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Executive Manager of Operations

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February 15, 2011

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Gary Stewart

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

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

Dear Mr. Stewart,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the fourth quarter of 2010 (4Q10), October 1 through December 31, 2010, for the *Chino Basin Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report. During 4Q10, 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 October 1 through December 31, 2010, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time from each of the recharge sites using recycled water, namely 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP-3, 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.

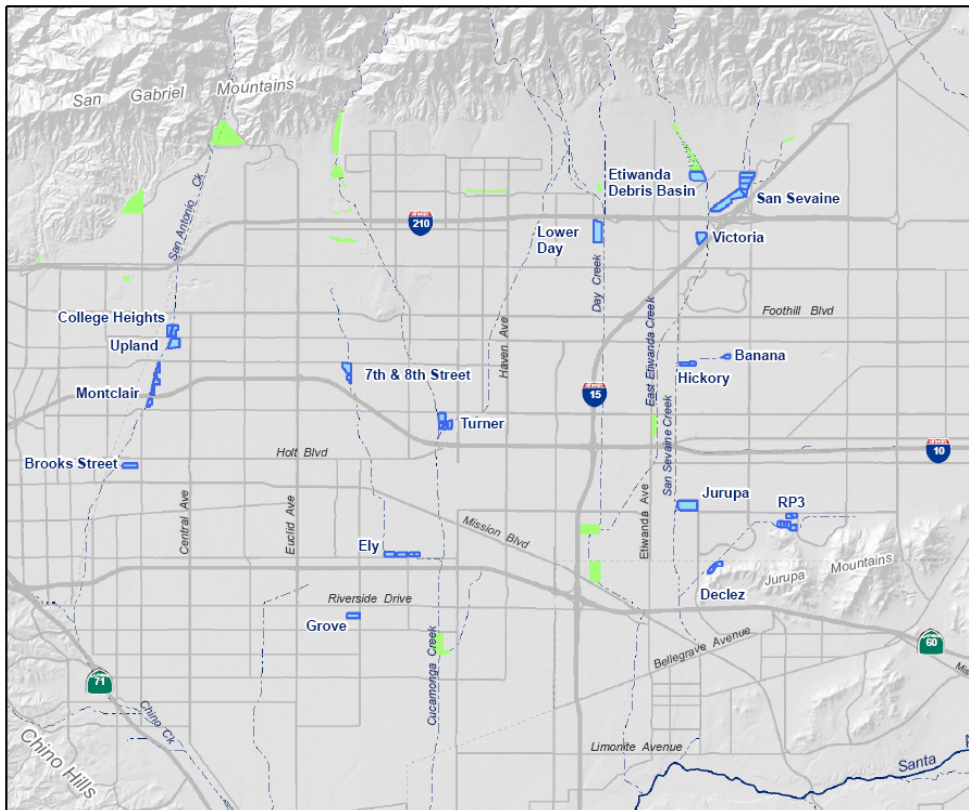
Executed on the 15th day of February 2011 in the Cities of Chino and Rancho Cucamonga.

Patrick O. Shields
Executive Manager of Operations

Kenneth R. Manning
Chief Executive Officer

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report October 1 through December 31, 2010



Prepared by:



February 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 fourth quarter of 2010 (4Q10).

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. R8-2001-0039

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 4Q10 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 4Q10. 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 1Q10 through 4Q10 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 4Q10, 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 are better representative 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 4Q10 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Brooks Basin as the compliance point. The Brooks lysimeter was selected as the 4Q10 compliance point because the basin received consistent recycled water recharge and recycled water was present at the 25-foot depth based on electrical conductivity (EC) measurements.

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

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly during periods when recycled water is delivered to recharge sites. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. All basin and lysimeter water quality results from 4Q10 are summarized in Table 2-5a. The table includes lysimeter data for 7th & 8th Street, Banana, Brooks, Hickory, RP-3, San Sevaïne, Turner, and Victoria Basins. Declez Basin lysimeter data is periodically included in Table 2-5a as background data only, as recycled water delivery has not been initiated at this basin.

The Brooks Basin has implemented an alternate monitoring plan to conduct monthly sampling of the Brooks Basin surface water, 25-foot lysimeter and monitoring well BRK-1/1. Sampling will be for EC, TOC, and TN at all the points and will be conducted as long as recycled water has been recharged in the prior 180 days. The 25-foot lysimeter will be the compliance point for TN and the monitoring well will be the compliance point for TOC.

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 results. The correction factors reduce the TOC results by 70 percent for recycled water delivered to Turner cells 1 & 2, 85 percent for recycled water delivered to Turner cells 3 & 4, and 76 percent for recycled water delivered to Ely Basin. The correction factors reduce TN results by 87 percent for recycled water delivered to all four Turner cells and 52 percent for recycled water delivered to Ely Basin. Turner Basin TOC and TN values calculated based on the correction factors provided in the alternative monitoring plan are summarized in Table 2-5b. Turner Basin did not receive recycled water during 4Q10.

C. Diluent Water

For 4Q10, diluent water quality sampling of stormwater was conducted on November 29, December 1, and December 2, 2010 at Ely, Lower Day, Montclair, and Turner Basins. State Water Project water was not delivered to any of the recharge basins receiving recycled water during 4Q10. Table 2-6 lists the results of the stormwater sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the 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 in the Order.

D. Groundwater Monitoring Wells

During 4Q10, 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 RP-3 Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the 7th & 8th Street Basin was monitored by sampling a network of five wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Ely Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the San Sevaine and Victoria Basins were monitored by sampling a network of five wells. The wells in the monitoring well networks for Hickory and Banana, Turner, 7th & 8th Street, Ely, Brooks, RP-3, 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 and annual monitoring (gross alpha and gross beta only) are presented in Table 2-8a and Table 2-8b.

Groundwater monitoring is conducted to evaluate water quality conditions in the vicinity of the recharge basins utilizing recycled water. Groundwater monitoring results can be used to assess background conditions, time the arrival of recharge waters, and the impact recharged water has on downgradient water supplies. Any 4Q10 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: 8TH-1/1 and VCT-1/1 and VCT-2/2. In subsequent quarters, additional well purging will be performed at 8TH-1/1, VCT-1/1, VCT 2/2, and other wells where turbidity levels continue to be elevated.

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 4Q10, only the manganese at well RP3-1/2 remained elevated.

TDS and EC are slightly higher than the secondary MCLs in wells Bishop of San Bernardino Corp, RP3-1 and Southridge JHS. The wells south of Ely and near RP-3 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, RP-3, and Declez monitoring network also have nitrate concentrations above the primary MCL. These higher levels are characteristic of groundwater quality in the local area where historically NO₃-N concentrations ranges from 10-30 mg/L. TDS and nitrate concentrations in the area of the RP-3 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, Banana, Brooks, Ely, Hickory, RP-3, San Sevaine, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff and stormwater captured during 4Q10 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 4Q10 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 7th & 8th Street, Banana, Brooks, Ely, Hickory, RP-3, 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 within a 500-foot buffer zone.

6. MVWD ASR Project

The Regional Board has allowed the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project to be included under IEUA/CBWM Phase I Groundwater Recharge Order No. R8-2005-0033 and subsequent permit updates. In April 2007, MVWD, Watermaster, and IEUA entered into an agreement to report the MVWD ASR project groundwater injection/recovery volumes and TIN/TDS mass balance in the recharge program quarterly reports. Initial injection began in June 2007. Effective May 1, 2008, MVWD discontinued groundwater injection at the ASR Wells until further notice. Table 6-1 summarizes the monthly volumes and TIN/TDS of injected and recovered water. The table also includes the mass balance of TIN/TDS from the injection-recovery cycles.

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

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁶	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
10/01/10	0.6	5.3				7.4	886			<2	0.5	3.5	5.5		5.5	7.0	690			<2
10/02/10	0.6	5.2				7.4	910			<2	0.5	3.4	5.3		5.3	7.0	690			<2
10/03/10	0.6	5.4	6.4		6.4	7.4	915			<2	0.6	3.5	4.4		4.4	7.1	705			<2
10/04/10	0.6	5.4				7.4	892			<2	0.4	3.6	4.3		4.3	7.1	690			<2
10/05/10	0.7	5.3	7.3	7.3	7.3	7.4	868	452	135	<2	0.4	3.6	5.2	6.1	5.2	7.1	710	424	139	<2
10/06/10	0.6	5.4				7.4	844			<2	0.5	3.5	6.0		6.0	7.0	710			<2
10/07/10	0.7	5.4	6.6		6.6	7.4	791			2	0.4	3.5	5.9		5.9	7.0	705			<2
10/08/10	0.7	5.3				7.5	770			<2	0.5	3.4	4.2		4.2	7.1	710			<2
10/09/10	0.9	5.7				7.5	792			<2	0.4	3.4	3.8		3.8	7.1	720			<2
10/10/10	0.8	6.1	5.2		5.2	7.5	802			2	0.6	3.6	4.1		4.1	7.1	726			<2
10/11/10	0.8	5.9				7.5	792			<2	0.5	3.6	3.9		3.9	7.1	731			<2
10/12/10	0.7	5.6	5.4	5.4	5.4	7.5	798	450		<2	0.4	3.5	3.8	4.7	3.8	7.1	700	448		<2
10/13/10	0.6	5.2				7.4	789			<2	0.4	3.4	4.6		4.6	7.1	705			<2
10/14/10	0.6	5.3	4.9		4.9	7.5	790			2	0.4	3.4	5.3		5.3	7.1	695			<2
10/15/10	0.6	5.2				7.5	788			<2	0.5	3.4	5.3		5.3	7.1	705			<2
10/16/10	0.6	5.1				7.5	791			<2	0.4	3.4	5.4		5.4	7.1	720			<2
10/17/10	0.6	5.3	5.8		5.8	7.5	783			<2	0.5	3.6	4.5		4.5	7.1	715			<2
10/18/10	0.7	5.2				7.5	772			<2	0.5	3.6	3.8		3.8	7.1	710			<2
10/19/10	0.7	5.2	5.9	5.9	5.9	7.4	798	436	146	<2	0.4	3.5	4.2	5.2	4.2	7.1	710	436		<2
10/20/10	0.7	5.0				7.3	807			<2	0.4	3.4	4.7		4.7	7.1	705			<2
10/21/10	0.7	5.0	5.5		5.5	7.5	806			2	0.5	3.4	5.3		5.3	7.1	710			<2
10/22/10	0.9	5.5				7.5	808			<2	0.5	3.4	5.6		5.6	7.1	710			<2
10/23/10	0.9	5.5				7.5	823			2	0.5	3.4	5.6		5.6	7.1	720			<2
10/24/10	0.9	5.9	5.3		5.3	7.5	820			2	0.6	3.6	5.0		5.0	7.1	705			2
10/25/10	0.7	5.5				7.4	848			2	0.6	3.6	4.4		4.4	7.1	690			<2
10/26/10	0.6	5.5	5.8	5.8	5.8	7.5	856	466		<2	0.5	3.6	5.1	5.6	5.1	7.1	685	406		<2
10/27/10	0.5	5.4				7.4	817			4	0.6	3.4	6.0		6.0	7.1	685			<2
10/28/10	0.6	5.5	6.3		6.3	7.2	811			<2	0.5	3.3	6.9		6.9	7.1	675			<2
10/29/10	0.5	5.0				7.2	788			<2	0.4	3.4	6.4		6.4	7.1	690			<2
10/30/10	0.5	5.1				7.2	776			2	0.5	3.4	6.0		6.0	7.1	695			<2
10/31/10	0.6	6.1	6.2		6.2	7.2	772			<2	0.5	3.6	4.7		4.7	7.1	715			<2
Avg	0.7	5.4	5.9	6.1	5.9	7.4	816	451	141	<2	0.5	3.5	5.0	5.4	5.0	7.1	704	429	139	<2
Min	0.5	5.0	4.9	5.4	4.9	7.2	770	436	135	<2	0.4	3.3	3.8	4.7	3.8	7.0	675	406	139	<2
Max	0.9	6.1	7.3	7.3	7.3	7.5	915	466	146	4	0.6	3.6	6.9	6.1	6.9	7.1	731	448	139	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 TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results.

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

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

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

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁶	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
11/01/10	0.6	5.7				7.2	776			<2	0.5	3.7	4.2		4.2	7.3	700			<2
11/02/10	0.6	6.1	6.3	6.3	6.3	7.2	797	474	145	<2	0.5	3.7	4.4	5.7	4.4	7.2	725	426	143	<2
11/03/10	0.6	5.8				7.2	851			<2	0.5	3.7	4.8		4.8	7.2	705			<2
11/04/10	0.6	5.6	6.0		6.0	7.2	782			<2	0.6	3.7	5.1		5.1	7.2	715			<2
11/05/10	0.6	5.4				7.2	784			<2	0.6	3.6	5.1		5.1	7.2	705			<2
11/06/10	0.6	5.3				7.2	808			4	0.6	3.6	5.1		5.1	7.3	720			<2
11/07/10	0.6	5.1	6.6		6.6	7.2	825			4	0.6	3.6	4.7		4.7	7.3	710			<2
11/08/10	0.6	5.4				7.2	754			<2	0.7	3.9	4.4		4.4	7.3	720			<2
11/09/10	0.6	5.8	6.7	6.7	6.7	7.2	749	558		<2	0.7	3.8	5.4	6.1	5.4	7.3	905	426		<2
11/10/10	0.7	6.1				7.2	801			<2	0.7	3.6	7.0		7.0	7.3	725			<2
11/11/10	0.7	6.2	5.8		5.8	7.2	810			2	0.6	3.7	6.0		6.0	7.3	710			<2
11/12/10	0.7	5.8				7.2	802			2	0.6	3.5	5.3		5.3	7.3	739			<2
11/13/10	0.6	5.4				7.2	804			<2	0.6	3.4	4.5		4.5	7.3	735			<2
11/14/10	0.7	5.8	5.3		5.3	7.3	816			<2	0.7	3.6	4.3		4.3	7.3	700			<2
11/15/10	0.7	5.8				7.2	809			2	0.8	3.7	4.0		4.0	7.3	700			<2
11/16/10	0.9	6.2	5.2	5.3	5.3	7.2	762	468	144	2	0.8	3.7	4.8	5.7	4.9	7.3	733	426		<2
11/17/10	0.9	5.8				7.2	700			<2	0.8	3.6	5.6		5.7	7.3	755			<2
11/18/10	0.8	5.8	6.9		7.0	7.2	706			<2	0.8	3.6	6.3		6.5	7.3	720			<2
11/19/10	0.6	5.3				7.1	686			<2	0.8	3.4	6.0		6.1	7.3	756			<2
11/20/10	0.6	5.1				7.0	677			2	0.8	3.5	5.9		6.0	7.3	750			<2
11/21/10	0.6	5.3	6.9		7.0	7.0	633			<2	0.7	3.6	5.2		5.3	7.3	715			<2
11/22/10	0.6	5.2				7.1	667			2	0.6	3.7	4.7		4.8	7.3	720			<2
11/23/10	0.6	5.1	5.4	5.5	5.5	7.1	718	436		<2	0.7	3.7	5.0	6.1	5.0	7.3	715	422		<2
11/24/10	0.6	5.0				7.1	705			<2	0.6	3.7	4.9		5.0	7.3	720			<2
11/25/10	0.6	5.0				7.1	697			<2	0.6	3.7	4.2		4.3	7.3	760			<2
11/26/10	0.6	4.8				7.1	682			<2	0.6	3.5	4.0		4.1	7.4	1100			<2
11/27/10	0.6	4.8				7.1	685			<2	0.5	3.5	5.5		5.6	7.3	725			<2
11/28/10	0.6	5.1	6.9		7.0	7.1	676			<2	0.5	3.7	5.5		5.6	7.3	700			<2
11/29/10	0.6	5.3				7.1	684			<2	0.5	3.8	4.5		4.6	7.4	705			<2
11/30/10	0.6	5.5	7.1	7.2	7.2	7.1	734	450		2	0.5	3.7	4.9	6.2	5.0	7.4	715	428		<2
Avg	0.6	5.5	6.3	6.2	6.3	7.2	746	477	144	<2	0.6	3.6	5.0	6.0	5.1	7.3	740	426	143	<2
Min	0.6	4.8	5.2	5.3	5.3	7.0	633	436	144	<2	0.5	3.4	4.0	5.7	4.0	7.2	700	422	143	<2
Max	0.9	6.2	7.1	7.2	7.2	7.3	851	558	145	4	0.8	3.9	7.0	6.2	7.0	7.4	1100	428	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 TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results. TOC compliance can be met at a point prior to the regional groundwater, including lysimeters.

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

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

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

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁶	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
12/01/10	0.6	5.3				7.1	755			<2	0.6	3.5	5.2		5.3	7.1	705			<2
12/02/10	0.7	5.6	5.2		5.3	7.1	1123			4	0.4	3.6	5.9		6.0	7.0	700			<2
12/03/10	0.7	5.4				7.1	1179			2	0.4	3.5	6.0		6.1	7.0	735			<2
12/04/10	0.7	5.7				7.1	763			4	0.4	3.5	6.0		6.1	7.0	710			<2
12/05/10	0.8	6.4	5.5		5.6	7.1	448			<2	0.4	3.8	5.3		5.4	7.0	725			<2
12/06/10	1.0	6.4				7.1	756			<2	0.4	3.8	4.5		4.6	7.0	710			<2
12/07/10	0.8	6.5	5.2	5.3	5.3	7.1	763	488	148	2	0.4	3.8	4.7	5.9	4.8	7.0	750	440	147	<2
12/08/10	0.8	6.4				7.1	778			<2	0.4	3.8	4.5		4.6	7.0	745			<2
12/09/10	0.9	6.2	4.7		4.8	7.1	795			<2	0.4	3.7	5.7		5.8	7.0	745			<2
12/10/10	0.8	5.7				7.1	812			<2	0.4	3.6	5.9		5.9	7.0	741			<2
12/11/10	0.7	5.6				7.1	818			<2	0.4	3.6	5.7		5.7	7.0	745			<2
12/12/10	0.7	5.9	4.8		4.8	7.1	772			<2	0.4	3.8	5.0		5.0	7.0	725			<2
12/13/10	0.7	5.8				7.0	801			<2	0.4	3.8	4.3		4.3	7.0	760			<2
12/14/10	0.7	5.8	5.6	5.6	5.6	7.0	802	500		<2	0.4	3.8	4.7	6.5	4.8	7.0	730	446		<2
12/15/10	0.7	5.4				7.0	809			QC	0.4	3.6	5.5		5.6	7.0	740			<2
12/16/10	0.6	5.7	5.2		5.3	7.0	865			<2	0.4	3.6	6.3		6.4	7.0				<2
12/17/10	0.6	5.2				7.0	851			QC	0.4	3.6	6.1		6.2	7.0	738			QC
12/18/10	0.6	5.2				7.1	812			<2	0.4	3.6	5.5		5.6	7.0	735			<2
12/19/10	0.6	5.1	4.5		4.6	7.1	799			QC	0.4	3.7	5.1		5.2	7.0	693			QC
12/20/10	0.6	5.0				7.0	684			2	0.4	4.4	4.7		4.8	6.9	640			<2
12/21/10	0.6	5.5	5.8	5.9	5.9	6.7	722		118	2	0.4	3.7	4.4	5.0	4.5	6.9	604	344		<2
12/22/10	0.6	5.2				6.7	751			<2	0.4	3.6	4.7		4.8	6.8	582			<2
12/23/10	0.6	5.2				6.9	751			<2	0.4	3.4	4.6		4.7	6.9	631			<2
12/24/10	0.6	5.2				6.9	751			<2	0.4	3.6	4.1		4.1	7.0	701			<2
12/25/10	0.5	5.2				7.0	751			<2	0.4	3.7	3.4		3.4	7.0	700			<2
12/26/10	0.6	5.2				7.0	751			<2	0.4	3.6	4.6		4.6	7.0	710			<2
12/27/10	0.7	5.5				7.0	751			2	0.4	3.9	4.7		4.8	7.0	715			<2
12/28/10	0.7	5.8	3.6	3.7	3.7	7.1	751			<2	0.4	4.0	4.4	5.2	4.5	7.0	720	440		2
12/29/10	0.8	5.5				7.1	751			<2	0.5	3.8	4.6		4.6	7.0	720			<2
12/30/10	0.8	5.2				7.1	751			<2	0.5	3.7	5.0		5.1	7.0	731			<2
12/31/10	0.8	5.3				7.0	751			<2	0.4	3.8	4.7		4.8	7.0	725			<2
Avg	0.7	5.6	5.0	5.1	5.1	7.0	788	494	133	<2	0.4	3.7	5.0	5.6	5.1	7.0	710	418	147	<2
Min	0.5	5.0	3.6	3.7	3.7	6.7	448	488	118	<2	0.4	3.4	3.4	5.0	3.4	6.8	582	344	147	<2
Max	1.0	6.5	5.8	5.9	5.9	7.1	1179	500	148	4	0.6	4.4	6.3	6.5	6.4	7.1	760	446	147	2

Note:

Bolded characters signify an exceedance of a permit limitation

QC: Quality control test failure

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

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

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

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

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

Date	TIN		TDS	
	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jan-10	5.7	5.6	493	496
Feb-10	6.2	5.4	489	498
Mar-10	6.4	5.4	482	497
Apr-10	5.7	5.3	473	494
May-10	5.2	5.3	471	492
Jun-10	5.0	5.2	478	490
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	481
Nov-10	5.7	5.3	479	481
Dec-10	5.0	5.3	472	479
Avg	5.3	5.3	479	489
Min	3.7	5.2	471	479
Max	6.4	5.6	493	498
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	1Q10	2Q10	3Q10	4Q10	4Q Run. Avg. ¹	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<0.2	<1.9	<0.8	<0.2	<1.9	7	MFL	EPA 100.2
Barium	5	9	7	5	7	1000	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium	0.9	2.9	3.1	2.2	2.3	50	µg/L	EPA 200.8
Cyanide	<5	<5	<5	<5	<5	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.2	0.1	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	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	<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
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 ²	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	2	<1	<1	3	2	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	<0.6	<0.6	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<45	<45	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.2	<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	1Q10	2Q10	3Q10	4Q10	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	0.052	<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	3.7	3.4	4.4	2.7	3.6	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<0.14	<0.72	<0.74	<0.76	<0.76	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	5	<3	15	pCi/L	EPA 900.0
Tritium	<220	<230	<262	<226	<262	20,000	pCi/L	EPA 906
Strontium-90	<0.19	<0.74	<0.76	<0.59	<0.76	8	pCi/L	EPA 905
Gross Beta Particle Activity	6	6	9	11	8	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	<25	<25	200	µg/L	EPA 200.8
Copper	3.7	3.4	4.4	2.7	3.6	1000	µg/L	EPA 200.8
Corrosivity ³	-0.4 (Non-Cor.)	-0.2 (Non-Cor.)	-0.1 (Non-Cor.)	-0.4 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	0.06	0.07	0.06	<0.05	0.05	0.5	mg/L	S5540C/EPA 425.1
Iron ³	NR	NR	43	NR	66	300	µg/L	EPA 200.7
Manganese	10	26	20	13	17	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE) ³	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold ³	3	3	1	2	2	3	TON	SM 2150B
Silver	<0.25	<0.25	0.30	<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	26	26	25	19	24	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ⁴	<1	<1	<1	<1	<1	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.02	<0.01	<0.02	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	RP3-10	RP3-25	RP3-25	BRK-25				
Total Trihalomethanes (TTHMs)	9	4	5	<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 than DL, will be based on highest DL found in the data set.

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

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

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

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

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

Constituent	4Q10	Unit	Method
Metals			
Chromium (III) ¹	2.2	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	4.4	µg/L	EPA 524.2
Chloroethane	<0.5	µg/L	EPA 524.2
2-Chloroethylvinylether	NR	µg/L	EPA 624
Chloroform	81	mg/L	EPA 524.2
Dichlorobromomethane	22	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

¹ Trivalent chromium is measured as total chromium

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

³ Analytical Method is not available for this constituent

Constituent	4Q10	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	<0.05	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
Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	2.1	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	NR	µg/L	542.2 MOD
1,2,3-Trichloropropane (1,2,3-TCF)	<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	4	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

NR: Not Required (Annual Requirement)

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

Banana Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BNA-LYS-00	0	10/06/10	7.16	2.6	0.9	0.4	2.2	0.03	715
BNA-LYS-00	0	10/12/10	7.71	2.2	<0.2	<0.1	2.2	0.12	726
BNA-LYS-00	0	10/19/10	6.89	2.5	1.1	0.9	1.6	0.17	720
BNA-LYS-00	0	10/27/10	5.95	3.9	2.4	2.1	1.9	0.04	700
BNA-LYS-00	0	11/03/10	6.52	4.0	2.1	2.1	2.0	<0.01	680
BNA-LYS-00	0	11/09/10	6.02	3.5	2.1	2.1	1.5	<0.01	695
BNA-LYS-00	0	11/16/10	6.38	2.2	1.4	1.3	0.9	0.15	700
BNA-LYS-00	0	11/23/10	6.10	2.2	1.2	0.7	1.6	0.12	280
BNA-LYS-25	25	10/06/10	0.81	1.3	1.3	1.3	<0.5	<0.01	700
BNA-LYS-25	25	10/12/10	0.66	2.1	1.3	1.1	0.9	0.19	727
BNA-LYS-25	25	10/19/10	0.80	1.0	1.2	1.0	<0.5	0.03	720
BNA-LYS-25	25	10/27/10	0.68	0.9	0.9	0.9	<0.5	<0.01	705
BNA-LYS-25	25	11/03/10	0.71	2.0	2.0	2.0	<0.5	<0.01	710
BNA-LYS-25	25	11/09/10	0.67	0.9	0.9	0.9	<0.5	<0.01	720
BNA-LYS-25	25	11/16/10	0.68	3.6	1.3	1.2	2.4	0.13	735
BNA-LYS-25	25	11/23/10	0.79	1.7	1.7	1.6	<0.5	0.12	720

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	10/05/10	3.59	4.0	3.2	3.0	1.0	0.16	680
BRK-LYS-00	0	11/10/10	4.99	6.0	4.5	4.5	1.5	<0.01	665
BRK-LYS-00	0	11/16/10	4.46	5.5	4.2	4.0	1.5	<0.01	670
BRK-LYS-00	0	12/07/10	5.41	4.2	3.2	2.7	1.4	0.17	470
BRK-LYS-25	25	10/05/10	2.29	<0.6	<0.2	<0.1	<0.5	0.20	610
BRK-LYS-25	25	11/10/10	2.82	<0.6	<0.2	<0.1	0.6	<0.01	620
BRK-LYS-25	25	11/16/10	2.58	0.6	<0.2	<0.1	0.6	<0.01	590
BRK-LYS-25	25	12/07/10	2.42	<0.6	<0.2	<0.1	<0.5	0.09	600

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	10/05/10	6.86	6.5	4.7	4.5	2.0	0.22	705
8TH-LYS-00	0	10/12/10	7.58	5.1	3.4	3.0	2.1	0.23	684
8TH-LYS-00	0	10/19/10	4.99	4.8	3.5	3.1	1.7	0.21	720
8TH-LYS-00	0	10/27/10	5.67	5.1	4.1	3.9	1.1	0.04	630
8TH-LYS-00	0	11/04/10	4.50	5.0	4.1	4.1	1.0	<0.01	660
8TH-LYS-00	0	11/10/10	7.30	5.4	4.3	4.2	1.3	<0.01	640
8TH-LYS-00	0	11/16/10	4.80	5.6	3.9	3.9	1.7	<0.01	700
8TH-LYS-00	0	11/23/10	6.39	0.8	1.0	0.7	<0.5	0.11	105
8TH-LYS-00	0	11/30/10	6.82	2.1	1.1	0.6	1.6	0.11	135
8TH-LYS-00	0	12/07/10	6.87	1.6	1.6	1.5	<0.5	0.09	235
8TH-LYS-00	0	12/14/10	4.90	2.9	2.1	1.9	1.1	0.06	470
8TH-LYS-15	15	10/05/10	3.46	4.6	3.7	3.4	1.2	0.26	700
8TH-LYS-15	15	10/12/10	5.51	1.3	0.5	0.4	0.9	0.19	575
8TH-LYS-15	15	10/19/10	3.49	1.7	1.0	0.8	0.9	0.23	700
8TH-LYS-15	15	10/27/10	4.15	0.7	0.7	0.6	<0.5	0.04	655
8TH-LYS-15	15	11/04/10	3.47	1.5	1.0	1.0	0.5	<0.01	545
8TH-LYS-15	15	11/10/10	3.09	1.6	1.6	1.6	<0.5	<0.01	630
8TH-LYS-15	15	11/16/10	2.71	2.0	1.3	1.3	0.7	<0.01	645
8TH-LYS-15	15	11/23/10	2.54	1.4	1.4	1.2	<0.5	0.18	565
8TH-LYS-15	15	11/30/10	2.21	0.7	0.7	0.6	<0.5	0.12	255
8TH-LYS-15	15	12/07/10	1.71	0.7	0.7	0.6	<0.5	0.10	490
8TH-LYS-15	15	12/14/10	1.47	0.9	0.4	0.3	0.6	0.07	315
8TH-LYS-25	25	10/05/10	3.24	5.1	4.2	4.0	1.1	0.22	665
8TH-LYS-25	25	10/12/10	5.34	1.4	0.8	0.7	0.7	0.16	501
8TH-LYS-25	25	10/19/10	3.41	2.6	2.0	1.8	0.8	0.21	630
8TH-LYS-25	25	10/27/10	3.93	3.1	1.9	1.8	1.3	0.07	605
8TH-LYS-25	25	11/04/10	3.58	1.2	1.2	1.1	<0.5	0.02	505
8TH-LYS-25	25	11/10/10	2.94	2.1	2.1	2.1	<0.5	<0.01	595
8TH-LYS-25	25	11/16/10	3.06	2.7	2.0	2.0	0.7	<0.01	620
8TH-LYS-25	25	11/23/10	2.65	1.2	1.2	1.1	<0.5	0.15	630
8TH-LYS-25	25	11/30/10	3.25	<0.6	0.3	0.2	<0.5	0.13	300
8TH-LYS-25	25	12/07/10	2.57	1.2	0.6	0.5	0.7	0.09	345
8TH-LYS-25	25	12/14/10	2.41	0.7	0.2	0.1	0.6	0.09	350
8TH-LYS-35	35	10/05/10	2.26	2.8	2.8	2.6	<0.5	0.23	690

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

8th Street 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
8TH-LYS-35	35	10/12/10	2.71	3.6	3.1	2.9	0.7	0.17	658
8TH-LYS-35	35	10/19/10	3.29	1.8	1.3	1.2	0.7	0.18	550
8TH-LYS-35	35	10/27/10	2.86	2.2	1.7	1.7	0.5	0.02	615
8TH-LYS-35	35	11/04/10	3.01	3.2	2.0	2.0	1.2	<0.01	590
8TH-LYS-35	35	11/10/10	2.89	2.4	1.9	1.9	0.6	<0.01	520
8TH-LYS-35	35	11/16/10	2.61	2.3	1.7	1.7	0.6	<0.01	580
8TH-LYS-35	35	11/23/10	2.46	1.9	1.9	1.7	<0.5	0.14	625
8TH-LYS-35	35	11/30/10	2.57	1.3	1.3	1.2	<0.5	0.14	595
8TH-LYS-35	35	12/07/10	2.68	1.1	0.2	0.1	1.0	0.11	330
8TH-LYS-35	35	12/14/10	2.20	0.8	<0.2	<0.1	0.8	0.09	325

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	10/06/10	4.18	6.0	5.0	4.5	1.6	<0.01	725
HKYE-LYS-00	0	10/12/10	4.26	5.4	3.4	3.2	2.2	0.19	734
HKYE-LYS-00	0	10/19/10	4.94	4.1	2.5	1.8	2.3	0.53	710
HKYE-LYS-00	0	10/27/10	6.11	4.9	2.0	1.5	3.4	0.38	680
HKYE-LYS-00	0	11/03/10	5.10	4.8	3.2	3.2	1.6	0.08	685
HKYE-LYS-00	0	11/09/10	4.79	5.8	3.8	3.8	2.1	<0.01	715
HKYE-LYS-00	0	11/16/10	4.83	5.6	3.2	3.1	2.6	0.15	720
HKYE-LYS-00	0	11/23/10	5.89	3.6	1.9	1.4	2.3	0.15	440
HKYE-LYS-25	25	10/06/10	1.83	3.4	3.4	3.4	<0.5	<0.01	705
HKYE-LYS-25	25	10/12/10	1.82			4.0		0.17	729
HKYE-LYS-25	25	10/19/10	1.70			4.1		0.16	705
HKYE-LYS-25	25	10/27/10	1.32	3.0	2.2	2.2	0.8	<0.01	710
HKYE-LYS-25	25	11/03/10	1.48			1.8		<0.01	680
HKYE-LYS-25	25	11/09/10	1.64			2.6		<0.01	675
HKYE-LYS-25	25	11/16/10	1.46			3.0		0.11	670
HKYE-LYS-25	25	11/23/10	1.32			3.0		0.10	705

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	11/03/10	5.30	4.2	3.5	3.2	1.0	<0.01	700
RP31-LYS-00	0	11/09/10	14.52	3.6	2.0	1.8	1.8	0.04	465
RP31-LYS-00	0	11/16/10	5.86	3.4	2.1	2.1	1.2	<0.01	695
RP31-LYS-00	0	11/23/10	6.94	1.6	1.8	0.8	0.8	0.15	200
RP31-LYS-00	0	11/30/10	5.94	2.6	1.5	1.4	1.2	0.15	495
RP31-LYS-00	0	12/07/10	6.02	2.1	1.6	1.5	0.7	0.11	250
RP31-LYS-00	0	12/14/10	4.23	4.9	3.6	3.4	1.5	0.10	710
RP31-LYS-10	10	11/03/10	4.89	5.1	4.5	4.5	0.6	0.04	650
RP31-LYS-10	10	11/09/10	3.21	4.9	4.1	4.1	0.8	<0.01	735
RP31-LYS-10	10	11/16/10	3.21	3.6	3.0	3.0	0.6	<0.01	700
RP31-LYS-10	10	11/23/10	2.50	2.9	2.9	2.8	<0.5	0.15	595
RP31-LYS-10	10	11/30/10	2.17	2.4	2.4	2.3	<0.5	0.12	450
RP31-LYS-15	15	11/03/10	2.33	2.8	2.3	2.3	0.6	<0.01	850
RP31-LYS-15	15	11/09/10	2.63	3.2	3.2	3.2	<0.5	<0.01	695
RP31-LYS-15	15	11/16/10	1.99	4.7	4.2	4.2	0.6	<0.01	725
RP31-LYS-15	15	11/23/10	2.31	3.5	3.5	3.3	<0.5	0.15	695
RP31-LYS-15	15	11/30/10	1.81	3.1	3.1	3.0	<0.5	0.13	715
RP31-LYS-25	25	11/03/10	2.43	5.6	5.6	5.6	<0.5	<0.01	890
RP31-LYS-25	25	11/09/10	2.74	4.2	4.2	4.2	<0.5	<0.01	700
RP31-LYS-25	25	11/16/10	1.74	4.5	3.9	3.9	0.6	<0.01	710
RP31-LYS-25	25	11/23/10	1.76	3.8	3.8	3.7	<0.5	0.15	690
RP31-LYS-25	25	11/30/10	1.70	3.4	3.4	3.3	<0.5	0.13	685
RP31-LYS-25	25	12/07/10	1.61	3.2	3.6	3.2	<0.5	0.09	670
RP31-LYS-25	25	12/14/10	1.39	2.3	2.3	2.2	<0.5	0.10	490
RP31-LYS-35	35	11/03/10	1.05	1.2	1.2	1.2	<0.5	<0.01	730
RP31-LYS-35	35	11/09/10	0.98	2.8	2.0	2.0	0.9	<0.01	710
RP31-LYS-35	35	11/16/10	1.05	2.6	2.6	2.6	<0.5	<0.01	700
RP31-LYS-35	35	11/23/10	1.16	3.7	3.7	3.5	<0.5	0.15	710
RP31-LYS-35	35	11/30/10	1.18	4.9	4.3	4.1	0.7	0.13	725
RP31-LYS-35	35	12/07/10	1.19	4.2	4.2	4.1	<0.5	0.09	710
RP31-LYS-35	35	12/14/10	1.12	3.9	4.3	3.8	<0.5	0.10	705

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

San Seavine 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	10/05/10	5.91	4.3	2.8	2.6	1.7	0.16	740
SS5-LYS-00	0	10/12/10	5.67	3.3	1.9	1.7	1.6	0.23	738
SS5-LYS-00	0	10/19/10	6.66	3.0	1.0	0.7	2.3	0.11	715
SS5-LYS-00	0	10/27/10	7.43	2.8	<0.2	<0.1	2.8	0.02	570
SS5-LYS-00	0	11/03/10	8.90	2.1	<0.2	<0.1	2.1	<0.01	560
SS5-LYS-00	0	11/09/10	10.72	2.4	<0.2	0.1	2.2	<0.01	570
SS5-LYS-00	0	11/16/10	2.85	7.0	5.2	5.1	1.9	0.12	770
SS5-LYS-00	0	11/23/10	4.76	2.1	1.3	1.0	1.1	0.11	245
SS5-LYS-00	0	11/30/10	5.73	1.8	0.3	0.2	1.7	0.10	245
SS5-LYS-00	0	12/07/10	4.14	3.2	1.7	1.6	1.6	0.11	380
SS5-LYS-00	0	12/14/10	4.28	3.6	2.3	2.2	1.4	0.11	575
SS5-LYS-05	5	10/05/10	4.87	1.2	0.3	0.2	1.0	0.16	920
SS5-LYS-05	5	10/12/10	4.22	<0.6	<0.2	<0.1	<0.5	0.14	902
SS5-LYS-05	5	10/19/10	4.02	<0.6	<0.2	<0.1	<0.5	0.17	910
SS5-LYS-05	5	10/27/10	3.86	0.6	<0.2	<0.1	0.6	<0.01	900
SS5-LYS-05	5	11/03/10	3.65	<0.6	<0.2	<0.1	<0.5	<0.01	810
SS5-LYS-05	5	11/09/10	3.72	0.8	<0.2	<0.1	0.8	<0.01	760
SS5-LYS-05	5	11/16/10	3.67	1.0	<0.2	<0.1	1.0	0.13	730
SS5-LYS-05	5	11/23/10	3.65	<0.6	<0.2	<0.1	<0.5	0.14	840
SS5-LYS-05	5	11/30/10	3.16	<0.6	0.3	0.1	<0.5	0.12	660
SS5-LYS-05	5	12/07/10	2.96	0.8	<0.2	<0.1	0.8	0.11	490
SS5-LYS-05	5	12/14/10	2.40	1.7	0.8	0.4	1.3	0.37	490
SS5-LYS-10	10	10/05/10	4.32	<0.6	<0.2	<0.1	<0.5	0.18	830
SS5-LYS-10	10	10/12/10	3.94	0.7	<0.2	<0.1	0.7	0.17	864
SS5-LYS-10	10	10/27/10	3.81	0.6	<0.2	<0.1	0.6	<0.01	770
SS5-LYS-10	10	11/03/10	3.41	<0.6	<0.2	<0.1	<0.5	<0.01	720
SS5-LYS-10	10	11/09/10	3.72	0.8	<0.2	<0.1	0.8	<0.01	660
SS5-LYS-10	10	11/16/10	3.35	1.0	0.3	0.2	0.8	0.03	650
SS5-LYS-10	10	11/23/10	3.22	<0.6	<0.2	<0.1	<0.5	0.14	670
SS5-LYS-10	10	11/30/10	2.99	<0.6	<0.2	<0.1	<0.5	0.12	705
SS5-LYS-10	10	12/07/10	2.94	0.8	<0.2	<0.1	0.8	0.12	535
SS5-LYS-10	10	12/14/10	2.58	0.9	<0.2	<0.1	0.9	0.14	410
SS5-LYS-15	15	10/05/10	2.73	1.1	0.7	<0.1	1.1	0.19	815
SS5-LYS-15	15	10/12/10	2.73	0.9	0.6	<0.1	0.9	0.19	871
SS5-LYS-15	15	10/19/10	2.85	1.3	0.5	<0.1	1.3	0.17	865
SS5-LYS-15	15	10/27/10	2.72	0.6	0.3	<0.1	0.6	<0.01	865
SS5-LYS-15	15	11/03/10	2.60	<0.6	0.3	<0.1	<0.5	<0.01	850
SS5-LYS-15	15	11/09/10	2.54	<0.6	0.3	<0.1	<0.5	<0.01	845
SS5-LYS-15	15	11/16/10	2.32	1.1	0.2	<0.1	1.1	<0.01	835
SS5-LYS-15	15	11/23/10	2.02	0.7	0.3	<0.1	0.7	0.16	755
SS5-LYS-15	15	11/30/10	2.01	<0.6	0.3	<0.1	<0.5	0.14	820
SS5-LYS-15	15	12/07/10	1.96	0.8	<0.2	<0.1	0.8	<0.01	810
SS5-LYS-15	19	12/14/10	1.90	1.3	<0.2	<0.1	1.3	0.14	875
SS5-LYS-20	20	10/05/10	4.26			<0.1		0.12	825
SS5-LYS-20	20	10/12/10	6.12			<0.1		0.17	846
SS5-LYS-20	20	10/19/10				<0.1		0.16	810
SS5-LYS-20	20	10/27/10	8.20			<0.1		<0.01	805
SS5-LYS-20	20	11/03/10	6.63			<0.1		<0.01	790
SS5-LYS-20	20	11/09/10	3.32			<0.1		<0.01	810
SS5-LYS-20	20	11/16/10				<0.1		<0.01	795
SS5-LYS-20	20	11/30/10	3.71			<0.1		0.13	790
SS5-LYS-25	25	10/05/10	4.27	<0.6	<0.2	<0.1	<0.5	0.16	3380
SS5-LYS-25	25	10/12/10	3.76	<0.6	<0.2	<0.1	<0.5	0.14	3560
SS5-LYS-25	25	10/19/10	3.94	0.9	<0.2	<0.1	0.9	0.14	3460
SS5-LYS-25	25	10/27/10	3.66	<0.6	0.3	<0.1	<0.5	<0.01	3410
SS5-LYS-25	25	11/03/10	4.28	<0.6	<0.2	<0.1	<0.5	<0.01	3140
SS5-LYS-25	25	11/09/10	3.23	<0.6	<0.2	<0.1	<0.5	<0.01	2930
SS5-LYS-25	25	11/16/10	5.50	<0.6	<0.2	<0.1	0.5	<0.01	3060
SS5-LYS-25	25	11/23/10	5.69	<0.6	<0.2	<0.1	<0.5	0.12	3200
SS5-LYS-25	25	11/30/10	5.11	0.7	<0.2	<0.1	0.7	0.14	3240
SS5-LYS-25	25	12/07/10	5.59	0.8	<0.2	<0.1	0.8	<0.01	3210
SS5-LYS-25	25	12/14/10	5.50			<0.1		0.14	3150
SS5-LYS-30	30	10/05/10	5.90	1.5	0.7	0.6	0.9	0.11	4083
SS5-LYS-30	30	10/12/10	7.00	1.4	0.6	0.5	1.0	0.12	4486
SS5-LYS-30	30	10/19/10	6.58	1.2	0.4	0.3	0.9	0.10	4530
SS5-LYS-30	30	10/27/10	7.27	1.3	<0.2	0.2	1.1	<0.01	4460

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

San Sevaire 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-30	30	11/03/10	6.73	0.9	<0.2	<0.1	0.9	<0.01	4370
SS5-LYS-30	30	11/09/10	5.36	<0.6	<0.2	<0.1	<0.5	<0.01	3850
SS5-LYS-30	30	11/16/10	5.44	0.7	<0.2	<0.1	0.7	<0.01	3820
SS5-LYS-30	30	11/23/10	5.06	<0.6	<0.2	<0.1	<0.5	0.03	3790
SS5-LYS-30	30	11/30/10	5.04	<0.6	<0.2	<0.1	<0.5	0.04	3700
SS5-LYS-30	30	12/07/10	4.95	0.8	<0.2	<0.1	0.8	<0.01	3630
SS5-LYS-30	30	12/14/10	4.89	0.7	<0.2	<0.1	0.7	0.03	3570
SS5-LYS-35	35	10/05/10	2.34	4.6	3.5	2.9	1.8	0.61	2200
SS5-LYS-35	35	10/12/10	2.60	4.0	3.8	2.7	1.4	0.66	2268
SS5-LYS-35	35	10/19/10	2.17	3.5	3.0	1.9	1.5	0.56	2170
SS5-LYS-35	35	10/27/10	4.18	1.9	1.7	0.9	1.0	0.29	2230
SS5-LYS-35	35	11/03/10	2.20	1.4	0.9	0.3	1.1	0.08	2300
SS5-LYS-35	35	11/09/10	2.20	1.0	0.6	0.2	0.8	<0.01	2220
SS5-LYS-35	35	11/16/10	2.09	1.2	0.3	<0.1	1.2	<0.01	2270
SS5-LYS-35	35	11/23/10	2.06	<0.6	0.4	<0.1	<0.5	0.15	2220
SS5-LYS-35	35	11/30/10	2.05	0.8	0.4	<0.1	0.8	0.16	2260
SS5-LYS-35	35	12/07/10	1.99	1.1	0.2	<0.1	1.1	<0.01	2200
SS5-LYS-35	35	12/14/10	1.92	<0.6	0.3	<0.1	<0.5	0.14	2160

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	10/05/10	5.31	4.7	3.2	2.9	1.7	0.21	710
VCT-LYS-00	0	10/12/10	4.93	5.1	3.3	3.1	2.0	0.21	705
VCT-LYS-00	0	10/19/10	4.70	4.2	2.5	2.3	1.9	0.21	690
VCT-LYS-00	0	10/27/10	5.39	4.3	2.8	2.0	2.3	0.09	670
VCT-LYS-00	0	11/03/10	5.47	4.4	3.2	2.6	1.8	0.25	640
VCT-LYS-00	0	11/09/10	4.51	4.5	3.5	3.3	1.3	<0.01	695
VCT-LYS-00	0	11/16/10	3.78	5.6	4.6	4.4	1.2	0.13	725
VCT-LYS-00	0	11/30/10	4.27	4.1	3.2	3.0	1.1	0.15	550
VCT-LYS-00	0	12/07/10	4.24	4.3	3.0	2.7	1.6	0.12	520
VCT-LYS-00	0	12/14/10	4.17	4.4	3.2	2.8	1.5	0.12	575
VCT-LYS-05	5	10/05/10	2.48	2.2	1.4	0.8	1.3	0.45	910
VCT-LYS-05	5	10/12/10	2.48	1.1	0.4	<0.1	1.1	0.26	908
VCT-LYS-05	5	10/19/10	2.27	1.2	0.5	0.3	0.9	0.27	875
VCT-LYS-05	5	10/27/10	2.05	1.6	1.7	1.5	<0.5	0.09	945
VCT-LYS-05	5	11/03/10	2.10	2.4	1.8	1.7	0.6	0.09	800
VCT-LYS-05	5	11/09/10	1.93	1.5	1.6	1.5	<0.5	0.03	780
VCT-LYS-05	5	11/16/10	1.77	1.6	1.0	0.7	0.9	0.28	810
VCT-LYS-05	5	11/30/10	1.67	1.2	1.2	1.0	<0.5	0.25	760
VCT-LYS-05	5	12/07/10	1.70	3.5	2.6	2.5	1.0	0.15	645
VCT-LYS-05	5	12/14/10	1.67	1.8	1.8	1.7	<0.5	0.13	620
VCT-LYS-10	10	10/05/10	2.13	<0.6	0.6	0.3	<0.5	0.31	1210
VCT-LYS-10	10	10/12/10	2.10	0.9	0.4	0.1	0.8	0.29	1174
VCT-LYS-10	10	10/19/10	1.79	<0.6	0.3	<0.1	<0.5	0.27	1100
VCT-LYS-10	10	10/27/10	1.98	<0.6	<0.2	0.1	<0.5	<0.01	1060
VCT-LYS-10	10	11/03/10	1.80	<0.6	0.4	0.4	<0.5	<0.01	1020
VCT-LYS-10	10	11/09/10	1.68	<0.6	0.4	0.4	<0.5	<0.01	990
VCT-LYS-10	10	11/16/10	1.62	1.0	0.4	0.3	0.7	0.16	1000
VCT-LYS-10	10	11/30/10	1.55	1.1	0.4	0.2	0.9	0.20	1040
VCT-LYS-10	10	12/07/10	1.70	0.9	0.3	0.3	0.6	<0.01	1040
VCT-LYS-10	10	12/14/10	1.50	1.0	0.5	0.3	0.7	0.15	1020
VCT-LYS-15	15	10/05/10	2.12	<0.6	0.4	0.1	<0.5	0.29	1010
VCT-LYS-15	15	10/12/10	1.98	0.8	0.3	<0.1	0.8	0.29	1096
VCT-LYS-15	15	10/19/10	1.82	0.8	0.3	<0.1	0.8	0.27	1020
VCT-LYS-15	15	10/27/10	1.81	<0.6	<0.2	<0.1	<0.5	<0.01	990
VCT-LYS-15	15	11/03/10	1.70	<0.6	<0.2	0.2	<0.5	<0.01	995
VCT-LYS-15	15	11/09/10	1.64	0.6	0.6	0.5	<0.5	0.11	990
VCT-LYS-15	15	11/16/10	1.43	2.0	1.3	0.8	1.2	0.44	950
VCT-LYS-15	15	11/30/10	1.35	<0.6	0.2	<0.1	<0.5	0.22	1050
VCT-LYS-15	15	12/07/10	1.44	0.8	<0.2	<0.1	0.8	<0.01	1020
VCT-LYS-15	15	12/14/10	1.46	<0.6	<0.2	<0.1	<0.5	0.18	965
VCT-LYS-20	20	10/05/10	2.28	<0.6	0.3	<0.1	<0.5	0.25	810
VCT-LYS-20	20	10/12/10	2.21	0.7	0.2	<0.1	0.7	0.23	912
VCT-LYS-20	20	10/19/10	2.07	<0.6	0.2	<0.1	<0.5	0.23	890

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-20	20	10/27/10	2.30	<0.6	<0.2	<0.1	<0.5	<0.01	895
VCT-LYS-20	20	11/03/10	2.25	<0.6	<0.2	<0.1	<0.5	<0.01	900
VCT-LYS-20	20	11/09/10	1.93	<0.6	0.3	0.3	<0.5	<0.01	930
VCT-LYS-20	20	11/16/10	1.77	1.5	0.5	0.3	1.2	0.20	900
VCT-LYS-20	20	11/30/10	1.58	1.1	0.3	0.1	1.0	0.19	905
VCT-LYS-20	20	12/07/10	1.67	<0.6	0.3	0.2	<0.5	0.12	960
VCT-LYS-20	20	12/14/10	1.64	1.1	0.4	0.2	0.9	0.13	950
VCT-LYS-25	25	10/05/10	2.50	1.1	0.5	0.2	0.8	0.29	1930
VCT-LYS-25	25	10/12/10	2.44	1.2	0.5	0.2	0.9	0.27	1687
VCT-LYS-25	25	10/19/10	2.11	1.0	0.5	0.2	0.8	0.26	1660
VCT-LYS-25	25	10/27/10	2.09	<0.6	0.2	0.1	<0.5	<0.01	1760
VCT-LYS-25	25	11/03/10	2.34	<0.6	<0.2	<0.1	<0.5	<0.01	1730
VCT-LYS-25	25	11/09/10	2.02	<0.6	<0.2	<0.1	<0.5	<0.01	1640
VCT-LYS-25	25	11/16/10	1.84	1.9	0.3	0.2	1.7	0.14	1590
VCT-LYS-25	25	11/30/10	1.68	1.1	0.6	0.4	0.7	0.20	1410
VCT-LYS-25	25	12/07/10	1.97	<0.6	<0.2	<0.1	<0.5	<0.01	1760
VCT-LYS-25	25	12/14/10	1.79	1.3	0.3	0.2	1.1	0.17	1790
VCT-LYS-30	30	10/05/10	2.21	<0.6	0.3	<0.1	<0.5	0.32	1010
VCT-LYS-30	30	10/12/10	2.87	<0.6	0.3	<0.1	<0.5	0.26	989
VCT-LYS-30	30	10/19/10	2.59	<0.6	0.2	<0.1	<0.5	0.22	920
VCT-LYS-30	30	10/27/10	2.77	<0.6	<0.2	<0.1	0.6	<0.01	860
VCT-LYS-30	30	11/03/10	2.99	<0.6	<0.2	<0.1	<0.5	<0.01	830
VCT-LYS-30	30	11/09/10	2.60	<0.6	<0.2	<0.1	<0.5	<0.01	835
VCT-LYS-30	30	11/16/10	2.76	1.0	<0.2	<0.1	1.0	0.16	810
VCT-LYS-30	30	11/30/10	1.85	<0.6	0.3	<0.1	<0.5	0.30	755
VCT-LYS-30	30	12/07/10	1.43	<0.6	0.2	<0.1	<0.5	0.24	740
VCT-LYS-30	30	12/14/10	1.43	1.3	0.4	0.2	1.1	0.22	790
VCT-LYS-35	35	10/05/10	1.41	0.9	0.9	0.7	<0.5	0.26	980
VCT-LYS-35	35	10/12/10	1.27	2.1	2.1	1.9	<0.5	0.21	826
VCT-LYS-35	35	10/19/10	1.32	0.9	0.9	0.7	<0.5	0.20	795
VCT-LYS-35	35	10/27/10	1.42	<0.6	0.3	0.3	<0.5	<0.01	770
VCT-LYS-35	35	11/03/10	1.18	0.7	0.7	0.7	<0.5	<0.01	740
VCT-LYS-35	35	11/09/10	1.16	0.7	0.7	0.7	<0.5	<0.01	725
VCT-LYS-35	35	11/16/10	1.25	2.4	1.5	1.4	1.0	0.13	730
VCT-LYS-35	35	11/30/10	1.11	1.6	1.6	1.5	<0.5	0.15	715
VCT-LYS-35	35	12/07/10	0.96	1.3	1.3	1.1	<0.5	0.11	690
VCT-LYS-35	35	12/14/10	1.21	1.0	0.3	0.1	0.9	0.17	760

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: TOC & TN

Turner Basin**					
Date	Recycled Water*	Recycled Water*	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4
mg/L==>	TOC	TN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
10/06/10	3.32	7.9	1.00	0.50	1.0
10/12/10	3.45	5.8	1.04	0.52	0.8
10/19/10	3.33	2.7	1.00	0.50	0.4
10/27/10	3.18	6.1	0.95	0.48	0.8
11/03/10	4.43	6.9	1.33	0.66	0.9
11/09/10	4.25	8.0	1.28	0.64	1.0
11/16/10	3.48	5.5	1.04	0.52	0.7
11/23/10	3.28	6.6	0.98	0.49	0.9
11/30/10	3.28	6.3	0.98	0.49	0.8
12/07/10	3.34	5.9	1.00	0.50	0.8
12/14/10	3.35	6.3	1.01	0.50	0.8

Ely Basin				
Date	Recycled Water*	Recycled Water*	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TOC (76% reduction)	TN (52% reduction)
10/06/10	3.32	7.9	0.80	3.77
10/12/10	3.45	5.8	0.83	2.79
10/19/10	3.33	2.7	0.80	1.30
10/27/10	3.18	6.1	0.76	2.94
11/03/10	4.43	6.9	1.06	3.29
11/09/10	4.25	8.0	1.02	3.83
11/16/10	3.48	5.5	0.84	2.63
11/23/10	3.28	6.6	0.79	3.18
11/30/10	3.28	6.3	0.79	3.04
12/07/10	3.34	5.9	0.80	2.83
12/14/10	3.35	6.3	0.80	3.01

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

** Recycled water was not delivered to Turner Basin during 4Q10

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	West Cucamonga Creek @ Ely Basin	Day Creek @ Lower Day Basin	San Antonio Creek @ Montclair Basin	Cucamonga & Deer Creek @ Turner 1&2 Basins	Deer Creek @ Turner 3&4 Basins	Unit	Method
	11/29/10	12/01/10	12/01/10	12/02/10	12/02/10		
NO ₂ -N	0.11	0.04	0.09	0.14	0.09	mg/L	EPA 300.0
NO ₃ -N	1.0	<0.1	0.6	2.1	0.2	mg/L	EPA 300.0
TDS	100	60	436	244	218	mg/L	SM 2540C
Total Coliform	>23	>23	>23	>23	>23	mpn/100ml	SM 9221B
Oil & Grease	<2	<2	<2	<2	<2	mg/L	EPA 1664A
Inorganic Chemicals							
Aluminum	153	507	316	132	584	µg/L	EPA 200.7
Antimony	1	<1	1	<1	1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<1.9	<6.36	<6.36	<6.4	<3.8	MFL	EPA 100.2
Barium	22	20	63	34	33	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	1.1	1.3	1.6	2.5	1.8	µg/L	EPA 200.7
Cyanide	<0.005	<0.005	<0.005	<0.005	<0.005	mg/L	SM 4500-CN E
Fluoride	<0.1	<0.1	0.3	0.4	0.1	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	2	1	3	2	2	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<1	<1	<1	<1	<1	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	0.9	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<45	<45	<45	<45	<45	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	West Cucamonga Creek @ Ely Basin	Day Creek @ Lower Day Basin	San Antonio Creek @ Montclair Basin	Cucamonga & Deer Creek @ Turner 1&2 Basins	Deer Creek @ Turner 3&4 Basins	Unit	Method
	11/29/10	12/01/10	12/01/10	12/02/10	12/02/10		
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	0.18	<0.05	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	3	<2	<2	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	9	<2	14	2	2	µg/L	S6251B
Bromate	<5	<5	<5	<5	<5	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.02	<0.02	mg/L	EPA 300.0
Action Level Chemicals							
Copper	7.9	6.1	7.2	6.0	6.7	µg/L	EPA 200.7
Lead	1.2	<0.5	1.4	<0.5	0.8	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 22	<0.705	<0.802	<0.614	<0.404	<0.887	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	3	<3	<3	4	pCi/L	EPA 900.0
Tritium	<228	<205	<205	<212	<212	pCi/L	EPA 906
Strontium-90	<0.608	<0.469	<0.484	<1.27	<0.791	pCi/L	EPA 905
Gross Beta Particle Activity	4	<3	5	<3	5	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	1.3	1.3	<0.7	pCi/L	EPA 200.8
Unregulated Chemicals							
Chromium VI	0.05	0.16	<0.05	2.00	0.29	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels							
Boron	<0.1	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	<1	<1	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	<2	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	<2	<2	<2	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 -trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	2	2	2	19	12	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals							
Aluminum	153	507	316	132	584	µg/L	EPA 200.7
Corrosivity	-1.2	-1.7	-0.4	2.2	0.9	SI	SM 2330B
Foaming Agents (MBAS)	0.11	0.09	0.15	0.09	0.11	mg/L	S5540C/EPA 425.1
Iron	289	417	905	151	613	µg/L	EPA 200.7
Manganese	22	11	132	7	19	µg/L	EPA 200.7
Odor--Threshold	2	40	40	8	4	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	30	9	22	10	20	µg/L	EPA 200.7

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

Table 2-7
Summary of Wells in Groundwater Monitoring Networks

BASIN	CBWM_ID	OWNER/LOCAL NAME	SEPARATION DISTANCE (feet)	SCREENED INTERVAL(S) (feet bgs)	CASING DIAMETER (inches)	STATUS	TYPE
Hickory and Banana Basins	3600573	Fontana Water Company - F37a	2240 upgradient	378-810	20	Active	Municipal
	600660	California Speedway - Infield Well	2070 downgradient	NA	NA	Active	Industrial
	3601365	California Speedway 2	2780 downgradient	451-455, 491-603, & 664-780	20	Active	Industrial
	3600371	Reliant Energy - East Well	4070 downgradient	434-467, 500-513, 553-580, 593-652, & 825-847	20	Active	Industrial
	3602267	City Of Ontario - 20	14500 downgradient	NA	20	Active	Municipal
	601001	Inland Empire Utilities Agency - BH-1/1	340 downgradient	365-405	4	Active	Monitoring
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Inactive	Municipal
	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600997	Inland Empire Utilities Agency - TRN-1/1	50 downgradient	340-360	4	Active	Monitoring
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
Declez Basin	300208	Jurupa Community Services District - 19	8900 downgradient	230-390	18	Active	Municipal
	300207	Jurupa Community Services District - 17	5240 downgradient	259-290, & 300-400	NA	Active	Municipal
	300200	Jurupa Community Services District - 13	5730 downgradient	220-446	16-34	Active	Municipal
	--	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	Municipal
	600848	Alcoa - Offsite Mw1	9480 downgradient	NA	NA	Active	Monitoring
	600850	Alcoa - Offsite Mw3	4725 downgradient	NA	NA	Active	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	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
San Sevaire 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	Unitec 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 number

bgs = below ground surface

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

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

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

	Sample Location	Date	TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	TDS (mg/L)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TOH)	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	10/20/10	0.46	<1.1	7.9	465	310	<25	<3	41.4	0.4	<0.05	44	2	<0.5	1	<0.25	<0.2	0.3	44	17	216	19	17	<0.1	<0.01	9.7	9.7	<0.5	169	6.6
	California Speedway No. 2	11/3/10	<0.10	<1.1	7.4	385	262	<25	<3	2.4	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	39	11	170	19	12	<0.1	<0.01	4.4	4.4	<0.5	158	2.9
	Reliant Energy East Well	11/18/10	0.11	<1.1	7.0	350	238	<25	<3	2.9	0.0	<0.05	68	3	<0.5	<1	<0.25	<0.2	0.5	2	11	138	22	15	<0.1	0.20	3.6	3.8	<0.5	136	9.8
	Ontario Well No. 20	10/13/10	0.23	<1.1	8.7	350	218	<25	<3	1.9	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	<1	7	164	14	6	<0.1	0.24	2.2	2.4	<0.5	169	8.2
	BH-1/2*	10/7/10	0.25	<1.1	8.1	495	338	<25	5	<0.5	0.3	<0.05	<15	4	<0.5	1	<0.25	<0.2	4.6	4	59	202	25	31	<0.1	<0.01	1.7	1.7	<0.5	122	7.7
Turner	Ontario Well No. 29	10/13/10	0.18	<1.1	7.7	385	248	<25	<3	0.9	0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.5	<1	12	158	22	19	<0.1	0.23	3.8	4.0	<0.5	152	5.6
	Ontario Well No. 38	10/13/10	0.18	<1.1	7.9	315	186	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	<1	5	135	19	8	<0.1	0.20	1.3	1.5	<0.5	153	5.6
	T-1/2*	10/14/10	0.49	<1.1	7.7	410	246	<25	<3	<0.5	0.0	<0.05	<15	2	<0.5	<1	<0.25	<0.2	0.4	<1	42	178	19	5	<0.1	<0.01	<0.1	<0.1	<0.5	146	4.8
	T-2/1*	10/11/10	0.55	<1.1	8.0	293	200	<25	<3	<0.5	-0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	1.4	4	29	100	22	17	<0.1	<0.01	0.3	0.3	<0.5	88	5.3
	T-2/2*	10/11/10	0.50	<1.1	8.0	267	198	<25	<3	<0.5	-0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.3	2	28	92	18	13	<0.1	<0.01	<0.1	<0.1	<0.5	77	5.2
RP-3	Southridge JHS*	10/14/10	0.36	>23	7.2	1020	662	<25	<3	0.6	0.3	<0.05	<15	2	<0.5	<1	<0.25	<0.2	3.1	13	114	394	59	81	<0.1	<0.01	14.9	14.9	<0.5	223	5.1
	Alcoa Offsite MW1	10/28/10	0.23	<1.1	8.0	600	408	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.1	<1	28	237	27	46	<0.1	<0.01	19.6	19.6	<0.5	171	7.0
	Alcoa Offsite MW3	10/28/10	0.37	<1.1	7.5	985	664	<25	<3	0.6	0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	1	113	395	44	51	<0.1	<0.01	24.8	24.8	<0.5	217	5.3
	RP3-1/1*	10/7/10	1.27	<1.1	7.2	1160	790	<25	<3	<0.5	0.2	0.07	<15	36	<0.5	1	<0.25	<0.2	1.0	9	90	460	77	113	<0.1	<0.01	27.8	27.8	<0.5	305	0.6
	RP3-1/2*	10/7/10	1.06	<1.1	7.3	1080	736	<25	<3	<0.5	0.2	<0.05	<15	210	<0.5	1	<0.25	<0.2	0.4	9	69	432	74	100	<0.1	0.25	25.7	26.0	<0.5	289	1.0
7th & 8th St.	Ontario Well No. 35	10/13/10	<0.10	<1.1	7.5	375	234	<25	<3	<0.5	0.2	<0.05	26	<1	<0.5	<1	<0.25	<0.2	0.2	1	7	165	19	21	<0.1	0.23	3.1	3.3	<0.5	159	3.9
	8TH-1/1*	10/20/10	0.57	1.1	8.1	280	184	<25	10	0.5	-0.1	<0.05	<15	12	<0.5	<1	<0.25	<0.2	18.2	7	25	122	11	16	<0.1	<0.01	1.1	1.1	<0.5	83	1.7
	8TH-1/2*	10/20/10	0.34	<1.1	8.0	270	174	<25	<3	2.0	-0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.3	9	13	109	14	10	<0.1	0.02	2.6	2.6	<0.5	98	1.4
	8TH-2/1*	11/2/10	0.26	<1.1	7.9	400	260	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.4	1	12	185	14	15	<0.1	<0.01	6.9	6.9	<0.5	154	7.9
	8TH-2/2*	11/2/10	0.28	<1.1	7.8	535	346	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.4	2	18	237	19	23	<0.1	<0.01	17.8	17.8	<0.5	160	7.2
Brooks	Pomona P-10	10/13/10	0.13	<1.1	7.6	540	356	<25	<3	1.3	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.2	6	34	258	11	42	<0.1	0.22	10.6	10.8	<0.5	148	4.8
	Pomona P-2	10/13/10	0.18	<1.1	7.5	625	398	<25	<3	1.1	0.6	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	2	37	306	13	57	<0.1	0.23	13.4	13.7	<0.5	165	6.1
	BRK-1/1*	11/10/10	0.60	<1.1	8.0	585	358	<25	3	<0.5	0.2	<0.05	<15	2	<0.5	<1	<0.25	<0.2	0.5	2	88	268	14	31	<0.1	<0.01	0.3	0.9	<0.6	133	6.6
	BRK-1/1	12/7/10	0.58			590																88				0.09	0.3	0.4			
	BRK-1/2*	10/5/10	0.15	<1.1	8.0	565	374	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.2	3	24	272	15	54	<0.1	0.26	19.2	19.5	<0.5	150	8.6
	BRK-2/1*	10/4/10	0.10	<1.1	7.8	470	340	<25	<3	<0.5	0.1	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	4.0	7	43	228	10	33	<0.1	<0.01	3.9	3.9	<0.5	135	6.3
	BRK-2/2*	10/4/10	0.50	<1.1	8.4	340	228	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.3	3	9	109	35	20	<0.1	0.05	6.0	6.1	<0.5	131	5.7
Ely	Ely Basin MW-1 Philadelphia St.*	11/4/10	0.61	1.1	8.2	400	252	<25	3	0.8	0.3	<0.05	<15	38	<0.5	1	<0.25	<0.2	0.9	6	66	166	27	13	<0.1	<0.01	0.1	0.1	<0.5	90	1.1
	Ely Basin MW-2 Walnut St.*	11/4/10	0.35	<1.1	4.8	700	448	<25	15	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	5.2	4	52	300	25	37	<0.1	<0.01	15.5	15.5	<0.5	197	4.8
	43840-CWW	10/12/10	0.28	<1.1	7.9	510	310	<25	<3	<0.5	0.4	<0.05	17	<1	<0.5	<1	<0.25	<0.2	0.1	12	23	231	21	32	<0.1	0.21	8.6	8.8	<0.5	174	6.9
	Bishop of San Bernardino Corp. - DOM	10/12/10	0.31	2.2	7.6	810	510	<25	<3	5.7	0.7	<0.05	100	5	<0.5	<1	<0.25	<0.2	1.9	9	41	373	24	67	<0.1	0.25	21.6	21.9	<0.5	223	5.8
Declez**	JCSD Well No. 13	10/21/10	0.21	<1.1	8.0	675	492	<25	<3	0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.3	<1	123	261	32	18	<0.1	<0.01	2.6	2.6	<0.5	121	6.3
	JCSD Well No. 17	10/21/10	0.25	<1.1	7.8	560	380	<25	<3	1.6	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.1	4	59	220	31	35	<0.1	<0.01	11.2	11.2	<0.5	114	5.8
	JCSD Well No. 19	10/21/10	<0.10	<1.1	8.0	345	208	<25	<3	19.0	0.3	<0.05	64	<1	<0.5	<1	<0.25	<0.2	0.3	1	11	124	27	13	<0.1	<0.01	2.7	2.7	<0.5	142	6.7
	DCZ-1/1*	10/7/10	0.90	<1.1	8.0	460	298	<25	5	<0.5	0.3	<0.05	<15	1	<0.5	<1	<0.25	<0.2	9.1	11	44	169	35	13	<0.1	<0.01	0.8	0.8	<0.5	161	0.7
Victoria & San Sevaline	SS-1/1*	10/13/10	0.34	<1.1	7.6	325	214	<25	<3	<0.5	-0.6	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.3	6	23	132	17	3							

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

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

	Ely Basin MW-1 11/04/10	Ely Basin MW-2 11/04/10	VCT-1/1 10/13/10	VCT-2/2 11/10/10	MCL	Unit	Method
Radionuclides							
Gross Alpha Particle Activity	<3	6	<3	<3	15	pCi/l	EPA 900.0
Gross Beta Particle Activity	<3	<3	4	<3	50	pCi/l	EPA 900.0

	8TH-1/1 10/20/10	8TH-1/2 10/20/10	8TH-2/1 11/02/10	8TH-2/2 11/02/10	MCL	Unit	Method
Radionuclides							
Gross Alpha Particle Activity	<3	<3	<3	4	15	pCi/l	EPA 900.0
Gross Beta Particle Activity	<3	3	<3	<3	50	pCi/l	EPA 900.0

	SS-1/1 10/13/10	BRK-1/1 11/10/10	BRK-2/1 11/04/10	BRK-2/2 11/04/10	MCL	Unit	Method
Radionuclides							
Gross Alpha Particle Activity	<3	7	4	<3	15	pCi/l	EPA 900.0
Gross Beta Particle Activity	<3	<3	<3	<3	50	pCi/l	EPA 900.0

Monitoring wells were resampled due to not being analyzed during annual monitoring in 3Q10

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

Date	Diluent Water																		Recycled Water								
	Imported Water									Local Runoff / Storm Flow																	
	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP-3	San Seavaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP-3	San Seavaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP-3	San Seavaine	Turner	Victoria
Jan-10	0	0	0	0	0	0		0		387	100	251	319	214	526	290	478	153	102	75	74	0	19	76	0	127	0
Feb-10	3	0	0	0	0	0	0	0	0	475	143	215	221	200	370	224	505	174	0	0	54	0	0	113	0	0	0
Mar-10	0	0	0	0	0	0	0	0	0	72	17	27	100	16	104	16	148	0	114	0	180	0	61	213	0	44	0
1Q10 Total	3	0	0	0	0	0	0	0	0	934	260	494	640	429	1000	529	1132	327	216	75	307	0	80	401	0	171	0
Apr-10	0	0	0	0	0	0	0	0	0	206	66	23	394	46	129	0	241	0	100	140	235	0	56	71	0	15	0
May-10	0	0	0	0	0	0	0	0	0	34	0	2	98	0	49	0	64	0	199	177	356	0	111	272	0	70	0
Jun-10	0	0	0	0	0	0	0	0	0	33	0	1	0	0	43	0	20	0	302	129	208	0	50	261	0	40	0
2Q10 Total	0	0	0	0	0	0	0	0	0	273	66	25	492	46	221	0	326	0	601	446	798	0	216	604	0	125	0
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

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

ASR Well No. 4										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
1Q08	Jan-08	0			0			0	0	0
	Feb-08	0			0			0	0	0
	Mar-08	40	0.87	290	0			40	43	14,307
2Q08	Apr-08	42	1.10	350	0			82	99	32,273
	May-08	0	1.10	350	98	7.5*	372*	(16)	(805)	(12,728)
	Jun-08	0	1.10	350	107	14	360	(123)	(2,645)	(60,049)

ASR Well No. 30										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q08	Jul-08	0			67	3.5*	310*	612	(722)	213,038
	Aug-08	0			0			612	(722)	213,038
	Sep-08	0			0			612	(722)	213,038
4Q08	Oct-08	0			0			612	(722)	213,038
	Nov-08	0			0			612	(722)	213,038
	Dec-08	0			0			612	(722)	213,038
1Q09	Jan-09	0			0			612	(722)	213,038
	Feb-09	0			0			612	(722)	213,038
	Mar-09	0			0			612	(722)	213,038
2Q09	Apr-09	0			0			612	(722)	213,038
	May-09	0			0			612	(722)	213,038
	Jun-09	0			0			612	(722)	213,038

ASR Well No. 32										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q08	Jul-08	0			67	No Data	No Data	167	No Data	No Data
	Aug-08	0			0			167		
	Sep-08	0			0			167		
4Q08	Oct-08	0			0			167		
	Nov-08	0			0			167		
	Dec-08	0			0			167		
1Q09	Jan-09	0			0			167		
	Feb-09	0			0			167		
	Mar-09	0			0			167		
2Q09	Apr-09	0			0			167		
	May-09	0			0			167		
	Jun-09	0			56	No Data	No Data	111	No Data	No Data

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

During 2Q08, WFA-treated water was sampled for TDS and TIN (NO₃-N + NO₂-N, assuming no NH₃-N in drinking water) on 04/15/08.

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

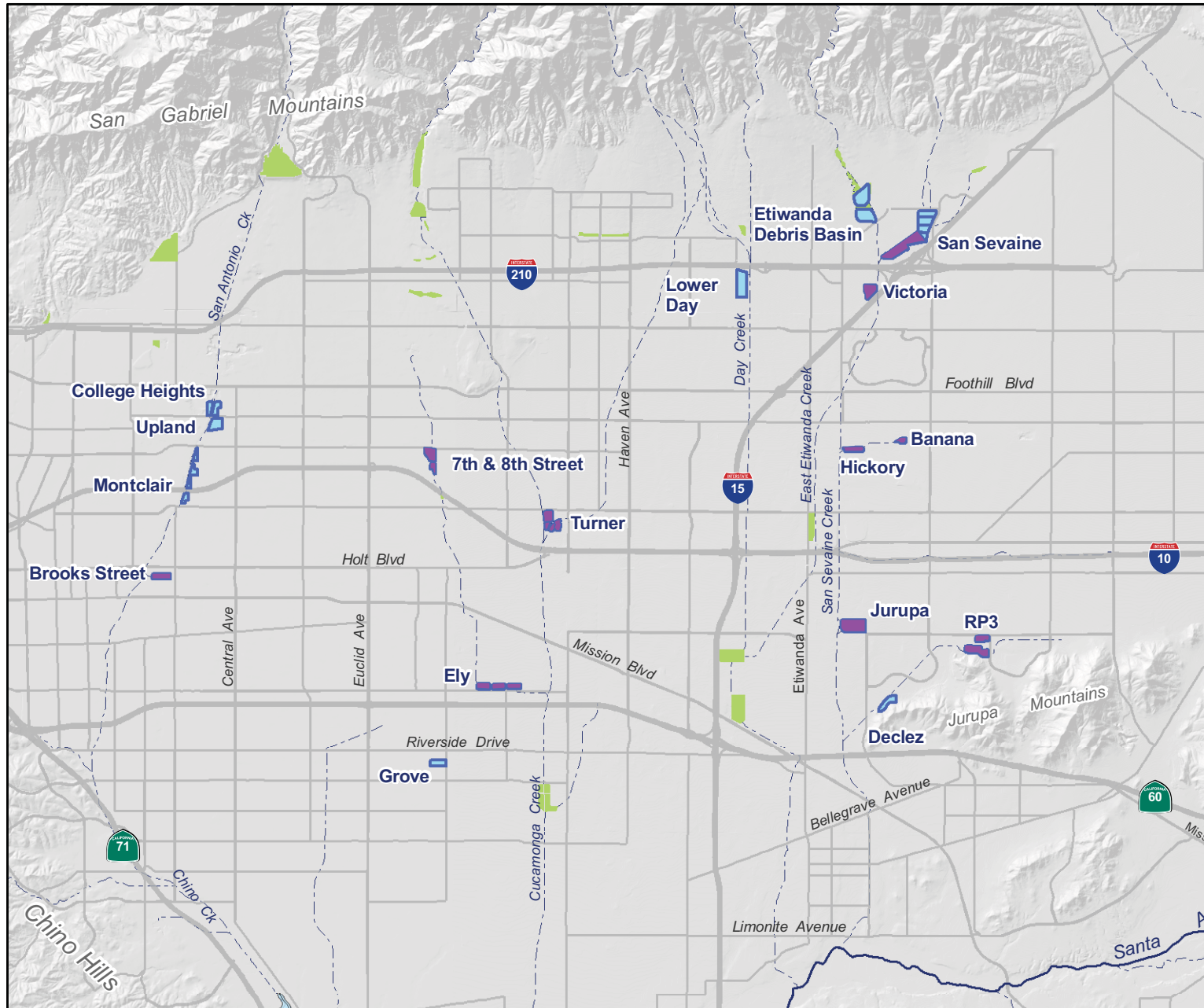
All wells were placed into production (extraction) mode during 2Q08.

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

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

Well 4	TIN	TDS	Est. Prod
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



Chino Basin Recycled Water Groundwater Recharge Programs

Basin Locations

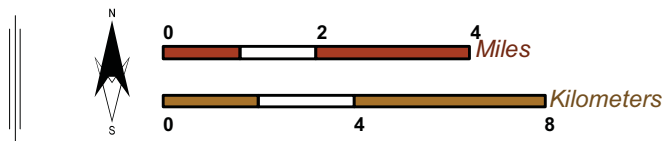
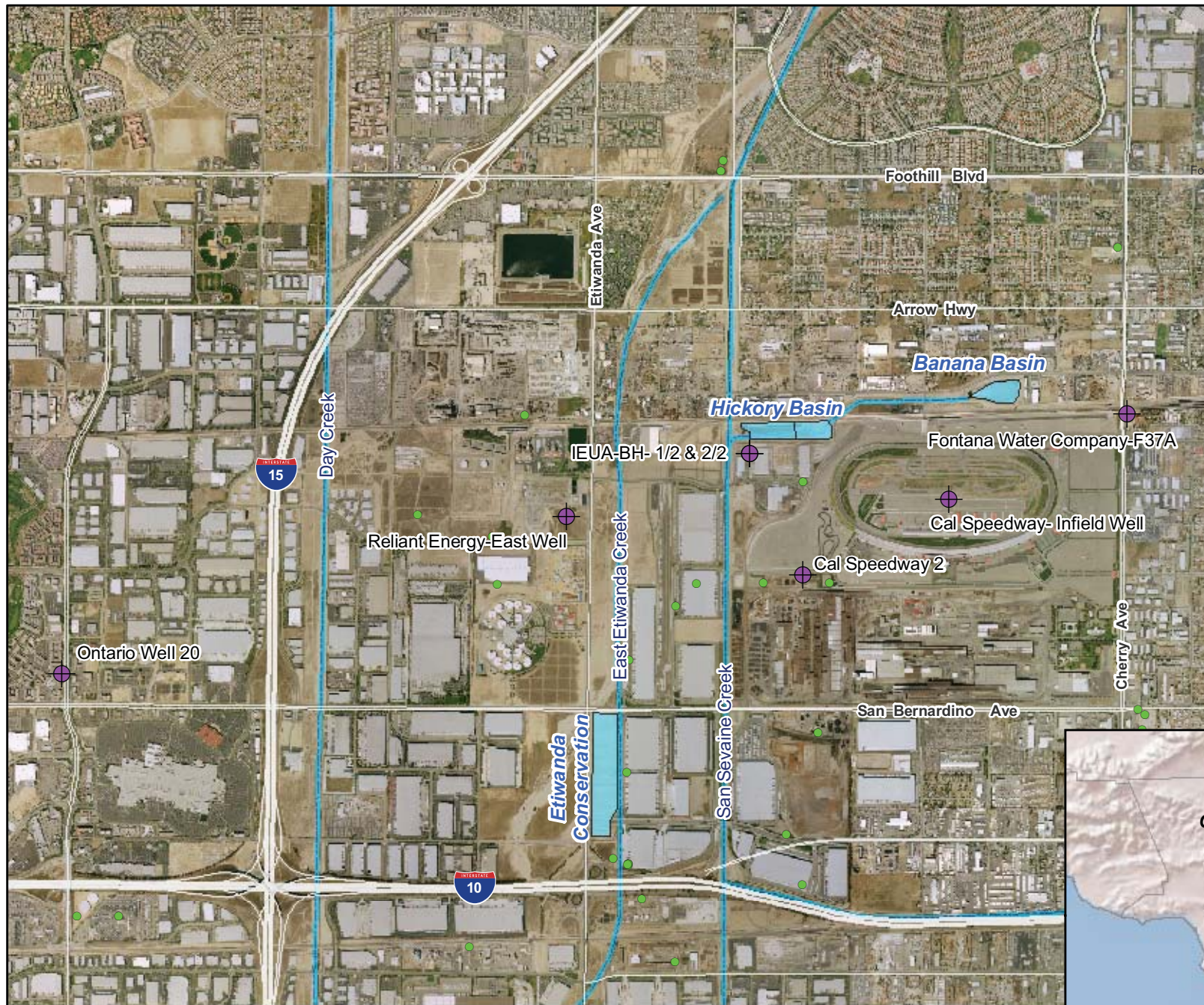


Figure 1-1



Main Map Features

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

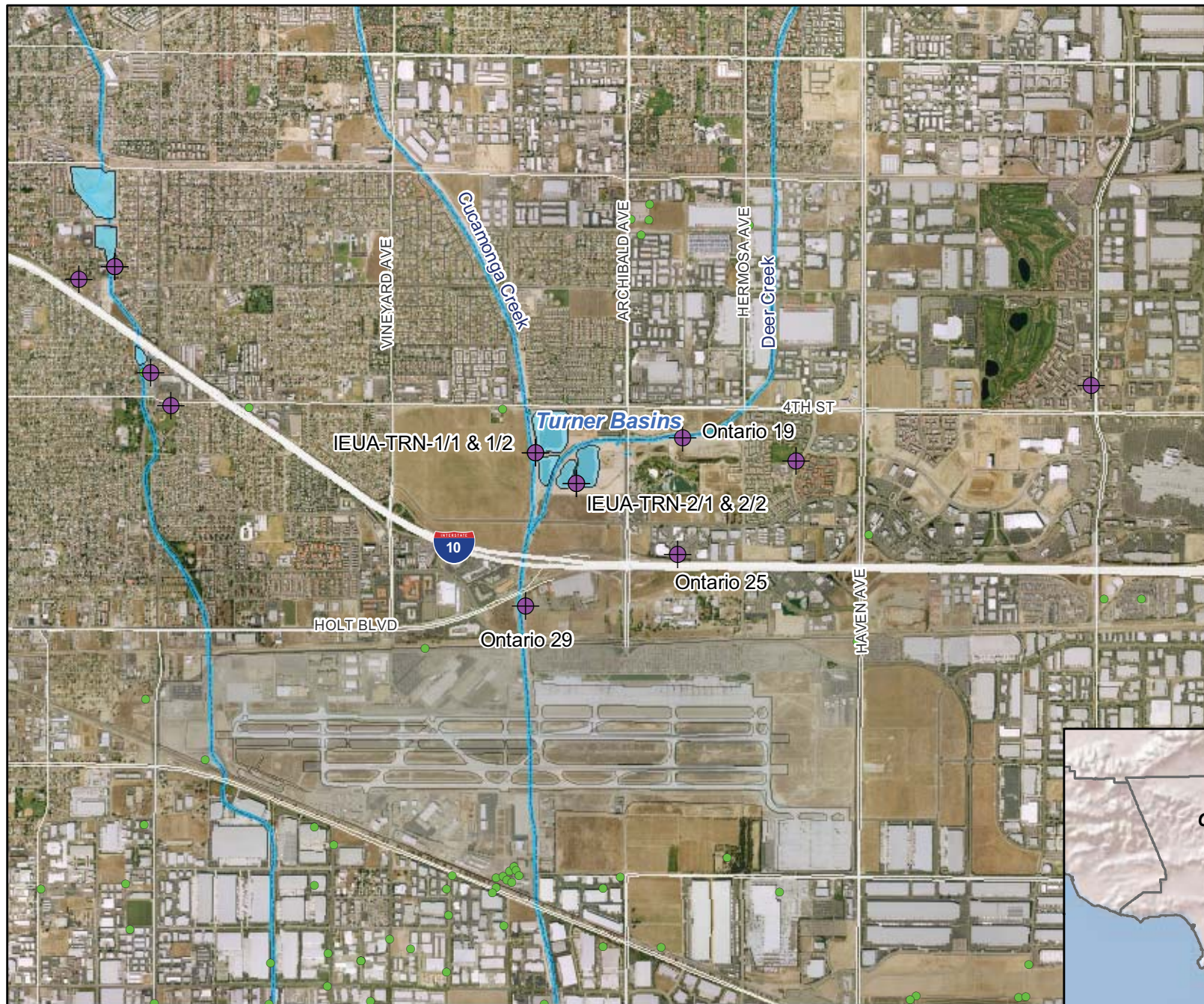


Monitoring Well Network Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program





Main Map Features

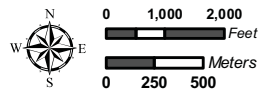
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

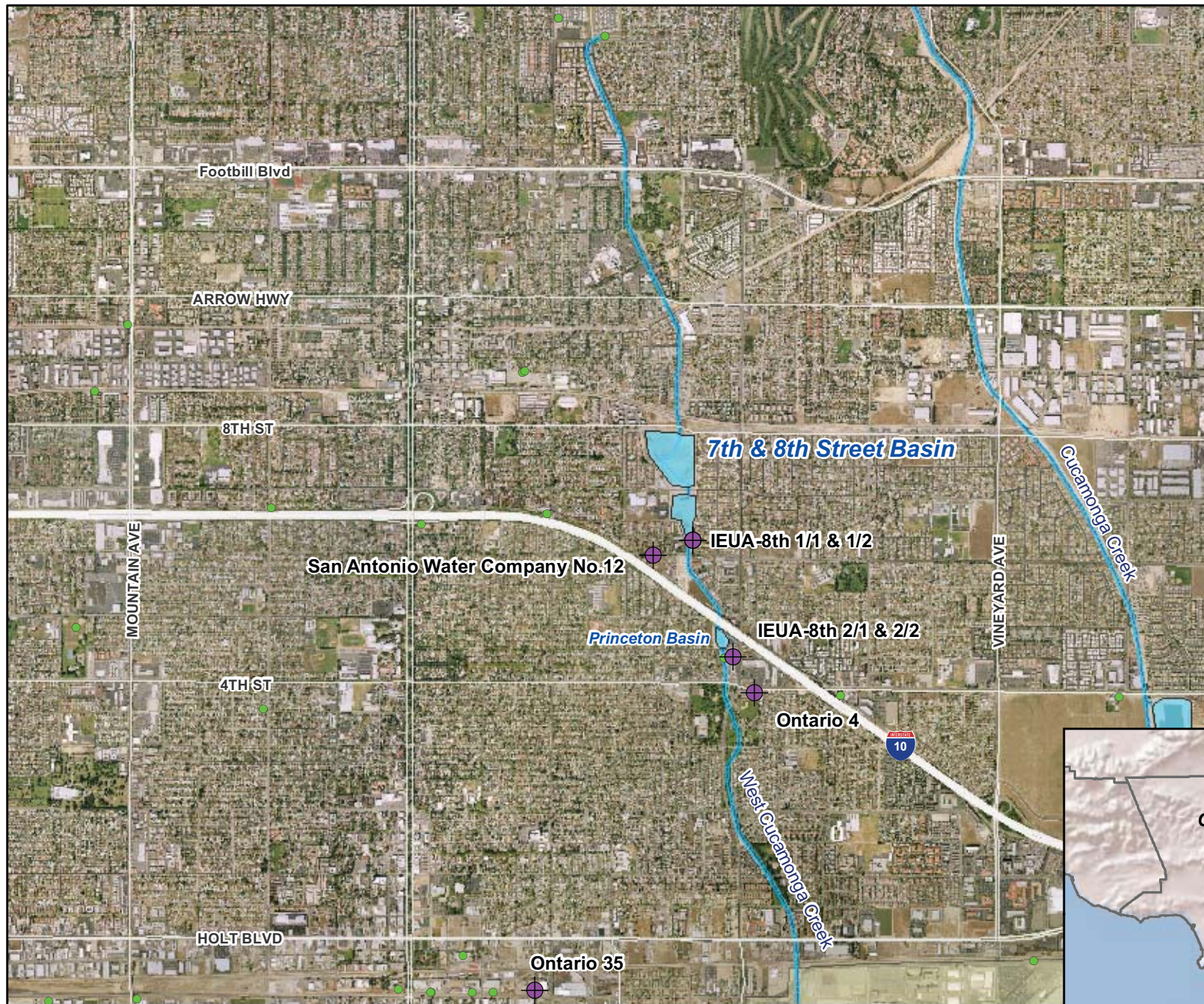


Monitoring Well Network
Turner Basins

Figure 2-2

Recycled Water Recharge Program





Main Map Features

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

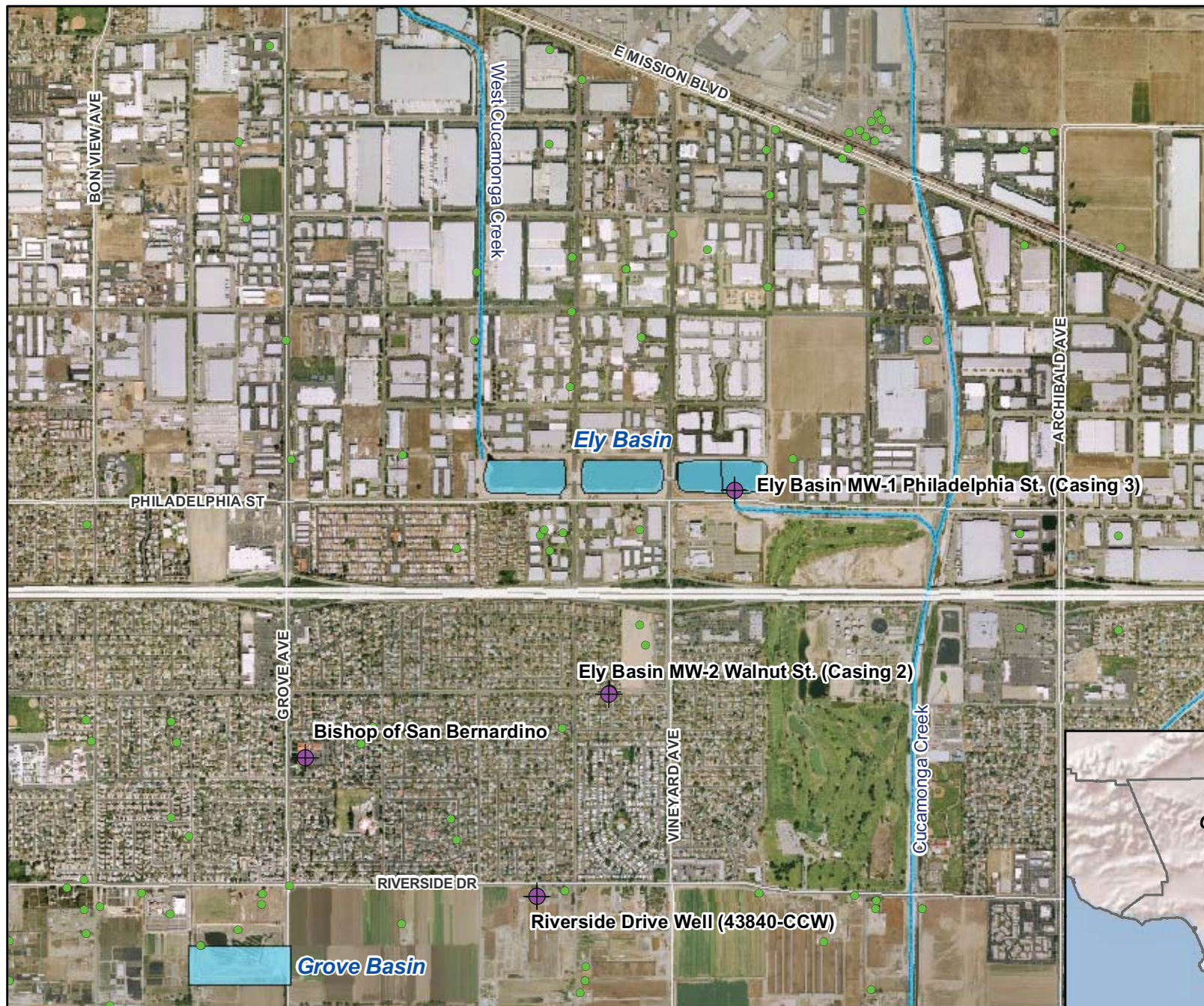


Monitoring Well Network
7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program





Main Map Features

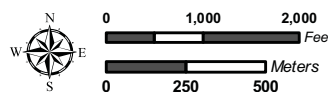
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

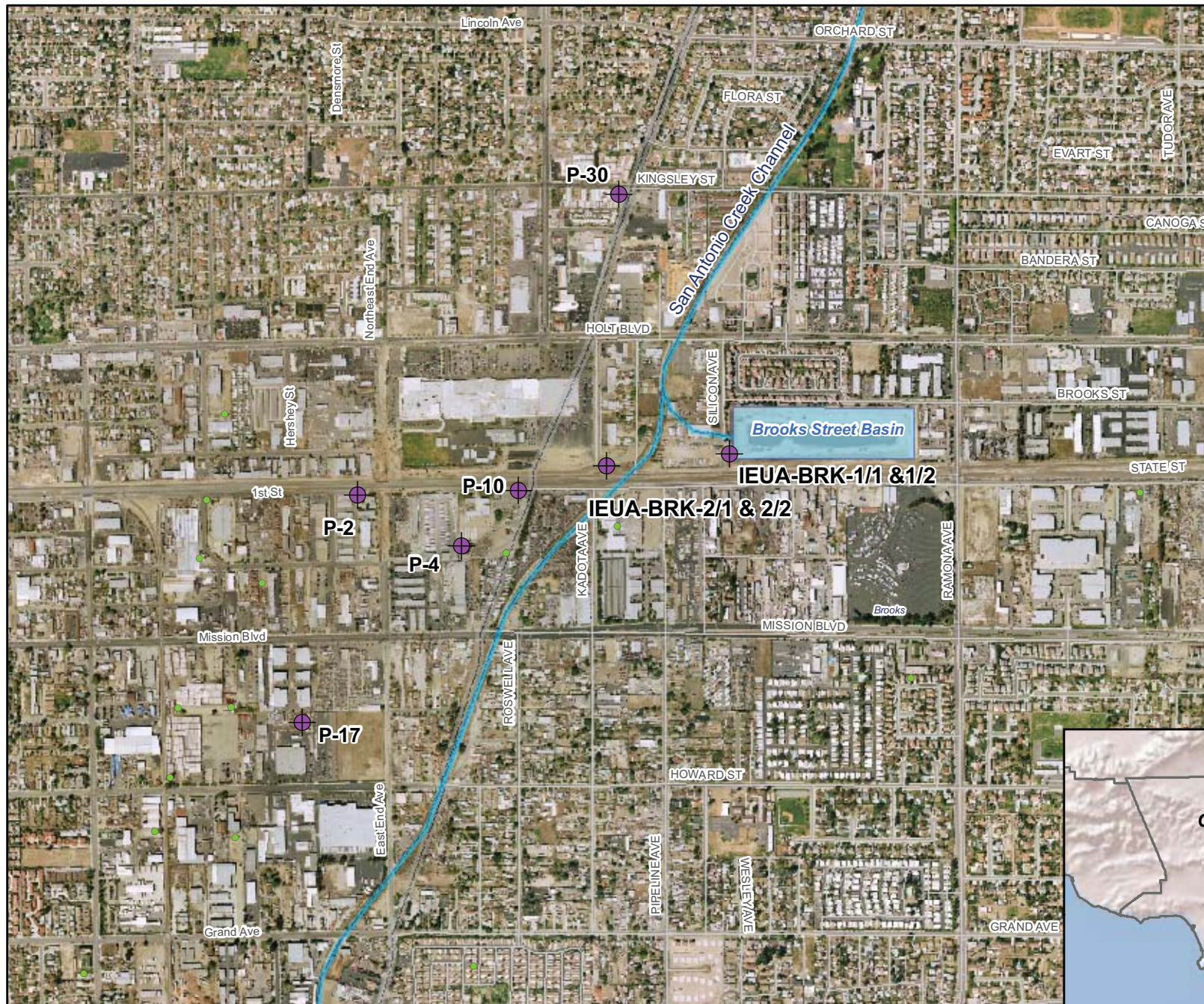


Monitoring Well Network
Ely Basins

Figure 2-4

Recycled Water Recharge Program





Main Map Features

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

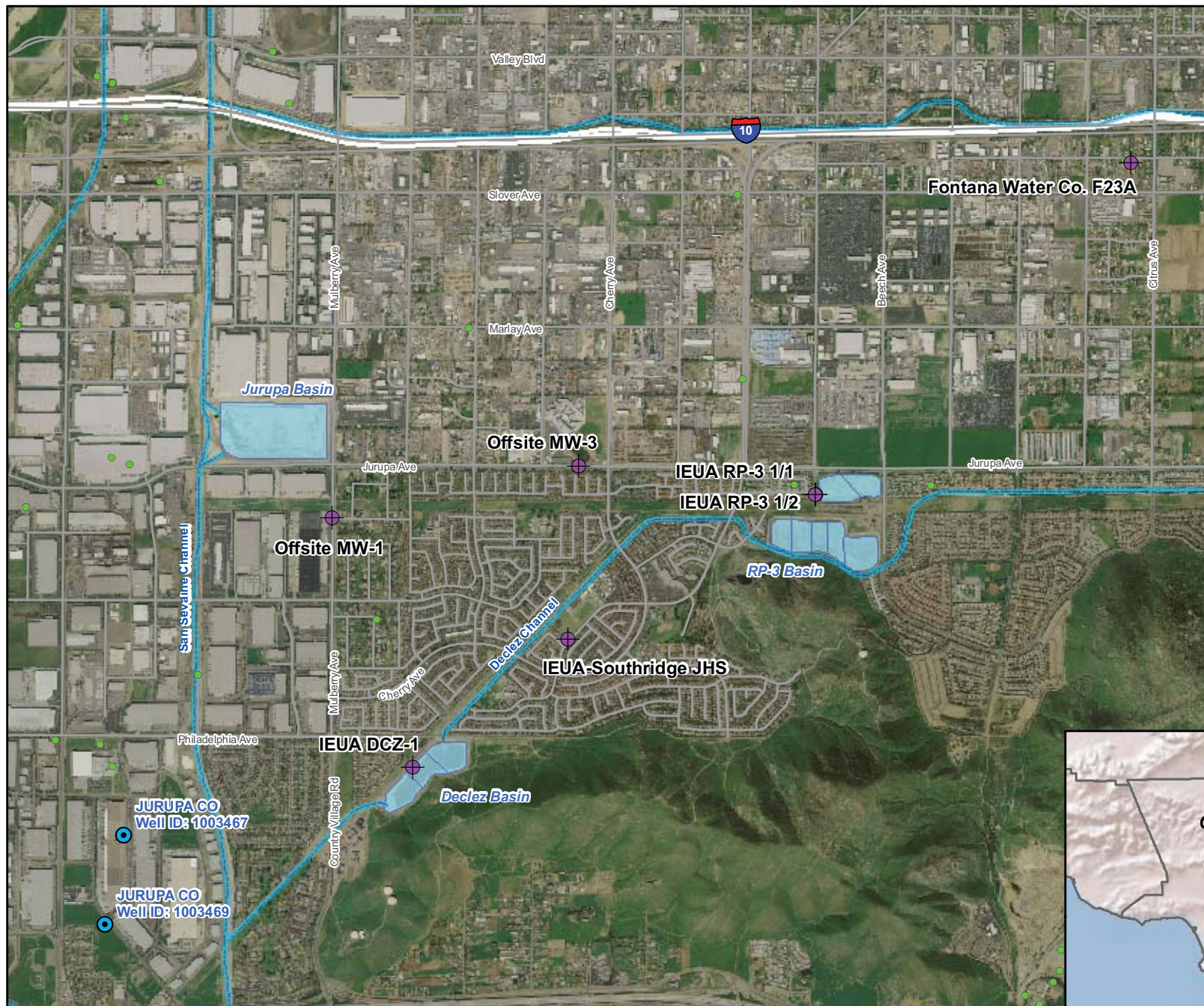


Monitoring Well Network
Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program





Main Map Features

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

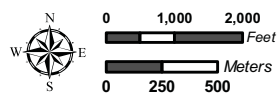


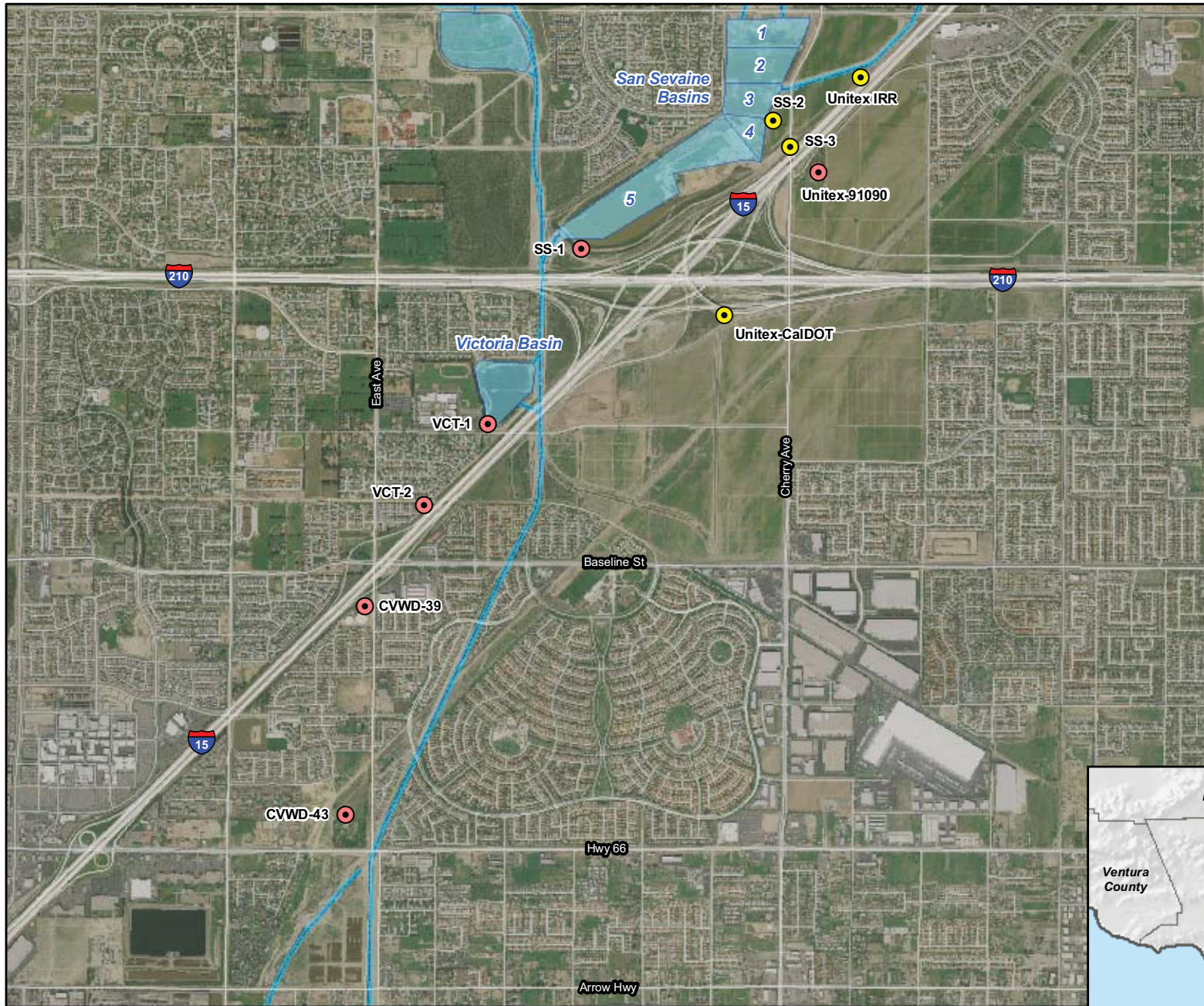
Monitoring Well Network

RP-3 Basin

Figure 2-6

Recycled Water Recharge Program





Main Map Features

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

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

Monitoring Well Network San Seavaine and Victoria Basins

Figure 2-7

