underflow of the Chino Basin aquifers to be used as a source of diluent water when calculating the running average RWC.

C. Revised Monitoring & Reporting Program No. R8-2007-0039

On October 27, 2010, the Regional Board revised Monitoring and Reporting Program No. R8-2007-0039 (MRP) based on requests for modifications from IEUA and approved by the State Water Resources Control Board – Division of Drinking Water (DDW, formerly California Department of Public Health). The following changes were made to the MRP:

- 1) Sampling Requirements A.3, A.4, and A.5 were modified by specifying that samples shall be collected on a representative day instead of the 10th day.

- 2) Groundwater Monitoring Program Requirement V.1. was modified by adding a sentence to the paragraph that allows IEUA to analyze the groundwater samples collected on a quarterly basis from non-active municipal drinking water wells for dissolved metals, instead of total recoverable metals.
- 3) Reporting Requirement VI.B.3.b. was modified and footnote No. 18 was added to reflect that IEUA uses groundwater monitoring information contained in the *State of the Basin* report prepared on a biennial basis by the Chino Basin Watermaster, amongst other sources, for the annual determination of the recycled water groundwater flow path.

D. Title 22, Division 4, Chapter 3. Article 5.1 §60320.100

On June 18, 2014, the DDW adopted new regulations pertaining to Groundwater Replenishment Reuse Projects (GRRP), which can be found in Title 22, Division 4, Chapter 3. Article 5.1 “Indirect Potable Reuse: Groundwater Replenishment - Surface Application” found in Sections §60320.100 through 60320.130. Pursuant to the new GRRP Regulations, additional monitoring and reporting began in 3Q15.

E. Outline of the Quarterly Report

Section 2 of this quarterly report discusses the water quality monitoring results for recycled water recharge (water recycling plant effluent, distribution system, basin surface water, and lysimeter data), diluent water, and groundwater. Section 3 provides an overview of recharge operations including the volume of diluent water and recycled water recharged. Section 4 describes any operational problems and preventive and/or corrective actions taken. Section 5 contains the certification of non-pumping in the 500-foot buffer zones around each basin. Section 6 is a brief overview of the Monte Vista Water District’s (MVWD) Aquifer Storage and Recovery (ASR) project.

2. Monitoring Results

A. Recycled Water: RP-1 and RP-4

The requirements for recycled water monitoring are presented in the MRP. Tables 2-1 through 2-4 include all of the requisite 4Q15 data.

Recycled Water Specifications A.5 through A.9 in the Order are the narrative limits established in the permit. The corresponding monitoring data used to determine compliance with the Order are presented in Tables 2-1 and 2-2. This data is typically collected from samples of RP-1 and RP-4 effluent; however, recycled water compliance with the total nitrogen (TN) limit of 5 mg/L (Specification A.7) can also be met at the lysimeters (Table 2-5a) or at locations specified in alternative monitoring plans (Table 2-5b, and discussed in further detail in Section 2.B). During 4Q15, there were three exceedances of the TN limit. The TN exceedances will be discussed in Section 2.B.

In the GRRP Regulations adopted by the DDW on June 18, 2014, the new TN limit for recycled water recharge is 10 mg/L. In anticipation of the adoption of these new Groundwater Replenishment Regulations, IEUA submitted a letter to the DDW and the Regional Board on March 12, 2014, requesting the higher TN limit in the proposed regulations be adopted for the Chino Basin Recycled Water Groundwater Recharge Program. Per the request of the Regional Board, additional data was submitted to support the increased TN limit. IEUA has yet to receive approval of the new limit and continues to report based on the 5 mg/L limit.

Recycled Water Specifications A.1 through A.4 of the Order are numerical limits based on the EPA’s primary maximum contaminant levels (MCLs), secondary MCLs, and Action Levels. Recycled Water Specification A.15 is a numerical limit for oil and grease. The corresponding monitoring data used to determine compliance with these specifications in the Order are presented in Table 2-3. Due to the volume

of samples required for laboratory analyses, IEUA selected, and DDW approved, a sampling point along the recycled water distribution pipeline as the compliance point for the numerical limits. IEUA selected the turnout to NRG California South, LP (formerly Reliant Energy) as representative of the system blend of recycled water used for recharge.

In the Order, compliance for all constituents with MCLs or Action Levels is based on a 4-quarter running average (Recycled Water Specifications A.1 through A.4). Table 2-3 summarizes the 4-quarter running average concentration data for each parameter from 1Q15 through 4Q15, and lists the corresponding limits for compliance.

For the parameters that were analyzed during 4Q15, there were no exceedances in the following categories: primary MCLs for inorganic chemicals, volatile organic compounds (VOCs), non-volatile synthetic organic chemicals (SOCs), radionuclides, and disinfection byproducts; action levels for lead and copper; secondary MCLs for required constituents, with the exception of odor; and oil and grease.

Odor has a secondary MCL of 3 Units in Recycled Water Specification A.3. The 4-quarter running average for 4Q15 was 31 Units, causing the threshold odor compliance metric to exceed the secondary MCL. The odor has been identified by Eaton Analytical (contract laboratory) as chlorine. Recycled water used for groundwater recharge must meet disinfected tertiary recycled water standards in accordance to Title 22. Sodium hypochlorite is used as the disinfection agent at the RP-1 and RP-4 water recycling facilities; hence, the smell of chlorine is prominent in recycled water and is therefore unavoidable. Order No. R8-2007-0039 allows compliance for secondary MCLs to be determined at the mound monitoring well. Based on the mound monitoring well data (Table 2-8), threshold odor did not exceed 3 Units at any of the monitoring wells during 4Q15.

Although NRG turnout is a suitable sampling location for most constituents, it is not appropriate for disinfection byproducts (DBPs), more specifically: Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance samples for these DBPs are taken from lysimeters at basins actively receiving recycled water. At these locations, the samples better represent the DBPs present in the recycled water prior to reaching the groundwater table. Once a quarter, a single representative sample is collected from a selected compliance lysimeter and analyzed for DBPs. For the 4Q15 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the RP3 Basin (RP3-LYS-25) as the compliance point. The RP3 Basin lysimeter was selected as the compliance point because the basin received consistent recycled water recharge and recycled water was present at the 25-foot depth based on electrical conductivity (EC) measurements.

For constituents with no specified limits, quarterly monitoring data are summarized in Table 2-4. All required constituents were analyzed in 4Q15, with the exception of diazinon and propachlor. These two compounds were inadvertently missed the first two quarters following the implementation of the new GRRP Regulations, which changed the monitoring frequency for State Notification Level (NL) chemicals from annually to quarterly.

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly at lysimeters in basins when recycled water is delivered, for the determination of compliance with Recycled Water Specifications A.7, A.10, and A.11. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. Basin and lysimeter water quality results from 4Q15 are summarized in Table 2-5a. The table includes lysimeter data for Banana, Brooks, and Hickory Basins. During 4Q15, there were no exceedances of TOC at the compliance lysimeters at the abovementioned basins. However, there were five (5) exceedances of TN at the Banana Basin compliance lysimeter.

In November and December 2015, the average of two consecutive TN sample results for the Banana Basin compliance lysimeter exceeded the 5 mg/L limit. Two exceedances occurred on the second and third weeks of November 2015; and three exceedances occurred on the second, third, and fourth weeks of December 2015. The DDW and the Regional Board were both notified via e-mail regarding the first week of exceedances that occurred each month.

Recycled water deliveries were initiated at Declez Basin on December 23, 2015. Surface water and lysimeter sampling did not take place until the first week of January 2016. The TOC and TN compliance monitoring results will start being reported in the 1Q16 report.

As indicated in Recycled Water Compliance Determination B.6 of the Order, alternative monitoring programs for TOC and TN compliance under Specifications A.7, A.10 and A11 can be developed based on start-up period findings. The alternative monitoring plans can be found in the Start-Up Period Report for each basin. The alternative TOC and TN monitoring plans approved by the Regional Board and DDW for Turner, RP3, Ely, 8th Street, San Sevaine, and Victoria Basins include alternative monitoring locations (RP1 effluent for Ely Basin, and recycled water at the NRG turnout for all other basins), and the application of correction factors for soil aquifer treatment (SAT). The following correction factors were determined from each basin's start-up period findings:

- Turner 1 & 2: TOC reduction of 70 percent and TN reduction of 87 percent
- Turner 3 & 4: TOC reduction of 85 percent and TN reduction of 87 percent
- Ely Basins: TOC reduction of 76 percent and TN reduction of 52 percent
- RP3 Basin: TOC reduction of 88 percent and TN reduction of 31 percent
- 8th Street Basin: TOC reduction of 59 percent and TN reduction of 75 percent
- San Sevaine 5: TOC reduction of 78 percent and TN reduction of 69 percent
- Victoria: TOC reduction of 78 percent and TN reduction of 82 percent

The TOC and TN values calculated based on the alternative monitoring locations and the application of these correction factors listed above are summarized in Table 2-5b.

An alternative monitoring plan has also been implemented at the Brooks Basin based on start-up period findings. The Brooks Basin alternative monitoring plan includes monthly sampling of the Brooks Basin surface water, 25-foot lysimeter, and monitoring well BRK-1/1 for EC, TOC, and TN to be conducted as long as recycled water has been recharged in the prior 180 days. Additionally, chloride will be analyzed for BRK-1/1 and used to verify the presence of recycled water. The 25-foot lysimeter will be the compliance point for TN and the monitoring well will be the compliance point for TOC. Brooks Basin alternative monitoring data are summarized in Table 2-5b.

On July 29, 2013, the Regional Board approved the relocation of Hickory Basin TN compliance point from HKYE-LYS-25 to groundwater mound monitoring well, BH-1/2. The TN monitoring data for BH-1/2 can be found in Table 2-5b.

During 4Q15, there were no exceedances of TOC at the basins that have implemented alternative monitoring plans. However there was one reported exceedance of TN at RP3 Basin. In December 2015, the average of two consecutive TN sample results for the RP3 Basin based on a 31% TN reduction factor exceeded the 5 mg/L limit. The DDW and the Regional Board were both notified via e-mail regarding the exceedance.

C. Diluent Water

For 4Q15, diluent water quality sampling of stormwater was conducted during the month of December 2015. Table 2-6 lists the results of the stormwater sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the DDW-approved Diluent Water Monitoring Plan. The quarterly sampling schedule for stormwater and local runoff is presented in Table 4-2 of the plan. Stormwater is sampled during the rainy season (1st and 4th quarters) and local runoff is sampled during the dry season (2nd and 3rd quarters). Samples are collected at about half the locations during each seasonal quarter, alternating between even and odd years. Table 5-1 of the plan summarizes the sample type and reporting frequency for the parameters listed in Tables I, II, III, and IV of the Diluent Water Monitoring requirement III.3 of the MRP. During 4Q15, the Declez Channel sample exceeded the “maximum level to trigger source water evaluation” for aluminum; and West Fontana Channel sample exceed the maximum level for di(2-ethylhexyl)phthalate and lead. IEUA will continue to monitor and evaluate these samples collected at these sites to see if the concentrations remain consistently high.

D. Groundwater Monitoring Wells

Monitoring is conducted at groundwater monitoring wells quarterly and annually to evaluate groundwater quality conditions in the vicinity of the recharge basins utilizing recycled water. Groundwater monitoring results can be used to assess background conditions, time the arrival of recharge waters, and the impact that recharged water has on downgradient water supplies. The wells in the monitoring well networks for Hickory and Banana, Turner, 8th Street, Ely, Brooks, RP3, San Sevaine, Victoria, and Declez Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-7, respectively. Groundwater quality samples are collected and tested quarterly for all constituents listed in Table 1 of Section V in the MRP R8-2007-0039, and annually for constituents specified in the Phase II Findings of Fact, Attachment A in the permit (Bullet 27 in the Conditions Section). The groundwater constituents analyzed from the monitoring wells during quarterly monitoring are presented in Table 2-8a.

Any 4Q15 sample which exceeded primary or secondary MCLs are shown in the table in bold italic font. The DDW is notified within 48 hours of receiving the results for primary MCL exceedances or coliform presence at active municipal drinking water wells. Exceedances of primary MCLs and coliform presence at non-drinking water monitoring wells and all secondary MCL exceedances will only be reported in the quarterly reports. Of note are the analyses for the following wells and constituents:

Turbidity exceeding the secondary MCL of 5 NTU was observed in seven monitoring wells, namely: 8TH-1/2, BRK-1/1, BRK-2/1, SS-1/1, and DCZ-1/1. The secondary MCL of 15 units for color was also exceeded at 8TH-1/2, BRK-2/1, and DCZ-1/1.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 μ mhos/cm, respectively, in Southridge JHS, Alcoa MW3, and Ely MW2 (Walnut). The wells south of the Ely Basins and near the RP3 Basins are located in areas where the TDS and EC concentrations in groundwater are naturally elevated. The distribution of TDS concentrations observed at wells in the Chino Basin is summarized in Watermaster’s State of the Basin Reports.

Some monitoring wells at the Banana & Hickory, RP3, 8th Street, Brooks, and Ely Basins monitoring well networks have nitrate as nitrogen (NO₃-N) concentrations above the primary MCL of 10 mg/L. The NO₃-N levels range from 10 to 30 mg/L and are characteristic of groundwater quality in these areas of the Chino Basin. The distribution of NO₃-N concentrations observed at wells in the Chino Basin is summarized in Watermaster’s State of the Basin Reports. No notifications were made to the DDW as these high NO₃-N concentrations are comparable to the ambient NO₃-N concentration in groundwater for each monitoring well’s respective groundwater management zone within the Chino Basin.

The current State of the Basin Report, which is the “Chino Basin Optimum Basin Management Program 2014 State of the Basin Report” published in June 2015 was prepared by Wildermuth Environmental for the Chino Basin Watermaster.

Total coliform was detected at Reliant Energy – East Well and Ely MW2 (Walnut). The total coliform found at these well locations did not come from recycled water, as the total coliform levels found in the recycled water are usually non-detect. In accordance with the MRP, notification to the DDW of coliform presence in municipal drinking water wells must be made within 48 hours of receiving the results. There were no notifications made to the DDW for coliform presence during 4Q15, as neither well were active municipal drinking water wells.

The new GRRP Regulations requires that downgradient monitoring wells (two downgradient monitoring wells with at least one monitoring well located: (A) no less than two weeks but no more than six months of travel through the saturated zone affected by the project, and (B) at least 30 days upgradient of the nearest drinking water well) be monitored quarterly for Priority Toxic Pollutants. The table below shows the monitoring wells that meet the (A) and (B) criteria specified above. The priority pollutants analysis results for these downgradient monitoring wells are summarized in Table 2-8b.

Basins	Monitoring Well (A)	Monitoring Well (B)
8 th Street	8TH-1/2	8TH-2/1
Banana & Hickory	BH-1/2	Reliant Energy – East Well
Brooks	BRK-1/1	BRK-2/1
Ely	Ely MW1	Ely MW2
RP3	RP3-1/1	Southridge JHS
Turner	T-1/2	T-2/2
Victoria & San Sevaïne	SS-1/1 & VCT-1/1	VCT-2/1
Declez	DCZ-1/1	--

3. Recharge Operations

IEUA’s Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The Banana, Brooks, Declez, Ely, Hickory, RP3, Turner, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (local runoff, stormwater, and/or imported water) captured during 4Q15 at the basins that have initiated recharge using recycled water.

As mentioned in Section 2.B., recycled water deliveries were initiated at Declez Basin on December 23, 2015.

4. Operational Problems & Preventive or Corrective Actions

No operational problems were encountered this quarter, therefore no corrective actions were necessary for the following: Regional Water Recycling Facilities - RP-1 & RP-4 and recharge operations.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 4Q15 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 8th Street, Banana, Brooks, Declez, Ely, Hickory, RP3, San Sevaïne, Turner, and Victoria Basins. In fact,

there are no domestic or municipal production wells within the buffer zones of these aforementioned recharge sites.

IEUA continues to work with the San Bernardino County Department of Environmental Health Services (SBCDEHS) to prevent the drilling and construction of new drinking water wells within the buffer zones. SBCDEHS has initiated control over production well permitting within the buffer zones of all recharge sites through the use of buffer zone maps that utilize the same land coordinate system (Township/Range/Section/40-acre Parcel) that is used in the permitting process. SBCDEHS reviews new well permit applications, in part, by checking the proposed location of a new drinking water well against recharge basin location maps and parcel lists, both provided by IEUA. The maps and lists show township/range/section parcels (40-acre parcels) that abut recharge basins and their 500-foot buffers.

If a proposed well falls within an abutting parcel, SBCDEHS will review the well location using maps of the basins and buffer zones. If the well falls too near the buffer zone boundary for SBCDEHS to determine the relationship of the proposed well location to the buffer boundary, SBCDEHS will defer to IEUA for a prompt field review of the proposed well location. The field review may include contacting and having the well applicant identify the exact location of the proposed well casing. To conduct a detailed field review, SBCDEHS will contact and provide the IEUA Groundwater Recharge Coordinator with a copy of the well permit application and a timeline for the completion of IEUA's review. Following the review, IEUA will notify SBCDEHS of its findings in writing. IEUA will also notify the DDW and the Regional Board of well permit applications that it recommends should be declined due to well locations determined to fall within a 500-foot buffer zone.

6. MVWD ASR Project

Reporting for the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project was allowed by the Regional Board to be included under IEUA/Watermaster Phase I Groundwater Recharge Order No. R8-2005-0033 and subsequent permit updates. In April 2007, MVWD, Watermaster, and IEUA entered into an agreement to report the MVWD ASR project groundwater injection/recovery volumes and TIN/TDS mass balance in the recharge program quarterly reports. Initial injection began in June 2007. In May 2008, MVWD discontinued groundwater injection at the ASR wells for an extended period of time. In June 2011, MVWD groundwater injection activities resumed at four ASR wells. MVWD continued injection of imported water through September 2011. No significant volume of imported water has been injected since September 2011. During the last four quarters (1Q15 through 4Q15), no imported water was injected into the groundwater basin. Table 6-1 summarizes the monthly volumes and TIN/TDS of injected and recovered water. The table also includes the mass balance of TIN/TDS from the injection-recovery cycles.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for October 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
10/01/15	0.7	5.1	3.4	3.5	3.5	7.3	1090			<2	0.8	3.9	4.8		4.8	7.2	820			<2
10/02/15	0.7	5.1				7.2	1072			<2	0.8	3.8				7.2	827			<2
10/03/15	0.7	5.0				7.3	1025			<2	0.7	3.8				7.2	824			<2
10/04/15	0.7	5.2	4.7	4.8	4.8	7.2	1062	472	153	<2	0.7	3.9	5.3	6.0	5.3	7.2	829	462	137	<2
10/05/15	0.8	5.4	4.7	4.8	4.8	7.2	1087			<2	0.8	4.0	4.7		4.8	7.2	831			<2
10/06/15	0.8	5.9	5.1	5.2	5.2	7.2	1023			<2	0.7	4.0	4.9		4.9	7.2	818			<2
10/07/15	0.8	5.6	3.0	3.0	3.0	7.2	1048			<2	1.1	4.2	6.0		6.0	7.1	828			<2
10/08/15	0.7	5.7	4.0	4.1	4.1	7.2	1028			<2	1.0	4.1	6.9		7.0	7.1	800			<2
10/09/15	0.7	5.8				7.3	1097			<2	0.9	4.0				7.1	774			<2
10/10/15	0.7	5.6				7.3	1083			<2	0.9	4.0				7.0	775			<2
10/11/15	0.7	5.6	5.9	6.0	6.0	7.2	1076	500		<2	0.9	4.2	5.7	6.9	5.8	7.0	779	456		<2
10/12/15	0.7	5.2	6.7	6.8	6.8	7.2	1075			<2	0.8	4.2	4.3		4.4	7.0	764			<2
10/13/15	0.7	5.4	4.4	4.5	4.5	7.2	1079			<2	0.7	4.1	3.9		4.0	7.0	783			<2
10/14/15	0.7	5.5	3.0	3.1	3.1	7.3	1079			<2	0.6	4.0	4.9		5.0	7.0	788			<2
10/15/15	0.7	5.2	4.8	4.8	4.8	7.3	1082			<2	0.6	3.8	5.8		5.8	7.0	767			<2
10/16/15	0.6	5.1				7.2	1092			<2	0.5	3.8				7.0	765			<2
10/17/15	0.6	5.0				7.2	1092			<2	0.5	3.9				7.0	776			<2
10/18/15	0.7	5.1	5.8	5.8	5.8	7.2	1091	472		<2	0.6	4.0	4.8	5.6	4.8	7.0	807	486		<2
10/19/15	0.7	5.0	6.3	6.3	6.3	7.3	1072			<2	0.6	4.2	3.5		3.5	7.1	813			<2
10/20/15	0.8	5.1	5.9	5.9	5.9	7.2	1084			<2	0.5	4.0	3.8		3.8	7.1	797			<2
10/21/15	0.7	5.1	6.4	6.4	6.4	7.2	1075			<2	0.5	3.9	5.0		5.0	7.1	791			<2
10/22/15	0.7	5.2	6.4	6.4	6.4	7.2	1084			<2	0.5	3.9	5.7		5.7	7.1	783			<2
10/23/15	0.8	5.1				7.3	1091			<2	0.5	3.7				7.1	787			<2
10/24/15	0.8	5.2				7.2	1090			<2	0.5	4.0				7.1	794			<2
10/25/15	0.7	5.4	5.2	5.2	5.2	7.2	1088	484		<2	0.5	3.9	4.6	5.3	4.6	7.1	781	460		<2
10/26/15	0.8	5.3	4.3	4.3	4.3	7.2	1088			<2	0.7	4.2	3.7		3.7	7.2	787			<2
10/27/15	0.7	5.4	5.9	5.9	5.9	7.2	1082			<2	0.6	4.1	4.2		4.2	7.3	779			<2
10/28/15	0.9	5.6	5.7	5.7	5.7	7.2	1090			<2	0.6	3.9	5.2		5.2	7.3	778			<2
10/29/15	0.7	5.4	6.3	6.3	6.3	7.2	1090			<2	0.6	4.0	6.3		6.3	7.3	779			<2
10/30/15	0.6	4.9				7.3	1084			<2	0.7	3.6				7.4	795			<2
10/31/15	0.6	4.7				7.2	1072			<2	0.8	3.7				7.2	815			<2
Avg	0.7	5.3	5.1	5.2	5.2	7.2	1077	482	153	<2	0.7	4.0	5.0	6.0	5.0	7.1	795	466	137	<2
Min	0.6	4.7	3.0	3.0	3.0	7.2	1023	472	153	<2	0.5	3.6	3.5	5.3	3.5	7.0	764	456	137	<2
Max	0.9	5.9	6.7	6.8	6.8	7.3	1097	500	153	<2	1.1	4.2	6.9	6.9	7.0	7.4	831	486	137	<2

Note:

Bolded characters signify an exceedance of a permit limitation

Blank cells indicate that analysis was not run for a constituent on that particular date. The data presented meets/exceeds the frequency of analysis specified under the discharge permit for these facilities.

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detect" values equal to 2. Determination of "less than" is dependent on the number of "non-detect" occurrences more than half the days in the month.

⁵ TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results.

⁶ TN compliance can be met at a point prior to the regional groundwater, including lysimeters.

⁷ These values based on continuous monitoring data generated by the Supervisory Control and Data Acquisition (SCADA) system.

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for November 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
11/01/15	0.6	4.8	6.1	6.1	6.1	7.2	1078	490	163	<2	0.9	3.9	4.5	4.5	4.5	7.2	796	464	163	<2
11/02/15	0.7	4.8	6.8	6.8	6.8	7.2	1075			<2	0.9	4.0	3.6		3.6	7.2	790			<2
11/03/15	0.6	4.9	6.5	6.5	6.5	7.2	1074			<2	0.7	3.9	4.1		4.1	7.3	794			<2
11/04/15	0.6	4.9	7.4	7.4	7.4	7.2	1083			<2	0.6	3.9	5.0		5.0	7.3	815			<2
11/05/15	0.6	4.8	6.3	6.3	6.3	7.2	1088			<2	0.6	3.9	5.9		5.9	7.3	826			<2
11/06/15	0.6	5.0				7.2	1099			<2	0.6	3.9				7.3	820			<2
11/07/15	0.6	5.0				7.3	1108			<2	0.7	4.0				7.3	835			<2
11/08/15	0.6	5.2	3.5	3.5	3.5	7.3	1107	474		<2	0.8	4.2	4.4	5.5	4.4	7.2	833	482		<2
11/09/15	0.7	5.1	4.5	4.5	4.5	7.3	1101			<2	0.8	4.1	3.6		3.6	7.2	805			<2
11/10/15	0.6	4.7	5.7	5.8	5.8	7.2	1112			<2	0.6	3.8	5.0		5.1	7.3	801			<2
11/11/15	0.6	4.7	6.8	6.8	6.8	7.2	1126			2	0.6	3.8	6.1		6.1	7.3	804			<2
11/12/15	0.6	4.7	6.4	6.5	6.5	7.2	1123			2	0.6	3.8	5.6		5.7	7.2	798			<2
11/13/15	0.6	4.6				7.2	1113			<2	0.6	4.3				7.2	810			<2
11/14/15	0.7	4.6				7.2	1117			<2	0.6	3.7				7.2	780			<2
11/15/15	0.7	4.7	6.2	6.2	6.2	7.2	1128	478		<2	0.8	4.0	4.0	4.0	4.0	7.2	801	458		<2
11/16/15	0.7	4.7	7.0	7.0	7.0	7.2	1130			<2	0.9	4.1	3.9		3.9	7.2	823			<2
11/17/15	0.8	4.8	7.8	7.8	7.8	7.2	1137			<2	0.7	4.0	5.0		5.1	7.3	801			<2
11/18/15	0.8	5.1	6.7	6.8	6.8	7.2	1140			<2	0.7	3.8	5.8		5.9	7.2	807			<2
11/19/15	0.9	5.4	6.1	6.2	6.2	7.2	1142			<2	0.7	3.8	6.2		6.3	7.2	792			2
11/20/15	0.8	4.9				7.2	1138			<2	0.7	3.6				7.2	806			<2
11/21/15	0.8	5.1				7.2	1140			140	0.7	3.6				7.3	810			<2
11/22/15	0.8	5.2	5.4	5.4	5.4	7.2	1136	472		<2	0.7	3.9	5.9	6.4	5.9	7.2	810	492		<2
11/23/15	0.8	5.0	4.5	4.5	4.5	7.2	1132			<2	0.7	3.9	5.3		5.3	7.2	811			<2
11/24/15	0.7	5.0	4.0	4.1	4.1	7.2	1142			2	0.6	3.9	5.5		5.6	7.2	799			<2
11/25/15	0.7	5.1				7.2	1041			<2	0.6	3.7				7.2	793			<2
11/26/15	0.8	5.0				7.2	956			<2	0.6	3.7				7.2	802			2
11/27/15	0.7	4.7				7.1	944			<2	0.7	3.7				7.3	931			<2
11/28/15	0.6	4.7				7.1	950			<2	0.7	4.0				7.2	805			<2
11/29/15	0.6	5.0	6.4	6.4	6.4	7.1	950	464		<2	0.6	4.1	5.6	6.3	5.6	7.1	812	482		<2
11/30/15	0.7	5.2	5.6	5.6	5.6	7.1	951			<2	0.6	4.2	4.6		4.6	7.1	790			<2
Avg	0.7	4.9	6.0	6.0	6.0	7.2	1085	476	163	<7	0.7	3.9	5.0	5.3	5.0	7.2	810	476	163	<2
Min	0.6	4.6	3.5	3.5	3.5	7.1	944	464	163	<2	0.6	3.6	3.6	4.0	3.6	7.1	780	458	163	<2
Max	0.9	5.4	7.8	7.8	7.8	7.3	1142	490	163	140	0.9	4.3	6.2	6.4	6.3	7.3	931	492	163	2

Note:

Bolded characters signify an exceedance of a permit limitation

Blank cells indicate that analysis was not run for a constituent on that particular date. The data presented meets/exceeds the frequency of analysis specified under the discharge permit for these facilities.

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detect" values equal to 2. Determination of "less than" is dependent on the number of "non-detect" occurrences more than half the days in the month.

⁵ TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results. TOC compliance can be met at a point prior to the regional groundwater, including lysimeters.

⁶ TN compliance can be met at a point prior to the regional groundwater, including lysimeters.

⁷ These values based on continuous monitoring data generated by the Supervisory Control and Data Acquisition (SCADA) system.

Table 2-1c
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for December 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
12/01/15	0.8	5.3	5.9	6.0	6.0	7.1	948			<2	0.5	4.0	4.5		4.6	7.1	797			<2
12/02/15	0.7	5.3	6.0	6.0	6.0	7.1	950			<2	0.6	4.0	5.7		5.7	7.1	814			<2
12/03/15	0.7	5.4	6.1	6.2	6.2	7.1	941			2	0.6	3.9	6.9		7.0	7.0	800			<2
12/04/15	0.7	5.0				7.0	935			<2	0.5	3.6				7.1	768			<2
12/05/15	0.7	5.1				7.0	940			<2	0.5	3.8				7.1	759			<2
12/06/15	0.8	5.3	5.4	5.5	5.5	7.0	944	506	148	2	0.6	4.0	6.8	6.9	6.9	7.1	748	432	142	<2
12/07/15	0.7	5.4	5.8	5.8	5.8	7.0	943			<2	0.6	4.0	4.9		4.9	7.1	748			<2
12/08/15	0.9	5.5	6.1	6.2	6.2	7.0	885			<2	0.5	4.0	5.5		5.6	7.2	744			<2
12/09/15	0.8	5.7	7.1	7.1	7.1	7.0	859			<2	0.4	3.8	6.5		6.5	7.2	731			<2
12/10/15	0.7	5.3	7.6	7.7	7.7	6.9	823			2	0.4	3.7	7.2		7.3	7.2	743			<2
12/11/15	0.7	4.9				7.0	865			<2	0.4	3.5				7.2	762			<2
12/12/15	0.7	4.8				7.0	880			<2	0.4	3.6				7.2	795			<2
12/13/15	0.6	5.0	7.5	7.5	7.5	7.0	905	470		<2	0.5	3.9	6.2	6.2	6.2	7.2	824	490		<2
12/14/15	0.6	5.1	7.4	7.4	7.4	7.0	897			<2	0.6	4.2	4.4		4.4	7.1	819			<2
12/15/15	0.7	5.3	5.5	5.6	5.6	7.0	846			<2	0.4	4.1	5.1		5.2	7.1	827			<2
12/16/15	0.7	5.4	8.0	8.0	8.0	7.0	865			<2	0.4	3.8	6.5		6.5	7.1	796			<2
12/17/15	0.6	5.0	7.4	7.5	7.5	7.0	867			4	0.4	3.7	8.2		8.3	7.1	764			<2
12/18/15	0.6	4.6				7.0	859			<2	0.4	3.6				7.1	748			<2
12/19/15	0.7	5.0				7.0	827			<2	0.3	3.6				7.1	727			<2
12/20/15	0.6	5.3	5.9	5.9	5.9	7.0	861	480		<2	0.4	3.8	6.4	7.2	6.4	7.1	727	450		<2
12/21/15	0.7	5.2	6.5	6.5	6.5	6.9	854			<2	0.3	3.5	6.3		6.3	7.1	713			<2
12/22/15	0.7	5.4	8.9	8.9	8.9	6.9	857			<2	0.3	3.6	5.8		5.9	7.0	739			<2
12/23/15	0.8	5.9	7.7	7.8	7.8	6.9	672			<2	0.3	3.6	5.5		5.6	7.1	753			<2
12/24/15	0.8	5.1				7.0	853			<2	0.3	3.4				7.1	746			<2
12/25/15	0.7	4.6				7.0	851			<2	0.3	3.4				7.1	732			<2
12/26/15	0.7	4.9				7.0	843			<2	0.3	3.4				7.2	748			<2
12/27/15	0.7	5.1	7.5	7.5	7.5	7.0	848	480		<2	0.3	3.5	7.6	7.6	7.6	7.1	749	460		<2
12/28/15	0.9	5.7	5.4	5.4	5.4	6.9	853			<2	0.3	3.8	6.9		6.9	7.1	738			<2
12/29/15	0.9	5.4	3.8	3.9	3.9	7.0	844			<2	0.3	3.8	6.5		6.6	7.1	729			<2
12/30/15	0.8	5.8	8.3	8.4	8.4	6.9	846			<2	0.3	4.0	10.0		11.2	7.1	761			<2
12/31/15	0.8	5.7				6.9	843			<2	0.3	3.7				7.1	753			<2
Avg	0.7	5.2	6.7	6.7	6.7	7.0	871	484	148	<2	0.4	3.7	6.4	7.0	6.5	7.1	761	458	142	<2
Min	0.6	4.6	3.8	3.9	3.9	6.9	672	470	148	<2	0.3	3.4	4.4	6.2	4.4	7.0	713	432	142	<2
Max	0.9	5.9	8.9	8.9	8.9	7.1	950	506	148	4	0.6	4.2	10.0	7.6	11.2	7.2	827	490	142	<2

Note:

Bolded characters signify an exceedance of a permit limitation

Blank cells indicate that analysis was not run for a constituent on that particular date. The data presented meets/exceeds the frequency of analysis specified under the discharge permit for these facilities.

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detected" values equal to 2. Determination of "less than" is dependent on the number of "non-detected" occurrences more than half the days in the month.

⁵ TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results. TOC compliance can be met at a point prior to the regional groundwater, including lysimeters.

⁶ TN compliance can be met at a point prior to the regional groundwater, including lysimeters.

⁷ These values based on continuous monitoring data generated by the Supervisory Control and Data Acquisition (SCADA) system.

Table 2-2
Recycled Water Monitoring: Agency-Wide Flow-Weighted TIN & TDS (mg/L)
(Recycled Water Quality Specifications A.6)

	TIN		TDS	
Date	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jan-15	7.9	5.2	546	525
Feb-15	7.4	5.3	560	529
Mar-15	6.2	5.4	528	532
Apr-15	5.2	5.4	531	533
May-15	6.1	5.4	520	533
Jun-15	4.6	5.4	515	534
Jul-15	5.2	5.6	500	534
Aug-15	4.7	5.7	503	534
Sep-15	4.8	5.7	508	532
Oct-15	5.2	5.8	506	529
Nov-15	5.4	5.7	505	524
Dec-15	6.2	5.7	503	519
Avg	5.8	5.5	523	532
Min	4.6	5.2	500	525
Max	7.9	5.7	560	534
Limit		8.0		550

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021).

Per the Regional Board, TDS is calculated using the flow-weighted averages based on discharged effluent flows and recycled water flows; TIN is calculated using the flow-weighted averages based on discharged effluent flows only.

The data reported above will supersede any information submitted for previous quarters. Agency-wide TIN & TDS were in compliance with permit limits at all times.

Table 2-3
Recycled Water Monitoring: Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, & A.15)

Constituent	1Q15	2Q15	3Q15	4Q15	4Q Run. Avg. ¹	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	40	34	31	31	34	1000	µg/L	EPA 200.8
Antimony	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<2.0	<0.7	RM	RM	<2.0	7	MFL	EPA 100.2
Barium	16	11	10	8	11	1000	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium	0.6	0.8	0.7	1.4	0.9	50	µg/L	EPA 200.8
Chromium VI	0.26	0.17	0.23	0.20	0.22	10	µg/L	EPA 218.6
Cyanide	<20	<20	<20	<20	<20	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.3	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Nickel	1	2	2	2	2	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314/331.0
Selenium	<2	<2	<2	<2	<2	50	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)								
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2/624
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2/624
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2/624
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2/624
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2/624
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,3-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2/624
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2/624
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2/624
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2/624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2/624
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2/624
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2/624
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2/624
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2/624
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 ²	µg/L	EPA 524.2/624
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2/624
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05*	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02*	<0.2	<0.2	<0.2	<0.2	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	6	3	5	5	5	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6*	<0.5	<0.5	<0.5	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6*	<0.5	<0.5	<0.5	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505

Table 2-3
Recycled Water Monitoring: Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, & A.15)

Constituent	1Q15	2Q15	3Q15	4Q15	4Q Run. Avg. ¹	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05*	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05*	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1*	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05*	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.2*	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<2.06	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	6.4	4.0	7.2	4.8	5.6	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium	0.25	<0.42	<0.26	<0.36	<0.42	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	6	4	4	15	pCi/L	EPA 900.0/SM7110C
Tritium	<299	<1000	<322	<341	<1000	20,000	pCi/L	EPA 906
Strontium-90	<0.82	<0.52	<0.34	<0.63	<0.82	8	pCi/L	EPA 905
Gross Beta Particle Activity	14	12	13	11	13	50	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	<0.7	20	pCi/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	40	34	31	31	34	200	µg/L	EPA 200.8
Copper	6.4	4.0	7.2	4.8	5.6	1000	µg/L	EPA 200.8
Corrosivity ³	-1.0 (Non-Cor.)	-0.7 (Non-Cor.)	-0.3 (Non-Cor.)	NR	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	0.1	0.1	0.1	<0.1	0.1	0.5	mg/L	S5540C/EPA 425.1
Iron ³	29	NR	NR	NR	103	300	µg/L	EPA 200.7
Manganese	13	10	19	18	15	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE) ³	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold ³	8	8	40	67	31	3	TON	SM 2150B
Silver	<0.25	0.74	<0.25	0.37	0.40	100	µg/L	EPA 200.8
Thiobencarb	<0.2*	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	42	27	29	23	30	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ⁴	<1	<1	<1	<1	<1	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	2	<1	<1	<1	<1	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
RP3-LYS-25 RP3-LYS-25 RP3-LYS-25 RP3-LYS-25								
Lysimeter Compliance Point Data	1Q15	2Q15	3Q15	4Q15				
Total Trihalomethanes (TTHMs)	<4	4	4	2	3	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	<2	60	µg/L	S6251B

NR: Not required this quarter

RM: Reduced monitoring for asbestos from quarterly to every 3 years in accordance with new groundwater recharge regulations

¹ 4-quarter running average is calculated based on ND values equal to half the detection limit. The reported 4-quarter running average value, if less than DL, will be based on highest DL found in the data set.

² The sum of m,p-Xylene and o-Xylene is used to calculate compliance for the Total Xylenes limit

³ 4-quarter running average is calculated based on the four most recent results. Monitoring is required annually. However, if monitoring takes place more frequently than required, those results will be reported.

⁴ Oil & Grease compliance determination not based on 4-quarter running average

Bold signifies an exceedance of a limit in the Order. Explained in further detail in the report text.

Table 2-4
Recycled Water Monitoring: Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals
(Monitoring & Reporting Program)

Constituent	4Q15	Unit	Method	Constituent	4Q15	Unit	Method
Metals				Pesticides			
Chromium (III) ¹	1.4	µg/L	EPA 200.8	Aldrin	NR	µg/L	EPA 608
Volatile Organic Chemicals (VOCs)				BHC, alpha isomer	NR	µg/L	EPA 608
Acrolein	<2	µg/L	EPA 624	BHC, beta isomer	NR	µg/L	EPA 608
Acrylonitrile	<0.25	µg/L	EPA 624	BHC, delta isomer	NR	µg/L	EPA 608
Bromoform	<0.5	µg/L	EPA 524.2/624	4,4'-DDT	NR	µg/L	EPA 608
Chlorodibromomethane	3.0	µg/L	EPA 524.2/624	4,4'-DDE	NR	µg/L	EPA 608
Chloroethane	<0.5	µg/L	EPA 524.2/624	4,4'-DDD	NR	µg/L	EPA 608
2-Chloroethylvinylether	NR	µg/L	EPA 524.2/624	Dieldrin	NR	µg/L	EPA 608
Chloroform	44.3	µg/L	EPA 524.2/624	Endosulfan I	NR	µg/L	EPA 608
Dichlorobromomethane	16.8	µg/L	EPA 524.2/624	Endosulfan II	NR	µg/L	EPA 608
Methyl Bromide	<1	µg/L	EPA 524.2/624	Endosulfan Sulfate	NR	µg/L	EPA 608
Methyl Chloride	<0.5	µg/L	EPA 524.2/624	Unregulated Chemicals			
Acid Extractibles				Endrin Aldehyde	NR	µg/L	EPA 608
2-Chlorophenol	NR	µg/L	EPA 625	Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
2,4-Dichlorophenol	NR	µg/L	EPA 625	Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
2,4-Dimethylphenol	NR	µg/L	EPA 625	Chemicals w/ State Notification Levels			
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625	Boron	0.3	mg/L	EPA 200.7
2,4-Dinitrophenol	NR	µg/L	EPA 625	n-butylbenzene	<0.5	µg/L	EPA 524.2
2-Nitrophenol	NR	µg/L	EPA 625	sec-butylbenzene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	NR	µg/L	EPA 625	tert-butylbenzene	<0.5	µg/L	EPA 524.2
4-Chloro-3-methylphenol	NR	µg/L	EPA 625	Carbon disulfide	<0.5	µg/L	EPA 524.2
Phenol	NR	µg/L	EPA 625	Chlorate	390	µg/L	EPA 300.0
2,4,6-Trichlorophenol	NR	µg/L	EPA 625	2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Base/Neutral Extractibles				4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthene	NR	µg/L	EPA 625	Diazinon	*	µg/L	EPA 525.2
Acenaphthylene	NR	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12 ²)	<0.5	µg/L	EPA 524.2
Anthracene	NR	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Benzidine	NR	µg/L	EPA 625	Ethylene glycol	<5	mg/L	EPA 8015B
Benzo(a)anthracene	NR	µg/L	EPA 625	Formaldehyde	36	µg/L	EPA 556
Benzo(b)fluoranthene	NR	µg/L	EPA 625	HMX	<0.4	µg/L	EPA 8330B
Benzo(g,h,i)perylene	NR	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2
Benzo(k)fluoranthene	NR	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	3.3	ng/L	EPA 521
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625	Propachlor	*	µg/L	EPA 525.2
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2
Butyl benzyl phthalate	NR	µg/L	EPA 625	RDX	<0.4	µg/L	EPA 8330B
2-Chloronaphthalene	NR	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	EPA 524.2
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625	1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	µg/L	EPA 524.2
Chrysene	NR	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
1,3-Dichlorobenzene	NR	µg/L	EPA 625	2,4,6-Trinitrotoluene	<0.4	µg/L	EPA 8330B
3,3-Dichlorobenzidine	NR	µg/L	EPA 625	Vanadium	5	µg/L	EPA 200.8
Diethyl phthalate	NR	µg/L	EPA 625	Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²			
Dimethyl phthalate	NR	µg/L	EPA 625	Acetaminophen	<5	ng/L	LC-MS-MS
Di-n-butyl phthalate	NR	µg/L	EPA 625	Bis Phenol A (BPA)	<10	ng/L	LC-MS-MS
2,4-Dinitrotoluene	NR	µg/L	EPA 625	Caffeine	<5	ng/L	LC-MS-MS
2,6-Dinitrotoluene	NR	µg/L	EPA 625	Carbamazepine	79	ng/L	LC-MS-MS
Di-n-octyl phthalate	NR	µg/L	EPA 625	DEET	24	ng/L	LC-MS-MS
Azobenzene	NR	µg/L	EPA 625	Estradiol	<5	ng/L	LC-MS-MS
Fluoranthene	NR	µg/L	EPA 625	Estrone	<5	ng/L	LC-MS-MS
Fluorene	NR	µg/L	EPA 625	Ethinyl Estradiol - 17 alpha	<5	ng/L	LC-MS-MS
Hexachlorobutadiene	NR	µg/L	EPA 625	Fluoxetine	14	ng/L	LC-MS-MS
Hexachlorocyclopentadiene	NR	µg/L	EPA 625	Gemfibrozil	<5	ng/L	LC-MS-MS
Hexachloroethane	NR	µg/L	EPA 625	Ibuprofen	<10	ng/L	LC-MS-MS
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625	Iopromide	50	ng/L	LC-MS-MS
Isophorone	NR	µg/L	EPA 625	Progesterone	<5	ng/L	LC-MS-MS
Naphthalene	NR	µg/L	EPA 625	Sucralose	18000	ng/L	LC-MS-MS
Nitrobenzene	NR	µg/L	EPA 625	Sulfamethoxazole	<5	ng/L	LC-MS-MS
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625	Testosterone	<5	ng/L	LC-MS-MS
N-Nitrosodiphenylamine	NR	µg/L	EPA 625	Triclosan	<10	ng/L	LC-MS-MS
Phenanthrene	NR	µg/L	EPA 625	Trimethoprim	<5	ng/L	LC-MS-MS
Pyrene	NR	µg/L	EPA 625	Warfarin	<5	ng/L	LC-MS-MS

¹ Trivalent chromium is measured as total chromium

*New groundwater recharge regulations (implemented 3Q15) increased monitoring from annually to quarterly. Analysis for these compounds were inadvertently missed during 4Q15.

NR: Not Required (Annual Requirement)

Table 2-5a
Lysimeter and Surface Water Monitoring: TOC, Nitrogen Species, and EC

Banana Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	TN* (Limit = 5 mg/L)	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BNA-LYS-00	0	10/07/15	7.19						277
BNA-LYS-00	0	10/14/15	4.61						807
BNA-LYS-00	0	10/21/15	4.33						815
BNA-LYS-00	0	10/28/15	4.94						811
BNA-LYS-00	0	11/04/15	9.05						470
BNA-LYS-00	0	11/11/15	4.04						823
BNA-LYS-00	0	11/18/15	4.03						814
BNA-LYS-00	0	11/24/15	4.16						818
BNA-LYS-00	0	12/02/15	4.21						821
BNA-LYS-00	0	12/09/15	4.56						751
BNA-LYS-00	0	12/16/15	5.02						761
BNA-LYS-00	0	12/23/15	5.62						386
BNA-LYS-00	0	12/30/15	5.63						366
BNA-LYS-25**	25	10/07/15	1.04	4.0	4.0	3.9	<0.5	0.05	758
BNA-LYS-25**	25	10/14/15	1.03	3.5	3.5	3.4	<0.5	0.05	661
BNA-LYS-25**	25	10/22/15	1.02	3.5	3.5	3.5	<0.5	<0.01	713
BNA-LYS-25**	25	10/28/15	1.14	4.0	4.0	4.0	<0.5	<0.01	721
BNA-LYS-25**	25	11/04/15	0.82	5.1	4.5	4.5	0.6	<0.01	723
BNA-LYS-25**	25	11/11/15	0.82	6.4	5.8	5.7	0.7	0.12	703
BNA-LYS-25**	25	11/18/15	0.89	5.0	5.0	4.8	<0.5	0.17	728
BNA-LYS-25**	25	11/24/15	0.87	4.7	4.7	4.7	<0.5	<0.01	741
BNA-LYS-25**	25	12/02/15	0.89	5.5	5.5	5.4	<0.5	0.12	749
BNA-LYS-25**	25	12/09/15	0.92	5.7	5.7	5.6	<0.5	0.10	747
BNA-LYS-25**	25	12/16/15	0.99	5.9	5.9	5.8	<0.5	0.10	774
BNA-LYS-25**	25	12/23/15	0.87	6.7	6.0	5.9	0.8	0.11	731

Brooks Basin									
Site	Depth, bgs	Date	TOC	TN* (Limit = 5 mg/L)	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BRK-LYS-00	0	10/06/15	7.09						615
BRK-LYS-00	0	11/25/15	11.9	7.2	0.2	0.2	7.0	<0.01	885
BRK-LYS-25**	25	10/06/15	2.79	0.8	<0.2	<0.1	0.8	0.08	769
BRK-LYS-25**	25	11/25/15	2.32	<0.6	0.2	<0.1	<0.5	0.20	805
BRK-LYS-25**	25	12/08/15	2.60	<0.6	<0.2	<0.1	<0.5	<0.01	1020

Hickory East Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	TN*	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
HKEYE-LYS-00	0	10/07/15	8.11						765
HKEYE-LYS-00	0	10/14/15	8.13						522
HKEYE-LYS-00	0	10/21/15	8.25						463
HKEYE-LYS-00	0	10/28/15	8.39						491
HKEYE-LYS-00	0	11/04/15	8.86						463
HKEYE-LYS-00	0	11/11/15	8.61						456
HKEYE-LYS-00	0	11/18/15	9.40						469
HKEYE-LYS-00	0	11/24/15	10.4						496
HKEYE-LYS-00	0	12/02/15	6.1						782
HKEYE-LYS-00	0	12/09/15	5.8						769
HKEYE-LYS-00	0	12/16/15	4.9						784
HKEYE-LYS-00	0	12/23/15	5.4						646
HKEYE-LYS-00	0	12/30/15	5.04						692
HKEYE-LYS-25**	25	10/07/15	2.34	2.5	1.8	1.8	0.7	<0.01	536
HKEYE-LYS-25**	25	10/14/15	2.43	1.9	1.0	1.0	0.9	<0.01	659
HKEYE-LYS-25**	25	10/21/15	2.62	1.8	1.0	1.0	0.8	<0.01	631
HKEYE-LYS-25**	25	10/28/15	2.30	0.6	0.7	0.6	<0.5	<0.01	592
HKEYE-LYS-25**	25	11/04/15	2.20	2.0	1.1	1.1	0.9	<0.01	569
HKEYE-LYS-25**	25	11/11/15	2.02	2.7	1.7	1.6	1.1	0.14	561
HKEYE-LYS-25**	25	11/18/15	1.70	2.1	2.2	2.0	<0.5	0.07	575
HKEYE-LYS-25**	25	11/24/15	1.56	3.6	2.8	2.8	0.8	<0.01	581
HKEYE-LYS-25**	25	12/02/15	1.11	3.8	3.2	3.1	0.7	0.11	572
HKEYE-LYS-25**	25	12/09/15	1.67	3.1	3.2	3.0	<0.5	0.12	564
HKEYE-LYS-25**	25	12/16/15	1.59	7.3	7.3	7.2	<0.5	0.12	660
HKEYE-LYS-25**	25	12/23/15	1.53	5.5	5.5	5.4	<0.5	0.11	629
HKEYE-LYS-25**	25	12/30/15	1.46	4.3	4.3	4.2	<0.5	0.11	676

Blank cells indicate that analysis was not run for a constituent on that particular date and/or depth due to insufficient volume or data was invalidated after analysis.

* If TN limit of 5 mg/L is not met prior to the RW distribution system, TN compliance can be met at a point prior to reaching the regional groundwater, including lysimeters.

** Compliance lysimeter for their respective basin (Specifications A.7, A.10, and A.11 of the Order). The Brooks Basin and Hickory Basin lysimeters are part of alternative monitoring plans; the Brooks Basin lysimeter is only used for compliance with TN, and the Hickory Basin lysimeter is only used for compliance with TOC. Compliance with TOC at Brooks Basin, TN at Hickory Basin, and both constituents at other basins is measured at alternative points (see Table 2-5b)

Table 2-5b
Alternative Monitoring Plans

Turner Basin					
Date	RW Blend*	RW Blend*	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4
mg/L==>	TOC	TN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
Limit ==>			16 mg/L	16 mg/L	5 mg/L
10/07/15	3.99	6.8	1.20	0.60	0.9
10/14/15	4.72	6.1	1.42	0.71	0.8
10/21/15	4.32	6.7	1.30	0.65	0.9
10/28/15	4.32	6.9	1.30	0.65	0.9
11/04/15	3.73	6.9	1.12	0.56	0.9
11/11/15	3.60	8.0	1.08	0.54	1.0
11/18/15	3.70	6.6	1.11	0.56	0.9
11/24/15	3.79	6.6	1.14	0.57	0.9
12/02/15	3.98	7.4	1.19	0.60	1.0
12/09/15	4.25	8.6	1.28	0.64	1.1
12/16/15	4.31	6.7	1.29	0.65	0.9
12/23/15	3.44	7.5	1.03	0.52	1.0
12/30/15	4.51	5.6	1.35	0.68	0.7

Ely Basin				
Date	RP-1 RW	RP-1 RW	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TOC (76% reduction)	TN (52% reduction)
Limit ==>			16 mg/L	5 mg/L
10/05/15	5.16	6.1	1.24	2.9
10/12/15	5.61	6.5	1.35	3.1
10/19/15	5.06	7.0	1.21	3.4
10/26/15	5.40	6.1	1.30	2.9
11/02/15	4.85	6.1	1.16	2.9
11/09/15	5.25	3.5	1.26	1.7
11/16/15	4.74	7.2	1.14	3.5
11/23/15	5.19	6.7	1.25	3.2
11/30/15	4.97	7.4	1.19	3.5
12/07/15	5.30	6.2	1.27	3.0
12/14/15	4.95	7.5	1.19	3.6
12/21/15	5.31	7.1	1.27	3.4
12/28/15	5.12	8.1	1.23	3.9

RP3 Basin				
Date	RW Blend*	RW Blend*	RP3	RP3
mg/L==>	TOC	TN	TOC (88% reduction)	TN (31% reduction)
Limit ==>			16 mg/L	5 mg/L
10/07/15	3.99	6.8	0.48	4.7
10/14/15	4.72	6.1	0.57	4.2
10/21/15	4.32	6.7	0.52	4.6
10/28/15	4.32	6.9	0.52	4.8
11/04/15	3.73	6.9	0.45	4.8
11/11/15	3.60	8.0	0.43	5.5
11/18/15	3.70	6.6	0.44	4.5
11/24/15	3.79	6.6	0.45	4.6
12/02/15	3.98	7.4	0.48	5.1
12/09/15	4.25	8.6	0.51	5.9
12/16/15	4.31	6.7	0.52	4.6
12/23/15	3.44	7.5	0.41	5.2
12/30/15	4.51	5.6	0.54	3.9

8th Street Basin				
Date	RW Blend*	RW Blend*	8th Street	8th Street
mg/L==>	TOC	TN	TOC (59% reduction)	TN (75% reduction)
Limit ==>			16 mg/L	5 mg/L
10/07/15	3.99	6.8	1.64	1.7
10/14/15	4.72	6.1	1.94	1.5
10/21/15	4.32	6.7	1.77	1.7
10/28/15	4.32	6.9	1.77	1.7
11/04/15	3.73	6.9	1.53	1.7
11/11/15	3.60	8.0	1.48	2.0
11/18/15	3.70	6.6	1.52	1.6
11/24/15	3.79	6.6	1.55	1.7
12/02/15	3.98	7.4	1.63	1.9
12/09/15	4.25	8.6	1.74	2.2
12/16/15	4.31	6.7	1.77	1.7
12/23/15	3.44	7.5	1.41	1.9
12/30/15	4.51	5.6	1.85	1.4

*The recycled water blend of RP-1 & RP-4 effluent is sampled at the NRG Energy (formerly Reliant Energy) turnout point

Table 2-5b
Alternative Monitoring Plans

San Sevaine 5 Basin				
Date	RW Blend*	RW Blend*	San Sevaine 5	San Sevaine 5
mg/L==>	TOC	TN	TOC (78% reduction)	TN (69% reduction)
Limit ==>			16 mg/L	5 mg/L
10/07/15	3.99	6.8	0.88	2.1
10/14/15	4.72	6.1	1.04	1.9
10/21/15	4.32	6.7	0.95	2.1
10/28/15	4.32	6.9	0.95	2.2
11/04/15	3.73	6.9	0.82	2.1
11/11/15	3.60	8.0	0.79	2.5
11/18/15	3.70	6.6	0.81	2.0
11/24/15	3.79	6.6	0.83	2.0
12/02/15	3.98	7.4	0.88	2.3
12/09/15	4.25	8.6	0.94	2.7
12/16/15	4.31	6.7	0.95	2.1
12/23/15	3.44	7.5	0.76	2.3
12/30/15	4.51	5.6	0.99	1.7

Victoria Basin				
Date	RW Blend*	RW Blend*	Victoria	Victoria
mg/L==>	TOC	TN	TOC (78% reduction)	TN (82% reduction)
Limit ==>			16 mg/L	5 mg/L
10/07/15	3.99	6.8	0.88	1.2
10/14/15	4.72	6.1	1.04	1.1
10/21/15	4.32	6.7	0.95	1.2
10/28/15	4.32	6.9	0.95	1.2
11/04/15	3.73	6.9	0.82	1.2
11/11/15	3.60	8.0	0.79	1.4
11/18/15	3.70	6.6	0.81	1.2
11/24/15	3.79	6.6	0.83	1.2
12/02/15	3.98	7.4	0.88	1.3
12/09/15	4.25	8.6	0.94	1.5
12/16/15	4.31	6.7	0.95	1.2
12/23/15	3.44	7.5	0.76	1.4
12/30/15	4.51	5.6	0.99	1.0

*The recycled water blend of RP-1 & RP-4 effluent is sampled at the NRG Energy (formerly Reliant Energy) turnout point

Brooks Basin				
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
mg/L==>	TOC	TN	EC	
10/06/15	7.09	-	615	
11/25/15	11.9	7.2	885	
Date	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25
mg/L==>	TOC	TN* (Limit = 5 mg/L)	EC	
10/06/15	2.79	0.8	769	
11/25/15	2.32	<0.6	805	
12/08/15	2.60	<0.6	1020	
Date	BRK-1/1	BRK-1/1	BRK-1/1	BRK-1/1
mg/L==>	TOC* (Limit = 16 mg/L)	TN	EC	Cl
10/06/15	0.55	0.8	723	105
11/11/15	0.44	1.3	720	107
12/07/15	0.60	3.8	735	119

*BRK-LYS-25 is the compliance point for TN and BRK-1/1 is the compliance point for TOC.

Hickory Basin		
Date	BH-1/2*	BH-1/2
mg/L==>	TN (Limit - 5 mg/L)	EC
10/28/15	3.9	725
11/23/15	4.1	-
12/07/15	4.1	744

*BH-1/2 was approved to be the TN compliance point for Hickory Basin by the RWQCB on 7/29/13

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	Declez Channel @ Declez Basin 12/14/15	San Sevaïne Channel @ San Sevaïne 1-5 12/14/15	Etiwanda Creek @ Etiwanda Debris Basin 12/22/15	W. Fontana Channel @ Banana Basin 12/22/15	Max Level to Trigger Source Water Evaluation	Unit	Method
NO ₂ -N	0.06	0.06	<0.02	0.05	1	mg/L	EPA 300.0
NO ₃ -N	1.0	0.9	4.0	0.8	10	mg/L	EPA 300.0
TDS	70	80	55	53	420	mg/L	SM 2540C
Total Coliform	50000	1600	8000	24000	NA	mpn/100ml	SM 9221B
Oil & Grease	<1	<1	<1	<1	NA	mg/L	EPA 1664A
Inorganic Chemicals							
Aluminum	1038	<25	718	<25	1000	µg/L	EPA 200.7
Antimony	1.3	1.1	<0.5	2.8	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<5.96	<6.71	<3.58	<6.71	7	MFL	EPA 100.2
Barium	26	38	24	84	1000	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	0.49	5	µg/L	EPA 200.7
Chromium	2.9	2.4	<0.5	10.6	50	µg/L	EPA 200.7
Chromium VI	0.39	0.50	0.03	0.62	10	µg/L	EPA 218.6
Cyanide	<2	<2	<2	<2	150	µg/L	ASTM D7284
Fluoride	0.3	0.2	<0.1	0.2	2	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Nickel	3	2	1	7	100	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	<4	6	µg/L	EPA 314
Selenium	<2	<2	<2	<2	50	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropane	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	1750	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	<0.5	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	1.8	0.7	<0.5	6.5	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	10	37	22	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	Declez Channel @ Declez Basin 12/14/15	San Sevaïne Channel @ San Sevaïne 1-5 12/14/15	Etiwanda Creek @ Etiwanda Debris Basin 12/22/15	W. Fontana Channel @ Banana Basin 12/22/15	Max Level to Trigger Source Water Evaluation	Unit	Method
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	0.15	<0.04	<0.04	0.22	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<1.94	<1.89	<1.96	<1.93	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	<2	<2	<2	<2	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	60	µg/L	SM 6251B
Bromate	<1	<1	<1	<1	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Action Level Chemicals							
Copper	12.9	9.0	2.3	42.4	1300	µg/L	EPA 200.7
Lead	3.8	2.2	<0.5	17.4	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 & Radium 228	<0.192	0.260	<0.229	0.210	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	4	15	pCi/L	EPA 900.0/SM7110C
Tritium	<387	392	<1000	<1000	20,000	pCi/L	EPA 906.0
Strontium-90	<1.28	<1.29	<1.33	<1.45	8	pCi/L	EPA 905.0
Gross Beta Particle Activity	4.9	<3	<3	3.3	50	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	20	pCi/L	EPA 200.8
Unregulated Chemicals							
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Chemicals w/ State Notification Levels							
Boron	<0.1	<0.1	<0.1	<0.1	-	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Chlorate	<10	83	<10	20	-	µg/L	EPA 9056
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Diazinon	<0.1	<0.1	<0.1	<0.1	-	µg/L	EPA 525.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	<1	-	µg/L	EPA 522
Formaldehyde	40	<5	35	79	-	µg/L	EPA 556
HMX	<0.1	<0.1	<0.1	<0.1	-	µg/L	LC-MS-MS
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	<2	<2	-	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	<2	<2	<2	QC	-	ng/l	EPA 521
N-nitrosodimethylamine (NDMA)	<2	<2	<2	QC	-	ng/l	EPA 521
Propachlor	<0.05	<0.05	<0.05	<0.05	-	µg/L	EPA 525.2
N-propylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
RDX	<0.1	<0.1	<0.1	<0.1	-	µg/L	LC-MS-MS
Tertiary butyl alcohol	<2	<2	<2	<2	-	µg/L	EPA 524.2 MOD
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
1,2,4 - trimethylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 524.2
2,4,6-Trinitrotoluene	<0.1	<0.1	<0.1	<0.1	-	µg/L	LC-MS-MS
Vanadium	8	7	3	12	-	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals							
Aluminum	1038	<25	718	<25	-	µg/L	EPA 200.7
Corrosivity	-1.5	-0.7	-2.5	-1.1	-	SI	SM 2330B
Foaming Agents (MBAS)	0.24	0.14	<0.05	0.15	-	mg/L	SM 5540C/EPA 425.1
Iron	1320	1480	647	5060	-	µg/L	EPA 200.7
Manganese	50	43	13	143	-	µg/L	EPA 200.7
Odor--Threshold	8	100	8	67	-	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	-	µg/L	EPA 200.7
Thiobencarb	<0.5	<0.5	<0.5	<0.5	-	µg/L	EPA 525.2
Zinc	61	100	5	220	-	µg/L	EPA 200.7

* Diluent monitoring is monitored per the schedule identified in the CDPH-approved Diluent Water Monitoring Plan

Bold signifies an exceedance of the maximum level to trigger a source water evaluation. Explained in further detail in the report text.

QC: Quality control test failure

Table 2-7
Summary of Wells in Groundwater Monitoring Networks

BASIN	CBWM_ID	OWNER/LOCAL NAME	SEPARATION DISTANCE (feet)	SCREENED INTERVAL(S) (feet bgs)	CASING DIAMETER (inches)	STATUS	TYPE
Hickory and Banana Basins	3600573	Fontana Water Company - F37a	2240 upgradient	378-810	20	Inactive	Municipal
	600660	California Speedway - Infield Well	2070 downgradient	NA	NA	Active	Industrial
	3601365	California Speedway 2	2780 downgradient	451-455, 491-603, & 664-780	20	Active	Industrial
	3600371	Reliant Energy - East Well	4070 downgradient	434-467, 500-513, 553-580, 593-652, & 825-847	20	Active	Industrial
	3602267	City Of Ontario - 20	14500 downgradient	NA	20	Active	Municipal
	601001	Inland Empire Utilities Agency - BH-1/1	340 downgradient	365-405	4	Active	Monitoring
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Inactive	Municipal
	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600997	Inland Empire Utilities Agency - TRN-1/1	50 downgradient	340-360	4	Active	Monitoring
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
Declez Basin	300208	Jurupa Community Services District - 19	8900 downgradient	230-390	18	Active	Municipal
	300207	Jurupa Community Services District - 17	5240 downgradient	259-290, & 300-400	NA	Active	Municipal
	300200	Jurupa Community Services District - 13	5730 downgradient	220-446	16-34	Active	Municipal
	300484	Inland Empire Utilities Agency - DCZ-1	50 downgradient	155-175	4	Active	Monitoring
	--	Inland Empire Utilities Agency - D-1/2	50 downgradient	185-205	4	NA	Monitoring
RP-3 Basins	600492	Fontana Water Company - F23a	7900 upgradient	450-740	18	Active	Municipal
	600477	Inland Empire Utilities Agency - Southridge JHS	5500 downgradient	NA	NA	Active	Monitoring
	600848	Alcoa - Offsite MW1	9480 downgradient	NA	NA	Active	Monitoring
	600850	Alcoa - Offsite MW3	4725 downgradient	NA	NA	Active	Monitoring
	601040	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	Active	Monitoring
	601041	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	Active	Monitoring
Jurupa Basin	Not currently planned for recharge						
7th & 8th Street Basins	3601561	San Antonio Water Company No. 12	740 downgradient	379-480, 525-563, 578-609, & 634-679	16	Inactive	Municipal
	3601772	City of Ontario No. 4	3429 downgradient	526-910	16-20	Inactive	Municipal
	--	City of Ontario No. 51	3402 downgradient	Not Yet Constructed	NA	NA	Municipal
	600493	City of Ontario No. 35	9695 downgradient	580-1020	18-36	Active	Municipal
	601036	Inland Empire Utilities Agency - 8TH-1/1	150 downgradient	495-535	4	Active	Monitoring
	601037	Inland Empire Utilities Agency - 8TH-1/2	150 downgradient	595-645	4	Active	Monitoring
	601038	Inland Empire Utilities Agency - 8TH-2/1	2460 downgradient	465-505	4	Active	Monitoring
	601039	Inland Empire Utilities Agency - 8TH-2/2	2460 downgradient	576-616	4	Active	Monitoring
Brooks Basins	1901719	City of Pomona P-10	1983 downgradient	295-784	20	Active	Municipal
	1901713	City of Pomona P-04	2620 downgradient	254-338, & 403-452	NA	Inactive	Municipal
	1903156	City of Pomona P-30	2160 crossgradient	565-875	20	Inactive	Municipal
	1903016	City of Pomona P-2	3455 downgradient	NA	NA	Active	Municipal
	1901725	City of Pomona P-17	4500 downgradient	454-536	20	Inactive	Municipal
	601050	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	601051	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	601048	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	Active	Monitoring
San Seavine Basins	600906	Cucamonga Valley Water District No. 40	8300-13170 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601115	Inland Empire Utilities Agency - SS-1/1 and 1/2	~39-116 downgradient	640-680	4	Active	Monitoring
	600462	Unitex 91090	~1601 downgradient	NA	NA	Active	Private Domestic
Victoria Basin	600905	Cucamonga Valley Water District No. 39	4329 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601033	Cucamonga Valley Water District No. 43**	8300 downgradient	650-800	32-42	Active	Municipal
	601117	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~39-116 downgradient	570-610	4	Active	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	Active	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	Active	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

Notes:

NA = Data not available

CBWM ID = Chino Basin Water Master well identification number

bgs = below ground surface

* = Ontario Well No. 38 replaced Ontario Well No. 19, which is inactive

** = Cucamonga Valley Water District No. 43 replaced CVWD Well Nos. 35 & 36, which are inactive.

Table 2-8a
Groundwater Monitoring Well Results (Quarterly)

	Sample Location	Date	TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TON)	Ag (µg/L)	Thiobencarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	TDS (mg/L)	Cl (mg/L)	Hardness (mg CaCO ₃ /L)	Na (mg/L)	SO ₄ (mg/L)	Nitrogen, Total (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N (mg/L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Co. - F37a*	10/15/15	0.15	<1.1	7.6	533	<25	5	0.8	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	3.00	7	324	24	231	20	27	12.7	0.10	12.6	6.30
	California Speedway - Infield Well	10/14/15	0.26	<1.1	7.5	567	<25	<3	0.9	0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.20	<1	352	28	235	20	55	8.4	0.09	8.3	5.90
	California Speedway 2	10/13/15	0.15	<1.1	7.4	429	<25	<3	1.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.10	2	280	17	179	18	21	6.2	0.11	5.3	4.60
	Reliant Energy - East Well	11/04/15	<0.10	12.0	7.8	380	<25	5	3.1	0.0	<0.05	<15	<1	<0.5	2	0.56	<0.2	0.20	7	250	15	156	19	14	6.1	<0.02	6.1	3.20
	Ontario Well No. 20	10/20/15	0.11	<1.1	7.6	378	<25	<3	0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.30	<1	254	9	168	13	6	2.5	0.12	2.4	8.10
	BH-1/2*	10/28/15	0.46	<1.1	7.6	725	<25	5	<0.5	0.5	<0.05	<15	3	<0.5	1	0.92	<0.2	4.30	5	438	111	275	28	45	3.7	<0.02	3.7	2.76
Turner	Ontario Well No. 25	10/20/15	0.19	<1.1	7.6	458	<25	<3	0.9	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	326	20	181	22	16	4.8	0.11	4.7	8.40
	Ontario Well No. 29	10/20/15	<0.10	<1.1	7.8	340	<25	5	0.8	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.15	<1	242	6	126	20	12	1.3	0.11	1.2	4.40
	Ontario Well No. 38	10/20/15	0.11	<1.1	7.8	312	<25	5	0.6	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	218	5	119	18	7	1.4	0.11	1.3	6.70
	T-1/2*	11/02/15	0.64	<1.1	7.4	658	<25	<3	1.6	0.2	<0.05	<15	1	<0.5	<1	<0.25	<0.2	0.90	62	402	72	282	33	39	1.0	<0.02	0.5	2.20
	T-2/2*	11/03/15	0.48	<1.1	7.5	525	<25	5	4.2	-0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.50	75	324	67	191	33	34	1.5	<0.02	1.0	2.80
RP3	Fontana Water Co. - F23a	10/15/15	0.11	<1.1	7.7	465	<25	5	0.8	0.3	0.06	<15	<1	<0.5	<1	<0.25	<0.2	0.15	2	296	26	185	19	23	8.6	0.07	8.5	6.70
	Southridge JHS*	11/17/15	0.39	<1.1	7.2	975	<25	5	1.9	0.1	0.12	<15	1	<0.5	<1	<0.25	<0.2	3.00	3	594	94	345	54	76	15.8	<0.02	15.8	4.60
	Alcoa MW1*	11/10/15	0.15	<1.1	7.4	627	<25	5	0.7	0.1	<0.05	<15	1	<0.5	<1	<0.25	<0.2	0.55	<1	370	46	251	27	36	14.2	<0.02	14.2	6.80
	Alcoa MW3*	11/09/15	0.29	<1.1	7.1	985	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.15	5	580	86	382	48	50	17.1	<0.02	17.1	3.50
	RP3-1/1*	10/29/15	0.79	<1.1	7.3	755	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	448	96	261	51	55	4.3	<0.02	4.3	1.50
8th Street	8TH-1/2*	11/03/15	0.31	<1.1	7.3	658	<25	20	0.6	0.1	<0.05	<15	23	<0.5	<1	<0.25	<0.2	50.0	2	444	102	304	14	44	1.9	<0.02	1.9	2.40
	8TH-2/1*	11/03/15	<0.10	<1.1	7.7	542	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	356	17	252	16	35	17.9	<0.02	17.3	2.50
Brooks	Pomona Well No. 10	10/08/15	0.20	<1.1	7.8	529	<25	<3	0.8	0.4	0.07	<15	<1	<0.5	1	<0.25	<0.2	0.10	4	344	40	231	11	39	6.9	0.07	6.8	5.90
	Pomona Well No. 2	10/08/15	0.21	<1.1	7.7	618	<25	<3	4.0	0.5	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.20	7	398	38	274	13	59	10.6	0.07	10.5	5.40
	Pomona Well No. 34	10/08/15	0.23	<1.1	7.7	570	<25	<3	1.3	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	2	358	32	255	12	42	13.7	0.08	13.6	5.10
	BRK-1/1*	11/11/15	0.44	<1.1	7.9	720	<25	15	1.4	0.1	<0.05	<15	4	<0.5	<1	0.81	<0.2	7.30	<1	402	107	300	29	38	1.3	0.12	0.6	3.10
	BRK-2/1*	11/11/15	0.28	<1.1	8.0	576	<25	20	<0.5	0.3	<0.05	<15	20	<0.5	1	0.46	<0.2	50.0	<1	318	81	260	11	30	1.6	0.12	1.5	2.40
Ely	Ely Basin MW1 Philadelphia St.*	11/16/15	0.73	<1.1	7.6	629	<25	5	0.9	0.2	<0.05	42	29	<0.5	2	<0.25	<0.2	3.71	<1	372	90	236	34	39	0.6	<0.02	0.6	1.40
	Ely Basin MW2 Walnut St.*	10/27/15	0.74	5.1	7.3	1054	<25	10	<0.5	0.4	<0.05	<15	11	<0.5	<1	<0.25	<0.2	2.40	6	652	70	506	30	67	21.5	<0.02	21.5	1.60
	Riverside Well (43840-CWW)*	10/08/15	0.23	<1.1	7.7	617	<25	5	1.0	0.5	<0.05	23	9	<0.5	2	<0.25	<0.2	0.20	38	364	30	256	21	35	11.2	0.08	11.1	4.30
	Bishop of SB Corp. - DOM	10/08/15	0.21	<1.1	7.5	790	<25	5	23.8	0.7	0.07	19	2	<0.5	1	<0.25	<0.2	0.15	314	490	36	347	23	64	20.1	0.09	20.0	4.30
Victoria & San Sevaine	SS-1/1*	10/28/15	0.32	<1.1	7.5	276	<25	5	<0.5	-0.5	<0.05	<15	<1	<0.5	<1	0.38	<0.2	6.60	47	190	12	108	15	21	3.0	<0.02	3.0	5.70
	VCT-1/1*	10/28/15	0.38	<1.1	7.4	626	<25	5	<0.5	-0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	5.40	5	402	102	263	22	27	1.7	<0.02	1.7	5.40
	VCT-2/2*	11/17/15	<0.10	<1.1	7.9	284	<25	<3	<0.5	-0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.15	3	194	6	111	16	8	2.3	<0.02	2.3	4.60
	CVWD Well No. 43	12/22/15	0.17	<1.1	7.5	313	<25	<3	<0.5	-0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.25	<1	223	8	139	20	14	2.9	<0.02	2.9	2.20
	Unitec 91090	10/13/15	0.24	<1.1	7.6	401	<25	5	0.6	0.1	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.15	2	258	28	170	12	30	2.6	0.09	1.8	6.20
Declez	JCSD Well No. 13	12/14/15	<0.10	<1.1	8.3	633	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.15	<1	364	100	242	29	19	3.6	<0.02	3.6	2.10
	JCSD Well No. 17	10/14/15	0.27	<1.1	7.7	627	<25	5	1.3	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	410	68	234	28	38	9.4	0.07	9.3	3.90
	JCSD Well No. 19	10/14/15	0.40	<1.1	7.7	365	<25	<3	0.9	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.1	<1	240	12	126	26	13	3.9	0.09	3.8	5.20
	DCZ-1/1	10/29/15	0.63	<1.1	7.3	496	<25	20	<0.5	0.1	<0.05	<15	21	<0.5	2	<0.25	<0.2	24.0	7	288	48	192	26	32	1.1	<0.02	1.1	1.20
	Primary Maximum Contaminant Level					1000			1300					13			70									1	10	
	Secondary Maximum Contaminant Level				6.5-8.5	900	200	15	1000		0.5	300	50	5	3	100	1	5	5000	500	250			250				

Blank cells indicate that analysis was not run for a constituent on that particular date. On certain dates, supplemental analysis was conducted on several monitoring wells. On those occasions, a full set of analysis was not necessary and only parameters of interest were analyzed.

* Total dissolved metals reported for these wells. The remaining wells report total recoverable metals values. Please note Fontana Water Co. Well No. 37A is a municipal well that has not been in production since May 2005 and is currently only used for monitoring.

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	8TH-1/1	8TH-2/1	BRK-1/1	BRK-2/1		
Constituent	11/03/15	11/03/15	11/11/15	11/11/15	Unit	Method
EPA Priority Pollutants - Metals						
Antimony	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.8
Chromium	7.8	3.4	0.5	3.6	µg/L	EPA 200.8
Copper	0.57	<0.5	1.4	<0.5	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Mercury	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	158	2	35	228	µg/L	EPA 200.8
Selenium	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Zinc	2	<1	<1	<1	µg/L	EPA 200.8
EPA Priority Pollutants - Volatile Organics						
1,1,1-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1,2-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
2-Chloroethyl vinyl ether	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Benzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromodichloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromoform	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromomethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Chlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroform	11	<1	<1	4	µg/L	EPA 524.2/EPA 624
Chloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Dibromochloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Ethylbenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Methylene chloride	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Tetrachloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Toluene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Trichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Trichlorofluoromethane	<2	<2	<2	<2	µg/L	EPA 524.2/EPA 624
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Acrolein	<2	<2	<2	<2	µg/L	EPA 624
Acrylonitrile	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 624

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	8TH-1/1	8TH-2/1	BRK-1/1	BRK-2/1		
Constituent	11/03/15	11/03/15	11/11/15	11/11/15	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles						
1,2,4-Trichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	<2	<2	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dinitrophenol	<3	<3	<3	<3	µg/L	EPA 625
2,4-Dinitrotoluene	<1	<1	<1	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	<2	<2	<2	µg/L	EPA 625
2-Chloronaphthalene	<1	<1	<1	<1	µg/L	EPA 625
2-Chlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	<2	<2	<2	µg/L	EPA 625
2-Nitrophenol	<1	<1	<1	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	<5	<5	<5	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	<1	<1	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Nitrophenol	<3	<3	<3	<3	µg/L	EPA 625
Acenaphthene	<1	<1	<1	<1	µg/L	EPA 625
Acenaphthylene	<1	<1	<1	<1	µg/L	EPA 625
Anthracene	<1	<1	<1	<1	µg/L	EPA 625
Azobenzene	<1	<1	<1	<1	µg/L	EPA 625
Benzidine	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)pyrene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(b)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	<2	<2	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	<2	<2	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	µg/L	EPA 625
Butyl benzyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Chrysene	<1	<1	<1	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	<1	<1	<1	µg/L	EPA 625
Diethyl phthalate	<2	<2	<2	<2	µg/L	EPA 625
Dimethyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-octyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Fluorene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	<5	<5	<5	µg/L	EPA 625
Hexachloroethane	<1	<1	<1	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	<2	<2	<2	µg/L	EPA 625
Isophorone	<1	<1	<1	<1	µg/L	EPA 625

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	8TH-1/1	8TH-2/1	BRK-1/1	BRK-2/1		
Constituent	11/03/15	11/03/15	11/11/15	11/11/15	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles (cont'd)						
Naphthalene	<1	<1	<1	<1	µg/L	EPA 625
Nitrobenzene	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodimethylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	<1	<1	<1	µg/L	EPA 625
Pentachlorophenol	<2	<2	<2	<2	µg/L	EPA 625
Phenanthrene	<1	<1	<1	<1	µg/L	EPA 625
Phenol	<1	<1	<1	<1	µg/L	EPA 625
Pyrene	<1	<1	<1	<1	µg/L	EPA 625
EPA Priority Pollutants - Pesticides						
4,4-DDD	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
4,4-DDE	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
4,4-DDT	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Aldrin	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 505/EPA 608
Alpha-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Beta-BHC	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 525.2/EPA 608
Delta-BHC	<0.007	<0.007	<0.007	<0.007	µg/L	EPA 525.2/EPA 608
Dieldrin	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505/EPA 608
Endosulfan I	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Endosulfan II	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Endosulfan Sulfate	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Endrin	<0.016	<0.016	<0.016	<0.016	µg/L	EPA 505/EPA 608
Endrin aldehyde	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 525.2/EPA 608
Gamma-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505/EPA 608
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505/EPA 608
Heptachlor epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505/EPA 608
Chlordane	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1016	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1221	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1232	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1242	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1248	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1254	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
PCB-1260	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608
Toxaphene	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 505/EPA 608

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

Constituent	BH-1/2 10/28/15	Ely Basin MW-1 11/16/15	Ely Basin MW-2 10/27/15	Reliant Energy - East Well 11/04/15	Unit	Method
EPA Priority Pollutants - Metals						
Antimony	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.8
Chromium	7.7	<0.5	7.1	6.4	µg/L	EPA 200.8
Copper	<0.5	0.9	<0.5	3.1	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Mercury	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	44	3	7	1	µg/L	EPA 200.8
Selenium	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Zinc	5	<1	6	7	µg/L	EPA 200.8
EPA Priority Pollutants - Volatile Organics						
1,1,1-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1,2-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
2-Chloroethyl vinyl ether	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Benzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromodichloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromoform	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromomethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Chlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroform	59	<1	11	10	µg/L	EPA 524.2/EPA 624
Chloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Dibromochloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Ethylbenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Methylene chloride	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Tetrachloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Toluene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Trichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Trichlorofluoromethane	<2	<2	<2	<2	µg/L	EPA 524.2/EPA 624
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Acrolein	<2	<2	<2	<2	µg/L	EPA 624
Acrylonitrile	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 624

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	BH-1/2	Ely Basin	Ely Basin	Reliant Energy -		
	10/28/15	MW-1	MW-2	East Well	Unit	Method
Constituent	10/28/15	11/16/15	10/27/15	11/04/15		
EPA Priority Pollutants - Base/Neutral and Acid Extractibles						
1,2,4-Trichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	<2	<2	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dinitrophenol	<3	<3	<3	<3	µg/L	EPA 625
2,4-Dinitrotoluene	<1	<1	<1	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	<2	<2	<2	µg/L	EPA 625
2-Chloronaphthalene	<1	<1	<1	<1	µg/L	EPA 625
2-Chlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	<2	<2	<2	µg/L	EPA 625
2-Nitrophenol	<1	<1	<1	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	<5	<5	<5	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	<1	<1	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Nitrophenol	<3	<3	<3	<3	µg/L	EPA 625
Acenaphthene	<1	<1	<1	<1	µg/L	EPA 625
Acenaphthylene	<1	<1	<1	<1	µg/L	EPA 625
Anthracene	<1	<1	<1	<1	µg/L	EPA 625
Azobenzene	<1	<1	<1	<1	µg/L	EPA 625
Benzidine	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)pyrene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(b)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	<2	<2	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	<2	<2	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	µg/L	EPA 625
Butyl benzyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Chrysene	<1	<1	<1	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	<1	<1	<1	µg/L	EPA 625
Diethyl phthalate	<2	<2	<2	<2	µg/L	EPA 625
Dimethyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-octyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Fluorene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	<5	<5	<5	µg/L	EPA 625
Hexachloroethane	<1	<1	<1	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	<2	<2	<2	µg/L	EPA 625
Isophorone	<1	<1	<1	<1	µg/L	EPA 625

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

Constituent	BH-1/2 10/28/15	Ely Basin MW-1 11/16/15	Ely Basin MW-2 10/27/15	Reliant Energy - East Well 11/04/15	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles (cont'd)						
Naphthalene	<1	<1	<1	<1	µg/L	EPA 625
Nitrobenzene	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodimethylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	<1	<1	<1	µg/L	EPA 625
Pentachlorophenol	<2	<2	<2	<2	µg/L	EPA 625
Phenanthrene	<1	<1	<1	<1	µg/L	EPA 625
Phenol	<1	<1	<1	<1	µg/L	EPA 625
Pyrene	<1	<1	<1	<1	µg/L	EPA 625
EPA Priority Pollutants - Pesticides						
4,4-DDD	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDE	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDT	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Aldrin	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Alpha-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Beta-BHC	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Delta-BHC	<0.007	<0.007	<0.007	<0.007	µg/L	EPA 608
Dieldrin	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan I	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan II	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan Sulfate	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endrin	<0.016	<0.016	<0.016	<0.016	µg/L	EPA 608
Endrin aldehyde	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Gamma-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Chlordane	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1016	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1221	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1232	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1242	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1248	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1254	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1260	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
Toxaphene	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	RP3-1/1	Southridge JHS	T-1/2	T-2/2		
Constituent	10/29/15	11/17/15	11/02/15	11/03/15	Unit	Method
EPA Priority Pollutants - Metals						
Antimony	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.8
Chromium	<0.5	4.3	<0.5	0.7	µg/L	EPA 200.8
Copper	<0.5	1.9	1.6	4.2	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Mercury	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	<1	3	13	5	µg/L	EPA 200.8
Selenium	<2	3	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Zinc	<1	3	62	75	µg/L	EPA 200.8
EPA Priority Pollutants - Volatile Organics						
1,1,1-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1,2-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
2-Chloroethyl vinyl ether	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Benzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromodichloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromoform	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromomethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Chlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroform	<1	<1	3	<1	µg/L	EPA 524.2/EPA 624
Chloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Dibromochloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Ethylbenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Methylene chloride	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Tetrachloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Toluene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Trichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Trichlorofluoromethane	<2	<2	<2	<2	µg/L	EPA 524.2/EPA 624
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Acrolein	<2	<2	<2	<2	µg/L	EPA 624
Acrylonitrile	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 624

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	RP3-1/1	Southridge JHS	T-1/2	T-2/2		
Constituent	10/29/15	11/17/15	11/02/15	11/03/15	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles						
1,2,4-Trichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	<2	<2	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dinitrophenol	<3	<3	<3	<3	µg/L	EPA 625
2,4-Dinitrotoluene	<1	<1	<1	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	<2	<2	<2	µg/L	EPA 625
2-Chloronaphthalene	<1	<1	<1	<1	µg/L	EPA 625
2-Chlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	<2	<2	<2	µg/L	EPA 625
2-Nitrophenol	<1	<1	<1	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	<5	<5	<5	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	<1	<1	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Nitrophenol	<3	<3	<3	<3	µg/L	EPA 625
Acenaphthene	<1	<1	<1	<1	µg/L	EPA 625
Acenaphthylene	<1	<1	<1	<1	µg/L	EPA 625
Anthracene	<1	<1	<1	<1	µg/L	EPA 625
Azobenzene	<1	<1	<1	<1	µg/L	EPA 625
Benzidine	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)pyrene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(b)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	<2	<2	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	<2	<2	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	µg/L	EPA 625
Butyl benzyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Chrysene	<1	<1	<1	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	<1	<1	<1	µg/L	EPA 625
Diethyl phthalate	<2	<2	<2	<2	µg/L	EPA 625
Dimethyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-octyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Fluorene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	<5	<5	<5	µg/L	EPA 625
Hexachloroethane	<1	<1	<1	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	<2	<2	<2	µg/L	EPA 625
Isophorone	<1	<1	<1	<1	µg/L	EPA 625

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	RP3-1/1	Southridge JHS	T-1/2	T-2/2		
Constituent	10/29/15	11/17/15	11/02/15	11/03/15	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles (cont'd)						
Naphthalene	<1	<1	<1	<1	µg/L	EPA 625
Nitrobenzene	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodimethylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	<1	<1	<1	µg/L	EPA 625
Pentachlorophenol	<2	<2	<2	<2	µg/L	EPA 625
Phenanthrene	<1	<1	<1	<1	µg/L	EPA 625
Phenol	<1	<1	<1	<1	µg/L	EPA 625
Pyrene	<1	<1	<1	<1	µg/L	EPA 625
EPA Priority Pollutants - Pesticides						
4,4-DDD	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDE	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDT	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Aldrin	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Alpha-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Beta-BHC	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Delta-BHC	<0.007	<0.007	<0.007	<0.007	µg/L	EPA 608
Dieldrin	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan I	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan II	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan Sulfate	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endrin	<0.016	<0.016	<0.016	<0.016	µg/L	EPA 608
Endrin aldehyde	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Gamma-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Chlordane	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1016	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1221	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1232	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1242	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1248	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1254	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1260	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
Toxaphene	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	SS-1/1	VCT-1/1	VCT-2/2	DCZ-1/1		
Constituent	10/28/15	10/28/15	11/17/15	10/29/16	Unit	Method
EPA Priority Pollutants - Metals						
Antimony	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.8
Chromium	2.1	2.3	6.0	5.4	µg/L	EPA 200.8
Copper	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Mercury	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	<1	<1	7	18	µg/L	EPA 200.8
Selenium	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Zinc	47	3	5	7	µg/L	EPA 200.8
EPA Priority Pollutants - Volatile Organics						
1,1,1-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1,2-Trichloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,1-Dichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
2-Chloroethyl vinyl ether	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Benzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromodichloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromoform	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Bromomethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Carbon tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Chlorobenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloroform	10	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Chloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
cis-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Dibromochloromethane	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Ethylbenzene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Methylene chloride	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Tetrachloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Toluene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
trans-1,2-Dichloroethene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
trans-1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Trichloroethene	<1	<1	<1	<1	µg/L	EPA 524.2/EPA 624
Trichlorofluoromethane	<2	<2	<2	<2	µg/L	EPA 524.2/EPA 624
Vinyl chloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2/EPA 624
Acrolein	<2	<2	<2	<2	µg/L	EPA 624
Acrylonitrile	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 624

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	SS-1/1	VCT-1/1	VCT-2/2	DCZ-1/1		
Constituent	10/28/15	10/28/15	11/17/15	10/29/16	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles						
1,2,4-Trichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,2-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
1,4-Dichlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	<2	<2	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	<1	<1	<1	µg/L	EPA 625
2,4-Dinitrophenol	<3	<3	<3	<3	µg/L	EPA 625
2,4-Dinitrotoluene	<1	<1	<1	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	<2	<2	<2	µg/L	EPA 625
2-Chloronaphthalene	<1	<1	<1	<1	µg/L	EPA 625
2-Chlorophenol	<1	<1	<1	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	<2	<2	<2	µg/L	EPA 625
2-Nitrophenol	<1	<1	<1	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	<5	<5	<5	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	<1	<1	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	<1	<1	<1	µg/L	EPA 625
4-Nitrophenol	<3	<3	<3	<3	µg/L	EPA 625
Acenaphthene	<1	<1	<1	<1	µg/L	EPA 625
Acenaphthylene	<1	<1	<1	<1	µg/L	EPA 625
Anthracene	<1	<1	<1	<1	µg/L	EPA 625
Azobenzene	<1	<1	<1	<1	µg/L	EPA 625
Benzidine	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	<5	<5	<5	µg/L	EPA 625
Benzo(a)pyrene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(b)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	<2	<2	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	<2	<2	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	<1	<1	<1	µg/L	EPA 625
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	µg/L	EPA 625
Butyl benzyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Chrysene	<1	<1	<1	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	<1	<1	<1	µg/L	EPA 625
Diethyl phthalate	<2	<2	<2	<2	µg/L	EPA 625
Dimethyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Di-n-octyl phthalate	<1	<1	<1	<1	µg/L	EPA 625
Fluoranthene	<1	<1	<1	<1	µg/L	EPA 625
Fluorene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobenzene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	<1	<1	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	<5	<5	<5	µg/L	EPA 625
Hexachloroethane	<1	<1	<1	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	<2	<2	<2	µg/L	EPA 625
Isophorone	<1	<1	<1	<1	µg/L	EPA 625

Table 2-8b
Groundwater Monitoring Well Results - Priority Pollutants (Quarterly)

	SS-1/1	VCT-1/1	VCT-2/2	DCZ-1/1		
Constituent	10/28/15	10/28/15	11/17/15	10/29/16	Unit	Method
EPA Priority Pollutants - Base/Neutral and Acid Extractibles (cont'd)						
Naphthalene	<1	<1	<1	<1	µg/L	EPA 625
Nitrobenzene	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodimethylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	<1	<1	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	<1	<1	<1	µg/L	EPA 625
Pentachlorophenol	<2	<2	<2	<2	µg/L	EPA 625
Phenanthrene	<1	<1	<1	<1	µg/L	EPA 625
Phenol	<1	<1	<1	<1	µg/L	EPA 625
Pyrene	<1	<1	<1	<1	µg/L	EPA 625
EPA Priority Pollutants - Pesticides						
4,4-DDD	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDE	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
4,4-DDT	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Aldrin	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Alpha-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Beta-BHC	<0.005	<0.005	<0.005	<0.005	µg/L	EPA 608
Delta-BHC	<0.007	<0.007	<0.007	<0.007	µg/L	EPA 608
Dieldrin	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan I	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan II	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endosulfan Sulfate	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Endrin	<0.016	<0.016	<0.016	<0.016	µg/L	EPA 608
Endrin aldehyde	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Gamma-BHC	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Heptachlor epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 608
Chlordane	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1016	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1221	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1232	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1242	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1248	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1254	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
PCB-1260	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608
Toxaphene	<2.5	<2.5	<2.5	<2.5	µg/L	EPA 608

Table 3-1
Diluent & Recycled Water Recharge Volume (Acre-Feet)

Date	Diluent Water																				Recycled Water									
	Imported Water										Local Runoff / Storm Flow																			
	7th & 8th St.	Banana	Brooks	Declez	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria	7th & 8th St.	Banana	Brooks	Declez	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria	7th & 8th St.	Banana	Brooks	Declez	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria
Jan-15	0	0	0	0	0	0	0	0	0	0	110	24	19	0	44	8	132	-5	121	18	0	144	10	0	183	194	29	0	0	63
Feb-15	0	0	0	0	0	0	0	0	0	0	42	16	27	0	72	47	94	39	157	40	0	47	92	0	222	180	243	0	113	57
Mar-15	0	0	0	0	0	0	0	0	0	0	43	2	13	0	15	0	69	2	123	12	0	80	69	0	157	115	325	0	298	79
1Q15 Total	0	0	0	0	0	0	0	0	0	0	194	42	58	0	131	55	295	36	401	70	0	272	171	0	562	489	597	0	412	199
Apr-15	0	0	0	0	0	0	0	0	0	0	25	3	10	0	100	0	41	0	39	0	0	90	101	0	165	229	282	0	0	127
May-15	0	0	0	0	0	0	0	0	0	0	57	0	21	0	231	3	121	17	0	13	0	161	120	0	160	139	348	102	0	141
Jun-15	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	0	2	1	0	26	156	0	273	197	531	38	81	32
2Q15 Total	0	0	0	0	0	0	0	0	0	0	94	3	30	0	331	3	174	17	41	14	0	277	377	0	598	565	1161	140	81	300
Jul-15	0	0	0	0	0	0	0	0	0	0	45	0	0	0	285	0	133	9	87	4	0	54	63	0	102	39	268	0	85	139
Aug-15	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	31	0	15	1	23	156	0	0	1	56	141	0	163	165
Sep-15	0	0	0	0	0	0	0	0	0	0	76	40	0	0	215	9	123	52	194	37	60	376	0	0	31	107	219	0	195	136
3Q15 Total	0	0	0	0	0	0	0	0	0	0	125	40	0	0	503	9	288	61	297	41	84	585	63	0	134	202	628	0	443	440
Oct-15	0	0	0	0	0	0	0	0	0	0	39	105	0	0	75	14	86	48	163	35	13	349	0	0	76	73	363	0	303	101
Nov-15	0	0	0	0	0	0	0	0	0	0	18	30	1	0	41	14	53	1	90	0	95	262	0	0	21	84	228	0	82	34
Dec-15	0	0	0	0	0	0	0	0	0	0	86	59	0	0	92	64	188	80	249	86	159	283	101	0	128	53	274	0	226	60
4Q15 Total	0	0	0	0	0	0	0	0	0	0	143	194	1	0	209	92	327	128	501	122	267	895	101	0	225	210	866	0	611	195

Table 6-1
MVWD ASR Project - TIN/TDS Mass Balance

ASR Well No. 4										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
1Q15	Jan-15	0.0	0.7	320	61	12.5	380	(756)	(13,723)	(359,411)
	Feb-15	0.0	0.7	320	47	12.6	380	(803)	(14,444)	(381,219)
	Mar-15	0.0	0.7	320	40	12.0	380	(843)	(15,037)	(399,961)
2Q15	Apr-15	0.0	0.7	320	41	12.5	380	(884)	(15,667)	(419,083)
	May-15	0.0	0.7	320	47	12.8	380	(931)	(16,415)	(441,299)
	Jun-15	0.0	0.7	320	4	12.9	380	(935)	(16,479)	(443,179)
3Q15	Jul-15	0.0	0.7	320	0	12.9	380	(935)	(16,479)	(443,179)
	Aug-15	0.0	0.7	320	0	12.9	380	(935)	(16,479)	(443,179)
	Sep-15	0.0	0.7	320	13	10.2	380	(948)	(16,639)	(449,174)
4Q15	Oct-15	0.0	0.7	320	11	10.2	380	(959)	(16,780)	(454,439)
	Nov-15	0.0	0.7	320	18	16.5	380	(977)	(17,138)	(462,699)
	Dec-15	0.0	0.7	320	52	16.5	380	(1,029)	(18,193)	(487,043)

ASR Well No. 30										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
4Q14	Oct-14	0.0	0.7	320	0	16.5	370	(161)	(25,336)	(279,931)
	Nov-14	0.0	0.7	320	0	16.5	370	(162)	(25,345)	(280,132)
	Dec-14	0.0	0.7	320	0	16.5	370	(162)	(25,345)	(280,132)
1Q15	Jan-15	0.0	0.7	320	3	16.5	370	(165)	(25,406)	(281,510)
	Feb-15	0.0	0.7	320	23	16.5	370	(187)	(25,868)	(291,867)
	Mar-15	0.0	0.7	320	0	14.0	370	(187)	(25,868)	(291,867)
2Q15	Apr-15	0.0	0.7	320	6	14.0	370	(193)	(25,971)	(294,606)
	May-15	0.0	0.7	320	16	14.0	370	(210)	(26,255)	(302,101)
	Jun-15	0.0	0.7	320	0	16.9	370	(210)	(26,255)	(302,101)
3Q15	Jul-15	0.0	0.7	320	0	16.9	370	(210)	(26,255)	(302,101)
	Aug-15	0.0	0.7	320	10	16.9	370	(220)	(26,470)	(306,816)
	Sep-15	0.0	0.7	320	28	16.9	370	(249)	(27,065)	(319,802)
4Q15	Oct-15	0.0	0.7	320	1	16.9	370	(250)	(27,094)	(320,450)
	Nov-15	0.0	0.7	320	0	15.1	370	(250)	(27,094)	(320,450)
	Dec-15	0.0	0.7	320	0	12.0	370	(250)	(27,094)	(320,450)

ASR Well No. 32										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
1Q15	Jan-15	0.0	0.7	320	0	18.3	300	(3,646)	(42,954)	(826,781)
	Feb-15	0.0	0.7	320	0	18.3	300	(3,646)	(42,954)	(826,781)
	Mar-15	0.0	0.7	320	0	12.9	300	(3,646)	(42,954)	(826,781)
2Q15	Apr-15	0.0	0.7	320	0	12.9	300	(3,646)	(42,954)	(826,781)
	May-15	0.0	0.7	320	0	12.9	300	(3,646)	(42,954)	(826,781)
	Jun-15	0.0	0.7	320	9	12.9	300	(3,654)	(43,092)	(829,997)
3Q15	Jul-15	0.0	0.7	320	29	19.0	300	(3,684)	(43,781)	(840,897)
	Aug-15	0.0	0.7	320	79	19.0	300	(3,763)	(45,636)	(870,238)
	Sep-15	0.0	0.7	320	129	19.0	300	(3,892)	(48,648)	(917,891)
4Q15	Oct-15	0.0	0.7	320	112	17.6	300	(4,003)	(51,072)	(959,204)
	Nov-15	0.0	0.7	320	111	16.9	300	(4,115)	(53,399)	(1,000,429)
	Dec-15	0.0	0.7	320	124	17.4	300	(4,239)	(56,055)	(1,046,269)

The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.

Cells shaded in grey reflect most recent lab values.

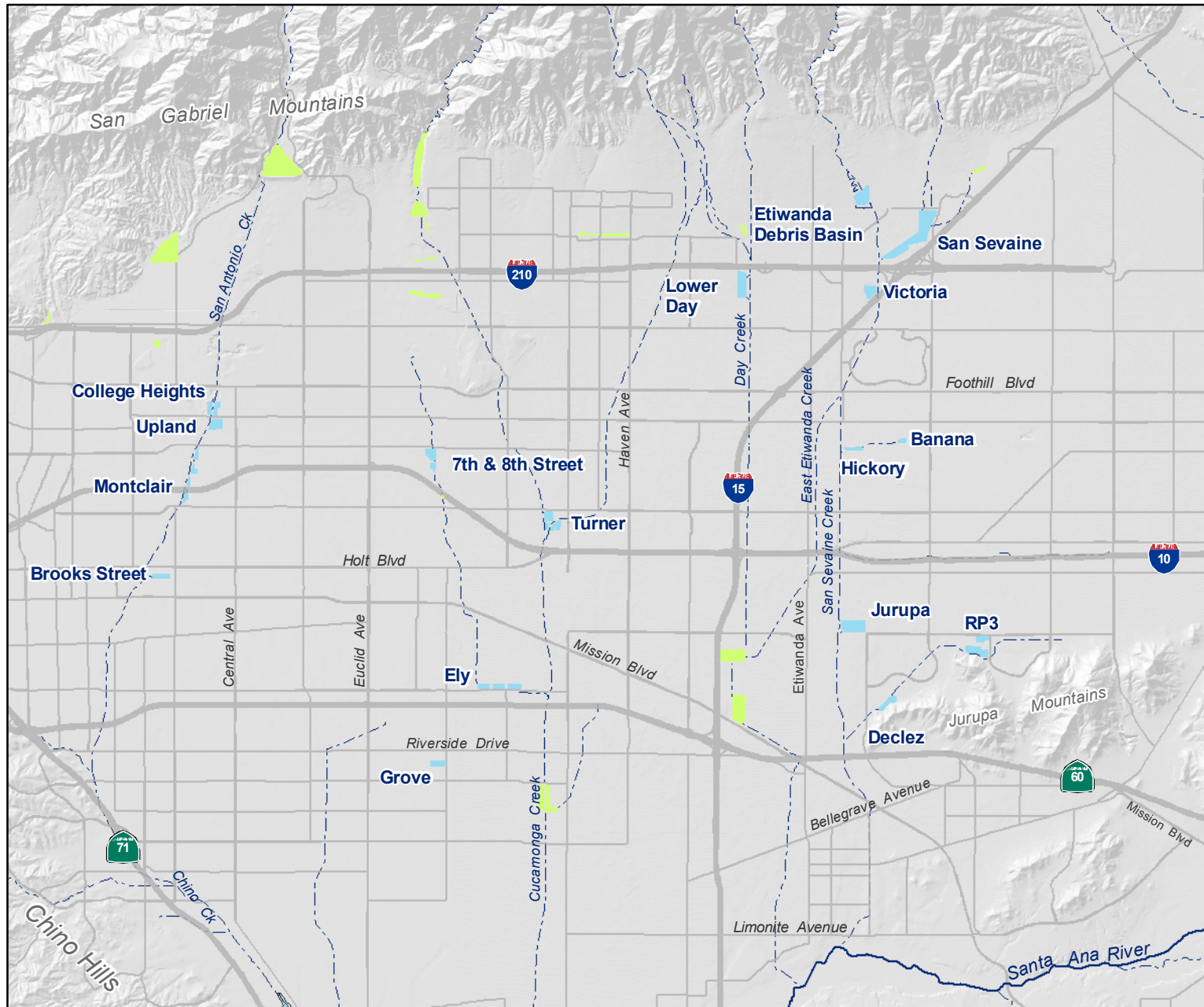
Table 6-1
MVWD ASR Project - TIN/TDS Mass Balance

ASR Well No. 33										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
1Q15	Jan-15	0.0	0.7	320	429	16.5	340	(1,685)	(35,065)	(659,963)
	Feb-15	0.0	0.7	320	442	16.5	340	(2,126)	(44,041)	(845,158)
	Mar-15	0.0	0.7	320	654	17.2	340	(2,781)	(57,887)	(1,119,567)
2Q15	Apr-15	0.0	0.7	320	758	16.5	340	(3,539)	(73,303)	(1,437,645)
	May-15	0.0	0.7	320	691	17.4	340	(4,230)	(88,115)	(1,727,385)
	Jun-15	0.0	0.7	320	972	17.1	340	(5,202)	(108,626)	(2,135,231)
3Q15	Jul-15	0.0	0.7	320	1015	17.0	340	(6,217)	(129,896)	(2,560,954)
	Aug-15	0.0	0.7	320	1004	16.9	340	(7,221)	(150,861)	(2,982,003)
	Sep-15	0.0	0.7	320	769	16.9	340	(7,990)	(166,928)	(3,304,670)
4Q15	Oct-15	0.0	0.7	320	698	11.3	340	(8,688)	(176,648)	(3,597,472)
	Nov-15	0.0	0.7	320	573	11.7	340	(9,262)	(184,948)	(3,837,878)
	Dec-15	0.0	0.7	320	531	12.6	340	(9,792)	(193,194)	(4,060,466)

The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.

Cells shaded in grey reflect most recent lab values.

Total Project (All Wells)					
	Date		Mass Balance		
			Storage (AF)	TIN (kg)	TDS (kg)
1Q15	Jan-15		(6,252)	(117,148)	(2,127,665)
	Feb-15		(6,762)	(127,306)	(2,345,025)
	Mar-15		(7,457)	(141,745)	(2,638,177)
2Q15	Apr-15		(8,262)	(157,895)	(2,978,115)
	May-15		(9,016)	(173,739)	(3,297,566)
	Jun-15		(10,001)	(194,452)	(3,710,508)
3Q15	Jul-15		(11,046)	(216,410)	(4,147,129)
	Aug-15		(12,139)	(239,446)	(4,602,235)
	Sep-15		(13,079)	(259,279)	(4,991,537)
4Q15	Oct-15		(13,901)	(271,594)	(5,331,565)
	Nov-15		(14,603)	(282,579)	(5,621,455)
	Dec-15		(15,310)	(294,537)	(5,914,227)



Main Map Features

- Recharge Basins in the Recycled Water Groundwater Recharge Program
- Non-Program Basins
- Rivers and Streams



Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations

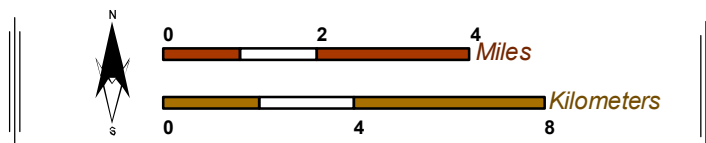
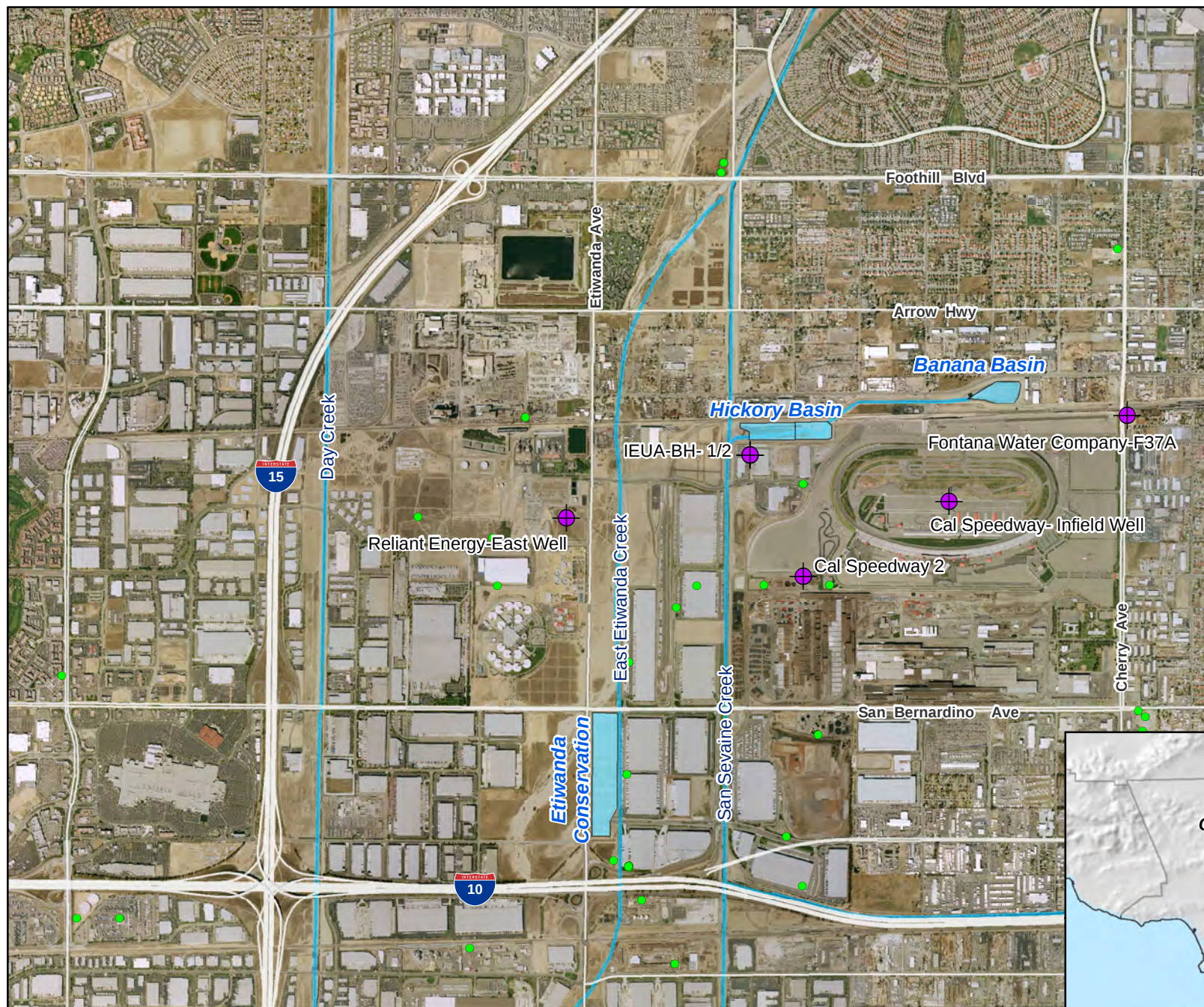
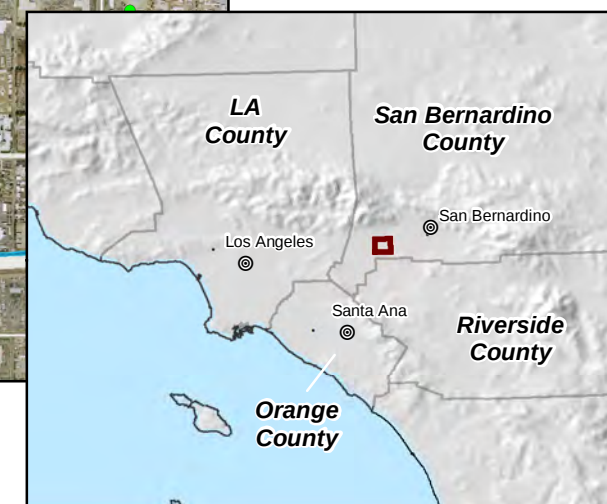


Figure 1-1



Main Map Features

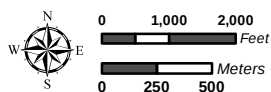
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

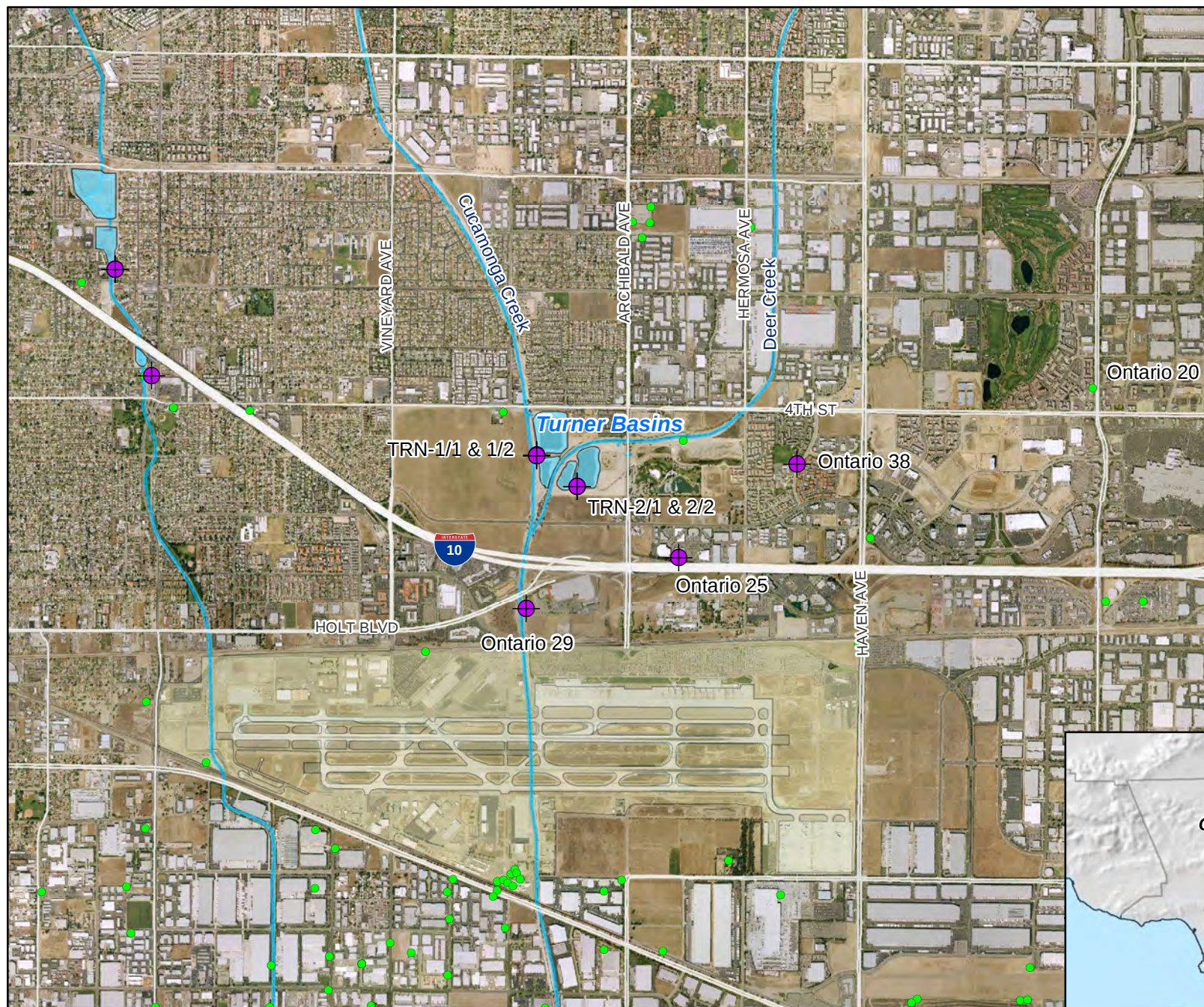


Monitoring Well Network Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program





Main Map Features

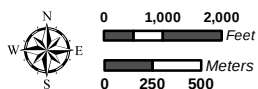
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

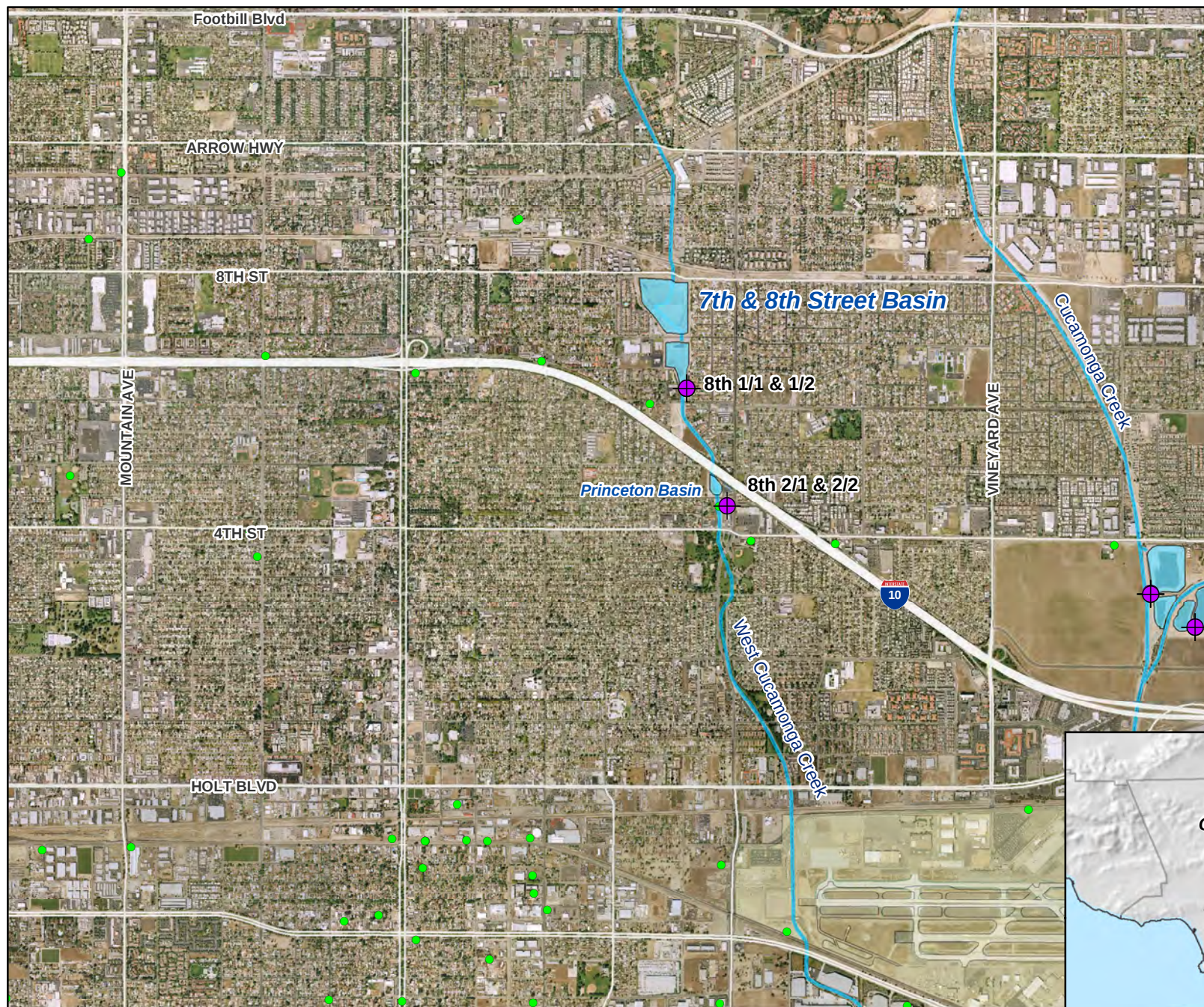


Monitoring Well Network
Turner Basins

Figure 2-2

Recycled Water Recharge Program





Main Map Features

-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins



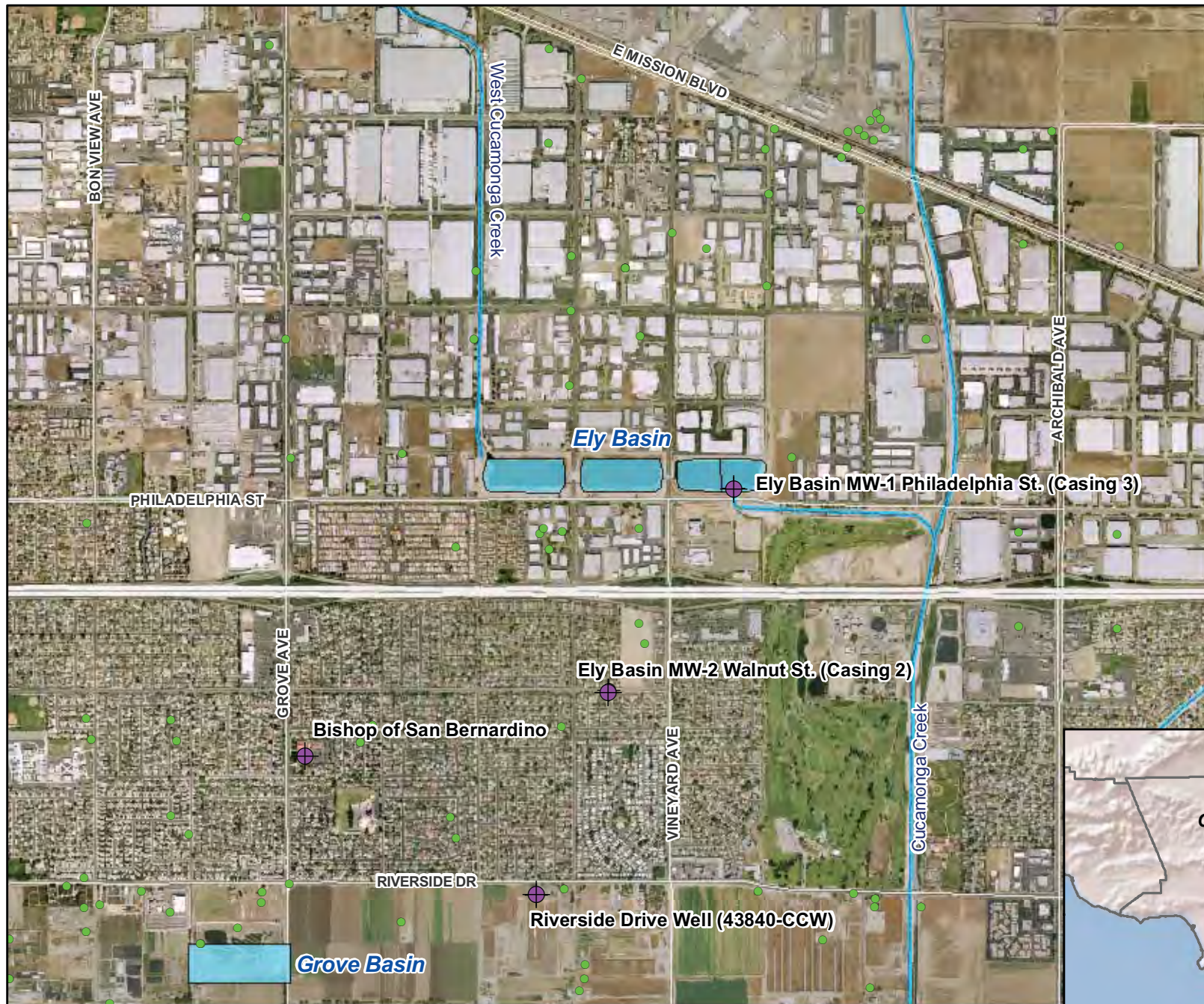
Monitoring Well Network

7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program





Main Map Features

-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

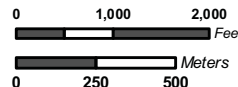


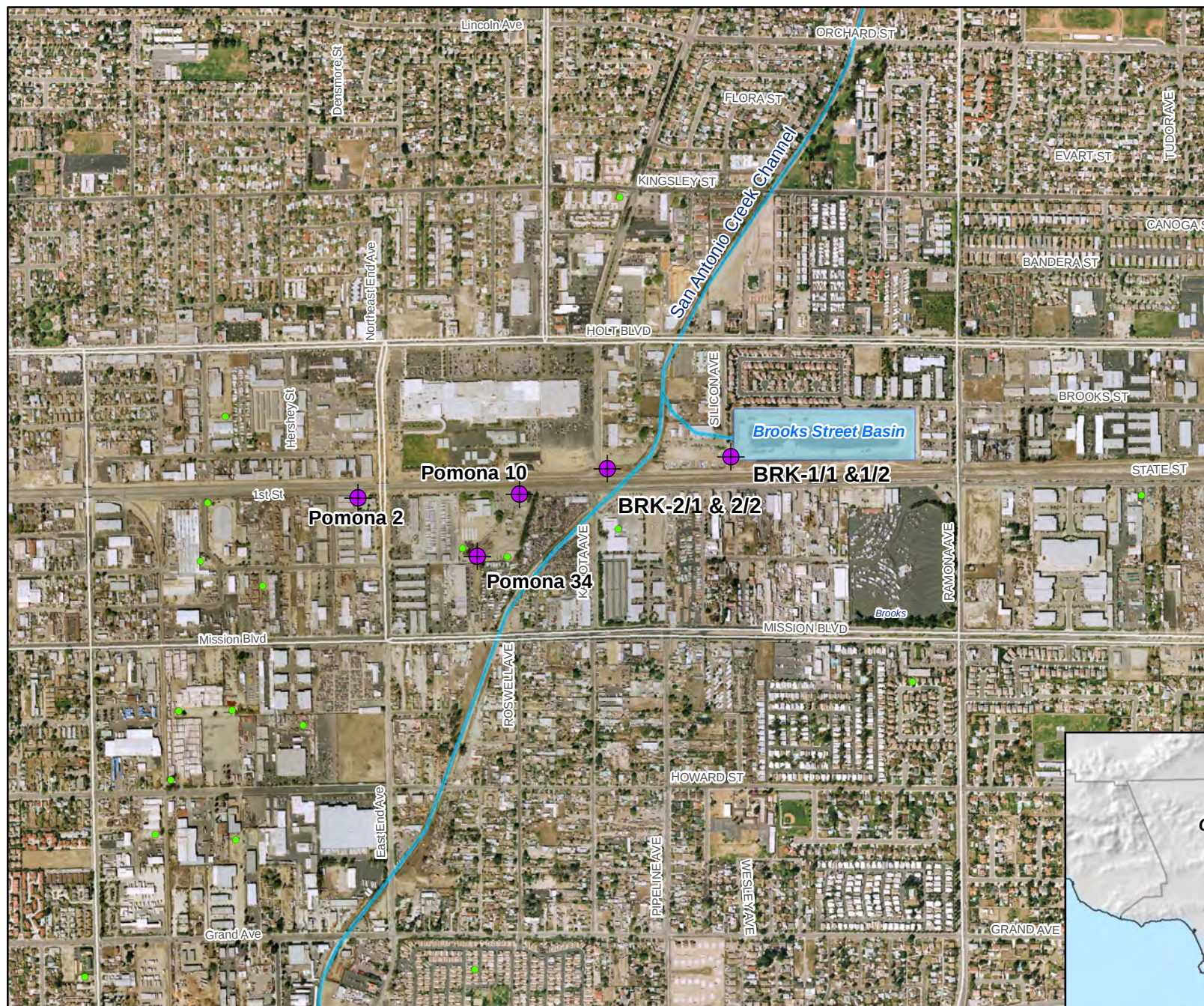
Monitoring Well Network

Ely Basins

Figure 2-4

Recycled Water Recharge Program





Main Map Features

-  Existing Monitoring Well
-  "Other" Wells
-  Rivers/Streams/Creeks
-  Recharge Basins

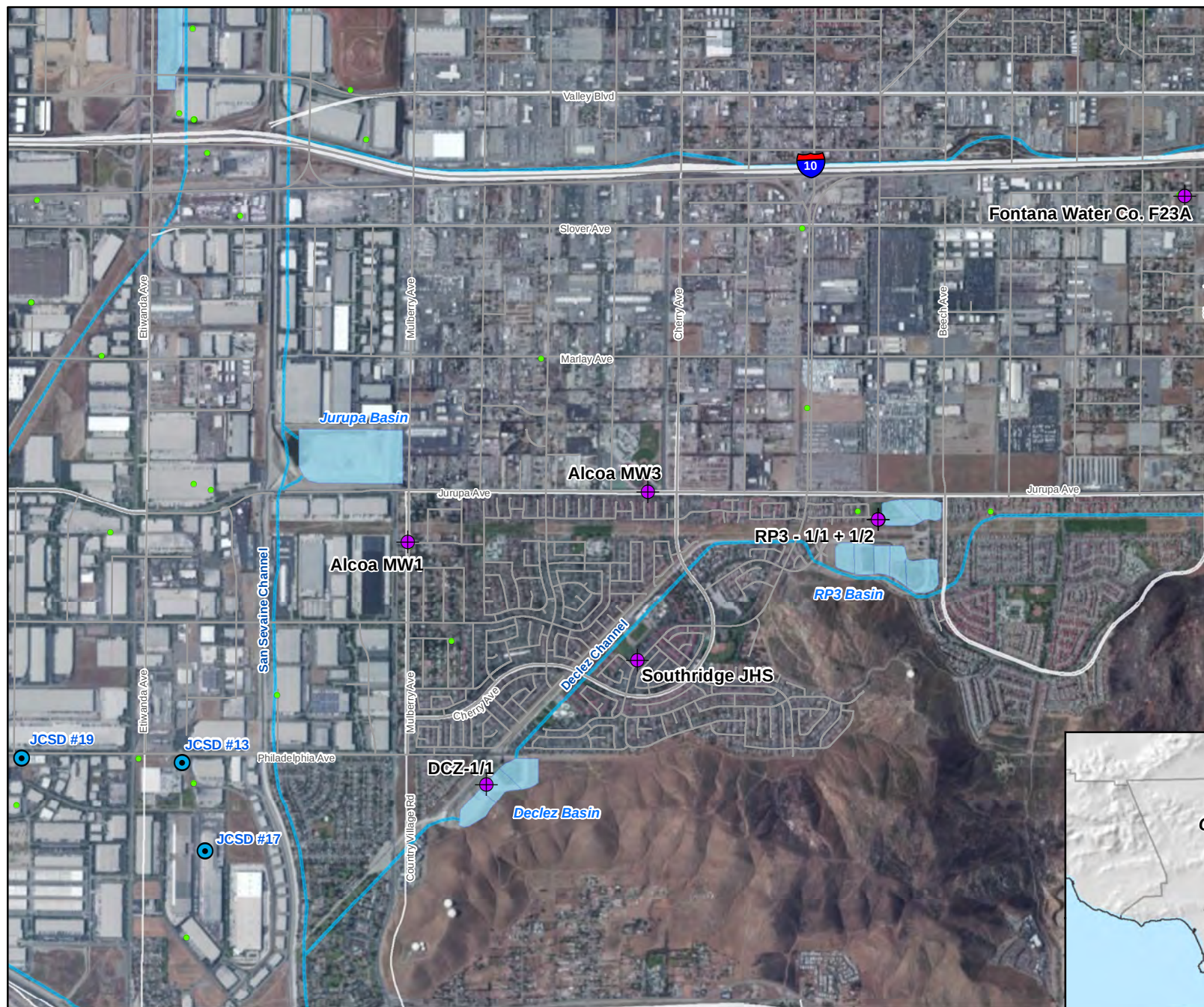


Monitoring Well Network
Brooks Street Basin

Figure 2-5

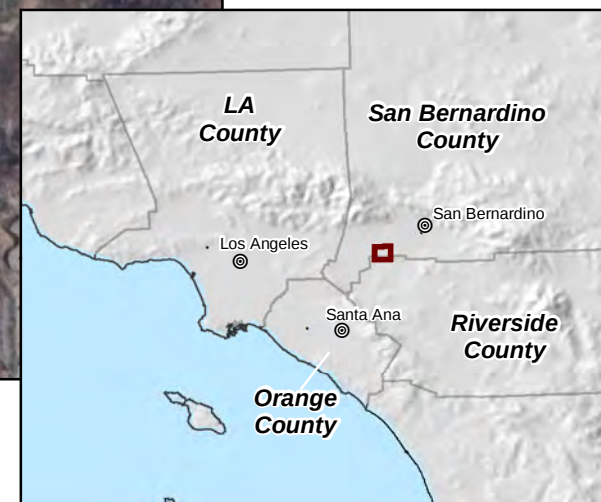
Recycled Water Recharge Program





Main Map Features

-  JCSD Wells
-  "Other Wells"
-  Existing Monitoring Well
-  Rivers/Streams/Creeks
-  Recharge Basins

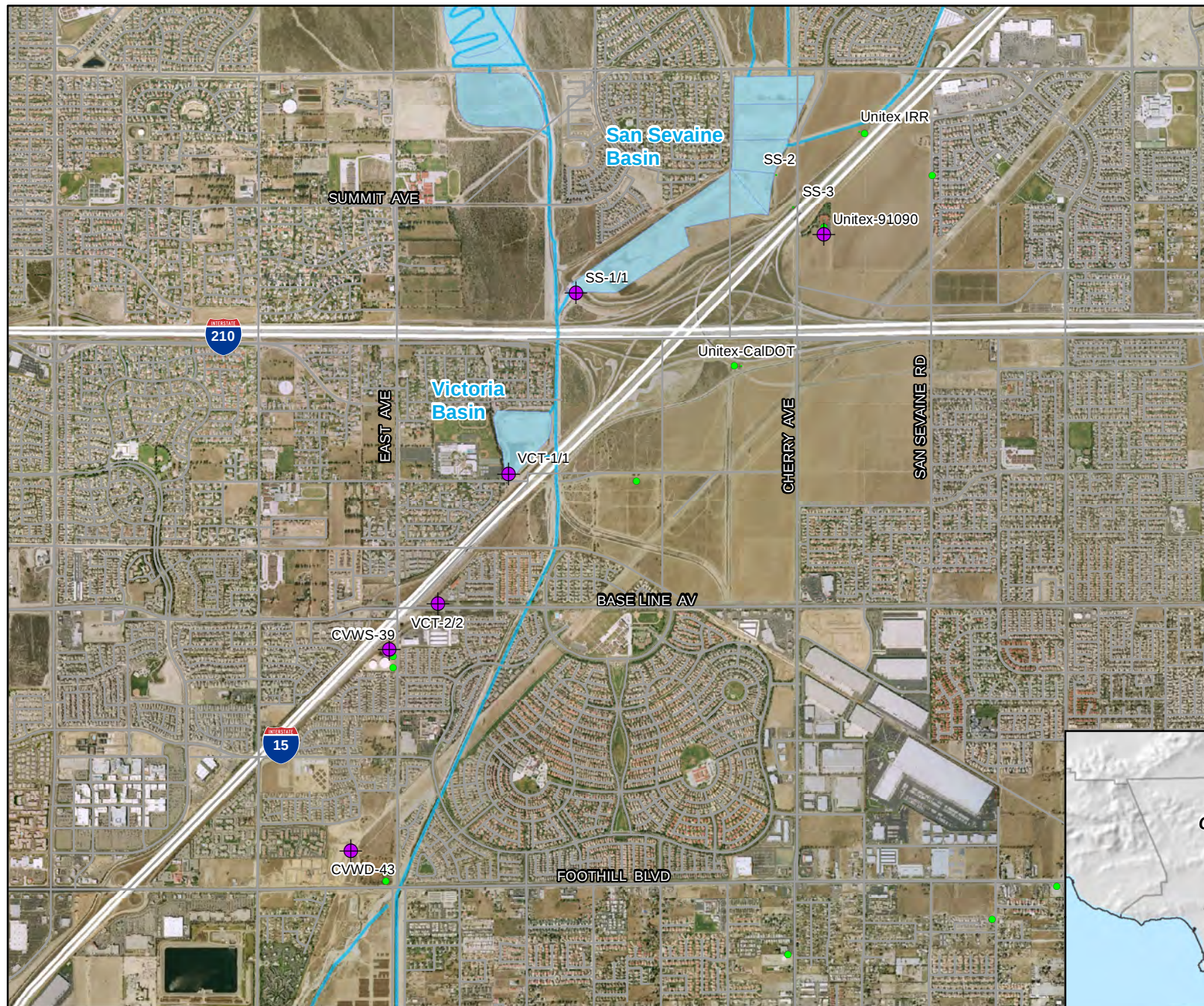


Monitoring Well Network
Declez and RP3 Basins

Figure 2-6

Recycled Water Recharge Program





Main Map Features

Legend

-  Existing Monitoring Well
-  Rivers/Streams/Creeks
-  Recharge Basins



Monitoring Well Network
San Seivaine and Victoria Basin

Figure 2-7

Recycled Water Recharge Program

