Patrick O. Sheilds
Executive Manager of Operations

Kenneth R. Manning
CEO

August 12, 2009

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 April through June 2009

Dear Mr. Thibeault,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2009 (2Q09), April 1 through June 30, 2009, for the *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 2Q09, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception Oil & Grease. Oil & Grease does not have a promulgated primary or secondary MCL.

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2009, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time of the recharge sites using recycled water, namely Banana, Brooks, Ely, Hickory, 7th & 8th Street, 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 12th day of August 2009 in the Cities of Chino and Rancho Cucamonga.

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Executive Manager of Operations

Kenneth R. Manning
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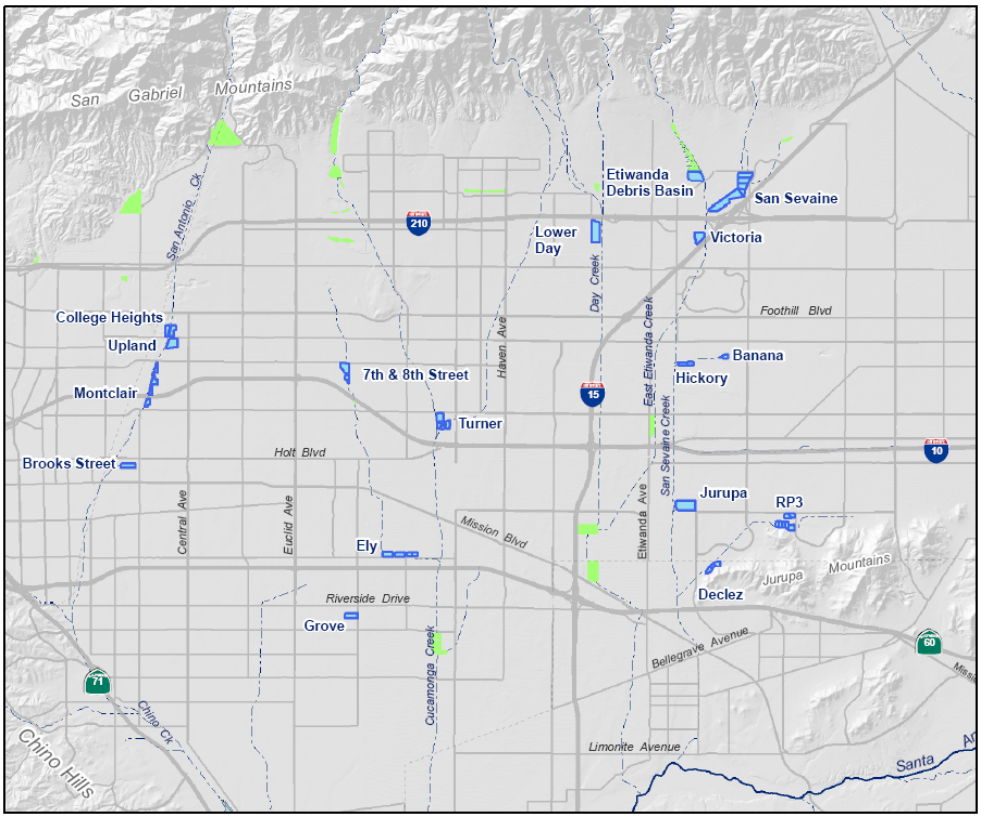
Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report

April 1 through June 30, 2009



Prepared by:

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

August 15, 2009

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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 Second Quarter of 2009 (2Q09).

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 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. 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. Finally, Section 7 includes WateReuse Foundation (WRF) research study sampling results.

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 2Q09 data.

Recycled Water Specifications A.5 though A.9 are narrative limits in the permit and corresponding monitoring data are presented in Tables 2-1 and 2-2. None of these limits were exceeded in 2Q09.

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 3Q08 through 2Q09 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 2Q09, the maximum contaminant levels for inorganic chemicals, organic chemicals, radionuclides, and disinfection byproducts; action levels for lead and copper; and secondary MCLs were not exceeded.

Oil & Grease has a narrative limit in Recycled Water Specification A.15 of 1 mg/L. Oil & Grease does not have a promulgated primary or secondary MCL.

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 Reliant Energy (an IEUA recycled water customer) 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, Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). For TTHMs and HAA5, samples collected at the basin are more consistent and representative of the recycled water prior to reaching the groundwater table. Compliance is selected at a point prior to the groundwater table and has in previous quarters been selected at a lysimeter actively receiving recycled water recharge during the defined sampling time. For the 2Q09 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Brooks 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 2-5. The table includes lysimeter data for Brooks and Ely Basins. Recycled water was delivered during the last three days of April 2009; therefore lysimeter data is presented in May 2009.

Turner and Ely Basins have implemented alternative monitoring plans that include pipeline sampling of recycled water and application of a correction factor for Soil-Aquifer Treatment determined from 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 3 East. The correction factors reduce TN results by 87 percent for recycled water delivered to all four cells and 52 percent for recycled water delivered to Ely Basin 3 East. Turner and Ely Basins TOC and TN values calculated based on the correction factors provided in the alternative monitoring plan are summarized in Table 2-5b.

During 3Q08, the Brooks Street Basin Start-Up Period began on August 6, 2008 and concluded in 2Q09. During 4Q08, a tracer study was initiated at Brooks Basin using both sulfur hexafluoride (SF_6) and enriched boron. Tracer test sampling ending in 2Q09 with results to be presented in the 2009 Annual Report.

C. Diluent Water

For 2Q09, diluent water sampling of local runoff was conducted on May 19, 2009 at the Hickory and Declez Basins. State Water Project water was not delivered to any basins during the monitoring period. Table 2-6 lists the results of the local runoff sampling and analyses. Details on the methods used to measure daily diluent water flow can be found in the CDPH-approved Diluent Water Monitoring Plan.

D. Groundwater Monitoring Wells

During 2Q09, 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 the Turner Basins was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the 7th & 8th Street Basins is monitored by sampling a network of five 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 Brooks Basin was monitored by sampling a network of four wells. The wells in the monitoring well networks for Hickory and Banana Basins, Turner Basin, 7th & 8th Street Basins, Ely Basins, and Brooks Basins 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 2Q09 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 the impact recharged recycled water has on downgradient water supplies. Any 2Q09 analyses results which exceeded primary or secondary standards are shown in bold. Of note are the analyses for inactive production well Fontana Water Company Well F37A and monitoring wells BRK-1/1 and RP3-1/1. The 2Q09 results for Fontana Water Company Well F37A (a well up gradient of Banana Basin) exceed two parameters (aluminum and iron) and are considered non-representative of local groundwater and artifacts of the well's inactive status. Monitoring wells BRK-1/1 (located at Brooks Street Basin) and RP3-1/1 have anomalous 2Q09 results for aluminum, iron, and turbidity which can be considered artifacts of their well drilling, development, and shallow construction into to the water table. BRK-1 and RP3-1 were drilled in the March and July of 2007, respectively.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The Brooks, Ely, and Turner Basins were the only recharge basins to receive recycled water this quarter. No imported water was delivered to any of the aforementioned recharge basins during 2Q09. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff and stormwater captured during 2Q09 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 2Q09 for domestic or municipal use from the zones that extend 500 feet and 6 months underground travel time from the Hickory, Banana, Turner 7th & 8th Street, Brooks, and Ely 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, buffers, and township/range/section parcels adjacent the basins and buffers.

If a well falls within an abutting parcel, SBCDEHS will review the proposed well location using maps of the basins and buffers. If the well falls too near the buffer 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.

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.

7. WateReuse Study

IEUA is participating in WateReuse Foundation research study WR-06-018, which includes periodic testing of San Antonio Water Company (SAWCO) Well No. 12, 8th Street Basin 1/1, and 8th Street Basin 2/1. The purge water from the well sampling is delivered to Ely Basin. The Regional Board has allowed the test discharges to be covered under IEUA's Groundwater Recharge Permit (Order No. R8-2007-0039) rather than the General De Minimus Discharge permit (NPDES No. CAG998001, Order No. R8-2006-0004). Therefore, the well discharge will not be sampled for constituents beyond those identified in the WRF study, and the discharge quantities will be reported in the groundwater recharge quarterly reports. During 2Q09, Brooks Basin 1/1 was sampled on April 8, 2009. Laboratory results for this sampling/discharge event is included in Table 7-1. Groundwater sampling for this study was concluded in 2Q09.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2009
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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<pH<9				2.2;23;240	2;5;10	16		5 [5]		6<pH<9				2.2;23;240
04/01/09	0.9	8.1				7.7	760			<2	0.6	4.7	1.5		1.5	6.9	680			<2
04/02/09	0.8	7.9	7.2		7.2	7.7	755			2	0.5	4.3	1.8		1.8	6.7	690			<2
04/03/09	0.8	7.6				7.8	760			4	0.5	4.2	2.1		2.1	6.9	715			<2
04/04/09	0.8	7.6				7.7	765			<2	0.6	4.3	2.1		2.1	6.9	725			<2
04/05/09	0.9	8.1	6.6		6.6	7.7	740			<2	0.6	4.5	1.9		1.9	6.9	700			<2
04/06/09	0.9	7.9				7.7	765			<2	0.6	4.6	1.5		1.5	6.8	710			<2
04/07/09	1.0	8.1	7.8	9.3	7.8	7.7	775	514	156	<2	0.6	4.6	1.2	1.7	1.2	6.8	710	454	143	<2
04/08/09	0.9	8.2				7.7	790			2	0.8	4.7	1.6		1.7	6.9	740			<2
04/09/09	0.9	7.9	6.8		6.8	7.8	780			2	0.7	4.5	1.4		1.4	6.9	720			<2
04/10/09	0.9	7.4				7.8	760			<2	0.6	4.5	1.5		1.5	6.9	730			<2
04/11/09	0.7	6.9				7.8	770			<2	0.6	4.4	1.6		1.8	6.9	740			2
04/12/09	0.7	7.0	5.2		5.2	7.8	740			<2	0.7	4.4	1.7		1.7	6.9	710			<2
04/13/09	0.7	7.5				7.8	750			2	0.6	4.5	1.1		1.1	6.9	715			<2
04/14/09	0.8	7.9	7.3	9.3	7.3	7.8	750			<2	0.6	4.4	1.2	2.2	1.2	6.9	725	476		<2
04/15/09	0.7	7.5				7.8	770			<2	0.6	4.4	1.2		1.2	7.0	745			<2
04/16/09	0.7	7.8	7.0		7.0	7.8	760			<2	0.6	4.1	1.7		1.7	6.9	735			<2
04/17/09	0.8	5.2				7.8	800			<2	0.5	4.1	1.7		1.7	7.0	725			<2
04/18/09	0.8	8.2				7.8	805			<2	0.6	4.2	1.7		1.7	6.9	720			<2
04/19/09	0.8	8.7	6.6		6.6	7.8	750			<2	0.6	4.4	1.5		1.5	6.9	715			<2
04/20/09	0.9	8.4				7.8	760			<2	0.6	4.6	1.0		1.0	6.9	720			<2
04/21/09	0.9	9.3	7.0	10.2	7.1	7.8	770			<2	1.2	4.3	1.3	1.7	1.3	6.9	730			<2
04/22/09	0.9	9.0				7.8	760			<2	0.5	4.5	2.1		2.1	7.1	730			<2
04/23/09	0.9	8.6	7.9		7.9	7.8	780			<2	0.5	4.4	2.0		2.0	7.0	745			2
04/24/09	0.9	8.0				7.8	790			<2	0.5	4.4	1.8		1.9	6.9	750			<2
04/25/09	0.9	7.8				7.9	795			<2	0.5	4.6	1.9		1.9	6.9	765			<2
04/26/09	0.8	7.7	7.2		7.2	7.9	755			<2	0.6	5.3	1.8		1.8	6.9	735	440		<2
04/27/09	0.8	8.2				7.9	775			<2	0.6	4.9	1.3		1.3	6.9	730			<2
04/28/09	0.8	8.7	7.4	10.4	7.4	7.9	760			<2	0.6	4.8	1.2	2.4	1.2	6.9	745	452		2
04/29/09	0.7	8.3				7.8	750			<2	0.5	4.7	1.3		1.4	6.9	735			<2
04/30/09	0.7	7.3	8.1		8.2	7.8	745			<2	0.6	4.6	1.1		1.2	6.9	730			<2
Avg	0.8	7.9	7.1	9.8	7.1	7.8	766	514	156	<2	0.6	4.5	1.5	2.0	1.6	6.9	726	456	143	<2
Min	0.7	5.2	5.2	9.3	5.2	7.7	740	514	156	<2	0.5	4.1	1.0	1.7	1.0	6.7	680	440	143	<2
Max	1.0	9.3	8.1	10.4	8.2	7.9	805	514	156	4	1.2	5.3	2.1	2.4	2.1	7.1	765	476	143	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 May 2009
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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<pH<9				2.2;23;240	2;5;10	16		5 [5]		6<pH<9				2.2;23;240
05/01/09	0.7	8.0				7.9	755			<2	0.7	4.6	1.3		1.3	6.9	745			<2
05/02/09	0.8	6.9				7.9	770			<2	0.6	4.7	1.7		1.7	6.8	755			<2
05/03/09	0.7	7.4	8.2		8.2	7.9	765			<2	0.7	4.8	1.8		1.8	6.9	760			2
05/04/09	0.8	8.7				7.9	760			<2	0.7	5.1	1.5		1.5	6.9	740			<2
05/05/09	0.8	8.4	7.0	9.2	7.0	7.9	775	490	151	2	0.6	4.5	1.0	4.3	1.0	6.9	745	444	133	<2
05/06/09	0.8	7.2				7.9	750			<2	0.5	4.6	1.0		1.0	6.9	735			<2
05/07/09	0.7	7.4	6.9		6.9	7.9	740			<2	0.5	4.5	1.1		1.1	6.9	725			<2
05/08/09	0.7	7.6				7.9	765			<2	0.6	4.5	1.4		1.5	6.9	735			<2
05/09/09	0.7	7.4				8.0	760			<2	0.6	4.6	1.7		1.7	6.9	745			<2
05/10/09	0.7	7.5	5.3		5.3	7.9	770			<2	0.7	4.8	1.9		1.9	7.0	715			<2
05/11/09	0.7	7.4				7.9	780			<2	0.8	4.8	1.5		1.5	7.1	730			<2
05/12/09	0.7	8.9	6.2	7.6	6.2	7.9	780			<2	0.8	4.8	1.3	2.3	1.3	7.1	750	468		<2
05/13/09	0.6	7.6				7.3	755			<2	0.8	4.9	1.5		1.6	7.1	760			<2
05/14/09	0.6	7.9	5.8		5.8	7.0	760			<2	1.2	4.8	2.0		2.0	7.0	765			<2
05/15/09	0.6	7.4				7.1	745			<2	0.9	4.8	1.9		1.9	7.0	760			<2
05/16/09	0.6	7.1				7.1	750			<2	0.9	4.9	2.1		2.1	6.9	755			<2
05/17/09	0.6	7.4	5.2		5.2	7.1	750			<2	1.2	5.1	2.0		2.0	6.9	765			<2
05/18/09	0.6	8.2				7.1	740			<2	1.0	5.0	1.5		1.5	6.9	750			<2
05/19/09	0.9	8.6	6.3	6.8	6.3	7.1	745			<2	0.5	4.7	1.7	2.8	1.7	7.0	760	474		<2
05/20/09	0.6	8.2				7.1	750			2	0.6	4.8	2.6		2.6	6.9	765			<2
05/21/09	0.7	8.4	5.7		5.7	7.1	750			2	0.7	4.8	3.1		3.1	6.8	770			<2
05/22/09	0.6	8.0				7.1	760			<2	0.7	4.8	3.2		3.2	6.9	775			<2
05/23/09	0.6	7.8				7.1	750			<2	0.5	4.7	4.0		4.0	6.9	760			<2
05/24/09	0.6	7.3				7.1	740			2	0.5	4.7	3.6		3.6	6.9	775			<2
05/25/09	0.6	7.9				7.1	745			<2	0.8	4.6	3.2		3.2	6.9	775			<2
05/26/09	0.6	7.6	6.7	9.1	6.9	7.1	745			<2	0.7	4.5	2.4	3.5	2.4	6.9	760	463		<2
05/27/09	0.6	8.1				7.1	745			<2	0.5	4.3	2.0		2.0	6.9	765			<2
05/28/09	0.6	8.3	6.2		6.2	7.1	735			2	0.3	4.2	2.1		2.1	6.9	745			<2
05/29/09	0.6	8.0				7.1	740			<2	0.5	4.2	2.2		2.2	6.9	770			<2
05/30/09	0.5	7.5				7.1	745			<2	0.5	4.1	2.6		2.6	6.9	765			<2
05/31/09	0.5	7.5	6.6		6.6	7.1	735			2	0.5	4.1	2.6		2.6	6.9	765			<2
Avg	0.7	7.8	6.3	8.2	6.4	7.4	753	490	151	<2	0.7	4.6	2.1	3.2	2.1	6.9	754	462	133	<2
Min	0.5	6.9	5.2	6.8	5.2	7.0	735	490	151	<2	0.3	4.1	1.0	2.3	1.0	6.8	715	444	133	<2
Max	0.9	8.9	8.2	9.2	8.2	8.0	780	490	151	2	1.2	5.1	4.0	4.3	4.0	7.1	775	474	133	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 June 2009
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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<pH<9				2.2;23;240	2;5;10	16		5 [5]		6<pH<9				2.2;23;240
06/01/09	0.6	8.1				7.1	740			<2	0.4	4.0	1.8		1.8	0.4	755			<2
06/02/09	0.6	8.0	6.7	7.5	6.7	7.1	755	479	150	2	0.3	3.9	1.8	2.1	1.8	0.3	770	471	131	<2
06/03/09	0.6	7.6				7.1	760			<2	0.3	3.9	2.1		2.1	0.3	760			<2
06/04/09	0.6	8.2	6.6		6.6	7.1	780			<2	0.3	3.9	2.7		2.7	0.3	780			<2
06/05/09	0.5	7.8				7.1	765			<2	0.3	3.8	4.2		4.2	0.3	765			<2
06/06/09	0.5	7.3				7.1	760			<2	0.3	3.9	5.1		5.1	0.3	760			<2
06/07/09	0.5	7.6	6.8		6.8	7.1	750			<2	0.4	4.1	4.5		4.5	0.4	760			<2
06/08/09	0.5	9.5				7.1	780			<2	0.3	4.1	3.6		3.6	0.3	775			<2
06/09/09	0.5	8.8	7.6	8.8	7.6	7.1	785			<2	0.3	4.1	4.4	4.5	4.4	0.3	750	471		<2
06/10/09	0.6	8.2				7.0	785			<2	0.3	4.2	5.4		5.4	0.3	770			<2
06/11/09	0.6	7.8	6.6		6.6	7.1	735			<2	0.3	4.0	6.1		6.1	0.3	750			<2
06/12/09	0.6	7.1				7.1	740			<2	0.3	4.1	6.2		6.2	0.3	775			<2
06/13/09	0.6	7.2				7.1	750			<2	0.4	4.3	6.3		6.3	0.4	780			<2
06/14/09	0.6	7.2	6.2		6.2	7.2	745			<2	0.5	4.6	6.6		6.7	0.5	760			<2
06/15/09	0.6	9.1				7.2	750			<2	0.5	4.8	6.1		6.1	0.5	780			<2
06/16/09	0.6	10.3	5.4	7.6	5.4	7.2	760			<2	0.6	4.6	6.0		6.0	0.6	790	480		<2
06/17/09	0.6	8.3				7.2	755			<2	0.5	4.7	6.2		6.2	0.5	785			<2
06/18/09	0.6	9.4	5.0		5.0	7.2	755			2	0.5	4.8	7.3		7.3	0.5	785			<2
06/19/09	0.5	9.1				7.2	760			<2	0.5	4.9	7.7		7.7	0.5	770			<2
06/20/09	0.5	8.5				7.2	765			<2	0.6	4.8	7.1		7.1	0.6	765			<2
06/21/09	0.5	8.6	5.8		5.8	7.2	760			<2	0.7	4.9	6.8		6.8	0.7	795			<2
06/22/09	0.5	QC				7.2	765			<2	0.7	4.9	5.8		5.8	0.7	795			<2
06/23/09	0.5	9.8	7.0	8.8	7.0	7.2	775			<2	0.6	5.0	5.3	6.2	5.3	0.6	800	480		<2
06/24/09	0.5	9.1				7.2	765			<2	0.6	4.9	6.4		6.4	0.6	790			<2
06/25/09	0.6	9.5	6.1		6.1	7.2	770			<2	0.7	5.0	7.2		7.2	0.7	790			<2
06/26/09	0.6	9.4				7.2	760			<2	0.7	4.8	9.5		9.5	0.7	790			<2
06/27/09	0.6	9.3				7.2	750			<2	0.6	5.0	10.5		10.5	0.6	775			<2
06/28/09	0.5	9.1	6.0		6.0	7.2	740			<2	0.6	4.8	10.3		10.3	0.6	790			<2
06/29/09	0.5	8.8				7.2	740			<2	0.6	4.8	10.2		10.2	0.6	785			<2
06/30/09	0.6	9.8	6.4		6.4	7.3	785			2	0.6	4.7	9.7	10.0	9.7	0.6	815	494		<2
Avg	0.6	8.6	6.3	8.2	6.3	7.1	760	479	150	<2	0.5	4.5	6.1	5.7	6.1	0.5	777	479	131	<2
Min	0.5	7.1	5.0	7.5	5.0	7.0	735	479	150	<2	0.3	3.8	1.8	2.1	1.8	0.3	750	471	131	<2
Max	0.6	10.3	7.6	8.8	7.6	7.3	785	479	150	2	0.7	5.0	10.5	10.0	10.5	0.7	815	494	131	<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

QC: Quality Control test failure

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

	TIN		**TDS**	
Date	**Monthly**	**12-Mo. Run Avg.**	**Monthly**	**12-Mo. Run Avg.**
Jul-08	6.1	6.6	499	503
Aug-08	5.8	6.6	514	506
Sep-08	8.3	6.8	510	509
Oct-08	7.0	6.9	503	508
Nov-08	5.7	6.7	496	506
Dec-08	6.3	6.7	495	504
Jan-09	6.5	6.6	*497*	*503*
Feb-09	7.8	6.7	*463*	*500*
Mar-09	6.9	6.8	*496*	*499*
Apr-09	6.6	6.8	*509*	*498*
May-09	5.8	6.6	*501*	*498*
Jun-09	5.4	6.5	*505*	*499*
Avg	6.5	6.7	499	503
Min	5.4	6.5	463	498
Max	8.3	6.9	514	509
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. *Please note changes for the 12-month running average TDS as calculations were corrected during 2Q09 to include RP-4 RW TDS.*

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

Constituent	3Q08	4Q08	1Q09	2Q09	4Q Run. Avg.[1]	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	<25	32	26	21	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	<1.9	<0.8	<0.9	7	MFL	EPA 100.2
Barium	29	5	9	13	14	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	3.4	1.3	1.8	1.2	1.9	50	µg/L	EPA 200.8
Cyanide	<6	<6	<6	<6	<6	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.1	0.1	0.1	0.1	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	1	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	<1	<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	4.3	<0.5	<0.5	<1.3	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	<0.5	<0.3	<0.3	<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	EPA531.2
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	4	4	4	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	<20	<20	<20	<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	3Q08	4Q08	1Q09	2Q09	4Q Run. Avg.[1]	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	0.10	<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	9.5	3.9	5.8	6.2	1300	µg/L	EPA 200.8
Lead	2.8	<0.5	<0.5	<0.5	<0.9	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	0.218	<0.54	<0.481	0.862	0.53	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	3.6	7.1	4.4	<3.0	6.0	15	pCi/L	EPA 900.0
Tritium	<221	<240	<224	<210	<224	20,000	pCi/L	EPA 906
Strontium-90	<0.635	1.65	<0.607	<1.07	<0.99	8	pCi/L	EPA 905
Gross Beta Particle Activity	12	13	7	6	9	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	<25	32	26	21	200	µg/L	EPA 200.8
Copper	5.8	9.5	3.9	5.8	6.2	1000	µg/L	EPA 200.8
Corrosivity [3]	-0.4 (Non-Cor.)	-0.5 (Non-Cor.)	0.1 (Non-Cor.)	0.1 (Non-Cor.)	-0.2	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) [3]	<0.05	NR	0.166	<0.05	0.06	500	µg/L	S5540C/EPA 425.1
Iron [3]	NR	NR	NR	44	75	300	µg/L	EPA 200.7
Manganese	5	1	7	4	4	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]	2	NR	3	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	7	24	24	40	24	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease [4]	**2**	<1	<1	**2**		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	8th-25	BRK-25	BRK-25	BRK-25				
Total Trihalomethanes (TTHMs)	3.5	<0.5	<0.5	<0.5	<1.1	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<1	<1	<1	<1	<1	60	µg/L	S6251B

NA: Not Analyzed 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 then 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: Table II. Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals
(Monitoring & Reporting Program)

Constituent	2Q09	Unit	Method
Metals			
Chromium (III) [1]	1.2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)			
Acrolein	<2	µg/L	EPA 624
Acrylonitrile	<2	µg/L	EPA 624
Bromoform	<0.5	µg/L	EPA 524.2
Chlorodibromomethane	2	µg/L	EPA 524.2
Chloroethane	<0.5	µg/L	EPA 524.2
2-Chloroethylvinylether	<1	µg/L	EPA 624
Chloroform	87	mg/L	EPA 524.2
Dichlorobromomethane	15	µg/L	EPA 524.2
Methyl Bromide	<0.5	µg/L	EPA 524.2
Methyl Chloride	<0.5	µg/L	EPA 524.2
Acid Extractibles			
2-Chlorophenol	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	µg/L	EPA 625
2,4-Dinitrophenol	<3	µg/L	EPA 625
2-Nitrophenol	<1	µg/L	EPA 625
4-Nitrophenol	<3	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	µg/L	EPA 625
Phenol	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	µg/L	EPA 625
Base/Neutral Extractibles			
Acenaphthene	<1	µg/L	EPA 625
Acenaphthylene	<1	µg/L	EPA 625
Anthracene	<1	µg/L	EPA 625
Benzidine	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	µg/L	EPA 625
Benzo(b)fluoranthene	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	µg/L	EPA 625
Butyl benzyl phthalate	<1	µg/L	EPA 625
2-Chloronaphthalene	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	µg/L	EPA 625
Chrysene	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	µg/L	EPA 625
Diethyl phthalate	<2	µg/L	EPA 625
Dimethyl phthalate	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	µg/L	EPA 625
2,4-Dinitrotoluene	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	µg/L	EPA 625
Di-n-octyl phthalate	<1	µg/L	EPA 625
Azobenzene	<1	µg/L	EPA 625
Fluoranthene	<1	µg/L	EPA 625
Fluorene	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	µg/L	EPA 625
Hexachloroethane	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	µg/L	EPA 625
Isophorone	<1	µg/L	EPA 625
Naphthalene	<1	µg/L	EPA 625
Nitrobenzene	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	µg/L	EPA 625
Phenanthrene	<1	µg/L	EPA 625
Pyrene	<1	µg/L	EPA 625
Pesticides			
Aldrin	<5	µg/L	EPA 608
BHC, alpha isomer	<10	µg/L	EPA 608
BHC, beta isomer	<5	µg/L	EPA 608
BHC, delta isomer	<7	µg/L	EPA 608
4,4'-DDT	<10	µg/L	EPA 608
4,4'-DDE	<10	µg/L	EPA 608
4,4'-DDD	<10	µg/L	EPA 608
Dieldrin	<10	µg/L	EPA 608
Endosulfan I	<10	µg/L	EPA 608
Endosulfan II	<10	µg/L	EPA 608
Endosulfan Sulfate	<10	µg/L	EPA 608
Endrin Aldehyde	<10	µg/L	EPA 608

Constituent	2Q09	Unit	Method
Unregulated Chemicals			
Boron	0.2	mg/L	EPA 200.7
Chromium VI	0.35	µg/L	EPA 218.6
Dichlorodifluoromethane	<0.5	µg/L	EPA 524.2
Ethyl tertiary butyl ether	<3	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	ng/L	1625MOD
Tertiary amyl methyl ether	<3	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	µg/L	542.2 MOD
Vanadium	7	µg/L	EPA 200.8
1,4 - Dioxane	<2	µg/L	8270MOD
1,2,3-Trichloropropane	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels[2]			
n-butylbenzene	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	µg/L	EPA 524.2
Chlorate	432	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Diazinon	<0.1	µg/L	EPA 525.2
Formaldehyde	32	µg/L	SM 6252/EPA 8315
Isopropylbenzene	<0.5	µg/L	EPA 524.2
N-propylbenzene	<0.5	µg/L	EPA 524.2
1,2,4 –trimethylbenzene	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
N-Nitrosodiethylamine	<2	µg/L	EPA 521
N-Nitrosopyrrolidine	<2	µg/L	EPA 521
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals[2]			
Hormones			
Ethinyl estradiol	*<1* / <2.0	ng/L	HPLC/MS-SEDC
17-B estradiol	*<1* / <2.0	ng/L	HPLC/MS-SEDC
Estrone	*<1* / <1.0	ng/L	HPLC/MS-SEDC
"Industrial" Endocrine Disruptors			
Bisphenol A	<10	ng/L	HPLC/MS-SEDC
Nonylphenol and nonylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC
Octylphenol and octylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC
PBDE 17	<1.0	ng/L	8270C SIM
PBDE 28	<1.0	ng/L	8270C SIM
PBDE 71	<1.0	ng/L	8270C SIM
PBDE 47	2.2	ng/L	8270C SIM
PBDE 66	<1.0	ng/L	8270C SIM
PBDE 100	<1.0	ng/L	8270C SIM
PBDE 99	<1.0	ng/L	8270C SIM
PBDE 85	<1.0	ng/L	8270C SIM
PBDE 154	<1.0	ng/L	8270C SIM
PBDE 153	<1.0	ng/L	8270C SIM
PBDE 138	<1.0	ng/L	8270C SIM
PBDE 128	<1.0	ng/L	8270C SIM
PBDE 183	2.1	ng/L	8270C SIM
PBDE 190	<1.0	ng/L	8270C SIM
PBDE 203	3.7	ng/L	8270C SIM
PBDE 206	<1.0	ng/L	8270C SIM
PBDE 209	<1.0	ng/L	8270C SIM
Pharmaceuticals & Other Substances			
Acetaminopen	*<1* / <1.0	ng/L	HPLC/MS-SEDC
Amoxicillin	NR		Not Available[3]
Azithromycin	NR		Not Available[3]
Caffeine	*<3* / <5.0	ng/L	HPLC/MS-SEDC
Carbamazepine	*80* / 1.1	ng/L	HPLC/MS-SEDC
Ciprofloxacin	NR		Not Available[3]
Ethylenediamine tetra-acetic acid (EDTA)	*<0.1*	mg/L	EPA 300.0MOD
Gemfibrozil	*<1* / <1.0	ng/L	HPLC/MS-SEDC
Ibuprofen	*4.2* / <10	ng/L	HPLC/MS-SEDC
Iodinated contrast media	*75*	ng/L	HPLC/MS-SEDC
Lipitor	NR		Not Available[3]
Methadone	<5.0	ng/L	HPLC/MS-SEDC
Morphine	NR		Not Available[3]
Salicylic acid	63	ng/L	HPLC/MS-SEDC
Triclosan	*17* / 130	ng/L	HPLC/MS-SEDC

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) were sampled during 2Q09 for the annual requirement.

MWH Lab Data for EDCs is italicized and green

CAS Lab Data for EDCs is underlined and blue

[3] Analytical Method is not available for this constituent

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	04/07/09	4.43	1.7	1.5	1.4	<0.5	<0.01	650
BRK-LYS-00	0	04/14/09	4.93	1.8	1.3	1.2	0.6	<0.01	665
BRK-LYS-00	0	04/21/09	6.05	2.4	1.3	1.3	1.1	<0.01	695
BRK-LYS-00	0	04/28/09	5.21	4.0	1.6	1.4	2.6	0.14	700
BRK-LYS-00	0	05/05/09	5.75	2.6	0.7	0.6	2.0	0.10	680
BRK-LYS-00	0	05/12/09	5.00	<0.6	<0.2	<0.1	<0.5	0.06	680
BRK-LYS-00	0	05/19/09	5.75	1.1	<0.2	<0.1	1.0	0.05	685
BRK-LYS-00	0	05/27/09	5.63	1.3	<0.2	<0.1	1.3	0.06	710
BRK-LYS-00	0	06/02/09	5.55	1.8	<0.2	<0.1	1.8	0.07	705
BRK-LYS-00	0	06/09/09	4.57	3.8	2.9	2.8	1.0	0.06	755
BRK-LYS-00	0	06/16/09	4.92	5.5	4.3	4.2	1.3	0.06	765
BRK-LYS-00	0	06/23/09	5.21	4.6	2.7	2.7	1.9	0.09	760
BRK-LYS-00	0	06/30/09	6.12	6.0	3.8	3.7	2.3	0.10	780
BRK-LYS-05	5	04/07/09	3.20	<0.6	0.7	<0.1	<0.5	<0.01	610
BRK-LYS-05	5	04/14/09	3.74	1.4	0.6	<0.1	1.3	<0.01	600
BRK-LYS-05	5	04/21/09	5.36	1.3	0.9	0.4	0.8	<0.01	655
BRK-LYS-05	5	04/28/09	3.02	1.9	<0.2	<0.1	1.8	0.14	695
BRK-LYS-05	5	05/05/09	2.93	1.5	0.6	<0.1	1.5	0.12	690
BRK-LYS-05	5	05/12/09	3.64	<0.6	0.6	<0.1	<0.5	0.08	700
BRK-LYS-05	5	05/19/09	3.95	1.2	0.9	<0.1	1.2	0.08	730
BRK-LYS-05	5	05/27/09	4.63	1.6	1.3	<0.1	1.5	0.08	740
BRK-LYS-05	5	06/02/09	5.73	2.0	1.3	<0.1	2.0	0.08	720
BRK-LYS-05	5	06/09/09	5.96	2.4	1.4	<0.1	2.4	0.08	730
BRK-LYS-05	5	06/16/09	5.59	2.5	1.5	<0.1	2.4	0.08	755
BRK-LYS-05	5	06/23/09	5.29	1.8	1.6	<0.1	1.7	0.09	795
BRK-LYS-05	5	06/30/09	5.39	4.1	<0.2	<0.1	4.0	0.08	790
BRK-LYS-10	10	04/07/09	3.90	0.7	<0.2	<0.1	0.7	<0.01	380
BRK-LYS-10	10	04/14/09	4.26	<0.6	<0.2	<0.1	<0.5	<0.01	370
BRK-LYS-10	10	04/21/09	3.84	<0.6	<0.2	<0.1	<0.5	<0.01	395
BRK-LYS-10	10	04/28/09	3.75	0.7	<0.2	<0.1	0.7	0.09	410
BRK-LYS-10	10	05/05/09	4.44		0.2	<0.1		0.09	420
BRK-LYS-10	10	05/12/09	4.14	<0.6	<0.2	<0.1	<0.5	0.05	430
BRK-LYS-10	10	05/19/09	3.84	<0.6	<0.2	<0.1	<0.5	0.04	455
BRK-LYS-10	10	05/27/09	4.18	<0.6	0.3	<0.1	<0.5	0.04	480
BRK-LYS-10	10	06/02/09	4.53	2.5	0.2	0.1	2.4	0.05	500
BRK-LYS-10	10	06/09/09	4.33			0.2		0.05	525
BRK-LYS-10	10	06/16/09	4.85						545
BRK-LYS-10	10	06/23/09	4.76			0.1		0.05	550
BRK-LYS-10	10	06/30/09	4.61			0.1		0.04	575
BRK-LYS-15	15	06/09/09	6.26					0.22	2170
BRK-LYS-25	25	04/07/09	1.50	<0.6	<0.2	<0.1	<0.5	<0.01	350
BRK-LYS-25	25	04/14/09	1.83	<0.6	<0.2	<0.1	<0.5	<0.01	340
BRK-LYS-25	25	04/21/09	1.46	<0.6	<0.2	<0.1	<0.5	<0.01	340
BRK-LYS-25	25	04/28/09	1.52	<0.6	<0.2	<0.1	0.6	0.10	360
BRK-LYS-25	25	05/05/09	1.69	0.6	0.2	<0.1	0.5	0.11	405
BRK-LYS-25	25	05/12/09	2.38	<0.6	<0.2	<0.1	<0.5	0.07	465
BRK-LYS-25	25	05/19/09	2.03	<0.6	<0.2	<0.1	<0.5	0.07	510
BRK-LYS-25	25	05/27/09	1.98	1.8	<0.2	<0.1	1.8	0.07	530
BRK-LYS-25	25	06/02/09	2.32	1.0	<0.2	<0.1	1.0	0.08	530
BRK-LYS-25	25	06/09/09	2.04	<0.6	<0.2	<0.1	0.5	0.09	605
BRK-LYS-25	25	06/16/09	2.46	<0.6	<0.2	<0.1	<0.5	0.08	650
BRK-LYS-25	25	06/23/09	2.82	<0.6	<0.2	<0.1	<0.5	0.09	660
BRK-LYS-25	25	06/30/09	2.95	<0.6	<0.2	<0.1	<0.5	0.08	700
BRK-LYS-35	35	04/07/09	2.97	<0.6	<0.2	<0.1	<0.5	<0.01	355
BRK-LYS-35	35	04/14/09	2.74	<0.6	<0.2	<0.1	0.6	<0.01	370
BRK-LYS-35	35	04/21/09	2.88	<0.6	<0.2	<0.1	<0.5	<0.01	425
BRK-LYS-35	35	04/28/09	3.45	0.7	<0.2	<0.1	0.7	0.11	420
BRK-LYS-35	35	05/05/09	4.57	<0.6	<0.2	<0.1	<0.5	0.11	440
BRK-LYS-35	35	05/12/09	8.29	<0.6	<0.2	<0.1	<0.5	0.06	415
BRK-LYS-35	35	05/19/09	5.64	<0.6	<0.2	<0.1	<0.5	0.06	440
BRK-LYS-35	35	05/27/09	7.17	<0.6	<0.2	<0.1	<0.5	0.06	480
BRK-LYS-35	35	06/02/09	6.50	0.9	<0.2	<0.1	0.9	0.13	495
BRK-LYS-35	35	06/09/09	8.70	<0.6	<0.2	<0.1	0.6	0.08	490
BRK-LYS-35	35	06/16/09	5.78	<0.6	<0.2	<0.1	<0.5	0.09	525
BRK-LYS-35	35	06/23/09	4.55	<0.6	<0.2	<0.1	<0.5	0.08	575
BRK-LYS-35	35	06/30/09	3.65	<0.6	<0.2	<0.1	<0.5	0.07	600

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

Ely Basin No. 3									
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
ELY3E-LYS-00	0	05/05/09	7.18	1.3	1.0	0.8	0.5	0.11	190
ELY3E-LYS-00	0	05/12/09	6.29	0.7	0.8	0.7	<0.5	0.07	210
ELY3E-LYS-00	0	05/19/09	5.62	<0.6	0.4	0.3	<0.5	0.06	210
ELY3E-LYS-00	0	05/28/09	7.40	2.2	<0.2	<0.1	2.1	0.02	220
ELY3E-LYS-10	10	05/05/09	2.60	0.8	0.8	0.6	<0.5	0.12	215
ELY3E-LYS-10	10	05/12/09	1.80	0.8	0.8	0.7	<0.5	0.08	210
ELY3E-LYS-10	10	05/19/09	1.75	6.7	0.6	0.6	6.1	0.08	210
ELY3E-LYS-10	10	05/28/09	1.98	0.9	0.4	0.3	0.6	0.06	215
ELY3E-LYS-25	25	05/05/09				0.1		0.12	360
ELY3E-LYS-25	25	05/12/09				<0.1		0.08	270
ELY3E-LYS-25	25	05/19/09	1.96						250
ELY3E-LYS-25	25	05/28/09	1.95						245

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	TIN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
05/27/09	4.38	2.2	1.31	0.66	0.3
06/02/09	4.00	2.2	1.20	0.60	0.3

Ely Basin				
Date	Recycled Water*	Recycled Water*	Ely 3 East	Ely 3 East
	TOC	TIN	TOC (76% reduction)	TN (52% reduction)
05/27/09	4.38	2.2	1.05	1.1

*Recycled water sampled at Reliant

Table 2-6
Diluent Water Monitoring Results

Constituent	Hickory Basin Local Runoff May 19, 2009	Declez Basin Local Runoff May 19, 2009	Unit	Method
NO_2-N	0.06	0.13	mg/L	EPA 300.0
NO_3-N	<0.1	0.9	mg/L	EPA 300.0
TDS	428	329	mg/L	SM 2540C
Total Coliform	>23	>23	mpn/100ml	SM 9221B
Oil & Grease	<2	<2	mg/L	EPA 1664A
Inorganic Chemicals				
Aluminum	869	46	µg/L	EPA 200.7
Antimony	1.2	1.5	µg/L	EPA 200.8
Arsenic	3	2	µg/L	EPA 200.8
Asbestos	<6.22	<6.22	MFL	EPA 100.2
Barium	73	54	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	µg/L	EPA 200.7
Chromium	2.9	2.1	µg/L	EPA 200.7
Cyanide	<0.006	<0.006	mg/L	SM 4500-CN E
Fluoride	0.3	0.3	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	µg/L	EPA 245.2
Nickel	3	3	µg/L	EPA 200.7
Perchlorate	<4	<4	µg/L	EPA 314
Selenium	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)				
Benzene	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	1.1	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.3	<0.3	µg/L	EPA 524.2
Total Xylenes	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)				
Alachlor (Alanex)	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	µg/L	EPA531.2
Chlordane	<0.1	<0.1	µg/L	EPA 505
2,4-D	2.3	4.2	µg/L	EPA 515.4
Dalapon	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	µg/L	EPA 548.1

Table 2-6
Diluent Water Monitoring Results

Constituent	Hickory Basin Local Runoff May 19, 2009	Declez Basin Local Runoff May 19, 2009	Unit	Method
Endrin	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	20	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	µg/L	EPA 505
Simazine	0.1	<0.05	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts				
Total Trihalomethanes (TTHMs)	<0.5	<0.5	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	20	8.9	µg/L	S6251B
Bromate	<5	<5	µg/L	EPA 300.1
Chlorite	0.02	<0.01	mg/L	EPA 300.0
Notification Level Chemicals				
Copper	17.2	14.1	µg/L	EPA 200.7
Lead	1.7	0.6	µg/L	EPA 200.8
Radionuclides				
Combined Radium-226 and Radium 228	<0.296	<0.821	pCi/L	EPA 903.0
Gross Alpha Particle Activity	4.7	<3	pCi/L	EPA 900.0
Tritium	<227	<227	pCi/L	EPA 906
Strontium-90	<0.765	<0.849	pCi/L	EPA 905
Gross Beta Particle Activity	<3	4	pCi/L	EPA 900.0
Uranium	1.8	1.0	pCi/L	EPA 200.8
Unregulated Chemicals				
Boron	0.2	0.2	mg/L	EPA 200.7
Chromium VI	0.6	1.0	µg/L	EPA 218.6
Dichlorodifluoromethane	<0.5	<0.5	µg/L	EPA 524.2
Ethyl tertiary butyl ether	<3	<3	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	2.05	ng/L	1625MOD
Perchlorate	<4	<4	µg/L	EPA 314
Tertiary amyl methyl ether	<3	<3	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	<2	µg/L	542.2 MOD
Vanadium	12	16	µg/L	EPA 200.8
1,4 - Dioxane	<2	<2	µg/L	8270MOD
1,2,3-Trichloropropane	<0.5	<0.5	µg/L	EPA 524.2
Secondary Maximum Contaminant Level Chemicals				
Aluminum	869	46	µg/L	EPA 200.7
Corrosivity	1.2	1.9	SI	SM 2330B
Foaming Agents (MBAS)	0.08	0.3	mg/L	S5540C/EPA 425.1
Iron	1156	111	µg/L	EPA 200.7
Manganese	28	14	µg/L	EPA 200.7
Odor--Threshold	40	67	TON	SM 2150B
Silver	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Zinc	15	11	µg/L	EPA 200.7

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
	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
	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
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 numbe
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 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_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 Company F37a	4/23/09	<0.1	<1.1	7.2	460	296	***204***	3	573	0.4	<0.05	***1360***	29	<0.5	1	<0.25	<0.2	3.5	13	18	222	20	16	1.0	<0.01	***10.7***	10.7	<0.5	174	9.1
	California Speedway Infield Well	4/23/09	0.3	<1.1	7.4	585	394	<25	<3	6.0	0.3	0.06	38	<1	<0.5	1	<0.25	<0.2	0.5	10	20	268	23	75	<0.1	<0.01	***10.7***	10.7	<0.5	177	11.2
	California Speedway 2	4/23/09	0.1	<1.1	7.5	370	238	<25	3	2.4	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	31	11	162	18	15	<0.1	<0.01	4.4	4.4	<0.5	159	10.2
	Reliant Energy East Well	4/23/09	0.5	<1.1	6.1	370	250	<25	<3	1.5	0.0	0.06	38	4	<0.5	2	<0.25	<0.2	0.4	<1	19	153	17	23	<0.1	<0.01	9.8	9.8	<0.5	117	10.8
	Ontario Well No. 20	4/21/09	0.2	<1.1	7.4	350	222	<25	<3	4.8	0.4	0.08	<15	<1	<0.5	2	<0.25	<0.2	0.2	7	9	158	15	6	<0.1	<0.01	1.9	1.9	<0.5	164	10.4
	BH-1/2	4/15/09	0.4	<1.1	7.5	500	334	<25	5	0.7	0.3	<0.05	312	4	<0.5	1	<0.25	<0.2	2.4	<1	74	209	21	34	<0.1	<0.01	2.3	2.3	<0.5	116	6.1
Turner	Ontario Well No. 29	4/21/09	0.3	<1.1	6.2	350	240	<25	<3	8.3	0.2	0.08	<15	<1	<0.5	2	<0.25	<0.2	0.3	2	9	141	23	18	<0.1	<0.01	3.1	3.1	<0.5	153	8.3
	Ontario Well No. 38	4/21/09	<0.1	<1.1	7.3	300	196	<25	<3	0.8	0.4	0.07	<15	<1	<0.5	1	<0.25	<0.2	0.1	<1	8	124	21	10	<0.1	<0.01	1.5	1.5	<0.5	150	8.5
	T-1/2	4/20/09	1.0	2.2	7.4	360	232	<25	3	5.3	0.0	0.07	<15	3	<0.5	1	<0.25	<0.2	0.2	6	34	148	20	14	<0.1	<0.01	0.1	0.1	<0.5	131	6.2
	T-2/1	4/20/09	1.2	9.2	7.3	500	300	<25	5	8.3	0.0	0.08	***1890***	6	<0.5	2	<0.25	<0.2	***7.1***	2	69	197	30	23	<0.1	<0.01	0.9	0.9	<0.5	136	7.4
	T-2/2	4/20/09	0.8	2.2	7.3	530	338	<25	3	4.5	0.0	0.07	76	21	<0.5	1	<0.25	<0.2	1.0	17	80	224	23	47	<0.1	<0.01	0.8	0.8	<0.5	128	6.0
7th & 8th St.	Ontario Well No. 35	4/20/09	0.5	<1.1	7.6	340	216	<25	3	23	0.2	0.07	<15	<1	<0.5	1	<0.25	<0.2	0.7	11	7	133	24	22	<0.1	<0.01	2.4	2.4	<0.5	142	6.7
	8TH-1/1	4/14/09	1.5	<1.1	7.9	175	138	33	<3	0.6	0.0	<0.05	41	<1	<0.5	1	<0.25	<0.2	0.2	1	9	70	11	6	0.2	0.11	1.5	1.6	<0.5	74	7.3
	8TH-1/2	4/14/09	0.2	<1.1	7.4	325	218	<25	<3	2.2	0.0	<0.05	123	13	<0.5	1	<0.25	<0.2	0.2	16	14	136	16	13	<0.1	0.13	7.4	9.2	1.7	115	6.9
	8TH-2/1	4/14/09	0.2	<1.1	7.3	540	378	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.4	<1	19	243	18	43	0.4	0.14	***24.6***	24.8	<0.5	136	8.8
	8TH-2/2	4/14/09	3.1	<1.1	7.2	615	420	<25	<3	<0.5	0.0	0.10	18	1	<0.5	1	<0.25	<0.2	0.3	4	29	275	20	27	<0.1	0.15	***30.0***	30.2	<0.5	153	7.6
Ely	Ely Basin MW-1 Philadelphia St.	4/16/09	1.3	<1.1	7.8	345	210	<25	3	<0.5	0.4	0.07	79	6	<0.5	2	<0.25	<0.2	0.3	<1	47	122	24	11	<0.1	<0.01	0.4	0.4	<0.5	97	0.9
	Ely Basin MW-2 Walnut St.	4/16/09	0.4	<1.1	7.3	705	410	<25	<3	0.6	1.0	0.06	20	<1	<0.5	1	<0.25	<0.2	0.2	2	44	326	26	40	<0.1	<0.01	***19.5***	19.5	<0.5	215	3.2
	43840-CWW	4/16/09	0.6	<1.1	7.2	480	308	<25	<3	0.5	0.8	0.06	<15	<1	<0.5	1	<0.25	<0.2	0.1	7	22	216	21	33	<0.1	<0.01	8.2	8.2	<0.5	168	7.9
	Bishop of San Bernardino Corp. - DOM	4/16/09	0.2	<1.1	6.5	790	466	<25	3	7.1	1.0	0.06	34	2	<0.5	1	<0.25	<0.2	0.9	11	41	374	24	73	<0.1	<0.01	***21.7***	21.7	<0.5	237	7.2
Brooks	BRK-1/1	4/8/09	1.1			570		***4610***		3.5				***54***			<0.25			10	85		86	36	<0.1	<0.01	1.7	<4.2	<2.5		
	BRK-1/1	4/13/09	1.1	1.1	8.2	575	376	***2960***	5	3.4	0.2	<0.05	***2090***	***62***	<0.5	2	0.43	<0.2	***113***	9	78	114	92	33	<0.1	<0.01	1.1	<3.6	<2.5	143	0.4
	BRK-1/1	4/27/09	0.5			560																			<0.1	<0.01	3.5	<4.8	<1.3		
	BRK-1/1	5/11/09	1.3			530																			<0.1	<0.01	3.9	4.9	1.1		
	BRK-1/1	5/26/09	1.3			510																			0.4	0.08	1.5	<14.1	<12.5		
	BRK-1/1	6/8/09	1.0			510																			0.2	<0.01	1.8	1.8	<0.5		
	BRK-1/1	6/22/09	1.0			515																			0.1	<0.01	1.5	1.5			
	BRK-1/2	4/8/09	0.5			520		27		6.7				18			<0.25			36	16		15	41	<0.1	<0.01	***18.9***	18.9	<0.5		
	BRK-1/2	4/13/09	0.3	1.1	7.9	515	334	<25	<3	0.5	0.3	0.07	28	<1	<0.5	1	<0.25	<0.2	1.7	1	18	248	15	40	<0.1	<0.01	***18.3***	18.3	<0.5	150	6.4
	BRK-1/2	4/27/09	1.3			520																			<0.1	<0.01	***18.4***	18.4	<0.5		
	BRK-1/2	5/11/09	0.5			530																			<0.1	<0.01	***19.2***	19.2	<0.5		
	BRK-1/2	5/26/09	0.2			550																			<0.1	0.10	***17.2***	17.3	<0.5		
	BRK-1/2	6/8/09	0.2			545																			<0.1	<0.01	***18.2***	18.2	<0.5		
	BRK-1/2	6/22/09	0.2			540																			<0.1	<0.01	***18.3***	18.3	<0.5		
	BRK-2/1	4/13/09	0.3	2.2	7.7	560	354	<25	5	0.8	0.3	<0.05	196	4	<0.5	1	<0.25	<0.2	2.4	2	43	286	12	42	<0.1	<0.01	9.0	9.0	<0.5	166	7.3
	BRK-2/1	5/11/09	0.6			580																			<0.1	<0.01	9.8	9.8	<0.5		
	BRK-2/1	6/8/09	0.3			600																			<0.1	<0.01	8.8	8.8	<0.5		
	BRK-2/2	4/13/09	<0.1	1.1	7.5	320	206	<25	<3	<0.5	0.4	<0.05	55	<1	<0.5	1	<0.25	<0.2	0.2	<1	6	97	34	19	<0.1	<0.01	4.9	4.9	<0.5	132	5.2
	BRK-2/2	5/11/09	0.1			320																			<0.1	<0.01	5.1	5.1	<0.5		
	BRK-2/2	6/8/09	0.2			340																			<0.1	<0.01	4.9	4.9	<0.5		
	Pomona Well # 2	4/28/09	0.2	<1.1	7.2	600	390	<25	<3	8.2	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	12	43		12	56	<0.1	0.14	***12.0***	12.1	<0.5	158	0.8
	Pomona Well #10	4/28/09	0.1	<1.1	5.8	525	354	<25	<3	10.0	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	13	41		12	46	<0.1	0.14	***10.1***	10.3	<0.5	148	9.3
	Pomona Well #34	4/28/09	0.2	<1.1	7.1	555	372	<25	<3	132	0.3	<0.05	26	<1	<0.5	1	<0.25	<0.2	0.6	254	31		12	48	<0.1	0.15	***16.1***	16.2	<0.5	157	10.1
Background*	DCZ-1	4/15/09	1.5	6.9	7.9	360	248	37	3	1.6	0.4	<0.05	***531***	***67***	<0.5	2	<0.25	<0.2	2.9	2	22	129	31	20	<0.1	<0.01	1.5	1.5	<0.5	137	1.5
	RP3-1/1	4/15/09	7.3	9.2	7.1	***1440***	***998***	***2390***	5	7.0	0.3	<0.05	***2540***	***484***	<0.5	***4***	<0.25	<0.2	***114***	16	49	224	281	168	<0.1	1.86	***19.3***	21.8	0.7	553	0.9
	RP3-1/1	6/2/09	7.3			***1420***																			<0.1	0.32	***13.0***	14.2	0.9		
	RP3-1/1	6/16/09	7.4			***1350***																			0.2	0.23	***12.7***	13.8	0.8		
	RP3-1/2	4/15/09	0.8	1.1	6.9	***950***	***642***	<25	<3	0.8	0.2	0.18	<15	<1	<0.5	***4***	<0.25	<0.2	0.4	<1	34	355	77	54	<0.1	0.08	***21.5***	21.5	<0.5	350	1.3
	RP3-1/2	6/2/09	2.0			***970***																			<0.1	0.33	***24.3***	24.6	<0.5		
	RP3-1/2	6/16/09	2.2			***970***																			<0.1	0.33	***25.5***	25.9	<0.5		
	Primary Maximum Contaminant Level							1000		1300					13			70									10				
	Secondary Maximum Contaminant Level					900	500	200		1000		500	300	50	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 Brooks St. monitoring wells. On those occasions, a full set of analysis was not necessary and only parameters of interest were analyzed.

*Declez and RP3 wells are currently undergoing background testing prior to start-up of those two sites

Bold and italicized text - Primary MCL exceedance ***Bold and italicized text - Secondary MCL exceedance***

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

	Diluent Water																	
	Imported Water						Local Runoff / Storm Flow						Recycled Water					
Date	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana
Jul-08	0	0	0	0	0	0	29	91	3	11	18	31	224	67	0	0	0	0
Aug-08	0	0	0	0	0	0	15	8	16	8	6	45	128	0	117	0	0	0
Sep-08	0	0	0	0	0	0	15	5	0	141	3	34	0	0	86	0	0	0
3Q08 Total	**0**	**0**	**0**	**0**	**0**	**0**	**59**	**104**	**19**	**160**	**27**	**110**	**352**	**67**	**203**	**0**	**0**	**0**
Oct-08	0	0	0	0	0	0	16	85	0	117	3	36	0	135	166	94	0	0
Nov-08	0	0	0	0	0	0	137	198	23	117	3	50	0	88	103	38	0	0
Dec-08	0	0	0	0	0	0	352	287	162	394	35	87	0	0	88	0	0	0
4Q08 Total	**0**	**0**	**0**	**0**	**0**	**0**	**505**	**571**	**184**	**628**	**41**	**173**	**0**	**223**	**356**	**131**	**0**	**0**
Jan-09	0	0	0	0	0	0	35	38	25	39	0	5	0	39	277	0	0	40
Feb-09	0	0	0	0	0	0	458	399	208	413	63	95	0	9	20	0	23	0
Mar-09	0	0	0	0	0	0	21	32	30	57	31	0	0	0	159	0	23	0
1Q09 Total	**0**	**0**	**0**	**0**	**0**	**0**	**514**	**469**	**263**	**509**	**94**	**100**	**0**	**48**	**456**	**0**	**46**	**40**
Apr-09	0	0	0	0	0	0	15	78	1	13	8	0	0	15	296	0	0	0
May-09	0	0	0	0	0	0	16	38	17	19	18	0	0	11	115	30	0	0
Jun-09	0	0	0	0	0	0	30	14	0	62	11	0	0	0	178	9	0	0
2Q09 Total	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**130**	**18**	**94**	**36**	**0**	**0**	**27**	**589**	**39**	**0**	**0**

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

	ASR Well No. 4									
		Injection			Recovery			Mass Balance		
	Date	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)	(12,728)
	Jun-08	0	1.10	350	107	14	360	(123)	(2,645)	(60,049)

	ASR Well No. 30									
		Injection			Recovery			Mass Balance		
	Date	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									
		Injection			Recovery			Mass Balance		
	Date	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 (NO_3-N + NO_2-N, assuming no NH_3-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)			
		Mass Balance		
	Date	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

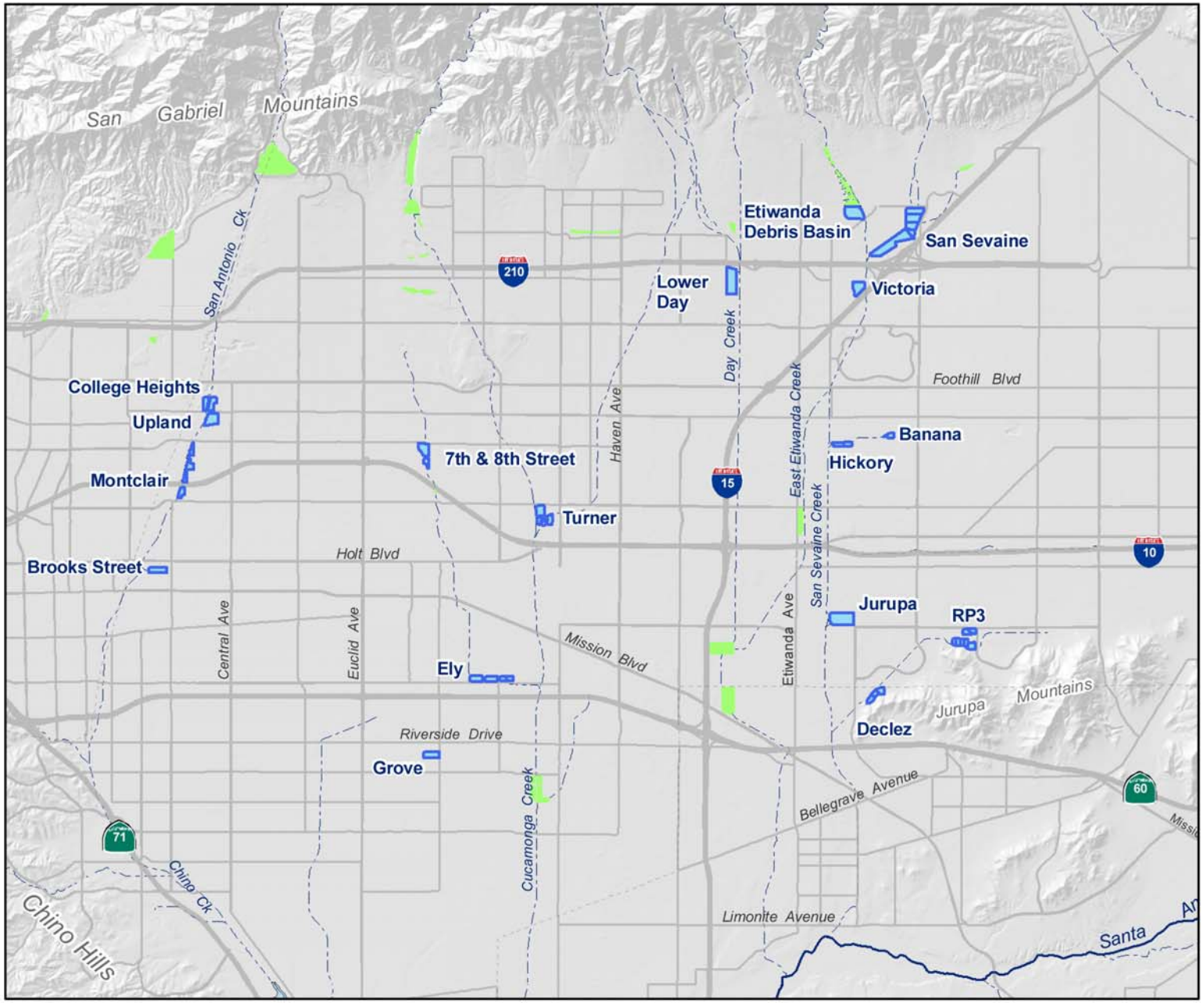
Well 4	TIN	TDS	Est. Prod
5/7/08	4.1	360	20%
5/9/08	6.9	370	40%
5/12/08	6.9	370	60%
5/27/08	12	390	80%
6/6/08	14	360	100%

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

Table 7-1
WateReuse Study Results

Constituent	Brooks Basin BRK-1/1 April 8, 2009	Unit	Method
1,1,1-Trichloroethane	<0.5	µg/L	ML/EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloroethane	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethane	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethylene	<0.5	µg/L	ML/EPA 524.2
1,2,3-Trichloropropane	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trichlorobenzene	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trimethylbenzene	<0.5	µg/L	ML/EPA 524.2
1,2-Dichlorobenzene	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloroethane	<0.5	µg/L	ML/EPA 524.2
cis-1,2-Dichloroethylene	<0.5	µg/L	ML/EPA 524.2
trans-1,2-Dichloroethylene	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloropropane	<0.5	µg/L	ML/EPA 524.2
1,3,5-Trimethylbenzene	<0.5	µg/L	ML/EPA 524.2
1,3-Dichloropropene	<0.5	µg/L	ML/EPA 524.2
1,4-Dichlorobenzene	<0.5	µg/L	ML/EPA 524.2
1,4-Dioxane	<2	µg/L	ML/SW 8270 mod
2,4,6-trichlorophenol	<5	µg/L	ML/EPA625/8270
2,4-D	<0.1	µg/L	ML/EPA 515.4
2,4-dichlorophenol	<5	µg/L	ML/EPA625/8270
2,4-dinitrophenol	<50	µg/L	ML/EPA625/8270
2,4-dinitrotoluene	<0.1	µg/L	ML/EPA 525.2
2,6-dinitrotoluene	<5	µg/L	ML/EPA625/8270
2-chlorotoluene	<0.5	µg/L	ML/EPA 524.2
4-chlorotoluene	<0.5	µg/L	ML/EPA 524.2
Alachlor	<0.05	µg/L	ML/EPA 525.2
Aluminum	4614	µg/L	EPA 200.8
Antimony	0.2	µg/L	EPA 200.8
Arsenic	3.5	µg/L	EPA 200.8
Atrazine	<0.05	µg/L	ML/EPA 525.2
Barium	73	µg/L	EPA 200.8
Bentazon	<0.5	µg/L	ML/EPA 515.4
Benzene	<0.5	µg/L	ML/EPA 524.2
Benzo(a)pyrene	<0.02	µg/L	ML/EPA 525.2
Beryllium	1.0	µg/L	EPA 200.8
Boron	0.1	mg/L	EPA 200.7
Bromate	<1	µg/L	EPA 317
Butylbenzene-n	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-sec	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-tert	<0.5	µg/L	ML/EPA 524.2
Cadmium	0.1	µg/L	EPA 200.8
Carbofuran	<0.5	µg/L	ML/EPA 531.2
Carbon Disulfide	<0.5	µg/L	ML/EPA 624
Carbon Tetrachloride	<0.5	µg/L	ML/EPA 524.2
Chlorate	63	µg/L	ML/EPA 300.0
Chlordane	<0.1	µg/L	ML/EPA 505
Chlorite	<0.01	mg/l	ML/EPA 300.0
Chromium	23.4	µg/L	EPA 200.8
Chromium-6	0.3	µg/L	EPA 218.6
Copper	3.5	µg/L	EPA 200.8
Cyanide	<0.006	mg/L	SM 4500-CN E
Dalapon	<1	µg/L	ML/EPA 515.4
Diazinon	<0.1	µg/L	ML/EPA 525.2
Dibromochloropropane (DBCP)	<0.01	µg/L	ML/EPA 504.1
Dichlorodifluoromethane	<0.5	µg/L	ML/EPA 524.2
Dichloromethane	<0.5	µg/L	ML/EPA 524.2
Di(2-ethylhexyl)adipate	<0.6	µg/L	ML/EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	µg/L	ML/EPA 525.2

Constituent	Brooks Basin BRK-1/1 April 8, 2009	Unit	Method
Dinoseb	<0.2	µg/L	ML/EPA 515.4
Diquat	<0.4	µg/L	ML/EPA 549.2
EC	570	µmhos/cm	SM 2510
Endothall	<5	µg/L	EPA 548.1
Endrin	<0.01	µg/L	ML/EPA 505
Ethyl tertiary butyl ether	<3	µg/L	ML/EPA 524.2
Ethylbenzene	<0.5	µg/L	ML/EPA 524.2
Ethylene Dibromide (EDB)	<0.01	µg/L	ML/EPA 504.1
Fluoride	0.3	mg/L	EPA 300.0
Formaldehyde	<5	µg/L	ML/SM 6252
Glyphosate	<6	µg/L	EPA 547
Total Haloacetic Acids (HAA5)	<1	µg/L	ML/S6251B
Heptachlor	<0.01	µg/L	ML/EPA 505
Heptachlor Epoxide	<0.01	µg/L	ML/EPA 505
Hexachlorobenzene	<0.05	µg/L	ML/EPA 525.2
Hexachlorocyclopentadiene	<0.05	µg/L	ML/EPA 525.2
Isopropylbenzene	<0.5	µg/L	ML/EPA 524.2
Lead	15	µg/L	EPA 200.8
Lindane	<0.01	µg/L	ML/EPA 505
Manganese	54	µg/L	EPA 200.8
Mercury	<0.2	µg/L	EPA 245.2
Methoxychlor	<0.05	µg/L	ML/EPA 505
Methyl isobutyl ketone (MIBK)	<5	µg/L	ML/EPA 524.2
Methyl-tert-butyl ether (MTBE)	<0.5	µg/L	ML/EPA 524.2
Molinate	<0.1	µg/L	ML/EPA 525.2
Naphthalene	<0.5	µg/L	ML/EPA 524.2
Nickel	35	µg/L	EPA 200.8
Nitrate Nitrogen	1.7	mg/L	EPA 300.0
Nitrite Nitrogen	<0.01	mg/L	EPA 300.0
Nitrobenzene	<5	µg/L	ML/EPA625/8270
N-nitrosodiethylamine (NDEA)	<2	ng/l	ML/EPA 521
N-Nitrosodimethylamine (NDMA)	5.8	ng/l	ML/EPA 521
N-nitrosodi-n-propylamine (NDPA)	<2	ng/l	ML/EPA 521
n-propylbenzene (isocumene)	<0.5	µg/L	ML/EPA 524.2
Oxamyl	<0.5	µg/L	ML/EPA 531.2
Pentachlorophenol	<0.04	µg/L	ML/EPA 515.4
Perchlorate	<4	µg/L	EPA 314
Picloram	<0.1	µg/L	ML/EPA 515.4
Polychlorinated Biphenyls	<0.08	µg/L	ML/EPA 505
Propachlor	<0.05	µg/L	ML/EPA 525.2
Selenium	<2	µg/L	EPA 200.8
2,4,5-TP (Silvex)	<0.2	µg/L	ML/EPA 515.4
Simazine	<0.05	µg/L	ML/EPA 525.2
Styrene	<0.5	µg/L	ML/EPA 524.2
Tertiary amyl methyl ether	<3	µg/L	ML/EPA 524.2
Tertiary butyl alcohol	<2	µg/L	ML/524.2
Tetrachloroethylene	<0.5	µg/L	ML/EPA 524.2
Thallium	<1	µg/L	EPA 200.8
Thiobencarb	<0.2	µg/L	ML/EPA 525.2
Toluene	<0.5	µg/L	ML/EPA 524.2
Total Nitrate/Nitrite (as N)	1.7	mg/L	EPA 300.0
Total Trihalomethanes (THM)	8	µg/L	ML/EPA 524.2
Toxaphene	<0.5	µg/L	ML/EPA 505
Trichloroethylene	<0.5	µg/L	ML/EPA 524.2
Trichlorofluoromethane	<0.5	µg/L	ML/EPA 624
Vanadium	3	µg/L	EPA 200.8
Vinyl Chloride	<0.3	µg/L	ML/EPA 524.2
Xylenes	<1	µg/L	ML/EPA 524.2



Explanation

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

N

S

0 2 4 Miles

0 4 8 Kilometers

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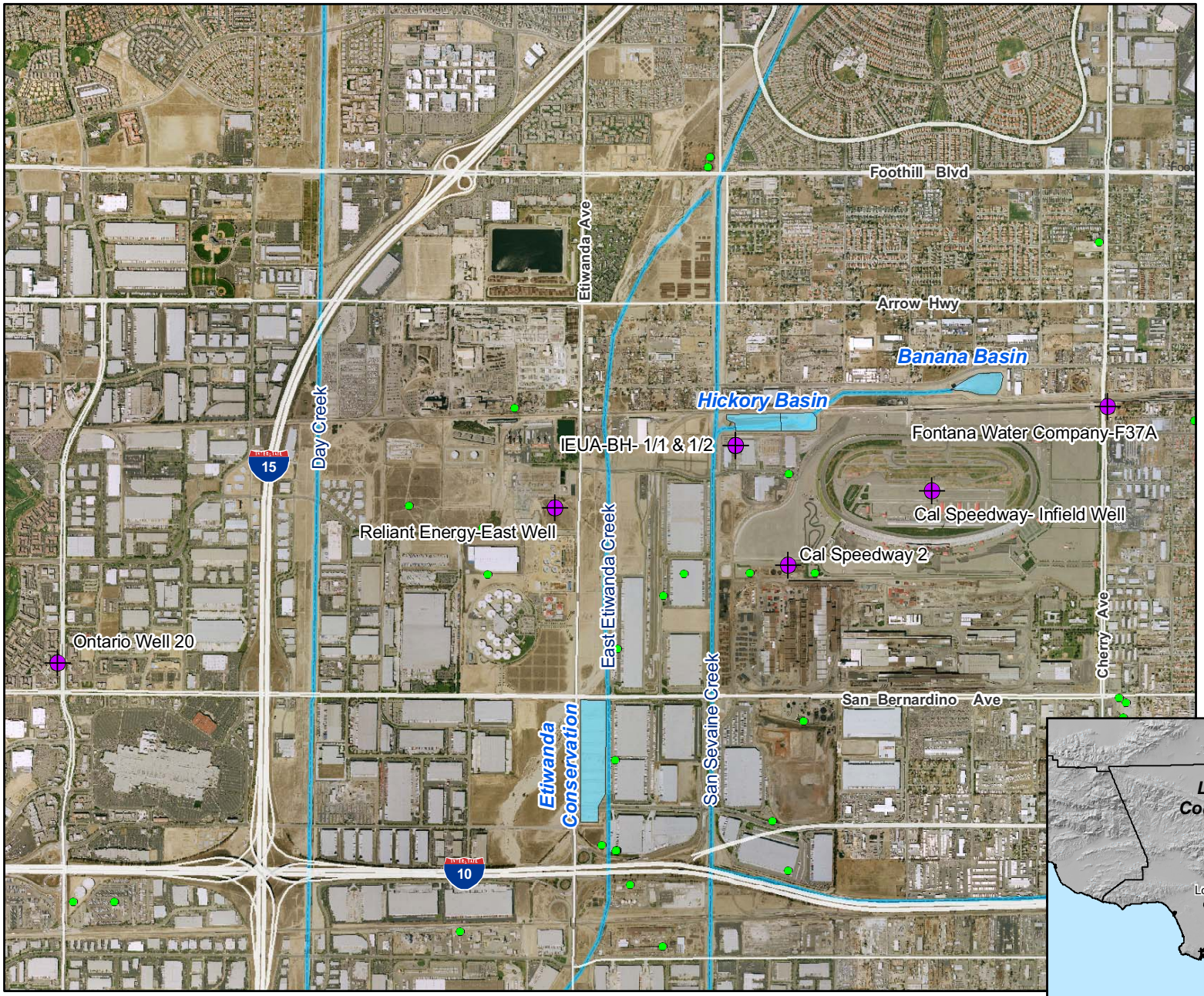
Chino Basin Recycled Water Groundwater Recharge Program

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

0 1,000 2,000 Feet

0 250 500 Meters

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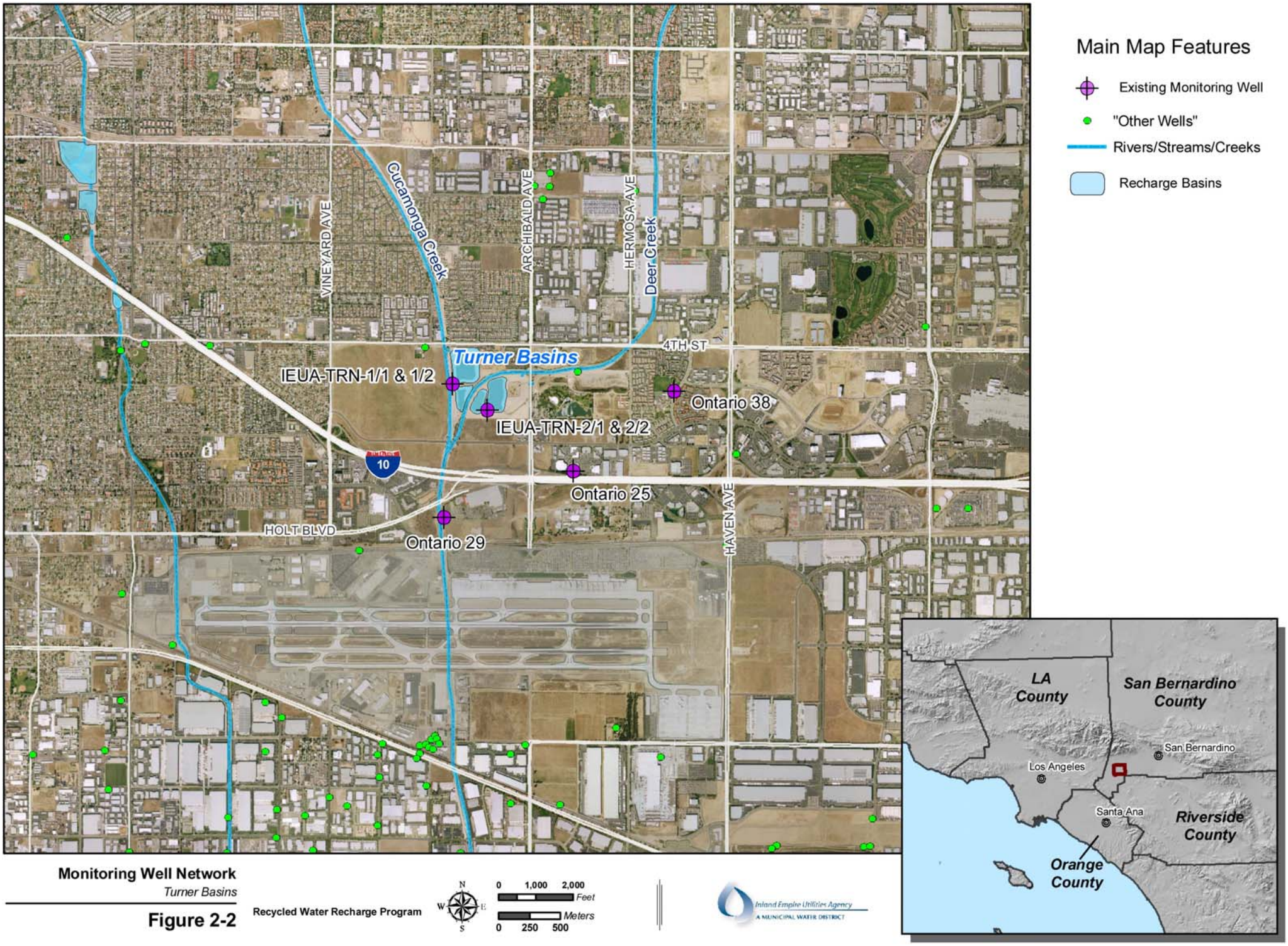
20071106

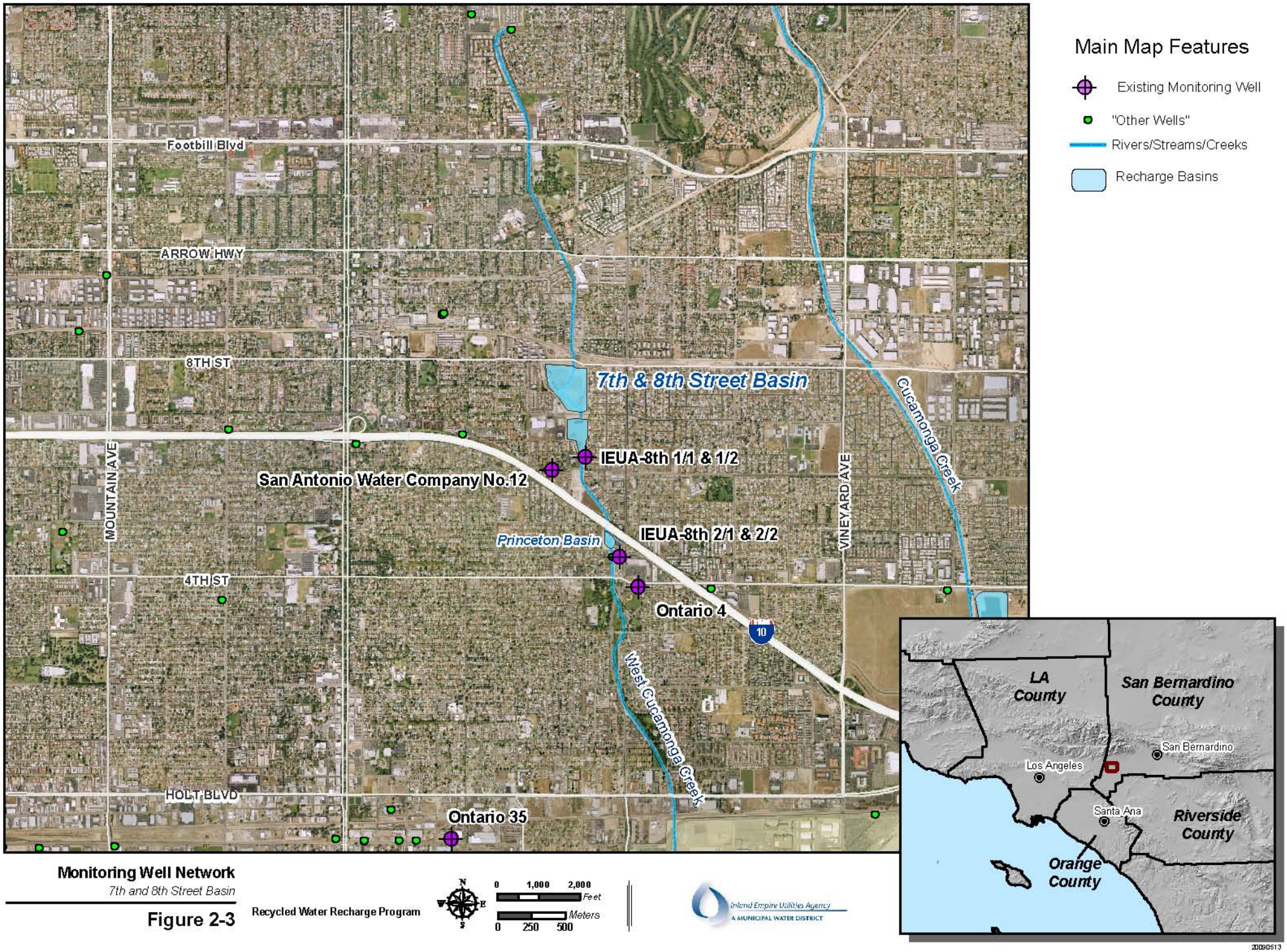


Monitoring Well Network

Turner Basins

Figure 2-2

Recycled Water Recharge Program

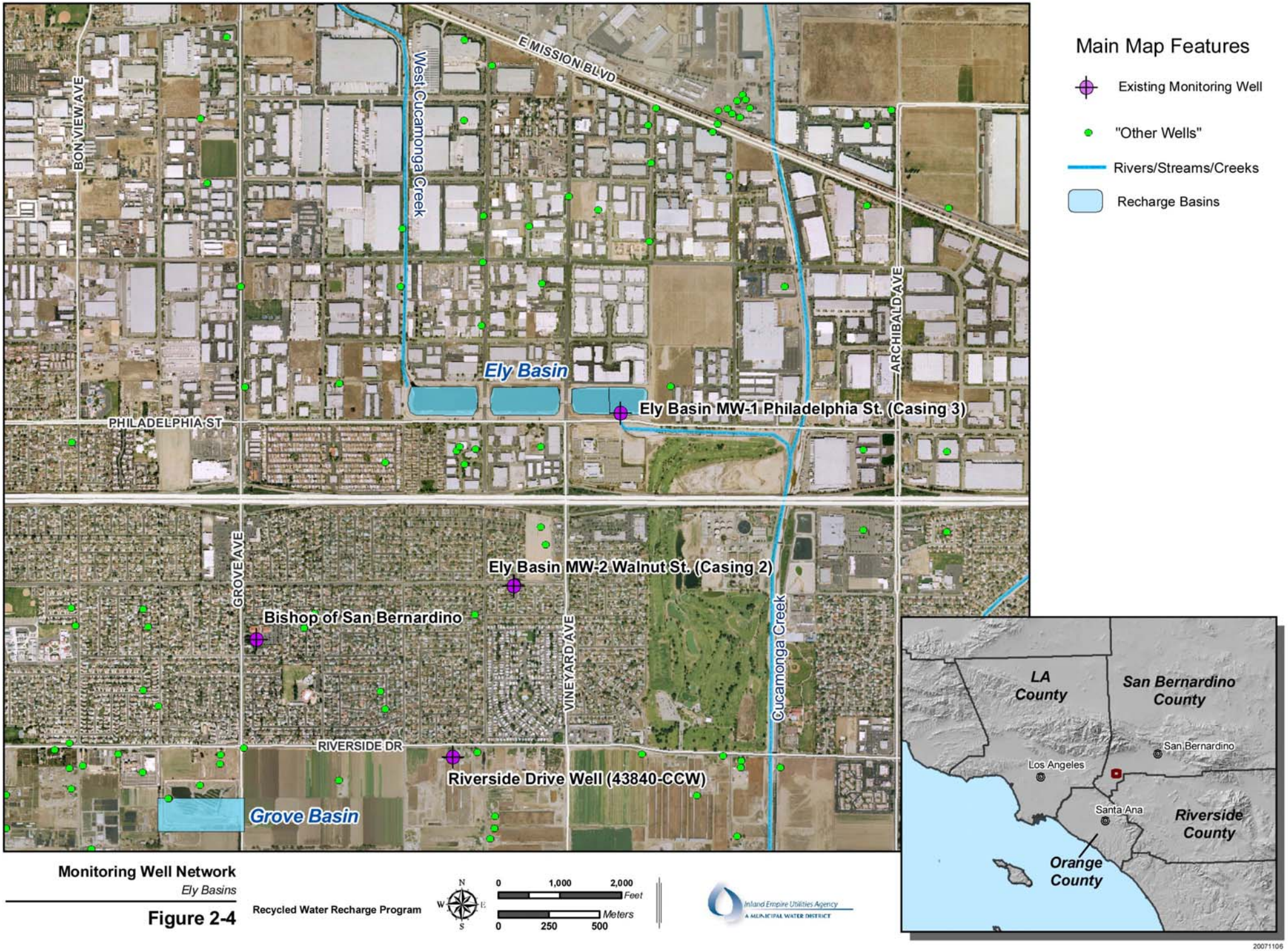


Monitoring Well Network

7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program

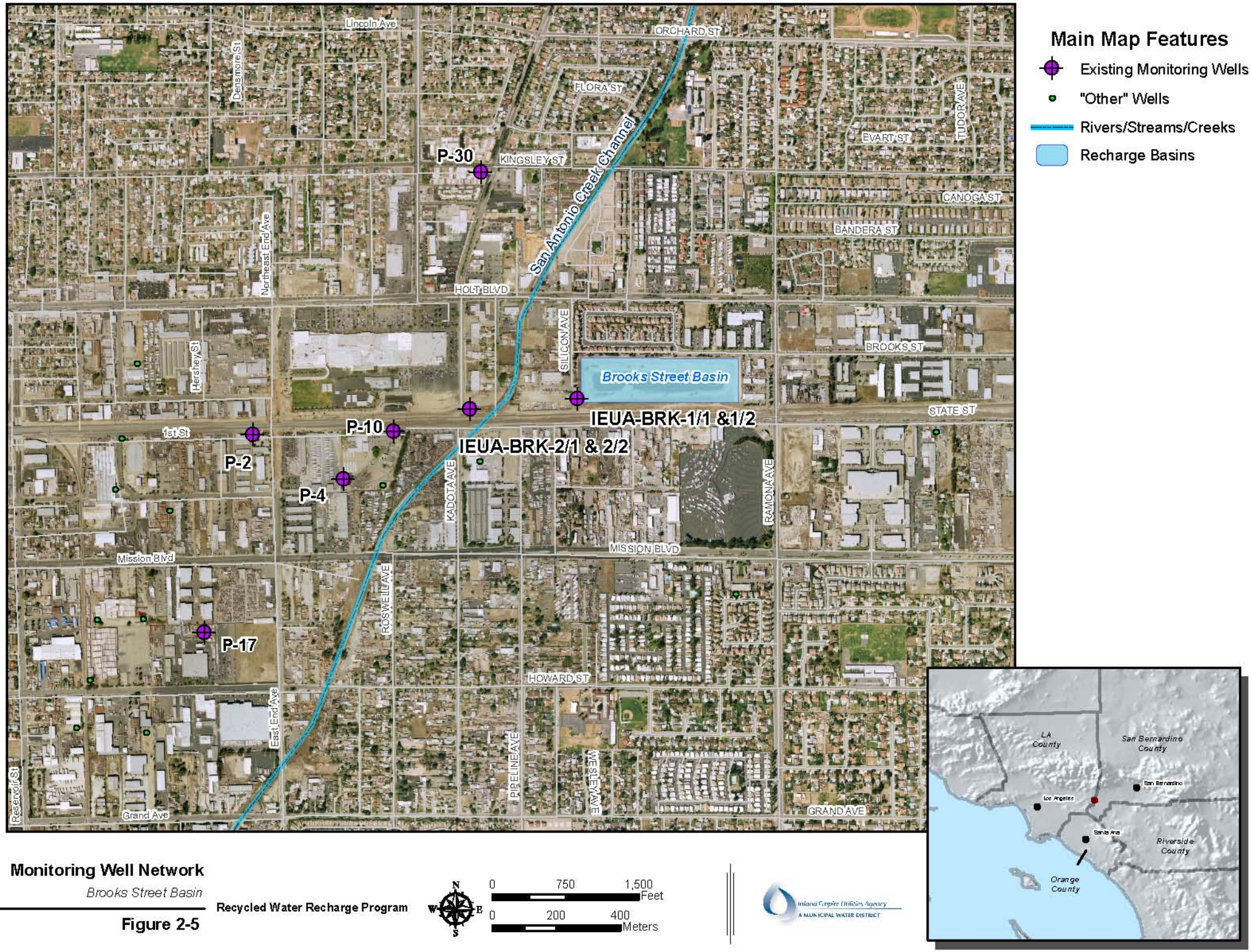


Monitoring Well Network

Ely Basins

Figure 2-4

Recycled Water Recharge Program



Monitoring Well Network

Brooks Street Basin

Recycled Water Recharge Program

Figure 2-5

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