



Patrick O. Sheilds  
Executive Manager of Operations

Kenneth R. Manning  
CEO

February 12, 2009

Regional Water Quality Control Board, Santa Ana Region

**Attention: Mr. Gerard Thibeault**

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

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

Dear Mr. Thibeault,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the fourth quarter of 2008 (4Q08), 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.

During 4Q08, 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.

Chino Basin Watermaster hereby certifies that, during the period of October 1 through December 31, 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, Brooks, Ely, Hickory, 7<sup>th</sup> & 8<sup>th</sup> Street, and Turner Basins. In point of fact, there are no production wells in the buffer zones of the aforementioned recharge sites.

#### DECLARATION

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

Executed on the 12<sup>th</sup> day of February 2009 in the Cities of Chino and Rancho Cucamonga.

Handwritten signature of Patrick O. Sheilds in black ink.

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Executive Manager of Operations

Kenneth R. Manning  
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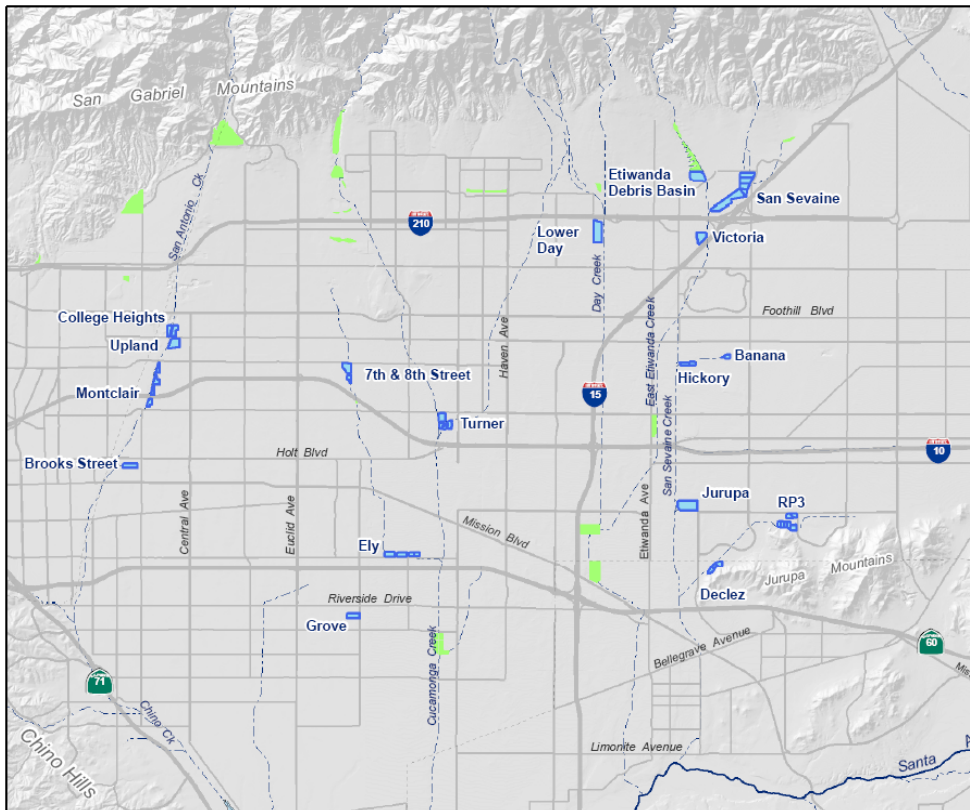
Patrick O. Sheilds  
Executive Manager of Operations

Handwritten signature of Kenneth R. Manning in blue ink.

Kenneth R. Manning  
Chief Executive Officer

# Chino Basin Recycled Water Groundwater Recharge Program

## Quarterly Monitoring Report October 1 through December 31, 2008



*Prepared by:*



February 15, 2009

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## 1. Introduction

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

### A. Order No. R8-2007-0039

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

The M&RP includes the water quality monitoring requirements of the Chino Basin Recycled Water Groundwater Recharge Program and the requirement for the submittal of quarterly and annual reports. This document is the quarterly report for the Fourth Quarter of 2008 (4Q08).

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

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

### B. Outline of the Quarterly Report

Section 2 of this quarterly report discusses the water quality monitoring results for recycled water recharge (water recycling plant effluent, distribution system, basin surface water, and lysimeter data), diluent water, and groundwater. Section 3 provides an overview of recharge operations including the volume of diluent water and recycled water recharged. Section 4 describes any operational problems and preventive and/or corrective actions taken. Section 5 contains the certification of non-pumping in the 500-foot buffer zones around each basin. Finally, Section 6 includes WateReuse Foundation (WRF) research study sampling results.

## 2. Monitoring Results

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

The requirements for recycled water monitoring are presented in the M&RP. Tables 2-1 through 2-4 include all of the requisite 4Q08 data.

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Recycled Water Specifications A.5 through A.9 are narrative limits in the permit and corresponding monitoring data are presented in Tables 2-1 and 2-2. None of these limits were exceeded in 4Q08.

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 1Q08 through 4Q08 are summarized in Table 2-3. The table includes the 4-quarter running average for each parameter and the corresponding limits for compliance. Of the Recycled Water Quality Specifications with limitations, only Oil & Grease does not require the 4-quarter running 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 4Q08, with the exception of odor.

The threshold-odor secondary MCL of 3 units was exceeded by a 4-quarter running average value of 4 units. This is based on the most recent four quarters of analysis; odor analysis was not run during 4Q08, as it has an annual monitoring requirement. Diluent water sampling for 4Q08 indicated that diluent water samples resulted in odor values ranging from 3 to 67 units.

Due to the volume of sample required for analyses, IEUA has selected, and CDPH has approved, a recycled water sampling point along the distribution pipeline. IEUA selected the turnout to Reliant Energy (an IEUA recycled water customer) to be representative of the system blend of recycled water used for recharge. Although this sampling location is suitable for most constituents, it is not appropriate for disinfection byproducts (DBP), more specifically, Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). For TTHMs and HAA5, samples collected at the basin are more consistent and representative of the recycled water prior to reaching the groundwater table. Compliance is selected at a point prior to the groundwater table and has in previous quarters been selected at a lysimeter actively receiving recycled water recharge during the defined sampling time. For the 4Q08 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Brooks Basin as the compliance point, in accordance with Recycled Water Quality Specification A.2.

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

## **B. Recycled Water: Basin and Lysimeter Samples**

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

The Turner Basin Start-up period report was submitted to RWQCB and CDPH on July 3, 2008 and IEUA has since received verbal authorization to sample in accordance to the alternative monitoring plan recommended in the report. Turner Basin has implemented an alternative monitoring plan that includes pipeline sampling of recycled water and application of a correction factor for Soil-Aquifer Treatment. The correction factors reduce the TOC results by 70 percent for recycled water delivered to cells 1 & 2 and 85 percent for recycled water delivered to cells 3 & 4. The correction factors reduce TN results by 87 percent for recycled water delivered to all four cells. Turner Basin TOC and TN values calculated based on the correction factors provided in the alternative monitoring plan are summarized in Table 2-5b.

During 4Q08, Ely Basin compliance lysimeter sampling continued with an alternative to the failed 15 foot deep lysimeter by sampling both the 5- and 10-foot depths. Sampling of these shallower lysimeters will continue into 1Q09 to develop a SAT correction factor to use in pipeline-based alternative monitoring plan. An alternative monitoring plan will be proposed in the 2008 Annual Report.



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During 3Q08, the Brooks Street Basin Start-Up Period which began on August 6, 2008, continued through 4Q08 and should conclude in 1Q09. During 4Q08, a tracer study was initiated at Brooks Basin using both sulfur hexafluoride (SF<sub>6</sub>) and enriched boron. Tracer test sampling will continue into 2009.

### **C. Diluent Water**

For 4Q08, diluent water sampling of local runoff was conducted in the West Cucamonga Creek at 8<sup>th</sup> Street and the 8<sup>th</sup> Street storm drain. Diluent water sampling of stormwater was conducted in the San Antonio Channel at the College Heights inlet, Cucamonga Creek at Turner 1, West Cucamonga Creek at Ely 1, and Day Creek at Lower Day. State Water Project water was not delivered to any basins during the monitoring period. Table 2-6a & 2-6b lists the results of the local runoff and stormwater sampling and analyses, respectively. 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 4Q08, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Turner Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the 7<sup>th</sup> & 8<sup>th</sup> Street Basins is monitored by sampling a network of five wells. The groundwater quality within the vicinity of the Ely Basin was monitored by sampling a network of three wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of four wells. The wells in the monitoring well networks for Hickory and Banana Basins, Turner Basin, 7<sup>th</sup> & 8<sup>th</sup> Street Basins, Ely, and Brooks Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-5, respectively.

The groundwater constituents analyzed from the monitoring wells during 4Q08 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 Brooks, Ely, and Turner Basins were the only recharge basins to receive recycled water this quarter. Hickory Basin was used for a construction staging site during the 4Q08 and did not receive any recycled water recharge and minimal diluent water recharge. No imported water was delivered to any of the aforementioned recharge basins during 4Q08. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff and stormwater captured during 4Q08 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.

On December 24, 2008, a diesel spill and resultant fire occurred in the San Sevaire Channel upstream of Hickory Basin. In response to the spill, IEUA staff ensured that the Hickory inlet was closed and the rubber dam was inflated. Diesel and fire-fighting foam was cleaned up by the San Bernardino County Office of Emergency Services.

## **5. Certification of Non-Pumping in the Buffer Zones**

Watermaster has certified that there was no reported pumping of groundwater in 4Q08 for domestic or municipal use from the zones that extend 500 feet and 6 months underground travel time from the Hickory, Banana, Turner 7<sup>th</sup> & 8<sup>th</sup> Street, Brooks, and Ely Basins. In fact, there are no production wells

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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 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. Effective May 1, 2008, MVWD discontinued groundwater injection at the ASR Wells until further notice.

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

During 4Q08, Brooks Basin 1/1 was sampled on November 19, 2008 and December 18, 2008; Brooks Basin 1/2 was sampled on November 19, 2008; and 8<sup>th</sup> Street Basin 2/1 was sampled on December 18, 2008. 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 October 2008  
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC ** µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL
Limits	2;5;10	16		*		6<pH<9				2.2;23;240	2;5;10	16		*	6<pH<9					2.2;23;240
10/01/08	0.7	8.3				7.4	785			<2	0.5	4.2	4.4		4.4	6.9	785			<2
10/02/08	0.6	7.4	8.3		8.3	7.1	830			<2	0.5	3.9	5.4		5.4	6.9	825			<2
10/03/08	0.7	11.0				7.1	780			<2	0.5	4.1	5.5		5.5	6.9	790			<2
10/04/08	1.3	23.6				7.2	785			<2	0.5	4.2	6.1		6.1	6.8	785			<2
10/05/08	0.9	13.5	9.1		9.1	7.0	780			<2	0.5	4.4	5.7		5.7	6.8	795			<2
10/06/08	0.8	10.0				7.3	830			<2	0.4	4.6	6.4		6.4	6.5	864			<2
10/07/08	0.7	9.5	8.8	10.1	8.8	7.3	820	156		<2	0.8	4.7	8.7	8.7	8.7	6.7	835	498	142	<2
10/08/08	0.7	9.1				7.3	800			2	0.4	4.7	9.4		9.4	6.7	820			<2
10/09/08	0.6	7.9	8.6		8.6	7.4	795			<2	0.2	4.4	10.6		10.6	6.7	820			<2
10/10/08	0.7	7.7				7.2	820			<2	0.3	4.6	13.1		13.1	6.6	830			<2
10/11/08	0.6	7.5				7.3	835			<2	0.4	4.7	13.6		13.6	6.7	865			<2
10/12/08	0.8	8.2	8.3		8.3	7.4	815			<2	0.5	4.8	11.8		11.8	6.8	845			<2
10/13/08	0.7	8.1				7.5	810			<2	0.5	4.6	10.1		10.1	6.8	850			<2
10/14/08	0.7	7.5	8.4	10.0	8.4	7.8	800			<2	0.6	4.2	11.1	12.3	11.4	6.8	865	517		<2
10/15/08	0.6	7.2				7.3	790			4	0.5	4.2	11.4		11.4	6.7	950			<2
10/16/08	0.6	7.8	6.8		6.8	7.4	790			<2	0.5	4.0	11.8		11.8	6.7	840			<2
10/17/08	0.6	7.1				7.4	795			<2	0.5	4.1	16.1		16.1	6.6	860			<2
10/18/08	0.6	7.0				7.4	790			<2	0.5	4.0	14.4		14.4	6.6	865			<2
10/19/08	0.5	7.5	8.3		8.3	7.3	785			<2	0.6	4.2	10.6		10.6	6.7	855			<2
10/20/08	0.5	7.8				7.0	790			2	0.6	4.2	7.0		7.0	6.8	850			<2
10/21/08	0.5	8.1	8.7	9.6	8.7	7.1	790	152		<2	0.5	4.2	8.2	8.2	8.2	6.8	850	484		<2
10/22/08	0.5	7.4				7.2	775			<2	0.5	4.0	9.4		9.4	6.8	835			<2
10/23/08	0.5	8.0	8.0		8.0	7.2	786			<2	0.4	3.8	9.5		9.5	6.8	843			<2
10/24/08	0.5	7.7				7.1	800			<2	0.5	4.0	9.1		9.1	6.8	840			<2
10/25/08	0.6	7.9				7.2	795			<2	0.6	4.1	7.5		7.5	6.8	840			<2
10/26/08	0.5	7.8	7.7		7.7	7.2	785			<2	0.6	4.2	4.4		4.4	6.9	820			<2
10/27/08	0.5	8.5				7.2	790			<2	0.6	4.3	3.4		3.4	6.9	825			<2
10/28/08	0.5	5.9	7.8	9.5	7.8	7.2	790	473		<2	0.5	4.2	4.1	4.6	4.1	6.9	815	463		<2
10/29/08	0.5	8.0				7.2	790			2	0.5	4.3	6.0		6.0	6.9	815			<2
10/30/08	0.5	7.7	7.3		7.3	7.2	785			<2	0.5	4.3	7.5		7.5	6.9	825			<2
10/31/08	0.5	7.0				7.2	820			<2	0.7	4.4	8.6		8.6	6.8	830			<2
Avg	0.6	8.6	8.2	9.8	8.2	7.3	798	473	154	<2	0.5	4.3	8.7	8.5	8.8	6.8	837	491	142	<2
Min	0.5	5.9	6.8	9.5	6.8	7.0	775	473	152	<2	0.2	3.8	3.4	4.6	3.4	6.5	785	463	142	<2
Max	1.3	23.6	9.1	10.1	9.1	7.8	835	473	156	4	0.8	4.8	16.1	12.3	16.1	6.9	950	517	142	<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.

\*\*RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

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

Unit	RP-1 Effluent										RP-4 Effluent										
	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC ** µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	
Limits	2;5;10	16		*		6<pH<9				2.2;23;240	2;5;10	16		*	6<pH<9					2.2;23;240	
11/01/08	0.5	7.2				7.2	825			2	0.7	4.2	6.5		6.5	6.9	825			<2	
11/02/08	0.5	7.5	7.5		7.5	7.2	780			<2	0.7	4.3	4.4		4.4	6.9	915			<2	
11/03/08	0.5	7.2				7.2	795			<2	0.6	4.3	3.4		3.4	6.9	810			<2	
11/04/08	0.5	7.1	8.5	9.2	8.5	7.2	800	472	153	<2	0.5	4.1	4.0	4.0	4.0	6.9	810	452	137	<2	
11/05/08	0.5	7.8				7.3	790			<2	0.5	3.9	4.8		4.8	6.9	840			<2	
11/06/08	0.5	8.5	7.3		7.3	7.2	795			<2	0.6	3.9	5.2		5.2	6.9	820			<2	
11/07/08	0.5	7.7				7.1	800			<2	0.4	4.0	7.9		7.9	6.9	820			<2	
11/08/08	0.5	8.0				7.2	795			<2	0.4	4.0	7.4		7.4	6.9	815			<2	
11/09/08	0.5	7.6	6.6		6.6	7.3	770			<2	0.5	4.1	4.7		4.7	7.0	800			<2	
11/10/08	0.5	7.7				7.2	790			<2	0.5	4.2	3.7		3.7	7.0	795			<2	
11/11/08	0.5	7.2	6.4	7.5	6.4	7.2	810			<2	0.5	4.0	3.5	4.4	3.5	7.0	800	464		<2	
11/12/08	0.5	6.9				7.2	810			<2	0.5				7.0	800				<2	
11/13/08	0.6	7.8	5.8		5.8	7.2	805			<2	0.5	3.9	3.3		3.3	7.0	780			<2	
11/14/08	0.6	7.2				7.2	800			<2	0.5	3.8	3.5		3.5	7.1	770			<2	
11/15/08	0.6	8.2				7.3	795			2	0.4	4.1	4.2		4.2	7.1	780			<2	
11/16/08	0.5	8.0	4.2		4.2	7.3	795			<2	0.4	4.4	3.8		3.8	7.0	800			<2	
11/17/08	0.5	8.0				7.2	805			<2	0.4	4.4	2.8		2.8	7.1	805			<2	
11/18/08	0.5	7.6	2.8	2.8	2.8	7.2	800	475	153	<2	0.4	4.2	2.9	2.9	2.9	7.1	800	460		<2	
11/19/08	0.6	7.5				7.2	800			<2	0.4	4.1	3.8		3.8	7.1	815			<2	
11/20/08	0.6	7.7	4.1		4.1	7.3	798			<2	0.4	4.0	3.2		3.2	7.1	805			<2	
11/21/08	0.6	7.4				7.2	800			<2	0.3	4.0	4.1		4.1	7.1	790			<2	
11/22/08	0.5	7.4				7.2	805			2	0.3	3.9	5.3		5.3	7.1	785			<2	
11/23/08	0.5	7.7	3.2		3.2	7.3	800			<2	0.4	3.9	5.2		5.2	7.0	810			<2	
11/24/08	0.5	7.6				7.2	810			<2	0.4	4.2	4.9		4.9	7.1	805			<2	
11/25/08	0.6	7.6	3.1	4.2	3.1	7.3	805			TF	0.4	3.9		0.5	7.0	780	453			TF	
11/26/08	0.7	7.5				7.3	835			TF	0.3	4.0	5.0		5.0	7.1	780			TF	
11/27/08	0.7	7.4				7.2	830			TF	0.3	3.9	4.8		4.8	7.0	795			TF	
11/28/08	0.6	7.4				7.3	800			TF	0.3	3.8	3.2		3.2	7.0	800			TF	
11/29/08	0.7	7.5				7.3	795			TF	0.3	4.0	4.0		4.0	7.0	795			TF	
11/30/08	0.6	7.4	3.7		3.7	7.1	800			<2	0.3	4.2	4.2		4.2	7.1	790			<2	
						0.0															
Avg	0.5	7.6	5.3	5.9	5.3	7.0	801	474	153	<2	0.4	4.1	4.4	3.0	4.4	7.0	805	457	137	<2	
Min	0.5	6.9	2.8	2.8	2.8	0.0	770	472	153	<2	0.3	3.8	2.8	0.5	2.8	6.9	770	452	137	<2	
Max	0.7	8.5	8.5	9.2	8.5	7.3	835	475	153	2	0.7	4.4	7.9	4.4	7.9	7.1	915	464	137	<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

TF: Temperature Failure

**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.

\*\*RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

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

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL	Turbidity NTU	TOC mg/L	NO <sub>3</sub> -N mg/L	TN mg/L	TIN mg/L	pH unit	EC ** µhmo/cm	TDS mg/L	Hardness mg/L	Coliform mpn/100mL
Limits	2;5;10	16		*		6<pH<9				2.2;23;240	2;5;10	16		*	6<pH<9					2.2;23;240
12/01/08	0.6	7.0				6.8	785			<2	0.3	4.4	3.3		3.3	7.1	780			<2
12/02/08	0.7	7.7	6.7	8.2	6.7	7.0	820		155	2	0.3	4.3	4.1	4.7	4.1	7.1	775	453	137	<2
12/03/08	0.7	7.2				7.3	820			<2	0.3	4.0	5.4		5.4	7.0	780			<2
12/04/08	0.6	7.7	6.3		6.3	7.3	770			<2	0.3	4.0	6.6		6.6	7.0	776			<2
12/05/08	0.6	7.6				7.3	770			8	0.2	4.1	7.0		7.0	7.0	775			<2
12/06/08	0.5	7.1				7.3	780			<2	0.2	4.0	7.0		7.0	7.0	770			<2
12/07/08	0.5	7.0	8.5		8.5	7.3	760			<2	0.3	4.2	5.7		5.7	7.0	785			<2
12/08/08	0.5	7.3				7.3	770			<2	0.3	4.5	4.2		4.2	7.0	780			<2
12/09/08	0.6	6.9	9.4	10.4	9.4	7.0	765			<2	0.3	4.3	4.2	4.2	4.2	7.1	770	453		<2
12/10/08	0.6	7.1				7.0	775			2	0.3	3.9	6.0		6.0	7.0	775			<2
12/11/08	0.6	7.1	7.9		7.9	7.3	765			<2	0.3	3.9	6.7		6.7	7.0	770			<2
12/12/08	0.6	6.4				7.3	780			<2	0.3	3.8	6.5		6.5	7.0	780			2
12/13/08	0.6	6.3				7.3	785			<2	0.4	3.9	6.9		6.9	7.0	775			<2
12/14/08	0.6	6.8	6.8		6.8	7.4	790			<2	0.4	4.1	5.5		5.5	7.0	815			<2
12/15/08	0.6	6.7				7.3	730			<2	0.3	4.0	3.9		3.9	7.0	805			<2
12/16/08	0.6	6.6	6.8	6.8	6.8	7.2	755	441	140	4	0.2	3.9	4.1	5.1	4.1	7.0	795	445		<2
12/17/08	0.6	6.6				7.3	770			<2	0.2	3.9	5.5		5.5	7.0	795			<2
12/18/08	0.6	6.4	7.1		7.1	7.2	765			<2	0.2	3.7	6.8		6.8	6.9	785			<2
12/19/08	0.6	6.7				7.2	810			<2	0.2	3.7	7.6		7.6	6.9	800			<2
12/20/08	0.7	6.7				7.3	805			<2	0.2	3.9	7.8		7.8	7.0	795			<2
12/21/08	0.7	7.0	5.2		5.2	7.3	845			<2	0.2	4.0	6.9		6.9	7.0	800			<2
12/22/08	0.6	7.0				7.3	840			2	0.3	4.2	5.1		5.1	7.0	800			2
12/23/08	0.6	7.1	4.7	5.5	4.7	7.3	820			2	0.2	4.1	4.7	5.6	4.7	7.0	770	460		<2
12/24/08	0.6	7.0				7.3	820			<2	0.3	4.0	4.8		4.8	7.0	785			<2
12/25/08	0.5	6.5				7.4	790			<2	0.3	3.9	3.6		3.6	7.1	750			<2
12/26/08	0.6	6.4				7.3	780			<2	0.3	3.9	3.8		3.8	7.1	730			<2
12/27/08	0.6	7.0				7.3	785			<2	0.3	3.9	4.2		4.2	7.1	725			2
12/28/08	0.7	7.2	5.1		5.1	7.3	780			2	0.3	4.0	4.0		4.0	7.1	705			<2
12/29/08	0.8	7.6				7.4	770			<2	0.3	4.1	3.8		3.8	7.1	695			<2
12/30/08	0.8	8.6	4.7	5.9	4.7	7.4	800			<2	0.3	3.9	3.7	4.4	3.7	7.1	705	426		<2
12/31/08	0.8	7.7				7.4	785			2	0.3	3.9	4.1		4.1	7.1	715			<2
Avg	0.6	7.0	6.6	7.3	6.6	7.3	787	441	148	<2	0.3	4.0	5.3	4.8	5.3	7.0	770	447	137	<2
Min	0.5	6.3	4.7	5.5	4.7	6.8	730	441	140	<2	0.2	3.7	3.3	4.2	3.3	6.9	695	426	137	<2
Max	0.8	8.6	9.4	10.4	9.4	7.4	845	441	155	8	0.4	4.5	7.8	5.6	7.8	7.1	815	460	137	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.

\*\*RP-4 Effluent EC values from IEUA lab data, not continuous monitoring data

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

Date	TIN		TDS	
	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jan-08	6.8	6.2	511	481
Feb-08	6.4	6.2	492	483
Mar-08	6.6	6.2	515	484
Apr-08	6.7	6.3	519	487
May-08	7.2	6.4	502	489
Jun-08	6.8	6.5	490	490
Jul-08	6.1	6.6	499	491
Aug-08	5.8	6.6	514	492
Sep-08	8.3	6.8	510	494
Oct-08	7.0	6.9	503	496
Nov-08	5.7	6.7	496	498
Dec-08	6.3	6.7	494	504
Avg	6.7	6.5	504	491
Min	5.7	6.2	490	481
Max	8.3	6.9	519	504
Limit		8.0		550

Please note that 3Q08 data was accurate, however the months reported were not updated accordingly. The data reported above will supersede any information submitted for previous quarters. Agency-wide TIN & TDS were in compliance with permit limits at all times.

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

Constituent	1Q08	2Q08	3Q08	4Q08	4Q Run. Avg. <sup>1</sup>	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	<25	57	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<1.8	<1.8	<0.75	<0.2	<1.8	7	MFL	EPA 100.2
Barium	9	7	29	5	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	2.9	1.2	3.4	1.3	2.2	50	µg/L	EPA 200.8
Cyanide	<5	<6	<6	<6	<6	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.2	0.2	0.1	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	3	1	2	2	100	µg/L	EPA 200.8
Perchlorate	<10	<4	<4	<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	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<1	<0.5	<1	<1	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	4.3	<1.3	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.3	<0.5	<0.3	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<1	<0.5	<0.5	<0.5	<1	1750 <sup>2</sup>	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<1		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	3	<1	4	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	<20	<5	<20	<20	<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	1Q08	2Q08	3Q08	4Q08	4Q Run.		Unit	Method
					Avg. <sup>1</sup>	Limit		
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	0.06	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05	0.1	<0.05	<0.05	0.04	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	13.6	3.6	5.8	9.5	8.1	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	2.8	<0.5	<0.9	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<1.0	<0.76	0.22	<0.54	<1.0	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	3.6	7.1	<3.4	15	pCi/L	EPA 900.0
Tritium	<196	<191	<221	<240	<240	20,000	pCi/L	EPA 906
Strontium-90	<0.700	<0.740	<0.635	1.65	<0.67	8	pCi/L	EPA 905
Gross Beta Particle Activity	10	10	12	13	11	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	57	<25	<25	<25	200	µg/L	EPA 200.8
Copper	13.6	3.6	5.8	9.5	8.1	1000	µg/L	EPA 200.8
Corrosivity <sup>3</sup>	<0.1	NR	<0.1	<0.1	<0.2	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) <sup>3</sup>	<0.05	<0.05	<0.05	NR	<0.05	500	µg/L	S5540C/EPA 425.1
Iron <sup>3</sup>	110	NR	NR	NR	85	300	µg/L	EPA 200.7
Manganese	9	19	5	1	9	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE) <sup>3</sup>	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold <sup>3</sup>	8	2	2	NR	4	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	55	15	7	24	25	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease <sup>4</sup>	3	<2	2	<1		1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data								
Total Trihalomethanes (TTHMs)	8th-15	HE-25	8th-25	BRK-25				
Total Haloacetic Acids (HAA5)	6.5	48	4	<0.5	15	80	µg/L	EPA 524.2/624
	<1	<1	<1	<1	<1	60	µg/L	S6251B

NA: Not Analyzed this quarter

<sup>1</sup> 4-quarter running average is calculated based on ND values equal to half the detection limit. The reported 4-quarter running average value, if less than DL, will be based on highest DL found in the data set.

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

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

<sup>4</sup> 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	4Q08	Unit	Method
Metals			
Chromium (III) <sup>1</sup>	1.3	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	<0.5	µg/L	EPA 524.2
Chloroethane	<0.5	µg/L	EPA 524.2
2-Chloroethylvinylether	NR	µg/L	EPA 624
Chloroform	1	mg/L	EPA 524.2
Dichlorobromomethane	<0.5	µg/L	EPA 524.2
Methyl Bromide	<1	µg/L	EPA 524.2
Methyl Chloride	<0.5	µg/L	EPA 524.2
Acid Extractibles			
2-Chlorophenol	NR	µg/L	EPA 625
2,4-Dichlorophenol	NR	µg/L	EPA 625
2,4-Dimethylphenol	NR	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625
2,4-Dinitrophenol	NR	µg/L	EPA 625
2-Nitrophenol	NR	µg/L	EPA 625
4-Nitrophenol	NR	µg/L	EPA 625
4-Chloro-3-methylphenol	NR	µg/L	EPA 625
Phenol	NR	µg/L	EPA 625
2,4,6-Trichlorophenol	NR	µg/L	EPA 625
Base/Neutral Extractibles			
Acenaphthene	NR	µg/L	EPA 625
Acenaphthylene	NR	µg/L	EPA 625
Anthracene	NR	µg/L	EPA 625
Benzidine	NR	µg/L	EPA 625
Benzo(a)anthracene	NR	µg/L	EPA 625
Benzo(b)fluoranthene	NR	µg/L	EPA 625
Benzo(g,h,i)perylene	NR	µg/L	EPA 625
Benzo(k)fluoranthene	NR	µg/L	EPA 625
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625
Butyl benzyl phthalate	NR	µg/L	EPA 625
2-Chloronaphthalene	NR	µg/L	EPA 625
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625
Chrysene	NR	µg/L	EPA 625
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625
1,3-Dichlorobenzene	NR	µg/L	EPA 625
3,3-Dichlorobenzidine	NR	µg/L	EPA 625
Diethyl phthalate	NR	µg/L	EPA 625
Dimethyl phthalate	NR	µg/L	EPA 625
Di-n-butyl phthalate	NR	µg/L	EPA 625
2,4-Dinitrotoluene	NR	µg/L	EPA 625
2,6-Dinitrotoluene	NR	µg/L	EPA 625
Di-n-octyl phthalate	NR	µg/L	EPA 625
Azobenzene	NR	µg/L	EPA 625
Fluoranthene	NR	µg/L	EPA 625
Fluorene	NR	µg/L	EPA 625
Hexachlorobutadiene	NR	µg/L	EPA 625
Hexachlorocyclopentadiene	NR	µg/L	EPA 625
Hexachloroethane	NR	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625
Isophorone	NR	µg/L	EPA 625
Naphthalene	NR	µg/L	EPA 625
Nitrobenzene	NR	µg/L	EPA 625
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625
N-Nitrosodiphenylamine	NR	µg/L	EPA 625
Phenanthrene	NR	µg/L	EPA 625
Pyrene	NR	µg/L	EPA 625
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	4Q08	Unit	Method
Unregulated Chemicals			
Boron	0.36	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)	4.3	ng/L	1625MOD
Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	µg/L	542.2 MOD
Vanadium	3.48	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 <sup>2</sup>			
n-butylbenzene	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	µg/L	EPA 524.2
Chlorate	NR	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	µg/L	EPA 524.2
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 521
N-Nitrosopyrrolidine	NR	µg/L	EPA 521
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals <sup>2</sup>			
<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 &amp; Other Substances</u>			
Acetaminopen	NR	ng/L	HPLC/MS-SEDC
Amoxicillin	NR		Not Available <sup>3</sup>
Azithromycin	NR		Not Available <sup>3</sup>
Caffeine	NR	ng/L	HPLC/MS-SEDC
Carbamazepine	NR	ng/L	HPLC/MS-SEDC
Ciprofloxacin	NR		Not Available <sup>3</sup>
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 <sup>3</sup>
Methadone	NR	ng/L	HPLC/MS-SEDC
Morphine	NR		Not Available <sup>3</sup>
Salicylic acid	NR	ng/L	HPLC/MS-SEDC
Triclosan	NR	ng/L	HPLC/MS-SEDC

NR: Not Required (Annual Requirement)

<sup>1</sup> Trivalent chromium is measured as total chromium

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

<sup>3</sup> Analytical Method is not available for this constituent

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

Brooks Basin									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO <sub>3</sub> -N	TKN+NO <sub>2</sub> -N	NO <sub>2</sub> -N
Unit==>	feet	mm/dd/yy	mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
BRK-LYS-00	0	10/07/08	5.84	5.2	820	4.6	4.4	0.8	0.06
BRK-LYS-00	0	10/14/08	5.22	8.2	845	7.4	7.3	0.8	0.06
BRK-LYS-00	0	10/21/08	5.06	10.3	880	9.4	9.2	1.1	<0.01
BRK-LYS-00	0	10/28/08	4.83	7.2	840	7.0	6.9	<0.5	0.03
BRK-LYS-00	0	11/04/08	5.48	7.8	855	6.7	6.5	1.3	0.02
BRK-LYS-00	0	11/12/08	5.09	6.4	830	5.8	5.6	0.9	0.02
BRK-LYS-00	0	11/18/08	5.17	3.8	815	3.6	3.6	<0.5	<0.01
BRK-LYS-00	0	11/25/08	4.63	5.3	820	4.2	4.2	1.1	<0.01
BRK-LYS-00	0	12/02/08	5.23	3.7	735	3.6	3.4	<0.5	<0.01
BRK-LYS-00	0	12/10/08	5.52	4.6	705	4.2	4.1	<0.5	<0.01
BRK-LYS-00	0	12/16/08	6.69	2.8	330	2.4	2.0	0.8	0.01
BRK-LYS-00	0	12/23/08	4.72	1.9	260	1.9	1.7	<0.5	0.02
BRK-LYS-00	0	12/30/08	4.49	3.8	410	2.5	2.3	1.5	<0.01
BRK-LYS-05	5	10/07/08	5.44	1.7	810	1.4	0.4	1.3	0.08
BRK-LYS-05	5	10/14/08	4.57	2.9	810	2.8	1.7	1.2	0.24
BRK-LYS-05	5	10/21/08	4.30	6.5	840	5.7	4.3	2.2	0.72
BRK-LYS-05	5	10/28/08	4.13	6.5	840	6.2	5.0	1.5	0.63
BRK-LYS-05	5	11/04/08	4.21	5.5	845	4.9	4.1	1.4	0.42
BRK-LYS-05	5	11/12/08	3.95	4.8	830	4.3	3.5	1.3	0.48
BRK-LYS-05	5	11/18/08	4.19	3.5	830	3.7	2.9	0.6	0.52
BRK-LYS-05	5	11/25/08	3.17	3.8	825	3.5	3.1	0.7	0.21
BRK-LYS-05	5	12/02/08	4.40	1.1	635	1.2	0.8	<0.5	0.24
BRK-LYS-05	5	12/10/08	3.77	2.7	690	2.6	2.1	0.7	0.26
BRK-LYS-05	5	12/16/08	3.52	2.6	670	2.7	2.1	<0.5	0.28
BRK-LYS-05	5	12/23/08	2.77	0.9	312	1.1	0.8	<0.5	0.12
BRK-LYS-05	5	12/30/08	2.83	1.2	275	0.5	0.3	1.0	0.12
BRK-LYS-10	10	10/07/08	6.27	0.7	670	0.3	<0.1	0.7	<0.01
BRK-LYS-10	10	10/14/08	6.02	<0.6	675	0.3	<0.1	<0.5	<0.01
BRK-LYS-10	10	10/21/08	5.04	0.7	685	0.8	0.4	<0.5	0.14
BRK-LYS-10	10	10/28/08	4.88	0.7	690	0.6	0.2	<0.5	0.17
BRK-LYS-10	10	11/04/08	4.65	0.8	700	0.6	0.2	0.5	0.11
BRK-LYS-10	10	11/12/08	4.58	0.7	705	0.5	0.2	0.5	0.16
BRK-LYS-10	10	11/18/08	3.87	<0.6	730	0.6	0.3	<0.5	0.08
BRK-LYS-10	10	11/25/08	3.91	<0.6	715	0.5	0.2	<0.5	0.12
BRK-LYS-10	10	12/02/08	3.67	<0.6	705	0.3	<0.1	<0.5	0.04
BRK-LYS-10	10	12/10/08	3.95	<0.6	670	0.2	<0.1	<0.5	0.02
BRK-LYS-10	10	12/23/08	3.75	<0.6	613	<0.2	<0.1	<0.5	<0.01
BRK-LYS-10	10	12/30/08	3.87	1.1	550	<0.2	<0.1	1.1	<0.01
BRK-LYS-25	25	10/07/08	2.36	<0.6	650	<0.2	<0.1	<0.5	0.03
BRK-LYS-25	25	10/14/08	3.21	<0.6	685	<0.2	<0.1	<0.5	<0.01
BRK-LYS-25	25	10/21/08	3.02	<0.6	650	<0.2	<0.1	<0.5	<0.01
BRK-LYS-25	25	10/27/08	3.69		715	0.3	0.2		<0.01
BRK-LYS-25	25	10/28/08	3.81	<0.6	635	0.6	0.2	<0.5	0.07
BRK-LYS-25	25	11/04/08	3.19	0.6	705	0.7	0.6	<0.5	0.02
BRK-LYS-25	25	11/12/08	2.94	1.3	740	1.2	1.1	<0.5	0.06
BRK-LYS-25	25	11/18/08	2.73	1.4	770	1.2	1.1	<0.5	0.05
BRK-LYS-25	25	11/25/08	2.57	0.9	780	0.9	0.8	<0.5	0.12
BRK-LYS-25	25	12/02/08	2.42	0.6	760	0.7	0.6	<0.5	0.07
BRK-LYS-25	25	12/10/08	2.20	0.8	750	0.8	0.7	<0.5	0.04
BRK-LYS-25	25	12/16/08	2.20	<0.6	740	0.3	0.2	<0.5	0.03
BRK-LYS-25	25	12/23/08	2.18	<0.6	715	<0.2	<0.1	<0.5	<0.01
BRK-LYS-25	25	12/30/08	2.29		660	<0.2	<0.1		<0.01
BRK-LYS-35	35	10/07/08	3.80	<0.6	610	0.3	0.3	<0.5	<0.01
BRK-LYS-35	35	10/14/08	3.82	4.2	590	<0.2	<0.1	4.1	0.03
BRK-LYS-35	35	10/21/08	5.93	<0.6	705	0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	10/28/08	4.81	<0.6	710	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	11/04/08	4.23	<0.6	740	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	11/12/08	3.35	<0.6	790	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	11/18/08	3.03	0.7	810	<0.2	<0.1	0.7	<0.01
BRK-LYS-35	35	11/25/08	3.50	<0.6	800	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	12/02/08	2.64	<0.6	800	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	12/10/08	2.68	<0.6	785	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	12/16/08	3.01	<0.6	755	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	12/23/08	2.70	<0.6	745	<0.2	<0.1	<0.5	<0.01
BRK-LYS-35	35	12/30/08	2.74		710	<0.2	<0.1		<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 2-5a  
Lysimeter and Surface Water Monitoring: TOC, Nitrogen Species, and EC

Ely Basin No. 3									
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO <sub>3</sub> -N	TKN+NO <sub>2</sub> -N	NO <sub>2</sub> -N
Unit==>	feet	mm/dd/yy	mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L	mg/L
ELY3E-00	0	10/07/08	5.95	2.8	525	<0.2	<0.1	2.8	<0.01
ELY3E-00	0	10/14/08	13.37	2.3	680	1.8	1.8	<0.5	0.03
ELY3E-00	0	10/22/08	9.26	7.4	795	4.3	4.2	3.2	0.05
ELY3E-00	0	10/28/08	7.92	7.8	780	5.2	4.8	3.0	0.09
ELY3E-00	0	11/04/08	10.28	6.7	755	4.3	4.2	2.6	0.08
ELY3E-00	0	11/12/08	9.51	6.2	690	4.2	4.1	2.1	0.11
ELY3E-00	0	11/18/08	7.98	6.0	670	3.8	3.7	2.4	0.12
ELY3E-00	0	11/26/08	10.46	36.0	585	34.4	34.1	1.9	0.12
ELY3E-00	0	12/02/08	8.26	4.2	590	2.7	2.6	1.6	0.09
ELY3E-10	10	10/07/08	2.31	1.2	685	0.2	<0.1	1.1	<0.01
ELY3E-10	10	10/14/08	2.34	11.1	620	11.2	10.9	<0.5	<0.01
ELY3E-10	10	10/22/08	2.15	12.0	710	11.6	11.6	<0.5	<0.01
ELY3E-10	10	10/28/08	2.20	12.5	700	12.5	12.3	<0.5	<0.01
ELY3E-10	10	11/04/08	2.50	9.5	670	9.6	9.5	<0.5	0.07
ELY3E-10	10	11/12/08	3.28	5.0	620	5.0	4.9	<0.5	0.05
ELY3E-10	10	11/18/08	3.26	2.3	605	2.2	2.2	<0.5	0.03
ELY3E-10	10	11/26/08	3.00	2.4	625	1.8	1.8	0.6	<0.01
ELY3E-10	10	12/02/08	2.45	<0.6	650	0.5	0.4	<0.5	<0.01
ELY3E-25	25	10/07/08			595		7.0		<0.01
ELY3E-25	25	10/28/08	2.37		575		0.3		<0.01
ELY3E-25	25	11/04/08			560		0.2		<0.01
ELY3E-25	25	11/12/08	2.20		570		0.2		<0.01
ELY3E-25	25	11/18/08	2.23		560		0.1		<0.01
ELY3E-25	25	11/26/08	2.20		580		0.3		<0.01
ELY3E-25	25	12/02/08	2.04		540				

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

Table 2-5b  
 Alternative Monitoring Plan for TOC and TN (mg/L)

Turner Basin					
Date	Recycled Water	Recycled Water	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4
	TOC	TIN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
10/02/08	4.98	5.4	1.49	0.75	0.7
10/07/08	4.43	8.5	1.33	0.66	1.1
10/14/08	4.53	12.5	1.36	0.68	1.6
10/21/08	4.04	12.5	1.21	0.61	1.6
10/28/08	5.89	10.1	1.77	0.88	1.3
11/04/08	4.71	5.3	1.41	0.71	0.7
11/12/08	4.36	5.5	1.31	0.65	0.7

Table 2-6a  
Diluent Water Monitoring Results

Constituent	West Cucamonga Creek - 8th Street		8th Street Storm Drain		Unit	Method
	November 3, 2008		November 3, 2008			
NO <sub>2</sub> -N	<0.02		<0.02		mg/L	EPA 300.0
NO <sub>3</sub> -N	0.6		0.6		mg/L	EPA 300.0
TDS	No Data		432		mg/L	SM 2540C
Total Coliform	>23		>23		mpn/100ml	SM 9221B
Oil & Grease	<2		<2		mg/L	EPA 1664A
Inorganic Chemicals						
Aluminum	145		42		µg/L	EPA 200.7
Antimony	1.13		<1		µg/L	EPA 200.8
Arsenic	<2		<2		µg/L	EPA 200.8
Asbestos	<3.75		<6.26		MFL	EPA 100.2
Barium	42		49		µg/L	EPA 200.7
Beryllium	<0.5		<0.5		µg/L	EPA 200.7
Cadmium	<0.25		<0.25		µg/L	EPA 200.7
Chromium	1.0		0.5		µg/L	EPA 200.7
Cyanide	<0.006		<0.006		mg/L	SM 4500-CN E
Fluoride	0.8		0.3		mg/L	SM 4500-F C
Mercury	<0.2		<0.2		µg/L	EPA 245.2
Nickel	4		3		µg/L	EPA 200.7
Perchlorate	<4		<4		µg/L	EPA 314
Selenium	<2		<2		µg/L	EPA 200.8
Thallium	<1		<1		µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)						
Benzene	<0.5		<0.5		µg/L	EPA 524.2
Carbon Tetrachloride	<0.5		<0.5		µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5		<0.5		µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5		<0.5		µg/L	EPA 524.2
1,1-Dichloroethane	<0.5		<0.5		µg/L	EPA 524.2
1,2-Dichloroethane	<0.5		<0.5		µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5		<0.5		µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5		<0.5		µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5		<0.5		µg/L	EPA 524.2
Dichloromethane	<0.5		<0.5		µg/L	EPA 524.2
1,2-Dichloropropane	<0.5		<0.5		µg/L	EPA 524.2
1,3-Dichloropropene	<0.5		<0.5		µg/L	EPA 524.2
Ethylbenzene	<0.5		<0.5		µg/L	EPA 524.2
Chlorobenzene	<0.5		<0.5		µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5		<0.5		µg/L	EPA 524.2
Styrene	<0.5		<0.5		µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5		<0.5		µg/L	EPA 524.2
Tetrachloroethylene	<0.5		<0.5		µg/L	EPA 524.2
Toluene	7.6		<0.5		µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5		<0.5		µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5		<0.5		µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5		<0.5		µg/L	EPA 524.2
Trichloroethylene	<0.5		<0.5		µg/L	EPA 524.2
Trichlorofluoromethane	<0.5		<0.5		µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5		<0.5		µg/L	EPA 524.2
Vinyl Chloride	<0.3		<0.3		µg/L	EPA 524.2
Total Xylenes	<1		<1		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)						
Alachlor (Alanex)	<0.1		<0.1		µg/L	EPA 505
Atrazine	<0.05		<0.05		µg/L	EPA 525.2
Bentazon	<0.5		<0.5		µg/L	EPA 515.4
Benzo(a)pyrene	<0.02		<0.02		µg/L	EPA 525.2
Carbofuran	<0.5		<0.5		µg/L	EPA531.2
Chlordane	<0.1		<0.1		µg/L	EPA 505
2,4-D	<0.1		<0.1		µg/L	EPA 515.4
Dalapon	<1		<1		µg/L	EPA 515.4
Dibromochloropropane	<0.01		<0.01		µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6		<0.6		µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6		1.1		µg/L	EPA 525.2
Dinoseb	<0.2		<0.2		µg/L	EPA 515.4
Diquat	<0.4		<0.4		µg/L	EPA 549.2
Endothall	<20		<20		µg/L	EPA 548.1

Table 2-6a  
Diluent Water Monitoring Results

Constituent	West Cucamonga Creek - 8th Street		Unit	Method
	November 3, 2008	8th Street Storm Drain November 3, 2008		
Endrin	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<6	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	µg/L	EPA 525.2
Lindane	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.1	<0.1	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	0.11	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	µg/L	EPA 505
Simazine	0.3	<0.05	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts				
Total Trihalomethanes (TTHMs)	<0.5	<0.5	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	1.4	2.4	µg/L	S6251B
Bromate	<5	<5	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	mg/L	EPA 300.0
Notification Level Chemicals				
Copper	9.9	5.5	µg/L	EPA 200.7
Lead	1.2	0.6	µg/L	EPA 200.8
Radionuclides				
Combined Radium-226 and Radium 228	<0.11	0.25	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	6.1	pCi/L	EPA 900.0
Tritium	<224	<222	pCi/L	EPA 906
Strontium-90	<0.53	<0.72	pCi/L	EPA 905
Gross Beta Particle Activity	4.5	6	pCi/L	EPA 900.0
Uranium	1.7	0.87	pCi/L	EPA 200.8
Unregulated Chemicals				
Boron	9.9	0.1	mg/L	EPA 200.7
Chromium VI	0.3	0.2	µg/L	EPA 218.6
Dichlorodifluoromethane	<0.5	<0.5	µg/L	EPA 524.2
Ethyl tertiary butyl ether	<3	<3	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	ng/L	1625MOD
Perchlorate	<4	<4	µg/L	EPA 314
Tertiary amyl methyl ether	<3	<3	µg/L	EPA 524.2
Tertiary butyl alcohol	<2	<2	µg/L	542.2 MOD
Vanadium	5.3	3.1	µg/L	EPA 200.8
1,4 - Dioxane	<2	<2	µg/L	8270MOD
1,2,3-Trichloropropane	<0.5	<0.5	µg/L	EPA 524.2
Secondary Maximum Contaminant Level Chemicals				
Aluminum	145	42	µg/L	EPA 200.7
Corrosivity	No Data	0.7	SI	SM 2330B
Foaming Agents (MBAS)	0.1	0.1	mg/L	S5540C/EPA 425.1
Iron	431	122	µg/L	EPA 200.7
Manganese	19	6	µg/L	EPA 200.7
Odor--Threshold	40	40	TON	SM 2150B
Silver	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Zinc	26	46	µg/L	EPA 200.7

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

Constituent	San Antonio Channel- College Heights Inlet December 1, 2008	Cucamonga Creek - Turner 1 December 1, 2009	West Cucamonga Creek - Ely 1 December 3, 2009	Day Creek @ Lower Day December 16, 2008	Unit	Method
NO <sub>2</sub> -N	0.07	0.04	0.35	<0.01	mg/L	EPA 300.0
NO <sub>3</sub> -N	2.9	0.9	0.9	0.4	mg/L	EPA 300.0
TDS	162	208	131	35	mg/L	SM 2540C
Total Coliform	22000	>2300	161000	>23	mpn/100ml	SM 9221B
Oil & Grease	<2	5	3	3	mg/L	EPA 1664A
Inorganic Chemicals						
Aluminum	212	269	211	1609	µg/L	EPA 200.7
Antimony	1.7	1.4	1.2	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<6.92	<6.92	<6.57	<6.26	MFL	EPA 100.2
Barium	38	38	28	29	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	2.0	2.2	3.0	3.0	µg/L	EPA 200.7
Cyanide	<0.006	<0.006	<0.006	<0.006	mg/L	SM 4500-CN E
Fluoride	0.3	0.2	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	4	3	4	2	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	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<1	<1	<1	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	4.5	5.5	6.8	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.3	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)						
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	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	EPA531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	0.45	0.93	0.29	<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	<0.6	<0.6	<0.6	<0.6	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	San Antonio Channel- College Heights Inlet December 1, 2008	Cucamonga Creek - Turner 1 December 1, 2009	West Cucamonga Creek - Ely 1 December 3, 2009	Day Creek @ Lower Day December 16, 2008	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	9	40	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	0.13	<0.04	0.14	<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	0.5	<0.05	<0.05	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)	<2	<2	<2	<0.5	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	1.1	<1	2.6	2	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	9.8	7.61	12.6	6.5	µg/L	EPA 200.7
Lead	1.6	0.88	2.4	1.5	µg/L	EPA 200.8
Radionuclides						
Combined Radium-226 and Radium 228	<0.514	<0.387	<0.496	0.409	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	5.2	<3	<3	pCi/l	EPA 900.0
Tritium	<239	<240	<240	<228	pCi/l	EPA 906
Strontium-90	<0.653	0.788	<0.591	<0.394	pCi/l	EPA 905
Gross Beta Particle Activity	5	5	6	<3	pCi/l	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	pCi/l	EPA 200.8
Unregulated Chemicals						
Boron	<0.1	0.114	<0.1	<0.1	mg/L	EPA 200.7
Chromium VI	0.2	0.6	<0.1	0.3	ug/l	EPA 218.6
Dichlorodifluoromethane	<0.5	<0.5	<0.5	<0.5	ug/l	EPA 524.2
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	<3	ug/l	EPA 524.2
N-nitrosodimethylamine (NDMA)	4.1	<2	5.6	124	ng/L	1625MOD
Perchlorate	<4	<4	<4	<4	ug/l	EPA 314
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	<3	ug/l	EPA 524.2
Tertiary butyl alcohol	<2	<2	<2	<2	ug/l	542.2 MOD
Vanadium	4	11	4	5	ug/l	EPA 200.8
1,4 - Dioxane	<2	<2	<2	<2	ug/l	8270MOD
1,2,3-Trichloropropane	<0.5	<0.5	<0.5	<0.5	ug/l	EPA 524.2
Secondary Maximum Contaminant Level Chemicals						
Aluminum	212	269	211	1609	µg/L	EPA 200.7
Corrosivity	-0.6	1.5	-1.1	-1.9	SI	SM 2330B
Foaming Agents (MBAS)	0.14	0.09	0.08	<0.05	mg/L	S5540C/EPA 425.1
Iron	298	264	385	1800	µg/L	EPA 200.7
Manganese	30	17	51	41	µg/L	EPA 200.7
Odor--Threshold	17	17	67	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Zinc	54	22	72	31	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
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
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
Declez Basin	--	Inland Empire Utilities Agency - D-1/1	50 downgradient	135-155	4	NA	Monitoring
	--	Inland Empire Utilities Agency - D-1/2	50 downgradient	185-205	4	NA	Monitoring
RP-3 Basins	--	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	NA	Monitoring
	--	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	NA	Monitoring
7th & 8th Street Basins	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
MZ-1 Basins	--	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	--	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	--	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	NA	Monitoring
	--	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	NA	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	NA	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	NA	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

**Notes:**

NA = Data not available

CBWM ID = Chino Basin Water Master well identification number

bgs = below ground surface

\* = Ontario Well No. 38 has taken the place of Ontario Well No. 19, which is inactive



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

Date	Diluent Water																	
	Imported Water						Local Runoff / Storm Flow						Recycled Water					
	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana
Jan-08	0	0	0	0	0	0	328	793	301	454	126	130	1	0	0	0	0	0
Feb-08	0	0	0	0	0	0	98	233	50	260	97	75	157	0	0	0	97	0
Mar-08	0	0	0	0	0	0	21	82	9	17	44	0	164	116	0	0	80	0
<b>1Q08 Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>447</b>	<b>1108</b>	<b>360</b>	<b>731</b>	<b>267</b>	<b>205</b>	<b>322</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>177</b>	<b>0</b>
Apr-08	0	0	0	0	0	0	11	170	4	18	64	0	90	116	0	0	7	47
May-08	0	0	0	0	0	0	90	137	43	181	39	3	158	87	0	0	86	38
Jun-08	0	0	0	0	0	0	15	123	3	39	24	8	86	103	0	0	0	72
<b>2Q08 Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>430</b>	<b>50</b>	<b>238</b>	<b>127</b>	<b>11</b>	<b>334</b>	<b>306</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>157</b>
Jul-08	0	0	0	0	0	0	29	91	3	11	18	31	224	67	0	0	0	0
Aug-08	0	0	0	0	0	0	15	8	16	8	6	45	128	0	117	0	0	0
Sep-08	0	0	0	0	0	0	15	5	0	141	3	34	0	0	86	0	0	0
<b>3Q08 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>104</b>	<b>19</b>	<b>160</b>	<b>27</b>	<b>110</b>	<b>352</b>	<b>67</b>	<b>203</b>	<b>0</b>	<b>0</b>	<b>0</b>
Oct-08	0	0	0	0	0	0	16	85	0	117	3	36	0	135	166	94	0	0
Nov-08	0	0	0	0	0	0	137	198	23	117	3	50	0	88	103	38	0	0
Dec-08	0	0	0	0	0	0	352	287	162	394	35	87	0	0	88	0	0	0
<b>4Q08 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>505</b>	<b>571</b>	<b>184</b>	<b>628</b>	<b>41</b>	<b>173</b>	<b>0</b>	<b>223</b>	<b>356</b>	<b>131</b>	<b>0</b>	<b>0</b>

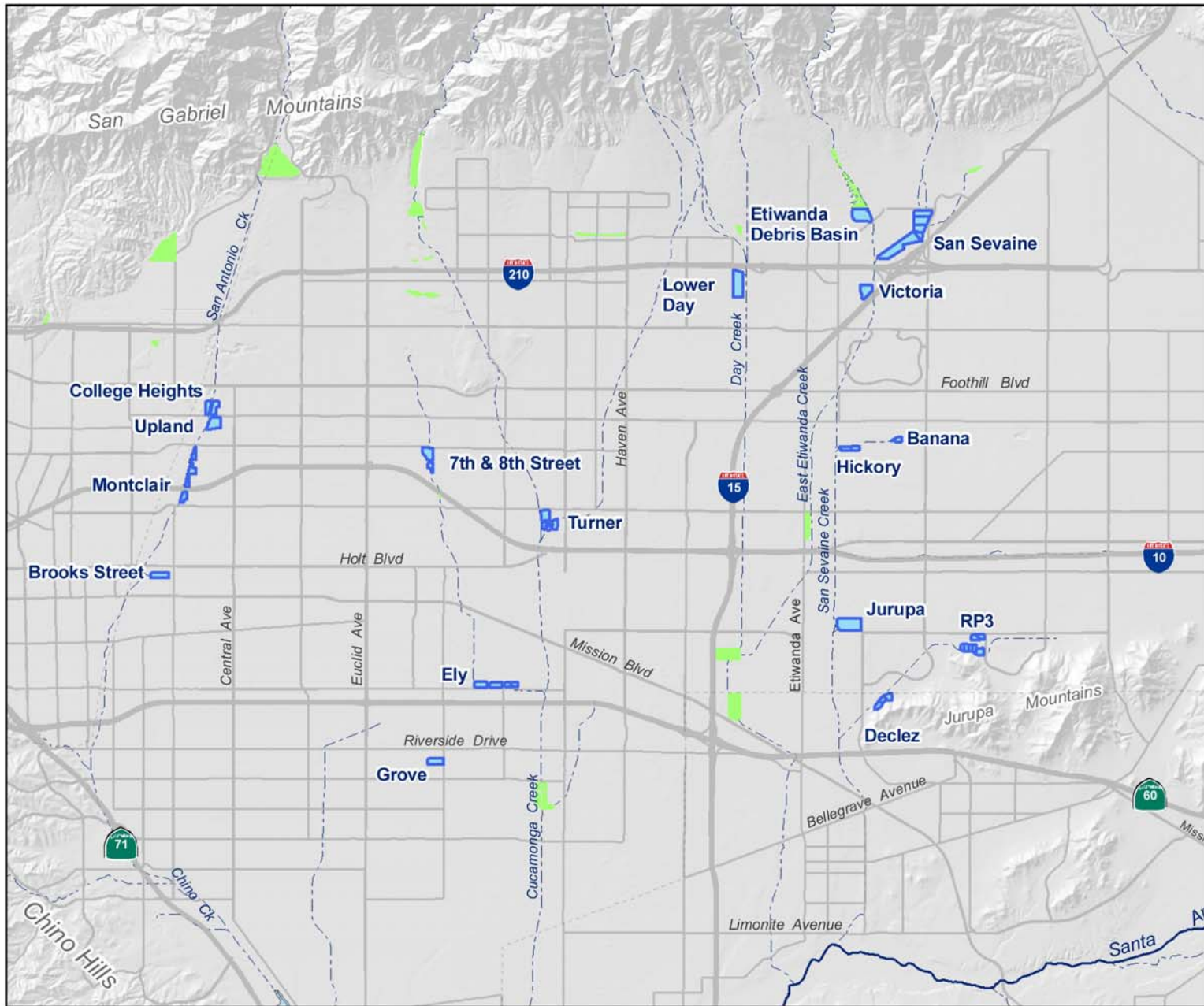
Note: (-) Negative values indicate more water pumped from the basin than was routed to the basin.  
Diluent water at Ely Basin does not include discharge of treated groundwater

Table 7-1  
Water Reuse Study Results




Constituent	Brooks 1/1 November 19, 2008	Brooks 1/2 November 19, 2008	8th St 2/1 December 18, 2008	Brooks 1/1 December 18, 2008	Unit	Method
1,1,1-Trichloroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,1,2-Tetrachloroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1,2-Trichloroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,1-Dichloroethylene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,3-Trichloropropane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trichlorobenzene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2,4-Trimethylbenzene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichlorobenzene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloroethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
cis-1,2-Dichloroethylene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
trans-1,2-Dichloroethylene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,2-Dichloropropane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3,5-Trimethylbenzene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,3-Dichloropropene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
1,4-Dichlorobenzene	<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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
4-chlorotoluene	<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	<25	<25	<25	4224	µg/L	EPA 200.8
Antimony	<1	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	4.7	µg/L	EPA 200.8
Atrazine	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 525.2
Barium	49	54	51	41	µg/L	EPA 200.8
Bentazon	<0.5	<0.5	<0.5	<0.5	µg/L	ML/EPA 515.4
Benzene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Benzo(a)pyrene	<0.02	<0.05	<0.05	<0.02	µg/L	ML/EPA 525.2
Beryllium	<0.5	<0.5	<0.5	0.6	µg/L	EPA 200.8
Boron	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
Bromate	<1	<1	<1	<1	µg/L	EPA 317
Butylbenzene-n	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-sec	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Butylbenzene-tert	<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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 624
Carbon Tetrachloride	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Chlorate	10	<10	11	35	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	5.1	5.0	5.3	13.0	µg/L	EPA 200.8
Chromium-6	1.0	4.8	2.7	1.4	µg/L	EPA 218.6
Copper	<0.5	<0.5	<0.5	2	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	0.07	0.01	<0.01	µg/L	ML/EPA 504.1
Dichlorodifluoromethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Dichloromethane	<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	3.8	1	<0.6	µg/L	ML/EPA 525.2

Table 7-1  
Water Reuse Study Results

Constituent	Brooks 1/1 November 19, 2008	Brooks 1/2 November 19, 2008	8th St 2/1 December 18, 2008	Brooks 1/1 December 18, 2008	Unit	Method
Dinoseb	<0.2	<0.2	<0.2	<0.2	µg/L	ML/EPA 515.4
Diquat	<8	<0.4	<0.4	<0.4	µg/L	ML/EPA 549.2
EC	385	535	525	455	µmhos/cm	SM 2510
Endothall	<5	<20	<20	<5	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 505
Ethyl tertiary butyl ether	<30	<3	<3	<3	µg/L	ML/EPA 524.2
Ethylbenzene	<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	0.3	0.2	0.2	0.2	mg/L	EPA 300.0
Formaldehyde	<5	<5	<5	10	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 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 505
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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Lead	<0.5	<0.5	<0.5	10.7	µg/L	EPA 200.8
Lindane	<0.01	<0.01	<0.01	<0.01	µg/L	ML/EPA 505
Manganese	<1	<1	<1	24	µg/L	EPA 200.8
Mercury	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 245.2
Methoxychlor	<0.05	<0.05	<0.05	<0.05	µg/L	ML/EPA 505
Methyl isobutyl ketone (MIBK)	<50	<5	<5	<5	µg/L	ML/EPA 524.2
Methyl-tert-butyl ether (MTBE)	<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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Nickel	1.35	1.31	1.86	25	µg/L	EPA 200.8
Nitrate Nitrogen	2.2	18.0	2.1	19.8	mg/L	EPA 300.0
Nitrite Nitrogen	<0.02	0.04	<0.01	0.02	mg/L	EPA 300.0
Nitrobenzene	<5	<5	<5	<5	µg/L	ML/EPA625/8270
N-nitrosodiethylamine (NDEA)	<2	<2	<2	<2	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	<2	ng/l	ML/EPA 521
n-propylbenzene (isocumene)	<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	9.5	9	<4	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	0.06	<0.05	µg/L	ML/EPA 525.2
Styrene	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Tertiary amyl methyl ether	<30	<3	<3	<3	µg/L	ML/EPA 524.2
Tertiary butyl alcohol	<2	<2	<2	<2	µg/L	ML/524.2
Tetrachloroethylene	<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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Total Nitrate/Nitrite (as N)	2.2	18.1	2.1	19.8	mg/L	EPA 300.0
Total Trihalomethanes (THM)	<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	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 524.2
Trichlorofluoromethane	<5	<0.5	<0.5	<0.5	µg/L	ML/EPA 624
Vanadium	1.42	4.27	4.22	3	µg/L	EPA 200.8
Vinyl Chloride	<3	<0.3	<0.3	<0.3	µg/L	ML/EPA 524.2
Xylenes	<10	<1	<1	<1	µg/L	ML/EPA 524.2

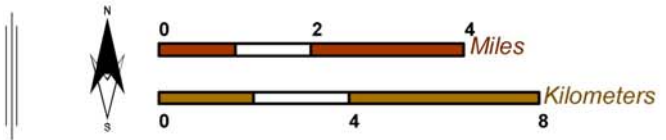


**Explanation**

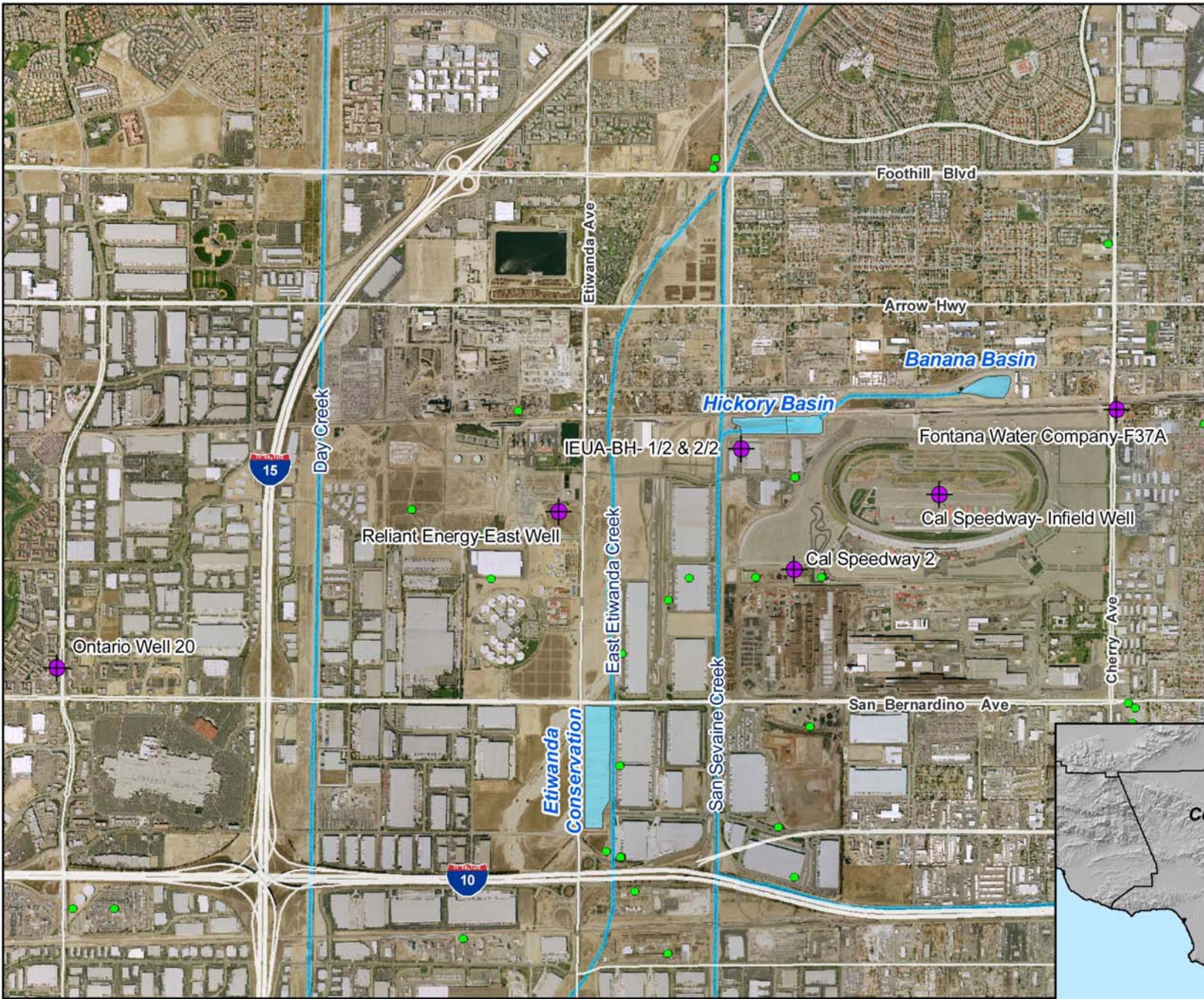
-  Recharge Basins in the Recycled Water Groundwater Recharge Program
-  Non-program basins
-  Rivers and Streams






**Chino Basin Recycled Water Groundwater Recharge Program**  
Basin Locations



**Figure 1-1**



**Main Map Features**

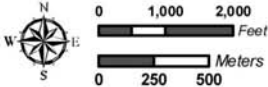
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

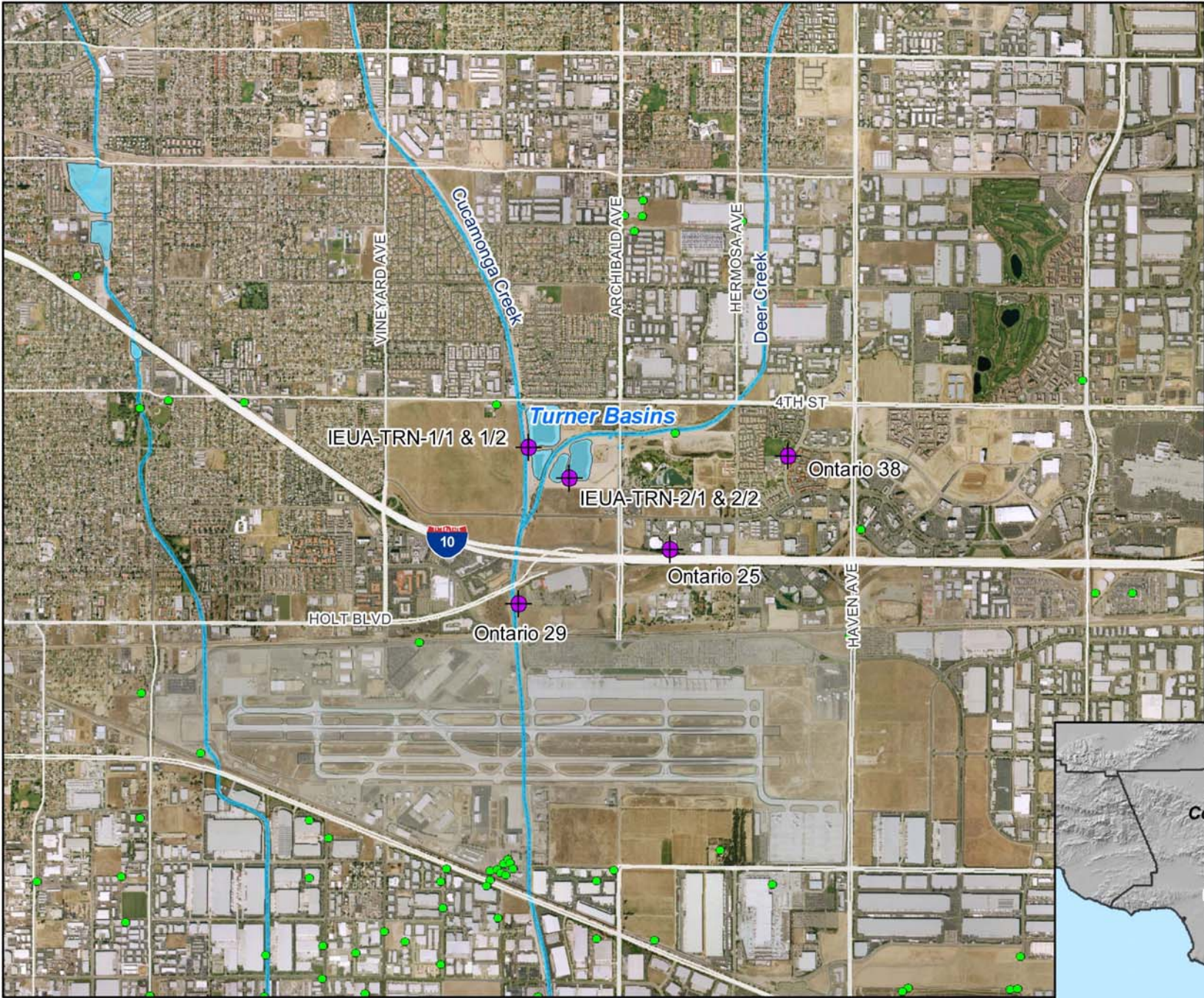


**Monitoring Well Network**  
Hickory and Banana Basins

**Figure 2-1**

Recycled Water Recharge Program





### Main Map Features

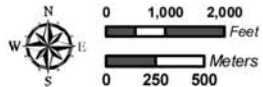
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins



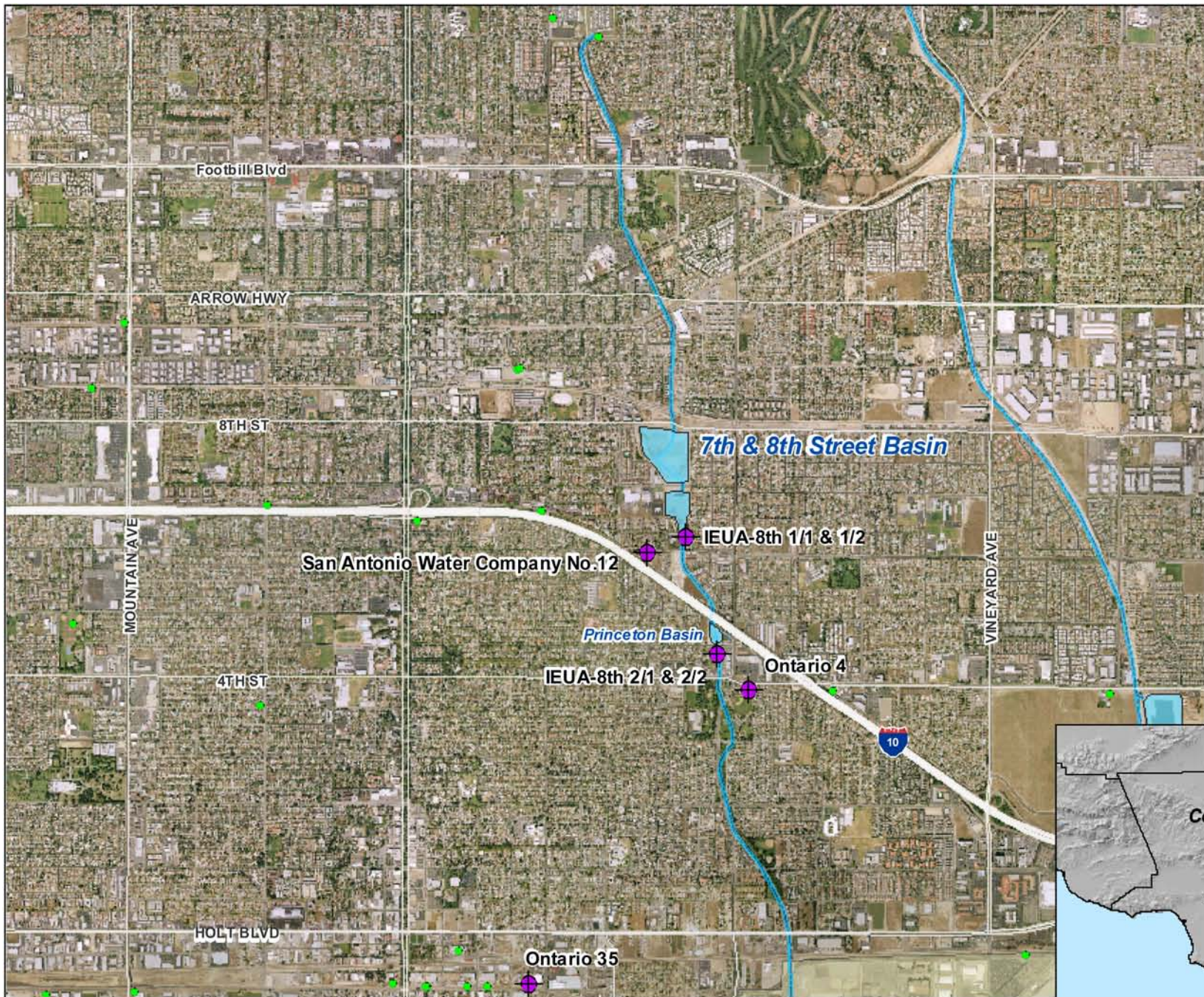
Monitoring Well Network  
Turner Basins

Figure 2-2





Recycled Water Recharge Program







### Main Map Features

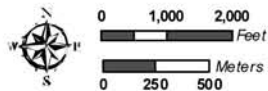
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

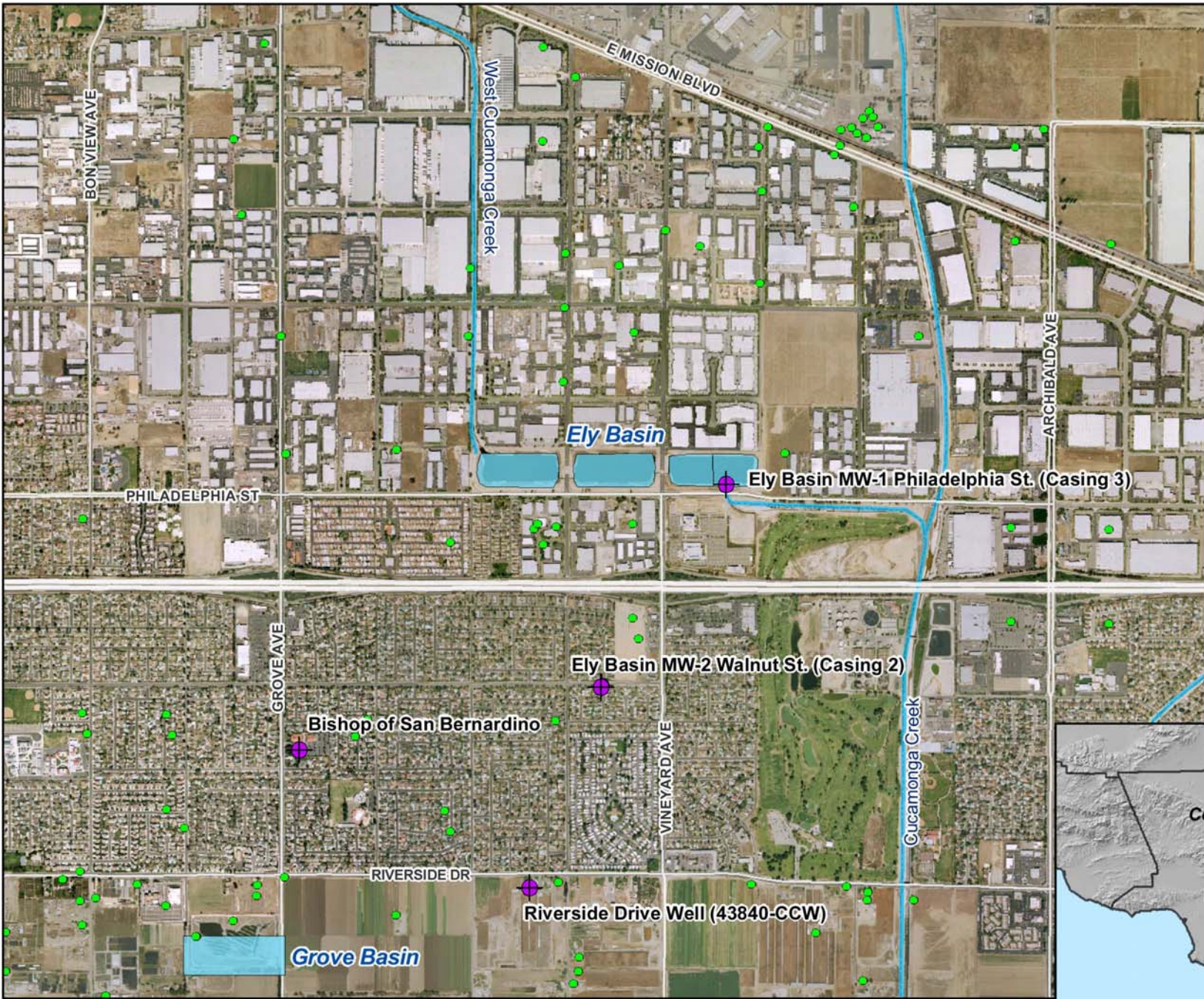


**Monitoring Well Network**  
7th and 8th Street Basin





**Figure 2-3**

Recycled Water Recharge Program





**Main Map Features**

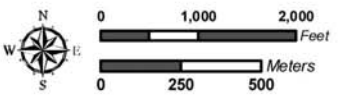
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

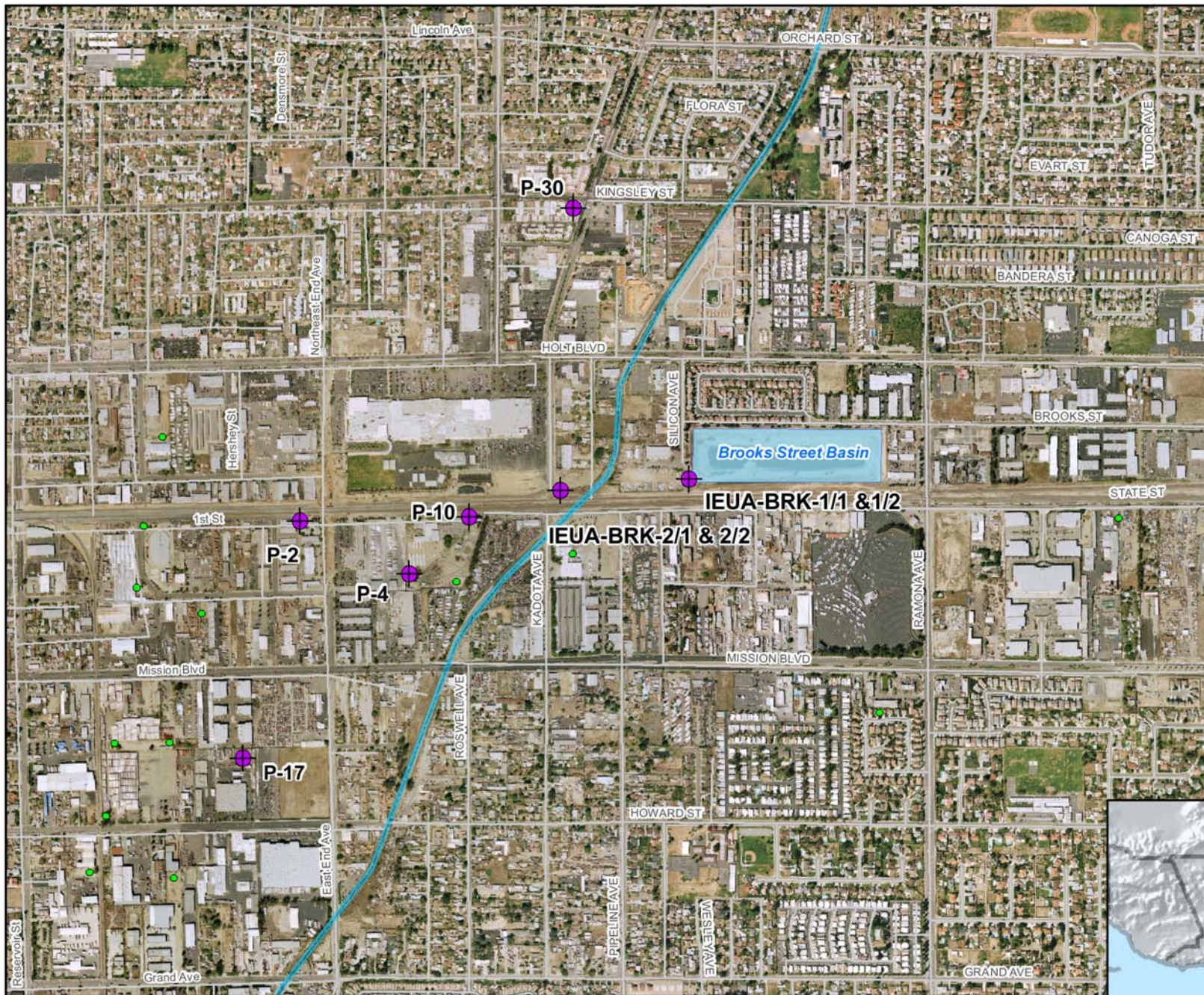


**Monitoring Well Network**  
Ely Basins

**Figure 2-4**

Recycled Water Recharge Program





### Main Map Features

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

### Monitoring Well Network Brooks Street Basin

Recycled Water Recharge Program

Figure 2-5

