Patrick Sheilds
Executive Manager of Operations

Desi Alvarez, P.E.
CEO

August 15, 2011

Regional Water Quality Control Board, Santa Ana Region
Attention: Mr. Kurt Berchtold
3737 Main Street, Suite 500
Riverside, California 92501-3348

Subject: Chino Basin Recycled Water Groundwater Recharge Program Quarterly Monitoring Report for April through June 2011

Dear Mr. Berchtold,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2011 (2Q11), April 1 through June 30, 2011, 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 2Q11, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order.

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2011, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time from each of the recharge sites using recycled water, namely 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In point of fact, there are no production wells in the buffer zones of the aforementioned recharge sites.

DECLARATION

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

Executed on the 15th day of August 2011 in the Cities of Chino and Rancho Cucamonga.

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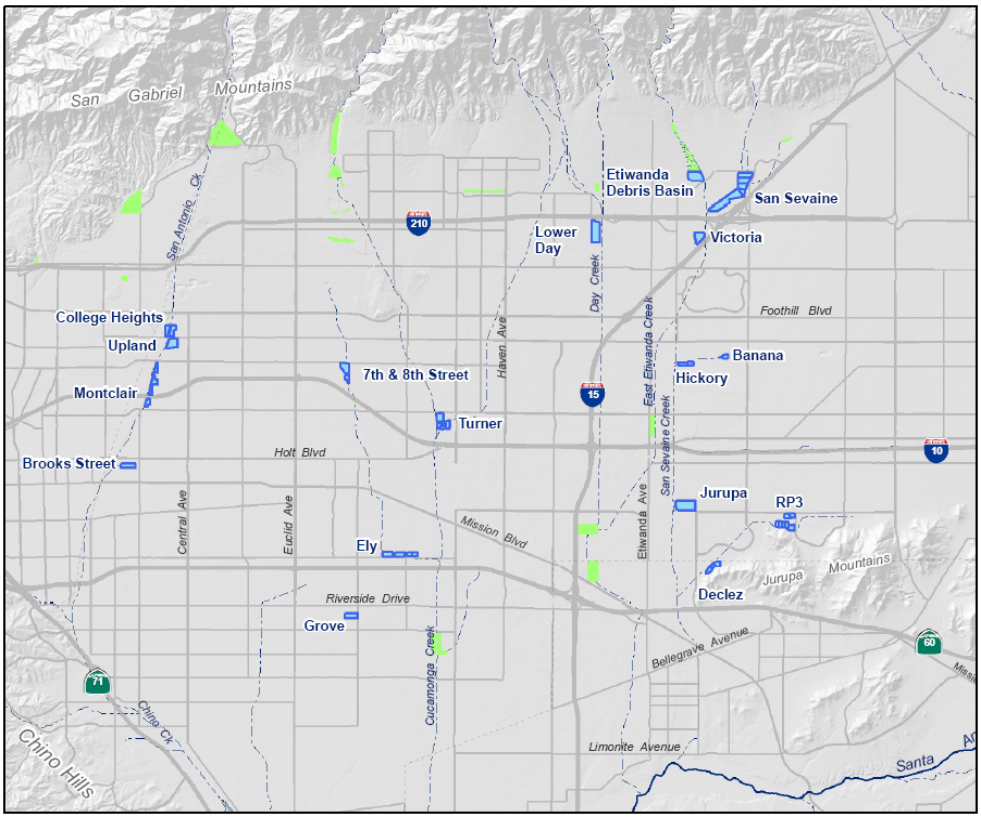
Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report

April 1 through June 30, 2011



Prepared by:

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

August 15, 2011

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1. Introduction

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

A. Order No. R8-2007-0039

On June 29, 2007, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Order No. R8-2007-0039 (Order) which prescribes the requirements for recycled water use for groundwater recharge in 13 recharge sites within the Chino North Management Zone. Chino Basin Groundwater Recharge Program Basins are presented in Figure 1-1. As a provision of this Order, IEUA and Watermaster must also comply with Monitoring and Reporting Program No. R8-2007-0039 (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 2011 (2Q11).

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 previously 60-month averaging period to 120 months for determining a recharge site's recycled water contribution (RWC). The Order No. R8-2009-0057 also allowed a fraction of the groundwater underflow of the Chino Basin aquifers to be used as a source of diluent water when calculating the running average RWC.

In February 2010, the National Water Research Institute (NWRI) convened an independent expert panel to review the amendment and to evaluate if the amendment provided an equal level of public protection. The panel supported a 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 are appendices in the 2009 Chino Basin Recycled Water Groundwater Recharge Program Annual Report submitted on May 1, 2010.

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

On October 27, 2010, the Regional Board revised Monitoring and Reporting Program No. R8-2007-0039 (MRP) based on requests for modifications from IEUA and approved by the CDPH. The following changes were made to the MRP:

1) Sampling Requirements A.3, A.4, and A.5 were modified by specifying that samples shall be collected on a representative day instead of the 10th day.
2) Groundwater Monitoring Program Requirement V.1. was modified by adding a sentence to the paragraph that allows IEUA to analyze the groundwater samples collected on a quarterly basis from non-active municipal drinking water wells for dissolved metals, instead of total recoverable metals.
3) Reporting Requirement VI.B.3.b. has been modified and footnote No. 18 has been added to reflect that IEUA uses groundwater monitoring information contained in the *State of the Basin* report prepared on a biennial basis by the Chino Basin Watermaster, amongst other sources, for the annual determination of the recycled water groundwater flow path.

D. Outline of the Quarterly Report

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

2. Monitoring Results

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

The requirements for recycled water monitoring are presented in the M&RP. Tables 2-1 through 2-4 include all of the requisite 2Q11 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 2Q11. Recycled water compliance for the total nitrogen (TN) limit of 5 mg/L is met at the lysimeters.

In the Order, compliance for constituents with maximum contaminant levels (MCLs) and secondary MCLs are based on 4-quarter running averages. These constituents are listed in Recycled Water Specifications A.1 through A.3 (Tables I, II, and III in the Order). The 4-quarter running average concentration data for 3Q10 through 2Q11 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 2Q11, there were no exceedances in the following categories: primary MCLs for inorganic chemicals, volatile organic compounds (VOCs), non-volatile synthetic organic chemicals (SOCs), radionuclides, and disinfection byproducts; action levels for lead and copper; secondary MCLs for required constituents; and oil and grease.

Due to the volume of sample required for analyses, IEUA has selected, and CDPH has approved, a recycled water sampling point along the distribution pipeline. IEUA selected the turnout to GenOn Energy (formerly Reliant Energy) to be representative of the system blend of recycled water used for recharge. Although this sampling location is suitable for most constituents, it is not appropriate for

disinfection byproducts (DBPs), more specifically, Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance samples for these DBPs are taken from lysimeters at basins actively receiving recycled water. At these locations, DBPs have been able to break down and samples better represent of the recycled water prior to reaching the groundwater table. Once a quarter, a single representative sample is collected from a selected compliance lysimeter and analyzed for DBPs. For the 2Q11 sampling for DBPs, IEUA chose the 30-foot below ground surface lysimeter at the Victoria Basin as the compliance point. The Victoria basin lysimeter was selected as the 2Q11 compliance point because the basin received consistent recycled water recharge and recycled water was present at the 30-foot depth based on electrical conductivity (EC) measurements.

For constituents with no specified limits, quarterly monitoring data are summarized in Table 2-4.

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly during periods when recycled water is delivered to recharge sites. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. All basin and lysimeter water quality results from 2Q11 are summarized in Table 2-5a. The table includes lysimeter data for 7th & 8th Street, Brooks, Hickory, RP3, San Sevaine, and Victoria Basins.

The Turner and Ely Basins have implemented alternative monitoring plans which include the sampling of recycled water at the GenOn Energy turnout and the application of TOC and total nitrogen (TN) correction factors for Soil-Aquifer Treatment at the basins. These correction factors were determined from each basin's start-up period findings. 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. Ely Basin TOC and TN values calculated based on the correction factors provided in the alternative monitoring plan are summarized in Table 2-5b. Turner Basin did not receive recycled water during 2Q11.

The Brooks and RP3 Basins have implemented alternative monitoring plans based on start-up period findings. The Brooks Basin alternative monitoring plan includes monthly sampling of the Brooks Basin surface water, 25-foot lysimeter, and monitoring well BRK-1/1 for EC, TOC, and TN to be conducted as long as recycled water has been recharged in the prior 180 days. Additionally, chloride will be analyzed for BRK-1/1 and used to verify the presence of recycled water. The 25-foot lysimeter will be the compliance point for TN and the monitoring well will be the compliance point for TOC. The RP3 alternative monitoring plan includes monthly sampling of the 35-foot deep lysimeter for EC, TOC, and TN. The monitoring schedule would be conducted during the initial year of recycled water recharge at the RP3 Basin. If sufficient SAT is demonstrated in this initial year, the alternative monitoring plan proposes compliance monitoring from samples collected from the recycled water distribution pipeline and applying a performance-based TOC correction factor determined from past lysimeter monitoring. Brooks and RP3 Basins alternative monitoring data are summarized in Table 2-5b.

C. Diluent Water

For 2Q11, diluent water quality sampling of stormwater was conducted on June 22, 2011 at RP3 and Jurupa Basins. Table 2-6a lists the results of the local runoff sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the CDPH-approved Diluent Water Monitoring Plan. The quarterly sampling schedule for stormwater and local runoff is presented in Table 4-2 of the plan. Stormwater is sampled during the rainy season and local runoff is sampled during the dry season. Samples are collected at about half the locations during each seasonal quarter, alternating between even and odd years. Table 5-2 of the plan

summarizes the sample type and reporting frequency for the parameters listed in Tables I, II, III, and IV of the Diluent Water Monitoring requirement III.3 of the MRP.

State Water Project water was delivered as diluent water to 7th & 8th Street, Brooks, Ely, Hickory, RP3, San Sevaine, and Victoria Basins during 2Q11. Table 2-6b lists the results from Metropolitan Water District's general mineral and physical analysis of source water from Silverwood Lake.

D. Groundwater Monitoring Wells

During 2Q11, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of five wells. The groundwater quality within the vicinity of Turner Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the RP3 Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the 7th & 8th Street Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Ely Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the San Sevaine and Victoria Basins were monitored by sampling a network of five wells. The wells in the monitoring well networks for Hickory and Banana, Turner, 7th & 8th Street, Ely, Brooks, RP3, and San Sevaine & Victoria Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-7, respectively. The groundwater constituents analyzed from the monitoring wells during quarterly 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 the impact recharged water has on downgradient water supplies. Any 2Q11 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 several monitoring wells, namely: Southridge JHS, BRK-2/1, VCT-1/1 and VCT-2/2. In subsequent quarters, additional well purging will be performed at these and other wells where turbidity levels continue to be elevated. However, additional purging may still not resolve turbidity issues.

To evaluate turbidity impacts on metals results, IEUA has previously conducted comparative sampling and analyses methods for metals at several monitoring wells. The compared methods were analysis of total recoverable metals (unfiltered sample) and analysis of dissolved metals (filtered sample). Findings indicated the metals are not appreciably present following filtering. IEUA discussed with CDPH and RWQCB staff about modifying the metals analyses to total dissolved metals for monitoring wells samples that are not active municipal drinking water wells. Both agencies agreed and written approval was received from the Regional Board in October 2010. During 2Q11, manganese at wells Ely Basin's MW-1 and RP3 Basin's RP3-1/2, iron and manganese at RP3 Basin's Southridge JHS remained elevated. The Southridge JHS well is a former agricultural well that has not been used as such for many years. The current status of the Southridge JHS well predates the recharge program. Since this well is primarily used for monitoring the recycled water groundwater recharge program, the well type has now been re-categorized as a monitoring well in Table 2-7 and the samples collected from this well will be analyzed for dissolved metals rather than total recoverable metals.

TDS and EC are slightly higher than the secondary MCLs in wells RP3-1, Alcoa MW3, and Southridge JHS. The wells south of Ely and near RP3 are located in an area with historically high EC levels (>1,000 µmhos/cm). Many of the monitoring wells in the 8th Street, Brooks, Ely, RP3, and Declez monitoring network also have NO_3-N concentrations above the primary MCL. These higher levels are characteristic of groundwater quality in the local area where historically the NO_3-N concentrations ranges from 10-30 mg/L. TDS and NO_3-N concentrations in the area of the RP3 and Declez monitoring well network are documented in the CBWM 2008 *State of the Basin* report.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The 7th & 8th Street, Brooks, Ely, Hickory, RP3, San Sevaine, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (local runoff, stormwater, and/or imported water) captured during 2Q11 at the basins that have initiated recharge using recycled water.

4. Operational Problems & Preventive or Corrective Actions

No operational problems were encountered this quarter, therefore no corrective actions were necessary for the following: Regional Water Recycling Facilities - RP-1 & RP-4 and recharge operations. 8TH-1/1 monitoring well was not sampled due to a damaged sampling pump and is scheduled to be repaired during 3Q11.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 2Q11 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In fact, there are no production wells within the buffer zones of these aforementioned recharge sites.

IEUA continues to work with the San Bernardino County Department of Environmental Health Services (SBCDEHS) to prevent the drilling and construction of new drinking water wells within the buffer zones. SBCDEHS has initiated control over production well permitting within the buffer zones of all recharge sites through the use of buffer zone maps that utilize the same land coordinate system (Township/Range/Section/40-acre Parcel) that is used in the permitting process. SBCDEHS reviews new well permit applications in part by checking the proposed location of a new drinking water well against 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. In May 2008, MVWD discontinued groundwater injection at the ASR wells for an extended period of time. In June 2011, MVWD groundwater injection activities resumed at four ASR wells. Table 6-1

summarizes the monthly volumes and TIN/TDS of injected and recovered water. The table also includes the mass balance of TIN/TDS from the injection-recovery cycles.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2011
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	RP-1 Effluent									RP-4 Effluent									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		5 [6]		6<pH<9			2.2;23;240	2;5;10	16 [5]		5 [6]		6<pH<9				2.2;23;240
04/01/11	0.4	5.9				7.2			<2	0.5	4.6				6.9	640			<2
04/02/11	0.5	5.9				7.2			<2	0.5	5.2				7.0	640			<2
04/03/11	0.5	6.9	7.4	7.4	7.4	7.2		133	<2	0.5	5.8	5.4	6.8	5.4	7.0	635		128	<2
04/04/11	0.5	6.8				7.2			<2	0.8	5.0				6.8	640			<2
04/05/11	0.5	6.8				7.2			<2	0.8	4.2				6.8	630			<2
04/06/11	0.4	6.1				7.2	444		<2	0.8	4.1				6.8	630	396		<2
04/07/11	0.4	5.9				7.2			2	1.0	4.3				6.9	655			<2
04/08/11	0.4	5.7				7.2			<2	1.1	4.2				6.9	655			<2
04/09/11	0.4	5.7				7.2			2	1.0	4.1				6.9	650			<2
04/10/11	0.4	6.1	6.6	6.6	6.6	7.2			2	1.0	4.4	4.8	6.1	4.8	6.9	645			<2
04/11/11	0.4	6.2				7.2			2	1.2	4.5				6.9	640			<2
04/12/11	0.4	6.2				7.2			<2	1.3	4.4				6.9	635			2
04/13/11	0.4	6.4				7.3	424		<2	1.5	4.4				6.9	650	381		<2
04/14/11	0.5	6.0				7.2			<2	1.6	4.4				6.8	630			<2
04/15/11	0.7	6.0				7.2			<2	1.6	4.2				6.8	650			<2
04/16/11	0.7	6.0				7.2			<2	1.4	4.3				6.8	650			<2
04/17/11	0.7	6.4	8.0	8.1	8.1	7.3		134	<2	1.8	4.8	3.2	4.0	3.3	6.8	650			<2
04/18/11	0.7	6.4				7.3			<2	2.0	4.5				6.9	640			<2
04/19/11	0.8	6.2				7.3			2	1.2	5.2				6.9	660			<2
04/20/11	0.8	6.2				7.3	434		<2	1.2	4.8				6.8	660	386		<2
04/21/11	0.7	5.9				7.1			<2	1.4	4.1				6.8	655			<2
04/22/11	0.7	5.8				6.8			<2	1.2	4.2				6.8	665			<2
04/23/11	0.8	5.9				6.8			<2	1.3	4.6				6.8	660			<2
04/24/11	0.7	6.0	6.4	6.5	6.5	6.9			4	1.8	5.0	3.1	3.9	3.1	6.8	655			<2
04/25/11	0.7	6.0				6.9			<2	1.6	4.8				6.9	660			<2
04/26/11	0.7	5.9				6.9			<2	1.7	4.8				6.9	655			<2
04/27/11	0.7	5.9				6.9	430		<2	1.4	4.8				6.8	655	394		<2
04/28/11	0.8	5.8				6.9			<2	1.4	4.7				6.9	660			<2
04/29/11	0.8	5.6				6.9			<2	1.2	4.5				6.9	660			<2
04/30/11	0.8	5.7				6.9			<2	1.3	4.3				6.9	660			<2
Avg	0.6	6.1	7.1	7.1	7.1	7.1	433	134	<2	1.2	4.6	4.1	5.2	4.2	6.9	649	389	128	<2
Min	0.4	5.6	6.4	6.5	6.5	6.8	424	133	<2	0.5	4.1	3.1	3.9	3.1	6.8	630	381	128	<2
Max	0.8	6.9	8.0	8.1	8.1	7.3	444	134	4	2.0	5.8	5.4	6.8	5.4	7.0	665	396	128	2

Note: **Bolded characters signify an exceedance of a permit limitation**

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

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

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

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

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

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

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

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

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for May 2011
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	RP-1 Effluent									RP-4 Effluent									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		5 [6]		6<pH<9			2.2;23;240	2;5;10	16 [5]		5 [6]		6<pH<9				2.2;23;240
05/01/11	0.6	5.9	7.8	8.7	7.8	7.2			2	1.3	4.6	2.8	3.4	2.8	6.9	660			<2
05/02/11	0.7	5.8				7.2			<2	1.6	4.5				6.9	665			<2
05/03/11	0.6	5.9				7.2			2	1.4	4.4				6.8	665			<2
05/04/11	0.6	5.9	6.2		6.3	7.2	444	132	<2	1.4	4.5	2.7		2.9	6.9	855	412	138	<2
05/05/11	0.6	6.0				7.2			<2	1.8	4.7				6.9	670			<2
05/06/11	0.7	6.6				7.2			<2	1.5	4.8				6.9	664			<2
05/07/11	1.9	6.5				7.1			<2	1.1	5.1				6.9	673			<2
05/08/11	1.4	6.6	4.3		4.3	7.2			<2	1.6	5.9	2.5		2.7	6.9	668			<2
05/09/11	1.7	6.4				7.2			<2	1.6	5.2				7.0	665			<2
05/10/11	1.6	6.2				7.1			<2	1.5	4.8				7.0	660			<2
05/11/11	1.5	6.3				7.0	438		<2	1.3	4.7		1.3		6.9	675	404		<2
05/12/11	1.3	5.9				7.1			<2	1.3	4.9				6.9	665			<2
05/13/11	1.3	6.5				7.1			<2	1.5	4.7				7.0	660			<2
05/14/11	1.3	6.3				7.0			<2	1.5	4.7				7.0	660			<2
05/15/11	1.3	6.4	6.5	7.4	6.5	6.9			2	1.6	5.0	3.1	3.8	4.2	7.1	670			<2
05/16/11	1.3	6.3				6.8			<2	1.6	5.1				7.1	665			<2
05/17/11	0.8	6.0				6.7			<2	1.4	4.6				7.0	660			<2
05/18/11	0.7	5.9	6.7	7.7	6.8	7.3	428	120	<2	1.2	4.8	4.0		4.0	7.0	650	404		<2
05/19/11	1.1	6.0				6.7			2	1.4	4.7				7.0	660			<2
05/20/11	1.2	5.8				6.8			<2	1.4	4.5				7.0	650			<2
05/21/11	1.2	5.6				7.2			<2	1.3	4.8				7.0	650			<2
05/22/11	1.1	6.1	4.0	4.9	4.0	7.2			<2	1.3	4.5	3.3	4.0	3.3	7.0	650			<2
05/23/11	1.2	6.0				7.2			2	1.4	4.6				7.1	640			<2
05/24/11	1.3	5.6				7.2			<2	1.1	4.3				7.1	655			<2
05/25/11	1.1	5.7				7.2	436		<2	0.9	4.3				7.1	655	408		<2
05/26/11	0.8	5.7				7.2			<2	1.1	4.9				7.0	660			<2
05/27/11	1.2	5.6				7.2			2	1.0	4.5				7.0	670			<2
05/28/11	1.0	5.5				7.2			<2	0.9	4.9				7.1	660			<2
05/29/11	0.7	5.2				7.2			2	0.8	4.3				7.1	655			<2
05/30/11	0.7	5.6	6.6	7.6	6.7	7.1			<2	0.7	4.6	2.8	3.9	2.9	7.1	660			<2
05/31/11	0.8	5.9				7.2			2	0.9	4.4				7.0	655			<2
Avg	1.1	6.0	6.0	7.3	6.1	7.1	437	126	<2	1.3	4.7	3.0	3.3	3.3	7.0	667	407	138	<2
Min	0.6	5.2	4.0	4.9	4.0	6.7	428	120	<2	0.7	4.3	2.5	1.3	2.7	6.8	640	404	138	<2
Max	1.9	6.6	7.8	8.7	7.8	7.3	444	132	2	1.8	5.9	4.0	4.0	4.2	7.1	855	412	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. CA8000409, Order No. R8-2009-0021.

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

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

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

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

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

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

Table 2-1c
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for June 2011
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	RP-1 Effluent									RP-4 Effluent									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		5 [6]		6<pH<9			2.2;23;240	2;5;10	16 [5]		5 [6]		6<pH<9				2.2;23;240
06/01/11	0.9	6.2				7.1	434		<2	0.8	4.4				7.0	660	410		<2
06/02/11	0.8	6.2				7.1			<2	1.1	4.4				7.0	668			<2
06/03/11	0.9	6.0				7.1			<2	1.5	4.2				7.0	655			<2
06/04/11	0.8	5.8				7.2			<2	1.6	4.5				7.0	655			<2
06/05/11	0.7	5.8	5.0	5.0	5.0	7.2			<2	1.9	4.7	2.9	4.3	2.9	7.1	655			<2
06/06/11	0.7	5.7				7.2			<2	1.9	4.7				7.0	655			<2
06/07/11	0.7	5.9				7.1			<2	2.2	4.7				7.0	655			<2
06/08/11	0.6	5.7	6.4		6.4	7.1	428	126	<2	1.8	4.8	3.4		3.4	7.0	655	404	132	<2
06/09/11	0.6	5.6				7.1			<2	2.1	5.0				6.8	680			<2
06/10/11	0.6	5.5				7.1			<2	2.1	4.8				6.7	680			<2
06/11/11	0.7	5.8				7.1			<2	1.7	4.7				6.7	665			<2
06/12/11	0.9	6.7	6.2	6.2	6.2	7.1			<2	1.6	4.7	2.9	3.5	2.9	6.7	680			<2
06/13/11	0.9	7.2				7.1			<2	1.7	4.7				6.8	680			<2
06/14/11	1.2	6.9				7.2			2	1.7	4.7				6.8	680			<2
06/15/11	0.8	6.1				7.3	428		<2	1.4	4.5				6.8	685	408		<2
06/16/11	0.7	5.9				7.3			2	1.1	4.3				6.8	675			<2
06/17/11	0.7	5.8				7.3			<2	1.2	4.3				6.8	675			<2
06/18/11	0.7	6.0				7.3			<2	1.6	4.4				6.8	670			<2
06/19/11	0.7	6.0	6.1	6.1	6.1	7.2			<2	1.6	4.5	3.3	4.2	3.3	6.9	660			<2
06/20/11	0.8	6.3				7.2			<2	1.6	4.6				6.8	665			<2
06/21/11	0.8	6.2				7.2			<2	1.5	4.6				6.8	665			<2
06/22/11	0.8	6.4	5.0		5.0	7.2	444	133	<2	1.2	4.5				6.9	670	414		<2
06/23/11	0.8	6.3				7.3			<2	1.0	4.3				6.9	680			<2
06/24/11	0.8	5.9				7.3			<2	0.9	4.3				7.0	680			<2
06/25/11	0.7	5.8				7.3			<2	0.9	4.2				7.0	675			<2
06/26/11	0.6	5.7	6.0	6.0	6.0	7.3			<2	0.9	4.4	3.1	3.7	3.1	7.0	675			<2
06/27/11	0.7	6.1				7.3			<2	0.9	4.4				7.0	665			<2
06/28/11	0.8	5.9				7.3			<2	0.7	4.4				7.0	670			<2
06/29/11	0.7	6.9				7.3	452		<2	1.0	4.4				6.8	675	414		<2
06/30/11	0.8	5.7				7.3			<2	0.7	4.2				6.8	685			<2
Avg	0.8	6.1	5.8	5.9	5.8	7.2	437	130	<2	1.4	4.5	3.1	3.9	3.1	6.9	670	410	132	<2
Min	0.6	5.5	5.0	5.0	5.0	7.1	428	126	<2	0.7	4.2	2.9	3.5	2.9	6.7	655	404	132	<2
Max	1.2	7.2	6.4	6.2	6.4	7.3	452	133	2	2.2	5.0	3.4	4.3	3.4	7.1	685	414	132	<2

Note: **Bolded characters signify an exceedance of a permit limitation**

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

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

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

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

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

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

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

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

* RP-1 effluent continuous monitoring is normally conducted at Prado Lake. Due to a shutdown of this station during 2Q11, lab EC values from 24 hour composite samples are reported in the place of continuous monitoring data.

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-10	5.1	5.2	477	487
Aug-10	4.6	5.2	477	485
Sep-10	3.7	5.2	476	483
Oct-10	5.5	5.3	478	482
Nov-10	5.7	5.3	478	481
Dec-10	5.0	5.3	471	479
Jan-11	6.4	5.4	474	477
Feb-11	6.9	5.4	455	474
Mar-11	6.4	5.4	468	473
Apr-11	6.5	5.5	460	472
May-11	6.0	5.6	462	471
Jun-11	5.7	5.6	464	470
Avg	5.6	5.4	470	478
Min	3.7	5.2	455	470
Max	6.9	5.6	478	487
Limit		8.0		550

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021)
The data reported above will supersede any information submitted for previous quarters. Agency-wide TIN & TDS were in compliance with permit limits at all times.

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

Constituent	3Q10	4Q10	1Q11	2Q11	4Q Run. Avg.[1]	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	<25	<25	35	<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	<3.6	<2	<3.6	7	MFL	EPA 100.2
Barium	7	5	5	6	6	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	3.1	2.2	1.7	0.8	1.9	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	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Nickel	2	2	2	3	2	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314
Selenium	<2	<2	<2	<2	<2	50	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)								
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<1	<1	<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	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 [2]	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	3	<1	<1	1	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	<45	<5	<5	<45	100	µg/L	EPA 548.1
Endrin	<0.2	<0.01	<0.01	<0.01	<0.2	2	µg/L	EPA 505

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

Constituent	3Q10	4Q10	1Q11	2Q11	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	<25	<25	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05	<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	4.4	2.7	3.0	2.8	3.2	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	<0.74	<0.76	<0.43	<0.48	<0.76	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	5	<3	<2.44	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<262	<226	<201	<386	<386	20,000	pCi/L	EPA 906
Strontium-90	<0.76	<0.59	<0.75	<0.79	<0.79	8	pCi/L	EPA 905
Gross Beta Particle Activity	9	11	10	8	10	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	<25	35	<25	200	µg/L	EPA 200.8
Copper	4.4	2.7	3.0	2.8	3.2	1000	µg/L	EPA 200.8
Corrosivity [3]	-0.1 (Non-Cor.)	-0.4 (Non-Cor.)	-0.2 (Non-Cor.)	-0.4 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) [3]	0.06	<0.05	0.07	0.06	0.05	0.5	mg/L	S5540C/EPA 425.1
Iron [3]	43	NR	NR	NR	66	300	µg/L	EPA 200.7
Manganese	20	13	14	10	14	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]	1	2	1	3	2	3	TON	SM 2150B
Silver	0.3	<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	25	19	24	25	23	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease [4]	<1	<1	<1	<1	<1	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.02	<0.01	<0.01	<0.01	<0.02	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	RP3-25	BRK-25	RP3-35	VCT-30				
Total Trihalomethanes (TTHMs)	5	<2	2	<2	5	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	<2	60	µg/L	S6251B

NR: Not required this quarter

[1] 4-quarter running average is calculated based on ND values equal to half the detection limit. The reported 4-quarter running average value, if less 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: Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals
(Monitoring & Reporting Program)

Constituent	2Q11	Unit	Method
Metals			
Chromium (III) [1]	0.8	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)			
Acrolein	NR	µg/L	EPA 624
Acrylonitrile	NR	µg/L	EPA 624
Bromoform	<0.5	µg/L	EPA 524.2
Chlorodibromomethane	2.4	µg/L	EPA 524.2
Chloroethane	<0.5	µg/L	EPA 524.2
2-Chloroethylvinylether	NR	µg/L	EPA 624
Chloroform	65.7	mg/L	EPA 524.2
Dichlorobromomethane	15.6	µg/L	EPA 524.2
Methyl Bromide	<1	µg/L	EPA 524.2
Methyl Chloride	<0.5	µg/L	EPA 524.2
Acid Extractibles			
2-Chlorophenol	NR	µg/L	EPA 625
2,4-Dichlorophenol	NR	µg/L	EPA 625
2,4-Dimethylphenol	NR	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625
2,4-Dinitrophenol	NR	µg/L	EPA 625
2-Nitrophenol	NR	µg/L	EPA 625
4-Nitrophenol	NR	µg/L	EPA 625
4-Chloro-3-methylphenol	NR	µg/L	EPA 625
Phenol	NR	µg/L	EPA 625
2,4,6-Trichlorophenol	NR	µg/L	EPA 625
Base/Neutral Extractibles			
Acenaphthene	NR	µg/L	EPA 625
Acenaphthylene	NR	µg/L	EPA 625
Anthracene	NR	µg/L	EPA 625
Benzidine	NR	µg/L	EPA 625
Benzo(a)anthracene	NR	µg/L	EPA 625
Benzo(b)fluoranthene	NR	µg/L	EPA 625
Benzo(g,h,i)perylene	NR	µg/L	EPA 625
Benzo(k)fluoranthene	NR	µg/L	EPA 625
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625
Butyl benzyl phthalate	NR	µg/L	EPA 625
2-Chloronaphthalene	NR	µg/L	EPA 625
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625
Chrysene	NR	µg/L	EPA 625
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625
1,3-Dichlorobenzene	NR	µg/L	EPA 625
3,3-Dichlorobenzidine	NR	µg/L	EPA 625
Diethyl phthalate	NR	µg/L	EPA 625
Dimethyl phthalate	NR	µg/L	EPA 625
Di-n-butyl phthalate	NR	µg/L	EPA 625
2,4-Dinitrotoluene	NR	µg/L	EPA 625
2,6-Dinitrotoluene	NR	µg/L	EPA 625
Di-n-octyl phthalate	NR	µg/L	EPA 625
Azobenzene	NR	µg/L	EPA 625
Fluoranthene	NR	µg/L	EPA 625
Fluorene	NR	µg/L	EPA 625
Hexachlorobutadiene	NR	µg/L	EPA 625
Hexachlorocyclopentadiene	NR	µg/L	EPA 625
Hexachloroethane	NR	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625
Isophorone	NR	µg/L	EPA 625
Naphthalene	NR	µg/L	EPA 625
Nitrobenzene	NR	µg/L	EPA 625
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625
N-Nitrosodiphenylamine	NR	µg/L	EPA 625
Phenanthrene	NR	µg/L	EPA 625
Pyrene	NR	µg/L	EPA 625

Constituent	2Q11	Unit	Method
Pesticides			
Aldrin	NR	µg/L	EPA 608
BHC, alpha isomer	NR	µg/L	EPA 608
BHC, beta isomer	NR	µg/L	EPA 608
BHC, delta isomer	NR	µg/L	EPA 608
4,4'-DDT	NR	µg/L	EPA 608
4,4'-DDE	NR	µg/L	EPA 608
4,4'-DDD	NR	µg/L	EPA 608
Dieldrin	NR	µg/L	EPA 608
Endosulfan I	NR	µg/L	EPA 608
Endosulfan II	NR	µg/L	EPA 608
Endosulfan Sulfate	NR	µg/L	EPA 608
Unregulated Chemicals			
Endrin Aldehyde	NR	µg/L	EPA 608
Chromium VI	0.24	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels[2]			
Boron	0.2	mg/L	EPA 200.7
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	NR	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Diazinon	NR	µg/L	EPA 525.2
Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	µg/L	EPA 522
Ethylene glycol	NR	mg/L	EPA 8015B
Formaldehyde	NR	µg/L	EPA 556
HMX	NR	µg/L	EPA 8330B
Isopropylbenzene	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	NR	µg/L	EPA 521
N-nitrosodimethylamine (NDMA)	NR	ng/L	EPA 521
Propachlor	NR	µg/L	EPA 525.2
N-propylbenzene	<0.5	µg/L	EPA 524.2
RDX	NR	µg/L	EPA 8330B
Tertiary butyl alcohol	<2	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<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
2,4,6-Trinitrotoluene	NR	µg/L	EPA 8330B
Vanadium	2	µg/L	EPA 200.8
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals[2]			
4-nonylphenol	NR	ng/L	LC-MS-MS
4-tert-Octylphenol	NR	ng/L	LC-MS-MS
Acetaminophen	NR	ng/L	LC-MS-MS
BPA	NR	ng/L	LC-MS-MS
Caffeine	NR	ng/L	LC-MS-MS
Carbamazepine	NR	ng/L	LC-MS-MS
DEET	NR	ng/L	LC-MS-MS
Diuron	NR	ng/L	LC-MS-MS
Estradiol	NR	ng/L	LC-MS-MS
Estrone	NR	ng/L	LC-MS-MS
Ethinyl Estradiol - 17 alpha	NR	ng/L	LC-MS-MS
Gemfibrozil	NR	ng/L	LC-MS-MS
Ibuprofen	NR	ng/L	LC-MS-MS
Iopromide	NR	ng/L	LC-MS-MS
Sulfamethoxazole	NR	ng/L	LC-MS-MS
TCEP	NR	ng/L	LC-MS-MS
Triclosan	NR	ng/L	LC-MS-MS
EDTA	NR	mg/L	MWH_MET

[1] Trivalent chromium is measured as total chromium

NR: Not Required (Annual Requirement)

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

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	04/07/11	3.12	1.0	1.0	0.9	<0.5	0.14	135
BRK-LYS-00	0	05/12/11	5.83	3.7	1.9	1.8	1.9	0.09	480
BRK-LYS-00	0	06/08/11	4.95	3.4	2.9	2.9	0.5	<0.01	585
BRK-LYS-25	25	04/07/11	1.60	<0.6	<0.2	<0.1	<0.5	0.11	315
BRK-LYS-25	25	05/12/11	1.53	<0.6	<0.2	<0.1	<0.5	0.17	305
BRK-LYS-25	25	06/08/11	1.68	<0.6	<0.2	<0.1	<0.5	<0.01	385

8th Street Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
8TH-LYS-00	0	04/07/11	5.79	2.0	1.2	0.7	1.3	0.08	98
8TH-LYS-00	0	04/19/11	6.28	4.1	3.2	3.1	1.0	0.06	635
8TH-LYS-00	0	04/26/11	6.17	4.1	2.7	2.6	1.5	0.07	645
8TH-LYS-00	0	05/04/11	8.58	3.1	1.6	1.5	1.6	0.03	675
8TH-LYS-00	0	05/11/11	21.8	1.5	0.3	<0.1	1.5	<0.01	680
8TH-LYS-00	0	05/17/11	12.0	3.3	1.8	1.5	1.8	0.08	610
8TH-LYS-00	0	05/25/11	4.83	2.2	1.7	1.7	0.5	<0.01	420
8TH-LYS-00	0	06/02/11	6.04	6.8	1.2	1.2	5.6	<0.01	380
8TH-LYS-00	0	06/09/11	5.84	1.1	0.5	0.5	0.6	<0.01	375
8TH-LYS-00	0	06/28/11	6.43	2.0	<0.2	0.1	1.9	0.03	460
8TH-LYS-25	25	04/07/11	2.19	<0.6	<0.2	<0.1	<0.5	0.12	155
8TH-LYS-25	25	04/19/11	1.99	<0.6	<0.2	<0.1	<0.5	0.16	180
8TH-LYS-25	25	04/26/11	1.90	<0.6	<0.2	<0.1	<0.5	0.09	375
8TH-LYS-25	25	05/04/11	2.43	<0.6	<0.2	<0.1	<0.5	<0.01	555
8TH-LYS-25	25	05/11/11	2.39	0.6	<0.2	<0.1	0.6	<0.01	605
8TH-LYS-25	25	05/17/11	2.12	<0.6	<0.2	<0.1	<0.5	0.03	600
8TH-LYS-25	25	05/25/11	2.92	<0.6	<0.2	<0.1	<0.5	<0.01	590
8TH-LYS-25	25	06/02/11	2.77	<0.6	<0.2	<0.1	<0.5	<0.01	530
8TH-LYS-25	25	06/09/11	2.55	<0.6	<0.2	0.1	<0.5	<0.01	425
8TH-LYS-35	35	04/07/11	1.91	<0.6	<0.2	<0.1	<0.5	0.12	205
8TH-LYS-35	35	04/19/11	1.86	<0.6	<0.2	<0.1	<0.5	0.14	185
8TH-LYS-35	35	04/26/11	1.85	<0.6	<0.2	<0.1	<0.5	0.14	170
8TH-LYS-35	35	05/04/11	1.70	<0.6	<0.2	<0.1	<0.5	0.08	300
8TH-LYS-35	35	05/11/11	1.76	<0.6	0.3	<0.1	<0.5	0.34	440
8TH-LYS-35	35	05/17/11	1.74	<0.6	<0.2	<0.1	<0.5	0.03	560
8TH-LYS-35	35	05/25/11	1.84	<0.6	<0.2	<0.1	<0.5	<0.01	595
8TH-LYS-35	35	06/02/11	2.06	<0.6	<0.2	<0.1	<0.5	<0.01	600
8TH-LYS-35	35	06/09/11	2.29	<0.6	<0.2	<0.1	<0.5	<0.01	500
8TH-LYS-35	35	06/28/11	2.14	<0.6	0.4	<0.1	<0.5	0.04	390

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	05/04/11	6.00	5.0	2.4	2.4	2.6	0.02	655
HKYE-LYS-00	0	05/11/11	5.90	3.2	0.3	0.3	2.9	0.03	590
HKYE-LYS-00	0	05/17/11	6.81	1.8	<0.2	0.1	1.7	0.05	465
HKYE-LYS-00	0	05/25/11	5.65	3.8	2.9	2.8	1.0	<0.01	630
HKYE-LYS-00	0	06/02/11	6.60	3.7	2.3	2.2	1.5	<0.01	640
HKYE-LYS-00	0	06/08/11	6.22	2.8	1.8	1.8	1.0	<0.01	645
HKYE-LYS-00	0	06/14/11	5.51	3.8	2.4	2.2	1.6	0.02	670
HKYE-LYS-00	0	06/21/11	7.41	4.0	2.2	2.2	1.8	<0.01	680
HKYE-LYS-00	0	06/28/11	7.38	2.9	0.4	0.4	2.5	0.04	675
HKYE-LYS-25	25	05/04/11	1.03	1.7	1.7	1.6	<0.5	0.09	320
HKYE-LYS-25	25	05/11/11	1.62	3.1	2.6	2.6	0.5	0.03	535
HKYE-LYS-25	25	05/17/11	1.56			1.9		0.02	610
HKYE-LYS-25	25	05/25/11	1.52			0.6		<0.01	590
HKYE-LYS-25	25	06/02/11	1.20	<0.6	0.4	0.4	<0.5	<0.01	545
HKYE-LYS-25	25	06/08/11	1.30			0.4		<0.01	520
HKYE-LYS-25	25	06/14/11	1.50			0.7		<0.01	570
HKYE-LYS-25	25	06/28/11	1.47			0.9		<0.01	600
HKYE-LYS-25	25	05/04/11	1.59			1.0		<0.01	620

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	04/05/11	4.89	2.6	1.5	1.4	1.2	0.09	415
RP31-LYS-00	0	04/19/11	8.44	3.7	1.6	1.3	2.4	0.19	610
RP31-LYS-00	0	04/26/11	11.3	3.6	1.9	1.7	1.9	0.21	565
RP31-LYS-00	0	05/04/11	12.2	2.9	1.1	0.9	2.0	0.09	670

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

RP-3 Basin (cont'd)									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
RP31-LYS-00	0	05/11/11	8.24	1.6	<0.2	<0.1	1.6	0.03	640
RP31-LYS-00	0	06/01/11	5.78	0.9	0.2	<0.1	0.9	0.11	235
RP31-LYS-00	0	06/28/11	5.20	1.6	0.3	0.3	1.3	0.04	340
RP31-LYS-25	25	05/11/11	0.90	2.3	2.3	2.2	<0.5	0.06	435
RP31-LYS-25	25	06/01/11	1.13	2.1	2.1	2.0	<0.5	0.09	445
RP31-LYS-35	35	04/05/11	0.93	2.8	2.8	2.7	<0.5	0.05	420
RP31-LYS-35	35	04/19/11	1.24	2.6	2.6	2.5	<0.5	0.09	445
RP31-LYS-35	35	04/26/11	1.66	2.5	2.5	2.4	<0.5	0.09	430
RP31-LYS-35	35	05/04/11	0.94	2.4	2.4	2.3	<0.5	0.07	430
RP31-LYS-35	35	06/28/11	1.00	1.9	1.9	1.9	<0.5	<0.01	460

San Sevaine Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
SS5-LYS-00	0	04/06/11	5.64	1.2	<0.2	<0.1	1.2	0.09	130
SS5-LYS-00	0	04/19/11	7.99	1.0	0.4	<0.1	1.0	0.14	175
SS5-LYS-00	0	04/26/11	8.70	1.7	0.6	<0.1	1.7	0.15	205
SS5-LYS-00	0	05/04/11	10.0	1.6	0.3	<0.1	1.6	0.14	270
SS5-LYS-00	0	05/10/11	12.7	2.5	<0.2	<0.1	2.5	0.15	285
SS5-LYS-00	0	05/17/11	10.5	2.4	0.4	0.3	2.1	0.06	505
SS5-LYS-00	0	05/25/11	8.65	1.9	<0.2	<0.1	1.9	<0.01	510
SS5-LYS-00	0	06/02/11	11.8	2.3	0.4	<0.1	2.3	<0.01	570
SS5-LYS-00	0	06/08/11	6.71	3.2	2.2	2.2	1.0	<0.01	665
SS5-LYS-00	0	06/14/11	8.12	2.1	0.5	0.5	1.6	<0.01	640
SS5-LYS-00	0	06/21/11	10.3	<0.6	<0.2	<0.1	<0.5	<0.01	675
SS5-LYS-00	0	06/28/11	4.47	5.8	3.9	3.6	2.2	0.05	750
SS5-LYS-05	5	04/06/11	3.19	<0.6	<0.2	0.1	<0.5	0.07	595
SS5-LYS-05	5	04/19/11	2.15	<0.6	<0.2	<0.1	<0.5	0.17	455
SS5-LYS-05	5	04/26/11	2.29	<0.6	<0.2	<0.1	<0.5	0.16	390
SS5-LYS-05	5	05/04/11	2.23	<0.6	<0.2	<0.1	<0.5	0.16	390
SS5-LYS-05	5	05/10/11	2.54	0.8	0.2	<0.1	0.8	0.20	420
SS5-LYS-05	5	05/17/11	2.36	<0.6	0.2	<0.1	<0.5	0.20	450
SS5-LYS-05	5	05/25/11	2.04	<0.6	<0.2	<0.1	<0.5	<0.01	455
SS5-LYS-05	5	06/02/11	2.01	<0.6	<0.2	<0.1	<0.5	<0.01	465
SS5-LYS-05	5	06/08/11	3.36						446
SS5-LYS-05	5	06/14/11	2.22	<0.6	<0.2	<0.1	<0.5	<0.01	620
SS5-LYS-05	5	06/21/11	2.47	<0.6	0.5	0.5	<0.5	<0.01	690
SS5-LYS-05	5	06/28/11	2.56	<0.6	<0.2	0.1	<0.5	<0.01	755
SS5-LYS-10	10	04/06/11	2.47	<0.6	<0.2	<0.1	<0.5	0.06	510
SS5-LYS-10	10	04/19/11	2.12	<0.6	<0.2	<0.1	<0.5	0.15	315
SS5-LYS-10	10	04/26/11	2.26	<0.6	<0.2	<0.1	<0.5	0.14	260
SS5-LYS-10	10	05/04/11	2.56	<0.6	<0.2	<0.1	<0.5	0.14	250
SS5-LYS-10	10	05/10/11	2.37	<0.6	<0.2	<0.1	<0.5	0.16	250
SS5-LYS-10	10	05/17/11	2.06	<0.6	<0.2	<0.1	<0.5	0.15	280
SS5-LYS-10	10	05/25/11	1.93	<0.6	<0.2	<0.1	<0.5	<0.01	375
SS5-LYS-10	10	06/02/11	1.80	<0.6	<0.2	<0.1	<0.5	<0.01	360
SS5-LYS-10	10	06/08/11	3.25			<0.1		<0.01	356
SS5-LYS-10	10	06/14/11	1.66	<0.6	<0.2	<0.1	<0.5	<0.01	470
SS5-LYS-10	10	06/21/11	2.01	<0.6	<0.2	<0.1	<0.5	<0.01	600
SS5-LYS-10	10	06/28/11	2.32	<0.6	<0.2	<0.1	<0.5	<0.01	680
SS5-LYS-15	15	04/06/11	2.49	<0.6	0.3	0.3	<0.5	<0.01	870
SS5-LYS-15	15	04/19/11	2.02	<0.6	<0.2	<0.1	<0.5	0.05	860
SS5-LYS-15	15	04/26/11	1.81	<0.6	<0.2	<0.1	<0.5	0.07	860
SS5-LYS-15	15	05/04/11	1.81	<0.6	<0.2	<0.1	<0.5	0.04	935
SS5-LYS-15	15	05/10/11	1.60	<0.6	<0.2	<0.1	<0.5	0.07	940
SS5-LYS-15	15	05/17/11	1.90	<0.6	<0.2	<0.1	<0.5	0.07	970
SS5-LYS-15	15	05/25/11	1.50	<0.6	<0.2	<0.1	<0.5	<0.01	990
SS5-LYS-15	15	06/02/11	1.55	<0.6	<0.2	<0.1	<0.5	<0.01	950
SS5-LYS-15	15	06/08/11	2.46			<0.1		<0.01	810
SS5-LYS-15	15	06/14/11	1.36	<0.6	1.8	<0.1	<0.5	<0.01	725
SS5-LYS-15	15	06/21/11	1.46	<0.6	<0.2	<0.1	<0.5	<0.01	780
SS5-LYS-15	15	06/28/11	1.39	<0.6	<0.2	<0.1	<0.5	0.10	790
SS5-LYS-20	20	04/06/11	2.41	<0.6	0.3	0.2	<0.5	0.07	400
SS5-LYS-20	20	04/19/11	1.80	<0.6	<0.2	<0.1	<0.5	0.05	560
SS5-LYS-20	20	04/26/11	1.41	<0.6	<0.2	<0.1	<0.5	0.04	590
SS5-LYS-20	20	05/04/11	1.37	<0.6	<0.2	<0.1	<0.5	<0.01	570
SS5-LYS-20	20	05/10/11	1.18	<0.6	<0.2	0.1	<0.5	0.06	540
SS5-LYS-20	20	05/17/11	1.39	<0.6	<0.2	0.1	<0.5	0.05	540

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

San Sevaine Basin (cont'd)									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
SS5-LYS-20	20	05/25/11	1.34	<0.6	0.3	0.3	<0.5	<0.01	500
SS5-LYS-20	20	06/02/11	1.13	0.8	0.8	0.8	<0.5	<0.01	480
SS5-LYS-20	20	06/08/11	2.12			0.8		<0.01	444
SS5-LYS-20	20	06/14/11	0.91	1.6	1.6	1.6	<0.5	<0.01	425
SS5-LYS-20	20	06/21/11	1.07	1.9	1.9	1.9	<0.5	<0.01	420
SS5-LYS-20	20	06/28/11	0.87	1.1	1.1	1.0	<0.5	0.11	415
SS5-LYS-30	30	04/06/11	3.70	0.6	<0.2	<0.1	0.6	<0.01	2970
SS5-LYS-30	30	04/19/11	4.09	<0.6	<0.2	<0.1	<0.5	<0.01	2940
SS5-LYS-30	30	05/04/11	3.79			<0.1		<0.01	2870
SS5-LYS-30	30	05/10/11				<0.1		0.04	2830
SS5-LYS-30	30	05/17/11	4.16			<0.1		0.04	2820
SS5-LYS-30	30	05/25/11	3.78			<0.1		<0.01	2770
SS5-LYS-30	30	06/08/11	3.91						2690
SS5-LYS-30	30	06/14/11	3.93			<0.1		<0.01	2650
SS5-LYS-30	30	06/21/11	5.19			<0.1		<0.01	2680
SS5-LYS-35	35	04/06/11	1.94	<0.6	0.3	0.3	<0.5	<0.01	1600
SS5-LYS-35	35	04/19/11	1.68	<0.6	0.6	0.5	<0.5	0.07	1600
SS5-LYS-35	35	04/26/11	3.83	0.7	0.7	0.6	<0.5	0.07	1520
SS5-LYS-35	35	05/04/11	1.46	<0.6	0.5	0.5	<0.5	<0.01	1550
SS5-LYS-35	35	05/10/11	2.02	0.7	0.9	0.6	<0.5	0.09	1520
SS5-LYS-35	35	05/17/11	1.58	0.6	0.6	0.5	<0.5	0.10	1500
SS5-LYS-35	35	05/25/11	1.35	<0.6	0.5	0.5	<0.5	<0.01	1480
SS5-LYS-35	35	06/02/11	1.20	<0.6	0.4	0.4	<0.5	<0.01	1450
SS5-LYS-35	35	06/08/11	2.09	<0.6	0.4	0.4	<0.5	<0.01	1360
SS5-LYS-35	35	06/14/11	1.25	<0.6	0.4	0.4	<0.5	<0.01	1430
SS5-LYS-35	35	06/21/11	1.20	<0.6	0.3	0.3	<0.5	<0.01	1420
SS5-LYS-35	35	06/28/11	1.07	1.3	0.4	0.4	0.9	0.04	1470

Victoria Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
VCT-LYS-00	0	04/05/11	3.04	0.9	0.3	0.2	0.7	0.08	220
VCT-LYS-00	0	04/19/11	4.29	<0.6	<0.2	<0.1	<0.5	0.13	240
VCT-LYS-00	0	04/26/11	4.90	0.6	<0.2	<0.1	0.6	0.10	260
VCT-LYS-00	0	05/04/11	5.30	1.6	0.6	0.6	1.0	<0.01	405
VCT-LYS-00	0	05/10/11	5.72	2.8	1.7	1.6	1.2	0.04	625
VCT-LYS-00	0	05/17/11	6.27	2.1	1.1	0.8	1.3	0.04	630
VCT-LYS-00	0	05/26/11	5.56	2.0	0.8	0.5	1.5	<0.01	525
VCT-LYS-00	0	06/02/11	5.54	1.8	0.8	0.7	1.1	<0.01	480
VCT-LYS-00	0	06/09/11	5.92	1.6	1.1	0.7	0.9	<0.01	510
VCT-LYS-00	0	06/15/11	6.35	1.4	0.4	0.4	1.0	<0.01	495
VCT-LYS-00	0	06/21/11	6.18	2.2	0.9	0.9	1.3	<0.01	575
VCT-LYS-00	0	06/28/11	5.79	2.4	0.7	0.7	1.7	0.04	615
VCT-LYS-05	5	04/05/11	1.47	<0.6	0.2	0.2	<0.5	0.04	565
VCT-LYS-05	5	04/19/11	1.61	<0.6	0.2	<0.1	<0.5	0.21	475
VCT-LYS-05	5	04/26/11	1.74	<0.6	<0.2	<0.1	<0.5	0.18	440
VCT-LYS-05	5	05/04/11	1.79	<0.6	0.5	0.5	<0.5	<0.01	455
VCT-LYS-05	5	05/10/11	1.51	0.9	0.9	0.8	<0.5	0.13	470
VCT-LYS-05	5	05/17/11	1.51	1.2	1.2	1.1	<0.5	0.12	500
VCT-LYS-05	5	05/26/11	1.50	1.1	1.1	1.1	<0.5	<0.01	620
VCT-LYS-05	5	06/09/11	1.48	0.8	0.8	0.8	<0.5	<0.01	690
VCT-LYS-05	5	06/15/11	1.49	0.7	0.7	0.7	<0.5	<0.01	640
VCT-LYS-05	5	06/21/11	1.71	1.4	0.9	0.9	0.5	<0.01	625
VCT-LYS-05	5	06/28/11	1.56	2.3	1.7	1.7	0.6	0.04	610
VCT-LYS-10	10	04/05/11	1.42	<0.6	<0.2	0.1	<0.5	<0.01	960
VCT-LYS-10	10	04/19/11	1.74	<0.6	<0.2	<0.1	<0.5	0.07	965
VCT-LYS-10	10	04/26/11	2.02	<0.6	<0.2	<0.1	<0.5	0.08	895
VCT-LYS-10	10	05/04/11	1.34	<0.6	<0.2	0.1	<0.5	<0.01	885
VCT-LYS-10	10	05/10/11	1.15	<0.6	0.3	0.2	<0.5	0.08	845
VCT-LYS-10	10	05/17/11	1.28	<0.6	0.3	0.2	<0.5	0.08	830
VCT-LYS-10	10	05/26/11	1.43	<0.6	0.3	0.3	<0.5	<0.01	850
VCT-LYS-10	10	06/09/11	1.43	<0.6	0.3	0.3	<0.5	<0.01	900
VCT-LYS-10	10	06/15/11	1.95	<0.6	0.3	0.3	<0.5	<0.01	925
VCT-LYS-10	10	06/21/11	1.64	<0.6	0.4	0.4	<0.5	<0.01	940
VCT-LYS-10	10	06/28/11	1.59	<0.6	0.4	0.4	<0.5	0.04	920
VCT-LYS-15	15	04/05/11	1.18	<0.6	0.3	0.3	<0.5	<0.01	670
VCT-LYS-15	15	04/19/11	1.09	<0.6	<0.2	<0.1	<0.5	0.08	645
VCT-LYS-15	15	04/26/11	1.27	<0.6	<0.2	<0.1	<0.5	0.07	645
VCT-LYS-15	15	05/04/11	1.20	<0.6	<0.2	<0.1	<0.5	<0.01	655
VCT-LYS-15	15	05/10/11	1.06	<0.6	<0.2	<0.1	<0.5	0.10	660

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

Victoria Basin (cont'd)									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO_3-N	TKN+NO_2-N	NO_2-N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
VCT-LYS-15	15	05/17/11	1.17	<0.6	<0.2	<0.1	<0.5	0.14	645
VCT-LYS-15	15	05/26/11	0.99	<0.6	<0.2	<0.1	<0.5	<0.01	620
VCT-LYS-15	15	06/09/11	1.04	0.8	0.8	0.8	<0.5	0.03	630
VCT-LYS-15	15	06/15/11	0.95	0.7	0.7	0.7	<0.5	<0.01	705
VCT-LYS-15	15	06/21/11	1.03	<0.6	0.5	0.5	<0.5	<0.01	760
VCT-LYS-15	15	06/28/11	1.35	<0.6	0.5	0.5	<0.5	<0.01	775
VCT-LYS-20	20	04/05/11	1.52	<0.6	0.4	0.4	<0.5	<0.01	750
VCT-LYS-20	20	04/19/11	1.63	<0.6	0.3	0.2	<0.5	0.07	755
VCT-LYS-20	20	04/26/11	1.63	<0.6	0.4	0.3	<0.5	0.09	700
VCT-LYS-20	20	05/04/11	1.60	<0.6	0.3	0.3	<0.5	<0.01	705
VCT-LYS-20	20	05/10/11	1.53	<0.6	0.3	0.2	<0.5	0.06	685
VCT-LYS-20	20	05/17/11	1.52	<0.6	<0.2	0.1	<0.5	0.08	680
VCT-LYS-20	20	05/26/11	1.39	<0.6	0.2	0.2	<0.5	<0.01	620
VCT-LYS-20	20	06/09/11	1.22	1.1	1.1	1.1	<0.5	<0.01	610
VCT-LYS-20	20	06/15/11	1.12	1.1	1.1	1.1	<0.5	<0.01	620
VCT-LYS-20	20	06/21/11	1.21	1.0	1.0	1.0	<0.5	<0.01	670
VCT-LYS-20	20	06/28/11	1.41			1.1		0.02	680
VCT-LYS-25	25	04/05/11	1.45	<0.6	0.4	0.4	<0.5	0.03	1260
VCT-LYS-25	25	04/19/11	1.41	<0.6	0.4	0.3	<0.5	0.06	1370
VCT-LYS-25	25	04/26/11	1.44	<0.6	0.2	0.2	<0.5	0.03	1340
VCT-LYS-25	25	05/04/11	1.28	<0.6	0.2	0.2	<0.5	<0.01	1290
VCT-LYS-25	25	05/10/11	1.29	<0.6	<0.2	0.1	<0.5	<0.01	1210
VCT-LYS-25	25	05/17/11	1.21	<0.6	<0.2	0.1	<0.5	<0.01	1150
VCT-LYS-25	25	05/26/11	1.16	<0.6	0.2	0.2	<0.5	<0.01	1110
VCT-LYS-25	25	06/09/11	1.30	<0.6	0.3	0.3	<0.5	<0.01	1200
VCT-LYS-25	25	06/15/11	1.22	<0.6	0.2	0.2	<0.5	<0.01	1260
VCT-LYS-25	25	06/21/11	1.30	<0.6	0.3	0.3	<0.5	<0.01	1310
VCT-LYS-25	25	06/28/11	1.64	<0.6	0.4	0.3	<0.5	0.07	1230
VCT-LYS-30	30	04/05/11	1.23	<0.6	<0.2	0.1	<0.5	0.09	645
VCT-LYS-30	30	04/19/11	1.53	<0.6	<0.2	<0.1	<0.5	0.11	705
VCT-LYS-30	30	04/26/11	1.94	<0.6	<0.2	<0.1	<0.5	0.08	710
VCT-LYS-30	30	05/04/11	1.15	0.9	<0.2	0.1	0.8	<0.01	700
VCT-LYS-30	30	05/10/11	1.24	<0.6	<0.2	0.1	<0.5	0.07	680
VCT-LYS-30	30	05/17/11	1.07	<0.6	<0.2	0.1	<0.5	0.08	650
VCT-LYS-30	30	05/26/11	1.14	<0.6	0.3	0.2	<0.5	<0.01	630
VCT-LYS-30	30	06/09/11	1.11	<0.6	<0.2	<0.1	<0.5	<0.01	730
VCT-LYS-30	30	06/15/11	1.00	<0.6	<0.2	0.1	<0.5	<0.01	745
VCT-LYS-30	30	06/21/11	1.11	<0.6	0.2	0.2	<0.5	<0.01	750
VCT-LYS-30	30	06/28/11	0.97	<0.6	0.4	0.3	<0.5	0.06	755
VCT-LYS-35	35	04/05/11	0.79	1.0	1.0	0.9	<0.5	0.06	440
VCT-LYS-35	35	04/19/11	0.80	<0.6	0.5	0.4	<0.5	0.09	500
VCT-LYS-35	35	04/26/11	0.82	<0.6	0.4	0.3	<0.5	0.07	550
VCT-LYS-35	35	05/04/11	0.84	0.8	0.2	0.2	0.6	<0.01	575
VCT-LYS-35	35	05/10/11	0.77	<0.6	0.3	0.2	<0.5	0.08	560
VCT-LYS-35	35	05/17/11	0.93	<0.6	0.3	0.2	<0.5	0.09	540
VCT-LYS-35	35	05/26/11	0.80	<0.6	0.5	0.3	<0.5	<0.01	520
VCT-LYS-35	35	06/09/11	0.70	<0.6	0.4	0.4	<0.5	<0.01	410
VCT-LYS-35	35	06/15/11	0.63	<0.6	0.2	0.2	<0.5	<0.01	430
VCT-LYS-35	35	06/21/11	1.10	<0.6	0.2	0.2	<0.5	<0.01	450
VCT-LYS-35	35	06/28/11	0.78	<0.6	0.5	0.4	<0.5	0.12	500

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

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

Table 2-5b
Alternative Monitoring Plans

Ely Basin				
Date	Recycled Water*	Recycled Water*	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TOC (76% reduction)	TN (52% reduction)
04/19/11	4.01	3.9	0.96	1.89
04/26/11	5.03	4.7	1.21	2.27
05/04/11	4.21	4.6	1.01	2.21
05/10/11	4.60	6.1	1.10	2.93
05/17/11	4.71	2.2	1.13	1.06
05/25/11	4.95	5.7	1.19	2.74
06/02/11	4.45	4.8	1.07	2.30
06/08/11	5.16		1.24	
06/14/11	5.05	6.4	1.21	3.07
06/21/11	5.37	6.8	1.29	3.26
06/28/11	4.59	4.1	1.10	1.97

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

Brooks Basin				
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
mg/L==>	TOC	TN	EC	
04/07/11	3.12	1.0	135	
05/12/11	5.83	3.7	480	
06/08/11	4.95	3.4	585	
Date	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25
mg/L==>	TOC	TN**	EC	
04/07/11	1.60	0.1	315	
05/12/11	1.53	0.2	305	
06/08/11	1.68	0.0	385	
Date	BRK-1/1	BRK-1/1	BRK-1/1	BRK-1/1
mg/L==>	TOC**	TN	EC	Cl
04/07/11	0.72	<0.6	580	75
05/10/11	0.54	<0.6	590	76

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

NA: Not Analyzed

RP3 Basin			
Date	RP3-LYS-35	RP3-LYS-35	RP3-LYS-35
mg/L==>	TOC	TN	EC
04/05/11	0.93	2.8	420
04/19/11	1.24	2.6	445
04/26/11	1.66	2.5	430
05/04/11	0.94	2.4	430
06/28/11	1.00	1.9	460

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

Constituent	Declez Channel @ RP3 Basin 06/22/11	San Sevaine Creek @ Jurupa Basin 06/22/11	Unit	Method
NO_2-N	<0.02	<0.02	mg/L	EPA 300.0
NO_3-N	<0.1	0.1	mg/L	EPA 300.0
TDS	256	294	mg/L	SM 2540C
Total Coliform	>23	>23	mpn/100ml	SM 9221B
Oil & Grease	<2	<2	mg/L	EPA 1664A
Inorganic Chemicals				
Aluminum	<25	79	µg/L	EPA 200.7
Antimony	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	µg/L	EPA 200.8
Asbestos	<6.91	<6.67	MFL	EPA 100.2
Barium	29	32	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	1.2	2.0	µg/L	EPA 200.7
Cyanide	<0.005	<0.005	mg/L	SM 4500-CN E
Fluoride	0.4	0.5	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	µg/L	EPA 245.2
Nickel	2	2	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	<1	<1	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	0.9	<0.5	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	<0.5	<0.5	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	<0.1	<0.1	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	1.6	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
Endrin	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<25	<25	µg/L	EPA 547
Heptachlor	<0.01	<0.01	µg/L	EPA 505

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

Constituent	Declez Channel @ RP3 Basin 06/22/11	San Sevaine Creek @ Jurupa Basin 06/22/11	Unit	Method
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	0.07	<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)	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	3	12	µg/L	S6251B
Bromate	<5	<5	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	mg/L	EPA 300.0
Action Level Chemicals				
Copper	5.8	8.3	µg/L	EPA 200.7
Lead	<0.5	<0.5	µg/L	EPA 200.8
Radionuclides				
Combined Radium-226 and Radium 22	<0.475	<0.475	pCi/L	EPA 903.0
Gross Alpha Particle Activity	5.2	**	pCi/L	EPA 900.0
Tritium	<386	<386	pCi/L	EPA 906
Strontium-90	<0.791	<0.791	pCi/L	EPA 905
Gross Beta Particle Activity	3	**	pCi/L	EPA 900.0
Uranium	1.5	1.1	pCi/L	EPA 200.8
Unregulated Chemicals				
Chromium VI	0.29	0.85	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels				
Boron	<0.1	0.1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	3	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 –trimethylbenzene	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	3	6	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals				
Aluminum	<25	79	µg/L	EPA 200.7
Corrosivity	1.4	1.8	SI	SM 2330B
Foaming Agents (MBAS)	0.10	0.19	mg/L	S5540C/EPA 425.1
Iron	42	149	µg/L	EPA 200.7
Manganese	6	12	µg/L	EPA 200.7
Odor--Threshold	40	100	TON	SM 2150B
Silver	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Zinc	12	40	µg/L	EPA 200.7

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

** San Sevaine sample sent to MWH for Gross Alpha analysis was identified to be recycled water. Sample could not be recollected during 2Q11.

Table 2-6b

Diluent Water Monitoring: State Water Project - Silverwood Lake

Constituent	Apr-11	May-11	Jun-11	Unit
Silica	9.9	9.3	9.4	mg/L
Calcium	16	14	13	mg/L
Magnesium	8	7	6	mg/L
Sodium	28	25	22	mg/L
Potassium	1.9	2.1	1.8	mg/L
Carbonate	0	0	0	mg/L
Bicarbonate	67	63	59	mg/L
Sulfate	31	26	17	mg/L
Chloride	32	27	24	mg/L
Nitrate	2.6	1.5	0.9	mg/L
Fluoride	<0.1	<0.1	<0.1	mg/L
Total Dissolved Soilds	163	143	124	mg/L
Total Hardness as $CaCO_3$	69	63	53	mg/L
Total Alkalinity as $CaCO_3$	55	52	48	mg/L
Free Carbon Dioxide	1.2	1.2	1.1	mg/L
pH	7.98	7.96	7.95	unit
Specific Conductance	287	254	215	µmho/cm
Color	12	--	--	CU
Turbidity	2.0	3.6	2.4	NTU
Temperature	13	16	18	°C
Bromide	0.10	0.06	0.07	mg/L
Total Organic Carbon	3.98	4.14	3.37	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	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Inactive	Municipal
	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600997	Inland Empire Utilities Agency - TRN-1/1	50 downgradient	340-360	4	Active	Monitoring
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
Declez Basin	300208	Jurupa Community Services District - 19	8900 downgradient	230-390	18	Active	Municipal
	300207	Jurupa Community Services District - 17	5240 downgradient	259-290, & 300-400	NA	Active	Municipal
	300200	Jurupa Community Services District - 13	5730 downgradient	220-446	16-34	Active	Municipal
	--	Inland Empire Utilities Agency - DCZ-1	50 downgradient	155-175	4	Active	Monitoring
	--	Inland Empire Utilities Agency - D-1/2	50 downgradient	185-205	4	NA	Monitoring
RP-3 Basins	600492	Fontana Water Company - F23a	7900 upgradient	450-740	18	Active	Municipal
	600477	Inland Empire Utilities Agency - Southridge JHS	5500 downgradient	NA	NA	Active	Monitoring
	600848	Alcoa - Offsite Mw1	9480 downgradient	NA	NA	Active	Monitoring
	600850	Alcoa - Offsite Mw3	4725 downgradient	NA	NA	Active	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	Active	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	Active	Monitoring
Jurupa	Not currently planned for recharge						
7th & 8th Street Basins	3601561	San Antonio Water Company No. 12	740 downgradient	379-480, 525-563, 578-609, & 634-679	16	Inactive	Municipal
	3601772	City of Ontario No. 4	3429 downgradient	526-910	16-20	Inactive	Municipal
	--	City of Ontario No. 51	3402 downgradient	Not Yet Constructed	NA	NA	Municipal
	600493	City of Ontario No. 35	9695 downgradient	580-1020	18-36	Active	Municipal
	--	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	Active	Monitoring
	--	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	Active	Monitoring
San Sevaine Basins	600905	Cucamonga Valley Water District No. 39	8300-13170 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	--	Inland Empire Utilities Agency - SS-1/1 and 1/2	~39-116 downgradient	640-680	4	Active	Monitoring
	600462	Unitex 91090	~1601 downgradient	NA	NA	Active	Private Domestic
Victoria Basin	600905	Cucamonga Valley Water District No. 39	4329 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601033	Cucamonga Valley Water District No. 43**	8300 downgradient	650-800	32-42	Active	Municipal
	--	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~39-116 downgradient	570-610	4	Active	Monitoring
	--	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~ 2000 downgradient	570-610	4	Active	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	Active	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	Active	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

Notes:

NA = Data not available
CBWM ID = Chino Basin Water Master well identification numbe
bgs = below ground surface
* = Ontario Well No. 38 replaced Ontario Well No. 19, which is inactive
** = Cucamonga Valley Water District No. 43 replaced CVWD Well Nos. 35 & 36, which are inactive.

Table 2-8
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_2-N (mg/L)	NO_3-N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg $CaCO_3$/L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Co. - F37a	4/14/11	0.13	<1.1	8.1	480	298	<25	<3	2.5	0.7	<0.05	23	1	<0.5	<1	<0.25	<0.2	0.2	11	18	212	18	18	<0.1	0.04	9.7	9.7	<0.5	165	3.9
	California Speedway 2	4/14/11	<0.1	<1.1	7.9	390	248	<25	<3	2.7	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	26	11	162	18	13	<0.1	0.07	4.7	4.8	<0.5	159	4.2
	Reliant Energy - East Well	4/14/11	0.15	<1.1	***8.9***	375	246	<25	<3	5.8	1.3	<0.05	96	2	<0.5	<1	0.29	<0.2	0.3	2	14	155	19	19	<0.1	0.06	8.0	8.1	<0.5	121	3.9
	Ontario Well No. 20	4/14/11	0.12	<1.1	7.4	355	222	<25	<3	1.3	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	2	8	163	14	7	<0.1	0.10	2.2	2.3	<0.5	168	10.1
	BH-1/2*	5/3/11	0.74	<1.1	7.7	520	352	<25	5	<0.5	0.1	<0.05	<15	3	<0.5	<1	<0.25	<0.2	3.2	<1	68	206	22	37	<0.1	<0.01	3.9	3.9	<0.5	123	7.8
Turner	Ontario Well No. 25	4/14/11	0.15	<1.1	7.7	460	284	<25	<3	0.9	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	<1	22	191	23	20	<0.1	0.02	4.3	4.3	<0.5	173	12.3
	Ontario Well No. 38	4/14/11	0.17	<1.1	7.9	330	204	<25	<3	<0.5	0.3	<0.05	21	<1	<0.5	<1	<0.25	<0.2	0.2	<1	5	136	18	8	<0.1	0.11	1.4	1.5	<0.5	155	9.7
	T-1/2*	4/21/11	0.77	<1.1	7.4	390	246	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.8	<1	16	177	18	6	<0.1	0.17	<0.1	<0.6	<0.5	181	5.7
	T-2/1*	4/21/11	0.79	<1.1	7.3	470	288	<25	3	0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	2.1	2	62	183	25	14	<0.1	0.06	0.6	0.7	<0.5	127	6.3
	T-2/2*	4/21/11	1.18	<1.1	7.4	345	220	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	34	134	20	15	<0.1	0.10	0.8	0.9	<0.5	102	6.1
RP3	Southridge JHS	4/19/11	0.49	<1.1	7.5	***1010***	***680***	79	5	0.6	0.5	<0.05	***2720***	***98***	<0.5	1	<0.25	<0.2	***12.0***	6	109	373	56	82	<0.1	<0.01	***14.3***	14.3	<0.5	227	6.6
	Alcoa MW1*	5/3/11	0.28	5	7.9	605	408	<25	<3	<0.5	0.7	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.1	2	23	251	27	46	<0.1	<0.01	***17.2***	17.2	<0.5	172	7.3
	Alcoa MW3*	5/3/11	0.33	<1.1	7.4	***1110***	***830***	<25	3	0.6	0.5	<0.05	<15	2	<0.5	<1	<0.25	<0.2	0.9	2	126	442	49	57	<0.1	<0.01	***26.8***	26.8	<0.5	240	5.6
	RP3-1/1*	4/19/11	0.76	<1.1	7.4	***935***	***624***	<25	<3	1.7	0.4	<0.05	<15	43	<0.5	1	<0.25	<0.2	0.7	4	66	345	66	80	<0.1	<0.01	***17.5***	17.5	<0.5	252	0.9
	RP3-1/2*	4/19/11	1.04	<1.1	7.7	875	***568***	<25	3	0.8	0.6	<0.05	<15	***142***	<0.5	1	<0.25	<0.2	0.3	2	67	324	63	65	<0.1	0.18	***13.2***	13.4	<0.5	244	1.3
7th & 8th St.	Ontario Well No. 35	4/14/11	<0.1	<1.1	7.7	380	240	<25	<3	1.0	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.4	<1	7	163	19	21	<0.1	0.09	3.2	3.3	<0.5	154	12.3
	8TH-1/2*	5/10/11	0.18	<1.1	8.2	265	174	<25	<3	<0.5	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	3	16	102	13	10	<0.1	0.34	2.4	2.7	<0.5	92	9.1
	8TH-2/1*	5/10/11	0.28	<1.1	8.1	530	356	<25	<3	<0.5	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	5	18	220	16	28	<0.1	0.15	***19.2***	19.4	<0.5	141	9.0
	8TH-2/2*	5/10/11	0.13	<1.1	8.0	515	326	<25	<3	<0.5	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	3	20	220	16	28	<0.1	0.15	***13.6***	13.8	<0.5	157	8.4
Brooks	Pomona Well No. 10	4/21/11	0.42	<1.1	7.7	540	360	<25	<3	0.8	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	3	34	259	11	41	<0.1	0.10	***10.7***	10.8	<0.5	143	6.0
	Pomona Well No. 2	4/21/11	0.26	<1.1	7.8	625	414	<25	<3	2.1	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	5	36	300	12	56	<0.1	0.10	***13.6***	13.7	<0.5	160	6.8
	BRK-1/1*	4/7/11	0.72	<1.1	7.5	580	346	<25	5	<0.5	0.1	<0.05	<15	3	<0.5	1	<0.25	<0.2	0.8	2	75	261	15	33	<0.1	<0.01	0.4	<0.6	<0.5	155	6.8
	BRK-1/1	5/10/11	0.54			590																			<0.1	<0.01	0.4	<0.6	<0.5		
	BRK-1/2*	4/7/11	0.33	<1.1	8.0	585	356	<25	3	<0.5	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	<1	24	271	15	48	<0.1	0.10	***19.2***	19.3	<0.5	151	7.3
	BRK-2/1*	5/23/11	0.30	<1.1	7.7	495	356	<25	5	<0.5	0.2	<0.05	<15	4	<0.5	1	<0.25	<0.2	***13.2***	4	66	220	10	28	<0.1	0.06	1.5	1.6	<0.5	126	7.3
	BRK-2/2*	5/23/11	0.12	<1.1	8.5	350	236	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.5	3	7	111	35	19	<0.1	0.20	6.3	6.5	<0.5	134	7.1
Ely	Ely Basin MW1 Philadelphia St.*	5/26/11	1.21	<1.1	8.0	430	262	<25	30	<0.5	0.0	<0.05	<15	***58***	<0.5	1	<0.25	<0.2	***12.4***	3	49	162	28	21	0.1	<0.01	0.4	<0.6	<0.5	134	2.1
	Ely Basin MW2 Walnut St.*	4/21/11	1.00	<1.1	7.5	695	440	<25	10	<0.5	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	***6.3***	2	48	299	27	34	<0.1	0.06	***15.4***	15.5	<0.5	192	5.7
	Riverside Well (43840-CWW)	4/21/11	0.33	<1.1	7.8	530	336	<25	***<3***	1.7	0.4	<0.05	29	<1	<0.5	<1	<0.25	<0.2	0.6	11	24	235	20	33	<0.1	0.13	9.3	9.4	<0.5	172	4.1
	Bishop of SB Corp. - DOM	5/4/11	0.26	<1.1	7.2	775	484	<25	<3	1.6	0.0	<0.05	28	2	<0.5	1	<0.25	<0.2	0.2	3	39	356	23	66	<0.1	<0.01	***20.0***	20.0	<0.5	221	20.4
Declez**	JCSD Well No. 13	4/27/11	0.26	<1.1	7.2	710	462	<25	<3	0.6	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.0	4	104	286	29	30	<0.1	<0.01	7.1	7.1	<0.5	150	20.0
	JCSD Well No. 17	4/27/11	0.25	<1.1	7.9	565	380	<25	<3	1.4	0.4	<0.05	31	2	<0.5	1	<0.25	<0.2	0.0	3	57	217	29	35	<0.1	<0.01	***11.1***	11.1	<0.5	115	8.2
	JCSD Well No. 19	4/27/11	0.12	<1.1	7.7	365	234	<25	<3	2.4	0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.0	<1	13	129	24	13	<0.1	0.04	3.4	3.4	<0.5	144	9.0
	DCZ-1/1*	4/19/11	0.88	<1.1	8.1	320	212	<25	5	0.9	0.4	<0.05	<15	2	<0.5	<1	<0.25	<0.2	2.9	<1	10	112	25	14	<0.1	0.17	0.8	1.0	<0.5	136	1.4
Victoria & San Sevaine	SS-1/1*	5/19/11	0.15	<1.1	6.9	310	222	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.7	4	28	123	17	32	<0.1	0.11	2.0	2.1	<0.5	91	12.2
	VCT-1/1*	5/19/11	0.43	<1.1	7.5	345	256	<25	10	<0.5	0.0	<0.05	<15	24	<0.5	<1	<0.25	<0.2	***66***	4	42	141	16	12	0.3	0.03	1.2	1.2	<0.5	88	10.3
	VCT-2/2*	5/19/11	0.14	<1.1	***8.7***	265	200	<25	15	<0.5	0.0	<0.05	<15	6	<0.5	2	<0.25	<0.2	***160***	4	5	115	21	7	<0.1	0.18	1.5	1.7	<0.5	125	8.8
	Unitex 91090	4/21/11	0.21	1.1	8.2	410	260	<25	<3	<0.5	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.1	4	34	179	15	28	<0.1	0.10	1.4	1.5	<0.5	122	5.3
	CVWD Well No. 39	4/14/11	2.33	<1.1	7.8	280	182	<25	<3	1.2	0.1	<0.05	<15	<1	<0.5	<1	<0.25		0.2	2	5	100	23	10	<0.1	0.09	1.7	1.8	<0.5	124	3.7
	CVWD Well No. 39	4/21/11																<0.2													
	Primary Maximum Contaminant Level							1000		1300					13			70									10				
	Secondary Maximum Contaminant Level				6.5-8.5	900	500	200	15	1000		0.5	300	50	5	3	100	1	5	5000	250			250							

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

* Total dissolved metals reported for these monitoring wells. The remaining wells report total recoverable metals values.

** 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)

	Diluent Water																		Recycled Water								
	Imported Water									Local Runoff / Storm Flow																	
Date	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria
Jul-10	0	0	0	0	0	0	0	0	0	30	0	1	0	0	23	0	119	3	218	77	147	0	21	229	50	6	0
Aug-10	0	0	0	0	0	0	0	0	0	28	0	18	0	0	21	0	136	2	107	54	275	0	28	181	44	30	0
Sep-10	0	0	0	0	0	0	0	0	0	36	0	1	0	12	18	0	111	2	177	59	141	0	285	49	42	17	67
3Q10 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**94**	**0**	**20**	**0**	**12**	**63**	**0**	**366**	**7**	**502**	**190**	**563**	**0**	**334**	**459**	**136**	**53**	**67**
Oct-10	0	0	0	0	0	0	0	0	0	89	5	24	29	13	71	94	145	15	288	48	130	114	94	23	73	0	153
Nov-10	0	0	0	0	0	0	0	0	0	186	16	44	127	36	128	81	204	34	163	29	87	120	51	193	13	0	117
Dec-10	0	0	0	0	0	0	0	0	0	502	51	282	572	149	770	694	526	293	20	0	34	12	0	122	32	0	42
4Q10 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**776**	**73**	**350**	**728**	**197**	**969**	**869**	**875**	**341**	**471**	**76**	**251**	**246**	**145**	**338**	**117**	**0**	**312**
Jan-11	0	0	0	0	0	0	0	0	0	110	10	112	104	12	224	13	191	13	166	0	0	0	50	103	72	0	86
Feb-11	0	0	0	0	0	0	0	0	0	277	41	164	323	79	281	143	178	72	83	0	0	43	46	131	0	0	67
Mar-11	0	0	0	0	0	0	0	0	0	250	26	142	236	70	488	133	155	155	23	0	0	0	0	126	0	0	39
1Q11 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**637**	**76**	**419**	**663**	**160**	**992**	**288**	**524**	**240**	**273**	**0**	**0**	**43**	**96**	**359**	**72**	**0**	**192**
Apr-11	0	0	0	0	0	0	0	0	0	24	0	1	3	0	86	0	333	-56*	181	0	174	107	52	237	0	0	0
May-11	218	0	0	0	2	299	538	0	69	33	0	10	13	0	60	7	181	6	243	0	162	155	84	176	36	0	141
Jun-11	325	0	0	83	8	547	1169	0	0	21	0	1	8	0	26	0	78	3	202	0	223	206	74	184	34	0	61
2Q11 Total	**543**	**0**	**0**	**83**	**10**	**846**	**1707**	**0**	**69**	**78**	**0**	**12**	**24**	**1**	**172**	**7**	**592**	**-47***	**626**	**0**	**559**	**468**	**210**	**596**	**71**	**0**	**201**

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

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

	ASR Well No. 4									
		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)
2Q11	Apr-11	0			0			(123)	(2,645)	(60,049)
	May-11	0			0			(123)	(2,645)	(60,049)
	Jun-11	26	0.59	170	0			(97)	(2,626)	(54,640)

	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)
1Q08	Jan-08	132	0.87	290	0			696	466	244,894
	Feb-08	81	0.87	290	0			777	553	273,947
	Mar-08	99	0.87	290	0			876	659	309,405
2Q08	Apr-08	89	1.10	350	0			965	780	348,001
	May-08	0	1.10	350	0			965	780	348,001
	Jun-08	0	1.10	350	286	3.5*	310*	680	(436)	238,737
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
2Q11	Apr-11	0			0			612	(722)	213,038
	May-11	0			0			612	(722)	213,038
	Jun-11	80	0.59	170	0			692	(663)	229,761

	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)
2Q08	Apr-08	89	1.10	350	0			241	284	92,736
	May-08	0	1.10	350	0			241	284	92,736
	Jun-08	0	1.10	350	6			235	284	92,736
3Q08	Jul-08	0			67			167	284	92,736
	Aug-08	0			0			167	284	92,736
	Sep-08	0			0			167	284	92,736
2Q09	Apr-09	0			0			167	284	92,736
	May-09	0			0			167	284	92,736
	Jun-09	0			56			111	284	92,736
2Q11	Apr-11	0			0			111	284	92,736
	May-11	0			0			111	284	92,736
	Jun-11	80	0.59	170	0			191	342	109,450

	ASR Well No. 33									
		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)
2Q11	Apr-11	0			0			0	0	0
	May-11	0			0			0	0	0
	Jun-11	0.29	0.59	170	0			0	0.2	61

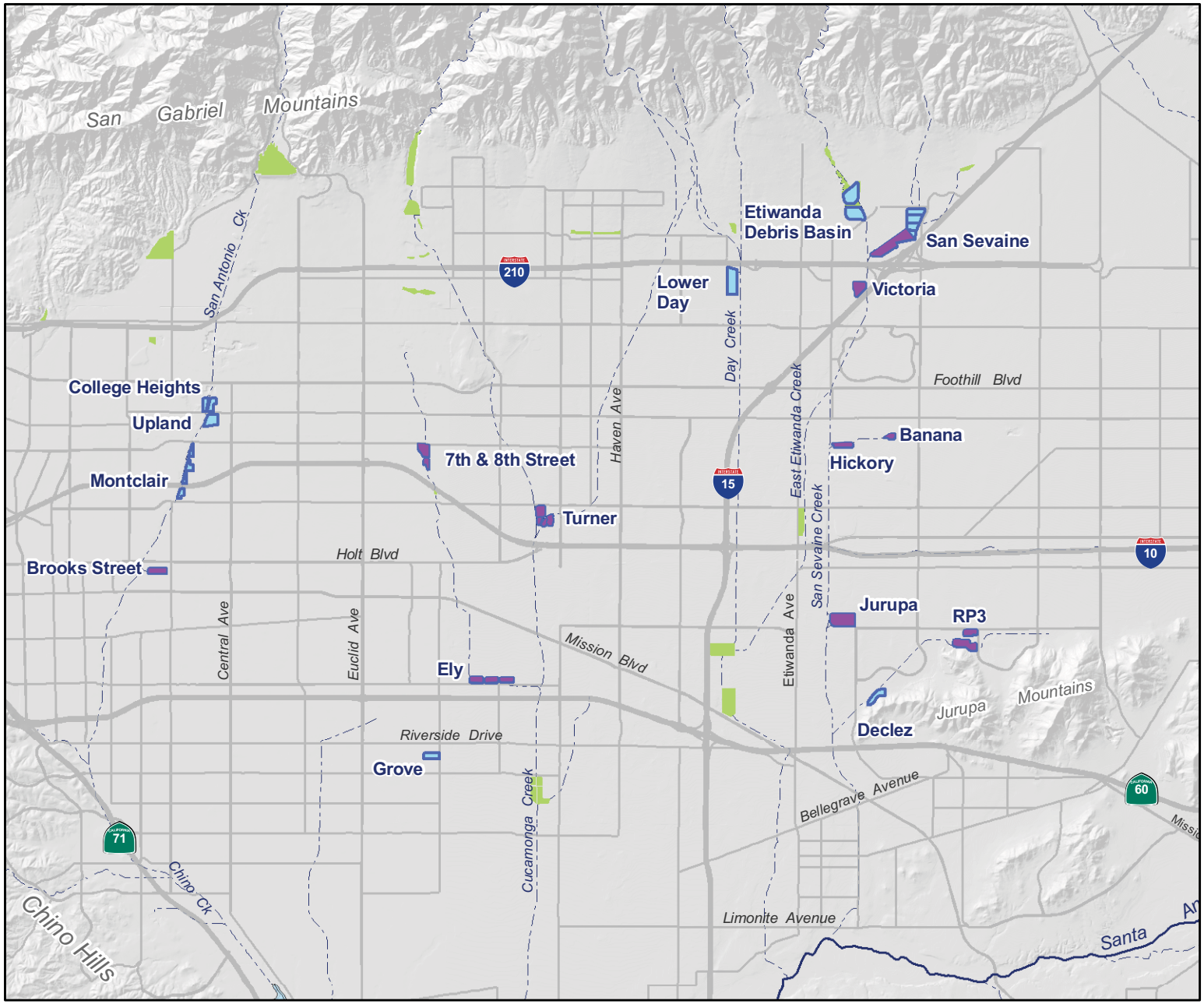
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.
During 2Q11, WFA-treated water was sampled for TDS and TIN (NO_3-N + NO_2-N, assuming no NH_3-N in drinking water) on 04/19/11.
* Wells w/ 2+ sampling events for the month show an avg. of those values. Individual values are at the bottom of the page.
** Well is not required to sample until it reaches 20% extraction. Mass balance will be calculated after 20% threshold has been reached.

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

	Total Project (All Wells)			
	Date	Mass Balance		
		Storage (AF)	TIN (kg)	TDS (kg)
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
2Q11	Apr-11	601	(3,367)	245,725
	May-11	601	(3,367)	245,725
	Jun-11	786	(2,948)	284,632

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

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



Main Map Features

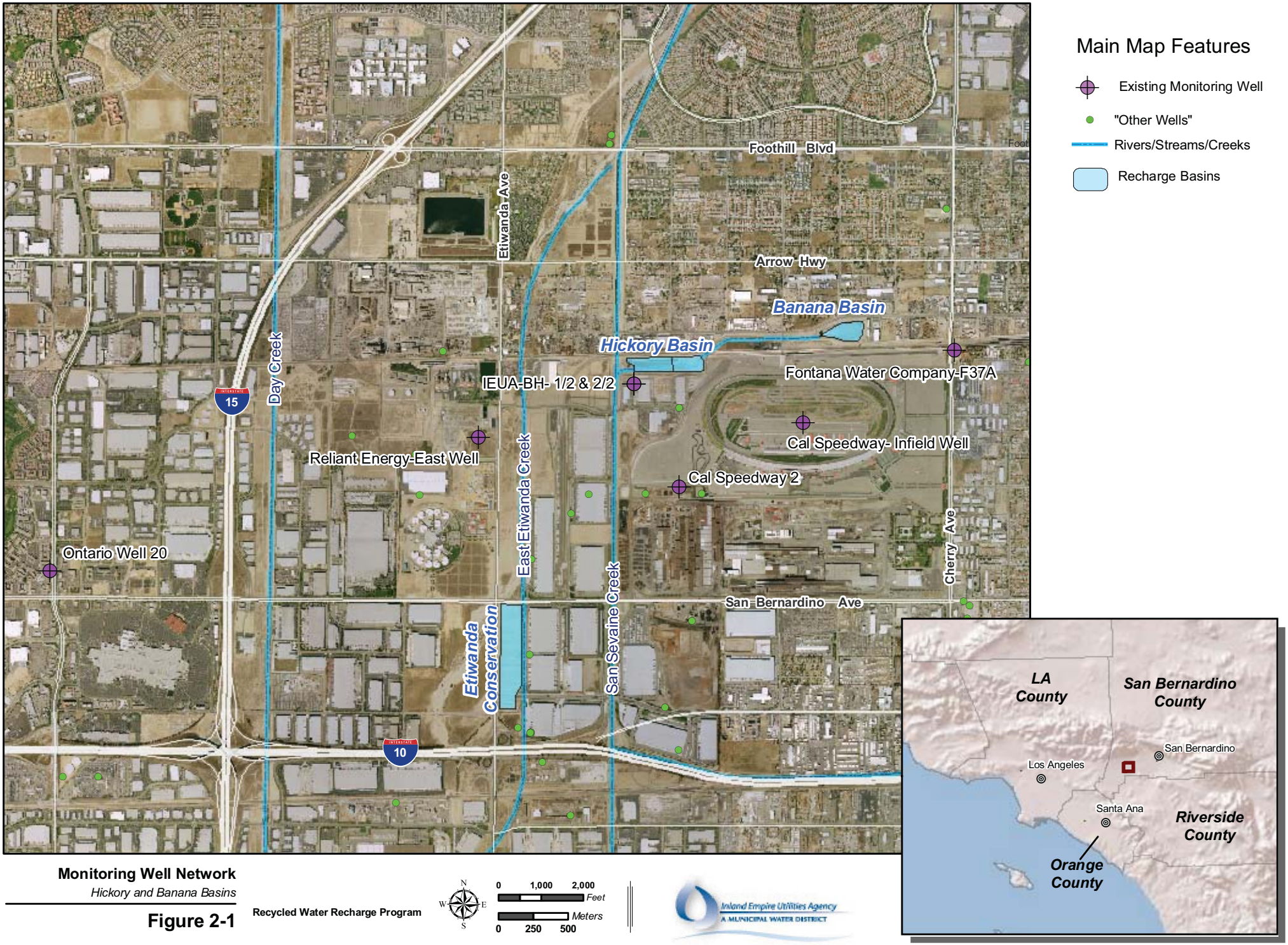
- Recharge Basins in the Recycled Water Groundwater Recharge Program (Recycled Water not initiated)
- Recharge Basins in the Recycled Water Groundwater Recharge Program (Recycled Water initiated)
- Non-program basins
- Rivers and Streams

N
S
0 2 4 Miles
0 4 8 Kilometers

Chino Basin Recycled Water Groundwater Recharge Programs

Basin Locations

Figure 1-1

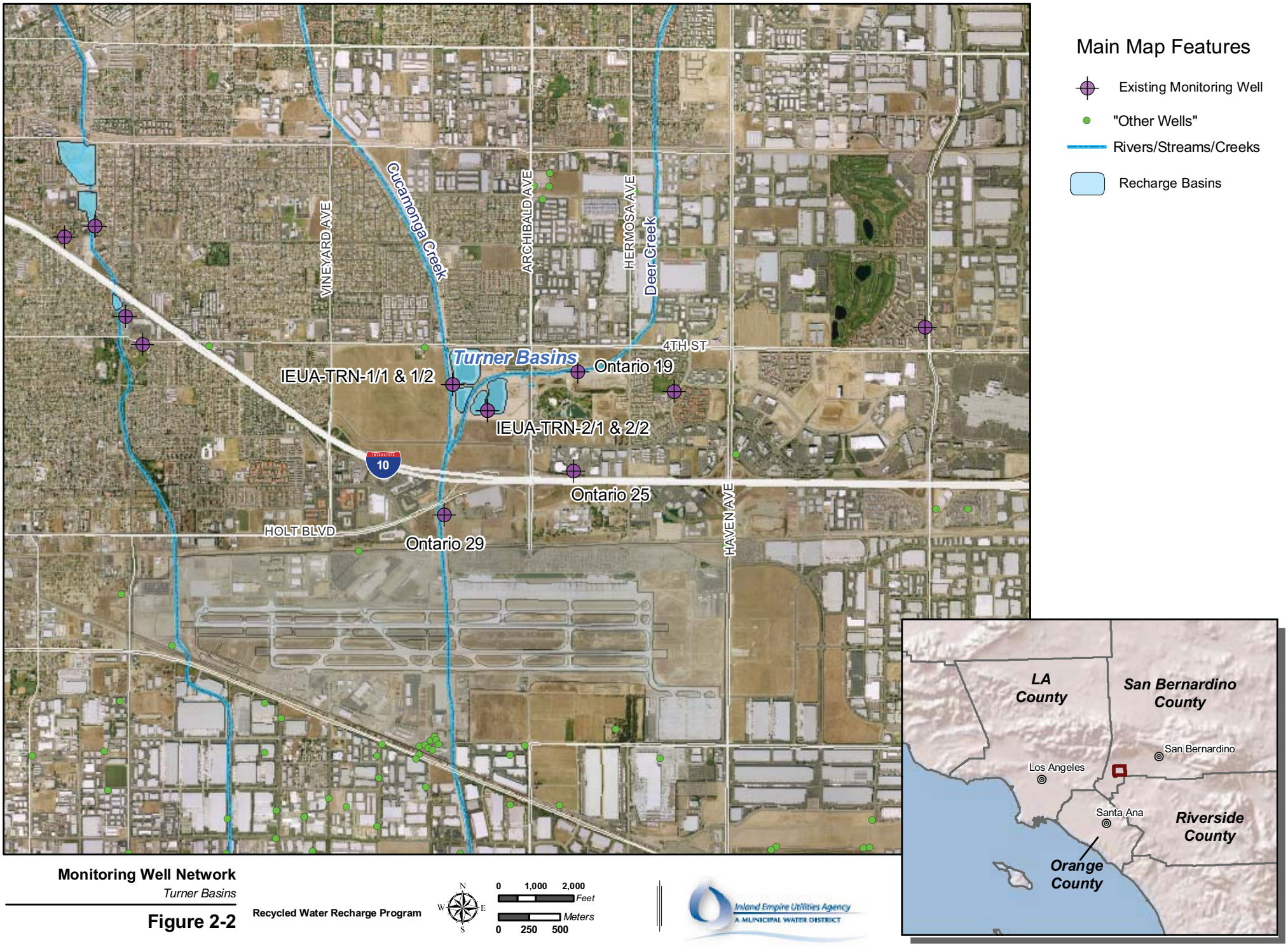


Monitoring Well Network

Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program



Monitoring Well Network

Turner Basins

Figure 2-2

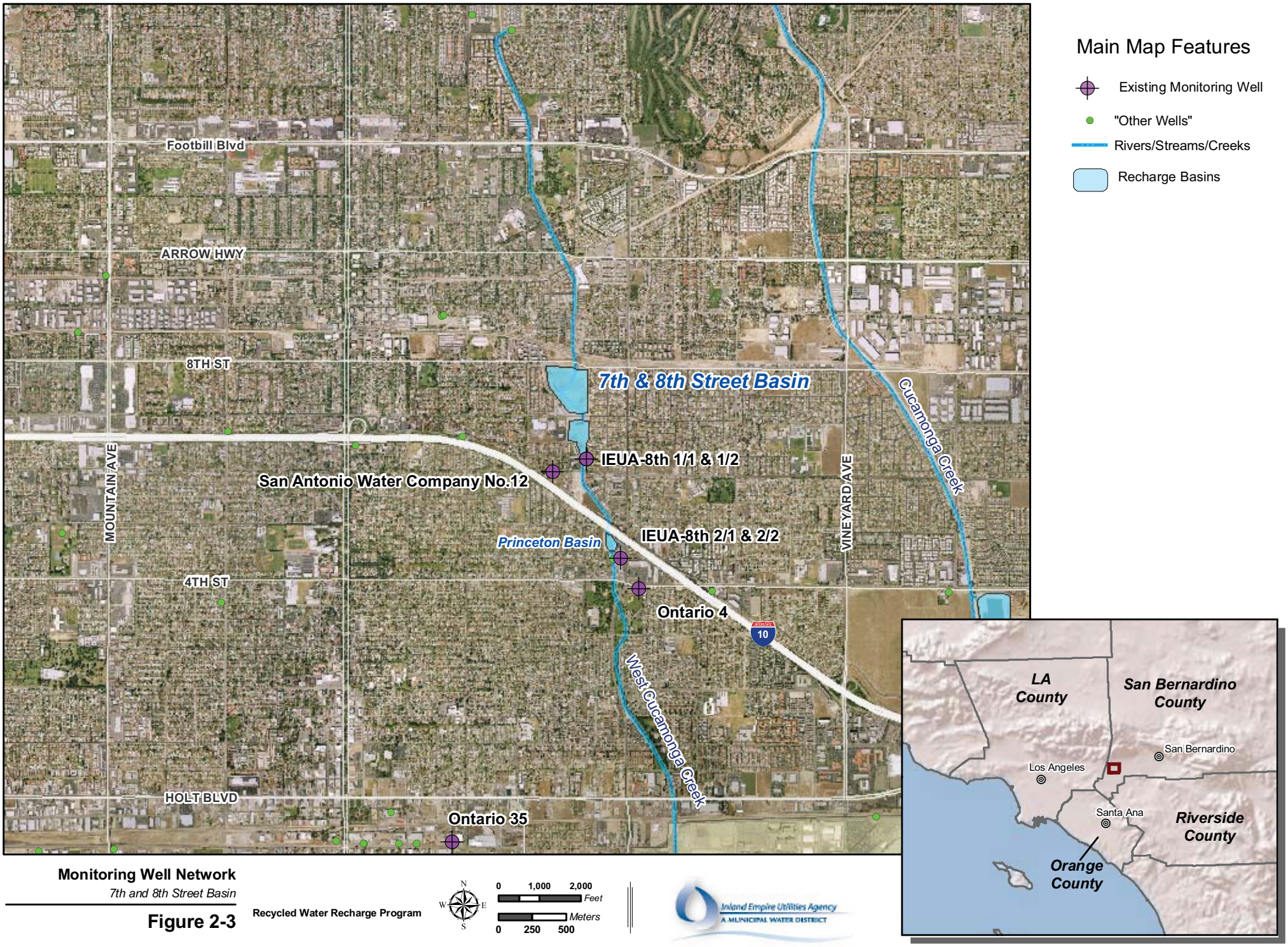
Recycled Water Recharge Program

N W E S

0 1,000 2,000 Feet

0 250 500 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

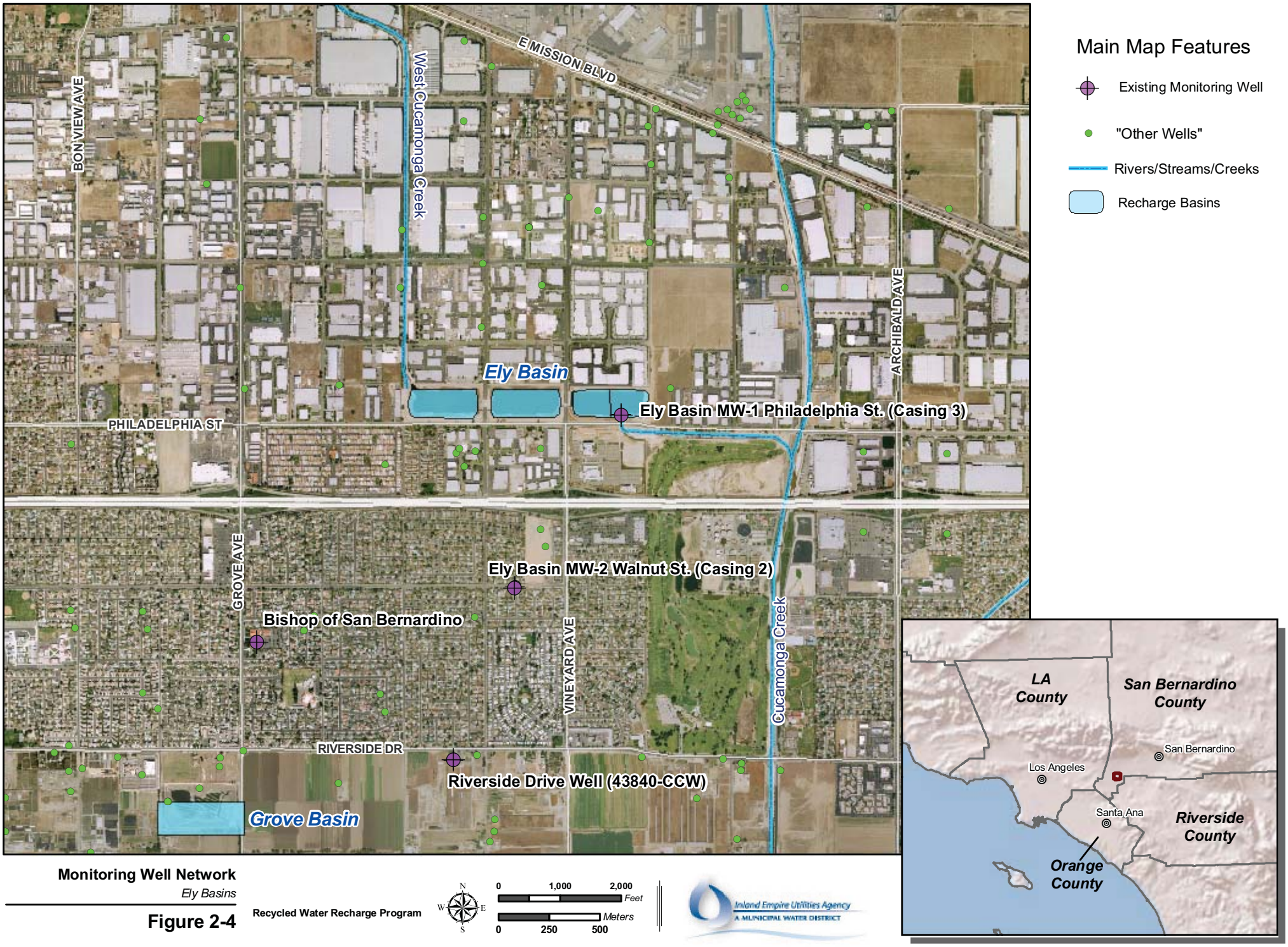


Monitoring Well Network

7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program



Monitoring Well Network

Ely Basins

Figure 2-4

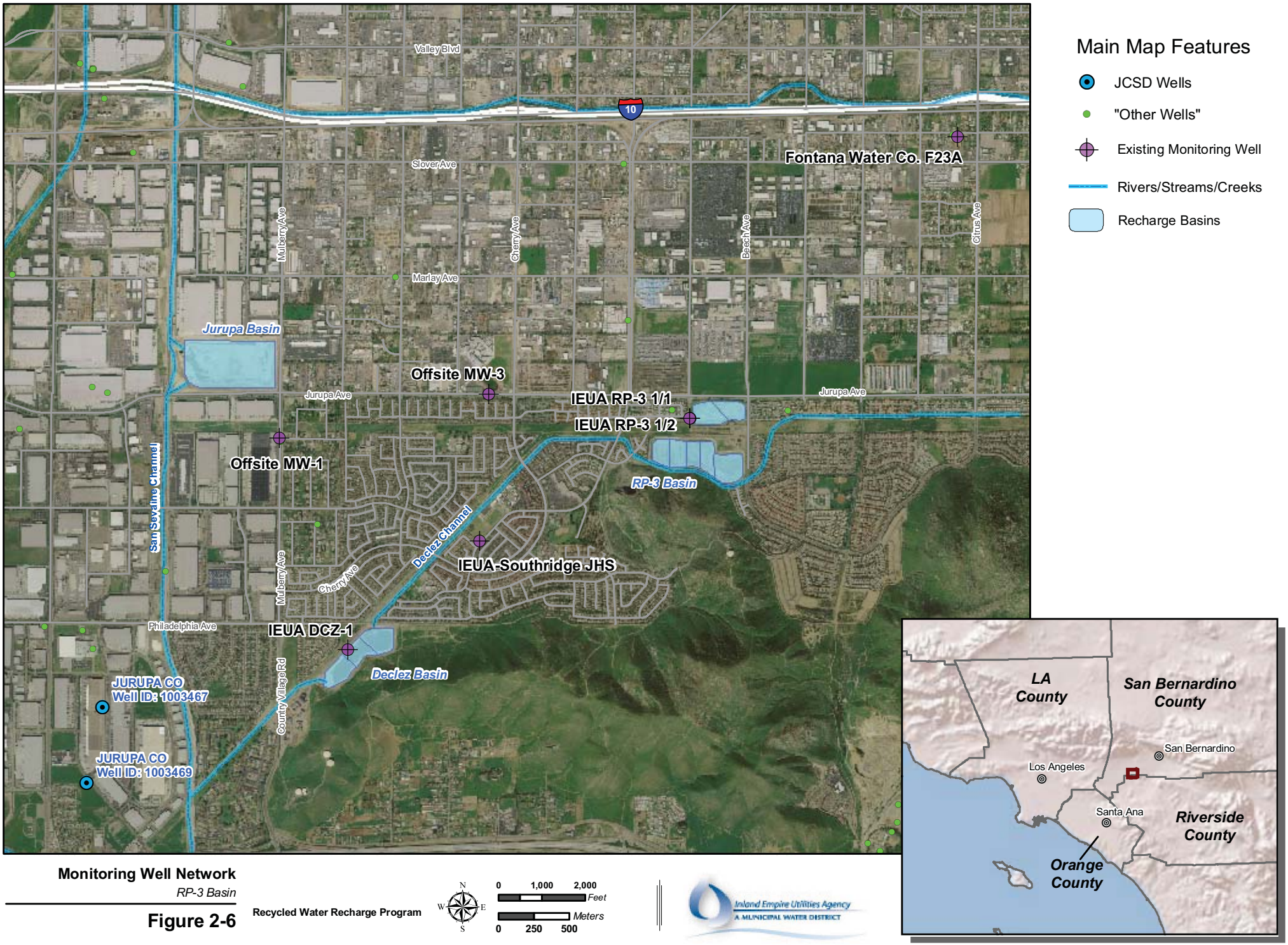
Recycled Water Recharge Program

Monitoring Well Network

Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program

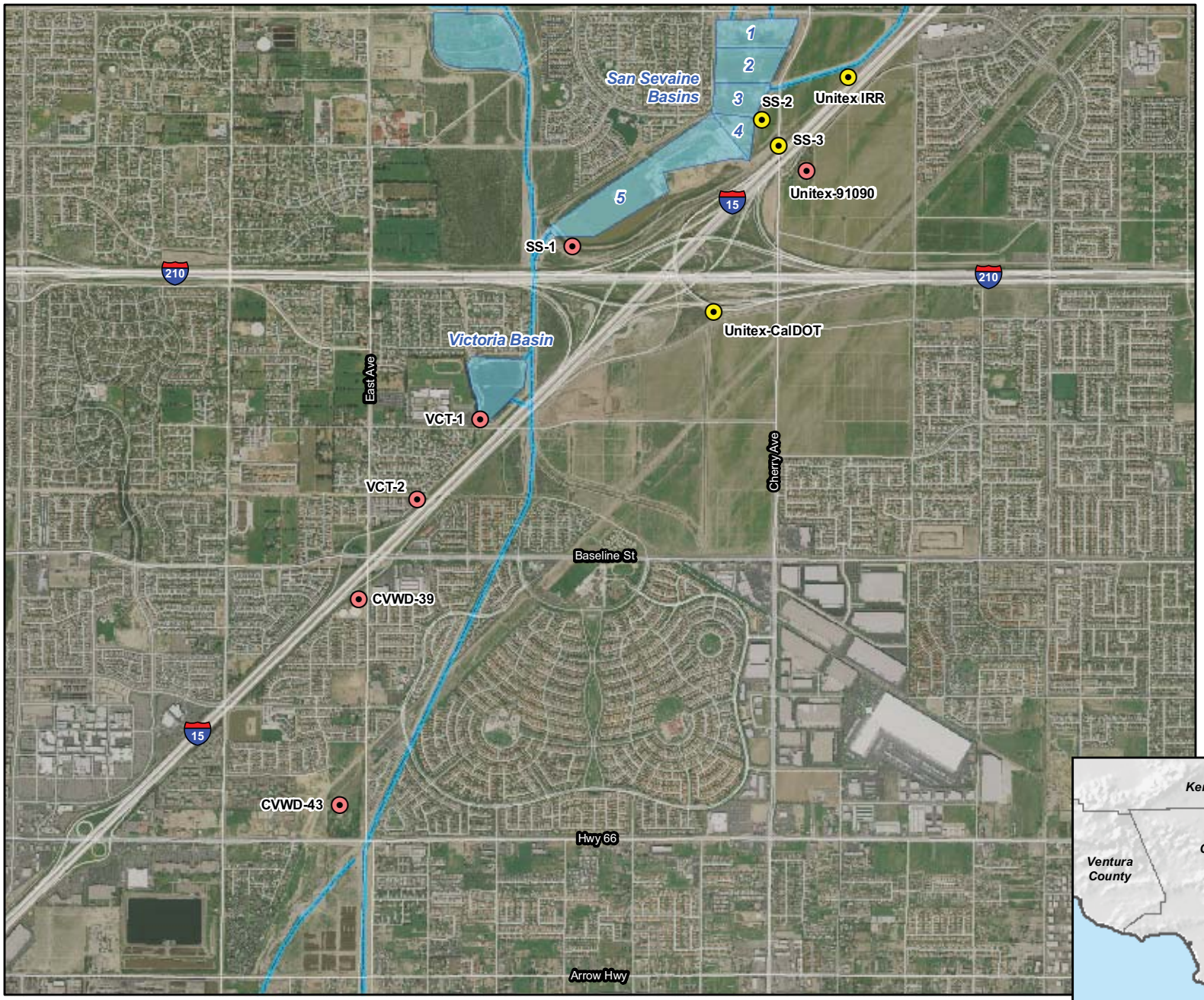


Monitoring Well Network

RP-3 Basin

Figure 2-6

Recycled Water Recharge Program



Main Map Features

- Existing Monitoring Wells
- Other Wells*
- Streams/Creeks
- Basins

*Current recycled water recharge activities occur at Victoria and San Sevaine 5 only. Therefore SS-2, SS-3, Unitex CalDOT, and Unitex IRR are not being monitored.

Monitoring Well Network

San Sevaine and Victoria Basins

Figure 2-7

0 1,000 2,000 3,000 Feet

0 250 500 750 Meters

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Recycled Water Recharge Program

20071106