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Executive Manager of Operations

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May 13, 2010

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Gerard Thibeault
3737 Main Street, Suite 500
Riverside, California 92501-3348

**Subject: Chino Basin Recycled Water Groundwater Recharge Program
Quarterly Monitoring Report for January through March 2010**

Dear Mr. Thibeault,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the first quarter of 2010 (1Q10), January 1 through March 31, 2010, 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.

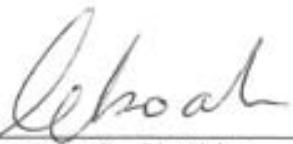
During 1Q10, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order.

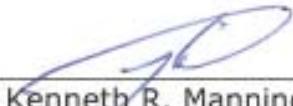
Chino Basin Watermaster hereby certifies that, during the period of January 1 through March 31, 2010, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time from each of the recharge sites using recycled water, namely 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP-3, and Turner 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.

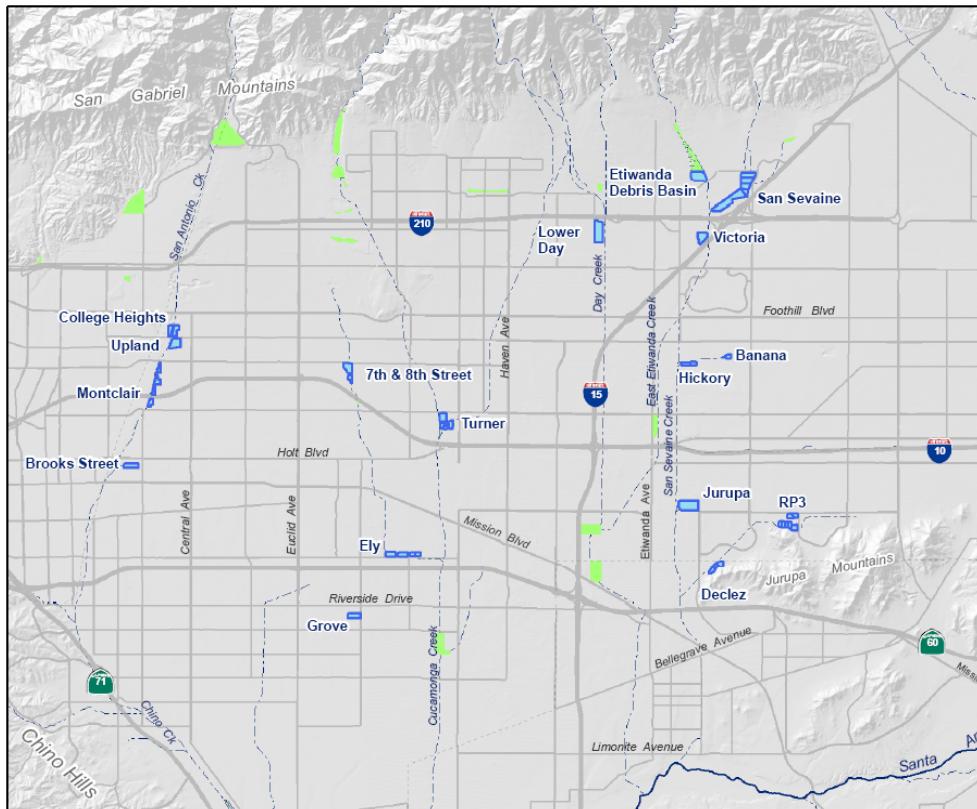
Executed on the 13th day of May 2010 in the Cities of Chino and Rancho Cucamonga.


for Patrick O. Sheilds
Executive Manager of Operations


Kenneth R. Manning
Chief Executive Officer

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report January 1 through March 31, 2010



Prepared by:



May 15, 2010

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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 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 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 (M&RP).

The M&RP 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 first quarter of 2010 (1Q10).

The quarterly report includes the following elements as prescribed in the M&RP:

- 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 previous 60-month averaging period to 120 months for determining a recharge site's recycled water contribution (RWC). The Order 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 RWC.

In February 2010, the National Water Research Institute (NWRI) convened an independent expert panel to review the amendment and evaluate if the amendment provided an equal level of public protection. The panel supported the proposed Darcian method of quantifying site specific groundwater underflow, but recommended that to be conservative (from a mixing standpoint), the fraction of the underflow used should only include the uppermost aquifer layers of higher hydraulic conductivity. The proposed methodology, assessment of groundwater underflow, and recommendations made by the expert review panel were submitted in the 2009 Chino Basin Recycled Water Groundwater Recharge Program Annual Report on May 1, 2010.

C. 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 M&RP. Tables 2-1 through 2-4 include all of the requisite 1Q10 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. None of these limits were exceeded in 1Q10.

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 2Q09 through 1Q10 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 1Q10, the MCLs for inorganic chemicals, volatile organic chemicals (VOCs), non-volatile synthetic organic chemicals (SOCs), radionuclides, and disinfection byproducts; action levels for lead and copper; secondary MCLs; and oil and grease were not exceeded.

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 RRI 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 (DBP), more specifically, Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance sampling for these DBP are usually done at lysimeters actively receiving recycled water from the basins because they are more representative of the recycled water prior to reaching the groundwater table. For the 1Q10 sampling for DBPs, IEUA chose the 10-foot below ground surface lysimeter at the RP-3 Basin as the compliance point in accordance with Recycled Water Quality Specification A.2.

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. Electrical conductivity is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. The basin and lysimeter water quality results are summarized in Table 2-5a. The table includes lysimeter data for RP-3, Brooks, 7th & 8th Street, Hickory, and Banana Basins.

The Turner and Ely Basins have implemented alternative monitoring plans which include the sampling of recycled water at the RRI Energy pipeline and the application of TOC and total nitrogen (TN) correction factors for Soil-Aquifer Treatment at the basins. These correction factors were determined during each basin's start-up period. The correction factors reduce the TOC results by 70 percent for recycled water delivered to Turner cells 1 & 2, 85 percent for recycled water delivered to Turner cells 3 & 4, and 76 percent for recycled water delivered to Ely Basin. The correction factors reduce TN results by 87 percent for recycled water delivered to all four Turner cells and 52 percent for recycled water delivered to Ely Basin. Turner Basin TOC and TN values calculated based on the correction factors provided in the alternative monitoring plan are summarized in Table 2-5b. Ely Basin did not receive recycled water during 1Q10.

C. Diluent Water

For 1Q10, diluent water sampling of local runoff/stormwater was conducted on January 26, 2010 at Ely Basin, Montclair Basin, and Lower Day Basin and February 2, 2010 at Turner cells 1&2 and Turner cells 3&4. State Water Project water was delivered to 7th & 8th Street Basin during the monitoring period. Table 2-6a lists the results of the local runoff/stormwater sampling and analyses. Table 2-6b lists the analysis results for State Water Project water reported by the Metropolitan Water District. 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.

D. Groundwater Monitoring Wells

During 1Q10, 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 7th & 8th Street Basin was monitored by sampling a network of three wells. The groundwater quality within the vicinity of the RP-3 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 three wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of seven wells. The wells in the monitoring well networks for Hickory and Banana Basins, Turner Basin, RP-3, 7th & 8th Street Basin, Brooks Basin, and Ely Basin are summarized in Table 2-7, and presented on Figures 2-1 through 2-5, respectively. The groundwater constituents analyzed from the monitoring wells during quarterly monitoring are presented in Table 2-8.

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 assess the impact recharged water has on downgradient water supplies. Any 1Q10 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 was observed in monitoring wells Southridge JHS, Alcoa MW3, BRK-1/1, and Bishop of San Bernardino Corp. Additional well purging will be conducted at these wells prior to the collection of future samples. IEUA will also video inspect BRK-1/1 as significant sediment fill has been identified within BRK-1/1 well screen. Iron and/or manganese exceeding the secondary MCL were observed at wells Southridge JHS, Alcoa MW1, BRK-2/1, Bishop of San Bernardino, Ely MW-2, and DCZ-1. The high concentrations of iron and manganese are likely related to well casing bacteria and the higher turbidity at these wells.

TDS and EC were slightly higher than the secondary MCLs in wells RP3-1 and Southridge JHS. The wells near RP-3 are located in an area with historically high EC levels (>1,000 µmhos/cm). Most of the monitoring wells in the RP-3 monitoring network have nitrate concentrations above the primary MCL.

These higher levels are characteristic of groundwater quality in the region, where historically NO₃-N concentrations ranges from 10-30 mg/L. TDS and nitrate concentrations in the area of the RP-3 monitoring well network are documented in the CBWM 2008 *State of the Basin Report*. Monitoring wells BRK-1/1, RP3-1/1, Alcoa MW-1, and DCZ-1 have anomalous results for aluminum which may be related to their shallow construction across the water table and relatively short development history, or natural occurrence in local sediments.

The semi-volatile synthetic organic chemicals, 1,2-dibromo-3-chloropropane (3.3 µg/L) and di(2-ethylhexyl) phthalate (4 µg/L) were identified in well 8TH-2/2. These parameters are not found in recycled water and the City of Ontario is being notified of their presence as the owner of the nearest potable use wells. During 4Q09, perchlorate (10 µg/L) and chromium (95.6 µg/L) were identified in BRK-1/2 and BRK-2/1, respectively, during annual sampling. This prompted additional sampling during 1Q10 of the Brooks monitoring wells for confirmation, as these wells are normally monitored for a much shorter list of parameters on a quarterly basis (Table 2-8). The 1Q10 results showed MCL exceedances at BRK-1/1 for chromium and nickel in samples collected January 14, 2010 and March 23, 2010. These parameters are not found in recycled water and the City of Pomona is being notified as the owner of the nearest potable use wells. Recycled water has yet to be identified at well BRK-2/1 based on a lack of increase in EC, as would be anticipated with recycled water arrival.

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, RP-3, and Turner Basins received recycled water this quarter. Imported water was delivered to 7th & 8th Street Basin during 1Q10 to allow Metropolitan Water District to drain and inspect its Rialto Feeder pipeline. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff and stormwater captured during 1Q10 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 Plants RP-1 & RP-4, recharge operations, and monitoring well sampling.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 1Q10 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, RP-3, and Turner Basins. In fact, there are no production wells within the buffer zones of these aforementioned recharge sites. In the cover letter of this report, Watermaster certifies non-pumping in the buffer zones.

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 a list of 40-acre parcels that abut recharge basins and their 500-foot buffers. IEUA has provided SBCDEHS with a list of parcels abutting each recharge basin and a series of maps showing the recharge basins, buffer zones, and township/range/section parcels adjacent the basins and buffer zones.

If a well falls within an abutting parcel, SBCDEHS will review the proposed 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 to 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 that are determined to fall with a 500-foot buffer zone.

6. MVWD ASR Project

The Regional Board has allowed the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project 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. Effective May 1, 2008, MVWD discontinued groundwater injection at the ASR Wells until further notice. 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 January 2010
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC ⁶	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
2;5;10	16					6<pH<9				2.2;23;240	2;5;10	16								
01/01/10	0.6	5.8				7.2	924			<2	0.4	4.0	1.2		1.2	6.9	735			<2
01/02/10	0.5	5.5				7.2	918			<2	0.5	4.0	1.1		1.1	6.9	740			<2
01/03/10	0.5	6.1	6.5		6.5	7.2	933			2	0.5	4.2	0.9		0.9	6.9	740			<2
01/04/10	0.5	5.9				7.2	932			<2	0.5	4.2	1.1		1.1	7.0	735			<2
01/05/10	0.5	6.8	5.8	5.8	5.8	7.2	944	484	142	<2	0.8	4.1	1.4	1.5	1.4	7.1	770	462	135	<2
01/06/10	0.6	6.9				7.2	963			<2	0.5	4.1	1.6		1.6	7.0	740			<2
01/07/10	0.6	7.0	4.7		4.7	7.2	956			<2	0.4	3.9	2.0		2.0	7.0	725			<2
01/08/10	0.6	7.2				7.2	971			<2	0.4	3.9	1.9		1.9	7.0	750			<2
01/09/10	0.6	6.8				7.2	981			<2	0.4	3.9	2.1		2.1	7.0	740			<2
01/10/10	0.5	6.9	5.5		5.5	7.2	978			2	0.4	4.0	1.7		1.7	7.0	730			<2
01/11/10	0.5	6.6				7.2	965			<2	0.4	4.1	1.4		1.4	7.0	725			<2
01/12/10	0.5	6.6	6.4	6.4	6.4	7.3	968			<2	0.4	4.1	1.8	2.4	1.8	7.0	735	428		<2
01/13/10	0.6	6.2				7.2	970			<2	0.4	3.8	2.1		2.1	7.0	720			<2
01/14/10	0.6	6.1	7.2		7.2	7.2	968			<2	0.4	3.8	2.4		2.4	7.0	720			<2
01/15/10	0.6	5.9				7.2	960			<2	0.4	3.7	2.4		2.5	7.0	740			<2
01/16/10	0.6	5.9				7.2	951			<2	0.4	3.8	2.5		2.5	7.0	715			<2
01/17/10	0.6	6.3	7.0		7.1	7.2	951			<2	0.4	3.8	2.1		2.1	7.0	735			<2
01/18/10	0.7	4.1				7.2	945			2	0.4	3.9	1.5		1.6	7.0	745			<2
01/19/10	0.7	5.8	6.7	6.8	6.8	7.2	871	136		<2	0.4	3.9	2.1	2.8	2.2	6.9	710	418		<2
01/20/10	0.7	5.6				7.1	875			<2	0.4	3.8	1.7		1.7	6.9	705			<2
01/21/10	0.6	5.4	6.2		6.2	7.1	841			<2	0.3	3.6	2.3		2.4	6.9	670			<2
01/22/10	0.7	5.4				7.1	754			2	0.3	3.5	2.4		2.4	6.9	655			<2
01/23/10	0.6	5.6				7.2	573			<2	0.3	3.6	2.5		2.6	6.9	645			<2
01/24/10	0.7	5.9	5.8		5.8	7.2	592			<2	0.3	3.8	2.4		2.5	6.9	700			<2
01/25/10	0.9	5.9				7.4	613			2	0.4	4.1	2.2		2.2	7.0	730			<2
01/26/10	0.8	6.0	5.2	5.2	5.2	7.5	618			<2	0.5	4.2	2.5	3.0	2.5	7.0	720	426		<2
01/27/10	0.7	5.8				7.5	650			2	0.6	4.1	2.8		2.8	7.0	715			<2
01/28/10	0.7	6.0	4.9		5.0	7.6	650			<2	0.8	4.0	3.3		3.4	7.0	720			<2
01/29/10	0.7	6.1				7.4	838			2	0.8	3.9	3.6		3.6	7.0	720			<2
01/30/10	0.8	6.5				7.3	936			<2	0.8	4.0	3.9		4.2	7.0	720			<2
01/31/10	1.0	7.0	6.1		6.2	7.1	1168			<2	0.8	4.0	3.7		3.7	7.0	700			<2
Avg	0.6	6.1	6.0	6.1	6.0	7.2	876	484	139	<2	0.5	3.9	2.1	2.4	2.2	7.0	721	434	135	<2
Min	0.5	4.1	4.7	5.2	4.7	7.1	573	484	136	<2	0.3	3.5	0.9	1.5	0.9	6.9	645	418	135	<2
Max	1.0	7.2	7.2	6.8	7.2	7.6	1168	484	142	2	0.8	4.2	3.9	3.0	4.2	7.1	770	462	135	<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. CA0105279, Order No. R8-2006-0010.

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

⁶ RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for February 2010
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC ⁶	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL
2;5;10	2;5;10	16		5 ⁵		6<pH<9		2.2;23;240			2;5;10	16		5 ⁵		6<pH<9		2.2;23;240		
02/01/10	0.9	6.9				7.0	1109			<2	0.8	4.1	3.1		3.1	7.0	695			<2
02/02/10	0.8	7.2	4.6	5.0	5.0	7.2	1094	466	150	<2	0.8	4.1	3.2	3.8	3.2	7.0	700	412	136	<2
02/03/10	0.8	7.1				7.3	1077			4	0.7	4.2	3.2		3.2	7.0	685			<2
02/04/10	0.8	7.2	6.0		6.4	7.4	1076			2	0.7	3.9	3.7		4.0	7.0	675			<2
02/05/10	0.7	7.5				7.3	1093			2	0.6	4.2	3.8		4.0	7.0	670			<2
02/06/10	0.7	6.8				7.4	1044			2	0.6	4.2	3.9		4.1	7.0	695			<2
02/07/10	0.6	6.6	6.3		6.3	7.2	889			2	0.6	3.8	3.6		3.6	7.0	605			<2
02/08/10	0.6	6.4				7.3	980			2	0.6	3.8	2.9		3.1	7.0	645			<2
02/09/10	0.7	6.5	8.2	8.4	8.4	7.3	990			<2	0.5	3.9	3.3	3.9	3.4	7.1	665	404		<2
02/10/10	0.8	5.9				7.1	753			<2	0.4	3.7	3.4		3.6	7.1	655			<2
02/11/10	0.7	6.1	6.8		6.9	7.4	1052			<2	0.4	3.6	4.2		4.3	7.1	654			<2
02/12/10	0.8	6.3				7.4	1066			<2	0.4	3.8	5.9		6.4	7.1	660			<2
02/13/10	0.7	5.9				7.4	1083			<2	0.5	3.8	3.8		4.0	7.1	685			<2
02/14/10	0.7	5.9				7.4	1080			2	0.5	3.9	3.4		3.5	7.1	670			<2
02/15/10	0.7	6.0				7.4	1078			2	0.5	3.7	3.3		3.3	7.1	665			<2
02/16/10	0.8	6.2	7.4	7.4	7.4	7.4	1104	153		<2	0.6	3.8	2.6	3.5	2.7	7.1	670	404		<2
02/17/10	0.6	6.0				7.5	1105			<2	0.7	4.0	3.1		3.1	7.1	660			<2
02/18/10	0.6	5.8	7.1		7.1	7.5	1096			<2	0.7	3.8	3.7		3.9	7.1	655			<2
02/19/10	0.6	5.4				7.5	1085			<2	0.6	3.6	3.8		3.8	7.1	655			<2
02/20/10	0.6	5.2				7.5	1086			<2	0.6	3.5	4.1		4.3	7.1	670			<2
02/21/10	0.5	5.6	7.0		7.0	7.5	1067			<2	0.6	3.7	3.7		3.8	7.1	665			<2
02/22/10	0.5	5.5				7.5	1041			2	0.5	3.6	3.2		3.2	7.1	660			<2
02/23/10	0.5	5.5	7.9	7.9	7.9	7.5	1061			<2	0.5	3.8	3.3	3.8	3.3	7.1	660	406		<2
02/24/10	0.5	5.3				7.5	1075			<2	0.5	3.6	3.4		3.5	7.1	665			<2
02/25/10	0.5	5.7	6.8		6.9	7.5	1072			<2	0.5	3.7	4.1		4.1	7.1	665			<2
02/26/10	0.5	5.5				7.5	1100			<2	0.5	3.6	3.7		3.8	7.1	680			<2
02/27/10	0.5	5.3				7.5	1055			<2	0.6	3.7	3.9		3.9	7.0	685			<2
02/28/10	0.5	5.4	5.0		5.0	7.7	835			<2	0.6	3.7	3.5		3.6	7.0	640			<2
Avg	0.7	6.1	6.6	7.2	6.8	7.4	1045	466	151	<2	0.6	3.8	3.6	3.7	3.7	7.1	666	407	136	<2
Min	0.5	5.2	4.6	5.0	5.0	7.0	753	466	150	<2	0.4	3.5	2.6	3.5	2.7	7.0	605	404	136	<2
Max	0.9	7.5	8.2	8.4	8.4	7.7	1109	466	153	4	0.8	4.2	5.9	3.9	6.4	7.1	700	412	136	<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. CA0105279, Order No. R8-2006-0010.

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

⁶ RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

Table 2-1c
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for March 2010
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2}	TOC	NO ₃ -N	TN	TIN ³	pH	EC ⁶	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL
	2;5;10	16	5 ⁵	6<pH<9						2.2;23;240		2;5;10	16	5 ⁵	6<pH<9					
03/01/10	0.5	5.4			ND	804			2		0.8	4.1	2.9	2.9	7.1	685			<2	
03/02/10	0.6	6.0	6.9	6.9	6.9	7.5	922	462	138	2	0.7	3.9	3.5	4.1	3.5	7.0	710	420	138	<2
03/03/10	0.8	6.6				7.5	1124			<2	0.6	3.9	3.0	3.0	7.1	700			<2	
03/04/10	1.1	6.7	7.2		7.2	7.5	1134			2	0.6	4.1	3.5	3.5	7.0	690			<2	
03/05/10	0.8	6.9				7.5	1138			<2	0.6	4.1	3.6	3.6	7.1	690			<2	
03/06/10	0.8	6.4				7.5	1147			<2	0.8	4.2	3.6	3.6	7.1	695			<2	
03/07/10	1.1	7.0	6.7		6.7	7.5	1110			<2	0.8	4.3	3.5	3.5	7.1	680			<2	
03/08/10	0.9	6.6				7.5	1082			2	0.8	4.4	3.0	3.0	7.1	690			<2	
03/09/10	0.7	7.8	6.8	6.8	6.8	7.6	1082			2	0.7	5.2	2.4	2.8	2.4	7.1	700	406		<2
03/10/10	0.7	5.9				7.5	1084			2	0.6	3.8	2.8	2.8	7.1	685			<2	
03/11/10	0.8	6.6	6.7		6.7	7.5	1108			<2	0.7	3.9	3.1	3.1	7.1	680			<2	
03/12/10	0.9	6.6				7.5	1132			<2	0.7	3.8	3.3	3.3	7.1	680			<2	
03/13/10	1.0	6.5				7.5	1120			<2	0.7	3.9	3.5	3.5	7.1	695			<2	
03/14/10	0.9	6.2	6.1		6.1	7.6	1021			<2	0.7	4.0	3.5	3.5	7.1	680			2	
03/15/10	0.8	6.0				7.3	969			<2	0.7	4.2	3.4	3.4	7.1	675			<2	
03/16/10	0.9	6.3	6.0	6.0	6.0	7.2	981	144		<2	0.7	4.2	3.1	3.8	3.1	7.1	690	412		<2
03/17/10	0.9	6.2				7.2	990			2	0.5	4.1	2.6	2.6	7.2	675			<2	
03/18/10	0.9	6.5	6.6		6.6	7.2	1002			2	0.5	4.0	2.8	2.8	7.2	680			<2	
03/19/10	1.2	6.1				7.2	1016			2	0.4	3.8	2.7	2.7	7.2	675			<2	
03/20/10	1.1	6.2				7.2	1011			<2	0.4	3.8	3.0	3.0	7.2	680			<2	
03/21/10	1.1	6.0	6.6		6.6	7.3	992			<2	0.4	3.9	3.0	3.0	7.2	675			<2	
03/22/10	1.1	5.9				7.3	984			<2	0.4	4.0	3.1	3.1	7.2	680			<2	
03/23/10	1.0	6.0	6.2	6.2	6.2	7.3	995			<2	0.4	4.0	3.0	3.6	3.0	7.3	685	412		<2
03/24/10	0.9	5.9				7.3	998			<2	0.4	4.0	3.1	3.1	7.2	670			2	
03/25/10	0.9	5.9	5.8		5.8	7.3	990			2	0.3	3.8	3.3	3.3	7.2	685			<2	
03/26/10	0.8	5.4				7.3	1000			<2	0.4	3.7	3.5	3.5	7.2	680			<2	
03/27/10	0.7	5.2				7.3	1001			<2	0.4	3.6	3.7	3.7	7.3	690			<2	
03/28/10	0.7	5.2	6.4		6.4	7.3	990			2	0.3	3.6	3.4	3.4	7.2	675			<2	
03/29/10	0.7	5.1				7.3	981			<2	0.4	3.8	3.3	3.3	7.2	675			<2	
03/30/10	0.7	6.0	5.8	5.8	5.8	7.3	992	152		<2	0.4	3.8	3.2	3.7	3.2	7.3	695	408		<2
03/31/10	0.7	5.2				7.3	994			<2	0.4	3.8	3.5	3.5	7.3	680			<2	
Avg	0.9	6.1	6.4	6.3	6.4	7.4	1029	462	145	<2	0.5	4.0	3.2	3.6	3.2	7.2	685	412	138	<2
Min	0.5	5.1	5.8	5.8	5.8	7.2	804	462	138	<2	0.3	3.6	2.4	2.8	2.4	7.0	670	406	138	<2
Max	1.2	7.8	7.2	6.9	7.2	7.6	1147	462	152	2	0.8	5.2	3.7	4.1	3.7	7.3	710	420	138	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. CA0105279, Order No. R8-2006-0010.

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

⁶ RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

ND: No Discharge

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.
Apr-09	6.6	6.8	509	497
May-09	5.8	6.6	500	497
Jun-09	5.4	6.5	505	498
Jul-09	5.0	6.4	512	500
Aug-09	4.5	6.3	498	498
Sep-09	4.0	6.0	497	497
Oct-09	4.6	5.8	499	497
Nov-09	4.8	5.7	490	496
Dec-09	5.5	5.6	494	496
Jan-10	5.7	5.6	493	496
Feb-10	6.2	5.4	489	498
Mar-10	6.4	5.4	482	497
Avg	5.4	6.0	497	497
Min	4.0	5.4	482	496
Max	6.6	6.8	512	500
Limit		8.0		550

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: Recycled Water Quality Specifications A.1, A.2, A.3, & A.15

Constituent	2Q09	3Q09	4Q09	1Q10	4Q Run.			Method
					Avg. ¹	Limit	Unit	
Inorganic Chemicals								
Aluminum	26	30	<25	<25	<25	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	<0.8	<0.2	<0.4	<0.2	<0.4	7	MFL	EPA 100.2
Barium	13	4	5	5	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	1.2	1.6	1.6	0.9	1.3	50	µg/L	EPA 200.8
Cyanide	<5	<5	<5	<5	<5	150	µg/L	SM 4500-CN E
Fluoride	0.1	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	2	µg/L	EPA 245.2
Nickel	2	2	2	2	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	<0.5	<0.5	<1	<1	<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
1,1,2,2-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	<0.3	<0.3	<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	4	4	3	2	3	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	<20	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: Recycled Water Quality Specifications A.1, A.2, A.3, & A.15

Constituent	2Q09	3Q09	4Q09	1Q10	4Q Run.			Method
					Avg. ¹	Limit	Unit	
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	0.1	<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	5.8	4.5	3.4	3.7	4.4	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	0.86	<0.61	0.46	<0.14	<0.61	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	15	pCi/L	EPA 900.0
Tritium	<210	<220	<280	<220	<280	20,000	pCi/L	EPA 906
Strontium-90	<1.07	<0.54	<0.68	<0.19	<1.07	8	pCi/L	EPA 905
Gross Beta Particle Activity	6	8	8	6	7	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	26	30	<25	<25	<25	200	µg/L	EPA 200.8
Copper	5.8	4.5	3.4	3.7	4.4	1000	µg/L	EPA 200.8
Corrosivity ³	0.1 (Non-Cor.)	-0.1 (Non-Cor.)	-0.4 (Non-Cor.)	-0.4 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	<0.05	<0.05	NR	0.06	<0.07	0.5	mg/L	S5540C/EPA 425.1
Iron ³	44	NR	NR	NR	75	300	µg/L	EPA 200.7
Manganese	4	11	45	10	17	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	3	NR	3	3	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<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	40	17	17	26	25	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ⁴	2	<1	<1	<1		1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	7	<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	BRK-25	RP3-25	BRK-25	RP3-10				
Total Trihalomethanes (TTHMs)	<0.5	5	11	9	4.1	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<1	<1	<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	1Q10	Unit	Method		Constituent	1Q10	Unit	Method				
Metals												
Chromium (III) ¹	0.9	µg/L	EPA 200.8		Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2				
Volatile Organic Chemicals (VOCs)												
Acrolein	NR	µg/L	EPA 624		Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2				
Acrylonitrile	NR	µg/L	EPA 624	Chemicals w/ State Notification Levels ²								
Bromoform	<0.5	µg/L	EPA 524.2	Boron	0.3	mg/L	EPA 200.7					
Chlorodibromomethane	2.9	µg/L	EPA 524.2	n-butylbenzene	<0.5	µg/L	EPA 524.2					
Chloroethane	<0.5	µg/L	EPA 524.2	sec-butylbenzene	<0.5	µg/L	EPA 524.2					
2-Chloroethylvinylether	NR	µg/L	EPA 624	tert-butylbenzene	<0.5	µg/L	EPA 524.2					
Chloroform	111	mg/L	EPA 524.2	Carbon disulfide	<0.5	µg/L	EPA 524.2					
Dichlorobromomethane	22	µg/L	EPA 524.2	Chlorate	NR	µg/L	EPA 300.0					
Methyl Bromide	<1	µg/L	EPA 524.2	2-Chlorotoluene	<0.5	µg/L	EPA 524.2					
Methyl Chloride	<0.5	µg/L	EPA 524.2	4-Chlorotoluene	<0.5	µg/L	EPA 524.2					
Acid Extractibles												
2-Chlorophenol	NR	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2					
2,4-Dichlorophenol	NR	µg/L	EPA 625	1,4 - Dioxane	NR	µg/L	EPA 522					
2,4-Dimethylphenol	NR	µg/L	EPA 625	Ethylene glycol	NR	mg/L	EPA 8015B					
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625	Formaldehyde	NR	µg/L	SM 6252/EPA 8315					
2,4-Dinitrophenol	NR	µg/L	EPA 625	HMX	NR	µg/L	EPA 8330B					
2-Nitrophenol	NR	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2					
4-Nitrophenol	NR	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2					
4-Chloro-3-methylphenol	NR	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	NR	µg/L	EPA 521					
Phenol	NR	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521					
2,4,6-Trichlorophenol	NR	µg/L	EPA 625	Propachlor	NR	µg/L	EPA 525.2					
Base/Neutral Extractibles												
Acenaphthene	NR	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2					
Acenaphthylene	NR	µg/L	EPA 625	RDX	NR	µg/L	EPA 8330B					
Anthracene	NR	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	542.2 MOD					
Benzidine	NR	µg/L	EPA 625	1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	µg/L	EPA 524.2					
Benzo(a)anthracene	NR	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2					
Benzo(b)fluoranthene	NR	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2					
Benzo(g,h,i)perylene	NR	µg/L	EPA 625	2,4,6-Trinitrotoluene	NR	µg/L	EPA 8330B					
Benzo(k)fluoranthene	NR	µg/L	EPA 625	Vanadium	NR	µg/L	EPA 200.8					
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625	Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²								
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625	Hormones								
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625	Ethynodiol estradiol	NR	ng/L	HPLC/MS-SEDC					
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625	17-B estradiol	NR	ng/L	HPLC/MS-SEDC					
Butyl benzyl phthalate	NR	µg/L	EPA 625	Estrone	NR	ng/L	HPLC/MS-SEDC					
2-Chloronaphthalene	NR	µg/L	EPA 625	"Industrial" Endocrine Disruptors								
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625	Bisphenol A	NR	ng/L	HPLC/MS-SEDC					
Chrysene	NR	µg/L	EPA 625	Nonylphenol and nonylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC					
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625	Octylphenol and octylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC					
1,3-Dichlorobenzene	NR	µg/L	EPA 625	PBDE 17	NR	ng/L	8270C SIM					
3,3-Dichlorobenzidine	NR	µg/L	EPA 625	PBDE 28	NR	ng/L	8270C SIM					
Diethyl phthalate	NR	µg/L	EPA 625	PBDE 71	NR	ng/L	8270C SIM					
Dimethyl phthalate	NR	µg/L	EPA 625	PBDE 47	NR	ng/L	8270C SIM					
Di-n-butyl phthalate	NR	µg/L	EPA 625	PBDE 66	NR	ng/L	8270C SIM					
2,4-Dinitrotoluene	NR	µg/L	EPA 625	PBDE 100	NR	ng/L	8270C SIM					
2,6-Dinitrotoluene	NR	µg/L	EPA 625	PBDE 99	NR	ng/L	8270C SIM					
Di-n-octyl phthalate	NR	µg/L	EPA 625	PBDE 85	NR	ng/L	8270C SIM					
Azobenzene	NR	µg/L	EPA 625	PBDE 154	NR	ng/L	8270C SIM					
Fluoranthene	NR	µg/L	EPA 625	PBDE 153	NR	ng/L	8270C SIM					
Fluorene	NR	µg/L	EPA 625	PBDE 138	NR	ng/L	8270C SIM					
Hexachlorobutadiene	NR	µg/L	EPA 625	PBDE 128	NR	ng/L	8270C SIM					
Hexachlorocyclopentadiene	NR	µg/L	EPA 625	PBDE 183	NR	ng/L	8270C SIM					
Hexachloroethane	NR	µg/L	EPA 625	PBDE 190	NR	ng/L	8270C SIM					
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625	PBDE 203	NR	ng/L	8270C SIM					
Isophorone	NR	µg/L	EPA 625	PBDE 206	NR	ng/L	8270C SIM					
Naphthalene	NR	µg/L	EPA 625	PBDE 209	NR	ng/L	8270C SIM					
Nitrobenzene	NR	µg/L	EPA 625	Pharmaceuticals & Other Substances								
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625	Acetaminopen	NR	ng/L	HPLC/MS-SEDC					
N-Nitrosodiphenylamine	NR	µg/L	EPA 625	Amoxicillin	NR	Not Available ³						
Phenanthrene	NR	µg/L	EPA 625	Azithromycin	NR	Not Available ³						
Pyrene	NR	µg/L	EPA 625	Caffeine	NR	ng/L	HPLC/MS-SEDC					
Pesticides									Carbamazepine	NR	ng/L	HPLC/MS-SEDC
Aldrin	<0.01	µg/L	EPA 505	Ciprofloxacin	NR	Not Available ³			EDTA	NR	mg/L	EPA 300.0MOD
BHC, alpha isomer	NR	µg/L	EPA 608	Ethylenediamine tetra-acetic acid (EDTA)	NR	mg/L			Gemfibrozil	NR	ng/L	HPLC/MS-SEDC
BHC, beta isomer	NR	µg/L	EPA 608	Ibuprofen	NR	ng/L			Ibuprofen	NR	ng/L	HPLC/MS-SEDC
BHC, delta isomer	NR	µg/L	EPA 608	Iodinated contrast media	NR	ng/L			Iodinated contrast media	NR	ng/L	HPLC/MS-SEDC
4,4'-DDT	NR	µg/L	EPA 608	Lipitor	NR	Not Available ³			Lipitor	NR	Not Available ³	
4,4'-DDE	NR	µg/L	EPA 608	Methadone	NR	ng/L			Methadone	NR	ng/L	HPLC/MS-SEDC
4,4'-DDD	NR	µg/L	EPA 608	Morphine	NR	Not Available ³			Morphine	NR	Not Available ³	
Dieldrin	NR	µg/L	EPA 608	Salicylic acid	NR	ng/L			Salicylic acid	NR	ng/L	HPLC/MS-SEDC
Endosulfan I	NR	µg/L	EPA 608	Triclosan	NR	ng/L			Triclosan	NR	ng/L	HPLC/MS-SEDC
Endosulfan II	NR	µg/L	EPA 608									
Endosulfan Sulfate	NR	µg/L	EPA 608									
Endrin Aldehyde	NR	µg/L	EPA 608									
Chromium VI	0.1	µg/L	EPA 218.6									

NR: Not Required (Annual Requirement)

¹ Trivalent chromium is measured as total chromium

² Chemicals w/ State Notification Levels, Nitrosamines, and EDC, Pharmaceuticals & Other Chemicals (Attachment B, MRP No. R8 2007-0039)

³ Analytical Method is not available for this constituent

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

RP-3 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	01/05/10	4.8						690
RP31-LYS-00	0	01/12/10	8.73	1.8	0.2	0.2	1.7	<0.01	705
RP31-LYS-00	0	02/09/10	2.84	0.9	0.8	0.5	<0.5	0.05	79
RP31-LYS-00	0	02/17/10	3.84	3.0	2.4	2.3	0.7	<0.01	590
RP31-LYS-00	0	02/23/10	5.04	1.6	1.2	0.7	0.9	0.07	160
RP31-LYS-00	0	03/02/10	4.45	<0.6	0.5	0.4	<0.5	<0.01	155
RP31-LYS-00	0	03/09/10	1.43	2.6	1.3	1.2	1.3	<0.01	295
RP31-LYS-00	0	03/16/10	5.67	2.5	1.6	1.6	0.9	<0.01	675
RP31-LYS-00	0	03/24/10	6.88	2.0	1.3	1.3	0.7	<0.01	670
RP31-LYS-00	0	03/30/10	10.48	1.5	0.5	0.3	1.2	<0.01	645
RP31-LYS-05	5	01/05/10	2.16				0.8		755
RP31-LYS-05	5	02/09/10	2.15	1.1	1.0	1.0	<0.5	<0.01	415
RP31-LYS-05	5	02/17/10	1.63	2.8	2.4	2.4	<0.5	<0.01	525
RP31-LYS-05	5	02/23/10	1.62	2.2	2.0	2.0	<0.5	<0.01	605
RP31-LYS-05	5	03/02/10	0.00	2.2	2.2	2.2	<0.5	<0.01	445
RP31-LYS-05	5	03/09/10	1.99		1.3	1.3		<0.01	320
RP31-LYS-05	5	03/16/10	1.62			1.7		<0.01	430
RP31-LYS-05	5	03/24/10	2.20			1.7		<0.01	665
RP31-LYS-05	5	03/30/10	1.91			2.0		<0.01	745
RP31-LYS-10	10	01/05/10	1.84	1.2	1.0	1.0	<0.5	<0.01	655
RP31-LYS-10	10	01/12/10	2.19	1.5	1.2	1.2	<0.5	<0.01	740
RP31-LYS-10	10	02/09/10	2.02	2.2	1.3	1.3	0.9	<0.01	475
RP31-LYS-10	10	02/17/10	1.30	1.9	1.6	1.6	<0.5	<0.01	390
RP31-LYS-10	10	02/23/10	1.46	1.5	1.5	1.5	<0.5	<0.01	455
RP31-LYS-10	10	03/02/10	2.11	1.4	1.6	1.4	<0.5	<0.01	535
RP31-LYS-10	10	03/09/10	1.39	1.6	1.3	1.3	<0.5	<0.01	410
RP31-LYS-10	10	03/16/10	1.44	1.3	1.1	1.1	<0.5	<0.01	330
RP31-LYS-10	10	03/24/10	1.92	1.3	1.2	1.2	<0.5	<0.01	620
RP31-LYS-10	10	03/30/10	1.76	1.7	1.4	1.3	<0.5	<0.01	680
RP31-LYS-15	15	01/05/10	2.36	2.0	1.8	1.8	<0.5	0.02	460
RP31-LYS-15	15	01/12/10	2.57	1.7	1.4	1.4	<0.5	<0.01	505
RP31-LYS-15	15	02/09/10	2.08	1.1	0.9	0.8	<0.5	<0.01	305
RP31-LYS-15	15	02/17/10	1.55	1.7	1.4	1.4	<0.5	<0.01	345
RP31-LYS-15	15	02/23/10	1.53	1.6	1.4	1.3	<0.5	<0.01	330
RP31-LYS-15	15	03/02/10	1.86	1.4	1.4	1.4	<0.5	<0.01	325
RP31-LYS-15	15	03/09/10	1.23	1.9	1.7	1.7	<0.5	<0.01	445
RP31-LYS-15	15	03/16/10	1.69	1.5	1.4	1.4	<0.5	<0.01	430
RP31-LYS-15	15	03/24/10	1.66	1.2	1.2	1.2	<0.5	<0.01	365
RP31-LYS-15	15	03/30/10	1.66	1.8	1.5	1.4	<0.5	<0.01	510
RP31-LYS-25	25	01/05/10	1.95	2.4	2.3	2.3	<0.5	<0.01	570
RP31-LYS-25	25	01/12/10	1.88	2.3	2.2	2.2	<0.5	0.01	485
RP31-LYS-25	25	02/09/10	1.44	1.3	1.2	1.2	<0.5	<0.01	355
RP31-LYS-25	25	02/17/10	1.29	1.6	1.5	1.5	<0.5	<0.01	295
RP31-LYS-25	25	02/23/10	1.18	1.5	1.5	1.5	<0.5	<0.01	305
RP31-LYS-25	25	03/02/10	1.45	1.9	1.6	1.6	<0.5	<0.01	355
RP31-LYS-25	25	03/09/10	1.19	2.1	1.7	1.7	<0.5	<0.01	405
RP31-LYS-25	25	03/16/10	1.24	1.8	1.6	1.6	<0.5	<0.01	390
RP31-LYS-25	25	03/24/10	1.23	1.3	1.3	1.3	<0.5	<0.01	345
RP31-LYS-25	25	03/30/10	1.20	1.8	1.5	1.5	<0.5	<0.01	420
RP31-LYS-35	35	01/05/10	1.11	2.2	2.2	2.1	<0.5	0.02	670
RP31-LYS-35	35	01/12/10	1.19	2.5	2.2	2.1	<0.5	0.03	655
RP31-LYS-35	35	02/09/10	1.06	2.0	2.0	2.0	<0.5	0.06	620
RP31-LYS-35	35	02/17/10	0.92	2.3	2.2	2.2	<0.5	0.02	570
RP31-LYS-35	35	02/23/10	1.19	2.3	2.3	2.3	<0.5	<0.01	530
RP31-LYS-35	35	03/02/10	1.13	2.6	2.4	2.4	<0.5	<0.01	500
RP31-LYS-35	35	03/09/10	1.05	2.5	2.5	2.5	<0.5	<0.01	485
RP31-LYS-35	35	03/16/10	1.02	2.5	2.4	2.3	<0.5	<0.01	460
RP31-LYS-35	35	03/24/10	0.92	2.4	2.2	2.2	<0.5	<0.01	450
RP31-LYS-35	35	03/30/10	1.12	2.1	2.1	2.1	<0.5	<0.01	440

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

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

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	01/05/10	4.74	2.1	1.4	1.3	0.9	<0.01	535
BRK-LYS-00	0	01/12/10	4.24	3.3	2.8	2.8	0.5	<0.01	665
BRK-LYS-00	0	02/17/10	2.52	1.4	1.0	0.8	0.5	<0.01	185
BRK-LYS-00	0	02/23/10	0.88	1.2	0.8	0.8	<0.5	<0.01	175
BRK-LYS-00	0	03/02/10	3.89	1.7	0.9	0.9	0.9	<0.01	170
BRK-LYS-00	0	03/09/10	3.73	2.0	1.3	1.2	0.8	<0.01	260
BRK-LYS-00	0	03/16/10	3.93	2.2	0.9	0.9	1.3	<0.01	330
BRK-LYS-00	0	03/24/10	3.91	3.9	1.5	1.4	2.5	<0.01	435
BRK-LYS-00	0	03/30/10	3.88	2.3	1.5	1.5	0.9	<0.01	495
BRK-LYS-05	5	01/05/10	4.00	0.6	0.3	<0.1	0.6	<0.01	510
BRK-LYS-05	5	01/12/10	3.44	0.9	0.5	<0.1	0.8	<0.01	545
BRK-LYS-05	5	02/17/10	2.31	<0.6	0.3	<0.1	<0.5	<0.01	235
BRK-LYS-05	5	02/23/10	3.03	<0.6	0.3	<0.1	<0.5	<0.01	185
BRK-LYS-05	5	03/02/10	2.85	<0.6	0.4	0.2	<0.5	<0.01	195
BRK-LYS-05	5	03/09/10	2.30	0.6	0.3	<0.1	0.6	<0.01	240
BRK-LYS-05	5	03/16/10	2.61	0.7	0.5	0.2	<0.5	<0.01	325
BRK-LYS-05	5	03/24/10	2.74	2.0	1.8	1.5	<0.5	<0.01	315
BRK-LYS-05	5	03/30/10	2.91	0.8	0.6	0.1	0.7	<0.01	440
BRK-LYS-10	10	01/05/10	3.29	<0.6	<0.2	<0.1	<0.5	<0.01	610
BRK-LYS-10	10	01/12/10	3.05	<0.6	<0.2	<0.1	<0.5	<0.01	615
BRK-LYS-10	10	02/17/10	2.91	<0.6	<0.2	<0.1	<0.5	<0.01	625
BRK-LYS-10	10	02/23/10	2.35	<0.6	<0.2	<0.1	<0.5	<0.01	615
BRK-LYS-10	10	03/02/10	3.48	<0.6	<0.2	<0.1	<0.5	<0.01	595
BRK-LYS-10	10	03/09/10	3.30	<0.6	<0.2	<0.1	<0.5	<0.01	580
BRK-LYS-10	10	03/16/10	2.89	<0.6	<0.2	<0.1	<0.5	<0.01	580
BRK-LYS-10	10	03/24/10	2.76	<0.6	<0.2	<0.1	<0.5	<0.01	565
BRK-LYS-10	10	03/30/10	3.16	<0.6	<0.2	<0.1	<0.5	<0.01	560
BRK-LYS-25	25	01/05/10	2.31	<0.6	<0.2	<0.1	<0.5	<0.01	785
BRK-LYS-25	25	01/12/10	2.15	<0.6	<0.2	<0.1	<0.5	<0.01	770
BRK-LYS-25	25	02/17/10	1.95	<0.6	<0.2	<0.1	<0.5	<0.01	520
BRK-LYS-25	25	02/23/10	2.90	<0.6	<0.2	<0.1	<0.5	<0.01	475
BRK-LYS-25	25	03/02/10	2.24	<0.6	<0.2	<0.1	<0.5	<0.01	440
BRK-LYS-25	25	03/09/10	1.84	<0.6	<0.2	<0.1	0.5	<0.01	380
BRK-LYS-25	25	03/16/10	1.73	<0.6	<0.2	<0.1	<0.5	<0.01	340
BRK-LYS-25	25	03/24/10	1.99	<0.6	<0.2	<0.1	<0.5	<0.01	295
BRK-LYS-25	25	03/30/10	1.77	<0.6	<0.2	<0.1	<0.5	0.03	290
BRK-LYS-35	35	01/05/10	3.47	<0.6	<0.2	<0.1	<0.5	<0.01	700
BRK-LYS-35	35	01/12/10	5.50						670
BRK-LYS-35	35	02/17/10	2.06	<0.6	<0.2	<0.1	<0.5	<0.01	520
BRK-LYS-35	35	02/23/10	2.04	<0.6	<0.2	<0.1	<0.5	<0.01	495
BRK-LYS-35	35	03/02/10	2.63	<0.6	<0.2	<0.1	<0.5	<0.01	460
BRK-LYS-35	35	03/09/10	2.18	<0.6	<0.2	<0.1	<0.5	<0.01	410
BRK-LYS-35	35	03/16/10	2.22	<0.6	<0.2	<0.1	<0.5	<0.01	380
BRK-LYS-35	35	03/24/10	2.40	<0.6	<0.2	<0.1	<0.5	<0.01	345
BRK-LYS-35	35	03/30/10	2.47	<0.6	<0.2	<0.1	<0.5	<0.01	345

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

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	01/05/10	4.91	1.7	0.4	0.4	1.4	<0.01	740
8TH-LYS-00	0	01/12/10	5.11	2.9	1.0	0.9	2.0	<0.01	755
8TH-LYS-00	0	03/09/10	4.52	1.0	0.5	0.4	0.7	0.04	47
8TH-LYS-00	0	03/16/10	5.58	3.0	2.2	2.0	1.1	<0.01	630
8TH-LYS-00	0	03/24/10	5.54	2.6	1.7	1.6	1.0	<0.01	675
8TH-LYS-00	0	03/30/10	10.27	2.7	0.4	0.2	2.5	0.02	665
8TH-LYS-05	5	03/09/10	2.53			0.4		<0.01	420
8TH-LYS-15	15	01/05/10	3.81	<0.6	<0.2	<0.1	<0.5	<0.01	610
8TH-LYS-15	15	01/12/10	4.09	<0.6	<0.2	<0.1	0.5	<0.01	740
8TH-LYS-15	15	03/09/10	1.96	0.7	0.3	0.3	<0.5	<0.01	220
8TH-LYS-15	15	03/16/10	1.67	<0.6	0.6	0.4	<0.5	<0.01	150
8TH-LYS-15	15	03/24/10	1.17	2.5	2.4	2.4	<0.5	<0.01	240
8TH-LYS-15	15	03/30/10	1.63	1.2	1.0	1.0	<0.5	<0.01	405
8TH-LYS-25	25	01/05/10	3.68	<0.6	<0.2	<0.1	<0.5	<0.01	600
8TH-LYS-25	25	01/12/10	3.68	<0.6	<0.2	<0.1	<0.5	<0.01	700
8TH-LYS-25	25	03/09/10	3.19	<0.6	<0.2	<0.1	<0.5	<0.01	215
8TH-LYS-25	25	03/16/10	2.89	<0.6	<0.2	<0.1	<0.5	<0.01	150
8TH-LYS-25	25	03/24/10	2.14	<0.6	0.3	0.3	<0.5	<0.01	370
8TH-LYS-25	25	03/30/10	2.94	<0.6	<0.2	<0.1	<0.5	<0.01	535
8TH-LYS-35	35	01/05/10	2.49	<0.6	<0.2	<0.1	<0.5	<0.01	400
8TH-LYS-35	35	01/12/10	2.78	<0.6	<0.2	<0.1	<0.5	<0.01	575
8TH-LYS-35	35	03/09/10	1.86	<0.6	<0.2	<0.1	<0.5	<0.01	230
8TH-LYS-35	35	03/16/10	2.23	<0.6	0.3	<0.1	<0.5	<0.01	150
8TH-LYS-35	35	03/24/10	2.26	<0.6	<0.2	<0.1	<0.5	<0.01	140
8TH-LYS-35	35	03/30/10	1.85	<0.6	0.2	0.2	<0.5	0.02	250

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	01/05/10	6.41	1.3	0.8	0.7	0.5	<0.01	605
HKYE-LYS-00	0	01/12/10	6.00	1.1	<0.2	<0.1	1.1	<0.01	330
HKYE-LYS-00	0	03/24/10	4.28	2.7	2.3	2.3	<0.5	<0.01	660
HKYE-LYS-00	0	03/30/10	4.53	3.1	2.2	2.1	1.0	<0.01	680
HKYE-LYS-25	25	01/05/10	1.52						670
HKYE-LYS-25	25	01/12/10	1.50						570
HKYE-LYS-25	25	03/24/10	1.43	1.2	1.2	1.2	<0.5	<0.01	380
HKYE-LYS-25	25	03/30/10	1.81	2.0	1.8	1.7	<0.5	<0.01	515

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	01/05/10	5.03	1.4	1.0	1.0	<0.5	<0.01	715
BNA-LYS-00	0	01/12/10	4.92	3.5	2.8	2.7	0.8	<0.01	770
BNA-LYS-25	25	01/05/10	0.97	1.2	1.1	1.1	<0.5	<0.01	525
BNA-LYS-25	25	01/12/10	1.12	1.9	1.7	1.7	<0.5	<0.01	645

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

Table 2-5b
Alternative Monitoring Plan for TOC and TN (mg/L)

Turner Basin					
Date	Recycled Water*	Recycled Water*	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4
	TOC	TN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
01/05/10	4.65	3.0	1.40	0.70	0.4
01/12/10	3.74	2.0	1.12	0.56	0.3

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

Table 2-6a
Diluent Water Monitoring*: Local Runoff / Stormwater

Constituent	W. Cucamonga Creek @ Ely Basin Stormwater January 26, 2010	San Antonio Creek @ Montclair Basin Stormwater January 26, 2010	Day Creek @ Lower Day Basin Stormwater January 26, 2010	Cucamonga Creek @ Turner 1&2 Stormwater February 2, 2010	Deer Creek @ Turner 3&4 Stormwater February 2, 2010	Unit	Method
NO ₂ -N	0.04	0.10	0.079	0.07	0.06	mg/L	EPA 300.0
NO ₃ -N	0.7	2.1	0.5	1.5	1.1	mg/L	EPA 300.0
TDS	26	186	106	82	106	mg/L	SM 2540C
Total Coliform	2200	12000	1100	>23000	>23000	mpn/100ml	SM 9221B
Oil & Grease	<2	<2	<2	<2	<2	mg/L	EPA 1664A
Inorganic Chemicals							
Aluminum	154	396	415	603	283	µg/L	EPA 200.7
Antimony	<1	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	3	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<1.85	<0.74	<1.85	<6.9	<6.2	MFL	EPA 100.2
Barium	12	37	22	25	25	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	1.5	7.4	1.5	2.0	1.5	µg/L	EPA 200.7
Cyanide	<0.005	<0.005	<0.005	<0.005	<0.005	mg/L	SM 4500-CN E
Fluoride	<0.1	0.2	0.1	0.2	<0.1	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Nickel	<1	1	1	1	1	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	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	<1	<1	<1	<1	<1	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<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	<0.5	<0.5	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	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	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	0.2	<0.1	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	0.6	<0.6	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<45	<45	<45	<45	<45	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505

Table 2-6a
Diluent Water Monitoring*: Local Runoff / Stormwater

Constituent	W. Cucamonga Creek @ Ely Basin Stormwater January 26, 2010	San Antonio Creek @ Montclair Basin Stormwater January 26, 2010	Day Creek @ Lower Day Basin Stormwater January 26, 2010	Cucamonga Creek @ Turner 1&2 Stormwater February 2, 2010	Deer Creek @ Turner 3&4 Stormwater February 2, 2010	Unit	Method
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	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	0.06	<0.04	<0.04	<0.04	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	0.97	0.20	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	<2	<2	<2	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	3	6	µg/L	S6251B
Bromate	<5	<5	<5	<5	<5	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	mg/L	EPA 300.0
Action Level Chemicals							
Copper	4.2	2.9	1.7	5.1	4.2	µg/L	EPA 200.7
Lead	1.7	1.3	<0.5	0.9	<0.5	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 222	<0.46	<0.67	0.35	<0.2	<0.15	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	pCi/L	EPA 900.0
Tritium	<224	<224	<223	<235	<234	pCi/L	EPA 906
Strontium-90	0.77	1.40	<0.49	<0.64	<0.67	pCi/L	EPA 905
Gross Beta Particle Activity	<3	<3	<3	3	4	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	1.2	<0.7	<0.7	pCi/L	EPA 200.8
Unregulated Chemicals							
Chromium VI	0.3	6.6	0.2	0.2	0.2	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels							
Boron	<0.1	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<2	<2	<2	<2	<2	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	<2	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	<2	<2	<2	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	<2	<2	<2	<2	µg/L	EPA 524.2 SIM
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 – trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	<1	7	2	3.5	3.3	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals							
Aluminum	154	396	415	603	283	µg/L	EPA 200.7
Corrosivity	-2.1	0.4	-0.1	-0.6	-0.9	SI	SM 2330B
Foaming Agents (MBAS)	<0.05	<0.05	<0.05	0.09	0.07	mg/L	S5540C/EPA 425.1
Iron	238	606	418	683	344	µg/L	EPA 200.7
Manganese	8	17	9	18	12	µg/L	EPA 200.7
Odor--Threshold	3	2	3	4	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	27	9	8	16	15	µg/L	EPA 200.7

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

Table 2-6b
Diluent Water Monitoring: State Water Project - Lake Silverwood

Constituent	Jan-10	Feb-10	Mar-10	Unit
Silica	11.0	11.3		mg/L
Calcium	20	21		mg/L
Magnesium	9	8		mg/L
Sodium	55	51		mg/L
Potassium	2.4	2.3		mg/L
Carbonate	0	0		mg/L
Bicarbonate	82	82		mg/L
Sulfate	33	33		mg/L
Chloride	69	64		mg/L
Nitrate	3.3	3.3		mg/L
Fluoride	0.1	0.1		mg/L
Boron	--	--		mg/L
Total Dissolved Solids	244	235		mg/L
Total Hardness as CaCO ₃	89	87		mg/L
Total Alkalinity as CaCO ₃	67	67		mg/L
Free Carbon Dioxide	1.4	1.0		mg/L
pH	7.99	8.12		unit
Specific Conductance	465	424		µmho/cm
Color	7	--		CU
Turbidity	0.8	2.4		NTU
Temperature	10	9		°C
Bromide	0.24	0.22		mg/L
Total Organic Carbon	1.95	2.46		mg/L

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	3601065	City Of Ontario - 19	2200 upgradient	NA	16	Inactive	Municipal
	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	--	Inland Empire Utilities Agency - DCZ-1	50 downgradient	155-175	4	Active	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	Municipal
	600848	Alcoa - Offsite Mw1	9480 downgradient	NA	NA	Active	Monitoring
	600850	Alcoa - Offsite Mw3	4725 downgradient	NA	NA	Active	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	NA	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	NA	Monitoring
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
	--	Inland Empire Utilities Agency - 8th-1/1	150 downgradient	495-535	4	Active	Monitoring
	--	Inland Empire Utilities Agency - 8th-1/2	150 downgradient	595-645	4	Active	Monitoring
	--	Inland Empire Utilities Agency - 8th-2/1	2460 downgradient	465-505	4	Active	Monitoring
	--	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
	--	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	--	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	--	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	NA	Monitoring
	--	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	NA	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	NA	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	NA	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 has taken the place of Ontario Well No. 19, which is inactive

Table 2-8
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)	Thiobencarb (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 _x -N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg CaCO ₃ /L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Company F37a	1/13/10	0.1	<1.1	7.0	470	304	44	<3	5	0.4	<0.05	303	14	<0.5	1	<0.25	<0.2	1.4	7	18	212	19	15	<0.1	0.07	9.9	9.9	<0.5	178	10.0
	California Speedway Infield Well	1/13/10	0.2	<1.1	7.1	535	356	<25	<3	2.0	0.4	<0.05	21	<1	<0.5	2	<0.25	<0.2	0.4	2	16	245	22	52	<0.1	<0.01	8.8	8.8	<0.5	172	11.5
	California Speedway 2	2/2/10	0.2	<1.1	5.6	380	248	<25	<3	5	0.3	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.3	76	10	165	19	12	<0.1	<0.01	4.1	4.1	<0.5	164	13.5
	Reliant Energy East Well	1/13/10	<0.1	<1.1	5.5	330	164	28	<3	10	0.0	<0.05	196	10	<0.5	1	<0.25	<0.2	2.1	4	16	135	23	16	<0.1	<0.01	2.4	2.4	<0.5	145	9.5
	Ontario Well No. 20	1/7/10	0.1	<1.1	8.1	390	254	<25	3	6.0	0.5	<0.05	647	7	<0.5	1	<0.25	<0.2	2.0	5	12	171	15	8	<0.1	0.09	3.3	3.4	<0.5	180	2.7
	BH-1/2	1/7/10	0.6	1	7.3	510	348	<25	10	1.0	0.3	<0.05	549	7	<0.5	1	<0.25	<0.2	5.4	4	63	203	22	31	<0.1	<0.01	2.5	2.5	<0.5	125	8.8
Turner	Ontario Well No. 25	1/7/10	0.2	<1.1	7.7	430	284	<25	<3	1.2	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.5	<1	14	185	24	15	<0.1	0.08	4.0	4.0	<0.5	184	0.8
	Ontario Well No. 29	1/7/10	0.1	<1.1	7.5	400	268	<25	<3	1.0	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.4	<1	14	169	24	20	<0.1	0.08	5.0	5.6	<0.5	156	2.6
	Ontario Well No. 38	1/7/10	<0.1	<1.1	7.7	330	216	<25	<3	0.9	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	5	144	20	8	<0.1	0.11	1.2	1.3	<0.5	163	2.8
	T-1/2	2/2/10	0.7	<1.1	7.3	365	230	<25	<3	0.6	0.2	<0.05	33	<1	<0.5	2	<0.25	<0.2	0.3	<1	16	160	19	11	<0.1	<0.01	0.2	0.3	<0.5	164	7.9
	T-2/1	1/13/10	0.4	<1.1	7.1	445	274	28	<3	4.0	0.1	<0.05	449	2	<0.5	2	<0.25	<0.2	2.7	13	51	167	29	22	<0.1	<0.01	1.4	1.4	<0.5	130	8.0
	T-2/2	1/13/10	0.4	<1.1	7.1	470	294	<25	<3	<0.5	0.0	<0.05	16	<1	<0.5	1	<0.25	<0.2	0.3	<1	52	189	24	31	<0.1	<0.01	1.0	1.0	<0.5	134	6.6
RP-3	Southridge JHS	1/12/10	0.7	<1.1	6.7	1020	660	44	10	0.7	0.3	<0.05	807	41	<0.5	2	<0.25	<0.2	11.3	18	120	392	62	75	<0.1	<0.01	14.6	14.6	<0.5	209	10.3
	Fontana Water Company F23a	1/12/10	0.2	<1.1	5.5	435	278	<25	<3	2.9	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	9	29	182	19	23	<0.1	0.04	6.8	7.0	<0.5	144	9.3
	Alcoa Offsite MW1	2/11/10	0.9	2	7.4	580	404	1030	5	5.0	0.2	<0.05	2400	53	<0.5	2	<0.25	<0.2	1.9	31	28	240	27	34	<0.1	<0.01	16.7	16.7	<0.5	163	6.2
	Alcoa Offsite MW3	2/11/10	0.1	<1.1	7.2	705	458	85	<3	1.5	0.5	<0.05	202	4	<0.5	1	<0.25	<0.2	33.2	8	48	288	38	48	<0.1	<0.01	17.1	17.1	<0.5	174	5.8
	RP3-1/1	3/2/10		6.9		850																								5.7	
	RP3-1/1	1/5/10	1.3																												
	RP3-1/1	1/7/10	1.6	23	6.8	825	564	77	3	1.5	0.2	0.11	99	395	<0.5	2	<0.25	<0.2	3.4	3	20	299	69	62	<0.1	0.46	16.0	16.5	<0.5	298	1.3
	RP3-1/1	3/2/10	0.9	23	6.6	1160	816	34	<3	1.2	0.2	0.16	67	88	<0.5	4	<0.25	<0.2	2.0	11	30	438	78	53	<0.1	<0.01	56.3	56.3	<0.5	314	1.6
	RP3-1/2	1/5/10				750																									
	RP3-1/2	1/7/10	2.3	<1.1	6.9	740	498	38	3	1.5	0.2	0.08	39	388	<0.5	2	<0.25	<0.2	1.0	1	23	233	84	60	<0.1	1.05	6.5	7.6	<0.5	281	1.3
	RP3-1/2	3/2/10	1.4	23	6.9	970	666	28	3	1.2	0.2	0.07	84	347	<0.5	4	<0.25	<0.2	1.4	8	24	365	70	49	<0.1	0.52	41.4	42.0	<0.5	281	2.7
7th & 8th St.	8TH-1/1	1/28/10	0.5	<1.1	7.9	245	176	<25	3	0.7	0.3	<0.05	172	6	<0.5	1	<0.25	<0.2	1.4	1	37	98	11	7	<0.1	<0.01	1.0	1.0	<0.5	73	9.1
	8TH-2/1	1/28/10	0.3	<1.1	7.4	530	356	<25	<3	<0.5	-0.1	<0.05	<15	<1	<0.5	1	3.29	<0.2	0.1	<1	17	233	18	32	<0.1	0.07	18.0	18.1	<0.5	145	10.7
	8TH-2/2	1/28/10	0.1	<1.1	7.1	560	378	<25	<3	<0.5	0.1	0.12	<15	<1	<0.5	1	1.21	<0.2	0.3	<1	20	250	19	25	0.1	<0.01	20.9	20.9	<0.5	161	7.3
Brooks	Pomona P-2	1/11/10	0.2	<1.1	6.7	620	424	<25	<3	17.9	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	3	40	301	14	55	<0.1	<0.01	12.7	12.7	<0.5	165	13.8
	Pomona P-10	1/11/10	0.2	<1.1	5.1	550	366	<25	<3	21.6	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	7	37	262	12	44	<0.1	0.02	10.7	10.8	<0.5	158	11.0
	BRK-1/1	1/14/10	0.4	<1.1	7.3	460	298	37	15	5.3	0.1	<0.05	1290	37	<0.5	1	<0.25	<0.2	11.7	1	66	186	19	25	<0.1	<0.01	0.7	1.1	<0.5	103	3.9
	BRK-1/1	3/23/10					123			6.7				56																	
	BRK-1/2	1/14/10	0.1	<1.1	7.3	560	376	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	22	262	15	41	<0.1	<0.01	17.1	17.2	<0.5	157	7.0
	BRK-2/1	1/14/10	0.2	<1.1	7.4	595	378	28	3	0.6	0.3	<0.05	205	5	<0.5	2	<0.25	<0.2	2.2	2	39	278	11	46	<0.1	<0.01	9.6	9.6	<0.5	169	7.2
	BRK-2/1	3/23/10								<0.5																					
	BRK-2/2	1/14/10	<0.1	<1.1	7.9	355	236	<25	<3	0.6	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	9	113	38	22	<0.1	0.09	7.0	7.2	<0.5	139	6.0
Ely	Ely Basin MW-2 Walnut St.	1/12/10	0.4	<1.1	7.2	720	442	32	3	0.6	0.6	<0.05	195	1	<0.5	1	<0.25	<0.2	1.1	<1	51	324	26	39	<0.1	<0.01	17.8	17.8	<0.5	217	4.8
	43840-CWW	1/12/10	0.2	<1.1	7.1	490	304	<25	<3	7.3	0.2	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.3	6	22	218	22	31	<0.1	0.06	7.8	7.9	<0.5	170	8.7
	Bishop of San Bernardino Corp. - DOM	1/12/10	0.4	<1.1	7.0	780	490	<25	15	1.0	0.5	<0.05	1230	19	<0.5	2	<0.25	<0.2	12.9	37	36	367	25	64	<0.1	0.03	18.8	18.9	<0.5	227	7.4
Declez*	DCZ-1	1/7/10	1.4	<1.1	7.2	520	340	<25	10	3.8	0.3	<0.05	1260	129	<0.5	1	<0.25	<0.2	7.7	<1	23	200	35	22	<0.1	0.06	1.4	2.2	0.7	222	1.4
Victoria*	VCT1	2/4/10	0.2			300	210	160	20	<0.5	-0.3	<0.05	1570	56	<0.5	3	<0.25	<0.2	8.9	<1	36	109	18	16	<0.1	<0.01	1.7	1.7	<0.5	89	
	VCT2	2/4/10																													
	Primary Maximum Contaminant Level					6.5-8.5	900	500	200	15	1000	0.5	300	50	13	5	3	100	1	5	5000										

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

* Recycled water delivery has not been initiated at this basin. Data collected and reported is for background monitoring purposes only and will not be discussed in report text until the basin starts receiving recycled water.

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	RP-3	Turner	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP-3	Turner	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP-3	Turner
Apr-09	0	0	0	0	0	0	0	15	0	1	78	8	18	13	0	0	296	15	0	0	0
May-09	0	0	0	0	0	0	0	16	0	17	38	18	6	19	0	0	115	11	0	0	30
Jun-09	0	0	0	0	0	0	0	30	0	0	14	11	21	62	0	0	178	0	0	106	9
2Q09 Total	0	0	0	0	0	0	0	61	0	18	130	36	45	94	0	0	589	27	0	106	39
Jul-09	0	0	0	0	0	0	0	19	0	1	0	9	22	32	0	0	6	0	0	84	0
Aug-09	0	0	0	0	0	0	0	33	0	0	21	4	30	19	24	0	8	0	0	148	20
Sep-09	0	0	0	0	0	0	0	18	0	0	202	3	36	28	0	0	0	24	34	220	18
3Q09 Total	0	0	0	0	0	0	0	70	0	2	223	16	88	78	24	0	14	24	34	452	38
Oct-09	0	0	0	0	7	4	0	74	15	13	132	24	122	80	0	129	184	102	189	203	0
Nov-09	3	0	0	0	0	0	0	90	0	4	282	26	88	52	133	181	246	120	243	287	0
Dec-09	0	0	0	0	0	0	0	303	75	129	242	158	304	499	93	67	144	0	93	103	63
4Q09 Total	3	0	0	0	7	4	0	467	90	146	656	209	513	631	226	377	574	222	525	593	63
Jan-10	0	0	0	0	0	0	0	387	100	251	319	214	526	478	102	75	74	0	19	76	127
Feb-10	3	0	0	0	0	0	0	475	143	215	221	200	370	505	0	0	54	0	0	113	0
Mar-10	0	0	0	0	0	0	0	72	17	27	100	16	104	148	114	0	180	0	61	213	44
1Q10 Total	3	0	0	0	0	0	0	934	260	494	640	429	1000	1132	216	75	307	0	80	401	171

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)
1Q08	Jan-08	0		0			0	0	0
	Feb-08	0		0			0	0	0
	Mar-08	40	0.87	290	0		40	43	14,307
2Q08	Apr-08	42	1.10	350	0		82	99	32,273
	May-08	0	1.10	350	98	7.5*	372*	(16)	(805)
	Jun-08	0	1.10	350	107	14	360	(123)	(2,645)
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)
3Q08	Jul-08	0		67	3.5*	310*	612	(722)	213,038
	Aug-08	0		0			612	(722)	213,038
	Sep-08	0		0			612	(722)	213,038
4Q08	Oct-08	0		0			612	(722)	213,038
	Nov-08	0		0			612	(722)	213,038
	Dec-08	0		0			612	(722)	213,038
1Q09	Jan-09	0		0			612	(722)	213,038
	Feb-09	0		0			612	(722)	213,038
	Mar-09	0		0			612	(722)	213,038
2Q09	Apr-09	0		0			612	(722)	213,038
	May-09	0		0			612	(722)	213,038
	Jun-09	0		0			612	(722)	213,038
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)
3Q08	Jul-08	0		67	No Data	No Data	167	No Data	No Data
	Aug-08	0		0			167		
	Sep-08	0		0			167		
4Q08	Oct-08	0		0			167		
	Nov-08	0		0			167		
	Dec-08	0		0			167		
1Q09	Jan-09	0		0			167		
	Feb-09	0		0			167		
	Mar-09	0		0			167		
2Q09	Apr-09	0		0			167		
	May-09	0		0			167		
	Jun-09	0		56	No Data	No Data	111	No Data	No Data

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

During 2Q08, WFA-treated water was sampled for TDS and TIN ($\text{NO}_3\text{-N} + \text{NO}_2\text{-N}$, assuming no $\text{NH}_3\text{-N}$ in drinking water) on 04/15/08.

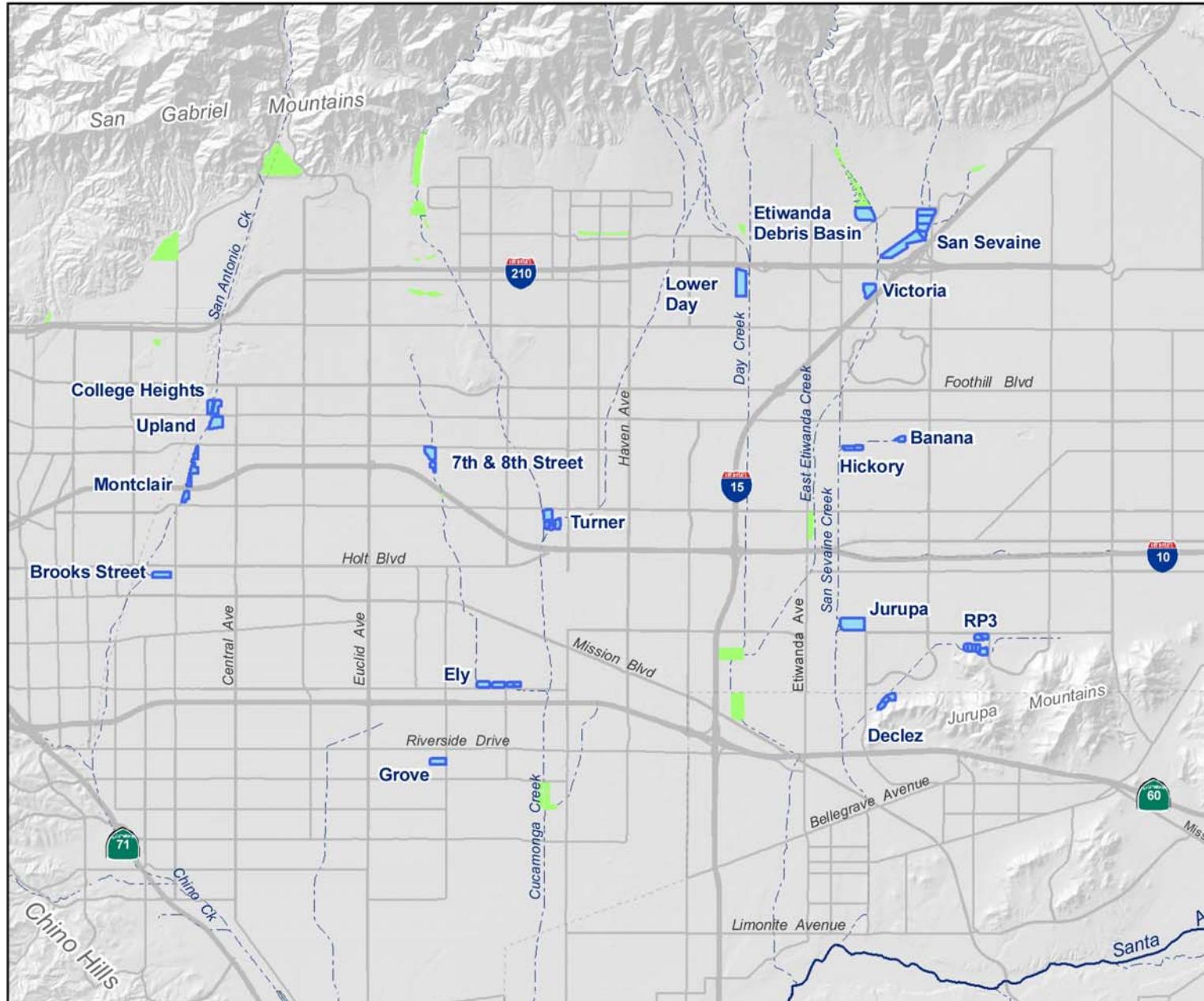
MVWD discontinued groundwater injection at ASR Wells 4, 30, and 32, effective May 1, 2008, until further notice.

All wells were placed into production (extraction) mode during 2Q08.

* Wells w/ 2+ sampling events for the month show an avg. of those values. Individual values are at the bottom of the page.

Total Project (All Wells)									
Date							Mass Balance		
	Storage (AF)	TIN (kg)	TDS (kg)						
3Q08	Jul-08						657	(3,367)	152,989
	Aug-08						657	(3,367)	152,989
	Sep-08						657	(3,367)	152,989
4Q08	Oct-08						657	(3,367)	152,989
	Nov-08						657	(3,367)	152,989
	Dec-08						657	(3,367)	152,989
1Q09	Jan-09						657	(3,367)	152,989
	Feb-09						657	(3,367)	152,989
	Mar-09						657	(3,367)	152,989
2Q09	Apr-09						657	(3,367)	152,989
	May-09						657	(3,367)	152,989
	Jun-09						601	(3,367)	152,989

Well 4	TIN	TDS	Est. Prod	Well 30	TIN	TDS	Est. Prod
5/7/08	4.1	360	20%	6/5/08	2.0	310	20%
5/9/08	6.9	370	40%	6/26/08	4.9	310	40%
5/12/08	6.9	370	60%				
5/27/08	12	390	80%				
6/6/08	14	360	100%				



Explanation

- Recharge Basins in the Recycled Water Groundwater Recharge Program (Blue)
- Non-program basins (Green)
- Rivers and Streams (Dashed Lines)



Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations



Figure 1-1

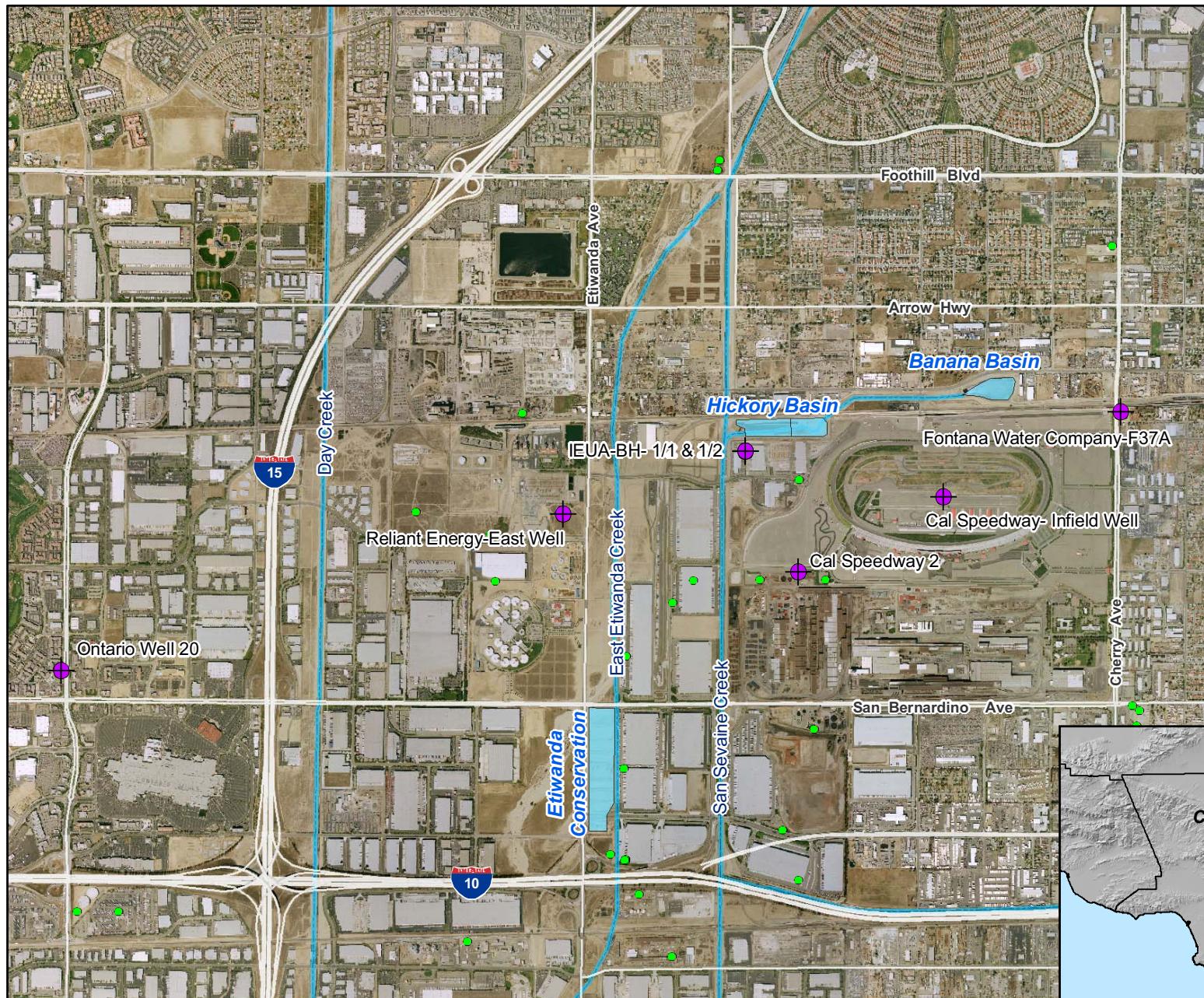


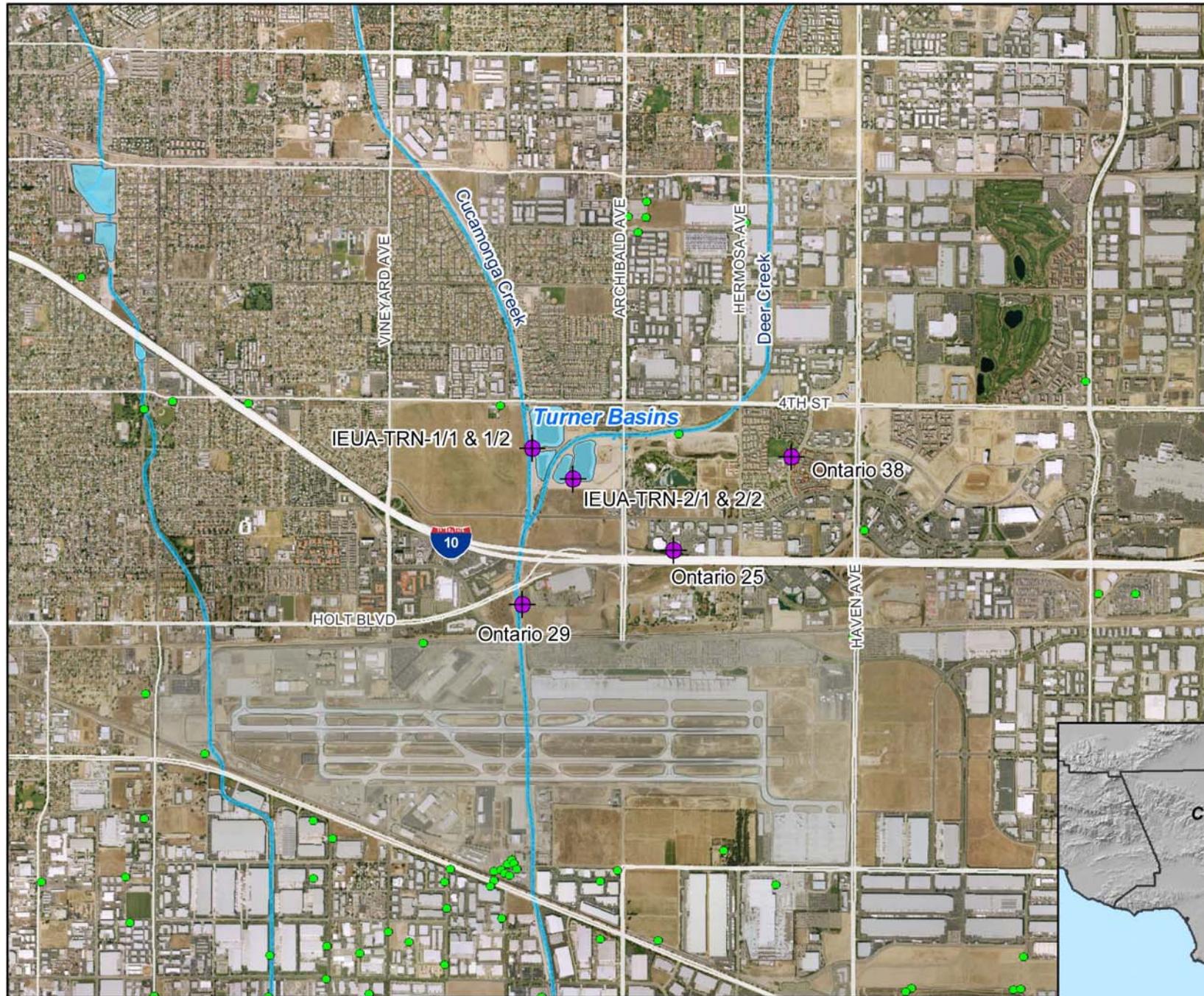
Figure 2-1

Recycled Water Recharge Program



0 1,000 2,000
Feet
0 250 500
Meters





Monitoring Well Network

Turner Basins

Recycled Water Recharge Program

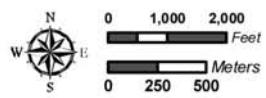
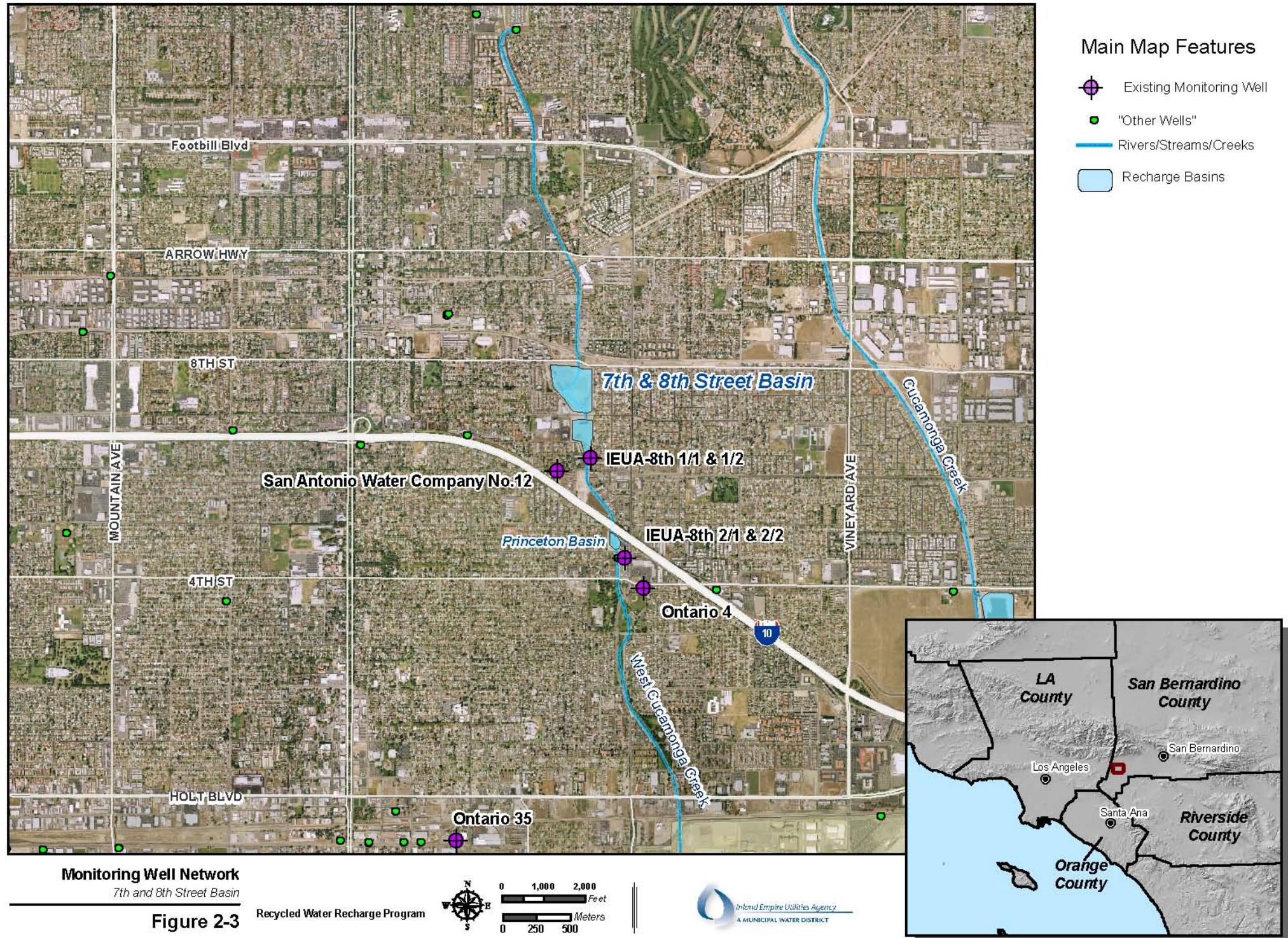


Figure 2-2

Main Map Features

- Existing Monitoring Well (Purple dot)
- "Other Wells" (Green dot)
- Rivers/Streams/Creeks (Blue line)
- Recharge Basins (Light blue shaded area)





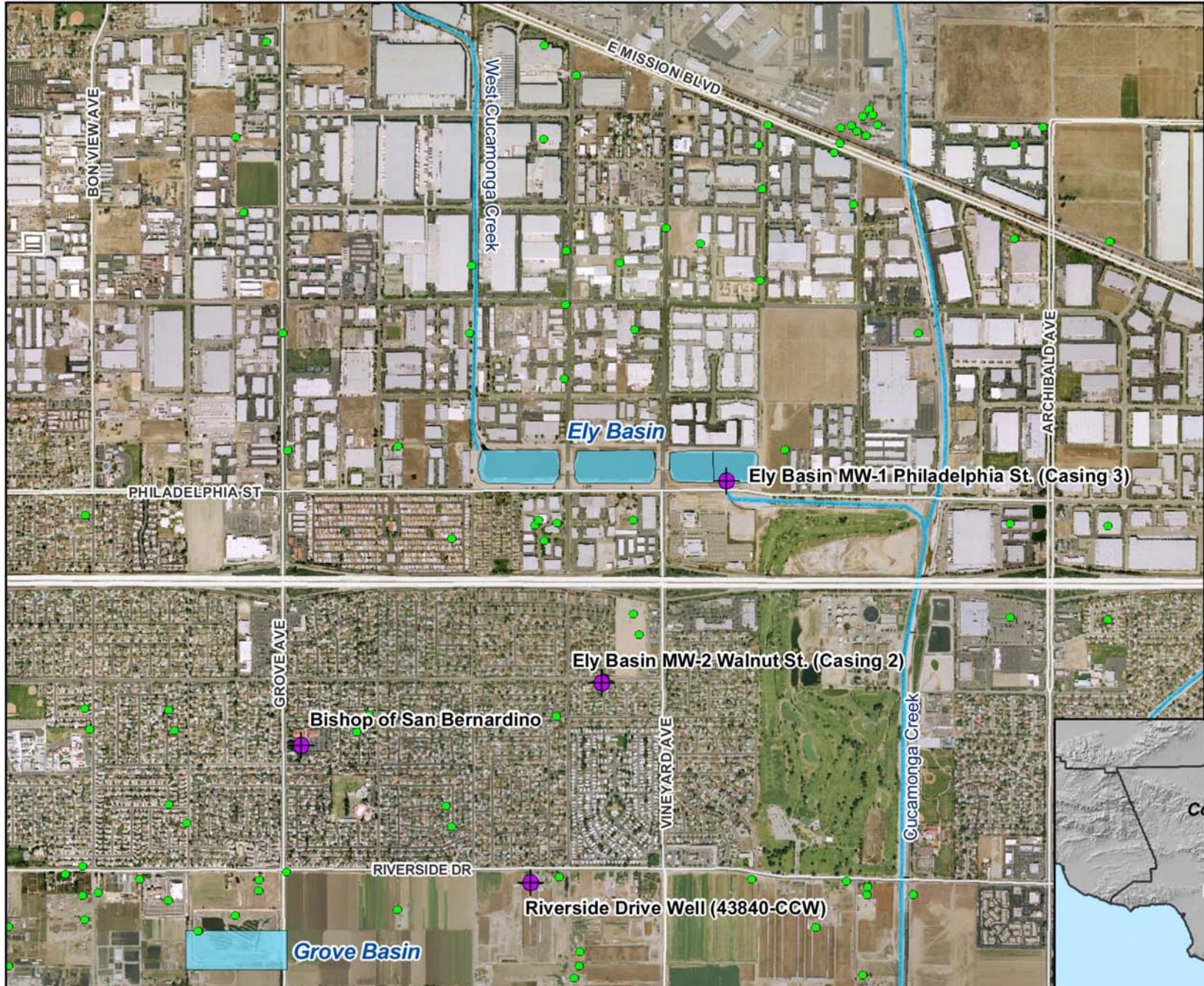
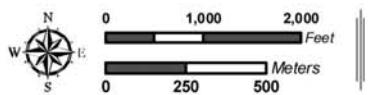
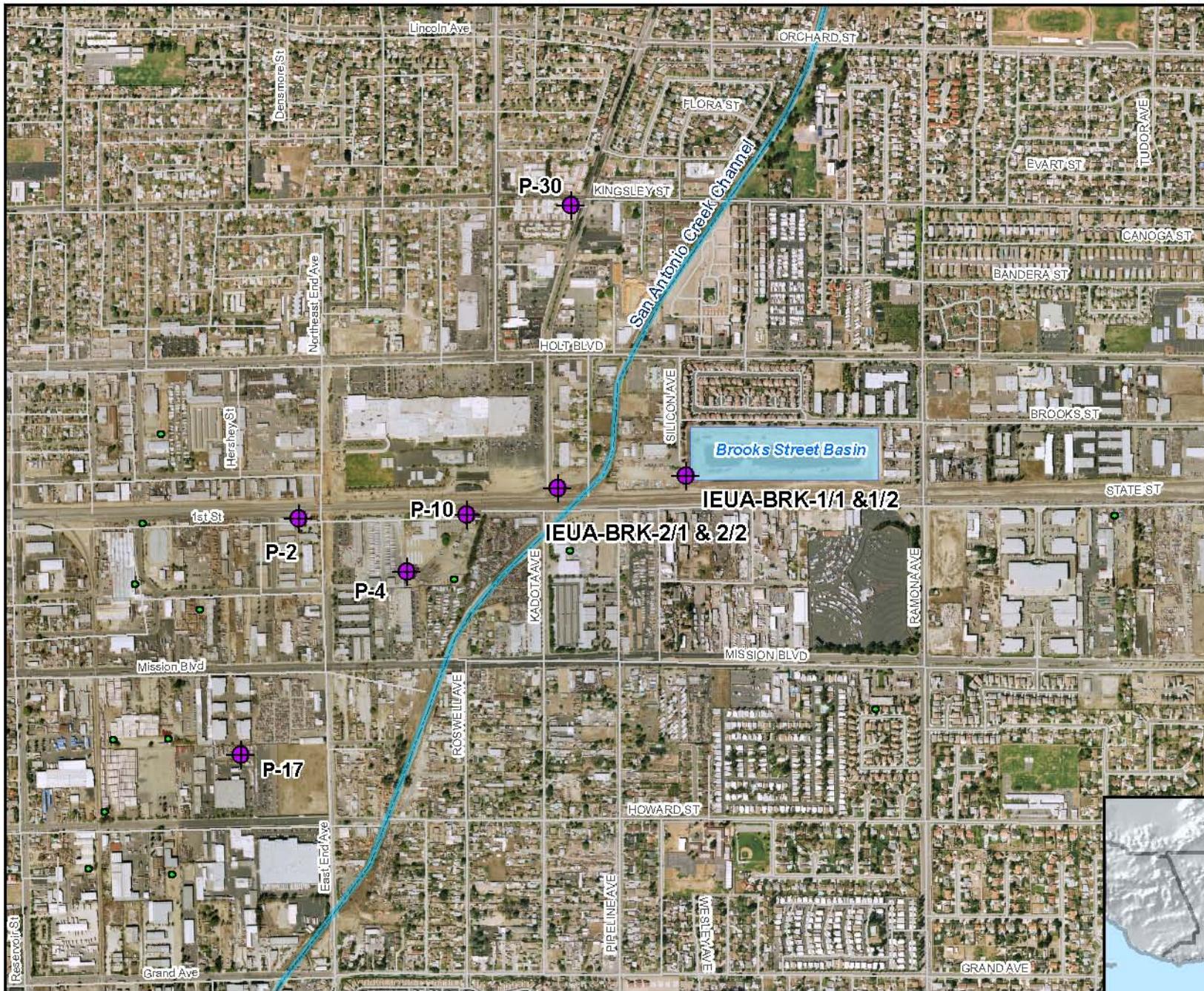


Figure 2-4





Main Map Features

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

Monitoring Well Network

Brooks Street Basin

Recycled Water Recharge Program

Figure 2-5

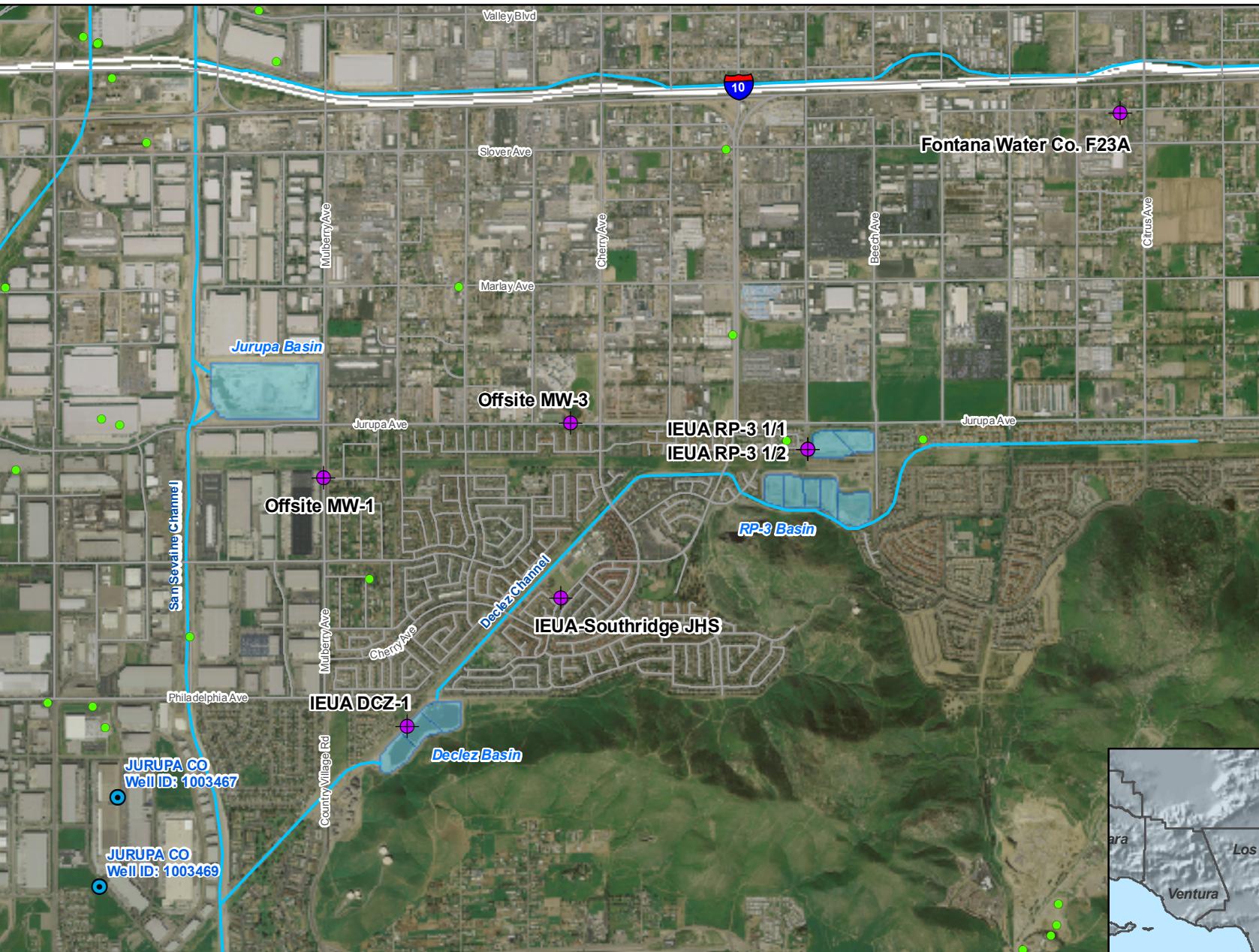


0 750 1,500
Feet
0 200 400
Meters



Main Map Features

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



Monitoring Well Network
RP-3 Basin



0 750 1,500 3,000
Feet
0 250 500 1,000
Meters



Figure 2-6

Recycled Water Recharge Program

