



Patrick O. Shields
Executive Manager of Operations

Kenneth R. Manning
CEO

August 13, 2008

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Gerard Thibeault

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

**Subject: Chino Basin Recycled Water Groundwater Recharge Program
Quarterly Monitoring Report for April through June 2008**

Dear Mr. Thibeault,

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) hereby submit the *Quarterly Monitoring Report* for the second quarter of 2008 (2Q08), April 1 through June 30, 2008, for the *Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report.

During 2Q08, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of Odor. Odor does not have a primary maximum contaminant level (MCL); instead it has a secondary MCL, which is a non-enforceable guideline regulating constituents that may cause cosmetic or aesthetic effects in drinking water. Odor is discussed in further detail in the report text.

Furthermore, the Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2008, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time of the recharge sites using recycled water, namely Banana, Hickory, Turner, 7th & 8th Street, and Ely Basins. In point of fact, there are no production wells in the buffer zones of the aforementioned recharge sites.

DECLARATION

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

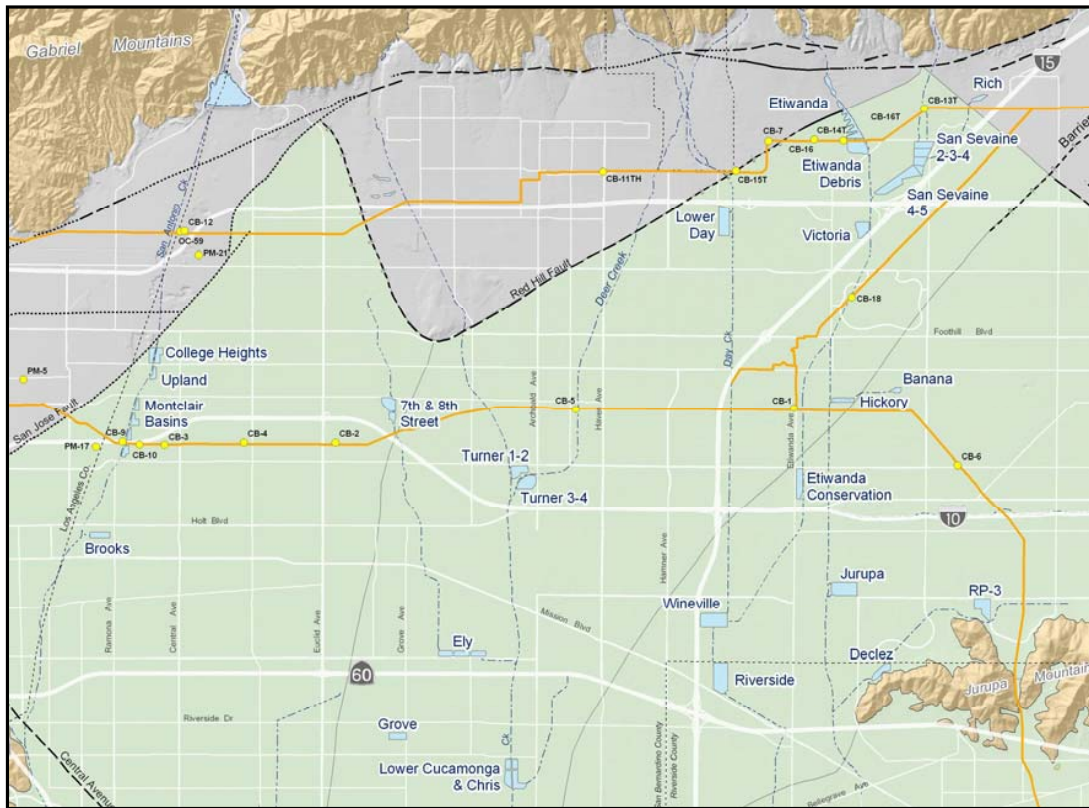
Executed on the 13th day of August 2008 in the Cities of Chino and Rancho Cucamonga.


Patrick O. Shields
Executive Manager of Operations


Kenneth R. Manning
Chief Executive Officer

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report April 1 through June 30, 2008



Prepared by:



August 15, 2008

Table of Contents

1. Introduction	1
<i>A. Order No. R8-2007-0039</i>	<i>1</i>
<i>B. Outline of the Quarterly Report</i>	<i>1</i>
2. Monitoring Results	2
<i>A. Recycled Water: RP-1 and RP-4</i>	<i>2</i>
<i>B. Recycled Water: Basin and Lysimeter Samples</i>	<i>3</i>
<i>C. Diluent Water</i>	<i>3</i>
<i>D. Groundwater Monitoring Wells</i>	<i>3</i>
3. Recharge Operations	3
4. Operational Problems & Preventive or Corrective Actions	3
5. Certification of Non-Pumping in the Buffer Zones	4
6. MVWD ASR Project	4
7. WaterReuse Study	4

LIST OF TABLES

2-1	Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)
2-2	Recycled Water Monitoring: Agency-Wide Flow-Weighted TIN & TDS (Recycled Water Quality Specifications A.6)
2-3	Recycled Water Monitoring: Recycled Water Quality Specifications A.1, A.2, A.3, & A.15
2-4	Recycled Water Monitoring: Table II. Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals (Monitoring & Reporting Program)
2-5	Lysimeter and Surface Water Monitoring: TOC, Nitrogen Species, and EC
2-6	Diluent Water Monitoring Results
2-7	Summary of Wells in Groundwater Monitoring Networks
2-8	Groundwater Monitoring Results
3-1	Diluent & Recycled Water Recharge Volume
6-1	MVWD ASR Project – TIN/TDS Mass Balance
7-1	WaterReuse Study Results

LIST OF FIGURES

1-1	Basin Locations
2-1	Monitoring Well Network: Hickory and Banana Basins
2-2	Monitoring Well Network: Turner Basin
2-3	Monitoring Well Network: 7th & 8th Street Basins
2-4	Monitoring Well Network: Ely Basin

1. Introduction

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

A. Order No. R8-2007-0039

On June 29, 2007, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Order No. R8-2007-0039 which prescribes the requirements for recycled water use for groundwater recharge in six Phase I recharge sites and seven Phase II recharge sites within the Chino North Management Zone. Ely Basin is incorporated into the new Order as one of the seven Phase II recharge sites although recycled water groundwater recharge activities began at this site in 1997. As a provision of this Order, IEUA and Watermaster must also comply with Monitoring and Reporting Program No. R8-2007-0039 (M&RP).

The M&RP includes the water quality monitoring requirements of the Chino Basin Recycled Water Groundwater Recharge Program and the requirement for the submittal of quarterly and annual reports. This document is the quarterly report for the Second Quarter of 2008 (2Q08), which is due to the Regional Board by August 15, 2008.

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

- Monitoring results for recycled water (including lysimeter monitoring), diluent water, and groundwater.
- Recycled water and diluent water volumes recharged at each basin.
- Reporting of any non-compliance events due to water quality, including records of any operational problems, plant upset and equipment breakdowns or malfunctions, and any diversion(s) of off-specification recycled water and the location(s) of final disposal. All corrective or preventive action(s) taken.
- Certification that no groundwater has been pumped from the zone that extends 500 feet and 6-months underground travel time from the recharge basin(s) where recycled water is applied for domestic water supply use.

As approved by the Regional Board in April 2007, the Monte Vista Water District (MVWD) entered into an agreement with Watermaster and IEUA to begin reporting its Aquifer Storage & Recovery (ASR) Project injection/recovery volumes and TIN/TDS data under the then existing Phase I Groundwater Recharge Order No. R8-2005-0033 and future permit updates, such as the current Order No. R8-2007-0039.

B. Outline of the Quarterly Report

Section 2 of this quarterly report discusses the water quality monitoring results for recycled water (water recycling plant effluent, 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 an overview of the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project, including injection volumes and TIN/TDS mass balance. Finally, Section 7 includes WaterReuse Foundation (WRF) research study sampling results for San Antonio Water Company Well No. 12 and 8th Street Basin monitoring wells.

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 2Q08 data.

Recycled Water Specifications A.5 through A.9 are narrative limits in the permit and corresponding monitoring data are presented in Tables 2-1 through 2-2. None of these limits were exceeded in 2Q08.

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 3Q07 through 2Q08 are summarized in Table 2-3 of this report. 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 averages for compliance determination. Maximum contaminant levels for inorganic chemicals, organic chemicals, radionuclides, and disinfection byproducts; and action levels for lead and copper; and secondary MCLs were not exceeded during 2Q08, with the exception of threshold odor.

Due to the volume of sample required for analyses, IEUA has selected a recycled water sampling point along the distribution pipeline. IEUA selected the turnout to Reliant Energy (an IEUA recycled water customer) to be representative of the system blend of recycled water used for recharge. Although this sampling location is suitable for most constituents, it is not appropriate for disinfection byproducts (DBP), more specifically, Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). For TTHMs and HAA5, samples collected at the basin are more consistent and representative of the recycled water prior to reaching the groundwater table. Compliance is selected at a point prior to the groundwater table and has in previous quarters been selected at a lysimeter actively receiving recycled water recharge during the defined sampling time. For the 2Q08 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at Hickory Basin East Cell as the compliance point, in accordance with Recycled Water Quality Specification A.2. This basin did receive recycled water during 2Q08.

During 2Q08, the threshold odor secondary MCL of 3 Units was exceeded by a 4-quarter running average value of 6 Units. As a comparison for odor values, diluent water sampling for 2Q08 indicated that all three diluent waters resulted in threshold odor values ranging from 3 to 67 Units.

Oil & Grease has a narrative limit in Recycled Water Specification A.15 of 1 mg/L. The method detection limit for Oil & Grease is 2 mg/L; the resultant value for the 2Q08 sample was “non-detect” or less than 2 mg/L. In this case only, the method detection limit is greater than the narrative limit, therefore it is not possible to verify that the narrative limit was not exceeded. Oil & Grease does not have a promulgated primary or secondary MCL. In 3Q08, the IEUA laboratory will run an MDL study to determine if the lab can attain a method detection limit of 1 mg/L. If the IEUA lab is unable to lower the MDL successfully, the sample will be sent to an outside laboratory for analysis during 3Q08.

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

B. Recycled Water: Basin and Lysimeter Samples

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

Compliance monitoring points have not yet been established for the 7th & 8th Street Basins; therefore all lysimeter sampling data collected during 2Q08 are presented in this report for this recharge site. In the quarterly reports following the completion of these sites' Start-Up Period Reports, quarterly monitoring and reporting will be limited to compliance monitoring sampling points selected based on the Start-Up Period data evaluation.

After a basin start-up period is complete, TOC compliance is determined from the maximum average RWC indicated by the 20-sample running average TOC. ($TOC_{avg} = 0.5 \text{ mg/L} \div RWC_{avg}$). The total nitrogen compliance limit is 5 mg/L.

C. Diluent Water

For 2Q08, diluent water sampling was conducted at the Turner and 8th Street Basins. State Water Project water was not delivered to any basins during the monitoring period. Table 2-6 lists the results of diluent water sampling and analyses. Details on the methods used to measure daily diluent water flow can be found in the CDPH-approved "Diluent Water Monitoring Plan."

D. Groundwater Monitoring Wells

During 2Q08, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Turner Basins is monitored by sampling a network of five wells. The groundwater quality within the vicinity of the 7th & 8th Street Basins are monitored by sampling a network of five wells. The groundwater quality within the vicinity of the Ely Basin is monitored by sampling a network of three wells. The wells in the monitoring well networks for Hickory and Banana Basins, Turner Basin, 7th & 8th Street Basins, and Ely Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-4, respectively.

The groundwater constituents analyzed from the monitoring wells during 2Q08 are presented in Table 2-8.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The 7th & 8th Street, Ely, Hickory and Banana Basins were the only recharge basins to receive recycled water this quarter. No imported water was delivered to any of the aforementioned recharge basins during 2Q08. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff captured during 2Q08 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.

During lysimeter sampling at Ely basin, the compliance lysimeter (15-foot depth) would not hold a negative pressure and could not be sampled. Rather than not collecting a sample, IEUA sampled the

10-and 25-foot depth lysimeters. These data are reported in Table 2-5. IEUA will continue to sample these two depths during recycled water recharge until an alternative monitoring plan is developed.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 2Q08 for domestic or municipal use from the zones that extend 500 feet and 6 months underground travel time from the Hickory, Banana, Turner 7th & 8th Street, and Ely Basins. In fact, there are no production wells within the buffer zones of these aforementioned recharge sites. In the cover letter of this report, Watermaster certifies non-pumping in the buffer zones.

IEUA continues to work with the San Bernardino County Department of Environmental Health Services (SBCDEHS) to prevent the drilling and construction of new drinking water wells within the buffer zones. SBCDEHS has initiated control over production well permitting within the buffer zones of all recharge sites through the use of buffer zone maps that utilize the same land coordinate system (Township/Range/Section/40-acre Parcel) that is used in the permitting process. SBCDEHS reviews new well permit applications in part by checking the proposed location of a new drinking water well against a list of 40-acre parcels that abut recharge basins and their 500-foot buffers. IEUA has provided SBCDEHS with a list of parcels abutting each recharge basin and a series of maps showing the recharge basins, buffers, and township/range/section parcels adjacent the basins and buffers.

If a well falls within an abutting parcel, SBCDEHS will review the proposed well location using maps of the basins and buffers. If the well falls too near the buffer boundary for SBCDEHS to determine the relationship of the proposed well location to the buffer boundary, SBCDEHS will defer to IEUA for a prompt field review of the proposed well location. The field review may include contacting and having the well applicant to identify the exact location of the proposed well casing. To conduct a detailed field review, SBCDEHS will contact and provide IEUA Groundwater Recharge Coordinator with a copy of the well permit application and a timeline for the completion of IEUA's review. Following the review, IEUA will notify SBCDEHS of its findings in writing. IEUA will also notify the California Department of Public Health and the Regional Board of well permit applications that it recommends be declined due to well locations that are determined to fall with a 500-foot buffer. SBCDEHS has initiated control over production well permitting within the buffer zones of all Phase I and Phase II basins through the use of buffer zone maps that utilize the same land coordinate system (Township/Range/Section) that is used in the permitting process.

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. The Regional Board has been apprised of this agreement and that IEUA will be reporting MVWD ASR project data on a quarterly basis. Initial injection began in June 2007. 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. During 2Q08, groundwater injection took place only during the month of April.

7. WaterReuse Study

IEUA is participating in WaterReuse Foundation research study WR-06-018, which includes periodic testing of San Antonio Water Company (SAWCO) Well No. 12, 8th Street Basin 1/1, and 8th Street

Basin 2/1. The purge water from the well sampling is delivered to the 8th Street Recharge Basin. The Regional Board has allowed the test discharges to be covered under IEUA's Groundwater Recharge permit (Order No. R8-2007-0039) rather than the General De Minimus Discharge permit (NPDES No. CAG998001, Order No. R8-2006-0004). Therefore, the well discharge will not be sampled for constituents beyond those identified in the WRF study, and the discharge quantities will be reported in the groundwater recharge quarterly reports.

During 2Q08, Well No. 12 was sampled on April 15, 2008 and June 18, 2008 discharging approximately 12,000 gallons and 10,000 gallons, respectively; 8th Street Basin 1/1 was micropurged and sampled on April 16, 2008 and discharged less than 10 gallons; and 8th Street Basin 2/1 was micropurged and sampled on April 17 & 23, 2008 and discharged less than 10 gallons. Laboratory results for the four sampling/discharge events are included in Table 7-1.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2008
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	TIN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	TIN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL
	2.5;10	16		*		6<pH<9				2,2;23;240	2.5;10	16		*		6<pH<9				2,2;23;240
04/01/08	0.8	6.2	5.9	6.5	5.9	7.0	805	490	149	2	0.5	4.7	3.3	3.7	3.3	6.9	790	458	146	<2
04/02/08	0.8	5.9				7.0	865			2	0.5	4.5	4.4		4.4	6.9	800			<2
04/03/08	0.8	5.9	6.7		6.7	7.0	860			2	0.4	4.2	5.4		5.5	6.7	790			<2
04/04/08	0.8	5.8				7.0	870			<2	0.4	4.0	6.6		6.6	6.7	800			<2
04/05/08	0.8	5.7				7.0	865			<2	0.4	4.1	6.3		6.3	6.7	820			<2
04/06/08	0.8	5.9	6.0		6.0	7.0	865			<2	0.3	4.0	6.0		6.0	6.7	820			<2
04/07/08	0.8	6.1				7.0	845			2	0.5	4.1	4.7		4.7	6.8	825			<2
04/08/08	0.8	5.9	6.5	7.0	6.5	7.0	860	524		<2	0.7	4.2	5.2	5.4	5.2	6.8	840	482		<2
04/09/08	0.7	5.8				6.9	825			<2	0.6	4.3	5.3		5.3	6.8	840			<2
04/10/08	0.6	6.1	5.5		5.5	6.9	840			<2	0.5	4.2	5.6		5.6	6.7	840			<2
04/11/08	0.6	5.8				7.0	855			<2	0.6	4.1	6.1		6.2	6.8	835			<2
04/12/08	0.7	5.9				7.0	850			4	0.3	4.0	6.0		6.1	6.8	840			<2
04/13/08	0.7	6.4	4.7		4.7	7.0	850			<2	0.3	3.9	5.9		6.0	6.8	820			<2
04/14/08	0.7	6.4				7.0	845			<2	0.5	4.2	5.0		5.0	6.8	830			<2
04/15/08	1.7	6.8	5.2	5.9	5.2	7.7	860			<2	0.5	4.2	3.5	3.9	3.5	7.3	840	478		<2
04/16/08	0.8	6.1				7.1	860	534		<2	0.7	4.2	3.1		3.1	6.9	830			<2
04/17/08	0.8	6.8	7.8		7.8	6.9	855			<2	0.5	4.3	3.2		3.2	6.9	825			<2
04/18/08	0.7	6.4				7.0	880			<2	0.7	4.2	3.4		3.4	7.2	820			<2
04/19/08	0.8	6.6				7.0	885			50	0.6	4.2	3.9		3.9	7.0	830			<2
04/20/08	0.8	6.7	6.7		6.7	7.0	860			<2	0.5	4.4	4.2		4.2	6.9	830			<2
04/21/08	0.7	6.7				7.0	875			4	0.4	4.4	3.1		3.1	7.0	845			<2
04/22/08	0.7	6.6	6.7	7.5	6.7	7.0	875	516		<2	0.4	4.2	3.5	3.7	3.5	6.9	830	464		<2
04/23/08	0.6	6.5				7.0	870			<2	0.4	4.2	3.8		3.8	7.0	820			<2
04/24/08	0.7	7.0	6.4		6.6	7.0	870			<2	0.4	4.2	3.7		3.8	7.0	810			<2
04/25/08	0.6	6.2				7.0	860			<2	0.4	4.4	3.9		4.0	7.0	800			<2
04/26/08	0.6	6.0				7.0	855			2	0.4	4.5	3.6		3.6	7.0	795			<2
04/27/08	0.6	6.2	7.1		7.1	7.0	850			<2	0.4	4.5	1.4		1.5	7.0	805			<2
04/28/08	0.6	6.1				7.0	855			<2	0.4	4.6	3.0		3.0	7.0	810			<2
04/29/08	0.6	6.3	7.9	8.5	7.9	6.9	860	526		<2	0.4	4.5	5.2	5.8	5.2	7.0	815	466		<2
04/30/08	0.8	6.6				7.0	865			<2	0.5	4.4	5.6		5.6	6.8	825			<2
Avg	0.7	6.2	6.4	7.1	6.4	7.0	858	518	149	<4	0.5	4.3	4.5	4.5	4.5	6.9	821	470	146	<2
Min	0.6	5.7	4.7	5.9	4.7	6.9	805	490	149	<2	0.3	3.9	1.4	3.7	1.5	6.7	790	458	146	<2
Max	1.7	7.0	7.9	8.5	7.9	7.7	885	534	149	50	0.7	4.7	6.6	5.8	6.6	7.3	845	482	146	<2

Note: 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.
 TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2
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.
 *TN compliance can be met at a point prior to the regional groundwater, including lysimeters.

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for May 2008
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL		Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	
	2,5:10	16		*	6<pH<9				2,2,23,240		2,5:10	16		*	6<pH<9				2,2,23,240	
05/01/08	0.8	6.6	8.5	8.5	7.0	885			<2		0.5	4.5	6.1	6.1	7.0	830			<2	
05/02/08	0.8	6.2			6.9	800			<2		0.5	4.3	6.5	6.5	6.9	820			<2	
05/03/08	1.2	6.1			6.9	795			<2		0.4	4.4	6.2	6.2	7.0	815			<2	
05/04/08	1.1	6.4	5.8	5.8	7.0	785			2		0.4	4.7	4.7	4.7	7.1	815			<2	
05/05/08	1.2	6.4			7.0	790			<2		0.4	4.9	4.8	4.8	7.1	820			<2	
05/06/08	1.2	6.4	7.1	7.9	7.0	780	480	155	<2		0.4	4.9	5.5	6.1	7.1	825	474	140	<2	
05/07/08	1.1	6.0			7.0	780			<2		0.5	4.9	4.7	4.7	7.1	850			<2	
05/08/08	1.2	6.3	7.1	7.1	7.0	780			<2		0.4	4.8	4.7	4.7	7.0	840			<2	
05/09/08	1.3	6.5			7.0	790			<2		0.4	4.7	6.2	6.2	7.0	830			<2	
05/10/08	1.2	6.6			7.0	795			2		0.4	4.6	6.5	6.5	7.0	825			<2	
05/11/08	1.2	7.1	6.5	6.5	7.0	775			<2		0.4	4.8	5.7	5.7	7.0	825			<2	
05/12/08	1.3	8.5			7.0	795			2		0.4	4.9	5.1	5.1	7.0	825			<2	
05/13/08	1.2	8.4	9.0	9.8	7.0	785	498		<2		0.5	4.8	5.8	6.6	7.0	835	486		<2	
05/14/08	1.2	8.3			7.2	765			<2		0.6	4.8	6.1	6.1	7.0	830			<2	
05/15/08	1.1	8.0	7.7	7.7	7.0	800			<2		0.7	4.8	6.2	6.2	7.0	830			<2	
05/16/08	1.2	7.8			7.0	770			<2		0.7	4.9	6.4	6.4	7.0	830			<2	
05/17/08	1.2	7.7			7.0	780			<2		0.8	5.0	5.7	5.7	7.0	825			<2	
05/18/08	1.2	8.0	7.6	7.6	7.0	755			<2		0.8	5.2	5.5	5.5	7.0	830			<2	
05/19/08	1.2	8.4			7.0	770			<2		0.8	5.4	5.0	5.0	7.0	930			<2	
05/20/08	1.2	6.1	7.7	8.9	7.0	785	502		<2		0.8	5.2	5.4	5.4	7.0	850	490		<2	
05/21/08	1.2	7.8			7.0	780			4		0.4	5.1	6.2	6.2	7.0	850			<2	
05/22/08	1.2	8.0	8.0	8.0	7.0	760			<2		0.7	5.1	7.0	7.0	7.0	835			<2	
05/23/08	1.0	7.7			7.0	750			<2		0.7	5.2	7.1	7.1	7.0	840			<2	
05/24/08	1.1	8.0			7.0	755			<2		0.6	5.1	7.0	7.0	7.0	850			<2	
05/25/08	1.0	7.6			7.0	785			<2		0.6	5.2	6.7	6.7	7.0	845			<2	
05/26/08	1.1	7.8			7.0	760			<2		0.7	5.4	7.0	7.0	7.0	850			<2	
05/27/08	1.1	7.7	6.5	6.7	6.5	7.0	765	484	<2		0.7	5.5	6.0	6.2	7.0	825	494		<2	
05/28/08	1.0	7.3			7.0	750			2		0.7	5.3	5.4	5.4	7.0	815			<2	
05/29/08	1.0	6.9	7.2		7.0	760			<2		0.7	5.1			7.0	805			<2	
05/30/08	1.0	6.9			7.0	740			<2		0.6	4.8	6.6	6.6	7.0	810			<2	
05/31/08	1.1	7.4			7.0	755			<2		0.6	4.6	7.2	7.2	7.0	825			<2	
Avg	1.1	7.3	7.4	8.3	7.4	778	491	155	<2		0.6	4.9	6.0	6.1	7.0	833	486	140	<2	
Min	0.8	6.0	5.8	6.7	5.8	740	480	155	<2		0.4	4.3	4.7	5.7	6.9	805	474	140	<2	
Max	1.3	8.5	9.0	9.8	9.0	885	502	155	4		0.8	5.5	7.2	6.6	7.1	930	494	140	<2	

Note:

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.

TDS and TN limits are based on a 12-month running average values which are presented in Table 2-2

Blanked 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.

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

Table 2-1c
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for June 2008
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL		Turbidity NTU	TOC mg/L	NO ₃ -N mg/L	TN mg/L	pH unit	EC µmho/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	
	2.5;10	16		*	6<pH<9				2,2,23,240		2.5;10	16		*	6<pH<9				2,2,23,240	
06/01/08	1.2	7.6	6.1	6.1	7.0	770			2		0.6	4.8	6.6		7.0	840			<2	
06/02/08	1.2	7.9			7.0	770			2		0.7	4.9	5.6		7.0	845			<2	
06/03/08	1.1	7.4	6.5	7.9	7.0	765	474	154	<2		0.7	4.8	6.0	6.4	7.0	850	486	143	<2	
06/04/08	1.0	7.4			7.0	765			<2		0.7	4.7	6.7		7.0	860			<2	
06/05/08	0.9	7.7	8.1		7.0	700			<2		0.8	4.7	6.4		7.0	780			<2	
06/06/08	0.9	6.6			7.0	700			<2		0.7	4.7	6.1		7.1	780			<2	
06/07/08	1.0	6.6			7.0	720			2		0.7	4.7	5.8		7.1	785			<2	
06/08/08	1.0	6.8	7.8		7.1	690			<2		0.7	4.8	5.4		7.1	775			<2	
06/09/08	1.0	7.1			7.0	685			2		0.7	4.9	4.9		7.1	785			<2	
06/10/08	1.1	6.5	6.6	8.1	7.1	815	486		2		0.8	5.1	5.6	5.8	7.1	905	488		<2	
06/11/08	1.2	7.0			7.0	835			<2		1.3	5.4	5.4		7.1	830			<2	
06/12/08	1.0	7.2	5.7		7.1	805			2		0.6	5.5	6.2		7.1	895			<2	
06/13/08	1.1	7.5			7.1	750			<2		0.4	5.2	7.1		7.1	860			<2	
06/14/08	1.1	7.2			7.1	755			2		0.3	4.9	8.1		7.1	850			<2	
06/15/08	1.1	6.9	5.1		7.0	830			2		0.3	5.0	8.7		7.2	960			<2	
06/16/08	1.1	6.6			7.0	820			<2		0.4	5.0	8.8		7.1	935			<2	
06/17/08	1.1	6.4	5.9	6.7	7.0	810	480		<2		0.4	5.3	9.6	9.9	7.2	965	518		<2	
06/18/08	1.1	10.0			7.0	800			2		0.4	4.8	9.7		7.2	900			<2	
06/19/08	1.0	5.6	5.9		7.0	780			<2		0.4	4.7	10.3		7.1	855			<2	
06/20/08	0.9	11.3			7.0	785			<2		0.3	4.7	11.2		7.1	845			<2	
06/21/08	1.0	10.3			7.0	790			<2		0.3	4.7	11.4		7.1	850			<2	
06/22/08	1.0	9.9	6.4		7.0	795			4		0.3	4.7	10.8		7.1	900	514		<2	
06/23/08	0.9	9.3			7.0	820			2		0.3	4.5	9.2		7.1	915			<2	
06/24/08	0.9	9.8	6.6	7.9	7.1	765	490		<2		0.3	4.7	8.6	8.7	7.2	825			<2	
06/25/08	0.9	9.0			7.1	750			<2		0.3	4.3	8.6		7.1	875			<2	
06/26/08	0.9	9.0	7.6		7.1	800			<2		0.3	4.1	9.2		7.1	870			<2	
06/27/08	0.9	8.5			7.0	760			<2		0.2	4.0	10.7		7.1	850			<2	
06/28/08	0.9	8.4			7.0	770			<2		0.3	3.9	12.4		7.0	855			<2	
06/29/08	1.0	8.9	6.0		7.0	810			2		0.2	3.9	12.7		7.0	890			<2	
06/30/08	0.9	9.5			7.0	820			<2		0.2	4.0	11.6		7.1	890			<2	
Avg	1.0	8.0	6.5	7.6	7.0	774	478	154	<2		0.5	4.7	8.3	7.7	7.1	861	502	143	<2	
Min	0.9	5.6	5.1	6.7	7.0	685	466	154	<2		0.2	3.9	4.9	5.8	7.0	775	486	143	<2	
Max	1.2	11.3	8.1	8.1	7.1	835	490	154	4		1.3	5.5	12.7	9.9	7.2	965	518	143	<2	

Note: 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.

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

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.

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

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

Date	TIN		TDS	
	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jul-07	5.1	6.3	492	480
Aug-07	5.2	6.3	478	481
Sep-07	5.9	6.2	478	482
Oct-07	6.0	6.2	517	487
Nov-07	7.6	6.2	514	490
Dec-07	7.4	6.3	522	494
Jan-08	6.8	6.2	511	483
Feb-08	6.4	6.2	492	484
Mar-08	6.6	6.2	515	486
Apr-08	6.7	6.3	519	488
May-08	7.2	6.4	502	490
Jun-08	6.5	6.5	490	491
Limit		8.0		550

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

Constituent	3Q07	4Q07	1Q08	2Q08	4Q Run. Avg. ¹	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	27	<25	57	<25	1000	µg/L	EPA 200.8
Antimony	0.5	<0.5	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<0.6	<0.2	<1.8	<1.8	<1.8	7	MFL	EPA 100.2
Barium	14	6	9	7	9	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	4.5	3.2	2.9	1.2	2.9	50	µg/L	EPA 200.8
Cyanide	<6	<6	<5	<6	<6	150	µg/L	SM 4500-CN E
Fluoride	0.3	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	2	µg/L	EPA 245.2
Nickel	3	2	3	3	3	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<10	<4	<10	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	<1	<0.5	<0.5	<1	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<1	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<1	<0.5	<0.5	<1	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<1	<0.5	<0.5	<1	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	<1	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<1	<0.5	<1	<1	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	NA	<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	<1	<0.5	<0.5	<1	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	<1	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<1	<0.5	<0.5	<1	300	µg/L	EPA 524.2
Monochlorobenzene	<0.5	<1	<0.5	<0.5	<1	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	<0.5	NA	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	NA	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Toluene	<0.5	<1	0.5	<0.5	<1	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	NA	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<1	<0.5	<0.5	<1	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<2	<0.5	<0.5	<2	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	NA	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.3	<1	<0.3	<0.5	<1	0.5	µg/L	EPA 524.2
m,p-Xylene	<1	NA	<1	<0.5	<1	1750 ²	µg/L	EPA 524.2
o-Xylene	<0.5	NA	<0.5	<0.5	<0.5		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	5	<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	<20	<20	<5	<20	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505

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

Constituent	3Q07	4Q07	1Q08	2Q08	4Q Run. Avg. ¹	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	0.06	<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	0.07	<0.05	<0.05	0.1	0.06	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	5.1	3.9	13.6	3.6	6.5	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	<0.670	<0.710	<1.0	<0.76	<1.0	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	15	pCi/L	EPA 900.0
Tritium	<190	<198	<196	<191	<198	20,000	pCi/L	EPA 906
Strontium-90	<0.640	<0.670	<0.700	<0.740	<0.740	8	pCi/L	EPA 905
Gross Beta Particle Activity	7	8	10	10	9	50	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	<0.7	20	pCi/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	<25	27	<25	57	<25	200	µg/L	EPA 200.8
Copper	5.1	3.9	13.6	3.6	6.5	1000	µg/L	EPA 200.8
Corrosivity ³	-0.3	0.7	<0.1	NR	0.1	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	<0.05	0.12	<0.05	<0.05	<0.05	500	µg/L	S5540C/EPA 425.1
Iron ³	79	65	110	NR	85	300	µg/L	EPA 200.7
Manganese	7	1	9	19	9	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	8	4	8	2	6	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.2	<0.2	<0.2	<0.2	<0.2	1	µg/L	EPA 525.2
Zinc	38	24	55	15	33	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ⁴	2	1	3	<2		1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.01	0.05	<0.01	<0.01	<0.02	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data								
Total Trihalomethanes (TTHMs)	129	16	7	48	50	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	3	3	<1	<1	2	60	µg/L	S6251B

NA: Not Analyzed this quarter

¹ 4-quarter running average is calculated based on ND values equal to half the detection limit. Final 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.

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.

Italic signifies that the 4-quarter running average highest DL is greater than the MCL; all values in data set are non-detect.

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

Constituent	2Q08	Unit	Method
Metals			
Chromium (III) ¹	1.2	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	6.4	µg/L	EPA 524.2
Chloroethane	<0.5	µg/L	EPA 524.2
2-Chloroethylvinylether	NR	µg/L	EPA 624
Chloroform	88	mg/L	EPA 524.2
Dichlorobromomethane	29	µg/L	EPA 524.2
Methyl Bromide	<1	µg/L	EPA 524.2
Methyl Chloride	0.9	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
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
Endrin Aldehyde	NR	µg/L	EPA 608

Constituent	2Q08	Unit	Method
Unregulated Chemicals			
Boron	0.4	mg/L	EPA 200.7
Chromium VI	0.1	µg/L	EPA 218.6
Dichlorodifluoromethane	<0.5	µg/L	EPA 524.2
Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	ng/L	1625MOD
Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	µg/L	542.2 MOD
Vanadium	1.2	µg/L	EPA 200.8
1,4 - Dioxane	<2	µg/L	8270MOD
1,2,3-Trichloropropane	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels ²			
n-butylbenzene	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	µg/L	EPA 524.2
Chlorate	204	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Diazinon	NR	µg/L	EPA 525.2
Formaldehyde	NR	µg/L	SM 6252/EPA 8315
Isopropylbenzene	<0.5	µg/L	EPA 524.2
N-propylbenzene	<0.5	µg/L	EPA 524.2
1,2,4 -trimethylbenzene	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	NR	µg/L	EPA 525
N-Nitrosopyrrolidine	NR	µg/L	EPA 525
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²			
<u>Hormones</u>			
Ethinyl estradiol	NR	ng/L	HPLC/MS-SEDC
17-B estradiol	NR	ng/L	HPLC/MS-SEDC
Estrone	NR	ng/L	HPLC/MS-SEDC
<u>"Industrial" Endocrine Disruptors</u>			
Bisphenol A	NR	ng/L	HPLC/MS-SEDC
Nonylphenol and nonylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC
Octylphenol and octylphenol polyethoxylate	NR	ng/L	HPLC/MS-SEDC
PolybromiNA	NR	ng/L	8270C SIM
PBDE 28	NR	ng/L	8270C SIM
PBDE 71	NR	ng/L	8270C SIM
PBDE 47	NR	ng/L	8270C SIM
PBDE 66	NR	ng/L	8270C SIM
PBDE 100	NR	ng/L	8270C SIM
PBDE 99	NR	ng/L	8270C SIM
PBDE 85	NR	ng/L	8270C SIM
PBDE 154	NR	ng/L	8270C SIM
PBDE 153	NR	ng/L	8270C SIM
PBDE 138	NR	ng/L	8270C SIM
PBDE 128	NR	ng/L	8270C SIM
PBDE 183	NR	ng/L	8270C SIM
PBDE 190	NR	ng/L	8270C SIM
PBDE 203	NR	ng/L	8270C SIM
PBDE 206	NR	ng/L	8270C SIM
PBDE 209	NR	ng/L	8270C SIM
<u>Pharmaceuticals & Other Substances</u>			
Acetaminopen	NR	ng/L	HPLC/MS-SEDC
Amoxicillin	NR		Not Available ³
Azithromycin	NR		Not Available ³
Caffeine	NR	ng/L	HPLC/MS-SEDC
Carbamazepine	NR	ng/L	HPLC/MS-SEDC
Ciprofloxacin	NR		Not Available ³
Ethylenediamine tetra-acetic acid (EDTA)	NR		EPA 300.0MOD
Gemfibrozil	NR	ng/L	HPLC/MS-SEDC
Ibuprofen	NR	ng/L	HPLC/MS-SEDC
Iodinated contrast media	NR	ng/L	HPLC/MS-SEDC
Lipitor	NR		Not Available ³
Methadone	NR	ng/L	HPLC/MS-SEDC
Morphine	NR		Not Available ³
Salicylic acid	NR	ng/L	HPLC/MS-SEDC
Triclosan	NR	ng/L	HPLC/MS-SEDC

NR: Not Required (Annual Requirement)

¹ Trivalent chromium is measured as total chromium

² Chemicals w/ State Notification Levels, Nitrosamines, and EDC, Pharmaceuticals & Other Chemicals (Attachment B)

³ Analytical Method is not available for this constituent

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

8th Street Basin									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
8TH-00	0	04/01/08	8.98	<0.6	730	<0.2	<0.1	<0.5	<0.01
8TH-00	0	04/08/08	13.91	1.4	690	<0.2	<0.1	1.4	<0.01
8TH-00	0	04/15/08	15.32	1.6	530	<0.2	<0.1	1.6	<0.01
8TH-00	0	04/22/08	6.86	1.7	820	0.8	0.8	1.0	0.01
8TH-00	0	04/29/08	6.10	1.5	915	1.2	1.1	<0.5	0.02
8TH-00	0	05/06/08	7.17	1.7	800	0.7	0.7	1.0	0.04
8TH-00	0	05/13/08	8.36	7.4	775	2.0	1.8	5.7	0.08
8TH-00	0	05/20/08	7.43	2.6	735	2.1	2.0	0.6	0.02
8TH-00	0	05/28/08	6.29	5.5	560	4.6	4.2	1.3	0.06
8TH-00	0	06/03/08	6.66	4.2	780	2.8	2.7	1.5	0.02
8TH-00	0	06/10/08	6.66	4.2	730	3.4	3.2	1.0	0.05
8TH-00	0	06/17/08	7.25	2.7	760	2.1	1.8	0.9	0.05
8TH-00	0	06/24/08	8.57	1.5	790	0.7	0.6	0.9	0.04
8TH-05	5	04/01/08	3.60	<0.6	720	<0.2	<0.1	<0.5	<0.01
8TH-05	5	04/08/08	3.14	<0.6	670	<0.2	0.1	<0.5	<0.01
8TH-05	5	04/15/08	2.60	<0.6	690	0.5	0.5	<0.5	<0.01
8TH-05	5	04/22/08	3.60	2.3	930	2.2	2.2	<0.5	<0.01
8TH-05	5	04/29/08	3.69	<0.6	945	0.4	0.4	<0.5	0.01
8TH-05	5	05/06/08	3.62	<0.6	935	<0.2	<0.1	<0.5	<0.01
8TH-05	5	05/13/08	3.85	<0.6	815	<0.2	<0.1	<0.5	<0.01
8TH-05	5	05/20/08	4.35	<0.6	775	<0.2	<0.1	<0.5	<0.01
8TH-05	5	05/28/08	4.85	<0.6	710	<0.2	<0.1	<0.5	<0.01
8TH-05	5	06/03/08	4.46	0.8	725	<0.2	<0.1	0.8	<0.01
8TH-05	5	06/10/08	4.31	<0.6	715	<0.2	<0.1	<0.5	<0.01
8TH-05	5	06/17/08	4.36	<0.6	770	0.3	<0.1	<0.5	<0.01
8TH-05	5	06/24/08	4.60	<0.6	835	<0.2	<0.1	<0.5	<0.01
8TH-15	15	04/01/08	3.44	<0.6	760	<0.2	<0.1	<0.5	<0.01
8TH-15	15	04/08/08	2.54	<0.6	715	0.3	0.3	<0.5	<0.01
8TH-15	15	04/15/08	2.45	0.8	645	0.8	0.8	<0.5	<0.01
8TH-15	15	04/22/08	3.93	1.4	655	1.4	1.4	<0.5	<0.01
8TH-15	15	04/29/08	3.12	<0.6	755	0.4	0.4	<0.5	<0.01
8TH-15	15	05/06/08	3.48	<0.6	760	0.6	0.4	<0.5	<0.01
8TH-15	15	05/13/08	3.48	<0.6	700	<0.2	0.1	<0.5	<0.01
8TH-15	15	05/20/08	4.42	<0.6	695	0.2	0.1	<0.5	<0.01
8TH-15	15	05/28/08	5.54	0.6	580	0.4	0.4	<0.5	0.01
8TH-15	15	06/03/08	3.74	1.0	605	0.4	0.3	0.8	<0.01
8TH-15	15	06/10/08	3.97	<0.6	670	0.3	0.2	<0.5	<0.01
8TH-15	15	06/17/08	3.69	9.3	695	0.8	0.7	8.7	0.05
8TH-15	15	06/24/08	3.79	0.7	750	0.6	0.5	<0.5	<0.01
8TH-25	25	04/01/08	3.67	<0.6	765	<0.2	<0.1	<0.5	<0.01
8TH-25	25	04/08/08	3.05	<0.6	710	<0.2	<0.1	<0.5	<0.01
8TH-25	25	04/15/08	3.51	<0.6	560	<0.2	0.1	<0.5	<0.01
8TH-25	25	04/22/08	3.70	<0.6	880	0.6	0.5	<0.5	<0.01
8TH-25	25	04/29/08	3.12	<0.6	965	<0.2	0.2	<0.5	<0.01
8TH-25	25	05/06/08	3.16	<0.6	1160	<0.2	<0.1	<0.5	<0.01
8TH-25	25	05/13/08	4.30	<0.6	905	<0.2	<0.1	<0.5	<0.01
8TH-25	25	05/20/08	4.89	<0.6	835	<0.2	<0.1	<0.5	<0.01
8TH-25	25	05/28/08	5.42	<0.6	805	<0.2	<0.1	<0.5	<0.01
8TH-25	25	06/03/08	4.53	0.8	740	<0.2	<0.1	0.8	<0.01
8TH-25	25	06/10/08	4.68	<0.6	740	<0.2	<0.1	0.5	<0.01
8TH-25	25	06/17/08	4.32	0.9	780	0.4	0.3	0.6	0.04
8TH-25	25	06/24/08	4.10	<0.6	830	<0.2	<0.1	<0.5	<0.01
8TH-35	35	04/01/08	3.17	<0.6	720	<0.2	<0.1	<0.5	<0.01
8TH-35	35	04/08/08	3.10	<0.6	765	<0.2	<0.1	<0.5	<0.01
8TH-35	35	04/15/08	3.21	<0.6	770	<0.2	<0.1	<0.5	<0.01
8TH-35	35	04/22/08	5.24	<0.6	780	<0.2	<0.1	<0.5	<0.01
8TH-35	35	04/29/08	3.31	<0.6	750	<0.2	<0.1	<0.5	<0.01
8TH-35	35	05/06/08	2.75	<0.6	925	<0.2	<0.1	<0.5	<0.01
8TH-35	35	05/13/08	3.71	<0.6	920	<0.2	<0.1	<0.5	<0.01
8TH-35	35	05/20/08	5.07	<0.6	860	<0.2	<0.1	<0.5	<0.01
8TH-35	35	05/28/08	3.20	<0.6	830	<0.2	<0.1	<0.5	<0.01
8TH-35	35	06/03/08	7.03	0.9	780	<0.2	<0.1	0.9	<0.01
8TH-35	35	06/10/08	4.90	<0.6	675	<0.2	<0.1	0.5	<0.01
8TH-35	35	06/17/08	3.47	<0.6	745	<0.2	<0.1	0.5	<0.01
8TH-35	35	06/24/08	3.55	<0.6	810	<0.2	<0.1	<0.5	<0.01

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

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

Hickory Basin East Cell									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
HKYE-00	0	05/06/08	5.43	4.5	825	4.0	4.0	0.5	<0.01
HKYE-00	0	05/13/08	5.90	9.2	815	4.5	4.5	4.7	<0.01
HKYE-00	0	05/20/08	7.26	3.8	775	3.0	2.5	1.3	0.24
HKYE-00	0	05/28/08	26.70	3.4	770	<0.2	<0.1	3.4	<0.01
HKYE-25	25	04/01/08	1.73	3.4	780	3.3	3.3	<0.5	<0.01
HKYE-25	25	05/06/08	2.04	5.2	860	5.2	5.2	<0.5	<0.01
HKYE-25	25	05/13/08	1.42	3.6	785	3.6	3.6	<0.5	<0.01
HKYE-25	25	05/20/08	2.44	4.6	810	4.6	4.6	<0.5	<0.01
HKYE-25	25	05/28/08	1.34	3.4	825	3.3	3.3	<0.5	<0.01

Banana Basin									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
BAN-00	0	04/29/08	5.24	4.7	820	4.2	4.1	0.5	<0.01
BAN-00	0	05/06/08	7.68	2.1	760	1.4	1.3	0.8	0.14
BAN-00	0	05/13/08	6.01	2.5	805	2.6	2.4	<0.5	0.10
BAN-00	0	05/20/08	10.56	1.5	805	0.3	<0.1	1.5	<0.01
BAN-00	0	06/03/08	5.24	6.9	815	5.6	5.5	1.4	<0.01
BAN-00	0	06/10/08	6.00	5.1	750	3.9	3.7	1.4	0.08
BAN-00	0	06/17/08	7.38	6.5	800	3.3	3.2	3.3	0.02
BAN-00	0	06/24/08	15.19	4.1	845	0.2	<0.1	4.1	<0.01
BAN-25	25	04/29/08	1.20	1.0	310	0.8	0.8	<0.5	<0.01
BAN-25	25	05/06/08	1.47	1.5	520	1.5	1.5	<0.5	<0.01
BAN-25	25	05/13/08	1.18	2.5	590	2.2	2.1	<0.5	<0.01
BAN-25	25	05/20/08	1.19	2.0	625	1.8	1.8	<0.5	<0.01
BAN-25	25	06/03/08	1.32	3.3	670	2.5	2.5	0.7	<0.01
BAN-25	25	06/10/08	1.40	2.1	590	1.9	1.8	<0.5	<0.01
BAN-25	25	06/17/08	1.42	1.9	680	1.7	1.6	<0.5	<0.01
BAN-25	25	06/24/08	1.17	1.6	685	1.4	1.2	<0.5	<0.01

Ely Basin No. 3									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
ELY3E-00	0	04/01/08	8.35	3.3	470	2.3	2.2	1.1	0.02
ELY3E-00	0	04/08/08	6.76	3.6	535	2.9	2.6	1.0	0.02
ELY3E-00	0	04/22/08	7.02	3.7	615	3.0	2.8	0.9	0.06
ELY3E-00	0	04/29/08	6.17	3.9	600	2.6	2.5	1.3	0.05
ELY3E-00	0	05/06/08	5.53	3.3	600	2.6	2.5	0.8	0.05
ELY3E-00	0	05/13/08	6.01	3.3	580	2.5	2.4	0.9	0.04
ELY3E-00	0	05/21/08	6.51	2.5	555	2.2	2.1	<0.5	0.02
ELY3E-00	0	05/28/08	7.25	3.9	565	2.5	2.4	1.5	0.04
ELY3E-00	0	06/03/08	7.87	4.4	550	2.9	2.8	1.6	0.04
ELY3E-00	0	06/10/08	7.89	3.7	525	2.7	2.4	1.3	0.05
ELY3E-00	0	06/17/08	8.34	3.7	545	1.9	1.8	1.8	0.03
ELY3E-00	0	06/24/08	8.65	2.9	585	1.9	1.7	1.2	0.03
ELY3E-05	5	04/29/08	3.84	2.7	505	0.9	0.5	2.2	0.02
ELY3E-05	5	05/06/08	3.48	1.2	560	1.1	0.2	1.0	0.01
ELY3E-10	10	04/01/08	1.80	1.9	195	1.7	1.7	<0.5	<0.01
ELY3E-10	10	04/08/08	1.91	1.6	245	1.2	1.1	0.5	<0.01
ELY3E-10	10	04/22/08	2.08	0.7	390	0.6	0.6	<0.5	<0.01
ELY3E-10	10	04/29/08	2.00	<0.6	445	0.4	0.3	<0.5	<0.01
ELY3E-10	10	05/06/08	1.94	<0.6	575	<0.2	0.1	<0.5	<0.01
ELY3E-10	10	05/13/08	1.84	<0.6	540	0.2	0.2	<0.5	<0.01
ELY3E-10	10	05/21/08	1.75	<0.6	540	0.5	0.5	<0.5	<0.01
ELY3E-10	10	05/28/08	1.34	1.2	375	0.8	0.8	<0.5	<0.01
ELY3E-10	10	06/03/08	1.51	1.3	560	0.8	0.8	<0.5	<0.01
ELY3E-10	10	06/10/08	1.81	0.8	530	0.7	0.6	<0.5	<0.01
ELY3E-10	10	06/17/08	1.57	1.1	560	0.7	0.7	<0.5	<0.01
ELY3E-10	10	06/24/08	1.77	<0.6	570	0.6	0.5	<0.5	<0.01
ELY3E-25	25	04/01/08	2.72	0.7	275	0.3	0.3	<0.5	<0.01
ELY3E-25	25	04/08/08	2.71	0.8	260	0.4	0.1	0.7	0.02
ELY3E-25	25	04/29/08			245		0.2		<0.01
ELY3E-25	25	05/06/08	3.57		255				
ELY3E-25	25	05/13/08	3.27	<0.6	260	<0.2	0.1	<0.5	<0.01
ELY3E-25	25	05/21/08	2.19	<0.6	300	<0.2	<0.1	<0.5	<0.01
ELY3E-25	25	05/28/08	2.73	1.0	220	<0.2	<0.1	1.0	<0.01
ELY3E-25	25	06/03/08	2.96	1.2	450	0.5	0.4	0.8	<0.01
ELY3E-25	25	06/10/08	2.79		455		<0.1		<0.01
ELY3E-25	25	06/17/08	2.68	<0.6	500	0.2	<0.1	<0.5	<0.01
ELY3E-25	25	06/24/08	2.81	<0.6	475	0.2	<0.1	<0.5	<0.01

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

Table 2-6
Diluent Water Monitoring Results

Constituent	West Cucamonga Channel - 7th & 8th Street	Cucamonga Creek - Turner 1 & 2	Deer Creek - Turner Drop Inlet	Unit	Method
NO ₂ -N	<0.01	0.04	<0.01	mg/L	EPA 300.0
NO ₃ -N	0.6	1.3	0.2	mg/L	EPA 300.0
TDS	190	542	396	mg/L	SM 2540C
Total Coliform	>23	>23	12	mpn/100ml	SM 9221B
Oil & Grease	<2	2	<2	mg/L	EPA 1664A
Inorganic Chemicals					
Aluminum	101	<25	48	µg/L	EPA 200.7
Antimony	<1	1.4	1.4	µg/L	EPA 200.8
Arsenic	2	<2	<2	µg/L	EPA 200.8
Asbestos	<6.73	<4.42	<6.42	MFL	EPA 100.2
Barium	30	82	54	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	0.3	<0.25	<0.25	µg/L	EPA 200.7
Chromium	1.2	1.7	2.1	µg/L	EPA 200.7
Cyanide	<6	<6	<6	µg/L	SM 4500-CN E
Fluoride	0.4	0.4	0.5	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Nickel	2	4	3	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	µg/L	EPA 314
Selenium	<2	2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)					
Benzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.3	<0.3	<0.3	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)					
Alachlor (Alanex)	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	µg/L	EPA531.2
Chlordane	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	µg/L	EPA 515.4
Dalapon	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	3.7	1.1	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	<5	µg/L	EPA 548.1

Table 2-6
Diluent Water Monitoring Results

Constituent	West Cucamonga Channel - 7th & 8th Street	Cucamonga Creek - Turner 1 & 2	Deer Creek - Turner Drop Inlet	Unit	Method
Endrin	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	22	<6	38	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts					
Total Trihalomethanes (TTHMs)	<0.5	<0.5	<0.5	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	3.2	72	24	µg/L	S6251B
Bromate	<5	<5	18	µg/L	EPA 300.1
Chlorite	<0.01	0.01	0.01	mg/L	EPA 300.0
Notification Level Chemicals					
Copper	11.0	20.0	18.4	µg/L	EPA 200.7
Lead	0.6	<0.5	<0.5	µg/L	EPA 200.8
Radionuclides					
Combined Radium-226 and Radium 228	<0.984	<0.912	<0.677	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3.00	<3.00	<3	pCi/L	EPA 900.0
Tritium	190	<189	<182	pCi/L	EPA 906
Strontium-90	<0.745	<0.706	<0.792	pCi/L	EPA 905
Gross Beta Particle Activity	15	6	5	pCi/L	EPA 900.0
Uranium	0.94	1.1	<0.7	pCi/L	EPA 200.8
Unregulated Chemicals					
Boron	<0.1	0.2	0.2	mg/L	EPA 200.7
Chromium VI	0.4	1.7	1.1	µg/L	EPA 218.6
Dichlorodifluoromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethyl tertiary butyl ether	<3	<3	<3	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	6.8	<4	<2	ng/L	1625MOD
Perchlorate	<4	<4	<4	µg/L	EPA 314
Tertiary amyl methyl ether	<3	<3	<3	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	<2	<2	µg/L	542.2 MOD
Vanadium	7.1	15.3	18.5	µg/L	EPA 200.8
1,4 - Dioxane	<2	2.1	<2	µg/L	8270MOD
1,2,3-Trichloropropane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Secondary Maximum Contaminant Level Chemicals					
Aluminum	101	<25	48	µg/L	EPA 200.7
Corrosivity	0.5	3.0	2.8	SI	SM 2330B
Foaming Agents (MBAS)	0.79	<0.05	<0.05	mg/L	S5540C/EPA 425.1
Iron	204	45	117	µg/L	EPA 200.7
Manganese	6	5	8	µg/L	EPA 200.7
Odor--Threshold	8	67	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	20	7	15	µg/L	EPA 200.7

Table 2-7
Summary of Wells in Groundwater Monitoring Networks

BASIN	CBWM_ID	OWNER/LOCAL NAME	SEPARATION DISTANCE (feet)	SCREENED INTERVAL(S) (feet bgs)	CASING DIAMETER (inches)	STATUS	TYPE
Hickory and Banana Basins	3600573	Fontana Water Company - F37a	2240 upgradient	378-810	20	Active	Municipal
	600660	California Speedway - Infield Well	2070 downgradient	NA	NA	Active	Industrial
	3601365	California Speedway 2	2780 downgradient	451-455, 491-603, & 664-780	20	Active	Industrial
	3600371	Reliant Energy - East Well	4070 downgradient	434-467, 500-513, 553-580, 593-652, & 825-847	20	Active	Industrial
	3602267	City Of Ontario - 20	14500 downgradient	NA	20	Active	Municipal
	601001	Inland Empire Utilities Agency - BH-1/1	340 downgradient	365-405	4	Active	Monitoring
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	3601065	City Of Ontario - 19	2200 upgradient	NA	16	Inactive	Municipal
	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Active	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
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
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	NA	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	NA	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

Notes:

NA = Data not available
CBWM ID = Chino Basin Water Master well identification number
bgs = below ground surface
* = Ontario Well No. 38 has taken the place of Ontario Well No. 19, which is inactive

Table 2-8
Groundwater Monitoring Results (Quarterly)

Sample Location		Date	Water Quality Parameters																												
			TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TON)	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 Basins	Fontana Water Company F37a	4/9/08	0.1	<1.1	7.63	455	288	43	<3	39.1	0.5	<0.05	233	9	<0.5	2	<0.25	<0.2	1.50	8	16	217	19	14	<0.1	0.04	10.2	<0.5	175	8.6	
	California Speedway Infield Well	4/9/08	0.5	<1.1	6.65	470	308	<25	<3	2.9	0.4	<0.05	23	1	<0.5	1	<0.25	<0.2	0.15	3	14	229	21	39	<0.1	0.05	7.9	<0.5	169	7.9	
	California Speedway 2	4/9/08	0.5	<1.1	7.94	264	236	<25	<3	1.6	0.2	<0.05	14	3	<0.5	1	<0.25	<0.2	0.22	30	11	167	19	14	<0.1	0.08	3.8	<0.5	158	6.8	
	Reliant Energy East Well	4/24/08	0.3	<1.1	7.20	375	262	88	<3	2.5	0.0	<0.05	231	18	<0.5	1	<0.25	<0.2	1.47	1	17	160	18	20	<0.1	<0.01	8.4	<0.5	119	6.5	
	Ontario Well No. 20	4/3/08	0.5	<1.1	7.90	330	204	<25	<3	3.7	0.4	<0.05	3	<1	<0.5	2	<0.25	<0.2	0.36	3	5	167	14	6	<0.1	0.19	1.6	<0.5	162	7.3	
	BH-1/2	4/11/08	0.7	<1.1	7.20	412	264	<25	<3	<0.5	0.2	<0.05	20	3	<0.5	1	<0.25	<0.2	0.25	3	40	182	20	24	<0.1	0.13	2.7	<0.5	118	7.4	
Banana & Hickory Basins	BH-1/2	4/28/08	0.5		7.02	415											0.47							<0.1	<0.01	2.4	2.4	117	7.9		
	Ontario Well No. 25	4/3/08	0.5	<1.1	7.65	420	272	<25	<3	1.7	0.3	<0.05	6	<1	<0.5	2	<0.25	<0.2	0.15	<1	14	197	22	19	<0.1	0.18	4.2	4.4	<0.5	177	6.6
Turner Basins	Ontario Well No. 29	4/3/08	0.5	<1.1	7.52	355	230	<25	<3	3.7	0.3	<0.05	1	<1	<0.5	2	<0.25	<0.2	0.26	2	12	159	24	16	<0.1	0.17	3.4	3.5	<0.5	153	8.9
	Ontario Well No. 38	4/3/08	0.5	<1.1	7.93	300	190	<25	<3	1.9	0.3	<0.05	7	<1	<0.5	2	<0.25	<0.2	0.21	<1	4	138	21	9	<0.1	0.18	1.1	1.3	<0.5	152	7.1
	T-1/2	4/7/08	1.0	<1.1	7.57	630	380	<25	<3	0.7	0.1	<0.05	20	1	<0.5	1	<0.25	<0.2	0.95	1	91	275	29	33	<0.1	<0.01	0.2	0.3	<0.5	153	6.9
	T-2/1	4/7/08	0.9	<1.1	7.59	480	296	<25	<3	0.6	0.1	<0.05	54	3	<0.5	1	<0.25	<0.2	0.89	<1	72	194	27	19	<0.1	<0.01	0.7	0.8	<0.5	117	8.8
	T-2/2	4/7/08	1.0	<1.1	7.64	505	330	<25	<3	<0.5	-0.1	<0.05	9	<1	<0.5	1	<0.25	<0.2	0.81	1	82	213	20	27	<0.1	<0.01	0.7	0.7	<0.5	96	8.3
	8TH-1/1	4/16/08	0.9	<1.1	7.95	220	154	<25	<3	0.6	0.1	<0.05	23	4	<0.5	2	<0.25	<0.2	0.55	<1	5	95	18	8	<0.1	<0.01	1.3	1.7	<0.5	100	7.2
7th & 8th St. Basins	8TH-1/1	6/10/08	0.4			195																			<0.1	1.0		<0.5			
	8TH-1/1	6/17/08	0.5			200																			<0.1	<0.01	1.0	1.0	<0.5		
	8TH-1/1	6/24/08	0.6			215																			0.1	<0.01	0.9	1.4	0.5		
	8TH-1/2	4/16/08	0.4	<1.1	7.36	355	236	<25	<3	<0.5	0.0	<0.05	11	5	<0.5	2	<0.25	<0.2	0.44	<1	14	166	18	14	<0.1	<0.01	6.7	6.8	<0.5	133	7.6
	8TH-1/2	6/10/08	0.1			335																			<0.1	<0.01	6.7	6.8	<0.5		
	8TH-1/2	6/17/08	0.3			350																			<0.1	<0.01	6.6		<0.5		
7th & 8th St. Basins	8TH-1/2	6/24/08	0.4			370																			<0.1	<0.01	6.7	6.7	<0.5		
	8TH-2/1	4/17/08	0.5	<1.1	7.48	615	436	<25	<3	<0.5	0.4		11	5			<0.25		0.18	2	18	289	20	64	<0.1	0.08	30.2	30.3	<0.5	128	8.2
	8TH-2/1	4/23/08										<0.05			<0.5	1															
	8TH-2/2	4/23/08	0.2	<1.1	7.24	520	338	<25	<3	<0.5	0.0	<0.05	21	6	<0.5	1	<0.25	<0.2	0.14	1	17	245	19	37	<0.1	<0.01	18.1	18.1	<0.5	153	8.7
	Ely Basin MW-1 Philadelphia St.	4/9/08	0.7	<1.1	8.75	245	148	28	3	<0.5	0.3	<0.05	294	14	<0.5	1	<0.25	<0.2	0.87	2	25	96	20	3	<0.1	<0.01	0.2	0.2	<0.5	83	0.9
	Ely Basin MW-2 Walnut St.	4/24/08	0.9	<1.1	7.22	1220	836	577	20	4.0	0.5	<0.05	4364	21	<0.5	2	<0.25	<0.2	42.8	6	111	571	32	60	<0.1	<0.01	44.5	44.5	<0.5	243	7.4
Ely Basins	Riverside Drive Well (43840-CWW)	4/7/08	0.6	<1.1	7.45	480	302	<25	<3	0.5	0.2	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.70	5	21	232	22	32	<0.1	<0.01	8.0	8.0	<0.5	165	7.3
	BRK-1/1	4/10/08	1.5	<1.1	7.71	355	248	878	<3	1.4	-0.1	<0.05	132	7	<0.5	1	<0.25	<0.2	8.45	3	16	105	42	28	<0.1	0.02	1.7	1.8	<0.5	126	5.5
	BRK-1/2	4/10/08	0.6	<1.1	7.86	530	340	<25	<3	<0.5	0.4	<0.05	11	3	<0.5	1	<0.25	<0.2	0.89	<1	14	269	15	37	<0.1	0.02	16.6	16.6	<0.5	152	7.1
	BRK-2/1	4/10/08	0.5	<1.1	7.59	555	344	31	5	0.8	0.4	<0.05	316	12	<0.5	1	<0.25	<0.2	1.84	2	34	297	14	34	<0.1	0.02	8.5	8.5	<0.5	173	8.2
	BRK-2/2	4/10/08	0.2	<1.1	8.33	315	206	<25	<3	0.7	0.1	<0.05	25	8	<0.5	3	<0.25	<0.2	0.59	1	7	82	44	25	<0.1	<0.01	2.8	2.8	<0.5	115	1.2
	DCZ-1	4/11/08	1.4	<1.1	7.24	310	186	<25	<3	0.8	0.2	<0.05	136	164	<0.5	2	<0.25	<0.2	1.90	1	12	118	30	13	<0.1	0.15	1.0	1.1	<0.5	134	3.1
Background Data	RP3-1/1	4/11/08	1.8	<1.1	6.24	1060	708	<25	3	1.8	0.4	<0.05	13	273	<0.5	3	<0.25	<0.2	0.20	1	27	408	94	63	<0.1	0.73	<0.1	0.7	<0.5	345	0.5
	RP3-1/2	4/11/08	1.8	<1.1	6.23	900	600	<25	3	2.0	0.3	<0.05	67	130	<0.5	2	<0.25	<0.2	0.21	2	36	359	81	50	<0.1	0.34	<0.1	0.3	<0.5	338	1.2

Blank cells indicate that analysis was not run for a constituent on that particular date. On certain dates, supplemental analysis was conducted on BH-1/2, 8th St-1/1, 8th St-1/2, and 8th St-2/1. On those occasions, a full set of analysis was not necessary and only parameters of interest were analyzed.

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

Diluent Water															
Date	Imported Water					Local Runoff / Storm Flow					Recycled Water				
	7th & 8th St.	Ely	Turner	Hickory	Banana	7th & 8th St.	Ely	Turner	Hickory	Banana	7th & 8th St.	Ely	Turner	Hickory	Banana
Apr-07	0	0	0	0	0	89	59	8	50	29	0	41	22	63	4
May-07	0	0	0	0	0	42	14	20	58	37	0	40	136	0	6
Jun-07	0	0	0	0	0	42	18	11	90	0	0	7	3	0	0
2Q07 Totals	0	0	0	0	0	173	91	68	306	133	0	88	319	126	19
Jul-07	0	0	0	0	0	16	26	5	93	0	0	0	0	141	0
Aug-07	0	0	0	0	0	16	29	48	93	0	0	0	0	78	0
Sep-07	0	0	0	0	0	17	34	16	92	3	128	0	0	15	0
3Q07 Totals	0	0	0	0	0	49	89	69	278	3	128	0	0	234	0
Oct-07	0	0	0	0	0	42	34	65	73	2	109	0	0	23	0
Nov-07	0	0	0	0	0	81	166	162	102	35	161	87	0	98	0
Dec-07	0	0	0	0	0	224	257	277	102	22	0	53	0	0	0
4Q07 Totals	0	0	0	0	0	347	457	504	277	59	270	140	0	121	0
Jan-08	0	0	0	0	0	328	793	454	126	130	1	0	0	0	0
Feb-08	0	0	0	0	0	98	233	260	97	75	157	0	0	97	0
Mar-08	0	0	0	0	0	21	82	17	44	0	164	116	0	80	0
1Q08 Totals	0	0	0	0	0	447	1108	731	267	205	322	116	0	177	0
Apr-08	0	0	0	0	0	11	170	18	64	0	90	116	0	7	47
May-08	0	0	0	0	0	90	137	181	39	3	158	87	0	86	38
Jun-08	0	0	0	0	0	15	123	39	24	8	86	103	0	0	72
2Q08 Totals	0	0	0	0	0	116	430	238	127	11	334	306	0	93	157

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)
3Q07	Jul-07	136	0.53	270	0			243	214	80,909
	Aug-07	71	0.53	270	0			314	261	104,598
	Sep-07	47	0.53	270	0			362	292	120,413
4Q07	Oct-07	123	0.13	310	0			484	312	167,280
	Nov-07	13	0.13	310	0			497	314	172,181
	Dec-07	67	0.13	310	0			564	324	197,792
1Q08	Jan-08	132	0.87	290	0			696	466	244,894
	Feb-08	81	0.87	290	0			777	553	273,947
	Mar-08	99	0.87	290	0			876	659	309,405
2Q08	Apr-08	89	1.10	350	0			965	780	348,001
	May-08	0	1.10	350	0			965	780	348,001
	Jun-08	0	1.10	350	286	3.5*	310*	680	(436)	238,737

	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)
1Q08	Jan-08	0			0			0	0	0
	Feb-08	33	0.87	290	0			33	35	11,813
	Mar-08	118	0.87	290	0			151	162	54,139
2Q08	Apr-08	89	1.10	350	0			241	284	92,736
	May-08	0	1.10	350	0			241	284	92,736
	Jun-08	0	1.10	350	6	**	**	235	**	**

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.

** Well is not required to sample until it reaches 20% extraction. Mass balance will be calculated after 20% threshold has been reached.

Total Project (All Wells)									
	Date						Mass Balance		
							Storage (AF)	TIN (kg)	TDS (kg)
3Q07	Jul-07						243	214	80,909
	Aug-07						314	261	104,598
	Sep-07						362	292	120,413
4Q07	Oct-07						484	312	167,280
	Nov-07						497	314	172,181
	Dec-07						564	324	197,792
1Q08	Jan-08						696	466	244,894
	Feb-08						810	588	285,760
	Mar-08						1,067	865	377,851
2Q08	Apr-08						1,288	1,164	473,010
	May-08						1,189	259	428,008
	Jun-08						791	(2,797)	271,424

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

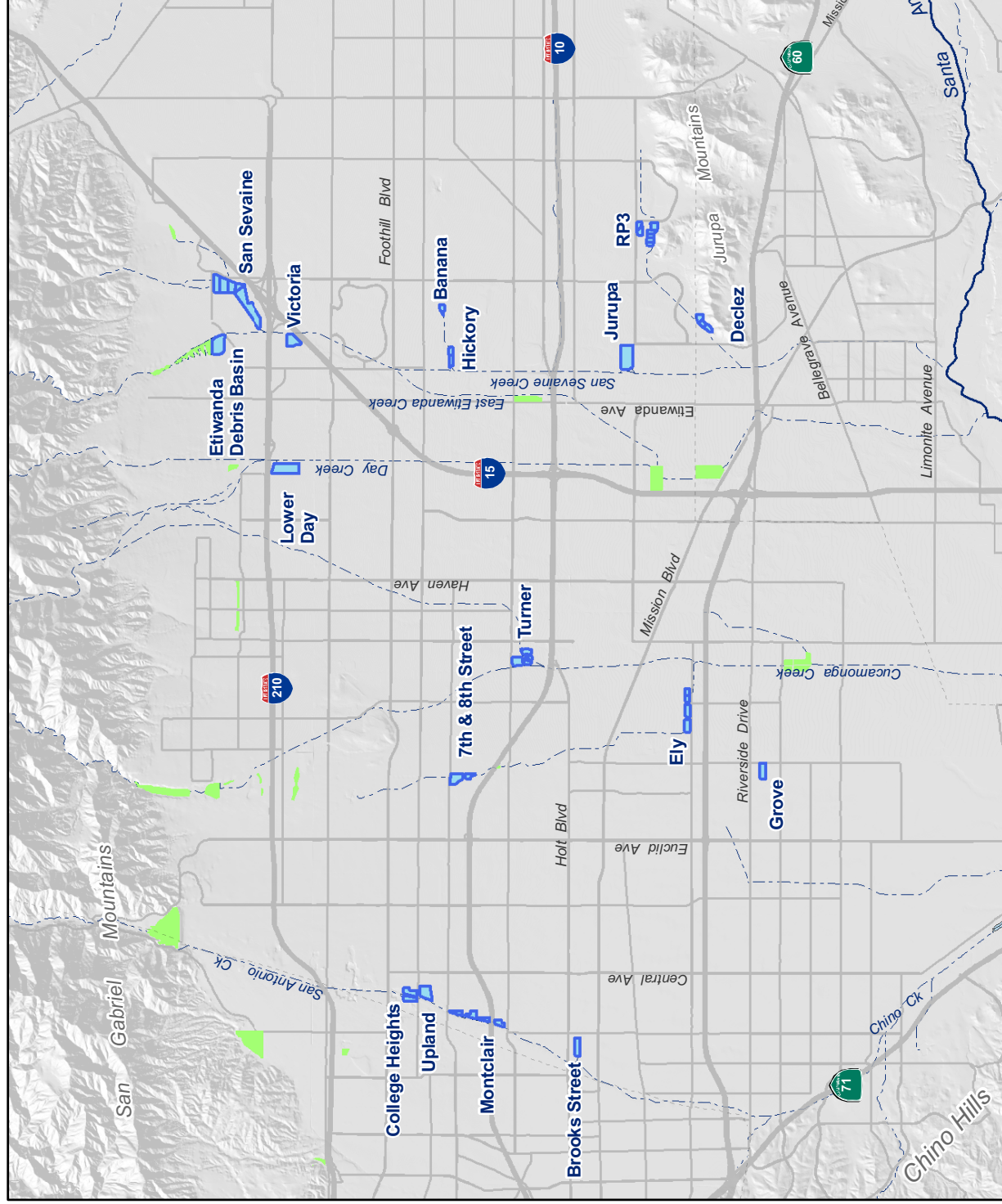
Well 30	TIN	TDS	Est. Prod
6/5/08	2.0	310	20%
6/26/08	4.9	310	40%

Table 7-1
WateReuse Study Results

Constituent	SAWCO Well No. 12 Sample 1	SAWCO Well No. 12 Sample 2	8th Street Basin 1/1	8th Street Basin 2/1	Unit	Method
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,3-Trichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3,5-Trimethylbenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,4-Dioxane	<2	<2	<2	<2	µg/L	ML/SW 8270 mod
2,4,6-trichlorophenol	<5	<5	<5	<5	µg/L	ML/EPA625/8270
2,4-D	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 515.4
2,4-dichlorophenol	<5	<5	<5	<5	µg/L	ML/EPA625/8270
2,4-dinitrophenol	<50	<50	<50	<50	µg/L	ML/EPA625/8270
2,4-dinitrotoluene	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 525.2
2,6-dinitrotoluene	<5	<5	<5	<5	µg/L	ML/EPA625/8270
2-chlorotoluene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
4-chlorotoluene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Alachlor	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 525.2
Aluminum	39	<25	<25	<25	µg/L	EPA 200.8
Antimony	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Atrazine	0.1	0.1	0.1	<0.05	µg/L	ML/EPA 525.2
Barium	32	28	26	65	µg/L	EPA 200.8
Bentazon	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 515.4
Benzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	µg/L	ML/EPA 525.2
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Boron	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
Bromate	<3	<1	<3	<1	µg/L	EPA 317
Butylbenzene-n	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-sec	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-tert	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.8
Carbofuran	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 531.2
Carbon Disulfide	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 624
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Chlorate	63	63	14	<10	µg/L	ML/EPA 300.0
Chlordane	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 505
Chlorite	<0.01	<0.01	<0.01	<0.01	mg/l	ML/EPA 300.0
Chromium	2.6	2.8	2.1	4.6	µg/L	EPA 200.8
Chromium-6	1.8	1.5	1.0	4.1	µg/L	EPA 218.6
Copper	702	11.4	0.6	<0.5	µg/L	EPA 200.8
Cyanide	<0.006	<0.006	<0.006	<0.006	mg/L	SM 4500-CN E
Dalapon	<1	<1	<1	<1	µg/L	ML/EPA 515.4
Diazinon	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 525.2
Dibromochloropropane (DBCP)	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 504.1
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	µg/L	ML/EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	93	68	µg/L	ML/EPA 525.2

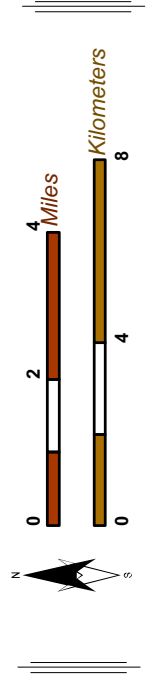
Table 7-1
WateReuse Study Results

Constituent	SAWCO Well No. 12 Sample 1	SAWCO Well No. 12 Sample 2	8th Street Basin 1/1	8th Street Basin 2/1	Unit	Method
Dinoseb	<0.2	<0.2	<0.2	<0.2	µg/L	ML/EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	µg/L	ML/EPA 549.2
EC	310	320	220	615	µmhos/cm	SM 2510
Endothall	<20	<5	<5	<20	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 505
Ethyl tertiary butyl ether	<3	<3	<3	<3	µg/L	ML/EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Ethylene Dibromide (EDB)	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 504.1
Fluoride	0.4	0.4	0.4	0.3	mg/L	EPA 300.0
Formaldehyde	<5	5.1	<5	<5	µg/L	ML/SM 6252
Glyphosate	<6	<6	<6	<6	µg/L	EPA 547
Total Haloacetic Acids (HAA5)	<1	<1	<1	<1	µg/L	ML/S6251B
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 525.2
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 525.2
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 525.2
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Lead	16	6.8	<0.5	<0.5	µg/L	EPA 200.8
Lindane	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 505
Manganese	9	6	4	5	µg/L	EPA 200.8
Mercury	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Methoxychlor	<0.05	<0.05	<0.1	<0.05	µg/L	ML/EPA 505
Methyl isobutyl ketone (MIBK)	<5	<5	<5	<5	µg/L	ML/EPA 524.2
Methyl-tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Molinate	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 525.2
Naphthalene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Nickel	2	3	3	3	µg/L	EPA 200.8
Nitrate Nitrogen	4.2	5.0	1.3	30.2	mg/L	EPA 300.0
Nitrite Nitrogen	0.02	0.12	<0.01	0.08	mg/L	EPA 300.0
Nitrobenzene	<5	<5	<5	<5	µg/L	ML/EPA625/8270
N-nitrosodiethylamine (NDEA)	<2	<2	<2	<5	ng/l	ML/EPA 521
N-Nitrosodimethylamine (NDMA)	<2	<2	<2	<2	ng/l	ML/EPA 521
N-nitrosodi-n-propylamine (NDPA)	<2	<2	<2	<7	ng/l	ML/EPA 521
n-propylbenzene (isocumene)	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	µg/L	ML/EPA 515.4
Perchlorate	<4	<4	<4	18	µg/L	EPA 314
Picloram	<0.1	<0.1	<0.1	<0.1	µg/L	ML/EPA 515.4
Polychlorinated Biphenyls	<0.08	<0.08	<0.08	<0.08	µg/L	ML/EPA 505
Propachlor	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 525.2
Selenium	<2	<2	<2	<2	µg/L	EPA 200.8
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	µg/L	ML/EPA 515.4
Simazine	<0.05	<0.05	0.20	0.1	µg/L	ML/EPA 525.2
Styrene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Tertiary amyl methyl ether	<3	<3	<3	<3	µg/L	ML/EPA 524.2
Tertiary butyl alcohol	<2	<2	<2	<2	µg/L	ML/EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Thiobencarb	<0.2	<0.2	<0.2	<0.2	µg/L	ML/EPA 525.2
Toluene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Total Nitrate/Nitrite (as N)	4.2	5.1	1.3	30.3	mg/L	EPA 300.0
Total Trihalomethanes (THM)	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 505
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 624
Vanadium	2	4	5	4	µg/L	EPA 200.8
Vinyl Chloride	<0.3	<0.3	<0.3	<0.3	µg/L	ML/EPA 524.2
Xylenes	<1.5	<1	<1.5	<1.5	µg/L	ML/EPA 524.2

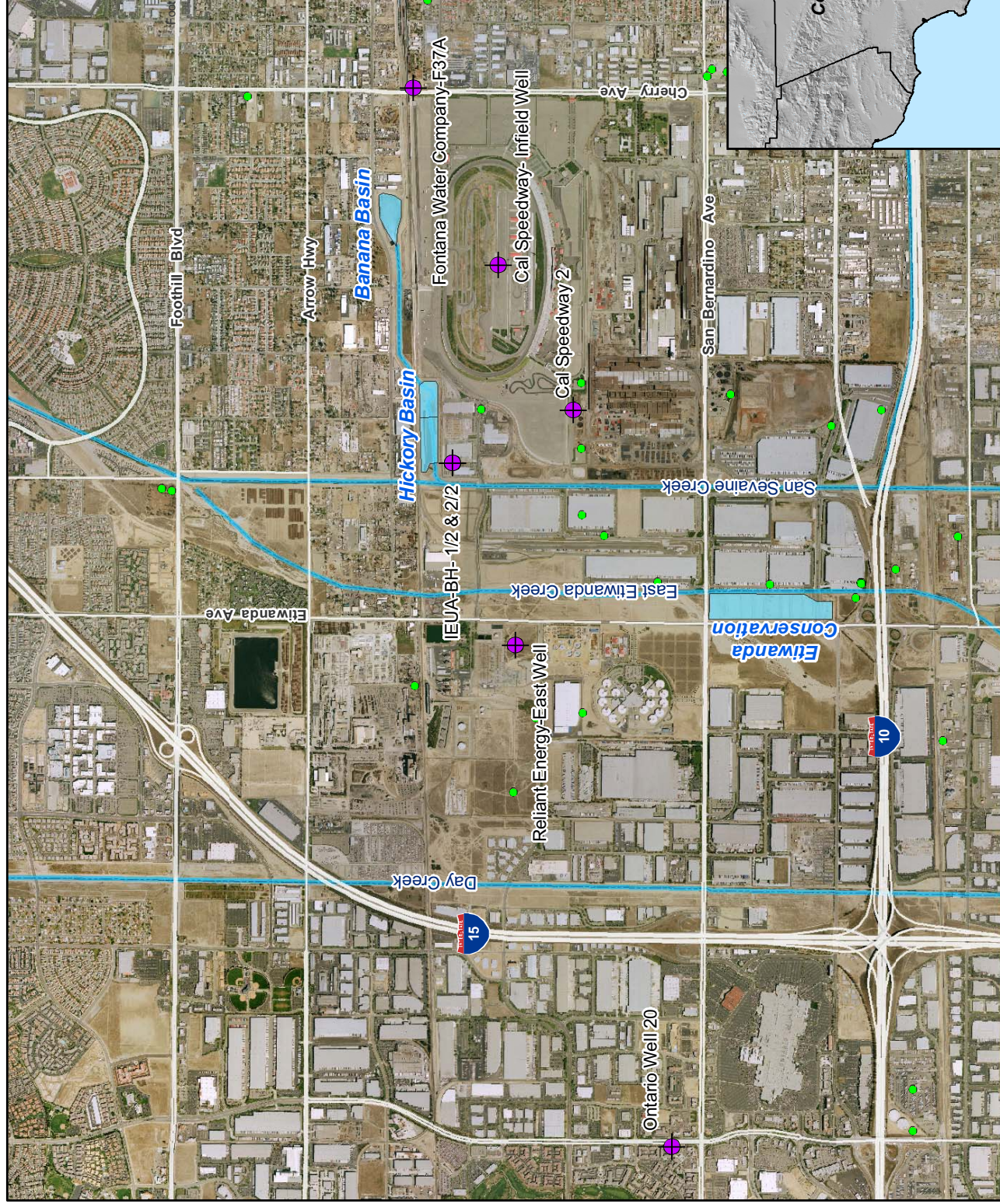


Main Map Features

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



Chino Basin Recycled Water Groundwater Recharge Programs
Basin Locations

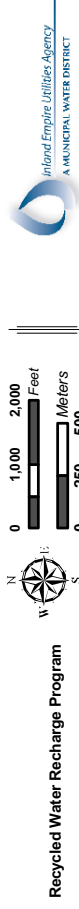


Main Map Features

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

Monitoring Well Network
Hickory and Banana Basins

Figure 2-1

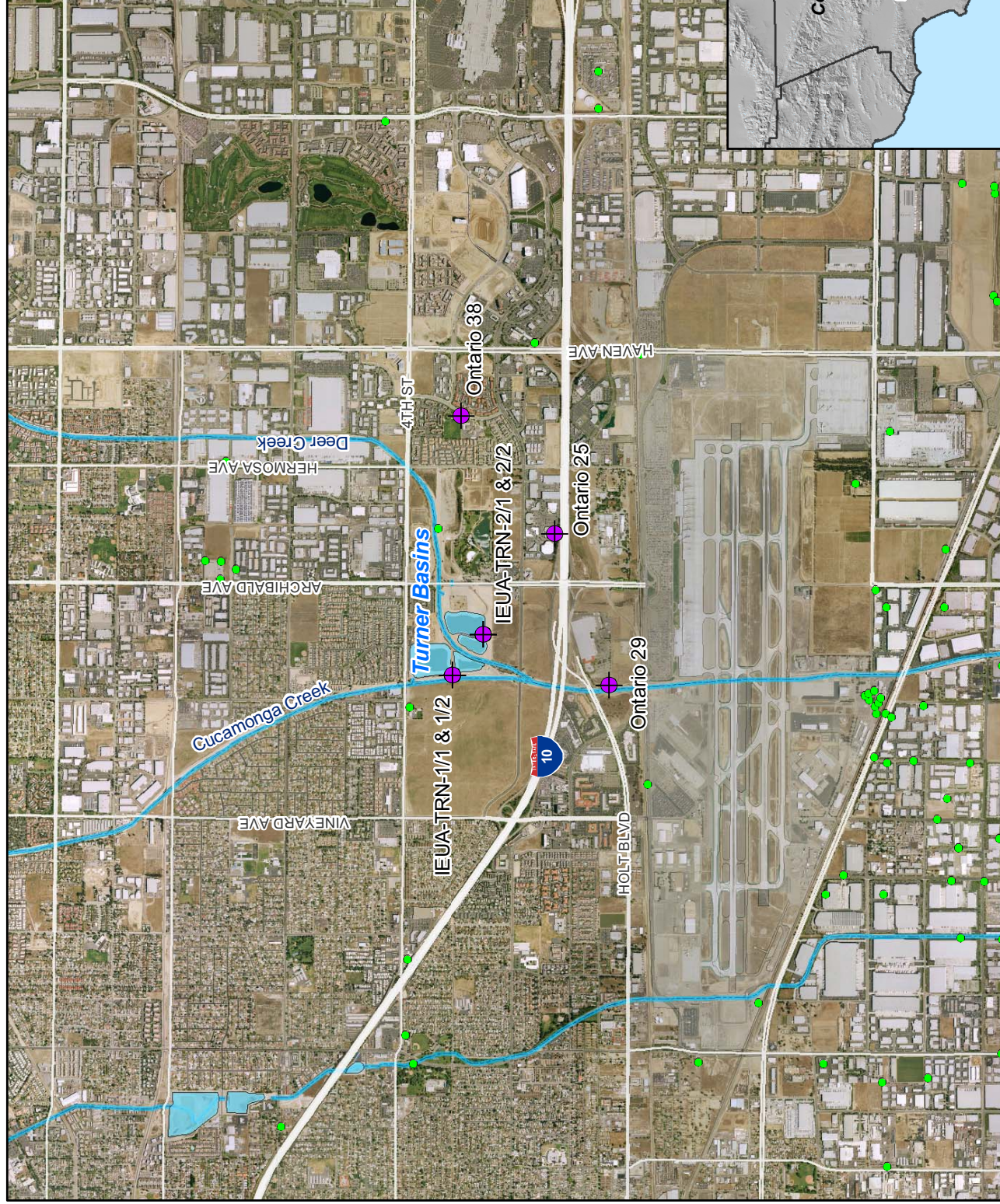


Recycled Water Recharge Program



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT





Main Map Features

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

Monitoring Well Network
Turner Basins

Recycled Water Recharge Program

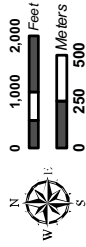
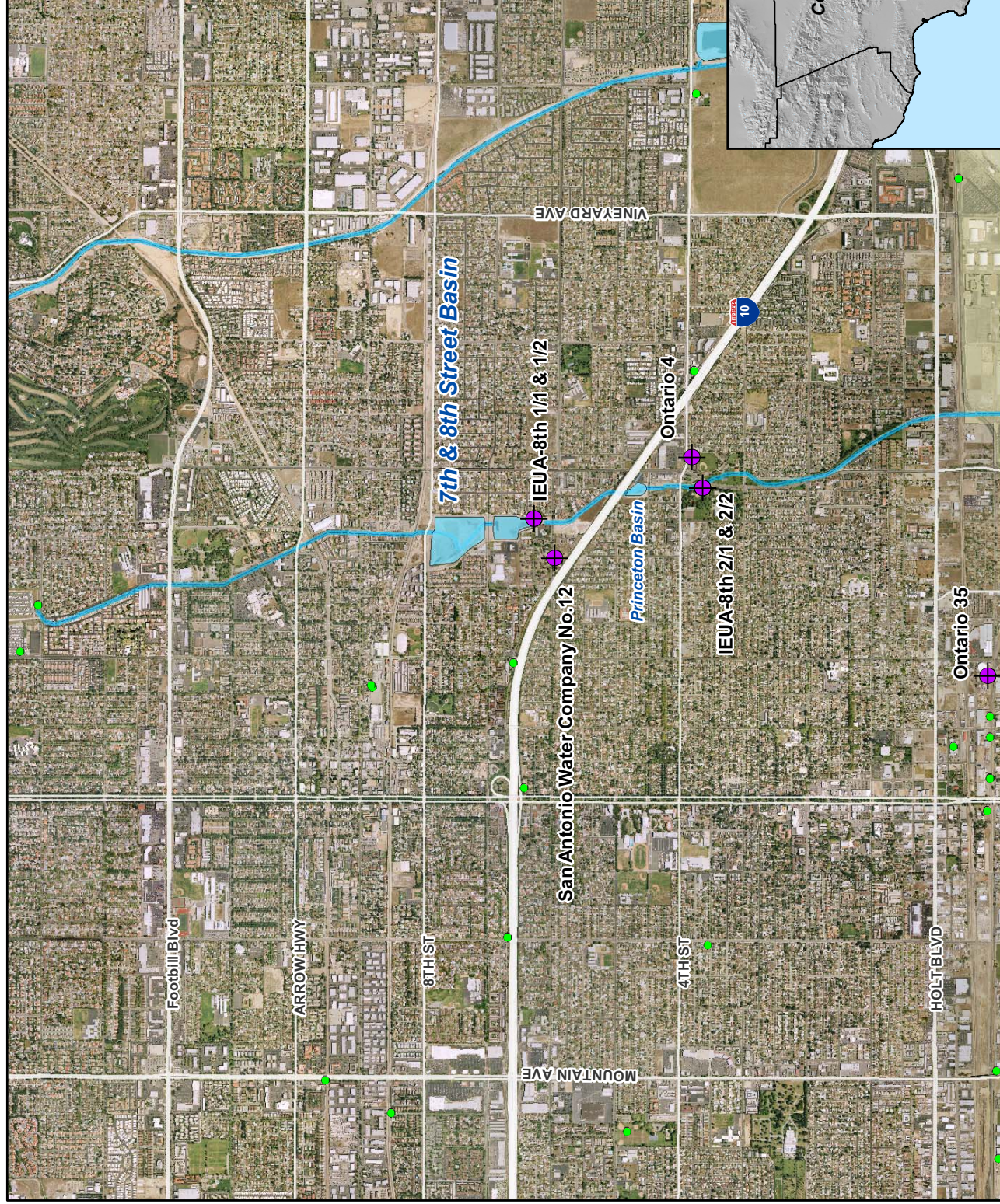


Figure 2-2



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



N
W E S



0 1,000 2,000 Feet

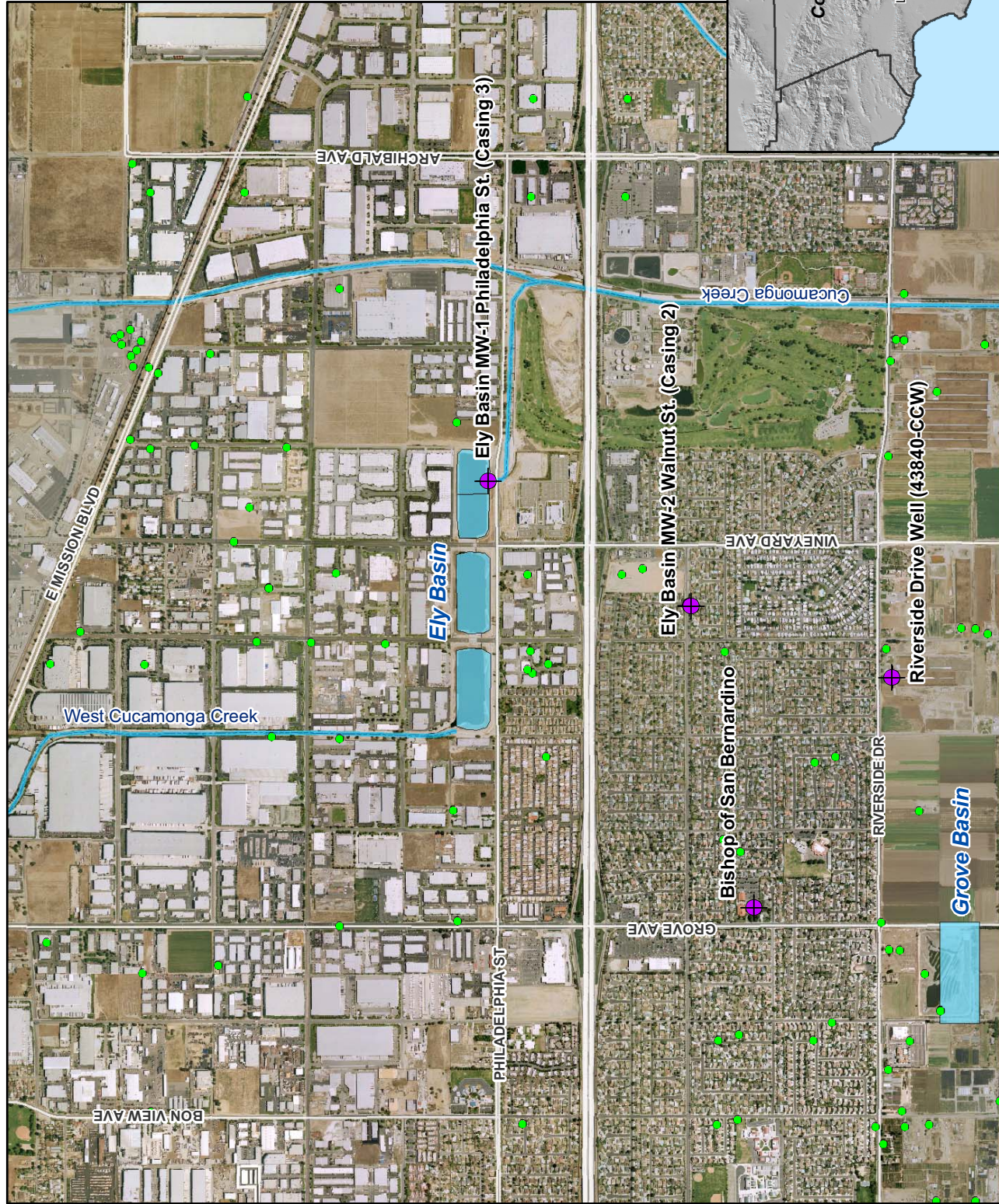


0 250 500 Meters



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT





Monitoring Well Network
Ely Basins

Figure 2-4

