



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT



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February 15, 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 October through December 2007**

Dear Mr. Thibeault,

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) hereby submit the *Quarterly Monitoring Report* for the fourth quarter of 2007 (4Q07), October 1 through December 31, 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.

The monitoring results for 4Q07 show that the Groundwater Recharge Program was in compliance with all primary maximum contaminant levels (MCLs).

Furthermore, the Chino Basin Watermaster hereby certifies that, during the period of October 1 through December 31, 2007, 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 February 2008 in the Cities of Chino and Rancho Cucamonga.

Patrick Sheilds
Executive Manager of Operations

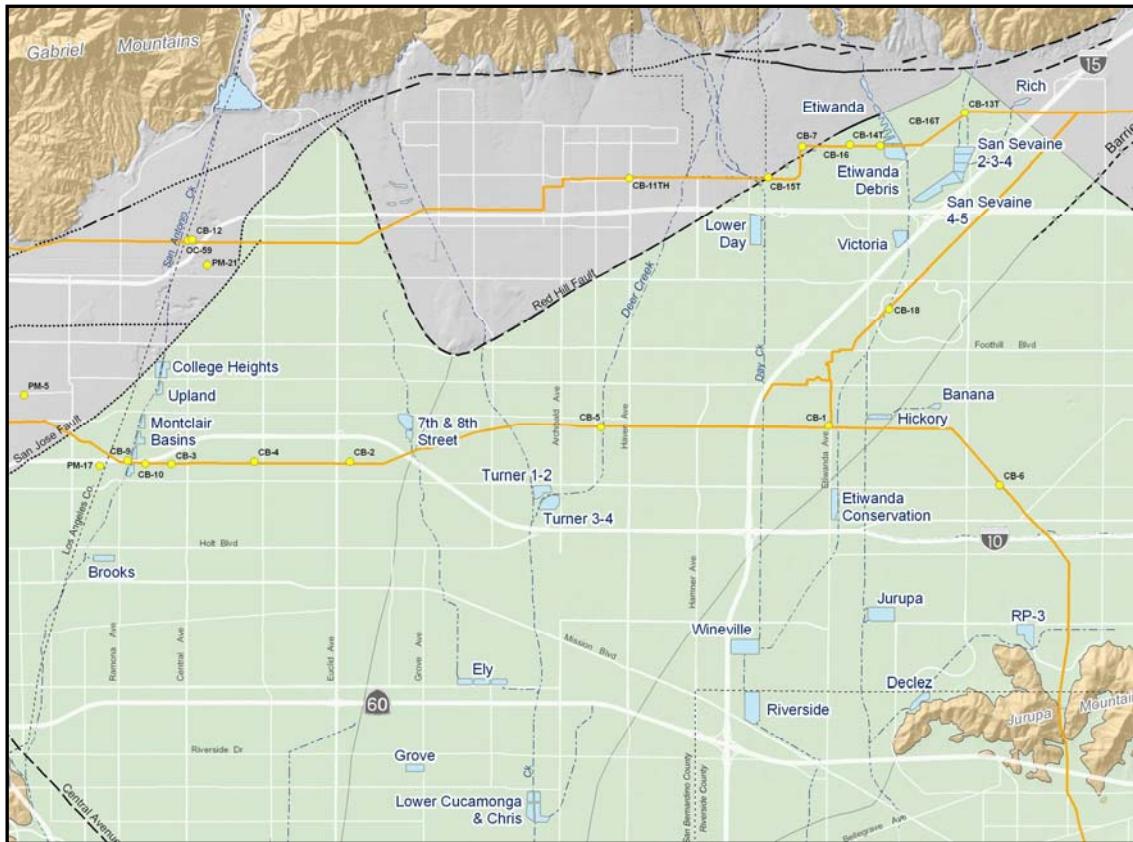
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Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report October 1 through December 31, 2007



Prepared by:



February 15, 2008

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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 operation and maintenance 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 Fourth Quarter of 2007 (4Q07), which is due to the Regional Board by February 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.

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 water. 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. Finally, 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.

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 4Q07 data.

Recycled Water Specifications A.5 though A.9 are narrative limits in the permit and corresponding monitoring data are presented in Tables 2-1 through 2-2. None of these limits were exceeded in 4Q07.

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 1Q07 through 4Q07 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 for various chemicals were not exceeded during 4Q07.

For 4Q07, the VOCs reported are EPA Method 624 results for RP-1 002 effluent, which is a blend of RP-1 and RP-4 effluent, for constituents where the data was available. Volatile organic chemicals (VOCs) using EPA Method 524.2 were not analyzed during 4Q07, two sampling events will take place in 1Q08 and both sets of data will be reported.

Due to the volume of sample required for analyses, IEUA has selected a recycled water sampling point along the distribution pipeline at the turnout to Reliant Energy (an IEUA recycled water customer). IEUA selected this location as being 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. During the prescribed sampling date for 4Q07, the 8th Street Basin was undergoing its start-up period, while no other basin was receiving recycled water recharge. As the compliance point for the 8th Street Basin has not yet been determined, TTHMs and HAA5 were sampled at all 8th Street Basin lysimeters and show a general decrease with depth. All 8th Street Basin results for 4Q07 were significantly less than their respective limits. For 4Q07, the compliance point for TTHMs and HAA5 will be the 8th Street Basin 25-foot depth lysimeter; however, the final compliance point for this site will be determined at the conclusion of its start-up period evaluation.

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, and Hickory Basins.

Compliance monitoring points have not yet been established for the 7th & 8th Street Basins; therefore all lysimeter sampling data collected during 4Q07 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. ($TOC_{avg} = 0.5 \text{ mg/L} \div RWC_{avg}$). Total nitrogen compliance is based on a 4-sample running average with a limit of 5 mg/L.

C. Diluent Water

During 4Q07, a draft Diluent Water Monitoring Plan was submitted for comment to the CDPH and Regional Board per the requirement of Order R8-2007-0039. While awaiting comments to the plan, IEUA initiated the draft plan. For 4Q07, diluent water sampling was conducted at the recommend basins, namely Montclair, Turner 1, and Ely 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.

D. Groundwater Monitoring Wells

Groundwater quality within the vicinity of Banana and Hickory Basins is 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 four wells; and 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 2-2 through 2-4, respectively.

The groundwater constituents analyzed from the monitoring wells during 4Q07 are presented in Table 2-8.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all Phase I and Phase II basins. The 7th & 8th Street, Ely, and Hickory 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 4Q07. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff captured during 4Q07 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, lysimeter and monitoring well sampling.

The 8th Street Basin start-up was interrupted by storm flows for the entire month of December 2007. The start-up period is expected resume in mid to late 1Q08.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 4Q07 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 Phase I and Phase II basins 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 within 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.

7. WateReuse Study

IEUA is participating in WateReuse Foundation research study WR-06-018, which includes the testing of San Antonio Water Company (SAWCO) Well No. 12. 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 4Q07, Well No. 12 was tested on November 15, 2007 and discharged approximately 27,000 gallons; Well No. 12 was also tested on December 17, 2007 and discharged approximately 24,000 gallons. Laboratory results for the two sampling/discharge events are included in Table 7-1.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for October 2007
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU 2.5;10	mg/L 16	mg/L 10	mg/L 6<pH<9	mg/L 10	unit 6<pH<9	μho/cm	mg/L	mg/L	mpn/100mL 2.2;23;240	NTU 2.5;10	mg/L 16	mg/L 10	mg/L 6<pH<9	mg/L 10	unit 6<pH<9	μho/cm	mg/L	mg/L	mpn/100mL 2.2;23;240
10/01/07	0.7	5.6			7.1	800			<2		NS	NS	NS		NS	NS	NS	NS	NS	NS
10/02/07	0.8	5.5	5.6	6.6	5.8	7.1	820	498	<2		NS	NS	NS		NS	NS	NS	NS	NS	NS
10/03/07	0.7	5.3				7.1	835		<2		NS	NS	NS		NS	NS	NS	NS	NS	NS
10/04/07	0.8	5.3	5.9		6.1	7.2	835		2		NS	NS	NS		NS	NS	NS	NS	NS	NS
10/05/07	0.9	5.2				7.2	825		<2		NS	NS	NS		NS	NS	NS	NS	NS	NS
10/06/07	0.9	5.7				7.2	820		<2		0.8	NS	NS		NS	6.7	NS	NS	NS	NS
10/07/07	0.9	6.5	5.3		5.3	7.2	825		<2		0.2	13.9	19.7		19.7	7.0	915		4	
10/08/07	1.0	6.5				7.1	820		<2		0.2	9.5	13.5		13.6	6.9	880		<2	
10/09/07	0.9	6.0	5.7	6.8	5.7	7.1	810	492	146	2	0.4	9.6	8.7	10.2	8.7	6.7	875	825	149	<2
10/10/07	0.9	5.6				7.2	810		<2		0.3	8.0	6.2		6.2	6.8	850		<2	
10/11/07	0.9	5.2	7.0		7.1	7.2	820		<2		0.4	8.8	9.5		9.5	6.6	870		<2	
10/12/07	0.8	5.1				7.2	820		2		0.6	9.2	8.4		8.4	6.7	880		<2	
10/13/07	0.9	5.3				7.2	830		2		1.3	13.1	12.5		12.5	6.6	890		<2	
10/14/07	0.9	5.5	6.9		7.3	7.2	810		<2		1.5	14.6	14.4		14.4	6.5	940		<2	
10/15/07	1.0	5.9				7.1	870		<2		1.2	12.1	10.3		10.4	6.6	910		<2	
10/16/07	0.9	5.7	7.4		7.4	7.2	855	520		<2		1.2	11.7	7.5	9.2	7.5	6.6	910	546	<2
10/17/07	0.8	5.7				7.1	850		<2		1.2	11.7	7.9		7.9	6.7	895		<2	
10/18/07	0.8	5.4	6.8		6.8	7.1	835		<2		0.6	9.3	4.9		4.9	6.6	865		<2	
10/19/07	0.7	5.3				7.1	825		2		0.3	7.1	2.1		2.2	6.6	845		<2	
10/20/07	0.8	5.1				7.2	795		<2		0.3	6.1	2.0		2.0	6.7	850		<2	
10/21/07	0.7	NS				7.2	NS		<2		0.3	5.5	1.1		1.1	6.8	840		<2	
10/22/07	0.7	NS				7.5	NS		70		0.2	5.4	2.2		2.2	6.9	855		<2	
10/23/07	0.8	NS				7.6	NS		<2		0.2	5.2	1.9	1.9	1.9	6.8	870	500	<2	
10/24/07	0.8	5.7				7.4	860		<2		0.2	4.9	1.7		1.7	6.8	850		<2	
10/25/07	0.7	5.5	6.7		6.7	7.1	850		<2		0.2	4.8	1.5		1.5	6.7	850		<2	
10/26/07	0.7	5.4				7.2	860		<2		0.2	4.6	1.7		1.8	6.7	850		<2	
10/27/07	0.8	5.6				7.2	850		<2		0.2	4.7	1.8		1.8	6.7	860		<2	
10/28/07	0.8	5.6	6.3			7.2	820		2		0.2	4.8	1.7		1.7	6.7	850		<2	
10/29/07	0.9	5.5				7.2	825		<2		0.2	4.8	1.8		1.8	6.7	840		<2	
10/30/07	1.0	11.3	7.5		7.6	7.2	870	518		<2		0.3	5.1	2.2	2.5	2.2	6.7	825	478	<2
10/31/07	1.0	11.6				7.1	845		<2		0.3	5.2	2.4		2.8	6.8	840		<2	
Avg	0.8	6.0	6.5	6.7	6.6	7.2	832	507	146	<4	0.5	8.0	5.9	5.9	5.9	6.7	868	587	149	<2
Min	0.7	5.1	5.3	6.6	5.3	7.1	795	492	146	<2	0.2	4.6	1.1	1.9	1.1	6.5	825	478	149	<2
Max	1.0	11.6	7.5	6.8	7.6	7.6	870	520	146	70	1.5	14.6	19.7	10.2	19.7	7.0	940	825	149	4

Note: Turbidity and pH is monitored continuously at RP-1 and RP-4.

Blank cells indicate that analysis was not run for a constituent on that particular date.

NS - No Sample

Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water

TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-4

Bolded characters signify an exceedance of a permit limitation

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for November 2007
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU 2;5;10	mg/L 16	mg/L 10	mg/L 6<pH<9	mg/L unit	μho/cm 2.2;23;240	mg/L 2.2;23;240	mg/L 2.2;23;240	mg/L 2.2;23;240	mpn/100mL 2.2;23;240	NTU 2;5;10	mg/L 16	mg/L 10	mg/L unit	mg/L 6<pH<9	μho/cm 2.2;23;240	mg/L 2.2;23;240	mg/L 2.2;23;240	mg/L 2.2;23;240	mpn/100mL 2.2;23;240
11/01/07	0.9	5.4	7.4	7.6	7.2	830			<2		0.4	5.5	2.2	2.3	6.8	820			<2	
11/02/07	1.0	5.3			7.1	805			2		0.3	5.2	1.7	1.7	6.8	825			<2	
11/03/07	1.0	5.4			7.1	800			<2		0.2	5.1	1.1	1.3	6.8	820			<2	
11/04/07	1.0	5.5	7.0	7.0	7.1	800			<2		0.2	5.2	0.3	0.3	6.8	820			<2	
11/05/07	1.0	5.2			7.1	830			2		0.3	5.0	0.4	0.4	6.8	840			<2	
11/06/07	1.0	5.5	7.9	8.9	7.9	7.1	860	512	139	<2		0.4	5.0	0.6	1.5	0.6	6.8	830	490	133
11/07/07	0.9	5.1			7.1	830			<2		0.4	4.8	1.5	1.5	6.8	820			<2	
11/08/07	1.0	5.0	9.1		9.3	7.1	820			<2		0.3	4.5	2.1	2.1	6.8	810			<2
11/09/07	0.9	5.0			7.1	815			<2		0.3	4.6	2.8	2.8	6.8	825			<2	
11/10/07	0.9	5.3			7.1	805			<2		0.3	5.0	2.8	2.8	6.8	820			<2	
11/11/07	0.9	5.3	7.7		7.9	7.1	850			<2		0.3	5.3	2.0	2.0	6.8	845			<2
11/12/07	0.9	5.3			7.1	820			<2		0.3	5.4	1.6	1.6	6.8	850			<2	
11/13/07	0.9	5.3	7.3		7.5	7.1	840	494		<2		0.3	5.2	1.7	2.4	1.7	6.8	880	494	
11/14/07	0.9	5.3			7.1	832			<2		0.2	4.8	2.5	2.5	6.8	850			<2	
11/15/07	0.9	6.1	8.8		9.2	7.1	800			QC		0.2	5.1	5.2	5.2	6.8	810			QC
11/16/07	1.0	8.2			7.1	810			<2		0.2	5.1	5.4	5.4	6.8	835			<2	
11/17/07	1.0	5.6			7.1	800			<2		0.1	4.7	4.1	4.1	6.8	840			<2	
11/18/07	0.9	5.6	7.4		7.7	7.1	835			<2		0.1	4.9	3.8	3.8	6.8	835			<2
11/19/07	0.9	8.6			7.1	810			4		0.2	5.1	2.9	2.9	6.8	830			<2	
11/20/07	0.9	9.6	5.7		6.0	7.1	810	488		<2		0.1	4.8	3.2	3.7	3.2	6.7	825	474	
11/21/07	0.9	5.0			7.1	805			<2		0.1	4.9	4.0	4.0	6.7	820			<2	
11/22/07	0.9	5.3			7.1	900			<2		0.1	5.2	3.1	3.1	6.6	840			<2	
11/23/07	0.8	5.0			7.1	840			<2		0.1	4.9	3.4	3.4	6.6	860			<2	
11/24/07	0.8	5.1			7.1	835			<2		0.1	4.7	3.8	3.8	6.7	855			<2	
11/25/07	0.8	5.6	8.1		8.3	7.1	810			<2		0.1	5.0	3.4	3.4	6.7	1030			<2
11/26/07	0.9	5.8			7.1	835			<2		0.1	4.9	2.7	2.7	6.6	830			<2	
11/27/07	1.0	7.1	7.3		7.3	7.1	895	542		4		0.1	4.6	2.6	3.2	2.6	6.6	820	478	
11/28/07	0.9	6.1			7.1	880			<2		0.1	4.5	3.3	3.3	6.6	810			<2	
11/29/07	0.8	6.5	9.1		9.1	7.0	920			<2		0.1	4.7	3.4	3.4	6.7	815			<2
11/30/07	1.1	6.4			7.1	885			<2		0.1	4.5	2.9	2.9	6.7	790			<2	
Avg	0.9	5.8	7.7	8.9	7.9	7.1	834	509	139	<2		0.2	4.9	2.7	2.7	2.7	6.7	837	484	133
Min	0.8	5.0	5.7	8.9	6.0	7.0	800	488	139	<2		0.1	4.5	0.3	1.5	0.3	6.6	790	474	133
Max	1.1	9.6	9.1	8.9	9.3	7.2	920	542	139	4		0.4	5.5	5.4	3.7	5.4	6.8	1030	494	133

Note: Turbidity and pH is monitored continuously at RP-1 and RP-4.

Blank cells indicate that analysis was not run for a constituent on that particular date.

Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water

QC: Quality Control Test Failure

TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-4

Bolded characters signify an exceedance of a permit limitation

Table 2-1c
 Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for December 2007
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO ₃ -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU 2;5;10	mg/L 16	mg/L 10	mg/L 10	mg/L 6<pH<9	unit 2.2;23;240	μho/cm 6<pH<9	mg/L 540	mg/L 144	mpn/100mL 2.2;23;240	NTU 2;5;10	mg/L 16	mg/L 10	mg/L 10	mg/L 6<pH<9	unit 2.2;23;240	μho/cm 6<pH<9	mg/L 540	mg/L 144	mpn/100mL 2.2;23;240
12/01/07	1.6	7.3			7.0	880		<2			0.1	5.5	3.2		6.7	795			<2	
12/02/07	1.6	7.8	8.9	9.2	7.0	955		<2			0.2	6.3	3.5		9.2	6.8	840		2	
12/03/07	0.9	6.7			7.0	845		2			0.2	5.9	2.9		6.7	835			<2	
12/04/07	0.9	6.8	9.5	10.1	9.8	7.0	920	540	144	<2	0.2	6.3	3.6	4.0	9.8	6.7	835	470	135	
12/05/07	1.1	6.8			7.0	905		4			0.1	5.9	3.7		6.7	815			<2	
12/06/07	1.0	6.7	10.1		10.2	7.0	890			4	0.1	5.2	3.5		10.2	6.7	800		<2	
12/07/07	1.0	6.4			7.0	820		2			0.1	4.6	3.9		6.7	795			<2	
12/08/07	0.9	5.9			7.0	850		2			0.1	4.5	4.4		6.7	795			<2	
12/09/07	0.8	5.8	9.6		9.7	7.0	900			2	0.2	4.7	4.5		9.7	6.8	820		<2	
12/10/07	1.1	5.9			7.0	912		4			0.2	4.7	4.4		6.7	811			<2	
12/11/07	1.0	6.4	9.7		9.7	7.0	920	534		<2	0.3	5.0	4.9	5.4	9.7	6.8	795	478		
12/12/07	0.9	6.4			7.0	920		<2			0.4	4.9	5.3		6.8	790			<2	
12/13/07	0.8	6.3	8.5		8.5	7.0	910			<2	0.4	4.9	5.5		8.5	6.7	790		2	
12/14/07	0.8	5.8			7.0	1020		<2			0.4	4.7	5.8		6.7	810			<2	
12/15/07	0.8	5.7			7.1	995		<2			0.3	4.7	5.3		6.7	820			<2	
12/16/07	0.9	5.8	7.4		7.4	7.0	895			<2	0.4	5.1	4.6		7.4	6.7	825			
12/17/07	1.1	5.9			7.0	890		2			0.3	5.1	4.1		6.8	810			<2	
12/18/07	1.1	6.2	6.5	11.7	6.5	7.0	910	536		<2	0.2	5.0	4.1	4.2	6.5	6.7	820	474		
12/19/07	1.1	5.9			7.0	895		2			0.2	5.0	4.5		6.6	805			<2	
12/20/07	1.0	6.2	6.4		6.4	7.0	910			2	0.3	5.1	4.2		6.4	6.6	790		<2	
12/21/07	0.9	5.8			7.0	930		<2			0.3	5.2	3.9		6.6	810			4	
12/22/07	0.9	5.7			7.0	925		<2			0.4	5.5	3.5		6.9	820			<2	
12/23/07	0.8	5.7			7.0	905		4			0.3	5.6	2.5		6.7	780			<2	
12/24/07	0.8	5.9			7.0	915		<2			0.2	5.4	2.2		6.7	830			<2	
12/25/07	0.7	5.5			7.1	890		2			0.2	5.3	1.2		6.8	815			<2	
12/26/07	0.7	5.5			7.0	895		<2			0.2	4.8	2.1		6.8	810			<2	
12/27/07	0.7	5.9	6.2		6.2	7.1	865	538		2	0.2	5.2	4.3		6.2	6.8	780	478		
12/28/07	0.7	5.6			7.1	950		<2			0.2	5.2	4.5		6.7	805			<2	
12/29/07	0.7	5.5			7.1	935		2			0.2	5.5	5.2		6.8	815			<2	
12/30/07	0.8	5.6	6.9		6.9	7.0	870			<2	0.2	5.3	5.0		6.9	6.8	940		<2	
12/31/07	0.7	5.6			7.1	845		2			0.3	5.3	4.9		6.7	810			<2	
Avg	0.9	6.1	8.1	10.9	8.2	7.0	905	537	144	<2	0.2	5.2	4.0	4.6	8.2	6.7	813	475	135	
Min	0.7	5.5	6.2	10.1	6.2	7.0	820	534	144	<2	0.1	4.5	1.2	4.0	6.2	6.6	780	470	135	
Max	1.6	7.8	10.1	11.7	10.2	7.1	1020	540	144	4	0.4	6.3	5.8	5.4	10.2	6.9	940	478	135	

Note:

Blank cells indicate that analysis was not run for a constituent on that particular date.

Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water
 TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-4
Bolded characters signify an exceedance of a permit limitation

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.
Jan-07	7.7	7.3	488	467
Feb-07	6.2	7.1	481	468
Mar-07	6.7	6.9	490	470
Apr-07	5.6	6.7	491	472
May-07	5.6	6.5	489	475
Jun-07	6.0	6.5	495	477
Jul-07	5.1	6.3	492	479
Aug-07	5.2	6.3	478	479
Sep-07	5.9	6.2	478	480
Oct-07	6.0	6.2	517	485
Nov-07	7.6	6.2	514	490
Dec-07	7.4	6.3	522	495
Avg	6.0	6.6	487	474
Min	5.1	6.2	478	467
Max	7.7	7.3	495	480
Limit		8.0		550

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

Constituent	1Q07	2Q07	3Q07	4Q07	4Q Run.			Method
					Avg.	Limit	Unit	
Inorganic Chemicals								
Aluminum	<25	<25	<25	27	<25	1000	µg/L	EPA 200.8
Antimony	0.7	0.8	0.5	<0.5	0.6	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<0.2	<0.2	<0.6	<0.2	<0.3	7	MFL	EPA 100.2
Barium	16	18	14	6	13	1000	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium	3.1	2.1	4.5	3.2	3.2	50	µg/L	EPA 200.8
Cyanide	5	<5	<6	<6	<6	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.3	0.3	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	2	µg/L	EPA 245.2
Nickel	2	2	3	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	<1	<0.6	1	µg/L	EPA 524.2/624
Carbon Tetrachloride	<0.5	<0.5	<0.5	<1	<0.6	0.5	µg/L	EPA 524.2/624
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<1	<0.6	600	µg/L	EPA 524.2/624
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<1	<0.6	5	µg/L	EPA 524.2/624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<1	<0.6	0.5	µg/L	EPA 524.2/624
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<1	<0.6	6	µg/L	EPA 524.2/624
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	NA	<0.5	6	µg/L	EPA 524.2/624
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2/624
Dichloromethane	<0.5	<0.5	<0.5	<1	<0.6	5	µg/L	EPA 524.2/624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,3-Dichloropropene	<0.5	<0.5	<0.5	<1	<0.6	0.5	µg/L	EPA 524.2/624
Ethylbenzene	<0.5	<0.5	<0.5	<1	<0.6	300	µg/L	EPA 524.2/624
Monochlorobenzene	<0.5	<0.5	<0.5	<1	<0.6	70	µg/L	EPA 524.2/624
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	NA	<0.5	13	µg/L	EPA 524.2/624
Styrene	<0.5	<0.5	<0.5	NA	<0.5	100	µg/L	EPA 524.2/624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2/624
Tetrachloroethylene	<0.5	<0.5	<0.5	<1	<0.6	5	µg/L	EPA 524.2/624
Toluene	<0.5	<0.5	<0.5	<1	<0.6	150	µg/L	EPA 524.2/624
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	NA	<0.5	5	µg/L	EPA 524.2/624
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<1	<0.6	200	µg/L	EPA 524.2/624
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<1	<0.6	5	µg/L	EPA 524.2/624
Trichloroethylene	<0.5	<0.5	<0.5	<1	<0.6	5	µg/L	EPA 524.2/624
Trichlorofluoromethane	<0.5	<0.5	<0.5	<2	<0.9	150	µg/L	EPA 524.2/624
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	NA	<0.5	1200	µg/L	EPA 524.2/624
Vinyl Chloride	<0.3	<0.3	<0.3	<1	<0.5	0.5	µg/L	EPA 524.2/624
m,p-Xylene	<1	<1	<1	NA	<1	1750 ¹	µg/L	EPA 524.2/624
o-Xylene	<0.5	<0.5	<0.5	NA	<0.5		µg/L	EPA 524.2/624
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	5.1	3.4	4.6	<1	3.5	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	<20	<9	100	µg/L	EPA 548.1

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

Constituent	4Q Run.						Method	
	1Q07	2Q07	3Q07	4Q07	Avg.	Limit		
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505
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	0.08	<0.05	<0.05	<0.05	<0.06	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	<0.07	<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	0.07	<0.05	<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	3.7	11.8	5.1	3.9	6.1	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	<0.705	<0.618	<0.670	<0.710	<0.676	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	15	pCi/l	EPA 900.0
Tritium	190	<194	<190	<198	<193	20,000	pCi/l	EPA 906
Strontium-90	<0.665	<0.688	<0.640	<0.670	<0.666	8	pCi/l	EPA 905
Gross Beta Particle Activity	9	13	7	8	9	50	pCi/l	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	<0.7	20	pCi/l	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	<25	<25	<25	27	<25	200	µg/L	EPA 200.8
Copper	3.7	11.8	5.1	3.9	6.1	1000	µg/L	EPA 200.8
Corrosivity	-0.3	-0.3	NR	0.7	0.0	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS)	0.14	<0.05	NR	0.12	0.10	500	µg/L	S5540C/EPA 425.1
Iron	NR	NR	NR	65	65	300	µg/L	EPA 200.7
Manganese	8	7	7	1	6	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	NA	<0.5	5	µg/L	EPA 524.2
Odor--Threshold	2	8	NR	4	5 ²	3	TON	SM 2150B
Silver	0.39	<0.25	<0.25	<0.25	<0.29	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	75	38	24	44	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ³	NA	NA	NA	1	NA	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.05	<0.02	<0.01	0.05	<0.03	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	HE-25	HE-25	HE-25	8th-25				
Total Trihalomethanes (TTHMs)	13	16	129	16	44	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<1	<1	3.4	2.9	2.1	60	µg/L	S6251B

NR: Not Required (Annual Requirement)

NA: Not Analyzed this quarter, two sampling events will take place in 1Q08 and both sets of data will be reported.

¹ The sum of m,p-Xylene and o-Xylene is used to calculate compliance for the Total Xylenes limit

² Odor Threshold 4-quarter running average is calculated based on 4Q06, 1Q07, 2Q07, and 4Q07 results

³ Oil & Grease compliance determination not based on 4-quarter running average

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

Constituent	4Q07	Unit	Method		Constituent	4Q07	Unit	Method
Metals								
Chromium (III) ¹	2.4	µg/L	EPA 200.8		Boron	0.2	mg/L	EPA 200.7
Volatile Organic Chemicals (VOCs)								
Acrolein	NR	µg/L	EPA 624		Chromium VI	0.4	µg/L	EPA 218.6
Acrylonitrile	NR	µg/L	EPA 624		Dichlorodifluoromethane	NR	µg/L	EPA 524.2
Bromoform	NR	µg/L	EPA 524.2		Ethyl tertiary butyl ether	NR	µg/L	EPA 524.2
Chlorodibromomethane	NR	µg/L	EPA 524.2		N-nitrosodimethylamine (NDMA)	5	ng/L	1625MOD
Chloroethane	NR	µg/L	EPA 524.2		Tertiary amyl methyl ether	NR	µg/L	EPA 524.2
2-Chloroethylvinylether	NR	µg/L	EPA 624		Tertiary butyl alcohol	NR	µg/L	542.2 MOD
Chloroform	NR	mg/L	EPA 524.2		Vanadium	4	µg/L	EPA 200.8
Dichlorobromomethane	NR	µg/L	EPA 524.2		1,4 - Dioxane	<2	µg/L	8270MOD
Methyl Bromide	NR	µg/L	EPA 524.2		1,2,3-Trichloropropane	NR	µg/L	EPA 524.2
Methyl Chloride	NR	µg/L	EPA 524.2		Chemicals w/ State Notification Levels ²			
Acid Extractables								
2-Chlorophenol	NR	µg/L	EPA 625		n-butylbenzene	<0.5	µg/L	EPA 524.2
2,4-Dichlorophenol	NR	µg/L	EPA 625		sec-butylbenzene	<0.5	µg/L	EPA 524.2
2,4-Dimethylphenol	NR	µg/L	EPA 625		tert-butylbenzene	<0.5	µg/L	EPA 524.2
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625		Carbon disulfide	NR	µg/L	EPA 524.2
2,4-Dinitrophenol	NR	µg/L	EPA 625		Chlorate	669	µg/L	EPA 300.0
2-Nitrophenol	NR	µg/L	EPA 625		2-Chlorotoluene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	NR	µg/L	EPA 625		Diazinon	<0.1	µg/L	EPA 525.2
4-Chloro-3-methylphenol	NR	µg/L	EPA 625		Formaldehyde	<5	µg/L	SM 6252/EPA 8315
Phenol	NR	µg/L	EPA 625		Isopropylbenzene	<0.5	µg/L	EPA 524.2
2,4,6-Trichlorophenol	NR	µg/L	EPA 625		N-propylbenzene	<0.5	µg/L	EPA 524.2
Base/Neutral Extractables								
Acenaphthene	NR	µg/L	EPA 625		1,2,4 -trimethylbenzene	<0.5	µg/L	EPA 524.2
Acenaphthylene	NR	µg/L	EPA 625		1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
Anthracene	NR	µg/L	EPA 625		N-Nitrosodiethylamine (NDEA)	<2	µg/L	EPA 525
Benzidine	NR	µg/L	EPA 625		N-Nitrosopyrrolidine	<2	µg/L	EPA 525
Benzo(a)anthracene	NR	µg/L	EPA 625		Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²			
Benzo(b)fluoranthene	NR	µg/L	EPA 625		Hormones			
Benzo(g,h,i)perylene	NR	µg/L	EPA 625		Ethynodiol estradiol	8.4 / <2	ng/L	HPLC/MS-SEDC
Benzo(k)fluoranthene	NR	µg/L	EPA 625		17-B estradiol	<1 / <2	ng/L	HPLC/MS-SEDC
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625		Estrone	91 / <2	ng/L	HPLC/MS-SEDC
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625		"Industrial" Endocrine Disruptors			
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625		Bisphenol A	<0.4	ng/L	HPLC/MS-SEDC
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625		Nonylphenol and nonylphenol polyethoxylate	<2	ng/L	HPLC/MS-SEDC
Butyl benzyl phthalate	NR	µg/L	EPA 625		Octylphenol and octylphenol polyethoxylate	<0.4	ng/L	HPLC/MS-SEDC
2-Chloronaphthalene	NR	µg/L	EPA 625		Polybrominated	<0.97	ng/L	8270C SIM
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625		PBDE 28	<0.97	ng/L	8270C SIM
Chrysene	NR	µg/L	EPA 625		PBDE 71	<0.97	ng/L	8270C SIM
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625		PBDE 47	2.9	ng/L	8270C SIM
1,3-Dichlorobenzene	NR	µg/L	EPA 625		PBDE 66	<0.97	ng/L	8270C SIM
3,3-Dichlorobenzidine	NR	µg/L	EPA 625		PBDE 100	<0.97	ng/L	8270C SIM
Diethyl phthalate	NR	µg/L	EPA 625		PBDE 99	<2	ng/L	8270C SIM
Dimethyl phthalate	NR	µg/L	EPA 625		PBDE 85	<0.97	ng/L	8270C SIM
Di-n-butyl phthalate	NR	µg/L	EPA 625		PBDE 154	<0.97	ng/L	8270C SIM
2,4-Dinitrotoluene	NR	µg/L	EPA 625		PBDE 153	<0.97	ng/L	8270C SIM
2,6-Dinitrotoluene	NR	µg/L	EPA 625		PBDE 138	<0.97	ng/L	8270C SIM
Di-n-octyl phthalate	NR	µg/L	EPA 625		PBDE 128	<0.97	ng/L	8270C SIM
Azobenzene	NR	µg/L	EPA 625		PBDE 183	<0.97	ng/L	8270C SIM
Fluoranthene	NR	µg/L	EPA 625		PBDE 190	<0.97	ng/L	8270C SIM
Fluorene	NR	µg/L	EPA 625		PBDE 203	<0.97	ng/L	8270C SIM
Hexachlorobutadiene	NR	µg/L	EPA 625		PBDE 206	<97	ng/L	8270C SIM
Hexachlorocyclopentadiene	NR	µg/L	EPA 625		PBDE 209	<97	ng/L	8270C SIM
Hexachloroethane	NR	µg/L	EPA 625		Pharmaceuticals & Other Substances			
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625		Acetaminopen	54 / <10	ng/L	HPLC/MS-SEDC
Iso phorone	NR	µg/L	EPA 625		Amoxicillin	NR	Not Available ³	
Naphthalene	NR	µg/L	EPA 625		Azithromycin	NR	Not Available ³	
Nitrobenzene	NR	µg/L	EPA 625		Caffeine	5.4 / <5	ng/L	HPLC/MS-SEDC
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625		Carbamazepine	14 / 45	ng/L	HPLC/MS-SEDC
N-Nitrosodiphenylamine	NR	µg/L	EPA 625		Ciprofloxacin	NR	Not Available ³	
Phenanthrene	NR	µg/L	EPA 625		Ethylenediamine tetra-acetic acid (EDTA)	<100	ng/L	EPA 300.0MOD
Pyrene	NR	µg/L	EPA 625		Gemfibrozil	<1 / <1	ng/L	HPLC/MS-SEDC
Pesticides								
Aldrin	NR	µg/L	EPA 608		Ibuprofen	<1 / <10	ng/L	HPLC/MS-SEDC
BHC, alpha isomer	NR	µg/L	EPA 608		Iodinated contrast media	1.2	ng/L	HPLC/MS-SEDC
BHC, beta isomer	NR	µg/L	EPA 608		Lipitor	NR	Not Available ³	
BHC, delta isomer	NR	µg/L	EPA 608		Methadone	<5	ng/L	HPLC/MS-SEDC
4,4'-DDT	NR	µg/L	EPA 608		Morphine	NR	Not Available ³	
4,4'-DDE	NR	µg/L	EPA 608		Salicylic acid	<10	ng/L	HPLC/MS-SEDC
4,4'-DDD	NR	µg/L	EPA 608		Tricosan	6.8 / <10	ng/L	HPLC/MS-SEDC
Dieldrin	NR	µg/L	EPA 608		NR: Not Required (Annual Requirement)			
Endosulfan I	NR	µg/L	EPA 608		¹ Trivalent chromium is measured as total chromium			
Endosulfan II	NR	µg/L	EPA 608		² Chemicals w/ State Notification Levels, Nitrosamines, and EDC, Pharmaceuticals & Other Chemicals (Attachment B) were sampled in September 2007 (annual requirement). Results were not reported 3Q07 as IEUA was still awaiting results from contract laboratories: MWH Lab Data for EDCs in Orange CAS Lab Data for EDCs in Blue			
Endosulfan Sulfate	NR	µg/L	EPA 608		³ Analytical Method is not available for this constituent			
Endrin Aldehyde	NR	µg/L	EPA 608					

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
Unit=>	feet		mg/L	mg/L	μmho/cm	mg/L	mg/L	mg/L
8TH-00	0	10/02/07	8.18	9.3	790	4.2	3.9	5.4
8TH-00	0	10/09/07	34.09	16.6	780	2.0	1.8	14.7
8TH-00	0	10/16/07	50.12	10.9	235	1.5	0.4	10.5
8TH-00	0	10/23/07	21.53	10.1	815	4.0	2.4	7.7
8TH-00	0	10/30/07	6.29	2.2	835	1.7	1.5	0.6
8TH-00	0	11/06/07	6.23	3.9	800	2.6	2.5	1.5
8TH-00	0	11/13/07	5.23	5.7	805	4.9	4.8	1.0
8TH-00	0	11/20/07	5.07	3.8	820	2.6	2.5	<0.01
8TH-00	0	11/27/07	6.09	4.2	835	3.0	3.0	<0.01
8TH-00	0	12/04/07	19.49	0.9	175	1.5	<0.1	0.9
8TH-00	0	12/11/07	10.06	1.8	110	0.7	0.6	1.3
8TH-00	0	12/18/07	10.15	2.2	192	0.8	<0.1	2.2
8TH-00	0	12/27/07	24.53		465	0.6	<0.1	0.10
8TH-05	5	10/02/07	59.41	0.8	755	<0.2	<0.1	0.7
8TH-05	5	10/09/07	19.56	1.3	600	0.6	0.7	0.05
8TH-05	5	10/16/07	35.57	0.8	710	<0.2	<0.1	0.8
8TH-05	5	10/23/07	9.97	<0.6	740	0.3	<0.1	<0.5
8TH-05	5	10/30/07	12.77	<0.6	655	0.5	<0.1	<0.5
8TH-05	5	11/06/07	9.93	0.6	660	<0.2	<0.1	0.6
8TH-05	5	11/13/07	10.06	2.2	715	<0.2	<0.1	2.2
8TH-05	5	11/20/07	3.77	1.0	700	0.7	0.6	<0.5
8TH-05	5	11/27/07	2.86	2.4	745	1.1	0.9	<0.01
8TH-05	5	12/04/07	3.47	1.1	735	1.0	0.8	<0.5
8TH-05	5	12/11/07	3.84	1.3	522	0.8	0.7	0.08
8TH-05	5	12/18/07	3.95	0.6	360	0.6	0.5	<0.5
8TH-05	5	12/27/07	6.37		360	0.6	<0.1	0.11
8TH-10	10	10/02/07	19.51	<0.6	555	<0.2	<0.1	0.6
8TH-10	10	10/09/07	18.20	0.9	600	0.4	0.4	0.5
8TH-10	10	10/16/07	93.71	1.8	610	0.4	<0.1	1.7
8TH-10	10	10/23/07	12.43	<0.6	535	0.2	0.1	<0.5
8TH-10	10	10/30/07	10.14	<0.6	520	<0.2	<0.1	<0.5
8TH-10	10	11/06/07	64.90	2.4	655	<0.2	<0.1	2.4
8TH-10	10	11/13/07	24.06	<0.6	715	<0.2	<0.1	<0.5
8TH-10	10	11/20/07	115.56		1760	0.4	<0.1	<0.01
8TH-10	10	12/04/07	6.87	1.7	790	1.6	1.4	<0.5
8TH-15	15	10/02/07	14.83	0.7	520	0.3	0.2	0.6
8TH-15	15	10/09/07	12.04	0.7	625	0.2	0.2	<0.5
8TH-15	15	10/16/07	13.02	1.3	670	0.6	0.6	0.8
8TH-15	15	10/23/07	11.98	0.7	660	<0.2	0.2	<0.5
8TH-15	15	10/30/07	14.37	<0.6	605	<0.2	<0.1	<0.5
8TH-15	15	11/06/07	11.84	<0.6	665	<0.2	<0.1	<0.5
8TH-15	15	11/13/07	10.26	<0.6	715	<0.2	<0.1	<0.5
8TH-15	15	11/20/07	23.59	0.7	740	0.5	0.5	<0.01
8TH-15	15	11/27/07	4.88	2.3	1060	1.8	1.7	0.04
8TH-15	15	12/04/07	4.57	2.0	1070	1.7	1.7	<0.5
8TH-15	15	12/11/07	22.55	1.8	830	1.3	1.3	<0.5
8TH-15	15	12/18/07	10.89	<0.6	735	0.5	0.4	<0.5
8TH-15	15	12/27/07	10.26		140	0.6	0.1	0.06
8TH-25	25	10/02/07	7.93	2.8	1040	2.3	2.1	0.7
8TH-25	25	10/09/07	7.01	2.3	1635	1.9	1.6	0.15
8TH-25	25	10/16/07	8.93	2.2	1380	2.4	2.0	<0.5
8TH-25	25	10/23/07	6.55	0.7	1080	1.7	1.5	<0.5
8TH-25	25	10/30/07	4.55	<0.6	1190	0.8	0.7	<0.5
8TH-25	25	11/06/07	4.60	0.9	1180	0.6	0.5	<0.5
8TH-25	25	11/13/07	3.67	1.4	1070	1.0	0.9	0.06
8TH-25	25	11/20/07	11.00	<0.6	745	<0.2	<0.1	<0.5
8TH-25	25	11/27/07	8.99	<0.6	775	<0.2	<0.1	<0.5
8TH-25	25	12/04/07	6.90	<0.6	780	<0.2	<0.1	<0.5
8TH-25	25	12/11/07	10.58	1.6	705	0.3	0.3	1.4
8TH-25	25	12/18/07	7.28	<0.6	710	0.2	0.2	<0.5
8TH-25	25	12/27/07	3.41		270	0.8	0.1	0.11
8TH-35	35	10/02/07	6.39	2.5	510	1.8	1.4	1.1
8TH-35	35	10/09/07	4.84	1.4	725	0.9	0.9	0.5
8TH-35	35	10/16/07	71.23	12.3	680	0.6	0.2	12.1
8TH-35	35	10/23/07	3.64	0.8	615	1.7	1.7	<0.5
8TH-35	35	10/30/07	4.05	<0.6	535	1.0	0.8	<0.5
8TH-35	35	11/06/07	3.33	<0.6	640	<0.2	<0.1	<0.5
8TH-35	35	11/13/07	3.41	<0.6	690	<0.2	<0.1	0.04
8TH-35	35	11/20/07	14.85	<0.6	745	<0.2	<0.1	<0.01
8TH-35	35	11/27/07	9.93	<0.6	795	<0.2	<0.1	<0.5
8TH-35	35	12/04/07	8.04	<0.6	810	<0.2	<0.1	<0.5
8TH-35	35	12/11/07	10.28	<0.6	813	<0.2	<0.1	<0.5
8TH-35	35	12/18/07	7.10	<0.6	780	<0.2	<0.1	<0.04
8TH-35	35	12/27/07	9.16		140	1.1	<0.1	0.09

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
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L
HKE-0	0	11/06/07	5.16	2.6	825	1.9	1.9	0.7
HKE-0	0	11/13/07	7.30	1.7	720	0.5	0.4	1.3
HKE-0	0	11/20/07	6.89	1.9	815	0.5	0.4	1.5
HKE-0	0	12/04/07	9.43	<0.6	145	0.7	0.6	<0.5
HKE-0	0	12/11/07	6.77	2.5	275	0.7	0.5	2.0
HKE-0	0	12/18/07	12.49	1.1	280	<0.2	<0.1	1.1
HKE-25	25	11/06/07	1.53	5.1	920	5.0	4.9	<0.5
HKE-25	25	11/13/07	2.14	6.8	845	6.6	6.5	<0.5
HKE-25	25	11/20/07	1.21	3.5	885	3.2	3.2	<0.5
HKE-25	25	11/27/07	1.18	3.0	940	2.7	2.7	<0.5
HKE-25	25	12/04/07	1.64	4.1	880	3.3	3.1	1.0
HKE-25	25	12/11/07	1.33	3.9	900	3.2	3.2	0.7
HKE-25	25	12/18/07	1.16	3.3	870	2.9	2.9	<0.5
Ely Basin No. 3								
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO ₃ -N	TKN+NO ₂ -N
Unit==>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L
ELY3E-00	0	11/21/07	7.39	7.6	795	6.9	6.5	1.1
ELY3E-00	0	11/27/07	6.92	8.5	825	6.8	6.8	1.7
ELY3E-00	0	12/04/07	10.35	4.9	340	3.7	3.2	1.7
ELY3E-00	0	12/11/07	8.21	5.5	397	4.2	3.6	1.9
ELY3E-00	0	12/18/07	8.71	5.4	380	3.7	3.4	2.0
ELY3E-00	0	12/27/07	6.96		268	2.3	2.2	0.12
ELY3E-15	15	11/21/07	3.62	10.9	695	10.3	9.9	0.9
ELY3E-15	15	11/27/07	3.58	10.8	740	10.2	10.1	0.7
ELY3E-15	15	12/04/07	3.57	6.2	760	6.1	5.9	<0.5
ELY3E-15	15	12/11/07	3.13	4.1	711	3.6	3.2	0.9
ELY3E-15	15	12/18/07	3.02	2.1	490	1.8	1.7	<0.5
ELY3E-15	15	12/27/07	2.79		420	2.0	1.8	0.09

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

Table 2-6a
Diluent Water Monitoring Results

Constituent	West Cucamonga Channel @ 7th & 8th Street Basin	San Sevaine Channel @ Hickory Dam	Deer Creek @ Turner Inlet	Unit	Method
NO ₂ -N	0.01	<0.01	<0.01	mg/L	EPA 300.0
NO ₃ -N	2.1	<0.1	<0.1	mg/L	EPA 300.0
TDS	368	336	394	mg/L	SM 2540C
Total Coliform	NA	>2300	>2300	mpn/100ml	SM 9221B
Oil & Grease	2	2	2	mg/L	EPA 1664A
Inorganic Chemicals					
Aluminum	184	900	108	µg/L	EPA 200.7
Antimony	0.69	1.4	0.7	µg/L	EPA 200.8
Arsenic	15	<2	<2	µg/L	EPA 200.8
Asbestos	<1.51	<5.02	<5.02	MFL	EPA 100.2
Barium	51	50	51	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	2.5	6.2	3.1	µg/L	EPA 200.7
Cyanide	<0.006	<0.006	<0.006	µg/L	SM 4500-CN E
Fluoride	0.3	0.2	0.2	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Nickel	2	4	2	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	NA	NA	NA	µg/L	EPA 524.2
Carbon Tetrachloride	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichlorobenzene	NA	NA	NA	µg/L	EPA 524.2
1,4-Dichlorobenzene	NA	NA	NA	µg/L	EPA 524.2
1,1-Dichloroethane	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichloroethane	NA	NA	NA	µg/L	EPA 524.2
1,1-Dichloroethylene	NA	NA	NA	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	NA	NA	NA	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	NA	NA	NA	µg/L	EPA 524.2
Dichloromethane	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichloropropane	NA	NA	NA	µg/L	EPA 524.2
1,3-Dichloropropene	NA	NA	NA	µg/L	EPA 524.2
Ethylbenzene	NA	NA	NA	µg/L	EPA 524.2
Chlorobenzene	NA	NA	NA	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	NA	NA	NA	µg/L	EPA 524.2
Styrene	NA	NA	NA	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	NA	NA	NA	µg/L	EPA 524.2
Tetrachloroethylene	NA	NA	NA	µg/L	EPA 524.2
Toluene	NA	NA	NA	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	NA	NA	NA	µg/L	EPA 524.2
1,1,1-Trichloroethane	NA	NA	NA	µg/L	EPA 524.2
1,1,2-Trichloroethane	NA	NA	NA	µg/L	EPA 524.2
Trichloroethylene	NA	NA	NA	µg/L	EPA 524.2
Trichlorofluoromethane	NA	NA	NA	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	µg/L	EPA 524.2
Vinyl Chloride	NA	NA	NA	µg/L	EPA 524.2
Total Xylenes	NA	NA	NA	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	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	0.16	<0.1	0.73	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	1.4	2.5	1.7	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	<20	<20	<5	µg/L	EPA 548.1

Table 2-6a
Diluent Water Monitoring Results

Constituent	West Cucamonga Channel @ 7th & 8th Street Basin	San Sevaine Channel @ Hickory Dam	Deer Creek @ Turner 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	6.2	32	<30	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	0.07	<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	0.06	<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)	NA	NA	NA	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	4.8	9.2	5.2	µg/L	S6251B
Bromate	<5	<5	<5	µg/L	EPA 300.1
Chlorite	0.30	0.03	<0.01	mg/L	EPA 300.0
Notification Level Chemicals					
Copper	5.3	16.7	12.7	µg/L	EPA 200.7
Lead	1.3	8.4	<0.5	µg/L	EPA 200.8
Radionuclides					
Combined Radium-226 and Radium 228	<0.68	<0.62	<0.70	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	pCi/l	EPA 900.0
Tritium	<199	<200	<199	pCi/l	EPA 906
Strontium-90	<0.69	<0.64	<0.65	pCi/l	EPA 905
Gross Beta Particle Activity	<3	4	7	pCi/l	EPA 900.0
Uranium	2.3	1.4	<0.7	pCi/l	EPA 200.8
Unregulated Chemicals					
Boron	0.1	0.1	0.1	mg/L	EPA 200.7
Chromium VI	<0.1	0.7	1.0	ug/l	EPA 218.6
Dichlorodifluoromethane	NA	NA	NA	ug/l	EPA 524.2
Ethyl tertiary butyl ether	NA	NA	NA	ug/l	EPA 524.2
N-nitrosodimethylamine (NDMA)	NA	NA	NA	ng/L	1625MOD
Perchlorate	<4	<4	<4	ug/l	EPA 314
Tertiary amyl methyl ether	NA	NA	NA	ug/l	EPA 524.2
Tertiary butyl alcohol	NA	NA	NA	ug/l	542.2 MOD
Vanadium	2.8	8	16	ug/l	EPA 200.8
1,4 - Dioxane	<2	<2	<2	ug/l	8270MOD
1,2,3-Trichloropropane	NA	NA	NA	ug/l	EPA 524.2
Secondary Maximum Contaminant Level Chemicals					
Aluminum	184	900	108	µg/L	EPA 200.7
Corrosivity	NA	1.6	2.6	SI	SM 2330B
Foaming Agents (MBAS)	<0.05	0.06	0.05	mg/L	S5540C/EPA 425.1
Iron	260	955	136	µg/L	EPA 200.7
Manganese	8	55	5	µg/L	EPA 200.7
Odor--Threshold	3	67	17	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	13	64	10	µg/L	EPA 200.7

NA: Not Analyzed

Table 2-6b
Diluent Water Monitoring Results (Stormwater)

Constituent	Ely Basin 1	Lower Day Cell 3	Montclair Basin 3	Turner Basin 1	Unit	Method
NO ₂ -N	0.05	0.02	0.02	0.01	mg/L	EPA 300.0
NO ₃ -N	1.2	0.7	1.0	0.7	mg/L	EPA 300.0
TDS	112	70	60	190	mg/L	SM 2540C
Total Coliform	>1600	>1600	>1600	>1600	mpn/100ml	SM 9221B
Oil & Grease	3.4	2.6	3.6	2.6	mg/L	EPA 1664A
Inorganic Chemicals						
Aluminum	626	1428	559	454	µg/L	EPA 200.7
Antimony	1.9	1.1	3.0	2.4	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<6.69	<6.69	<4.46	<6.69	MFL	EPA 100.2
Barium	28	30	30	34	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	1.8	<0.25	µg/L	EPA 200.7
Chromium	5.1	8.8	5.3	5.3	µg/L	EPA 200.7
Cyanide	<0.006	<0.006	0	<0.006	µg/L	SM 4500-CN E
Fluoride	0.1	<0.1	0.1	0.1	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Nickel	3	6	5	3	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)						
Benzene	NA	NA	NA	NA	µg/L	EPA 524.2
Carbon Tetrachloride	NA	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichlorobenzene	NA	NA	NA	NA	µg/L	EPA 524.2
1,4-Dichlorobenzene	NA	NA	NA	NA	µg/L	EPA 524.2
1,1-Dichloroethane	NA	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichloroethane	NA	NA	NA	NA	µg/L	EPA 524.2
1,1-Dichloroethylene	NA	NA	NA	NA	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	NA	NA	NA	NA	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	NA	NA	NA	NA	µg/L	EPA 524.2
Dichloromethane	NA	NA	NA	NA	µg/L	EPA 524.2
1,2-Dichloropropane	NA	NA	NA	NA	µg/L	EPA 524.2
1,3-Dichloropropene	NA	NA	NA	NA	µg/L	EPA 524.2
Ethylbenzene	NA	NA	NA	NA	µg/L	EPA 524.2
Chlorobenzene	NA	NA	NA	NA	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	NA	NA	NA	NA	µg/L	EPA 524.2
Styrene	NA	NA	NA	NA	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	µg/L	EPA 524.2
Tetrachloroethylene	NA	NA	NA	NA	µg/L	EPA 524.2
Toluene	NA	NA	NA	NA	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	NA	NA	NA	NA	µg/L	EPA 524.2
1,1,1-Trichloroethane	NA	NA	NA	NA	µg/L	EPA 524.2
1,1,2-Trichloroethane	NA	NA	NA	NA	µg/L	EPA 524.2
Trichloroethylene	NA	NA	NA	NA	µg/L	EPA 524.2
Trichlorofluoromethane	NA	NA	NA	NA	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	µg/L	EPA 524.2
Vinyl Chloride	NA	NA	NA	NA	µg/L	EPA 524.2
Total Xylenes	NA	NA	NA	NA	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)						
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<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	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	1.3	0.8	1.8	1	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	µg/L	EPA 548.1

Table 2-6b
Diluent Water Monitoring Results (Stormwater)

Constituent	Ely Basin 1	Lower Day Cell 3	Montclair Basin 3	Turner Basin 1	Unit	Method
Endrin	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	0.11	<0.04	0.09	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	0.2	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts						
Total Trihalomethanes (TTHMs)	NA	NA	NA	NA	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	8	<1	<1	5	µg/L	S6251B
Bromate	<5	<5	<5	<5	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.01	mg/L	EPA 300.0
Notification Level Chemicals						
Copper	13.9	8.25	18.5	7.4	µg/L	EPA 200.7
Lead	4.5	1.36	7.0	1.5	µg/L	EPA 200.8
Radionuclides						
Combined Radium-226 and Radium 228	<0.74	<0.826	<0.855	<0.784	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	pCi/l	EPA 900.0
Tritium	193	<192	<189	<190	pCi/l	EPA 906
Strontium-90	1.20	2.6	0.78	<0.72	pCi/l	EPA 905
Gross Beta Particle Activity	3.4	<3	<3	4	pCi/l	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	pCi/l	EPA 200.8
Unregulated Chemicals						
Boron	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
Chromium VI	<0.1	0.3	0.2	0.5	ug/l	EPA 218.6
Dichlorodifluoromethane	NA	NA	NA	NA	ug/l	EPA 524.2
Ethyl tertiary butyl ether	NA	NA	NA	NA	ug/l	EPA 524.2
N-nitrosodimethylamine (NDMA)	NA	NA	NA	NA	ng/L	1625MOD
Perchlorate	<4	<4	<4	<4	ug/l	EPA 314
Tertiary amyl methyl ether	NA	NA	NA	NA	ug/l	EPA 524.2
Tertiary butyl alcohol	NA	NA	NA	NA	ug/l	542.2 MOD
Vanadium	<1	<1	<1	5	ug/l	EPA 200.8
1,4 - Dioxane	<2	<2	<2	<2	ug/l	8270MOD
1,2,3-Trichloropropane	NA	NA	NA	NA	ug/l	EPA 524.2
Secondary Maximum Contaminant Level Chemicals						
Aluminum	626	1428	559	454	µg/L	EPA 200.7
Corrosivity	NA	NA	NA	NA	SI	SM 2330B
Foaming Agents (MBAS)	0.09	<0.05	0.09	<0.05	mg/L	S5540C/EPA 425.1
Iron	NA	NA	NA	NA	µg/L	EPA 200.7
Manganese	43	33	33	23	µg/L	EPA 200.7
Odor--Threshold	17	17	17	17	TON	SM 2150B
Silver	1.28	0.6	0	1	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	60	28	110	27	µg/L	EPA 200.7

NA: Not Analyzed

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	Active	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
	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
Ely Basin	--	Inland Empire Utilities Agency - 8th-2/2	2460 downgradient	576-616	4	Active	Monitoring
	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

Table 2-8a
Groundwater Monitoring Results (Quarterly)

Sample Location		Date	TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	TDS (mg/L)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (S)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TON)	Ag (µg/L)	Thiobencarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	Cl (mg/L)	Hardness (mg CaCO ₃ /L)	Na (mg/L)	SO ₄ (mg/L)	NH ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO-N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg CaCO ₃ /L)	Dissolved Oxygen (mg/L)
		Banana & Hickory Basins	Turner Basins	7th & 8th Street Basins	Ely Basins	Background Data																									
Banana & Hickory Basins	3600573 Fontana Water Company F37A	10/10/07	<0.1	<1.1	7.60	465	310	30	<3	3.2	0.4	<0.05	72	2	<0.5	1	<0.25	<0.2	0.32	5	16	202	18	15	<0.1	<0.01	10.0	<0.5	163	8.7	
	600660 California Speedway Infield Well	10/9/07	0.2	2.2	7.22	363	326	<25	<3	1.9	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.21	1	13	211	20	27	<0.1	<0.01	7.9	7.9	<0.5	159	7.4
	3601365 California Speedway No. 2	10/9/07	<0.1	<1.1	7.89	435	248	<25	<3	0.7	0.9	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.19	4	9	170	19	13	<0.1	<0.01	3.6	3.6	<0.5	362	6.2
	3600371 Reliant Energy East Well	10/18/07	0.4	<1.1	8.40	355	240	<25	<3	2	0.0	<0.05	39	<1	<0.5	1	<0.25	<0.2	0.33	2	13	158	19	19	<0.1	<0.01	7.2	7.2	<0.5	115	
	3602267 Ontario Well No. 20	10/9/07	<0.1	<1.1	7.78	340	246	<25	<3	2.9	0.3	<0.05	28	<1	<0.5	1	<0.25	<0.2	0.27	4	6	166	14	6	<0.1	<0.01	2.1	2.1	<0.5	161	8.6
	601002 BH-1/2 Well	10/10/07	0.1	<1.1	8.19	375	246	53	<3	<0.5	0.1	<0.05	40	<1	<0.5	2	<0.25	<0.2	0.23	<1	12	161	18	30	<0.1	<0.01	4.1	4.1	<0.5	134	6.4
Turner Basins	3600010 Ontario Well No. 25	10/9/07	<0.1	<1.1	7.77	403	264	<25	<3	1.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.14	<1	12	181	21	17	<0.1	<0.01	3.8	3.8	<0.5	165	8.2
	600453 Ontario Well No. 29	10/9/07	0.1	<1.1	7.83	345	234	<25	<3	2.0	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.18	<1	8	147	23	17	<0.1	0.06	2.9	3.0	<0.5	150	7.4
	600998 T-1/2 Well	10/10/07	0.4	<1.1	7.89	505	306	26	<3	<0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.58	<1	66	212	24	26	<0.1	<0.01	0.4	0.4	<0.5	129	4.9
	601000 T-2/2 Well	10/10/07	0.4	<1.1	7.85	465	328	<25	3	<0.5	-0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.62	<1	69	192	20	17	0.1	<0.01	0.3	0.4	<0.5	115	6.3
7th & 8th Street Basins	8th St. Well 1/1	10/8/07	0.5	<1.1	8.80	225	150	<25	<3	1.0	0.9	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.48	<1	6	61	33	9	<0.1	<0.01	1.4	1.4	<0.5	97	5.9
		11/13/07	0.5		8.75	225	142	<25		2.9				<1			<0.25			6	7	59	30	10	<0.1	0.08	1.6	1.7	<0.5	96	8.8
		12/11/07	0.3			215	156													6		29	9	<0.1	0.09	1.3		<0.5	91		
	8th St. Well 1/2	10/8/07			7.60				<3		<0.05				<0.5	1		<0.2											7.1		
		11/13/07	0.2			455	280	<25		0.9				<1			<0.25			2	19	204	19	17	<0.1	0.07	11.5	11.6	<0.5	155	
		12/11/07	0.2			447	292													18		19	16	<0.1	0.12	10.3		<0.5	150		
8th Street 2/1	8th Street 2/1	10/18/07	0.8	<1.1	7.75	450	310	<25	<3	<0.5	0.5	<0.05	39	<1	<0.5	2	<0.25	<0.2	0.69	1	14	200	27	24	0.1	<0.01	10.9	11.0	<0.5	152	6.0
	8th Street 2/2	10/18/07	0.6	<1.1	7.30	530	366	<25	<3	<0.5	0.1	0.2	<15	<1	<0.5	1	<0.25	<0.2	0.53	<1	16	256	20	44	<0.1	<0.01	17.2	17.2	<0.5	140	8.6
Ely Basins	601003 Ely Basin MW-1 Philadelphia St.	10/12/07	0.8	<1.1	8.37	275	180	56	<3	0.8	0.2	<0.05	511	<1	<0.5	8	<0.25	<0.2		<1	12	103	22	14	<0.1	<0.01	0.6	0.6	<0.5	102	0.6
	601004 Ely Basin MW-2 Walnut St.	10/8/07	0.6	<1.1	7.68	790	560	67	<3	1.0	0.1	0.05	117	<1	<0.5	1	0.32	<0.2	1.14	3	41	392	27	41	0.2	0.15	20.6	21.0	<0.5	222	3.7
	Riverside Dr. (near Ely Basin)	10/8/07	0.2	<1.1	7.43	475	318	<25	<3	0.5	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.08	10	19	224	21	28	0.2	<0.01	7.0	7.2	<0.5	158	12.2
Background Data	600585 Ontario Well No. 38	10/9/07	<0.1	<1.1	7.87	303	196	<25	<3	1.0	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.19	<1	6	129	21	9	<0.1	<0.01	1.0	1.0	<0.5	140	8.1
	BRK-1/1 Well	10/11/07	0.3	<1.1	8.01	470	302	<25	<3	<0.5	0.0	<0.05	36	<1	<0.5	1	<0.25	<0.2	0.74	<1	36	221	12	38	<0.1	<0.01	9.0	9.0	<0.5	117	7.4
	BRK-1/2 Well	10/8/07	0.2	<1.1	7.51	455	302	<25		<0.5	0.2		<15	<1			<0.25		0.11	<1	17	207	19	15	<0.1	<0.01	10.2	10.2	<0.5	144	7.2
	BRK- 2/1 Well	10/11/07	0.3	<1.1	8.02	530	346	192	<3	0.8	0.1	<0.05	210	<1	<0.5	1	<0.25	<0.2	0.42	3	17	264	15	41	0.1	<0.01	17.9	18.0	<0.5	142	3.7
	BRK- 2/2 Well	10/11/07	0.2	<1.1	8.02	590	364	27	<3	<0.5	0.3	<0.05	27	<1	<0.5	1	<0.25	<0.2	1.70	<1	32	278	17	41	<0.1	<0.01	11.1	11.1	<0.5	179	6.8
	RP3-1/1 Well	10/12/07	1.5	5.1	7.47	990	646	46	3	1.7	0.2	0.06	33	<1	<0.5	8	<0.25	<0.2		2	30	325	103	53	0.2	0.29	21.5	22.0	<0.5	360	0.6
	RP3-1/2 Well	10/12/07	1.7	1.1	7.44	890	572	<25	<3	0.8	0.1	0.32	<15	<1	<0.5	4	<0.25	<0.2		<1	38	326	79	48	0.1	0.23	12.5	12.8	<0.5	343	0.7
	DCZ-1 Well	10/12/07	1.5	<1.1	7.62	404	256	489	5	1.9	-0.2	<0.05	424	<1	<0.5	8	<0.25	<0.2		6	21	125	44	16	<0.1	<0.01	1.4	2.4	1.0	159	4.2

Blank cells indicate that analysis was not run for a constituent on that particular date

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

Constituent	8th Street 1/1	8th Street 2/1	Limit	Unit	Method
Inorganic Chemicals					
Aluminum	<25	<25	1000	µg/L	EPA 200.7
Antimony	<0.5	0.6	6	µg/L	EPA 200.8
Arsenic	<2	<2	10	µg/L	EPA 200.8
Asbestos	NA	NA	7	MFL	EPA 100.2
Barium	14	47	1000	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	4	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	5	µg/L	EPA 200.7
Chromium	1.9	5.2	50	µg/L	EPA 200.7
Cyanide	NA	NA	150	µg/L	SM 4500-CN E
Fluoride	NA	NA	2	mg/L	SM 4500-F C
Mercury	NA	NA	2	µg/L	EPA 245.2
Nickel	<1	6	100	µg/L	EPA 200.7
Perchlorate	<4	6	6	µg/L	EPA 314
Selenium	<2	<2	50	µg/L	EPA 200.8
Thallium	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)					
Benzene	<0.5	<0.5	1	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	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	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	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	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	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.3	<0.3	0.5	µg/L	EPA 524.2
Total Xylenes	<1.5	<1.5	1750	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)					
Alachlor (Alanex)	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	0.1	0.09	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	<1	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<20	100	µg/L	EPA 548.1

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

Constituent	8th Street 1/1	8th Street 2/1	Limit	Unit	Method
Endrin	<0.01	<0.2	2	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.03	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.05	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.04	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.1	30	µg/L	EPA 505
Molinate	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<1	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	0.2	0.3	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	NA	NA	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	50	µg/L	EPA 515.4
Notification Level Chemicals					
Copper	1.0	<0.5	1300	µg/L	EPA 200.7
Lead	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides					
Combined Radium-226 and Radium 228	NA	NA	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	NA	NA	15	pCi/l	EPA 900.0
Tritium	NA	NA	20,000	pCi/l	EPA 906
Strontium-90	NA	NA	8	pCi/l	EPA 905
Gross Beta Particle Activity	NA	NA	50	pCi/l	EPA 900.0
Uranium	NA	NA	20	pCi/l	EPA 200.8

NA: Not Analyzed

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

Date	Diluent Water										Recycled Water				
	Imported Water					Local Runoff / Storm Flow									
Date	7th & 8th St.	Ely	Turner	Hickory	Banana	7th & 8th St.	Ely	Turner	Hickory	Banana	7th & 8th St.	Ely	Turner	Hickory	Banana
Jan-07	0	0	0.0	0.0	298.1	59.0	95.0	37.5	16.3	33.4	0.0	58.0	101.6	0.0	0.0
Feb-07	0	0	3.4	0.0	0.0	168.0	150.0	17.3	40.3	73.7	0.0	23.0	64.9	41.6	0.0
Mar-07	0	0	0.0	6.9	41.1	39.0	17.0	28.9	27.7	12.0	0.0	45.0	72.8	0.0	0.0
1Q07 Totals	0	0	3.4	6.9	339.2	266.0	262.0	83.7	84.3	119.1	0.0	126.0	239.3	41.6	0.0
Apr-07	0	0	0.0	0.0	0.0	89.0	59.0	8.6	49.8	29.4	0.0	41.0	22.5	62.6	3.6
May-07	0	0	0.0	0.0	0.0	42.0	14.0	19.4	58.6	37.5	0.0	40.0	136.4	0.0	5.5
Jun-07	0	0	0.0	0.0	0.0	42.0	18.0	11.6	90.0	0.0	0.0	7.0	2.3	0.0	0.0
2Q07 Totals	0	0	0.0	0.0	0.0	173.0	91.0	67.6	306.8	133.8	0.0	88.0	320.0	125.2	18.2
Jul-07	0.0	0.0	0.0	0.0	0.0	15.5	65.0	5.4	93.0	0.0	0.0	0.0	0.0	141.4	0.0
Aug-07	0.0	0.0	0.0	0.0	0.0	15.5	49.6	47.4	93.0	0.0	0.0	0.0	0.0	77.4	0.0
Sep-07	0.0	0.0	0.0	0.0	0.0	16.3	-31.2	15.1	91.9	3.3	128.5	0.0	0.0	14.7	0.0
3Q07 Totals	0.0	0.0	0.0	0.0	0.0	47.3	83.4	67.9	277.9	3.3	128.5	0.0	0.0	233.6	0.0
Oct-07	0.0	0.0	0.0	0.0	0.0	42.3	34.2	65.4	72.9	2.2	108.7	0.0	0.0	22.8	0.0
Nov-07	0.0	0.0	0.0	0.0	0.0	80.6	165.7	162.4	101.6	34.8	160.9	86.6	0.0	98.3	0.0
Dec-07	0.0	0.0	0.0	0.0	0.0	224.1	256.5	276.8	101.8	22.0	0.0	52.8	0.0	0.0	0.0
4Q07 Totals	0.0	0.0	0.0	0.0	0.0	347.0	456.4	504.7	276.3	59.0	269.6	139.4	0.0	121.2	0.0

Note: (-) Negative values indicate more water pumped from the basin than was routed to the basin.

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

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)
2Q07	Apr-07	0		0			0	0	0
	May-07	0		0			0	0	0
	Jun-07	107	0.95	270	0		107	125,595	35,695,445
3Q07	Jul-07	136	0.53	270	0		243	214,328	80,899,240
	Aug-07	71	0.53	270	0		314	260,823	104,585,189
	Sep-07	47	0.53	270	0		362	291,863	120,398,024
4Q07	Oct-07	123	0.13	310	0		484	311,514	167,258,841
	Nov-07	13	0.13	310	0		497	313,569	172,159,319
	Dec-07	67	0.13	310	0		564	324,308	197,767,130

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

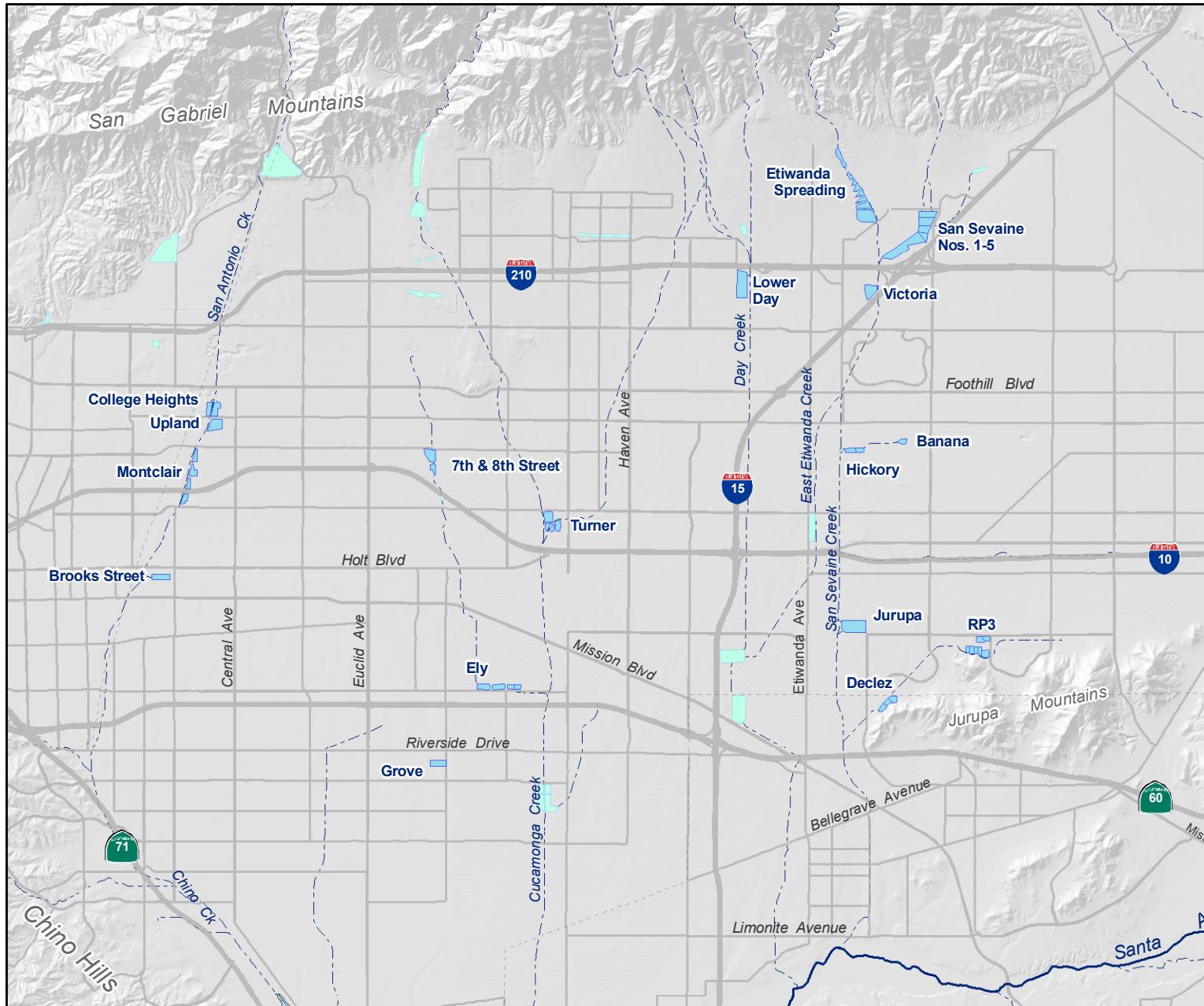
During 4Q07, WFA-treated water was sampled for TDS and TIN ($\text{NO}_3\text{-N} + \text{NO}_2\text{-N}$, assuming no $\text{NH}_3\text{-N}$ in drinking water) on 10/16/07.

Table 7-1
SAWCO Well No. 12 - WaterReuse Study Results

Constituent	November 15, 2007	December 15, 2007	Unit	Method
1,1,1-Trichloroethane	<0.5	<0.5	µg/L	ML/EPA 624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,3-Trichloropropane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trimethylbenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	µg/L	ML/EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3,5-Trimethylbenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
1,4-Dioxane	<2	<2	µg/L	ML/SW 8270 mod
2,4,6-trichlorophenol	<5	<5	µg/L	ML/EPA625/8270
2,4-D	<0.1	<0.1	µg/L	ML/EPA 515.4
2,4-dichlorophenol	<5	<5	µg/L	ML/EPA625/8270
2,4-dinitrophenol	<50	<50	µg/L	ML/EPA625/8270
2,4-dinitrotoluene	<0.1	<0.1	µg/L	ML/EPA 525.2
2,6-dinitrotoluene	<5	<5	µg/L	ML/EPA625/8270
2-chlorotoluene	<0.5	<0.5	µg/L	ML/EPA 524.2
4-chlorotoluene	<0.5	<0.5	µg/L	ML/EPA 524.2
Alachlor	<0.05	<0.05	µg/L	ML/EPA 525.2
Aluminum	<25	<25	µg/L	EPA 200.8
Antimony	<0.5	<0.5	µg/L	EPA 200.8
Arsenic	<2	<2	µg/L	EPA 200.8
Atrazine	0.1	0.1	µg/L	ML/EPA 525.2
Barium	29	27	µg/L	EPA 200.8
Bentazon	<0.5	<0.5	µg/L	ML/EPA 515.4
Benzene	<0.5	<0.5	µg/L	ML/EPA 524.2
Benzo(a)pyrene	<0.02	<0.02	µg/L	ML/EPA 525.2
Beryllium	<0.5	<0.5	µg/L	EPA 200.8
Boron	<0.1	<0.1	mg/L	EPA 200.7
Bromate	<1	<1	µg/L	EPA 317
Butylbenzene-n	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-sec	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-tert	<0.5	<0.5	µg/L	ML/EPA 524.2
Cadmium	<0.25	<0.25	µg/L	EPA 200.8
Carbofuran	<0.5	<0.5	µg/L	ML/EPA 531.2
Carbon Disulfide	<0.5	<0.5	µg/L	ML/EPA 624
Carbon Tetrachloride	<0.5	<0.5	µg/L	ML/EPA 524.2
Chlorate	47	49	µg/L	ML/EPA 300.0
Chlordane	<0.1	<0.1	µg/L	ML/EPA 505
Chlorite	<0.01	<0.01	mg/l	ML/EPA 300.0
Chromium	2.0	0.9	µg/L	EPA 200.8
Chromium-6	1.0	1.0	µg/L	EPA 218.6
Copper	16	8	µg/L	EPA 200.8
Cyanide	<0.006	<0.006	mg/L	SM 4500-CN E
Dalapon	<1	<1	µg/L	ML/EPA 515.4
Diazinon	<0.1	<0.1	µg/L	ML/EPA 525.2
Dibromochloropropane (DBCP)	<0.01	<0.01	µg/L	ML/EPA 504.1
Dichlorodifluoromethane	<0.5	<0.5	µg/L	ML/EPA 524.2
Dichloromethane	<0.5	<0.5	µg/L	ML/EPA 524.2
Di(2-ethylhexyl)adipate	<0.6	<0.6	µg/L	ML/EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	µg/L	ML/EPA 525.2

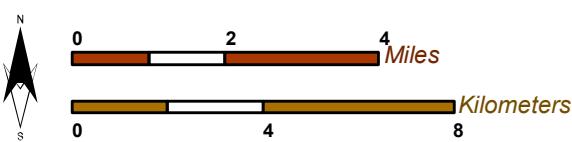
Table 7-1
SAWCO Well No. 12 - WaterReuse Study Results

Constituent	November 15, 2007	December 15, 2007	Unit	Method
Dinoseb	<0.2	<0.2	µg/L	ML/EPA 515.4
Diquat	<0.4	<0.4	µg/L	ML/EPA 549.2
EC	290	285	µmhos/cm	SM 2510
Endothall	<5	<20	µg/L	EPA 548.1
Endrin	<0.01	<0.01	µg/L	ML/EPA 505
Ethyl tertiary butyl ether	<3	<3	µg/L	ML/EPA 524.2
Ethylbenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
Ethylene Dibromide (EDB)	<0.01	<0.01	µg/L	ML/EPA 504.1
Fluoride	0.3	0.3	mg/L	EPA 300.0
Formaldehyde	<5	<5	µg/L	ML/SM 6252
Glyphosate	<6	<6	µg/L	EPA 547
Total Haloacetic Acids (HAA5)	<1	<1	µg/L	ML/S6251B
Heptachlor	<0.01	<0.01	µg/L	ML/EPA 505
Heptachlor Epoxide	<0.01	<0.01	µg/L	ML/EPA 505
Hexachlorobenzene	<0.05	<0.05	µg/L	ML/EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	µg/L	ML/EPA 525.2
Isopropylbenzene	<0.5	<0.5	µg/L	ML/EPA 524.2
Lead	2	1	µg/L	EPA 200.8
Lindane	<0.01	<0.01	µg/L	ML/EPA 505
Manganese	13	22	µg/L	EPA 200.8
Mercury	<0.2	<0.2	µg/L	EPA 245.2
Methoxychlor	<0.05	<0.05	µg/L	ML/EPA 505
Methyl isobutyl ketone (MIBK)	<5	<5	µg/L	ML/EPA 524.2
Methyl-tert-butyl ether (MTBE)	<0.5	<0.5	µg/L	ML/EPA 524.2
Molinate	<0.1	<0.1	µg/L	ML/EPA 525.2
Naphthalene	<0.5	<0.5	µg/L	ML/EPA 524.2
Nickel	1.02	<1	µg/L	EPA 200.8
Nitrate Nitrogen	2.8	3.0	mg/L	EPA 300.0
Nitrite Nitrogen	<0.01	0.10	mg/L	EPA 300.0
Nitrobenzene	<5	<5	µg/L	ML/EPA 625/8270
N-nitrosodiethylamine (NDEA)	<2	<2	ng/l	CLLE
N-Nitrosodimethylamine (NDMA)	<2	<2	ng/l	CLLE-1625MOD
N-nitrosodi-n-propylamine (NDPA)	<2	<2	ng/l	CLLE
n-propylbenzene (isocumene)	<0.5	<0.5	µg/L	ML/EPA 524.2
Oxamyl	<0.5	<0.5	µg/L	ML/EPA 531.2
Pentachlorophenol	<0.04	<0.04	µg/L	ML/EPA 515.4
Perchlorate	<4	<4	µg/L	EPA 314
Picloram	<0.1	<0.1	µg/L	ML/EPA 515.4
Polychlorinated Biphenyls	<0.08	<0.08	µg/L	ML/EPA 505
Propachlor	<0.05	<0.05	µg/L	ML/EPA 525.2
Selenium	<2	<2	µg/L	EPA 200.8
2,4,5-TP (Silvex)	<0.2	<0.2	µg/L	ML/EPA 515.4
Simazine	<0.05	<0.05	µg/L	ML/EPA 525.2
Styrene	<0.5	<0.5	µg/L	ML/EPA 524.2
Tertiary amyl methyl ether	<3	<3	µg/L	ML/EPA 524.2
Tertiary butyl alcohol	<2	<2	µg/L	ML/524.2
Tetrachloroethylene	<0.5	<0.5	µg/L	ML/EPA 524.2
Thallium	<1	<1	µg/L	EPA 200.8
Thiobencarb	<0.2	<0.2	µg/L	ML/EPA 525.2
Toluene	<0.5	<0.5	µg/L	ML/EPA 524.2
Total Nitrate/Nitrite (as N)	2.8	3.1	mg/L	EPA 300.0
Total Trihalomethanes (THM)	<0.5	<0.5	µg/L	ML/EPA 524.2
Toxaphene	<0.5	<0.5	µg/L	ML/EPA 505
Trichloroethylene	<0.5	<0.5	µg/L	ML/EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	µg/L	ML/EPA 624
Vanadium	3	4	µg/L	EPA 200.8
Vinyl Chloride	<0.3	<0.3	µg/L	ML/EPA 524.2
Xylenes	<1.5	<1.5	µg/L	ML/EPA 524.2



**Chino Basin Recycled Water
Groundwater Recharge Programs**

Basin Locations



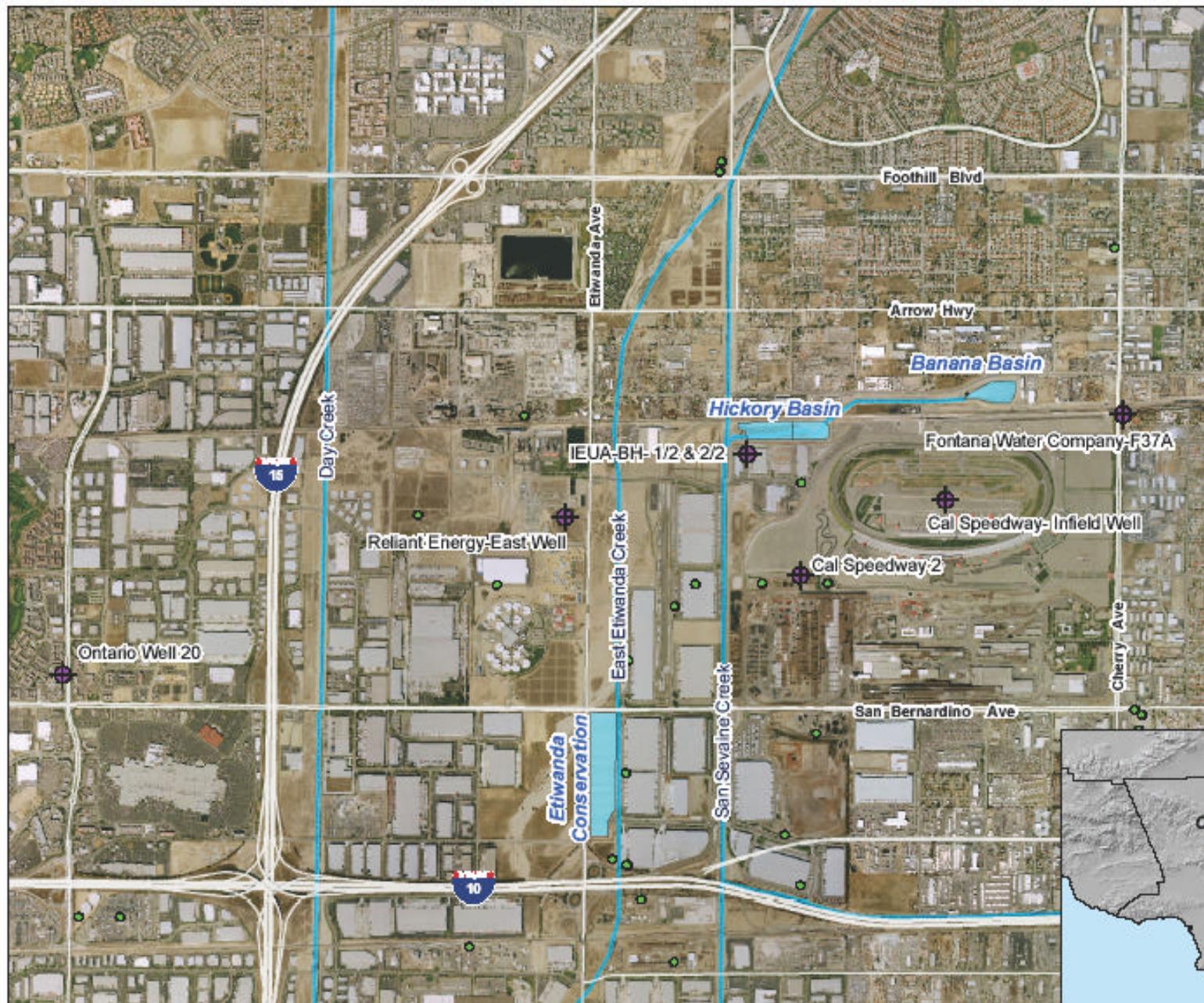
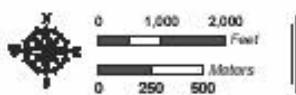
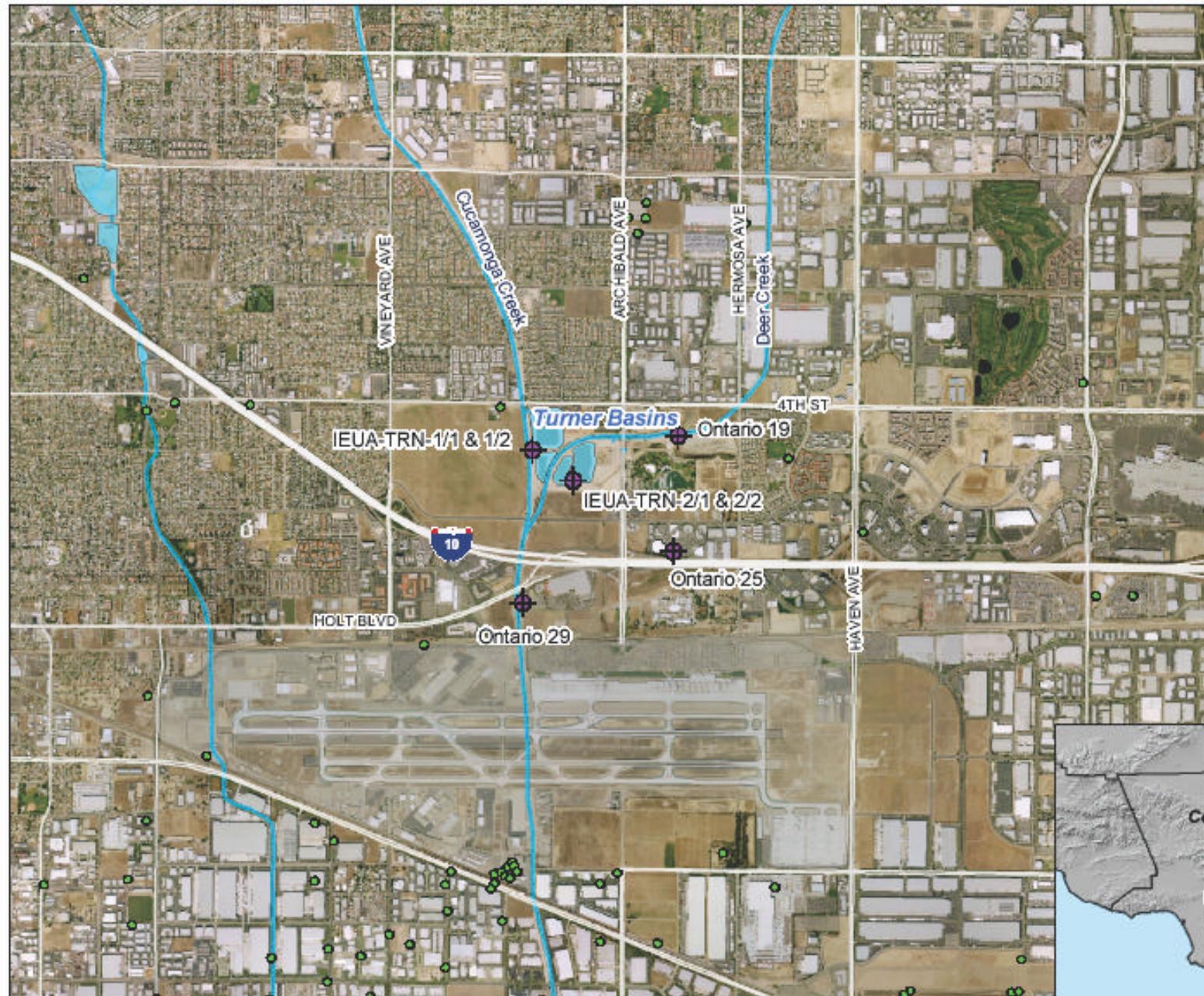


Figure 2-1

Recycled Water Recharge Program





Monitoring Well Network

Turner Basins

Recycled Water Recharge Program

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

Figure 2-2



Main Map Features

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



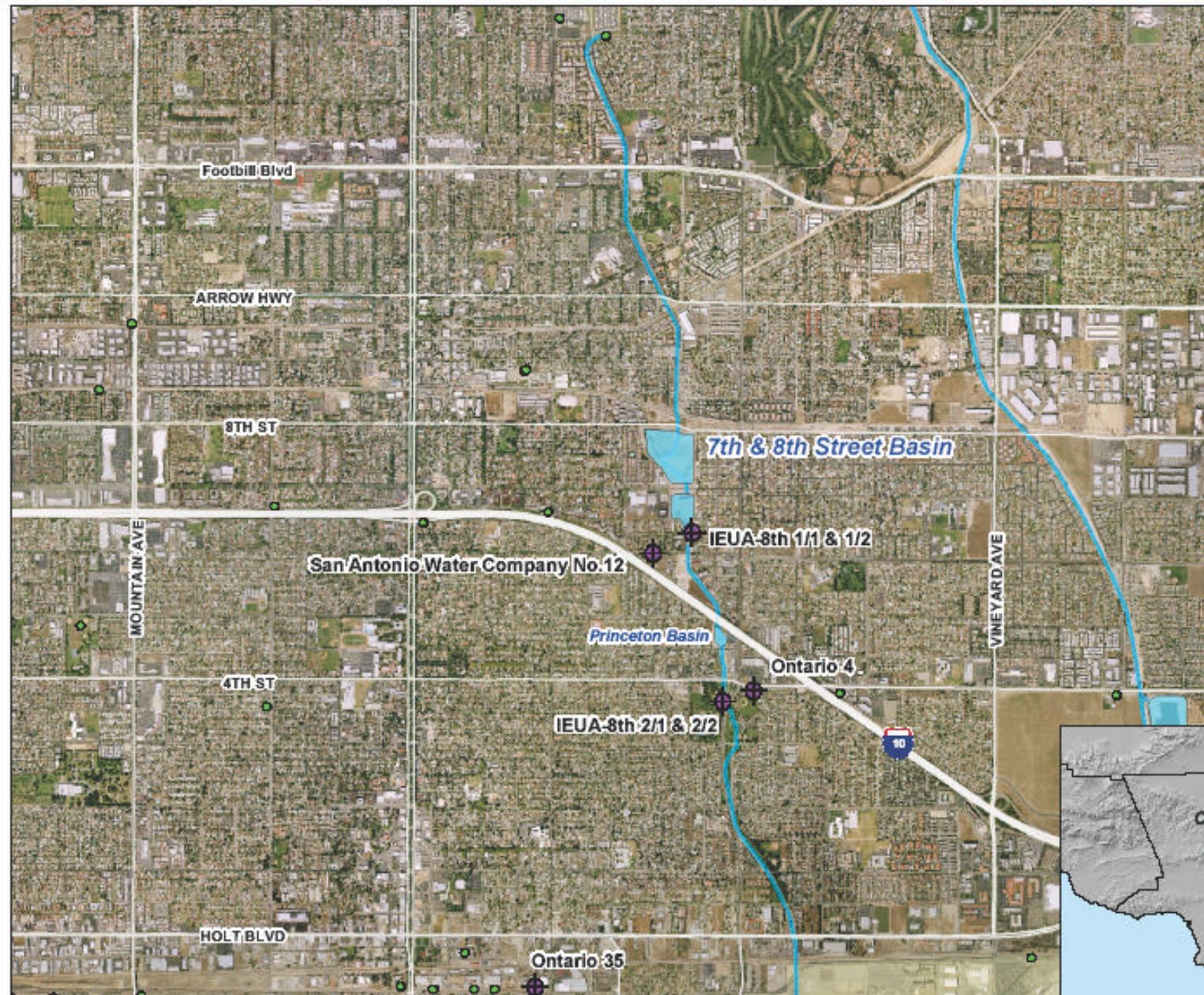
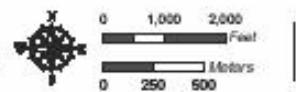
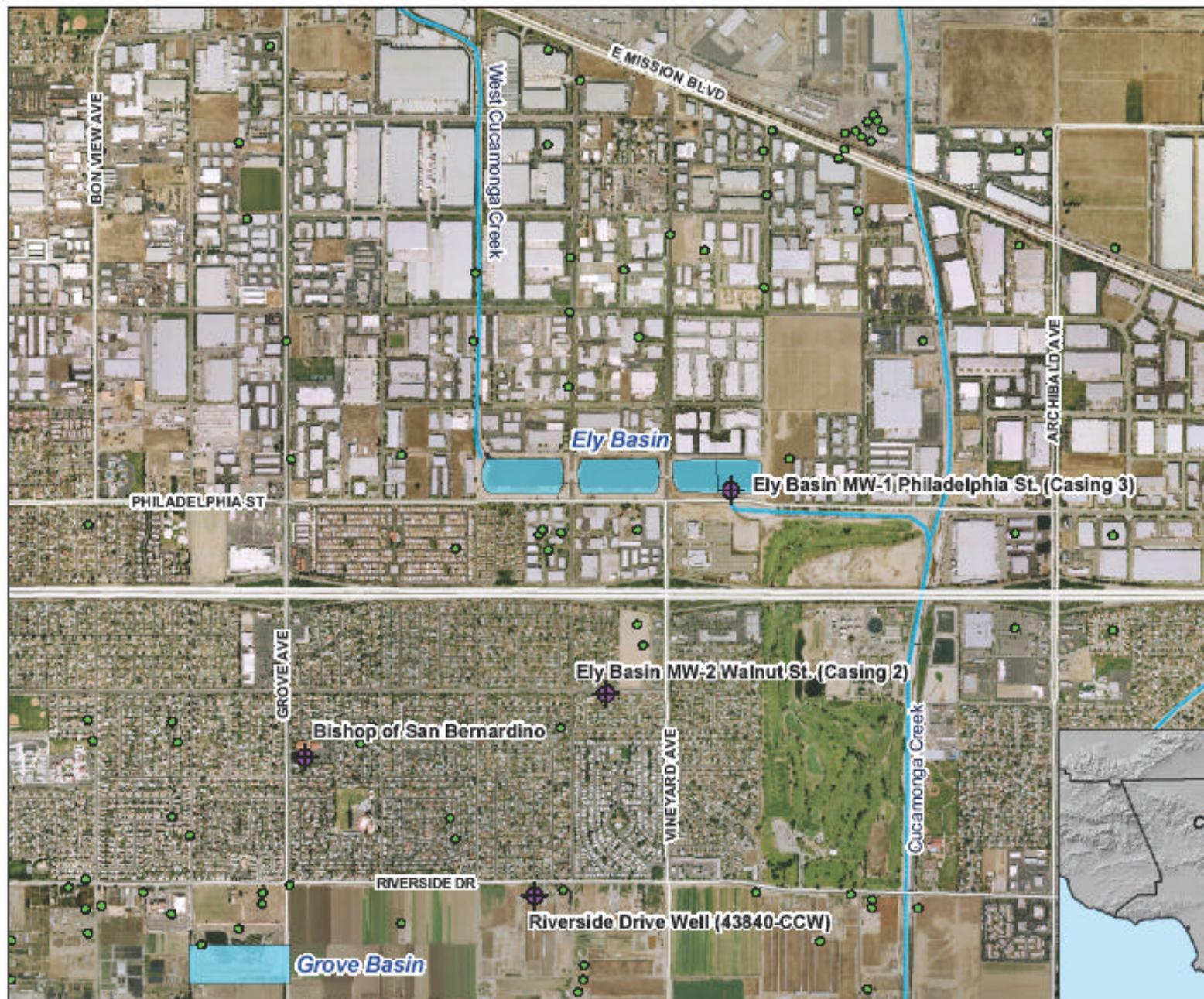


Figure 2-3

Recycled Water Recharge Program



2081198



Monitoring Well Network

Ely Basins

Recycled Water Recharge Program

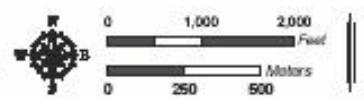


Figure 2-4

