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August 15, 2012

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 April through June 2012**

Dear Mr. Berchtold,

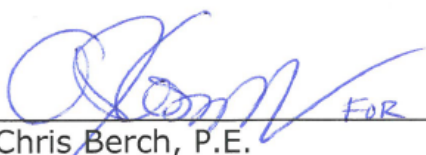
Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2012 (2Q12), April 1 through June 30, 2012, for the *Chino Basin Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report. During 2Q12, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order.

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2012, 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 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In point of fact, there are no production wells in the buffer zones of the aforementioned recharge sites.

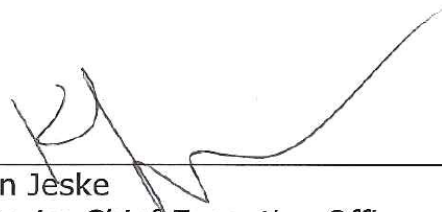
DECLARATION

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 15th day of August 2012 in the Cities of Chino and Rancho Cucamonga.



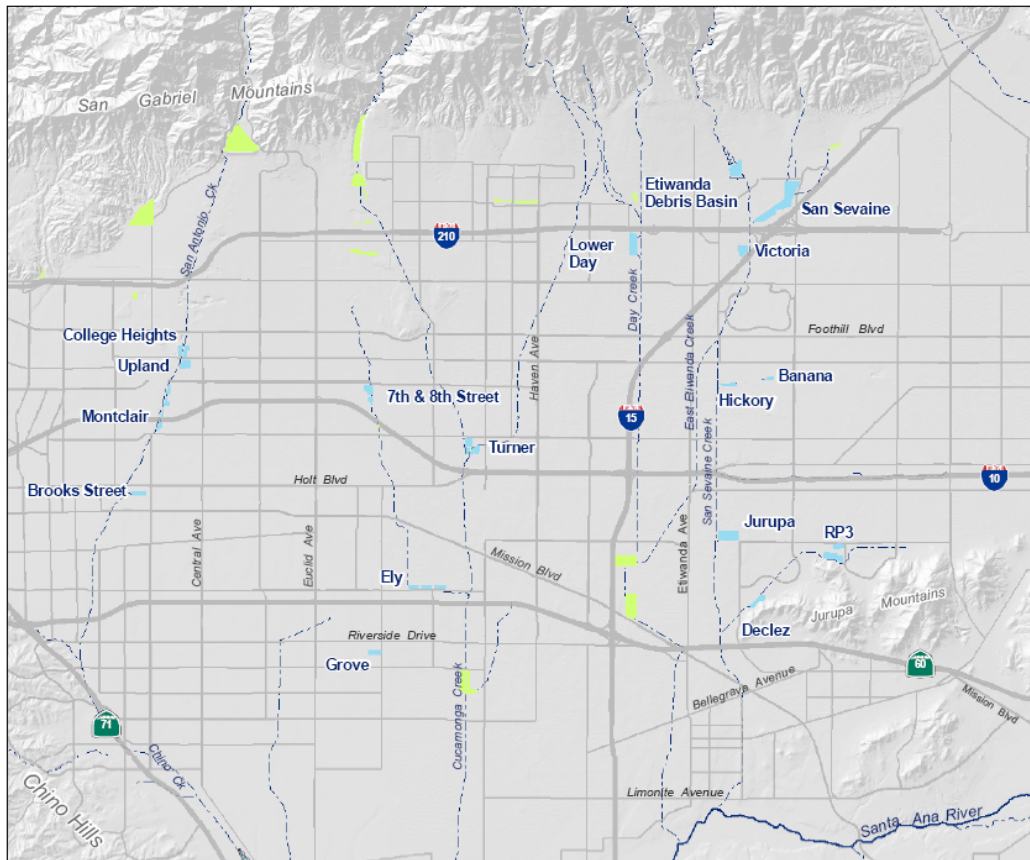
Chris Berch, P.E.
Manager of Planning &
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Ken Jeske
Interim Chief Executive Officer

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report April 1 through June 30, 2012



Prepared by:



August 15, 2012

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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. Chino Basin Groundwater Recharge Program Basins are presented 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 second quarter of 2012 (2Q12).

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 from the buffer zone that extends 500 feet and 6-months underground travel time from the recharge basin(s) where recycled water is applied for domestic water supply use.

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 CDPH. 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. has been modified and footnote No. 18 has been 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. 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 (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 2Q12 data.

Recycled Water Specifications A.5 through A.9 are the narrative limits established in the permit. Corresponding monitoring data are presented in Tables 2-1 and 2-2. Recycled water compliance for the total nitrogen (TN) limit of 5 mg/L is met at the lysimeters.

In the Order, compliance for constituents with maximum contaminant levels (MCLs) and secondary MCLs are based on 4-quarter running averages. These constituents are listed in Recycled Water Specifications A.1 through A.3 (Tables I, II, and III in the Order). The 4-quarter running average concentration data for 3Q11 through 2Q12 are summarized in Table 2-3. The table includes the 4-quarter running average for each parameter and the corresponding limits for compliance. Of the Recycled Water Quality Specifications with limitations, only oil & grease does not require the 4-quarter running average for compliance determination. During 2Q12, 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; and oil and grease.

Due to the volume of sample required for analyses, IEUA has selected, and CDPH has approved, a recycled water sampling point along the distribution pipeline. IEUA selected the turnout to GenOn Energy (formerly Reliant Energy) to be representative of the system blend of recycled water used for recharge. Although this sampling location is suitable 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 2Q12 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Brooks Basin as the compliance point. The Brooks Basin lysimeter was selected as the 2Q12 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.

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly during periods when recycled water is delivered to recharge sites. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. All basin and lysimeter water quality results from 2Q12 are summarized in Table 2-5a. The table includes lysimeter data for 7th & 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, and Victoria Basins.

The Turner, Ely Basins, San Sevaine, and Victoria Basins have implemented alternative monitoring plans which include the sampling of recycled water at the GenOn Energy turnout and the application of TOC and TN correction factors for SAT at the basins. 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
- 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 correction factors provided above are summarized in Table 2-5b.

The Brooks and RP3 Basins have also implemented alternative monitoring plans 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. The RP3 alternative monitoring plan includes monthly sampling of the 35-foot deep lysimeter for EC, TOC, and TN. The monitoring schedule would be conducted during the initial year of recycled water recharge at the RP3 Basin. If sufficient SAT is demonstrated in this initial year, the alternative monitoring plan proposes compliance monitoring from samples collected from the recycled water distribution pipeline and applying a performance-based TOC correction factor determined from past lysimeter monitoring. Brooks and RP3 Basins alternative monitoring data are summarized in Table 2-5b.

C. Diluent Water

For 2Q12, diluent water quality sampling of local runoff was conducted on May 14, 2012 at 8th Street Basin and on May 16, 2012 at Turner 1&2 and Turner 3&4 Basins. Table 2-6 lists the results of the local runoff sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the CDPH-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 5-2 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.

D. Groundwater Monitoring Wells

During 2Q12, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of Turner Basin was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the RP3 Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the 7th & 8th Street Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Ely Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the San Sevaine and Victoria Basins were monitored by sampling a network of four wells. The wells in the monitoring well networks for Hickory and Banana, Turner, 7th & 8th Street, Ely, Brooks, RP3, and San Sevaine and Victoria Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-7, respectively. The groundwater constituents analyzed from the monitoring wells during quarterly and annual monitoring are presented in Table 2-8a and Table 2-8b.

Groundwater monitoring is conducted to evaluate water 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 recharged water has on downgradient water supplies. Any 2Q12 analyses results which exceeded primary or secondary MCLs are shown in the tables in bold font. Of note are the analyses for the following wells and constituents:

Turbidity exceeding the secondary MCL of 5 NTU was observed in several monitoring wells, namely: BH-1/2, RP3-1/2, 8TH-1/1, BRK-1/1, BRK-2/1, DCZ-1/1, VCT-1/1, and VCT-2/2. In subsequent quarters, additional well purging will be performed at the wells where turbidity levels continue to be elevated. However, additional purging may still not resolve turbidity issues. During 2Q12, dissolved manganese was above secondary MCL of 50 µg/L at RP3-1/2. Color exceeded the secondary MCL of 15 units in monitoring wells BRK-2/1 and VCT-1/1.

During annual sampling, dissolved nickel was above the MCL of 100 µg/L at 8TH-1/1 and BRK-2/1. Nickel can occur naturally in soils, groundwater, and surface water where nickel-bearing rocks are present. Nickel is often used in electroplating, stainless steel and alloy products, mining, and refining. Nickel-bearing rocks include meteorites and ultramafic rocks formed in the Earth's mantle. Due to the general lack of ultramafic rocks in Chino Basin and the rarity of meteorites in the environment, an industrial source is suspected for the nickel concentrations found in groundwater samples from these wells. The Brooks Basin surrounding area is industrial; however, the 8th Street Basin is largely suburban. Perchlorate concentrations above the MCL of 6 µg/L were detected at BRK-1/2 which is characteristic of several production wells in the Pomona area and is documented in the CBWM 2008 State of the Basin report.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in the RP3 basin area wells (Alcoa MW3 and Southridge JHS) and Ely Basin area well (Walnut). The wells south of Ely and near RP3 are located in an area with historically high EC levels (>1,000 µmhos/cm). Some monitoring wells in the Banana & Hickory, RP3, 8th Street, Brooks, and Ely monitoring networks also have NO₃-N concentrations above the primary MCL of 10 mg/L. These higher levels are characteristic of groundwater quality in the local area where historically the NO₃-N concentrations ranges from 10-30 mg/L. TDS and NO₃-N concentrations in the area of the RP3 monitoring well network are documented in the CBWM 2008 State of the Basin report.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The 7th & 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, 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 2Q12 at the basins that have initiated recharge using recycled water.

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 2Q12 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In fact, there are no 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 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 California Department of Public Health and the Regional Board of well permit applications that it recommends be declined due to well locations determined to fall with 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 RWQCB to be included under IEUA/CBWM 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 injection has occurred since September 2011. 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 April 2012
 (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
04/01/12	0.6	5.9	7.4		7.5	7.0	771			<2	1.0	4.4	2.9		3.0	7.0	715			<2
04/02/12	0.7	6.3	6.9		7.0	7.0	771			<2	0.9	4.4	2.8		2.9	7.0	730			<2
04/03/12	0.8	6.1	7.0		7.1	7.0	790			<2	0.9	4.3	2.3		2.4	7.0	725			<2
04/04/12	1.0	6.1	7.3	7.4	7.4	7.0	786	454	132	<2	0.7	4.3	3.2	4.0	3.3	7.1	725	422	138	<2
04/05/12	0.8	5.8				7.1	777			<2	0.7	4.1			7.1	745				<2
04/06/12	0.8	5.4				7.1	783			<2	0.6	4.4			6.9	740				<2
04/07/12	0.8	5.5				7.1	805			4	0.6	4.0			7.0	750				<2
04/08/12	0.8	6.0	6.4	6.5	6.5	7.1	796			2	0.8	4.3	2.3	2.4	2.4	6.9	745			<2
04/09/12	0.9	*				7.0	796			<2	0.8	4.3	1.9		2.0	7.0	740			<2
04/10/12	0.9	6.2	8.0		8.1	7.0	809			2	0.6	4.5	1.8		1.9	6.9	755			<2
04/11/12	0.7	6.0	8.0		8.1	7.0	797	474		<2	0.6	4.4	2.9		3.0	7.0	755	440		<2
04/12/12	0.7	5.9				7.0	783			2	0.6	4.3			7.0	755				<2
04/13/12	0.7	5.6				7.0	767			<2	0.8	4.3			6.9	760				<2
04/14/12	0.6	5.5				7.0	750			2	0.9	4.4			6.8	730				<2
04/15/12	0.7	6.1	7.3	7.4	7.4	7.0	772			<2	0.9	4.3	3.2	4.0	3.3	6.9	740			<2
04/16/12	0.7	6.4	7.4		8.1	7.0	775			2	0.8	4.3	2.4		2.5	6.9	735			<2
04/17/12	0.8	6.4	7.9		8.0	7.0	806			<2	1.0	4.3	3.6		3.7	6.9	745			<2
04/18/12	0.9	7.2	8.1		8.2	6.9	846	492	135	<2	1.4	4.2	2.8		2.9	6.9	720	428		<2
04/19/12	1.0	7.2				6.9	865			<2	1.1	4.3			7.0	725				<2
04/20/12	1.3	6.9				6.9	877			<2	1.7	4.6			6.9	735				<2
04/21/12	1.0	6.3				6.9	876			<2	1.6	4.5			6.9	735				<2
04/22/12	0.9	6.5	10.3	10.4	10.4	6.9	837			<2	0.9	4.3	2.5	4.2	2.8	7.0	730			<2
04/23/12	0.8	6.4				6.9	827			<2	0.9	4.2			7.0	735				<2
04/24/12	0.8	6.3	11.1		11.2	6.9	846			<2	1.0	4.3	4.0		4.1	7.0	755			<2
04/25/12	0.8	6.3	11.4		11.5	6.9	831	494		<2	1.0	4.4	4.0		4.3	7.0	760	430		<2
04/26/12	0.7	6.1				6.9	805			<2	1.0	4.4			7.0	750				<2
04/27/12	0.8	6.0				6.9	793			<2	1.3	4.3			7.0	745				<2
04/28/12	0.9	6.1				7.0	813			<2	1.2	4.3			7.0	740				<2
04/29/12	0.8	6.4	9.4	9.5	9.5	7.0	823			<2	1.4	4.6	2.7	3.6	2.8	7.0	745			<2
04/30/12	1.0	6.7	8.4		8.8	7.0	806			<2	1.4	4.6	2.5		2.6	7.0	750			<2
Avg	0.8	6.2	8.3	8.2	8.4	7.0	806	479	134	<2	1.0	4.4	2.8	3.7	3.0	7.0	741	430	138	<2
Min	0.6	5.4	6.4	6.5	6.5	6.9	750	454	132	<2	0.6	4.0	1.8	2.4	1.9	6.8	715	422	138	<2
Max	1.3	7.2	11.4	10.4	11.5	7.1	877	494	135	4	1.7	4.6	4.0	4.2	4.3	7.1	760	440	138	<2

Note:

Bolded characters signify an exceedance of a permit limitation

*24-hour composite sample for 001 effluent was invalidated due to improper labeling of the sample bottle.

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 May 2012
 (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
05/01/12	1.0	6.6	7.7		7.8	7.3	819			2	1.3	4.5	3.4		3.5	7.1	760			<2
05/02/12	1.0	6.2	10.2		10.3	7.3	814	486	139	<2	1.1	4.5	4.1		4.4	7.0	770	452	163	<2
05/03/12	1.1	6.2				7.3	817			<2	1.3	4.4			7.1	770				<2
05/04/12	1.1	6.1				7.3	806			<2	1.2	4.6			7.1	770				<2
05/05/12	1.1	5.9				7.2	819			2	1.2	4.3			7.1	765				<2
05/06/12	1.0	6.5	8.2	8.3	8.3	7.3	808			<2	1.1	4.5	2.2	2.8	2.3	7.1	770			<2
05/07/12	1.2	6.6	8.1		8.4	7.3	803			<2	1.1	4.5	2.2		2.3	7.1	772			<2
05/08/12	1.1	6.4	7.9		8.0	7.2	812			<2	1.1	4.7	2.3		2.4	7.1	770			<2
05/09/12	1.1	6.5	7.5		7.6	7.1	823	492		<2	1.0	4.6	2.7		2.8	7.1	773	470		<2
05/10/12	1.1	6.5				7.2	810			<2	1.0	4.5			7.1	775				<2
05/11/12	1.0	6.1				7.2	821			<2	1.1	4.4			7.1	766				<2
05/12/12	0.9	6.4				7.2	838			<2	1.2	4.4			7.1	773				<2
05/13/12	0.8	6.4	7.0	7.1	7.1	7.1	832			<2	1.3	4.6	2.6	3.4	2.7	7.1	767			<2
05/14/12	0.9	6.6	7.3		7.4	7.1	825			<2	1.4	4.7	2.3		2.4	7.1	775			<2
05/15/12	0.8	6.4	7.9		8.0	7.1	844			<2	1.4	4.7	2.5		2.6	7.1	775			<2
05/16/12	0.8	6.2	7.7		7.8	7.1	825	480	145	<2	1.5	4.6	3.1		3.2	7.1	780	454		<2
05/17/12	0.9	6.2				7.2	820			2	1.3	4.4			7.1	775				<2
05/18/12	0.8	5.7				7.2	814			<2	1.3	4.0			7.1	765				<2
05/19/12	0.7	5.8				7.2	808			<2	1.3	4.0			7.1	765				<2
05/20/12	0.7	5.9	7.6	7.7	7.7	7.2	815			2	1.3	4.3	2.6	2.7	2.7	7.1	770			<2
05/21/12	0.9	6.0	6.5		6.6	7.2	812			<2	1.4	4.4	2.4		2.5	7.1	760			<2
05/22/12	0.9	5.8	7.0		7.1	7.2	834			<2	1.3	4.5	2.4		2.5	7.1	765			<2
05/23/12	0.9	6.0	6.2		6.3	7.2	843	468		<2	1.1	4.5	2.3		2.4	7.1	770	442		<2
05/24/12	0.9	6.2				7.2	852			<2	1.0	4.4			7.1	760				<2
05/25/12	0.9	6.9				7.2	849			<2	1.0	4.1			7.2	765				<2
05/26/12	1.0	*				7.2	835			<2	0.9	4.0			7.1	765				<2
05/27/12	0.9	5.9				7.2	842			<2	0.8	3.8			7.1	765				<2
05/28/12	0.9	5.8	7.6	7.6	7.6	7.2	178			2	0.9	4.1	3.2	4.5	3.2	7.1	755			<2
05/29/12	1.0	6.5	6.7		6.8	7.2	367			2	1.2	4.3	2.3		2.4	7.1	760			<2
05/30/12	1.0	6.6	6.7		6.7	7.2	880	472		2	1.1	4.4	2.2		2.4	7.1	765	436		<2
05/31/12	1.0	6.3				7.2	860			<2	1.0	4.3			7.1	755				<2
Avg	1.0	6.2	7.5	7.7	7.6	7.2	791	480	142	<2	1.2	4.4	2.6	3.4	2.8	7.1	767	451	163	<2
Min	0.7	5.7	6.2	7.1	6.3	7.1	178	468	139	<2	0.8	3.8	2.2	2.7	2.3	7.0	755	436	163	<2
Max	1.2	6.9	10.2	8.3	10.3	7.3	880	492	145	2	1.5	4.7	4.1	4.5	4.4	7.2	780	470	163	<2

Note:

Bolded characters signify an exceedance of a permit limitation

*Value not reported due to sample bottle deterioration

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 June 2012
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7} NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	TIN ³ mg/L	pH ⁷ unit	EC ⁷ µhmo/cm	TDS ³ mg/L	Hardness mg/L	Coliform ^{1,2,4} mpn/100mL	Turbidity ^{1,2,7} NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	TIN ³ mg/L	pH ⁷ unit	EC µhmo/cm	TDS ³ mg/L	Hardness mg/L	Coliform ^{1,2,4} 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
06/01/12	1.1	6.2				7.2	847			<2	0.9	4.1				7.1	750			<2
06/02/12	1.0	6.0				7.2	873			<2	0.9	4.1				7.1	745			<2
06/03/12	0.9	6.1	7.1	7.2	7.2	7.2	879			4	0.8	4.2	1.8	1.9	1.9	7.2	745			<2
06/04/12	1.0	6.2	7.7		7.7	7.2	855			<2	0.9	4.2	1.8		1.8	7.2	760			<2
06/05/12	1.0	6.0	7.7		7.7	7.2	859			2	0.8	4.1	1.8		1.8	7.2	760			<2
06/06/12	0.9	6.0	7.0		7.0	7.2	869	458	141	<2	0.8	4.2	2.2		2.2	7.2	765	438	157	<2
06/07/12	0.9	5.9				7.2	861			<2	0.7	4.1				7.2	750			<2
06/08/12	0.9	7.5				7.2	886			<2	0.7	4.0				7.2	755			<2
06/09/12	0.8	5.8				7.2	863			<2	0.7	4.0				7.2	755			<2
06/10/12	0.8	5.8	8.0	8.0	8.0	7.2	828			<2	0.7	4.1	3.4	3.4	3.4	7.2	755			<2
06/11/12	0.8	5.9	7.4		7.4	7.2	840			<2	0.6	4.0	2.9		2.9	7.2	745			<2
06/12/12	0.8	5.7	7.1		7.2	7.2	887			<2	0.7	4.2	2.2		2.3	7.2	750			<2
06/13/12	0.8	5.6	7.4		7.5	7.2	889	474		<2	0.6	4.0	2.3		2.4	7.2	750	436		<2
06/14/12	0.8	5.5				7.2	871			<2	0.6	4.0				7.2	740			<2
06/15/12	0.8	5.2				7.3	890			<2	0.6	3.8				7.2	745			<2
06/16/12	0.8	5.2				7.3	886			<2	0.5	3.8				7.2	740			<2
06/17/12	0.8	5.2	6.3	6.4	6.4	7.3	894			<2	0.6	4.0	2.5	3.2	2.6	7.2	735			<2
06/18/12	0.8	5.5	6.4		6.5	7.3	885			<2	0.7	4.0	2.2		2.3	7.2	730			<2
06/19/12	0.9	5.9	6.8		6.9	7.2	891			<2	0.9	4.2	2.2		2.3	7.2	735			<2
06/20/12	0.9	6.2	6.3		6.4	7.2	887	456	137	<2	0.9	4.3	2.7		2.8	7.2	750	460		<2
06/21/12	0.9	6.2				7.3	890			<2	1.2	4.4				7.2	740			<2
06/22/12	0.8	5.6				7.3	884			<2	1.2	4.2				7.2	730			<2
06/23/12	0.7	5.4				7.3	880			<2	1.4	4.3				7.2	720			<2
06/24/12	0.7	5.5	5.2	5.3	5.3	7.3	878			<2	1.4	4.7	2.7	3.6	2.8	7.2	730			<2
06/25/12	0.9	5.9	5.8		5.8	7.3	890			2	1.2	4.4	2.9		2.9	7.2	735			<2
06/26/12	0.7	6.2	4.4		4.5	7.3	928			<2	1.7	4.5	2.1		2.2	7.3	720			<2
06/27/12	0.7	5.8	6.9		7.0	7.2	887	474		<2	1.2	4.6	2.5		2.6	7.3	915	432		<2
06/28/12	0.7	5.4				7.2	888			<2	1.3	4.4				7.3	735			<2
06/29/12	0.7	5.3				7.2	893			<2	1.1	4.1				7.2	730			<2
06/30/12	0.6	5.4				7.3	913			<2	1.0	4.3				7.2	730			<2
Avg	0.8	5.8	6.7	6.7	6.8	7.2	879	466	139	<2	0.9	4.2	2.4	3.0	2.5	7.2	748	442	157	<2
Min	0.6	5.2	4.4	5.3	4.5	7.2	828	456	137	<2	0.5	3.8	1.8	1.9	1.8	7.1	720	432	157	<2
Max	1.1	7.5	8.0	8.0	8.0	7.3	928	474	141	4	1.7	4.7	3.4	3.6	3.4	7.3	915	460	157	<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 2-2
 Recycled Water Monitoring: Agency-Wide Flow-Weighted TIN & TDS (mg/L)
 (Recycled Water Quality Specifications A.6)

Date	TIN		TDS	
	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jul-11	4.3	5.5	454	468
Aug-11	4.4	5.5	457	467
Sep-11	5.8	5.7	457	465
Oct-11	5.2	5.7	457	463
Nov-11	5.9	5.7	453	461
Dec-11	6.3	5.8	454	460
Jan-12	6.4	5.8	465	459
Feb-12	6.7	5.8	476	461
Mar-12	6.7	5.8	497	463
Apr-12	7.4	5.9	496	466
May-12	6.4	5.9	493	469
Jun-12	5.8	5.9	482	470
Avg	5.9	5.8	470	464
Min	4.3	5.5	453	459
Max	7.4	5.9	497	470
Limit		8.0		550

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021)
 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	3Q11	4Q11	1Q12	2Q12	4Q Run. Avg. ¹	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	27	28	62	32	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	<0.8	<2	<6.7	<2	7	MFL	EPA 100.2
Barium	7	8	5	7	7	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	1.4	2.7	2.4	2.6	2.3	50	µg/L	EPA 200.8
Cyanide	<5	<5	<5	<5	<5	150	µg/L	SM 4500-CN E
Fluoride	0.1	0.3	0.2	0.4	0.3	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	2	3	2	3	2	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314
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
Carbon Tetrachloride	<0.5	<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	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<1	<0.5	<0.5	<0.5	<1	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<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	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<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	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<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	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 ²	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
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	<0.05	<0.05	<0.05	<0.05	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	<0.02	<0.02	<0.02	<0.02	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	<1	<1	2	4	2	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	<0.6	<0.6	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	<0.6	<0.6	<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	4Q Run.				Limit	Unit	Method	
	3Q11	4Q11	1Q12	2Q12				Avg. ¹
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<25	<6	<6	<6	<25	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	<0.010	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<0.05	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	<0.1	<0.1	<0.1	<0.1	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	<0.05	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	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	<5	<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	2.4	2.6	2.4	3.3	2.7	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 228	<0.41	<0.38	<0.26	<0.58	<0.48	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	3.8	<1.7	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<236	<228	<230	<220	<386	20,000	pCi/L	EPA 906
Strontium-90	<0.49	<0.62	<0.40	<0.81	<0.79	8	pCi/L	EPA 905
Gross Beta Particle Activity	10	13	11	9	11	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	<25	27	28	62	26	200	µg/L	EPA 200.8
Copper	2.4	2.6	2.4	3.3	2.7	1000	µg/L	EPA 200.8
Corrosivity ³	-0.2 (Non-Cor.)	-0.4 (Non-Cor.)	-0.4 (Non-Cor.)	-0.3 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	<0.05	0.06	<0.05	0.08	<0.05	0.5	mg/L	S5540C/EPA 425.1
Iron ³	NR	51	NR	300	109	300	µg/L	EPA 200.7
Manganese	8	16	17	148	47	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	3	1	3	4	2	3	TON	SM 2150B
Silver	<0.25	<0.25	0.30	<0.27	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	1	µg/L	EPA 525.2
Zinc	24	27	26	35	28	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	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	BNA-15 3Q11	BNA-15 4Q11	BRK-LYS-25 1Q12	BRK-LYS-25 2Q12				
Total Trihalomethanes (TTHMs)	80	79	<4	<2	40	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

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	2Q12	Unit	Method	Constituent	2Q12	Unit	Method
Metals				Pesticides			
Chromium (III) ¹	2.6	µg/L	EPA 200.8	Aldrin	<0.005	µg/L	EPA 608
Volatile Organic Chemicals (VOCs)				BHC, alpha isomer	<0.01	µg/L	EPA 608
Acrolein	<2	µg/L	EPA 624	BHC, beta isomer	<0.005	µg/L	EPA 608
Acrylonitrile	<2	µg/L	EPA 624	BHC, delta isomer	<0.007	µg/L	EPA 608
Bromoform	<0.5	µg/L	EPA 524.2	4,4'-DDT	<0.01	µg/L	EPA 608
Chlorodibromomethane	3.3	µg/L	EPA 524.2	4,4'-DDE	<0.01	µg/L	EPA 608
Chloroethane	<0.5	µg/L	EPA 524.2	4,4'-DDD	<0.01	µg/L	EPA 608
2-Chloroethylvinylether	<1	µg/L	EPA 624	Dieldrin	<0.01	µg/L	EPA 608
Chloroform	57	µg/L	EPA 524.2	Endosulfan I	<0.01	µg/L	EPA 608
Dichlorobromomethane	17.7	µg/L	EPA 524.2	Endosulfan II	<0.01	µg/L	EPA 608
Methyl Bromide	<1	µg/L	EPA 524.2	Endosulfan Sulfate	<0.01	µg/L	EPA 608
Methyl Chloride	<0.5	µg/L	EPA 524.2	Unregulated Chemicals			
Acid Extractibles				Endrin Aldehyde	<0.01	µg/L	EPA 608
2-Chlorophenol	<1	µg/L	EPA 625	Chromium VI	0.20	µg/L	EPA 218.6
2,4-Dichlorophenol	<2	µg/L	EPA 625	Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
2,4-Dimethylphenol	<1	µg/L	EPA 625	Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
2-Methyl-4,6-dinitrophenol	<2	µg/L	EPA 625	Chemicals w/ State Notification Levels ²			
2,4-Dinitrophenol	<3	µg/L	EPA 625	Boron	0.3	mg/L	EPA 200.7
2-Nitrophenol	<1	µg/L	EPA 625	n-butylbenzene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	<3	µg/L	EPA 625	sec-butylbenzene	<0.5	µg/L	EPA 524.2
4-Chloro-3-methylphenol	<1	µg/L	EPA 625	tert-butylbenzene	<0.5	µg/L	EPA 524.2
Phenol	<1	µg/L	EPA 625	Carbon disulfide	<0.5	µg/L	EPA 524.2
2,4,6-Trichlorophenol	<1	µg/L	EPA 625	Chlorate	310	µg/L	EPA 300.0
Base/Neutral Extractibles				2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthene	<1	µg/L	EPA 625	4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthylene	<1	µg/L	EPA 625	Diazinon	<0.1	µg/L	EPA 525.2
Anthracene	<1	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
Benidine	<5	µg/L	EPA 625	1,4 - Dioxane	1	µg/L	EPA 522
Benzo(a)anthracene	<5	µg/L	EPA 625	Ethylene glycol	<4	mg/L	EPA 8015B
Benzo(b)fluoranthene	<1	µg/L	EPA 625	Formaldehyde	39	µg/L	EPA 556
Benzo(g,h,i)perylene	<2	µg/L	EPA 625	HMX	<0.4	µg/L	EPA 8330B
Benzo(k)fluoranthene	<1	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2
Bis(2-chloroethoxy)methane	<2	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
Bis(2-chloroethyl)ether	<1	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521
Bis(2-chloroisopropyl)ether	<1	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	3.5	ng/L	EPA 521
4-Bromophenyl phenyl ether	<1	µg/L	EPA 625	Propachlor	<0.05	µg/L	EPA 525.2
Butyl benzyl phthalate	<1	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2
2-Chloronaphthalene	<1	µg/L	EPA 625	RDX	<0.4	µg/L	EPA 8330B
4-Chlorophenyl phenyl ether	<1	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	EPA 524.2
Chrysene	<1	µg/L	EPA 625	1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	µg/L	EPA 524.2
Dibenzo(a,h)anthracene	<1	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2
1,3-Dichlorobenzene	<1	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
3,3-Dichlorobenzidine	<5	µg/L	EPA 625	2,4,6-Trinitrotoluene	<0.4	µg/L	EPA 8330B
Diethyl phthalate	<2	µg/L	EPA 625	Vanadium	3	µg/L	EPA 200.8
Dimethyl phthalate	<1	µg/L	EPA 625	Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²			
Di-n-butyl phthalate	<1	µg/L	EPA 625	Acetaminophen	<5	ng/L	LC-MS-MS
2,4-Dinitrotoluene	<1	µg/L	EPA 625	Bis Phenol A (BPA)	<10	ng/L	LC-MS-MS
2,6-Dinitrotoluene	<2	µg/L	EPA 625	Caffeine	<5	ng/L	LC-MS-MS
Di-n-octyl phthalate	<1	µg/L	EPA 625	Carbamazepine	91	ng/L	LC-MS-MS
Azobenzene	<1	µg/L	EPA 625	DEET	180	ng/L	LC-MS-MS
Fluoranthene	<1	µg/L	EPA 625	Estradiol	<5	ng/L	LC-MS-MS
Fluorene	<1	µg/L	EPA 625	Estrone	<5	ng/L	LC-MS-MS
Hexachlorobutadiene	<1	µg/L	EPA 625	Ethinyl Estradiol - 17 alpha	<5	ng/L	LC-MS-MS
Hexachlorocyclopentadiene	<5	µg/L	EPA 625	Fluoxetine	13	ng/L	LC-MS-MS
Hexachloroethane	<1	µg/L	EPA 625	Gemfibrozil	<5	ng/L	LC-MS-MS
Indeno(1,2,3-cd)pyrene	<2	µg/L	EPA 625	Ibuprofen	<15	ng/L	LC-MS-MS
Isophorone	<1	µg/L	EPA 625	Iopromide	410	ng/L	LC-MS-MS
Naphthalene	<1	µg/L	EPA 625	Progesterone	<5	ng/L	LC-MS-MS
Nitrobenzene	<1	µg/L	EPA 625	Testosterone	<5	ng/L	LC-MS-MS
N-Nitroso-di-n-propylamine	<1	µg/L	EPA 625	Sucralose	42000	ng/L	LC-MS-MS
N-Nitrosodiphenylamine	<1	µg/L	EPA 625	Sulfamethoxazole	<5	ng/L	LC-MS-MS
Phenanthrene	<1	µg/L	EPA 625	Trimethoprim	<5	ng/L	LC-MS-MS
Pyrene	<1	µg/L	EPA 625	Triclosan	<10	ng/L	LC-MS-MS

¹ Trivalent chromium is measured as total chromium

² Chemicals with State Notification Levels, Nitrosamines, and EDC, Pharmaceuticals & Other Chemicals

NR: Not Required (Annual Requirement)

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

8th Street Basin									
Site	Depth, bgs	Date	TOC	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
8TH-LYS-00	0	04/19/12	4.48	1.1	0.5	0.3	0.8	<0.01	60
8TH-LYS-00	0	05/16/12	6.66	9.0	7.3	7.2	1.8	<0.01	810
8TH-LYS-00	0	06/13/12	5.35	7.4	6.4	6.3	1.1	<0.01	770
8TH-LYS-35	35	04/19/12	1.53	<0.6	<0.2	<0.1	<0.5	<0.01	375
8TH-LYS-35	35	05/16/12	1.65	<0.6	<0.2	0.1	<0.5	<0.01	380
8TH-LYS-35	35	06/13/12	1.61	<0.6	<0.2	<0.1	<0.5	<0.01	345

Banana Basin									
Site	Depth, bgs	Date	TOC	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
BNA-LYS-00	0	04/04/12	4.85	2.2	1.2	1.0	1.2	<0.01	290
BNA-LYS-00	0	04/11/12	6.77	2.4	0.7	0.5	1.9	<0.01	265
BNA-LYS-00	0	04/18/12	4.73	1.4	0.8	0.5	0.9	<0.01	140
BNA-LYS-00	0	04/25/12	4.60	2.4	2.1	1.4	1.0	<0.01	330
BNA-LYS-00	0	05/02/12	5.21	3.1	2.6	2.6	0.5	<0.01	525
BNA-LYS-00	0	05/09/12	5.45	3.4	2.2	1.8	1.6	<0.01	563
BNA-LYS-00	0	05/16/12	5.94	3.2	1.3	1.3	1.9	<0.01	630
BNA-LYS-00	0	05/23/12	7.09	3.0	2.0	1.5	1.5	<0.01	685
BNA-LYS-00	0	05/31/12	6.41	3.3	2.2	2.1	1.2	0.13	755
BNA-LYS-00	0	06/06/12	6.45	3.2	2.3	1.9	1.3	<0.01	765
BNA-LYS-00	0	06/13/12	6.83	3.2	1.5	1.4	1.8	<0.01	760
BNA-LYS-00	0	06/20/12	6.42	4.6	1.9	1.7	2.9	<0.01	770
BNA-LYS-00	0	06/27/12	6.92	1.9	0.2	0.2	1.7	<0.01	755
BNA-LYS-05	5	04/04/12	2.37	0.8	<0.2	0.1	0.7	<0.01	275
BNA-LYS-05	5	04/11/12	2.44	0.8	<0.2	<0.1	0.8	<0.01	250
BNA-LYS-05	5	04/18/12			<0.2	<0.1		<0.01	295
BNA-LYS-05	5	04/25/12	2.11	<0.6	0.7	<0.1	<0.5	<0.01	245
BNA-LYS-05	5	05/02/12	2.32	0.7	<0.2	0.1	0.6	<0.01	295
BNA-LYS-05	5	05/09/12	2.33	1.3	0.9	0.8	0.5	<0.01	456
BNA-LYS-05	5	05/16/12				0.7		<0.01	625
BNA-LYS-10	10	04/04/12	1.23	1.2	1.2	1.2	<0.5	<0.01	690
BNA-LYS-10	10	04/11/12	1.28	0.8	0.8	0.8	<0.5	<0.01	650
BNA-LYS-10	10	04/18/12	1.21	<0.6	1.0	0.5	<0.5	<0.01	595
BNA-LYS-10	10	04/25/12	1.03	<0.6	0.4	0.3	<0.5	<0.01	510
BNA-LYS-10	10	05/02/12	1.08	<0.6	0.3	0.3	<0.5	<0.01	445
BNA-LYS-10	10	05/09/12	1.14	<0.6	0.2	0.2	<0.5	<0.01	437
BNA-LYS-10	10	05/16/12	1.16	<0.6	0.2	0.2	<0.5	<0.01	465
BNA-LYS-15	15	04/04/12	1.14	0.6	0.6	0.6	<0.5	<0.01	705
BNA-LYS-15	15	04/11/12	1.13	<0.6	0.7	0.5	<0.5	<0.01	595
BNA-LYS-15	15	04/18/12	0.98	<0.6	0.4	0.4	<0.5	<0.01	465
BNA-LYS-15	15	04/25/12	0.93	<0.6	0.3	0.3	<0.5	<0.01	380
BNA-LYS-15	15	05/02/12	0.95	<0.6	0.4	0.3	<0.5	<0.01	350
BNA-LYS-15	15	05/09/12	1.01	1.0	0.4	0.4	0.6	<0.01	364
BNA-LYS-15	15	05/16/12	1.08	<0.6	0.3	0.3	<0.5	<0.01	355
BNA-LYS-25	25	04/04/12	0.78	2.1	2.1	2.1	<0.5	<0.01	650
BNA-LYS-25	25	04/11/12	0.83	1.8	1.8	1.8	<0.5	<0.01	615
BNA-LYS-25	25	04/18/12	0.74	1.6	1.6	1.6	<0.5	<0.01	545
BNA-LYS-25	25	04/25/12	0.69	2.0	1.3	1.3	0.7	<0.01	470
BNA-LYS-25	25	05/02/12	0.71	1.1	1.2	1.1	<0.5	<0.01	445
BNA-LYS-25	25	05/09/12	0.73	0.9	0.9	0.9	<0.5	<0.01	422
BNA-LYS-25	25	05/16/12	0.73	0.6	0.6	0.6	<0.5	<0.01	395
BNA-LYS-25	25	05/23/12	0.78	0.6	0.6	0.6	<0.5	<0.01	410
BNA-LYS-25	25	05/31/12	0.75	1.4	0.8	0.6	0.8	0.17	470
BNA-LYS-25	25	06/06/12	0.79	<0.6	0.5	0.5	<0.5	<0.01	495
BNA-LYS-25	25	06/13/12	0.87	1.4	0.7	0.6	0.8	<0.01	530
BNA-LYS-25	25	06/20/12	1.00	0.6	0.6	0.6	<0.5	<0.01	570
BNA-LYS-25	25	06/27/12	0.90	<0.6	0.5	0.5	<0.5	<0.01	600

Brooks Basin									
Site	Depth, bgs	Date	TOC	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
BRK-LYS-00	0	04/19/12	5.45	2.5	1.4	1.4	1.1	<0.01	365
BRK-LYS-00	0	05/16/12	7.28	3.5	1.0	0.9	2.6	<0.01	515
BRK-LYS-00	0	06/13/12	6.89	3.0	0.2	0.2	2.8	<0.01	695
BRK-LYS-25	25	04/19/12	2.46	0.6	<0.2	<0.1	0.6	<0.01	550
BRK-LYS-25	25	05/16/12	2.60	0.7	<0.2	<0.1	0.7	<0.01	580
BRK-LYS-25	25	06/13/12	2.56	<0.6	<0.2	<0.1	<0.5	<0.01	585

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

Hickory East Basin									
Site	Depth, bgs	Date	TOC	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
HKYE-LYS-00	0	04/04/12	5.76	1.9	0.5	0.5	1.4	<0.01	285
HKYE-LYS-00	0	04/11/12	4.66	4.3	2.7	1.2	1.6	<0.01	700
HKYE-LYS-00	0	04/18/12	4.65		2.0	1.0		<0.01	370
HKYE-LYS-00	0	04/25/12	6.27	3.3	1.1	1.1	2.2	<0.01	640
HKYE-LYS-00	0	05/02/12	5.77	1.4	0.8	0.4	1.0	<0.01	645
HKYE-LYS-00	0	05/09/12	5.81	6.8	4.9	4.8	2.0	<0.01	797
HKYE-LYS-00	0	05/16/12	6.99	5.5	3.5	3.5	2.0	<0.01	795
HKYE-LYS-00	0	05/23/12	5.91	3.9	3.4	3.3	0.6	<0.01	765
HKYE-LYS-00	0	05/31/12	6.29	3.7	2.0	1.7	2.0	0.20	785
HKYE-LYS-00	0	06/06/12	5.86	4.1	3.2	3.2	0.9	<0.01	770
HKYE-LYS-00	0	06/13/12	33.9	7.8	0.2	0.1	7.7	<0.01	925
HKYE-LYS-00	0	06/20/12	45.2	14.6	<0.2	0.1	14.5	<0.01	1520
HKYE-LYS-00	0	06/27/12	149	21.9	0.2	0.1	21.8	<0.01	1680
HKYE-LYS-05	5	04/11/12				0.2		<0.01	400
HKYE-LYS-05	5	04/18/12			1.6	0.8		<0.01	520
HKYE-LYS-05	5	05/09/12		<0.6	0.3	0.3	<0.5	<0.01	528
HKYE-LYS-05	5	05/16/12				0.2		<0.01	625
HKYE-LYS-10	10	04/11/12				1.5		<0.01	500
HKYE-LYS-10	10	04/18/12				1.9		<0.01	505
HKYE-LYS-10	10	05/02/12				2.3		<0.01	555
HKYE-LYS-10	10	05/09/12		2.0	2.0	2.0	<0.5	<0.01	532
HKYE-LYS-10	10	05/16/12				1.8		<0.01	505
HKYE-LYS-25	25	04/04/12	0.85	<0.6	0.4	0.4	<0.5	<0.01	405
HKYE-LYS-25	25	04/11/12	1.47	1.5	0.8	0.7	0.8	<0.01	395
HKYE-LYS-25	25	04/18/12	1.46	1.6	1.8	1.6	<0.5	<0.01	500
HKYE-LYS-25	25	04/25/12	1.69	2.9	1.9	1.9	1.0	<0.01	555
HKYE-LYS-25	25	05/02/12		2.1	2.2	2.1	<0.5	<0.01	615
HKYE-LYS-25	25	05/09/12	1.51	2.6	2.1	2.0	0.6	<0.01	647
HKYE-LYS-25	25	05/16/12	1.25	2.3	1.7	1.7	0.6	<0.01	665
HKYE-LYS-25	25	05/23/12	1.12	1.7	1.8	1.7	<0.5	<0.01	655
HKYE-LYS-25	25	05/31/12	1.08	2.4	1.8	1.7	0.7	0.12	660
HKYE-LYS-25	25	06/06/12	1.23	2.0	2.0	2	<0.5	<0.01	665
HKYE-LYS-25	25	06/13/12	1.47	3.5	2.4	2.4	1.1	<0.01	670
HKYE-LYS-25	25	06/20/12	1.20	2.8	2.8	2.8	<0.5	<0.01	690
HKYE-LYS-25	25	06/27/12	1.15	4.1	3.4	3.4	0.7	<0.01	690
RP3 Basin									
Site	Depth, bgs	Date	TOC	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
RP31-LYS-00	0	04/19/12	5.30	2.3	1.7	1.5	0.8	<0.01	700
RP31-LYS-00	0	05/16/12	7.88	3.1	1.5	1.5	1.6	<0.01	755
RP31-LYS-00	0	06/20/12	7.92	2.4	1.2	1.1	1.3	<0.01	765
RP31-LYS-35	35	04/19/12	0.88	3.0	3.0	3.0	<0.5	<0.01	510
RP31-LYS-35	35	05/16/12	1.05	3.0	3.0	3.0	<0.5	<0.01	530
RP31-LYS-35	35	06/20/12	1.18	2.8	2.8	2.8	<0.5	<0.01	530
San Sevaive Basin									
Site	Depth, bgs	Date	TOC	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
SS5-LYS-00	0	04/04/12	5.82	2.4	1.3	0.9	1.5	0.05	345
SS5-LYS-00	0	04/11/12	5.37	1.4	0.9	0.8	0.6	<0.01	280
SS5-LYS-00	0	04/19/12	5.13	1.6	0.6	0.6	1.0	<0.01	230
SS5-LYS-00	0	04/25/12	5.74	0.9	0.2	0.1	0.8	<0.01	235
SS5-LYS-00	0	05/02/12	5.01	3.7	2.8	2.8	0.9	<0.01	580
SS5-LYS-00	0	05/09/12	5.11	0.7	0.3	0.2	0.5	<0.01	469
SS5-LYS-00	0	06/13/12	5.50	0.9	<0.2	<0.1	0.9	<0.01	450
SS5-LYS-05	5	04/25/12	1.80	0.9	<0.2	<0.1	0.9	<0.01	465
SS5-LYS-05	5	05/02/12	1.87	<0.6	<0.2	<0.1	<0.5	<0.01	400
SS5-LYS-10	10	04/04/12	2.33	<0.6	<0.2	<0.1	<0.5	<0.01	580
SS5-LYS-10	10	04/11/12	2.26			<0.1		<0.01	480
SS5-LYS-10	10	04/19/12	2.48		0.4	<0.1		<0.01	430
SS5-LYS-10	10	04/25/12	2.26	<0.6	<0.2	<0.1	<0.5	<0.01	405
SS5-LYS-10	10	05/02/12	2.46	<0.6	<0.2	<0.1	<0.5	<0.01	345
SS5-LYS-15	15	04/04/12	1.59	<0.6	0.2	0.2	<0.5	<0.01	690
SS5-LYS-15	15	04/11/12	1.58	<0.6	<0.2	<0.1	<0.5	<0.01	670
SS5-LYS-15	15	04/19/12	1.83	<0.6	<0.2	<0.1	<0.5	<0.01	670
SS5-LYS-15	15	04/25/12	1.52	<0.6	<0.2	<0.1	0.5	<0.01	655
SS5-LYS-15	15	05/02/12	1.56	<0.6	<0.2	<0.1	<0.5	<0.01	595
SS5-LYS-15	15	05/09/12	1.92	<0.6	<0.2	<0.1	<0.5	<0.01	530
SS5-LYS-15	15	06/13/12	3.03	<0.6	<0.2	<0.1	<0.5	<0.01	535

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

San Sevaine Basin (cont'd)									
Site	Depth, bgs	Date	TOC	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
SS5-LYS-20	20	04/04/12	1.41	2.6	2.1	2.1	0.5	<0.01	660
SS5-LYS-20	20	04/11/12	1.34	1.7	1.7	1.7	<0.5	<0.01	645
SS5-LYS-20	20	04/19/12	1.58	1.2	1.4	1.2	<0.5	<0.01	645
SS5-LYS-20	20	04/25/12	1.28	0.9	1.0	0.9	<0.5	<0.01	635
SS5-LYS-20	20	05/02/12	1.30	0.6	0.7	0.6	<0.5	<0.01	610
SS5-LYS-20	20	05/09/12	2.14	0.9	0.2	0.2	0.7	<0.01	569
SS5-LYS-20	20	06/13/12	3.24	<0.6	0.5	0.5	<0.5	<0.01	425
SS5-LYS-25	25	04/11/12	4.60						1810
SS5-LYS-25	25	04/25/12		1.7	1.2	1.1	0.6	<0.01	1730
SS5-LYS-25	25	05/02/12				0.3		<0.01	1710
SS5-LYS-30	30	04/04/12			0.2	0.2		<0.01	2190
SS5-LYS-30	30	04/11/12	2.83						2090
SS5-LYS-30	30	04/19/12		<0.6	0.3	0.3	<0.5	<0.01	2080
SS5-LYS-30	30	04/25/12	2.61	1.1	0.4	0.3	0.8	<0.01	2030
SS5-LYS-30	30	05/02/12		1.2	0.3	0.3	0.9	<0.01	1960
SS5-LYS-35	35	04/04/12	2.59	4.4	4.4	4.4	<0.5	<0.01	1480
SS5-LYS-35	35	04/11/12	1.70	4.3	4.3	4.3	<0.5	<0.01	1460
SS5-LYS-35	35	04/19/12	2.07	4.3	4.3	4.3	<0.5	<0.01	1450
SS5-LYS-35	35	04/25/12	1.51	4.9	4.4	4.3	0.6	<0.01	1440
SS5-LYS-35	35	05/02/12	1.58	3.9	3.9	3.9	<0.5	<0.01	1420
Victoria Basin									
Site	Depth, bgs	Date	TOC	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
VCT-LYS-00	0	05/09/12	5.07	5.5	4.3	4.2	1.3	<0.01	744
VCT-LYS-00	0	06/13/12	6.66	3.9	1.9	1.8	2.1	<0.01	770
VCT-LYS-05	5	05/09/12	1.95	3.3	1.9	1.9	1.4	<0.01	449
VCT-LYS-10	10	05/09/12	2.25	0.6	0.6	0.6	<0.5	<0.01	565
VCT-LYS-15	15	05/09/12	1.79	1.1	1.2	1.1	<0.5	<0.01	440
VCT-LYS-25	25	05/09/12	1.31	0.6	0.6	0.6	<0.5	<0.01	490
VCT-LYS-30	30	05/09/12	1.57	<0.6	<0.2	0.1	<0.5	<0.01	512
VCT-LYS-35	35	05/09/12	1.00	<0.6	0.4	0.4	<0.5	<0.01	204
VCT-LYS-35	35	06/13/12	1.41	0.6	0.6	0.6	<0.5	<0.01	575

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.

Table 2-5b
Alternative Monitoring Plans

Turner Basin					
Date	Recycled Water*	Recycled Water*	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)
04/04/12	3.81	4.3	1.14	0.57	0.6
04/11/12	4.17	3.5	1.25	0.63	0.5
04/18/12	4.06	3.9	1.22	0.61	0.5
04/25/12	4.00	4.1	1.20	0.60	0.5
05/02/12	4.21	6.2	1.26	0.63	0.8
05/09/12	4.45	5.0	1.34	0.67	0.7
05/16/12	4.70	5.7	1.41	0.71	0.7
05/17/12	5.00	6.5	1.50	0.75	0.8
05/23/12	4.37	4.3	1.31	0.66	0.6
05/31/12	4.43	5.4	1.33	0.66	0.7
06/06/12	4.13	4.2	1.24	0.62	0.5
06/13/12	3.76	2.0	1.13	0.56	0.3
06/20/12	4.98	6.1	1.49	0.75	0.8
06/27/12	4.34	3.0	1.30	0.65	0.4

Ely Basin				
Date	Recycled Water*	Recycled Water*	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TOC (76% reduction)	TN (52% reduction)
04/04/12	3.81	4.3	0.91	2.1
04/11/12	4.17	3.5	1.00	1.7
04/18/12	4.06	3.9	0.97	1.9
04/25/12	4.00	4.1	0.96	2.0
05/02/12	4.21	6.2	1.01	3.0
05/09/12	4.45	5.0	1.07	2.4
05/16/12	4.70	5.7	1.13	2.7
05/17/12	5.00	6.5	1.20	3.1
05/23/12	4.37	4.3	1.05	2.1
05/31/12	4.43	5.4	1.06	2.6
06/06/12	4.13	4.2	0.99	2.0
06/13/12	3.76	2.0	0.90	1.0
06/20/12	4.98	6.1	1.20	2.9
06/27/12	4.34	3.0	1.04	1.4

Brooks Basin				
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
mg/L==>	TOC	TN	EC	
04/19/12	5.45	2.5	365	
05/16/12	7.28	3.5	515	
06/13/12	6.89	3.0	695	
Date	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25
mg/L==>	TOC	TN**	EC	
04/19/12	2.46	0.6	550	
05/16/12	2.60	0.7	580	
06/13/12	2.56	<0.6	585	
Date	BRK-1/1	BRK-1/1	BRK-1/1	BRK-1/1
mg/L==>	TOC**	TN	EC	Cl
04/03/12	0.59	<0.6	560	71
05/23/12	0.56	0.6	535	62
06/20/12	0.61	1.3	525	58

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

RP3 Basin			
Date	RP3-LYS-35	RP3-LYS-35	RP3-LYS-35
mg/L==>	TOC	TN	EC
04/19/12	0.88	3.0	510
05/16/12	1.05	3.0	530
06/20/12	1.18	2.8	530

Table 2-5b
Alternative Monitoring Plans

San Sevaine 5 Basin				
Date	Recycled Water*	Recycled Water*	San Sevaine 5	San Sevaine 5
mg/L==>	TOC	TN	TOC (78% reduction)	TN (69% reduction)
04/04/12	3.81	4.3	0.84	1.3
04/11/12	4.17	3.5	0.92	1.1
04/18/12	4.06	3.9	0.89	1.2
04/25/12	4.00	4.1	0.88	1.3
05/02/12	4.21	6.2	0.93	1.9
05/09/12	4.45	5.0	0.98	1.6
05/16/12	4.70	5.7	1.03	1.8
05/17/12	5.00	6.5	1.10	2.0
05/23/12	4.37	4.3	0.96	1.3
05/31/12	4.43	5.4	0.97	1.7
06/06/12	4.13	4.2	0.91	1.3
06/13/12	3.76	2.0	0.83	0.6
06/20/12	4.98	6.1	1.10	1.9
06/27/12	4.34	3.0	0.95	0.9

Victoria Basin				
Date	Recycled Water*	Recycled Water*	Victoria	Victoria
mg/L==>	TOC	TN	TOC (78% reduction)	TN (82% reduction)
04/04/12	3.81	4.3	0.84	0.8
04/11/12	4.17	3.5	0.92	0.6
04/18/12	4.06	3.9	0.89	0.7
04/25/12	4.00	4.1	0.88	0.7
05/02/12	4.21	6.2	0.93	1.1
05/09/12	4.45	5.0	0.98	0.9
05/16/12	4.70	5.7	1.03	1.0
05/17/12	5.00	6.5	1.10	1.2
05/23/12	4.37	4.3	0.96	0.8
05/31/12	4.43	5.4	0.97	1.0
06/06/12	4.13	4.2	0.91	0.8
06/13/12	3.76	2.0	0.83	0.4
06/20/12	4.98	6.1	1.10	1.1
06/27/12	4.34	3.0	0.95	0.5

*Recycled water sampled at GenOn Energy (formerly Reliant Energy)

Table 2-6
Diluent Water Monitoring*: Diluent Water

Constituent	W. Cucumonga Creek @	Cucamonga & Deer Creek @	Deer Creek @	Unit	Method
	8th Street Basin 05/14/12	Turner 1&2 Basins 05/16/12	Turner 3&4 Basins 05/16/12		
NO ₂ -N	0.14	0.05	<0.02	mg/L	EPA 300.0
NO ₃ -N	1.3	3.1	0.3	mg/L	EPA 300.0
TDS	536	392	336	mg/L	SM 2540C
Total Coliform	11000	120000	11000	mpn/100ml	SM 9221B
Oil & Grease	<2	<2	<2	mg/L	EPA 1664A
Inorganic Chemicals					
Aluminum	<25	164	129	µg/L	EPA 200.7
Antimony	<1	1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<3.81	<6.67	<6.67	MFL	EPA 100.2
Barium	62	61	50	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	1.1	2.0	1.8	µg/L	EPA 200.7
Cyanide	<0.005	<0.005	<0.005	mg/L	SM 4500-CN E
Fluoride	0.4	0.6	0.3	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	3	2	2	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)					
Benzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)					
Alachlor (Alanex)	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	µg/L	EPA 515.4
Dalapon	<1	2	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	1.4	0.6	<0.6	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	<5	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	11	12	31	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	µg/L	EPA 505

Table 2-6
Diluent Water Monitoring*: Diluent Water

Constituent	W. Cucumonga Creek @	Cucamonga & Deer Creek @	Deer Creek @	Unit	Method
	8th Street Basin 05/14/12	Turner 1&2 Basins 05/16/12	Turner 3&4 Basins 05/16/12		
Heptachlor Epoxide	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	<0.04	0.08	0.25	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts					
Total Trihalomethanes (TTHMs)	<2	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	16	76	13	µg/L	SM 6251B
Bromate	19	<5	<5	µg/L	EPA 300.1/317
Chlorite	<0.01	0.05	<0.01	mg/L	EPA 300.0
Action Level Chemicals					
Copper	9.5	13.5	14.6	µg/L	EPA 200.7
Lead	<0.5	4.0	<0.5	µg/L	EPA 200.8
Radionuclides					
Combined Radium-226 and Radium 228	<0.454	<0.555	<0.561	pCi/L	EPA 903.0
Gross Alpha Particle Activity	2.25	4	3	pCi/L	EPA 900.0/SM7110C
Tritium	<220	<225	<221	pCi/L	EPA 906.0
Strontium-90	<0.771	<0.723	<0.721	pCi/L	EPA 905.0
Gross Beta Particle Activity	6.2	4	<3	pCi/L	EPA 900.0
Uranium	2.7	2.3	0.9	pCi/L	EPA 200.8
Unregulated Chemicals					
Chromium VI	0.05	0.98	1.00	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels					
Boron	0.1	0.1	0.2	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	<2	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 -trimethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	3	10	7	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals					
Aluminum	<25	164	129	µg/L	EPA 200.7
Corrosivity	0.6	1.8	1.3	SI	SM 2330B
Foaming Agents (MBAS)	0.08	0.16	0.05	mg/L	SM 5540C/EPA 425.1
Iron	132	230	123	µg/L	EPA 200.7
Manganese	17	12	5	µg/L	EPA 200.7
Odor--Threshold	8	40	40	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	52	34	21	µg/L	EPA 200.7

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

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	Active	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
601049	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	Active	Monitoring	
San Seavine Basins	600905	Cucamonga Valley Water District No. 39	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
	--	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~ 2000 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)	TDS (mg/L)	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)	Thiocarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	Cl (mg/L)	Hardness (mg CaCO ₃ /L)	Na (mg/L)	SO ₄ (mg/L)	NH ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg CaCO ₃ /L)	Dissolved Oxygen (mg/L)	
Banana & Hickory	Fontana Water Co. - F37a	4/18/12	<0.10	<1.1	7.5	485	310	59	<3	2.8	0.4	<0.05	113	5	<0.5	1	<0.25	<0.2	0.65	23	21	221	19	19	<0.1	<0.02	10.2	11.2	<0.5	159	4.8
	California Speedway - Infield Well	4/18/12	0.15	<1.1	7.6	625	404	<25	<3	1.2	0.4	<0.05	25	1	<0.5	1	<0.25	<0.2	0.43	4	24	282	23	87	<0.1	<0.02	11.2	11.2	<0.5	159	4.8
	California Speedway 2	4/18/12	<0.10	<1.1	7.6	390	244	<25	<3	1.1	0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.15	3	11	171	19	13	<0.1	<0.02	4.9	4.9	<0.5	158	5.0
	Reliant Energy - East Well	4/18/12	<0.10	<1.1	7.7	330	220	<25	<3	1.3	0.0	<0.05	52	3	<0.5	1	<0.25	<0.2	0.75	3	9	132	22	12	<0.1	<0.02	2.1	2.1	<0.5	140	5.1
	Ontario Well No. 20	4/16/12	<0.10	<1.1	7.8	360	236	<25	<3	0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.23	1	8	167	14	6	0.1	0.28	2.2	3.0	<0.5	168	9.9
BH-1/2 *	4/20/12	0.65	<1.1	7.9	530	348	<25	10	<0.5	0.2	<0.05	<15	4	<0.5	3	<0.25	<0.2	11.0	4	62	221	27	32	0.2	0.17	5.1	5.3	<0.5	128	7.4	
Turner	Ontario Well No. 25	4/16/12	<0.10	<1.1	7.7	435	288	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.15	<1	20	189	24	17	<0.1	0.27	4.4	4.7	<0.5	173	9.5
	Ontario Well No. 38	4/16/12	<0.10	<1.1	8.0	325	216	<25	<3	2.4	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.09	<1	6	138	18	8	<0.1	0.27	1.5	2.8	1.0	152	9.1
	T-1/2 *	4/11/12	0.40	<1.1	8.5	320	238	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.29	<1	12	134	17	6	7.5	<0.02	0.3	<0.6	<0.5	144	4.9
	T-2/1 *	4/11/12	0.71	2.2	8.5	335	352	<25	<3	0.6	0.0	<0.05	<15	<1	<0.5	2	<0.25	<0.2	2.06	<1	68	212	30	34	0.2	<0.02	2.3	3.0	<0.7	125	3.4
	T-2/2 *	4/11/12	0.65	23	8.4	495	336	<25	<3	2.0	-0.1	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.17	3	72	190	26	31	<0.1	<0.02	1.8	1.8	<0.5	99	3.6
T-2/2 *	4/24/12							<3						2																	
RP3	Southridge JHS	4/19/12	0.36	<1.1	7.3	985	648	<25	<3	<0.5	0.1	<0.05	102	8	<0.5	1	<0.25	<0.2	0.99	11	102	378	56	78	0.1	<0.02	14.5	14.5	<0.5	227	4.3
	Alcoa MW1	4/19/12	0.16	<1.1	7.7	600	434	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.43	1	24	253	28	43	0.5	<0.02	16.0	16.0	<0.5	170	6.9
	Alcoa MW3	4/19/12	0.30	<1.1	7.2	1090	774	<25	<3	0.5	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.21	<1	120	455	49	58	0.1	<0.02	24.0	24.0	<0.5	239	5.4
	RP3-1/1 *	4/20/12	0.69	<1.1	7.6	475	302	<25	<3	<0.5	-0.1	<0.05	<15	19	<0.5	<1	<0.25	<0.2	1.37	3	18	164	47	12	<0.1	0.21	0.8	1.6	0.6	153	1.0
	RP3-1/2 *	4/26/12	1.21	23	7.6	465	280	<25	10	0.7	0.0	<0.05	16	145	<0.5	2	<0.25	<0.2	5.80	6	41	160	42	26	0.1	0.23	<0.1	<0.6	<0.5	154	1.6
7th & 8th St.	Ontario Well No. 35	4/23/12	<0.10	<1.1	7.9	355	230	<25	<3	<0.5	0.2	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.07	2	13	143	22	22	<0.1	0.25	2.6	2.9	<0.5	146	4.7
	8TH-1/1 *	4/9/12	0.39	<1.1	8.4	390	280	<25	5	<0.5	0.0	<0.05	<15	22	<0.5	1	<0.25	<0.2	9.58	14	55	170	12	17	<0.1	0.17	0.7	0.9	<0.5	95	4.6
	8TH-1/2 *	4/9/12	0.21	<1.1	8.2	300	198	<25	<3	<0.5	-0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.31	2	32	122	15	13	<0.1	0.18	1.8	2.0	<0.5	86	5.6
	8TH-2/1 *	4/10/12	0.40	<1.1	8.2	360	206	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.51	1	12	168	12	11	<0.1	0.23	4.7	4.9	<0.5	146	5.1
	8TH-2/2 *	4/10/12	0.22	<1.1	8.3	445	232	<25	<3	<0.5	-0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.31	<1	16	194	17	25	<0.1	0.22	10.4	10.6	<0.5	141	3.0
Brooks	Pomona Well No. 10	4/23/12	0.11	<1.1	7.8	540	350	<25	<3	3.8	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.11	21	40	257	12	41	<0.1	0.22	8.3	8.5	<0.5	148	6.9
	Pomona Well No. 2	4/23/12	<0.10	<1.1	7.9	615	400	<25	<3	0.8	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.22	3	41	297	13	57	<0.1	0.22	12.0	12.2	<0.5	161	5.9
	BRK-1/1 *	4/3/12	0.59	<1.1	8.3	560	359	<25	15	0.6	0.2	<0.05	<15	4	<0.5	1	<0.25	<0.2	13.2	3	71	236	17	30	<0.1	<0.02	0.5	<0.6	<0.5	151	7.2
	BRK-1/1	5/23/12	0.56			535																			<0.1	<0.02	0.6	0.6	<0.5		
	BRK-1/1	6/20/12	0.61			525																			<0.1	<0.02	0.8	1.3	0.5		
	BRK-1/2 *	4/3/12	0.13	9.2	8.5	595	394	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.33	<1	24	273	15	47	<0.1	<0.02	20.1	20.1	<0.5	150	6.8
	BRK-2/1 *	4/4/12	0.34	2.2	8.4	520	218	<25	50	<0.5	0.3	<0.05	<15	11	<0.5	1	<0.25	<0.2	19.0	2	67	217	10	28	<0.1	<0.02	1.1	1.1	<0.5	132	4.5
BRK-2/2 *	4/4/12	<0.10	<1.1	8.9	345	323	<25	<3	<0.5	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.27	<1	7	102	36	19	0.2	<0.02	6.6	6.6	<0.5	126	4.9	
Ely	Ely Basin MW1 Philadelphia St. *	4/12/12	0.40	<1.1	7.6	360	236	<25	5	<0.5	0.0	<0.05	28	32	<0.5	1	<0.25	<0.2	1.64	<1	30	137	28	19	<0.1	0.21	0.5	0.7	<0.5	124	1.0
	Ely Basin MW2 Walnut St. *	4/17/12	0.63	<1.1	7.4	1150	746	<25	5	<0.5	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	2.57	<1	106	564	36	67	0.1	0.21	33.8	34.0	<0.5	260	5.6
	Riverside Well (43840-CWW)	4/23/12	0.10	1.1	7.8	510	322	<25	<3	<0.5	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.07	16	25	233	21	32	<0.1	0.25	9.2	9.5	<0.5	172	5.2
	Bishop of SB Corp. - DOM	4/23/12	0.17	<1.1	7.6	765	474	<25	<3	0.6	0.4	<0.05	23	2	<0.5	1	<0.25	<0.2	0.28	2	38	360	24	62	<0.1	0.26	18.7	19.0	<0.5	223	5.4
Declerz**	JCSD Well No. 13	4/24/12	<0.10	<1.1	7.6	755	510	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.10	2	132	291	30	27	<0.1	0.12	6.5	6.6	<0.5	131	4.7
	JCSD Well No. 17	4/24/12	0.14	<1.1	7.8	565	380	<25	<3	1.0	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.06	<1	60	219	29	39	<0.1	0.18	11.4	11.6	<0.5	120	3.5
	JCSD Well No. 19	4/24/12	<0.10	<1.1	7.9	355	226	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.11	<1	14	132	28	13	<0.1	0.25	3.7	4.0	<0.5	143	4.4
	DCZ-1/1 *	4/20/12	0.60	<1.1	8.1	325	222	<25	10	<0.5	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	6.65	2	43	120	29	27	0.1	0.21	1.0	2.2	1.0	128	1.7
Victoria & San Sevaline	SS-1/1 *	4/2/12	0.13	<1.1	8.6	290	208	<25	<3	<0.5																					

Table 2-8b
Groundwater Monitoring Well Results (Annual)

Constituent	Ely Basin MW-1 04/12/12	Ely Basin MW-2 04/17/12	SS-1/1 04/02/12	VCT-1/1 04/02/12	VCT-2/2 04/02/12	MCL	Unit	Method
Inorganic Chemicals								
Asbestos	<0.2	<0.2	<0.2	<0.2	<0.2	7	MFL	EPA 100.2
Cyanide	<0.005	<0.005	<0.005	<0.005	<0.005	150	mg/L	SM 4500-CN E
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.3	0.2	0.2	0.1	0.1	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Barium, Dissolved	35	125	43	69	21	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	<0.5	5.3	2.7	1.5	6.8	50	µg/L	EPA 200.8
Copper, Dissolved	<0.5	<0.5	<0.5	<0.5	0.9	1300	µg/L	EPA 200.8
Iron, Dissolved	28	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	2	4	3	8	9	100	µg/L	EPA 200.8
Manganese, Dissolved	32	<1	<1	2	3	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	<0.25	<0.25	<0.25	<0.25	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	<1	<1	1	5	2	5000 (sec.)	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
Carbon Tetrachloride	<0.5	<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	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<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	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<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	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<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	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<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	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<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	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<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	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	<1	1750	µg/L	EPA 524.2

Table 2-8b
Groundwater Monitoring Well Results (Annual)

Constituent	Ely Basin	Ely Basin	SS-1/1	VCT-1/1	VCT-2/2	MCL	Unit	Method
	MW-1 04/12/12	MW-2 04/17/12	04/02/12	04/02/12	04/02/12			
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	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	<0.02	<0.02	<0.02	<0.02	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	<1	<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	<0.6	<0.6	0.7	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	0.6	<0.6	<0.6	<0.6	<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
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	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<0.05	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	<0.1	<0.1	<0.1	<0.1	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	0.36	0.16	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	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	<5	<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
Notification Level Chemicals								
Copper, Dissolved	<0.5	<0.5	<0.5	<0.5	0.9	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<0.413	<0.537	<0.459	0.900	<0.399	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	12	<3	7	<3	15	pCi/l	EPA 900.0
Tritium	<242	<262	<235	<235	<238	20,000	pCi/l	EPA 906
Strontium-90	<0.475	<0.568	<1.55	<0.559	<0.520	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	4	<3	3	<3	50	pCi/l	EPA 900.0
Uranium	<0.7	12	<0.7	<0.7	<0.7	20	pCi/l	EPA 200.8

* MWH invalidated this value. Sample will be re-collected for DBCP analysis during 4Q12.

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

Table 2-8b
Groundwater Monitoring Well Results (Annual)

	8TH-1/1	8TH-1/2	8TH-2/1	8TH-2/2			
Constituent	04/09/12	04/09/12	04/10/12	04/10/12	MCL	Unit	Method
Inorganic Chemicals							
Asbestos	<0.2	<0.2	<0.2	<0.2	7	MFL	EPA 100.2
Cyanide	<0.005	<0.005	<0.005	<0.005	150	mg/L	SM 4500-CN E
Perchlorate	<4	<4	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.4	0.4	0.3	0.3	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	<2	10	µg/L	EPA 200.8
Barium, Dissolved	38	26	34	44	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	2.7	0.9	1.2	3.4	50	µg/L	EPA 200.8
Copper, Dissolved	<0.5	<0.5	<0.5	<0.5	1300	µg/L	EPA 200.8
Iron, Dissolved	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	245	6	2	3	100	µg/L	EPA 200.8
Manganese, Dissolved	22	<1	<1	<1	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	<0.25	<0.25	<0.25	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	14	2	1	<1	5000 (sec.)	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-Dichloropropene	<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
1,1,1,2-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

Table 2-8b
Groundwater Monitoring Well Results (Annual)

	8TH-1/1	8TH-1/2	8TH-2/1	8TH-2/2			
Constituent	04/09/12	04/09/12	04/10/12	04/10/12	MCL	Unit	Method
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
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	<0.6	<0.6	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	1.3	1.3	0.7	1.4	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	<6	<6	<6	<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	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	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	0.22	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	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)	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Notification Level Chemicals							
Copper, Dissolved	<0.5	<0.5	<0.5	<0.5	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 228	<0.432	<0.983	0.390	<0.411	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	3	15	pCi/l	EPA 900.0
Tritium	<243	<242	<243	<241	20,000	pCi/l	EPA 906
Strontium-90	<0.599	<0.607	<0.613	<0.562	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	<3	<3	<3	50	pCi/l	EPA 900.0
Uranium	<0.7	<0.7	0.9	1.1	20	pCi/l	EPA 200.8

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

Table 2-8b
Groundwater Monitoring Well Results (Annual)

	BRK-1/1	BRK-1/2	BRK-2/1	BRK-2/2			
Constituent	04/03/12	04/03/12	04/04/12	04/04/12	MCL	Unit	Method
Inorganic Chemicals							
Asbestos	<0.2	<0.2	<0.2	<0.2	7	MFL	EPA 100.2
Cyanide	<0.005	<0.005	0.005	<0.005	150	mg/L	SM 4500-CN E
Perchlorate	<4	9	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.3	0.3	0.2	0.2	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	3	10	µg/L	EPA 200.8
Barium, Dissolved	26	67	33	48	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	2.0	6.6	7.3	6.8	50	µg/L	EPA 200.8
Copper, Dissolved	0.6	<0.5	<0.5	<0.5	1300	µg/L	EPA 200.8
Iron, Dissolved	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	85	3	173	28	100	µg/L	EPA 200.8
Manganese, Dissolved	4	<1	11	<1	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	<0.25	<0.25	<0.25	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	3	<1	2	<1	5000 (sec.)	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-Dichloropropene	<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
1,1,1,2-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

Table 2-8b
Groundwater Monitoring Well Results (Annual)

	BRK-1/1	BRK-1/2	BRK-2/1	BRK-2/2			
Constituent	04/03/12	04/03/12	04/04/12	04/04/12	MCL	Unit	Method
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
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	EPA531.2
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	0.07	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	1.7	<0.6	<0.6	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	<6	<6	<6	<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	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	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	<0.05	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	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)	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Notification Level Chemicals							
Copper, Dissolved	0.6	<0.5	<0.5	<0.5	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 228	<0.383	<0.434	<0.410	<0.362	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	3	<3	4	5	15	pCi/l	EPA 900.0
Tritium	<241	<236	<236	<232	20,000	pCi/l	EPA 906
Strontium-90	<0.553	<0.611	<0.517	<0.466	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	<3	3	<3	50	pCi/l	EPA 900.0
Uranium	1.7	1.5	1.2	0.8	20	pCi/l	EPA 200.8

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

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	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaïne	Turner	Victoria
Jul-11	191	0	236	285	0	787	1011	0	0	10	31	2	18	0	80	0	16	4	88	0	0	176	14	252	113	0	62
Aug-11	222	0	183	275	68	287	11	55	123	11	0	2	16	4	31	0	25	1	46	135	0	141	0	15	90	7	52
Sep-11	160	0	142	325	447	567	221	145	209	8	0	12	19	32	47	0	43	0	2	395	0	6	20	30	0	186	0
3Q11 Total	572	0	561	885	515	1641	1242	199	332	30	31	16	53	36	157	0	85	5	136	530	0	323	35	297	203	193	114
Oct-11	0	0	0	0	0	83	0	0	0	44	20	18	215	17	138	39	63	30	0	404	80	0	35	182	0	223	0
Nov-11	0	0	0	0	0	0	0	0	0	138	30	50	211	11	123	32	147	25	0	161	36	0	202	97	0	137	15
Dec-11	0	0	0	0	0	0	0	0	0	77	18	16	36	1	79	21	157	9	0	245	98	0	226	164	0	113	25
4Q11 Total	0	0	0	0	0	83	0	0	0	258	67	84	463	29	339	92	368	65	0	810	214	0	463	443	0	473	40
Jan-12	0	0	0	0	0	0	0	0	0	57	48	45	89	49	104	55	233	11	28	161	142	64	16	91	159	102	0
Feb-12	0	0	0	0	0	0	0	0	0	153	21	50	95	59	176	54	330	4	0	167	77	6	83	160	74	97	0
Mar-12	0	0	0	0	0	0	0	0	0	281	44	103	247	53	223	161	421	18	0	72	85	0	79	94	16	35	0
1Q12 Total	0	0	0	0	0	0	0	0	0	490	112	198	431	161	502	270	984	33	28	401	303	70	178	346	248	233	0
Apr-12	0	0	0	0	0	0	0	0	0	223	35	64	135	30	219	75	346	96	34	51	32	0	66	147	4	15	18
May-12	0	0	0	0	0	0	0	0	0	25	0	1	3	0	62	0	54	20	255	45	125	0	40	375	3	56	271
Jun-12	0	0	0	0	0	0	0	0	0	21	0	0	12	2	60	0	44	3	188	79	161	0	2	181	54	65	222
2Q12 Total	0	0	0	0	0	0	0	0	0	269	35	66	150	32	341	75	445	119	477	175	318	0	108	703	61	136	511

* Negative numbers indicate that more water was transferred from a basin than captured. Transferred water was captured in a downstream basin.

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)
3Q11	Jul-11	27.7	0.40	140	39			(319)	(2,613)	(49,851)
	Aug-11	20.9	0.40	140	58			(356)	(2,602)	(46,238)
	Sep-11	55.6	0.40	140	0			(300)	(2,575)	(36,638)
4Q11	Oct-11	0.0			0			(300)	(2,575)	(36,638)
	Nov-11	0.0			0			(300)	(2,575)	(36,638)
	Dec-11	0.0			0			(301)	(2,575)	(36,638)
1Q12	Jan-12	0.0			0			(301)	(2,575)	(36,638)
	Feb-12	0.0			0			(301)	(2,575)	(36,638)
	Mar-12	0.0			0			(301)	(2,575)	(36,638)
2Q12	Apr-12	0.0			0			(301)	(2,575)	(36,638)
	May-12	0.0			0			(301)	(2,575)	(36,638)
	Jun-12	0.0			0			(301)	(2,575)	(36,638)

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)
3Q11	Jul-11	139.8	0.40	140	0			831	(594)	253,909
	Aug-11	135.0	0.40	140	0			966	(528)	277,216
	Sep-11	134.6	0.40	140	0			1,101	(461)	300,463
4Q11	Oct-11	0.0			272			829	(461)	300,463
	Nov-11	0.0			79			751	(461)	300,463
	Dec-11	0.0			0			751	(461)	300,463
1Q12	Jan-12	0.0			0			751	(461)	300,463
	Feb-12	0.0			0			751	(461)	300,463
	Mar-12	0.0			0			750	(461)	300,463
2Q12	Apr-12	0.0			0			750	(461)	300,463
	May-12	0.0			0			750	(461)	300,463
	Jun-12	0.0			0			750	(461)	300,463

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)
3Q11	Jul-11	137.4	0.40	140	0			(1,200)	410	133,186
	Aug-11	95.0	0.40	140	82			(1,186)	456	149,594
	Sep-11	139.9	0.40	140	0			(1,047)	353	116,889
4Q11	Oct-11	0.0			145			(1,192)	353	116,889
	Nov-11	0.0			28			(1,220)	353	116,889
	Dec-11	0.0			0			(1,220)	353	116,889
1Q12	Jan-12	0.0			0			(1,220)	353	116,889
	Feb-12	0.0			27			(1,248)	353	116,889
	Mar-12	0.0			0			(1,248)	353	116,889
2Q12	Apr-12	0.0			0			(1,248)	353	116,889
	May-12	0.0			0			(1,248)	353	116,889
	Jun-12	0.0			0			(1,248)	353	116,889

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)
3Q11	Jul-11	0.0	0.40	140	0			(10)	0	61
	Aug-11	0.1	0.40	140	4			(14)	0	78
	Sep-11	12.6	0.40	140	0			(1)	6	2,246
4Q11	Oct-11	0.0			0			(1)	6	2,246
	Nov-11	0.0			16			(17)	6	2,246
	Dec-11	0.0			1			(18)	6	2,246
1Q12	Jan-12	0.0			1			(19)	6	2,246
	Feb-12	0.0			0			(19)	6	2,246
	Mar-12	0.0			0			(19)	6	2,246
2Q12	Apr-12	0.0			0			(19)	6	2,246
	May-12	0.0			0			(19)	6	2,246
	Jun-12	0.0			0			(19)	6	2,246

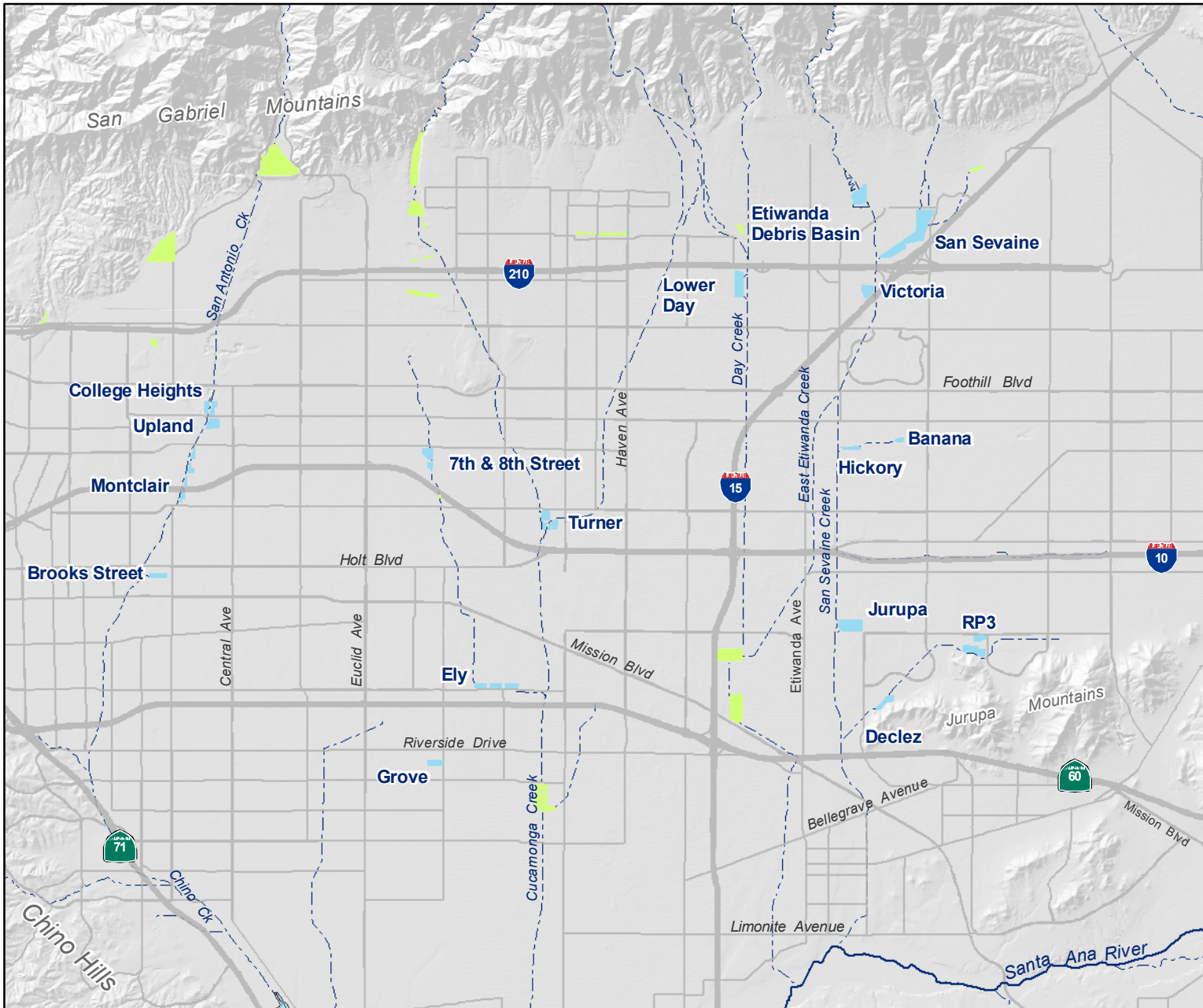
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.
During 2Q11, WFA-treated water was sampled for TDS and TIN (NO₃-N + NO₂-N, assuming no NH₃-N in drinking water) on 04/19/11.

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

Total Project (All Wells)					
Date		Mass Balance			
		Storage (AF)	TIN (kg)	TDS (kg)	
3Q11	Jul-11		(697)	(2,797)	337,305
	Aug-11		(589)	(2,674)	380,650
	Sep-11		(247)	(2,677)	382,960
4Q11	Oct-11		(664)	(2,677)	382,960
	Nov-11		(787)	(2,677)	382,960
	Dec-11		(788)	(2,677)	382,960
1Q12	Jan-12		(789)	(2,677)	382,960
	Feb-12		(817)	(2,677)	382,960
	Mar-12		(817)	(2,677)	382,960
2Q12	Apr-12		(817)	(2,677)	382,960
	May-12		(817)	(2,677)	382,960
	Jun-12		(817)	(2,677)	382,960

Well 4	TIN	TDS	Est. Prod
5/7/08	4.1	360	20%
5/9/08	6.9	370	40%
5/12/08	6.9	370	60%
5/27/08	12	390	80%
6/6/08	14	360	100%

Well 30	TIN	TDS	Est. Prod
6/5/08	2.0	310	20%
6/26/08	4.9	310	40%



- ### Main Map Features
- Recharge Basins in the Recycled Water Groundwater Recharge Program (Recycled Water not initiated)
 - Non-Program Basins
 - Rivers and Streams



Chino Basin Recycled Water Groundwater Recharge Program
Basin Locations

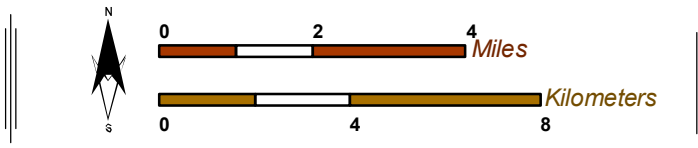
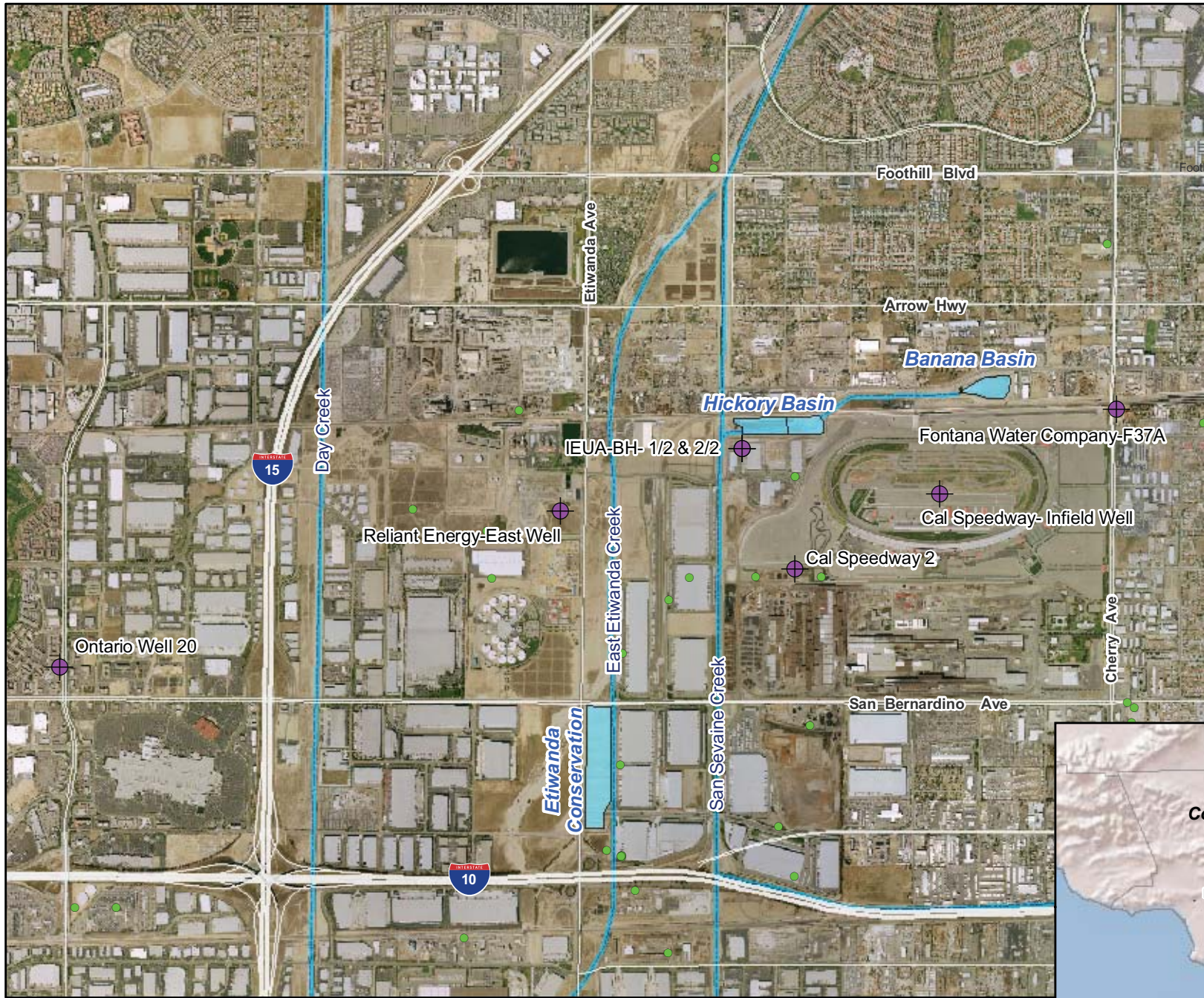






Figure 1-1



Main Map Features

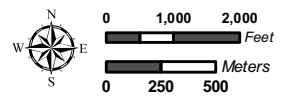
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

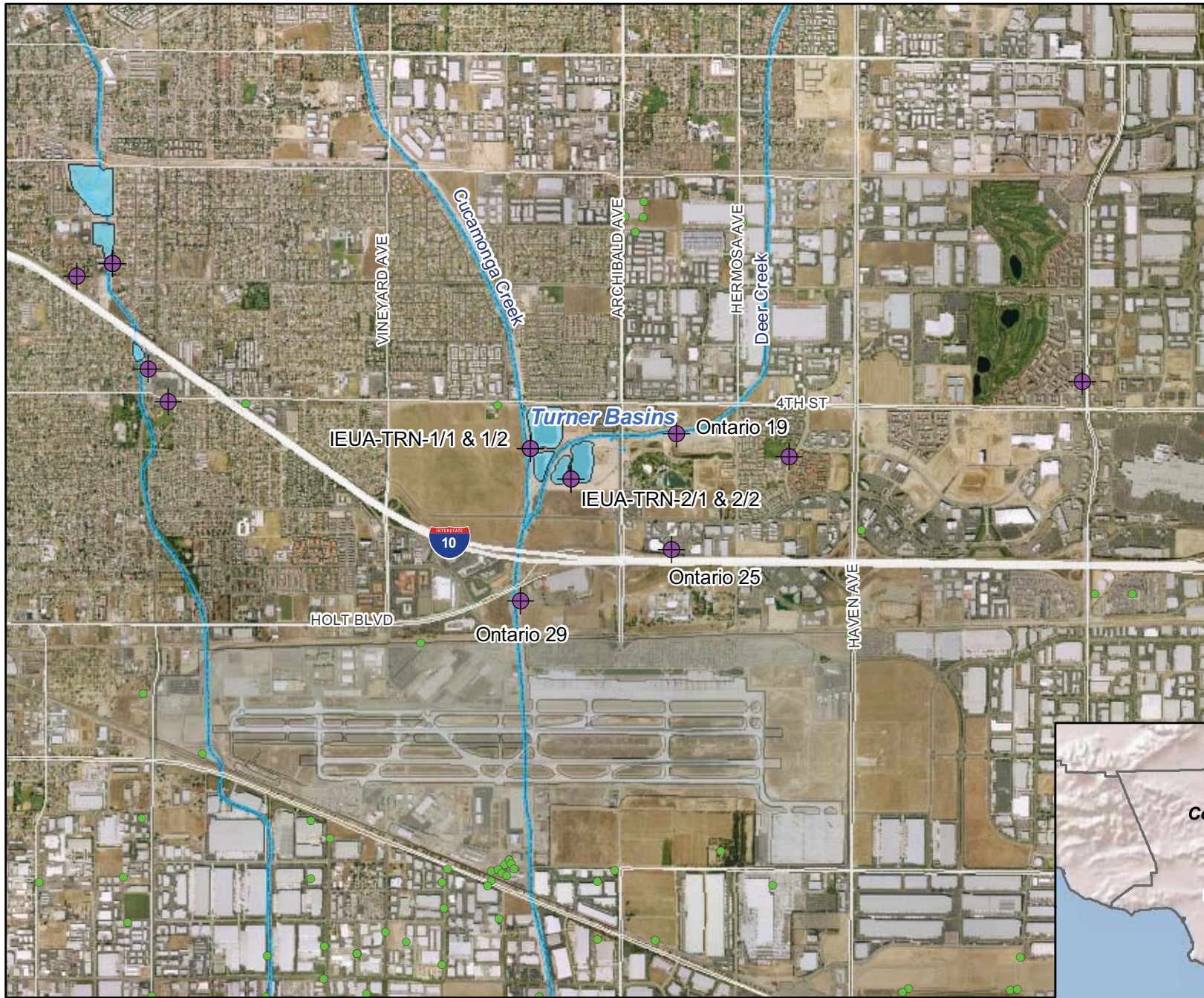


Monitoring Well Network
Hickory and Banana Basins





Figure 2-1

Recycled Water Recharge Program





Main Map Features

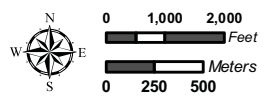
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

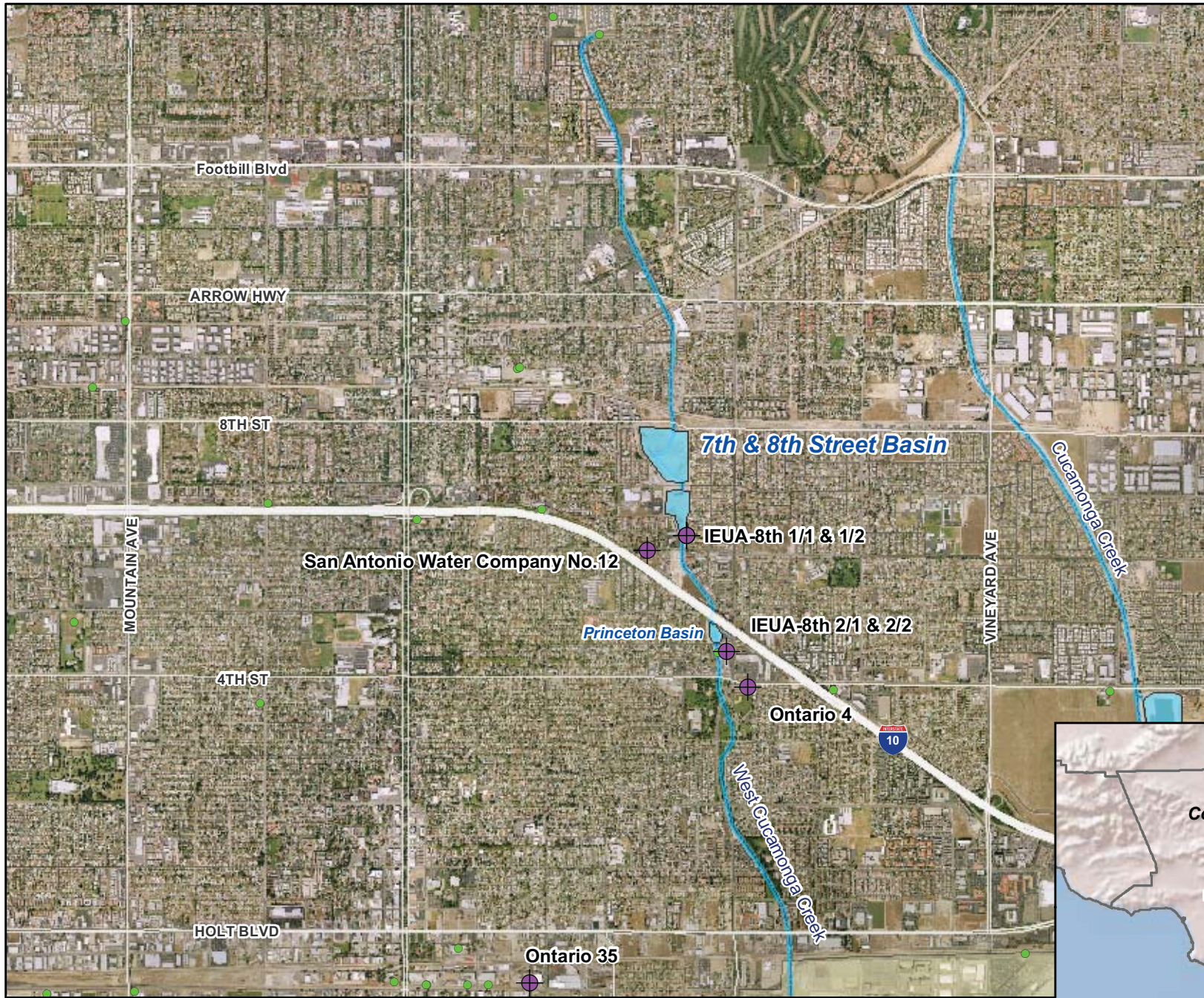


Monitoring Well Network
Turner Basins





Figure 2-2

Recycled Water Recharge Program





Main Map Features

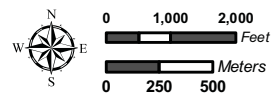
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

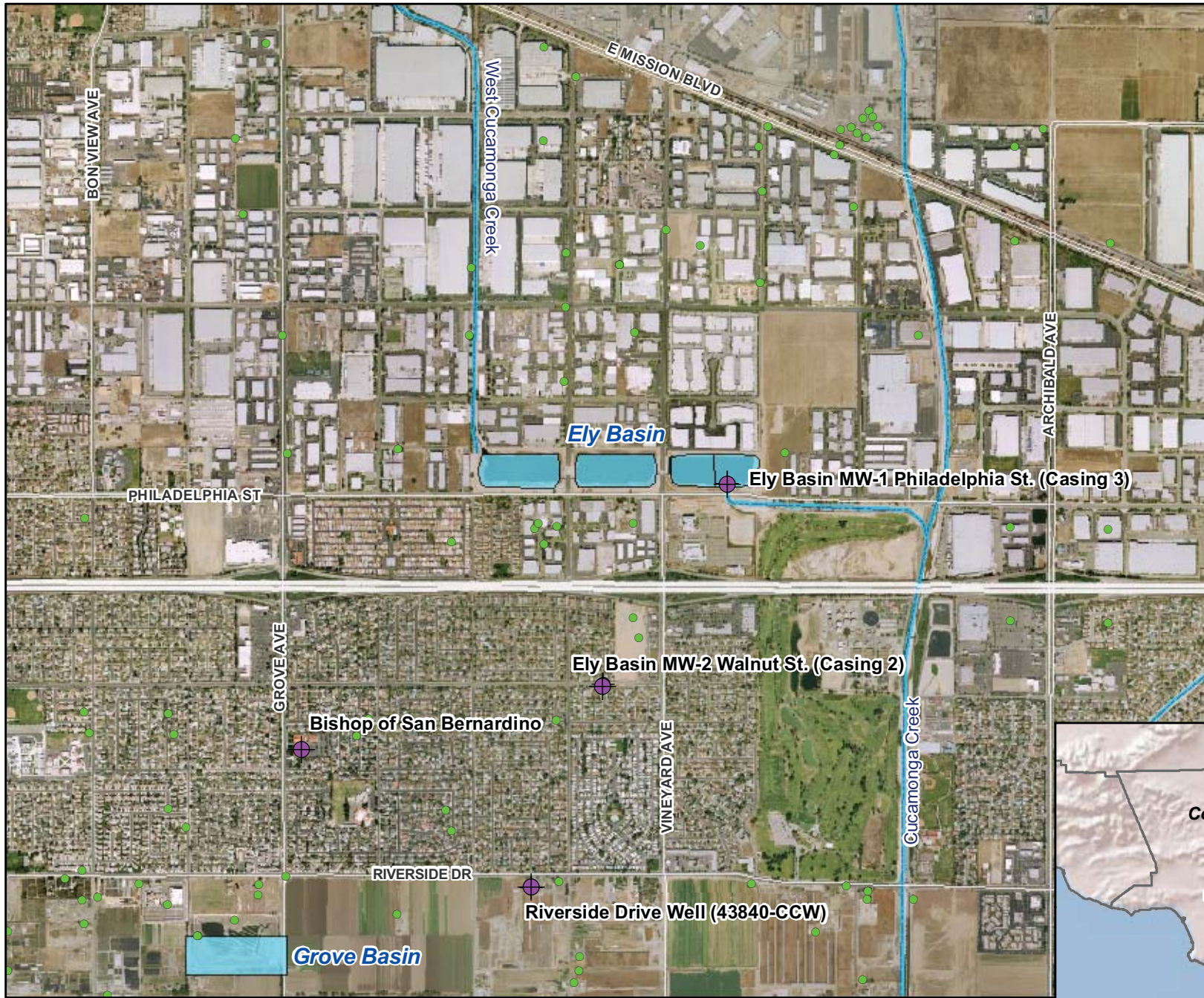


Monitoring Well Network
7th and 8th Street Basin





Figure 2-3

Recycled Water Recharge Program





Main Map Features

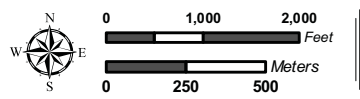
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

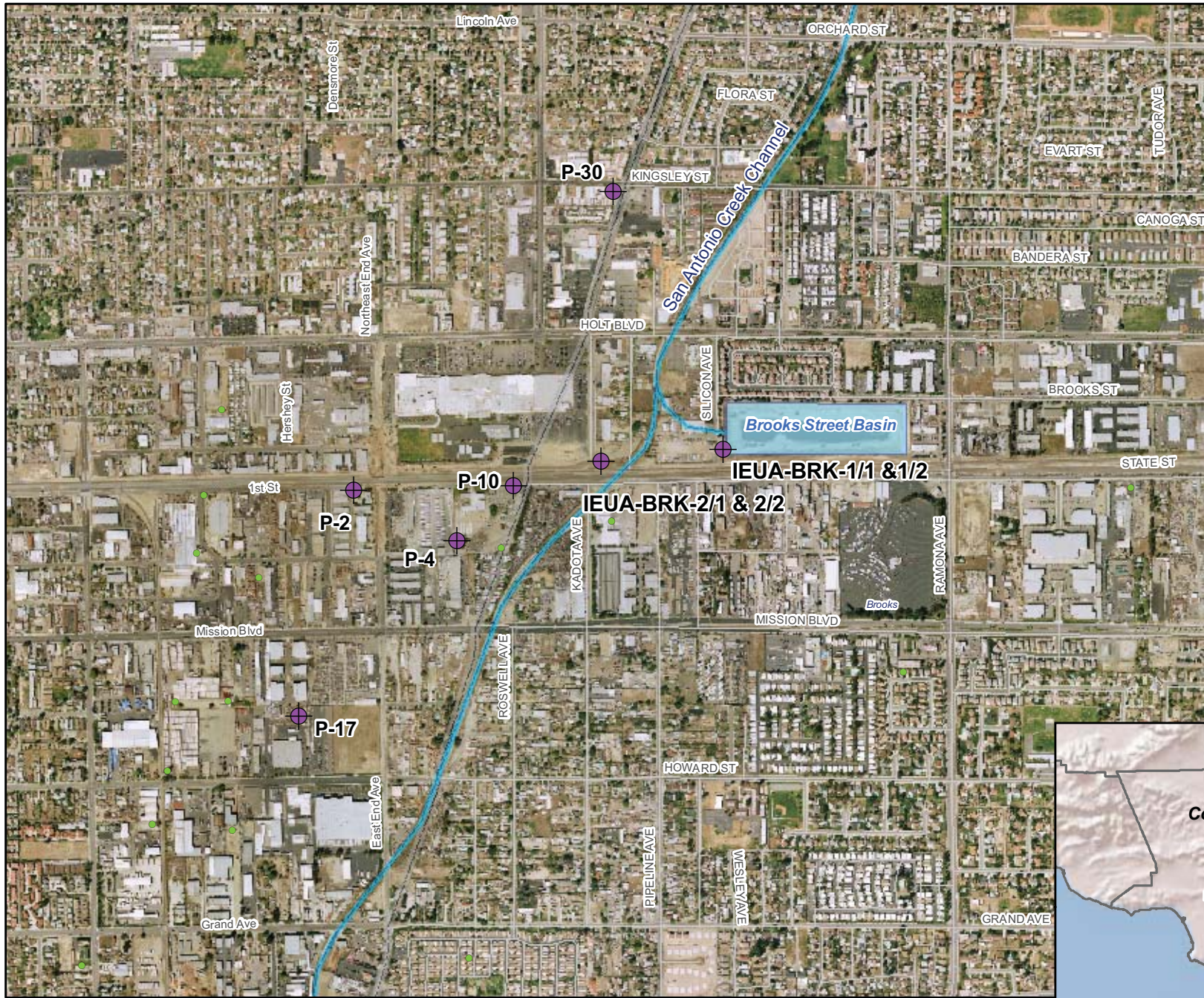


Monitoring Well Network
Ely Basins






Figure 2-4

Recycled Water Recharge Program





Main Map Features

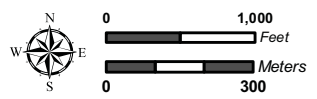
-  Existing Monitoring Well
-  "Other" Wells
-  Rivers/Streams/Creeks
-  Recharge Basins
-  County Boundary

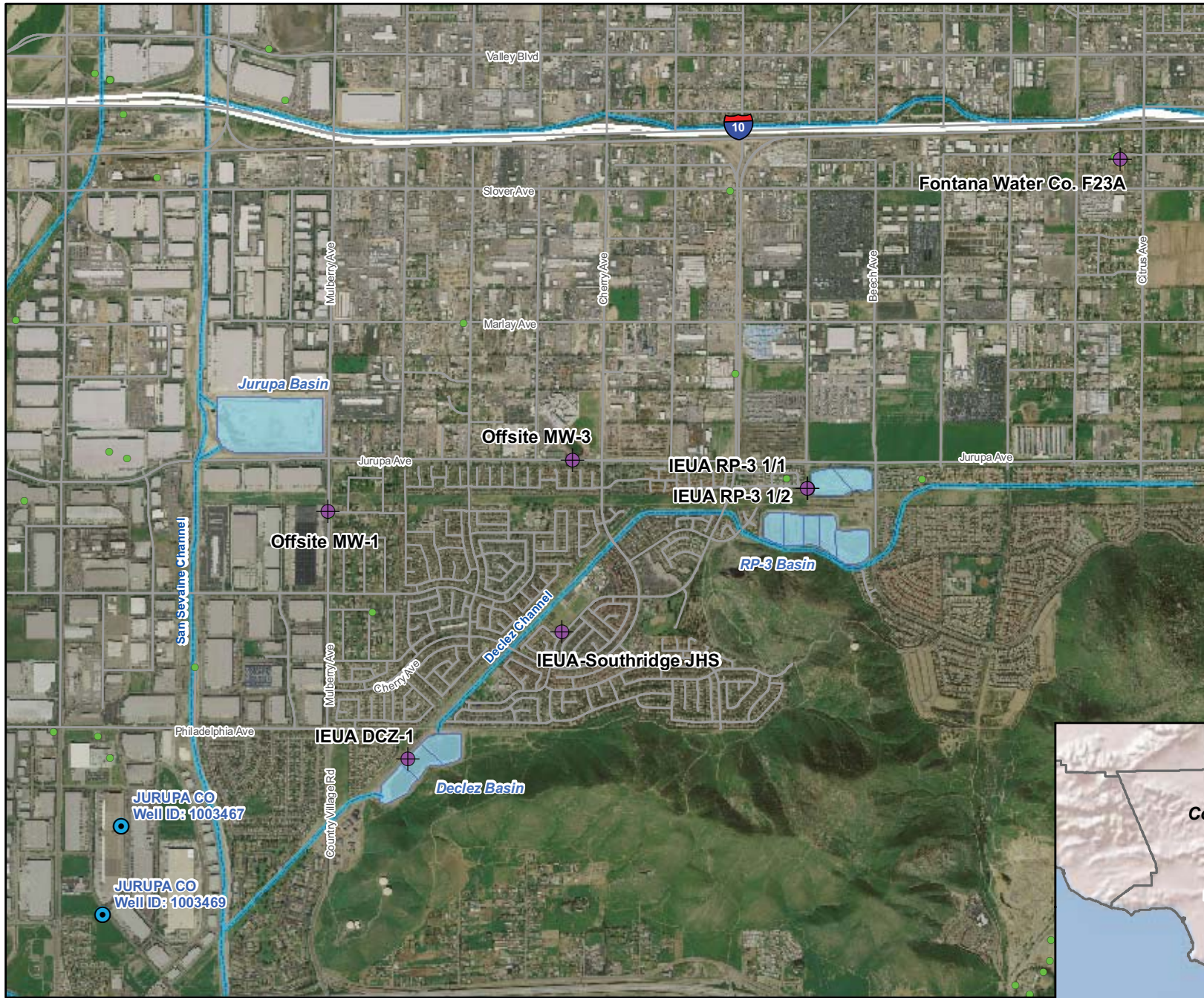


Monitoring Well Network
Brooks Street Basin






Figure 2-5

Recycled Water Recharge Program





Main Map Features

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

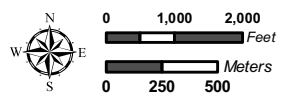


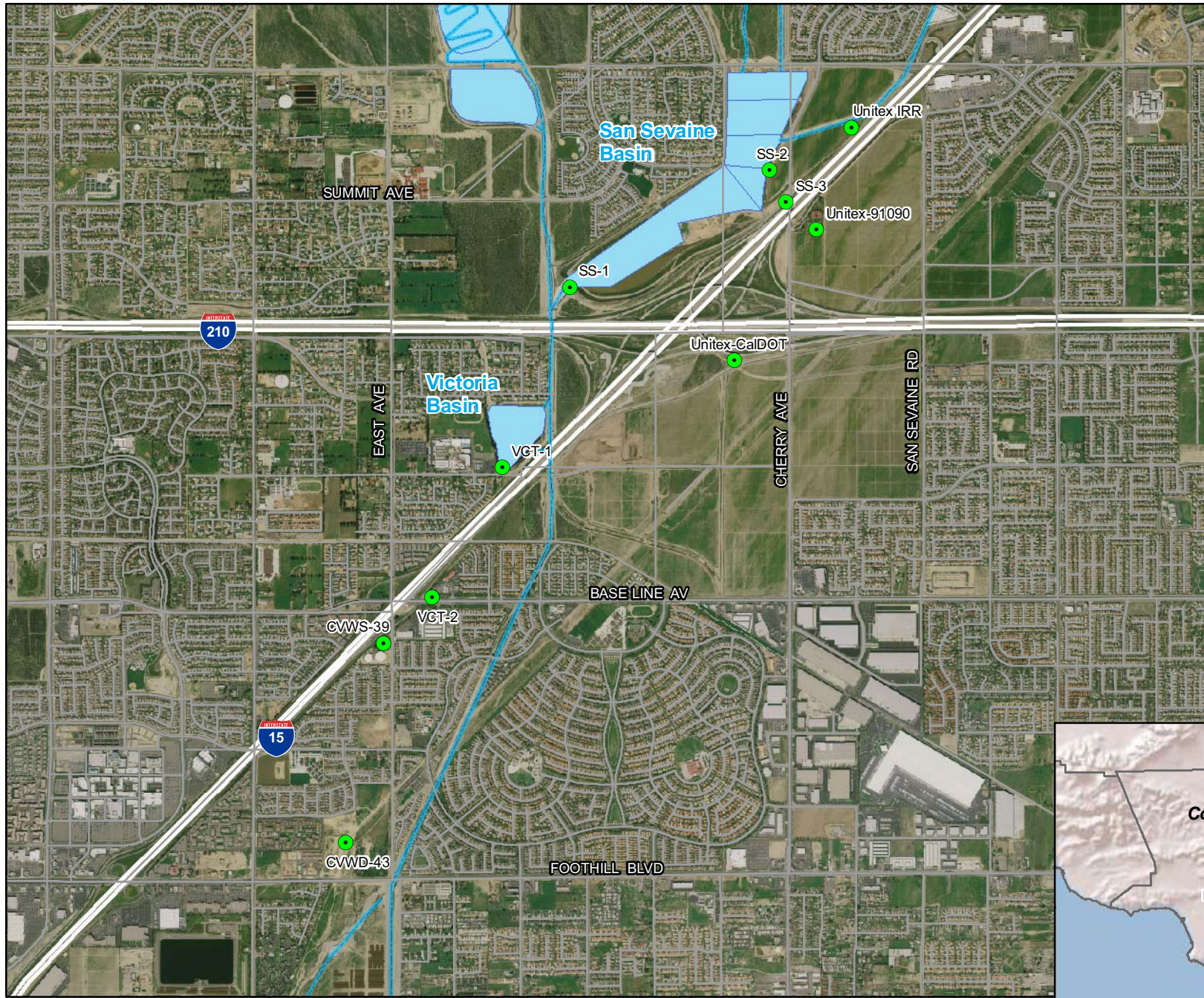
Monitoring Well Network

RP-3 Basin

Figure 2-6

Recycled Water Recharge Program





Main Map Features

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



Monitoring Well Network
San Sevine and Victoria Basin

Figure 2-7

Recycled Water Recharge Program

