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November 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 July through September 2008**

Dear Mr. Thibeault,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the third quarter of 2008 (3Q08), July 1 through September 30, 2008, for the *Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report.

During 3Q08, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of Odor and Oil & Grease. 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. Oil & Grease does not have a promulgated primary or secondary MCL. Odor and Oil & Grease is discussed in further detail in the report text.

Chino Basin Watermaster hereby certifies that, during the period of July 1 through September 30, 2008, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time of the recharge sites using recycled water, namely Banana, 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 November 2008 in the Cities of Chino and Rancho Cucamonga.

A handwritten signature in blue ink, appearing to read "Patrick O. Sheilds".

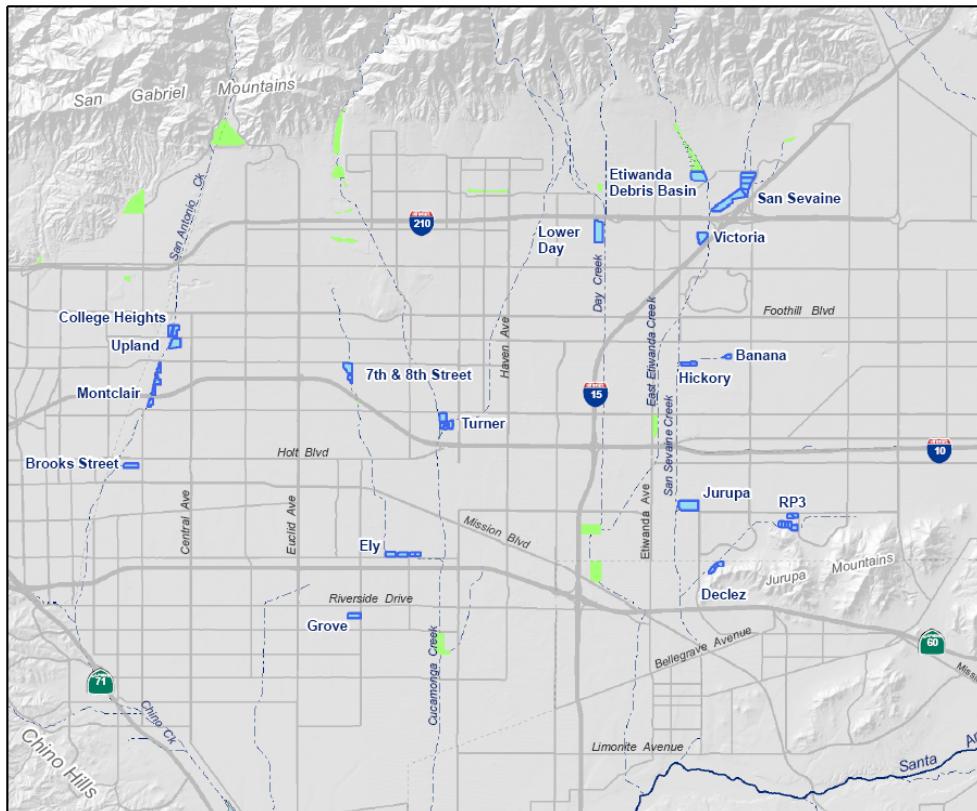
Patrick O. Sheilds  
Executive Manager of Operations

A handwritten signature in blue ink, appearing to read "Kenneth R. Manning".

Kenneth R. Manning  
Chief Executive Officer

# Chino Basin Recycled Water Groundwater Recharge Program

## Quarterly Monitoring Report July 1 through September 30, 2008



*Prepared by:*



November 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 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 Third Quarter of 2008 (3Q08).

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 for San Antonio Water Company Well No. 12.

## **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 3Q08 data.

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Recycled Water Specifications A.5 though 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 3Q08.

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 4Q07 through 3Q08 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 3Q08, with the exception of threshold odor.

During 3Q08, the threshold odor secondary MCL of 3 Units was exceeded by a 4-quarter running average value of 4 Units. Diluent water sampling for 3Q08 indicated that both diluent water samples resulted in threshold odor values of 4 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 3Q08 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the 8<sup>th</sup> Street Basin as the compliance point, in accordance with Recycled Water Quality Specification A.2.

Oil & Grease has a narrative limit in Recycled Water Specification A.15 of 1 mg/L. After the IEUA laboratory performed an MDL study and attained a 1 mg/L MDL during 3Q08, a sample was collected and analyzed at IEUA laboratory. The resultant value for this sample was 2 mg/L, which exceeded the 1 mg/L limit. Oil & Grease does not have a promulgated primary or secondary MCL.

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 7<sup>th</sup> & 8<sup>th</sup> Street, Banana, Brooks, and Ely Basins. Brooks Basin began receiving recycled water during 3Q08.

The 7<sup>th</sup> & 8<sup>th</sup> Street Basin ended the recycled water delivery stage of its start-up period on August 21, 2008, but weekly monitoring was continued to evaluate the potential impact of local street runoff on the results. Compliance monitoring points have not yet been established for Brooks and 7<sup>th</sup> & 8<sup>th</sup> Street Basins; therefore all lysimeter sampling data collected during 3Q08 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.

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During 3Q08, the Turner Basin Start-up period report was submitted to RWQCB and CDPH on July 3, 2008. Key recommendations made by IEUA include 1) tracking of two RWC limits, one for Turner cells 1 and 2 and the other for Turner cells 3 and 4, and 2) implementation of an alternative monitoring plan that includes pipeline sampling of recycled water and application of a correction factor for Soil-Aquifer Treatment. For cells 1 & 2, the maximum RWC limits is set at 24 percent, while for cells 3 & 4 it is set at 45 percent. 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.

During 3Q08, 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 4Q08 to develop a SAT correction factor to use in pipeline-based alternative monitoring plan.

During 3Q08, the Brooks Street Basin Start-Up Period began on August 6, 2008 and continued through the quarter.

### **C. Diluent Water**

For 3Q08, diluent water sampling of local runoff was conducted in the San Sevaine Channel at the Hickory Basin Inlet and in the Declez Channel at the RP3 Basin Inlet. State Water Project water was not delivered to any basins during the monitoring period. Table 2-6 lists the results of diluent water sampling and analyses. Details on the methods used to measure daily diluent water flow can be found in the CDPH-approved "Diluent Water Monitoring Plan."

### **D. Groundwater Monitoring Wells**

During 3Q08, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the Turner Basins is monitored by sampling a network of six wells. The groundwater quality within the vicinity of the 7<sup>th</sup> & 8<sup>th</sup> Street Basins are monitored by sampling a network of five wells. The groundwater quality within the vicinity of the Ely Basin is monitored by sampling a network of four wells. The groundwater quality within the vicinity of the Brooks Basin is 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 3Q08 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 7<sup>th</sup> & 8<sup>th</sup> Street, Ely, and Brooks 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 3Q08. Table 3-1 lists the volumes of diluent water, recycled water, and/or local runoff captured during 3Q08 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.

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

Watermaster has certified that there was no reported pumping of groundwater in 3Q08 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 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. WateReuse Study**

IEUA is participating in WateReuse 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 3Q08, Well No. 12 was sampled on August 19, 2008 and September 16, 2008 discharging less than 20,000 gallons each time. Laboratory results for the two sampling/discharge events are included in Table 6-1.

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

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL
2;5;10	16	*			6<pH<9					2.2;23;240	2;5;10	16	*		6<pH<9					2.2;23;240
07/01/08	1.0	9.3	6.8	8.3	6.8	7.1	835	472	159	<2	0.3	4.2	10.8	11.4	10.8	7.2	915	504	144	<2
07/02/08	1.0	9.0				7.1	745			4	0.3	4.1	10.7		10.7	7.1	815			<2
07/03/08	1.1	8.0				7.0	750			<2	0.3	4.1	10.0		10.0	7.2	820			<2
07/04/08	1.0	7.9				7.0	745			<2	0.3	4.1	8.8		8.8	7.2	810			<2
07/05/08	0.8	8.4				7.0	760			2	0.3	4.0	8.9		8.9	7.2	825			<2
07/06/08	0.8	8.0	7.5		7.5	7.0	820			<2	0.3	4.1	9.8		9.8	7.2	870			<2
07/07/08	0.9	7.6				7.1	750			2	0.4	4.1	10.1		10.1	7.1	820			<2
07/08/08	0.9	7.5	6.4	8.0	6.4	7.1	805			<2	0.3	4.2	10.2	11.1	10.2	7.1	865	504		<2
07/09/08	0.9	7.4				7.0	740			<2	0.4	4.2	10.1		10.1	7.2	800			<2
07/10/08	0.9	7.4	5.5		5.5	7.0	795			<2	0.3	4.3	10.2		10.2	7.1	840			<2
07/11/08	0.9	7.3				7.0	760			<2	0.3	4.1	8.7		8.7	7.2	800			<2
07/12/08	0.9	7.8				7.0	750			<2	0.3	4.0	9.3		9.3	7.1	795			<2
07/13/08	0.9	8.3	5.0		5.0	7.1	770			<2	0.3	3.9	10.1		10.1	7.1	825			<2
07/14/08	0.9	8.2				7.1	775			<2	0.3	4.0	9.9		9.9	7.1	830			<2
07/15/08	0.9	8.4	5.5	7.1	5.5	7.0	740			<2	0.3	3.9	9.7	10.4	9.7	7.1	790			<2
07/16/08	0.9	8.3				7.0	755			<2	0.2	4.0	8.5		8.5	7.1	800	494		<2
07/17/08	0.8	8.4	6.3		6.3	7.0	750			<2	0.2	4.0	9.3		9.3	7.1	800			<2
07/18/08	0.7	8.0				7.0	760			<2	0.2	4.0	8.5		8.5	7.2	790			<2
07/19/08	0.7	7.6				7.1	760			<2	0.2	3.9	8.0		8.0	7.2	805			<2
07/20/08	0.7	8.2	7.0		7.0	7.1	790			<2	0.3	4.0	7.0		7.0	7.2	815			<2
07/21/08	0.8	7.2				7.1	790			<2	0.4	4.2	6.0		6.0	7.2	810			<2
07/22/08	0.8	7.9	6.9	8.4	6.9	7.1	840			<2	0.4	4.3	6.3	7.0	6.3	7.2	870			<2
07/23/08	0.8	7.4				7.0	825			<2	0.4	4.2	6.9		6.9	7.2	840			<2
07/24/08	0.8	7.7	6.8		6.8	7.1	825			<2	0.4	4.2	7.3		7.3	7.2	830			<2
07/25/08	0.7	7.5				7.0	760			<2	0.4	4.2	5.2		5.2	7.2	780			<2
07/26/08	0.7	7.3				7.0	750			<2	0.6	4.2	8.0		8.0	7.2	785			<2
07/27/08	0.7	7.6	7.3		7.3	7.0	810			<2	0.6	4.3	8.1		8.1	7.2	830			<2
07/28/08	0.7	9.1				7.0	740			<2	0.5	4.7	7.7		7.7	7.2	765			<2
07/29/08	0.7	8.9	7.6	9.1	7.6	7.1	760			<2	0.5	4.7	7.9	9.3	7.9	7.2	800	488		<2
07/30/08	0.8	8.9				7.0	800			<2	0.4	4.6	8.0		8.0	7.2	825			<2
07/31/08	0.8	9.0	6.9		6.9	7.1	770			<2	0.4	4.7	7.8		7.8	7.2	800			<2
Avg	0.8	8.0	6.6	8.2	6.6	7.0	775	472	159	<2	0.3	4.2	8.6	9.8	8.6	7.2	818	498	144	<2
Min	0.7	7.2	5.0	7.1	5.0	7.0	740	472	159	<2	0.2	3.9	5.2	7.0	5.2	7.1	765	488	144	<2
Max	1.1	9.3	7.6	9.1	7.6	7.1	840	472	159	4	0.6	4.7	10.8	11.4	10.8	7.2	915	504	144	<2

Note: Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA0105279, Order No. R8-2006-0010.

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

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

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

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

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

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU	mg/L	mg/L	mg/L	mg/L	unit	μhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	μhmo/cm	mg/L	mg/L	mpn/100mL
2;5;10	16	*				6<pH<9				2.2;23;240	2;5;10	16	*			6<pH<9				2.2;23;240
08/01/08	0.8	8.0				7.2	780			<2	0.5	4.6	5.2	5.2	7.2	810				<2
08/02/08	0.8	8.1				7.2	785			<2	0.5	4.5	7.8	7.8	7.2	800				<2
08/03/08	0.8	9.0	7.0	7.0	7.3	7.3	777			<2	0.5	4.7	7.1	7.1	7.2	791				<2
08/04/08	0.8	9.0				7.3	785			2	0.5	4.8	5.7	5.7	7.2	790				<2
08/05/08	0.8	10.1	6.7	8.9	6.7	7.3	785	470	157	2	0.5	5.2	5.9	6.7	5.9	7.3	820	480	130	<2
08/06/08	0.9	9.3				7.3	795			<2	0.4	4.7	5.1	5.1	7.3	820				<2
08/07/08	0.8	9.5	6.5		6.5	7.2	790			<2	0.3	4.7	4.5	4.5	7.3	800				<2
08/08/08	0.9	8.8				7.2	780			<2	0.4	4.6	4.0	4.0	7.3	785				<2
08/09/08	0.9	9.2				7.3	775			<2	0.4	4.7	4.5	4.5	7.3	780				<2
08/10/08	0.8	8.9	6.6		6.6	7.3	795			2	0.4	4.7	5.1	5.1	7.3	780	466			<2
08/11/08	1.0	11.0				7.3	800			<2	0.4	4.9	4.6	4.6	7.3	780				<2
08/12/08	0.9	9.8	7.5	9.4	7.5	7.3	800			<2	0.3	4.7	4.0	4.6	4.0	7.3	820			<2
08/13/08	0.8	10.7				7.3	780			<2	0.4	4.8	4.1	4.1	7.3	810				<2
08/14/08	0.7	NS				7.3	NS			<2	0.5	4.8	4.1	4.1	7.3	790				<2
08/15/08	0.7	9.2				7.3	820			<2	0.5	4.7	4.4	4.4	7.4	795				<2
08/16/08	0.7	9.2				7.3	825			<2	0.5	4.9	5.0	5.0	7.3	790				<2
08/17/08	0.8	9.4	<0.1		0.2	7.3	835			<2	0.5	4.6	4.7	4.7	7.3	795				<2
08/18/08	0.8	8.3				7.3	760			2	0.6	4.4	4.0	4.1	7.3	750				<2
08/19/08	0.8	8.1	6.9	8.7	6.9	7.3	760			<2	0.6	4.4	3.4	4.2	3.4	7.3	760	458		<2
08/20/08	0.7	7.7				7.3	850			<2	0.5	4.3	3.2	3.2	7.4	830				<2
08/21/08	0.8	8.1	6.9		6.9	7.3	835			<2	0.4	4.3	3.8	3.8	7.1	820				<2
08/22/08	0.7	7.3				7.4	780			<2	0.4	4.3	4.0	4.0	6.8	765				<2
08/23/08	0.7	7.8				7.4	785			<2	0.4	4.3	4.4	4.4	6.8	775				<2
08/24/08	0.7	8.3	7.1		7.1	7.4	815			2	0.4	4.4	4.2	4.2	6.8	840				<2
08/25/08	0.8	8.8				7.4	830			<2	0.4	4.5	3.4	3.4	6.9	830				<2
08/26/08	0.9	8.2	8.0	9.8	8.0	7.1	780			<2	0.3	4.3	3.3	4.1	3.3	6.8	770	450		<2
08/27/08	0.8	8.0				6.9	820			<2	0.3	4.1	4.1	4.1	6.8	800				<2
08/28/08	0.8	8.2	6.8		6.8	7.4	780			<2	0.3	4.2	4.8	4.8	6.8	770				<2
08/29/08	0.8	7.9				7.4	780			<2	0.3	4.2	4.9	4.9	6.8	780				<2
08/30/08	0.8	8.0				7.4	785			<2	0.3	4.2	5.7	5.7	6.8	785				<2
08/31/08	0.8	7.6				7.3	770			<2	0.3	4.3	5.5	5.5	6.8	765				<2
Avg	0.8	8.7	7.0	9.2	6.4	7.3	795	470	157	<2	0.4	4.5	4.7	4.9	4.7	7.1	793	464	130	<2
Min	0.7	7.3	6.5	8.7	0.2	6.9	760	470	157	<2	0.3	4.1	3.2	4.1	3.2	6.8	750	450	130	<2
Max	1.0	11.0	8.0	9.8	8.0	7.4	850	470	157	2	0.6	5.2	7.8	6.7	7.8	7.4	840	480	130	<2

Note: Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA0105279, Order No. R8-2006-0010.

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

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

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

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

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

Unit Limits	RP-1 Effluent										RP-4 Effluent									
	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform	Turbidity	TOC	NO <sub>3</sub> -N	TN	TIN	pH	EC	TDS	Hardness	Coliform
	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	μho/cm	mg/L	mg/L	mpn/100mL
2;5;10	16	*			6<pH<9				2.2;23;240	2;5;10	16	*			6<pH<9				2.2;23;240	
09/01/08	0.8	8.4			7.4	760			<2	0.4	4.6	5.1		5.1	6.7	760			<2	
09/02/08	0.9	9.6	7.1	9.0	7.1	7.4	775		155	<2	0.4	4.6	4.1	4.3	4.1	6.8	760	464	134	<2
09/03/08	0.9	8.7				7.4	780	482		<2	0.4	4.6	4.5		4.5	6.8	770			<2
09/04/08	0.8	8.9	8.2		8.2	7.4	770			<2	0.3	4.5	5.4		5.4	6.8	730			<2
09/05/08	0.8	8.0				7.4	805			<2	0.4	4.5	6.0		6.0	6.8	780			<2
09/06/08	0.8	8.0				7.4	795			<2	0.4	4.6	5.6		5.6	6.8	775			<2
09/07/08	0.7	4.4	7.2		7.2	7.4	830			<2	0.5	4.8	4.7		4.7	6.9	925			<2
09/08/08	0.8	8.2				7.4	770			<2	0.5	4.9	3.7		3.7	6.9	750			<2
09/09/08	0.8	8.2	8.4	9.9	8.4	7.4	810			<2	0.6	4.8	4.8	5.5	4.8	6.9	790	456		<2
09/10/08	0.8	7.8				7.4	900			2	0.5	4.7	5.1		5.1	6.9	830			<2
09/11/08	0.7	8.7	11.3		11.3	7.4	790			<2	0.4	4.5	5.2		5.2	6.9	770			<2
09/12/08	0.7	7.6				7.4	800			2	0.4	4.4	4.9		4.9	6.8	770			<2
09/13/08	0.7	9.4				7.4	820			<2	0.4	4.3	5.6		5.6	6.8	775			<2
09/14/08	0.8	9.4	12.2		12.2	7.3	850			<2	0.4	4.9	6.0		6.0	6.8	820			<2
09/15/08	2.0	9.6				7.4	770			2	0.4	4.9	4.1		4.1	6.9	740			<2
09/16/08	0.7	9.2	11.9	13.3	11.9	7.4	880			<2	0.3	5.0	5.7	6.2	5.7	6.8	855	472		<2
09/17/08	0.8	9.2				7.3	850			<2	0.3	5.0	7.4		7.4	6.8	810			<2
09/18/08	0.8	9.2	9.5		9.5	7.4	795			<2	0.3	4.8	6.6		6.6	6.8	780			<2
09/19/08	0.7	8.2				7.4	790			<2	0.3	4.6	5.8		5.8	6.9	765			<2
09/20/08	0.7	8.3				7.4	800			<2	0.3	4.6	5.3		5.3	6.9	760			<2
09/21/08	0.7	8.8	7.7		7.7	7.4	835			2	0.3	4.7	4.7		4.7	6.9	820			<2
09/22/08	0.7	8.4				7.4	825			<2	0.3	4.9	3.8		3.8	6.9	820			<2
09/23/08	0.7	8.6	7.9		7.9	7.3	805			<2	0.4	4.7	4.1	4.0	4.1	6.9	790	459		<2
09/24/08	0.7	8.8				7.3	805			<2	0.5	4.5	4.5		4.5	6.9	785			<2
09/25/08	0.7	8.5	8.4		8.4	7.4	840			<2	0.6	4.6	4.3		4.7	6.9	790			<2
09/26/08	0.8	7.8				7.4	805			<2	0.6	4.2	4.7		4.7	6.9	770			<2
09/27/08	0.8	7.6				7.7	800			<2	0.6	4.3	4.9		4.9	6.9	785			<2
09/28/08	0.7	7.7	5.8		5.8	7.9	800			<2	0.7	4.6	4.2		4.2	6.9	805			<2
09/29/08	0.7	8.1				7.7	850			<2	0.7	4.6	3.0		3.0	7.0	830			<2
09/30/08	0.8	8.2	9.0		9.0	7.3	850			<2	0.6	4.2	3.4	3.4	3.4	7.0	830	471		<2
Avg	0.8	8.4	8.8	10.7	8.8	7.4	812	482	155	<2	0.4	4.6	4.9	4.7	4.9	6.9	791	464	134	<2
Min	0.7	4.4	5.8	9.0	5.8	7.3	760	482	155	<2	0.3	4.2	3.0	3.4	3.0	6.7	730	456	134	<2
Max	2.0	9.6	12.2	13.3	12.2	7.9	900	482	155	2	0.7	5.0	7.4	6.2	7.4	7.0	925	472	134	<2

Note: Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA0105279, Order No. R8-2006-0010.

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

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

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

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

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

Date	TIN		TDS	
	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jul-07	6.0	6.2	517	485
Aug-07	7.6	6.2	514	490
Sep-07	7.4	6.3	522	494
Oct-07	6.8	6.2	511	481
Nov-07	6.4	6.2	492	483
Dec-07	6.6	6.2	515	484
Jan-08	6.7	6.3	519	487
Feb-08	7.2	6.4	502	489
Mar-08	6.8	6.5	490	490
Apr-08	6.1	6.6	499	491
May-08	5.8	6.6	514	492
Jun-08	8.3	6.8	510	494
Limit		8.0		550

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

Constituent	4Q07	1Q08	2Q08	3Q08	4Q Run. Avg. <sup>1</sup>	Limit	Unit	Method
	Inorganic Chemicals							
Aluminum	27	<25	57	<25	27	1000	µg/L	EPA 200.8
Antimony	<0.5	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<0.2	<1.8	<1.8	<0.75	<1.8	7	MFL	EPA 100.2
Barium	6	9	7	29	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	3.2	2.9	1.2	3.4	2.7	50	µg/L	EPA 200.8
Cyanide	<6	<5	<6	<6	<6	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	2	µg/L	EPA 245.2
Nickel	2	3	3	1	2	100	µg/L	EPA 200.8
Perchlorate	<4	<10	<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	<1	<0.5	<0.5	<0.5	<1	1	µg/L	EPA 524.2
Carbon Tetrachloride	<1	<0.5	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<1	<0.5	<0.5	<0.5	<1	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<1	<0.5	<0.5	<0.5	<1	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<1	<0.5	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<1	<0.5	<1	<0.5	<1	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	NA	<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	<1	<0.5	<0.5	<0.5	<1	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<1	<0.5	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2
Ethylbenzene	<1	<0.5	<0.5	<0.5	<1	300	µg/L	EPA 524.2
Monochlorobenzene	<1	<0.5	<0.5	<0.5	<1	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	NA	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	NA	<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	<1	<0.5	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Toluene	<1	0.50	<0.5	<0.5	<1	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	NA	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<1	<0.5	<0.5	<0.5	<1	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<1	<0.5	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Trichloroethylene	<1	<0.5	<0.5	<0.5	<1	5	µg/L	EPA 524.2
Trichlorofluoromethane	<2	<0.5	<0.5	<0.5	<2	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<1	<0.3	<0.5	<0.3	<1	0.5	µg/L	EPA 524.2
m,p-Xylene	NA	<1	<0.5	<0.5	<1	1750 <sup>2</sup>	µg/L	EPA 524.2
o-Xylene	NA	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	<1	3	<1	1	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.6	<0.6	<0.6	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	<0.6	<0.6	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<20	<20	<5	<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	4Q07	1Q08	2Q08	3Q08	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	<0.05	0.06	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05	<0.05	0.10	<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	3.9	13.6	3.6	5.8	6.7	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	2.8	<1.1	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<0.71	<1.0	<0.76	0.22	<1.0	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	3.6	<2	15	pCi/L	EPA 900.0
Tritium	<198	<196	<191	<221	<221	20,000	pCi/L	EPA 906
Strontium-90	<0.670	<0.700	<0.740	<0.635	<0.740	8	pCi/L	EPA 905
Gross Beta Particle Activity	8	10	10	12	10	50	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	<0.7	<0.7	<0.7	20	pCi/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	27	<25	57	<25	27	200	µg/L	EPA 200.8
Copper	3.9	13.6	3.6	5.8	6.7	1000	µg/L	EPA 200.8
Corrosivity <sup>3</sup>	0.7	<0.1	NR	<0.1	0.1	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) <sup>3</sup>	0.12	<0.05	<0.05	<0.05	<0.05	500	µg/L	S5540C/EPA 425.1
Iron <sup>3</sup>	65	110.2	NR	NR	85	300	µg/L	EPA 200.7
Manganese	1	9	19	5	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>	4	8	2	2	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	24	55	15	7	25	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease <sup>4</sup>	1	3	<2	2	1	mg/L		EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	0.05	<0.01	<0.01	<0.01	<0.02	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	8th-25	8th-15	HE-25	8th-25				
Total Trihalomethanes (TTHMs)	16	6.5	48	3.5	19	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	3	<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. Final 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.

<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	3Q08	Unit	Method	
Metals				
Chromium (III) <sup>1</sup>	3.4	µg/L	EPA 200.8	
Volatile Organic Chemicals (VOCs)				
Acrolein	NR	µg/L	EPA 624	
Acrylonitrile	NR	µg/L	EPA 624	
Bromoform	0.6	µg/L	EPA 524.2	
Chlorodibromomethane	12	µg/L	EPA 524.2	
Chloroethane	<0.5	µg/L	EPA 524.2	
2-Chloroethylvinylether	NR	µg/L	EPA 624	
Chloroform	120	mg/L	EPA 524.2	
Dichlorobromomethane	43	µg/L	EPA 524.2	
Methyl Bromide	<0.5	µg/L	EPA 524.2	
Methyl Chloride	<0.5	µg/L	EPA 524.2	
Acid Extractables				
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 Extractables				
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	
Unregulated Chemicals				
Boron	0.4	mg/L	EPA 200.7	
Chromium VI	0.26	µg/L	EPA 218.6	
Dichlorodifluoromethane	<0.5	µg/L	EPA 524.2	
Ethyl tertiary butyl ether	<3	µg/L	EPA 524.2	
N-nitrosodimethylamine (NDMA)	3.6	ng/L	1625MOD	
Tertiary amyl methyl ether	<3	µg/L	EPA 524.2	
Tertiary butyl alcohol	<2	µg/L	542.2 MOD	
Vanadium	5	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	NR	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)	<2	µg/L	EPA 521	
N-Nitrosopyrrolidine	<2	µg/L	EPA 521	
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals <sup>3</sup>				
<u>Hormones</u>				
Ethynodiol	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 2-5**  
Lysimeter and Surface Water Monitoring: TOC, Nitrogen Species, and EC

8th Street 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		mg/L	mg/L	μmho/cm	mg/L	mg/L	mg/L	mg/L
8TH-00	0	07/02/08	6.78	7.6	845	6.0	5.5	2.0	0.26
8TH-00	0	07/08/08	6.11	4.5	795	3.5	3.4	1.1	0.07
8TH-00	0	07/15/08	23.07	6.2	705	3.8	2.7	3.5	0.63
8TH-00	0	07/22/08	7.10	6.2	770	11.1	4.0	2.2	0.02
8TH-00	0	07/30/08	5.90	6.8	740	5.5	5.3	1.5	0.05
8TH-00	0	08/05/08	5.76	3.7	810	3.4	3.1	0.5	0.10
8TH-00	0	08/13/08	6.94	3.0	750	1.2	1.1	1.9	0.02
8TH-00	0	08/19/08	5.40	3.1	765	1.9	1.9	1.2	0.02
8TH-00	0	08/26/08	9.09	0.9	750	0.3	<0.1	0.9	<0.01
8TH-00	0	09/03/08	10.59	1.9	620	<0.2	<0.1	1.9	<0.01
8TH-00	0	09/09/08	12.31	3.2	645	<0.2	<0.1	3.2	<0.01
8TH-00	0	09/16/08	10.58	1.0	635	<0.2	<0.1	1.0	<0.01
8TH-00	0	09/23/08	11.06	1.1	645	<0.2	<0.1	1.1	<0.01
8TH-00	0	09/30/08	10.54	0.8	530	<0.2	<0.1	0.8	<0.01
8TH-05	5	07/02/08	4.54	<0.6	725	<0.2	<0.1	<0.5	<0.01
8TH-05	5	07/08/08	4.33	<0.6	825	0.2	0.2	<0.5	<0.01
8TH-05	5	07/15/08	4.40	<0.6	835	0.2	0.2	<0.5	0.01
8TH-05	5	07/22/08	6.11	0.7	785	<0.2	<0.1	0.7	<0.01
8TH-05	5	07/30/08	6.29	0.7	710	<0.2	0.2	0.5	<0.01
8TH-05	5	08/05/08	4.69	<0.6	780	<0.2	<0.1	<0.5	<0.01
8TH-05	5	08/13/08	2.75	0.7	825	<0.2	<0.1	0.6	<0.01
8TH-05	5	08/19/08	3.38	0.8	780	<0.2	<0.1	0.8	<0.01
8TH-05	5	08/26/08	3.69	<0.6	740	0.2	0.2	<0.5	<0.01
8TH-05	5	09/03/08	3.62	<0.6	780	<0.2	<0.1	0.6	<0.01
8TH-05	5	09/09/08	3.87	2.2	705	2.1	<0.1	2.2	<0.01
8TH-05	5	09/16/08	4.23	<0.6	640	<0.2	<0.1	<0.5	<0.01
8TH-05	5	09/23/08	3.47	0.9	685	0.4	0.4	0.5	<0.01
8TH-05	5	09/30/08	3.29	2.2	755	2.3	2.2	<0.5	0.03
8TH-15	15	07/02/08	3.37	1.1	660	0.8	0.8	<0.5	<0.01
8TH-15	15	07/08/08	2.95	2.5	720	2.5	2.2	<0.5	<0.01
8TH-15	15	07/15/08	6.78	<0.6	690	0.4	0.4	<0.5	<0.01
8TH-15	15	07/22/08	6.51	<0.6	695	<0.2	<0.1	<0.5	<0.01
8TH-15	15	07/30/08	3.76	<0.6	650	<0.2	0.1	<0.5	<0.01
8TH-15	15	08/05/08	3.00	<0.6	700	<0.2	0.1	<0.5	<0.01
8TH-15	15	08/13/08	2.10	0.7	725	0.5	0.5	<0.5	<0.01
8TH-15	15	08/19/08	2.15	0.8	710	0.3	0.3	<0.5	<0.01
8TH-15	15	08/26/08	2.29	<0.6	690	0.3	0.2	<0.5	<0.01
8TH-15	15	09/03/08	2.45	1.0	730	0.4	0.4	0.6	<0.01
8TH-15	15	09/09/08	2.66	<0.6	590	0.3	0.3	<0.5	<0.01
8TH-15	15	09/16/08	2.45	0.7	555	0.6	0.6	<0.5	<0.01
8TH-15	15	09/23/08	2.06	1.3	575	1.2	1.2	<0.5	<0.01
8TH-15	15	09/30/08	2.68	2.1	590	2.1	2.1	<0.5	<0.01
8TH-25	25	07/02/08	6.14	0.6	735	0.2	0.2	<0.5	<0.01
8TH-25	25	07/08/08	3.29	2.5	865	2.6	2.4	<0.5	0.03
8TH-25	25	07/15/08	4.99	<0.6	845	0.3	0.2	<0.5	<0.01
8TH-25	25	07/22/08	8.11	<0.6	800	0.5	<0.1	<0.5	<0.01
8TH-25	25	07/30/08	5.69	<0.6	740	<0.2	<0.1	<0.5	<0.01
8TH-25	25	08/05/08	4.78	<0.6	805	<0.2	<0.1	<0.5	<0.01
8TH-25	25	08/13/08	2.73	<0.6	815	0.3	0.3	<0.5	<0.01
8TH-25	25	08/19/08	2.35	0.8	820	<0.2	0.2	0.6	<0.01
8TH-25	25	08/26/08	2.91	<0.6	780	<0.2	<0.1	<0.5	<0.01
8TH-25	25	09/03/08	3.47	1.1	760	0.3	0.2	0.9	<0.01
8TH-25	25	09/09/08	2.95	<0.6	705	<0.2	0.2	<0.5	<0.01
8TH-25	25	09/16/08	2.49	0.7	680	0.3	0.3	<0.5	<0.01
8TH-25	25	09/23/08	2.40	<0.6	720	0.3	0.3	<0.5	<0.01
8TH-25	25	09/30/08	2.85	<0.6	680	0.5	0.5	<0.5	<0.01
8TH-35	35	07/02/08	3.68	<0.6	790	<0.2	<0.1	<0.5	<0.01
8TH-35	35	07/08/08	4.77	<0.6	780	0.5	0.4	<0.5	<0.01
8TH-35	35	07/15/08	3.75	<0.6	795	0.3	0.2	<0.5	0.06
8TH-35	35	07/22/08	4.39	<0.6	785	<0.2	<0.1	<0.5	<0.01
8TH-35	35	07/30/08	5.63	<0.6	720	<0.2	<0.1	<0.5	<0.01
8TH-35	35	08/05/08	4.66	<0.6	800	<0.2	<0.1	<0.5	<0.01
8TH-35	35	08/13/08	2.75	<0.6	820	<0.2	<0.1	<0.5	<0.01
8TH-35	35	08/19/08	3.37	<0.6	820	<0.2	<0.1	<0.5	<0.01
8TH-35	35	08/26/08	3.20	<0.6	815	<0.2	<0.1	<0.5	<0.01
8TH-35	35	09/03/08	3.09	<0.6	900	<0.2	<0.1	0.5	<0.01
8TH-35	35	09/09/08	3.09	<0.6	825	<0.2	<0.1	<0.5	<0.01
8TH-35	35	09/16/08	3.02	<0.6	805	<0.2	<0.1	<0.5	<0.01
8TH-35	35	09/23/08	2.95	<0.6	815	<0.2	<0.1	<0.5	<0.01
8TH-35	35	09/30/08	3.06	<0.6	810	<0.2	<0.1	<0.5	<0.01

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

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

Brooks Basin								
Site	Depth, bgs	Date	TOC	TN	EC	TIN	NO <sub>3</sub> -N	TKN+NO <sub>2</sub> -N
Unit=>	feet		mg/L	mg/L	µmho/cm	mg/L	mg/L	mg/L
BRK-LYS-00	0	07/08/08	13.91	6.5	1270	1.4	0.9	5.6
BRK-LYS-00	0	07/15/08	76.90	5.5	1000	0.4	0.2	5.3
BRK-LYS-00	0	07/22/08	43.99	3.5	980	0.7	<0.1	3.5
BRK-LYS-00	0	07/30/08	16.88	2.8	720	0.9	0.9	1.9
BRK-LYS-00	0	08/05/08	21.30	2.4	750	0.4	<0.1	2.4
BRK-LYS-00	0	08/13/08	13.48	5.6	825	4.5	4.4	1.2
BRK-LYS-00	0	08/19/08	6.42	3.7	665	1.8	1.7	2.0
BRK-LYS-00	0	08/26/08	7.83	3.8	750	1.8	1.7	2.1
BRK-LYS-00	0	09/03/08	8.24	3.0	750	0.8	0.7	2.3
BRK-LYS-00	0	09/09/08	7.58	1.9	745	0.3	<0.1	1.8
BRK-LYS-00	0	09/10/08	4.74		795	0.8	0.5	0.15
BRK-LYS-00	0	09/16/08	6.27	2.5	770	1.1	1.0	1.5
BRK-LYS-00	0	09/23/08	5.27	3.6	820	3.7	3.6	<0.5
BRK-LYS-00	0	09/30/08	5.16	3.4	815	2.9	2.8	0.6
BRK-LYS-05	5	07/08/08	4.87	108.3	1350	108.1	108.0	<0.5
BRK-LYS-05	5	07/15/08	4.89	111.3	1330	111.0	111.0	<0.5
BRK-LYS-05	5	07/22/08	3.88	91.5	1320	91.5	91.5	<0.5
BRK-LYS-05	5	07/30/08	3.70	104.3	1250	104.3	104.3	<0.5
BRK-LYS-05	5	08/05/08	4.07	104.3	1285	104.3	104.3	<0.5
BRK-LYS-05	5	08/13/08	3.10	110.4	1315	110.1	110.1	<0.5
BRK-LYS-05	5	08/19/08	6.99	2.0	795	1.5	1.3	<0.01
BRK-LYS-05	5	08/26/08	7.08	1.3	710	0.7	<0.1	1.3
BRK-LYS-05	5	09/03/08	8.06	1.6	740	0.7	<0.1	1.6
BRK-LYS-05	5	09/09/08	9.31	1.5	780	0.9	<0.1	1.5
BRK-LYS-05	5	09/16/08	10.31	1.7	870	1.2	<0.1	1.7
BRK-LYS-05	5	09/23/08	8.96	1.0	980	1.1	<0.1	1.0
BRK-LYS-05	5	09/30/08	6.29	1.0	830	1.0	0.1	0.9
BRK-LYS-10	10	07/08/08	17.07	10.3	835	8.7	3.5	6.7
BRK-LYS-10	10	07/15/08	12.18	12.1	830	10.7	7.2	4.9
BRK-LYS-10	10	07/22/08	12.11	9.0	835	7.7	5.6	3.4
BRK-LYS-10	10	07/30/08	11.75	10.1	830	9.3	7.6	2.5
BRK-LYS-10	10	08/05/08	11.54	13.2	815	12.0	10.4	2.8
BRK-LYS-10	10	08/13/08	9.34	14.1	845	12.7	11.3	2.9
BRK-LYS-10	10	08/19/08	7.70	11.0	730	9.6	7.1	3.9
BRK-LYS-10	10	08/26/08	7.46	4.2	700	3.3	1.0	3.2
BRK-LYS-10	10	09/03/08	7.67	1.7	700	0.6	<0.1	1.7
BRK-LYS-10	10	09/09/08	7.36	0.8	670	0.3	<0.1	0.8
BRK-LYS-10	10	09/16/08	7.12	1.0	680	0.2	<0.1	1.0
BRK-LYS-10	10	09/23/08	7.46	<0.6	725	0.2	<0.1	<0.5
BRK-LYS-10	10	09/30/08	6.90	<0.6	685	0.2	<0.1	<0.5
BRK-LYS-15	15	07/08/08	107.00		7600			
BRK-LYS-15	15	08/19/08	55.10		5500			
BRK-LYS-15	15	08/26/08	28.37		5200			
BRK-LYS-15	15	09/09/08	49.52		3890			
BRK-LYS-25	25	07/08/08	20.10	3.8	480	2.9	0.4	3.4
BRK-LYS-25	25	07/15/08	31.46		1020		0.4	2.02
BRK-LYS-25	25	07/22/08	15.16				1.1	
BRK-LYS-25	25	07/30/08	17.84		1100		0.5	1.42
BRK-LYS-25	25	08/05/08			1045		0.4	1.55
BRK-LYS-25	25	08/13/08	0.97	1.6	345	1.3	1.2	<0.5
BRK-LYS-25	25	08/19/08	1.69	7.7	520	7.1	7.1	0.6
BRK-LYS-25	25	08/26/08	3.56	5.4	600	4.7	4.4	1.0
BRK-LYS-25	25	09/03/08	2.48	2.7	640	1.9	1.7	0.9
BRK-LYS-25	25	09/09/08	3.56	1.6	700	1.5	1.4	<0.5
BRK-LYS-25	25	09/16/08	2.44	0.7	630	0.3	0.3	<0.5
BRK-LYS-25	25	09/23/08	2.15	<0.6	655	0.2	0.2	<0.5
BRK-LYS-25	25	09/30/08	2.30	<0.6	645	<0.2	<0.1	<0.5
BRK-LYS-35	35	07/08/08	11.70	<0.6	635	<0.2	<0.1	<0.5
BRK-LYS-35	35	07/15/08	15.51	<0.6	500	<0.2	<0.1	<0.5
BRK-LYS-35	35	07/22/08	11.97	<0.6	510	<0.2	<0.1	<0.5
BRK-LYS-35	35	07/30/08	7.20	1.5	480	0.7	0.7	0.8
BRK-LYS-35	35	08/05/08	7.88	<0.6	435	<0.2	<0.1	<0.5
BRK-LYS-35	35	08/13/08	4.69	<0.6	450	<0.2	<0.1	<0.5
BRK-LYS-35	35	08/19/08	8.79	0.8	395	<0.2	0.1	0.6
BRK-LYS-35	35	08/26/08	5.61	<0.6	435	<0.2	<0.1	<0.5
BRK-LYS-35	35	09/03/08	4.21	<0.6	370	<0.2	<0.1	<0.5
BRK-LYS-35	35	09/09/08	3.95	<0.6	455	<0.2	<0.1	<0.5
BRK-LYS-35	35	09/16/08	24.43	<0.6	410	<0.2	0.2	<0.5
BRK-LYS-35	35	09/23/08	4.09	<0.6	620	<0.2	<0.1	<0.5
BRK-LYS-35	35	09/30/08	4.22	<0.6	600	<0.2	0.2	<0.01

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

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

Banana 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		mg/L	mg/L	μmho/cm	mg/L	mg/L	mg/L	mg/L
BAN-00	0	07/02/08	10.30	2.1	680	0.6	0.5	1.6	0.01
BAN-00	0	07/08/08	9.97	2.1	645	0.3	0.3	1.8	<0.01
BAN-25	25	07/02/08	1.56	1.3	740	1.2	1.2	<0.5	<0.01
BAN-25	25	07/08/08	1.17	1.4	780	1.2	1.1	<0.5	<0.01

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		mg/L	mg/L	μmho/cm	mg/L	mg/L	mg/L	mg/L
ELY3E-00	0	07/03/08	8.02	2.9	530	1.4	1.3	1.6	0.04
ELY3E-00	0	07/09/08	8.28	3.1	540	1.2	1.0	2.1	0.03
ELY3E-00	0	07/15/08	10.06	3.1	530	0.9	0.7	2.4	0.07
ELY3E-00	0	07/22/08	10.76	2.5	540	0.6	0.3	2.2	0.06
ELY3E-00	0	07/30/08	11.18	2.1	500	0.7	0.3	1.7	0.08
ELY3E-00	0	08/06/08	11.30	1.9	540	0.7	0.4	1.5	0.04
ELY3E-10	10	07/03/08	1.91	<0.6	535	<0.2	0.2	<0.5	<0.01
ELY3E-10	10	07/09/08	2.21	<0.6	540	<0.2	<0.1	<0.5	<0.01
ELY3E-10	10	07/15/08	2.79	<0.6	530	<0.2	<0.1	<0.5	<0.01
ELY3E-10	10	07/22/08	2.79	<0.6	540	<0.2	<0.1	<0.5	<0.01
ELY3E-10	10	07/30/08	2.79	<0.6	500	<0.2	<0.1	<0.5	<0.01
ELY3E-10	10	08/06/08	2.97	<0.6	550	<0.2	<0.1	<0.5	<0.01
ELY3E-25	25	07/03/08		<0.6	530	0.2	<0.1	<0.5	<0.01
ELY3E-25	25	07/09/08	2.30	<0.6	555	0.2	<0.1	<0.5	<0.01
ELY3E-25	25	07/15/08	2.04	0.7	540	<0.2	0.1	0.5	<0.01
ELY3E-25	25	07/22/08	2.28					0.8	
ELY3E-25	25	08/06/08	2.40	<0.6	585	<0.2	<0.1	<0.5	<0.01

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

Table 2-6  
Diluent Water Monitoring Results

Constituent	San Sevaine Channel - Hickory Inlet August 20, 2008	Declez Channel- RP3 Inlet August 20, 2008*	Unit	Method
NO <sub>2</sub> N	<0.02	<0.02	mg/L	EPA 300.0
NO <sub>3</sub> -N	<0.1	<0.1	mg/L	EPA 300.0
TDS	402	362	mg/L	SM 2540C
Total Coliform	12000	23000	mpn/100ml	SM 9221B
Oil & Grease	23	47	mg/L	EPA 1664A
Inorganic Chemicals				
Aluminum	156	130	µg/L	EPA 200.7
Antimony	1.06	1.57	µg/L	EPA 200.8
Arsenic	3	4	µg/L	EPA 200.8
Asbestos	<3.75	<6.75	MFL	EPA 100.2
Barium	55	43	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	1.5	2.9	µg/L	EPA 200.7
Cyanide	<0.006	<0.006	mg/L	SM 4500-CN E
Fluoride	0.4	1.0	mg/L	SM 4500-F C
Mercury	<0.2	<0.2	µg/L	EPA 245.2
Nickel	3	4	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	<0.5	<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	EPA 531.2
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	0.7	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<20	µg/L	EPA 548.1

Table 2-6  
Diluent Water Monitoring Results

Constituent	San Sevaine Channel - Hickory Inlet August 20, 2008	Declez Channel- RP3 Inlet August 20, 2008*	Unit	Method
Endrin	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	<6	640	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	<0.04	<0.04	µg/L	EPA 515.4
Picloram	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.05	<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)	4	1.5	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	5.8	16.6	µg/L	EPA 200.7
Lead	0.9	0.6	µg/L	EPA 200.8
Radionuclides				
Combined Radium-226 and Radium 228	0.196	<0.471	pCi/L	EPA 903.0
Gross Alpha Particle Activity	3.5	<3	pCi/L	EPA 900.0
Tritium	<221	<223	pCi/L	EPA 906
Strontium-90	<0.643	<0.524	pCi/L	EPA 905
Gross Beta Particle Activity	6	5	pCi/L	EPA 900.0
Uranium	1.7	<0.7	pCi/L	EPA 200.8
Unregulated Chemicals				
Boron	0.2	<0.1	mg/L	EPA 200.7
Chromium VI	0.1	1.1	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	5.6	29.0	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	156	130	µg/L	EPA 200.7
Corrosivity	1.1	2.5	SI	SM 2330B
Foaming Agents (MBAS)	0.07	0.07	mg/L	S5540C/EPA 425.1
Iron	242	253	µg/L	EPA 200.7
Manganese	40	8	µg/L	EPA 200.7
Odor--Threshold	4	4	TON	SM 2150B
Silver	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.2	<0.2	µg/L	EPA 525.2
Zinc	10	22	µg/L	EPA 200.7

\* Resampled on September 11, 2008 for EPA Method 525.2 constituents.

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
Decluz 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 2-8  
Groundwater Monitoring Results (Quarterly)

Sample Location		Date	TOC (mg/L)	Total Chloride (mg/L)	pH	EC (µmho/cm)	TDS (mg/L)	Al (mg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TOW)	Ag (µg/L)	Thiobacilli (µg/L)	Turbidity (NTU)	Zn (µg/L)	Cl (mg/L)	Hardness (mg CaCO <sub>3</sub> /L)	Na (mg/L)	SO <sub>4</sub> (mg/L)	NH <sub>3</sub> -N (mg/L)	NO <sub>2</sub> -N (mg/L)	NO <sub>3</sub> -N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg CaCO <sub>3</sub> /L)	Dissolved Oxygen (mg/L)	
Banana & Hickory	Fontana Water Company F37a	7/18/08	<0.1	<1.1	7.6	530	306	316	3	42	0.4	<0.05	1749	27	<0.5	1	<0.25	<0.2	3.70	7	15	224	19	15	<0.1	0.06	10.1	10.3	<0.5	172	9.0	
	California Speedway Infield Well	7/18/08	0.1	1	7.6	580	348	<25	<3	1.8	0.4	<0.05	10	<1	<0.5	1	<0.25	<0.2	0.26	2	16	249	21	50	<0.1	0.05	8.7	8.8	<0.5	166	11.4	
	California Speedway 2	7/18/08	0.1	<1.1	7.9	420	250	<25	<3	2.8	0.2	<0.05	5	<1	<0.5	1	<0.25	<0.2	0.21	44	9	175	19	14	<0.1	0.10	4.0	4.4	<0.5	157	8.4	
	Reliant Energy East Well	7/18/08	<0.1	1	6.6	385	236	<25	<3	11.5	0.0	<0.05	77	4	<0.5	1	<0.25	<0.2	0.42	5	16	145	20	18	0.1	<0.01	4.5	4.8	<0.5	129	9.8	
	Ontario Well No. 20	7/17/08	<0.1	<1.1	7.0	340	230	<25	<3	3.4	0.5	<0.05	8	<1	<0.5	1	<0.25	<0.2	0.31	1	7	165	14	6	<0.1	<0.01	1.8	2.2	<0.5	160	7.8	
	BH-1/2	7/24/08	0.4	<1.1	7.5	450	178	<25	3	<0.5	0.2	<0.05	35	2	<0.5	2	<0.25	<0.2	0.40	<1	54	199	21	27	<0.1	<0.01	2.4	2.7	<0.5	112	7.9	
Turner	Ontario Well No. 25	7/17/08	0.1	<1.1	7.7	385	252	<25	<3	1.2	0.6	<0.05	2	<1	<0.5	1	<0.25	<0.2	0.15	2	9	176	22	14	<0.1	<0.01	2.7	3.2	<0.5	168	9.3	
	Ontario Well No. 29	7/17/08	<0.1	<1.1	7.7	355	236	<25	<3	2.6	0.4	0.1	5	<1	<0.5	1	<0.25	<0.2	0.12	3	8	147	23	17	<0.1	<0.01	2.9	3.2	<0.5	151	8.6	
	Ontario Well No. 38	7/17/08	<0.1	<1.1	7.7	310	204	<25	<3	1.5	0.5	0.1	2	<1	<0.5	1	<0.25	<0.2	0.19	<1	4	130	21	8	<0.1	<0.01	1.1	1.4	<0.5	150	9.1	
	T-1/2	7/14/08	0.7	<1.1	7.2	495	316	<25	<3	0.5	0.2	<0.05	27	2	<0.5	1	<0.25	<0.2	0.40	1	37	217	26	29	<0.1	<0.01	0.3	0.6	<0.5	171	10.2	
	T-2/1	7/14/08	0.4	<1.1	8.3	450	310	<25	3	1.3	0.0	0.1	427	7	<0.5	1	<0.25	<0.2	4.75	1	64	185	25	21	<0.1	<0.01	1.0	1.2	<0.5	113	8.2	
	T-2/2	7/14/08	0.6	<1.1	7.6	460	328	<25	<3	<0.5	-0.2	<0.05	9	<1	<0.5	1	<0.25	<0.2	0.30	7	74	199	20	22	<0.1	<0.01	1.4	1.8	<0.5	93	7.7	
7th & 8th Street	Ontario Well No. 35	7/23/08	0.1	<1.1	7.3	350	226	<25	<3	120	0.2	<0.05	120	<1	<0.5	1	<0.25	<0.2	0.65	36	6	144	25	21	<0.1	<0.01	2.2	2.2	<0.5	142	5.5	
	8TH-1/1	7/20/08	0.6		205																				<0.1	0.12	1.0	1.2	<0.5			
	8TH-1/1	7/16/08	0.3	<1.1	7.7	195	138	<25	<3	<0.5	0.2	<0.05	3	<1	<0.5	2	1.31	<0.2	0.31	<1	7	82	13	9	<0.1	<0.01	0.9	1.1	<0.5	89	8.1	
	8TH-1/1	8/5/08	0.3		7.6	195																			<0.1	<0.01	1.0	1.2	<0.5			
	8TH-1/1	8/19/08	0.3		185																					<0.1	<0.01	1.0	1.4	<0.5		
	8TH-1/1	8/25/08	0.2		195																					<0.1	<0.01	6.9	7.2	<0.5		
	8TH-1/1	9/2/08	0.2		192																					<0.1	<0.01	1.1	1.2	<0.5		
	8TH-1/1	9/15/08	0.7		195																					<0.1	<0.01	1.2	1.2	<0.5		
	8TH-1/1	9/29/08	0.5		187																					<0.1	<0.01	1.0	1.0	<0.5		
	8TH-1/2	7/2/08	0.3		355																					<0.1	<0.01	6.5	6.6	<0.5		
	8TH-1/2	7/16/08	0.1	<1.1	7.8	345	234	<25	<3	<0.5	-0.1	0.1	1	<1	<0.5	1	<0.25	<0.2	0.24	<1	13	156	17	12	<0.1	<0.01	6.6	6.8	<0.5	122	8.5	
	8TH-1/2	8/5/08	0.1		7.2	360																			<0.1	<0.01	7.3	7.5	<0.5			
	8TH-1/2	8/19/08	<0.1		335																					<0.1	<0.01	6.9	7.1	<0.5		
	8TH-1/2	8/25/08	0.5		355																					<0.1	<0.01	1.0	1.5	0.5		
	8TH-1/2	9/2/08	<0.1		365																					<0.1	<0.01	7.9	7.9	<0.5		
	8TH-1/2	9/15/08	0.2		360																					0.3	<0.01	7.1	7.4	<0.5		
	8TH-2/1	9/29/08	0.4		353																					<0.1	<0.01	7.1	7.1	<0.5		
	8TH-2/1	7/16/08	0.3	<1.1	7.6	425	278	<25	<3	<0.5	0.3	<0.05	6	<1	<0.5	1	<0.25	<0.2	0.16	<1	11	203	18	21	<0.1	<0.01	9.1	9.2	<0.5	146	6.5	
	8TH-2/2	7/16/08	0.1	<1.1	7.9	530	354	<25	<3	<0.5	0.1	0.1	2	2	<0.5	2	<0.25	<0.2	0.38	<1	15	254	19	30	<0.1	<0.01	18.0	18.4	<0.5	151	7.5	
Ely	Ely Basin MW-1 Philadelphia St.	7/23/08	11.3	1	6.9	285	176	<25	5	<0.5	0.3	<0.05	105	27	<0.5	200	<0.25	<0.2	0.45	1	23	93	21	9	<0.1	<0.01	0.6	0.9	<0.5	95	6.9	
	Ely Basin MW-2 Walnut St.	7/23/08	0.5	<1.1	7.7	870	568	1489	10	7.3	0.4	<0.05	7130	64	<0.5	1	<0.25	<0.2	45	11	62	433	29	48	<0.1	<0.01	26.6	26.6	<0.5	229	7.8	
	43840-CVWW	7/9/08	0.4	<1.1	7.6	484	306	<25	<3	<0.5	0.2	<0.05	8	3	<0.5	2	<0.25	<0.2	0.14	7	22	221	21	33	<0.1	<0.01	8.0	8.1	<0.5	159	2.1	
	Bishop of San Bernardino Corp. - DOM	7/23/08	0.7	<1.1	7.4	820	510	<25	<3	3.0	0.6	<0.05	11	<1	<0.5	1	<0.25	<0.2	0.15	22	39	408	27	70	<0.1	<0.01	20.7	22.6	1.9	231	7.2	
	BRK-1/1	7/10/08	1.3	<1.1	6.2	378	342	28885	5	11	0.8	<0.05	9900	159	<0.5	2	0.35	<0.2	2612	62	6	239	79	5	0.3	<0.01	0.1	0.1	<0.5	123	8.0	
	BRK-1/1	8/13/08	0.5		520																				<0.1	<0.01	7.0	7.1	<0.5			
	BRK-1/1	8/25/08	0.5		7.6	530																			<0.1	<0.01	6.5	6.6	<0.5			
	BRK-1/1	9/8/08	0.5		580																				<0.1	<0.01	8.6	8.8	<0.5			
	BRK-1/1	9/22/08	0.4		550																				<0.1	<0.01	8.3	8.3	<0.5			
	BRK-1/2	7/10/08	0.1	<1.1	7.5	535	358	<25	<3	<0.5	0.4	<0.05	48	<1	<0.5	1	<0.25	<0.2	0.24	<1	16	269	15	41	<0.1	<0.01	18.1	18.1	<0.5	149	7.6	
Other	BRK-1/2	8/13/08	0.1		530																				<0.1	<0.01	20.9	20.9	<0.5			
	BRK-1/2	8/25/08	<0.1		7.4</																											

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

Date	Diluent Water										Recycled Water							
	Imported Water					Local Runoff / Storm Flow					Recycled Water							
Date	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana	7th & 8th St.	Ely	Brooks	Turner	Hickory	Banana
Oct-07	0	0	0	0	0	0	42	34	14	65	73	2	109	0	0	0	23	0
Nov-07	0	0	0	0	0	0	81	166	24	162	102	35	161	87	0	0	98	0
Dec-07	0	0	0	0	0	0	224	257	42	277	102	22	0	53	0	0	0	0
<b>4Q07 Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>347</b>	<b>457</b>	<b>80</b>	<b>504</b>	<b>277</b>	<b>59</b>	<b>270</b>	<b>140</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>0</b>
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>

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

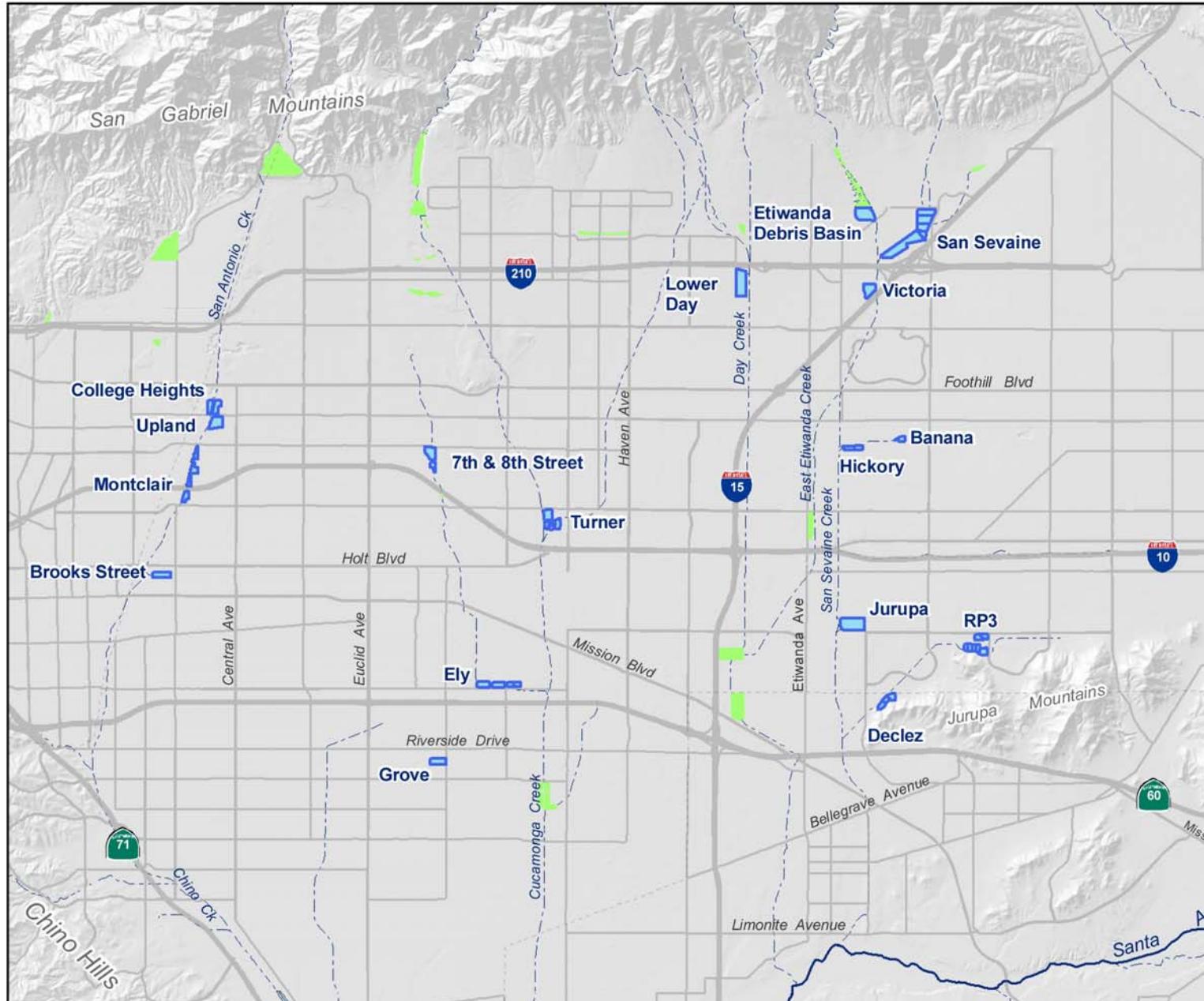
Diluent water at Ely Basin does not include discharge of treated groundwater

**Table 6-1**  
WateReuse Study Results

Constituent	SAWCO Well No. 12 August 19, 2008	SAWCO Well No. 12 September 16, 2008	Unit	Method
1,1,1-Trichloroethane	<0.5	<0.5	µg/L	ML/EPA 524.2
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	65	30.8	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	8	31	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	0.7	µg/L	ML/EPA 624
Carbon Tetrachloride	<0.5	<0.5	µg/L	ML/EPA 524.2
Chlorate	80	81	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	3.2	2.8	µg/L	EPA 200.8
Chromium-6	1.3	1.3	µg/L	EPA 218.6
Copper	6	29	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 6-1**  
WateReuse Study Results

Constituent	SAWCO Well No. 12 August 19, 2008	SAWCO Well No. 12 September 16, 2008	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	300	310	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	0.4	0.5	mg/L	EPA 300.0
Formaldehyde	<5	7.6	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	<0.5	15.4	µg/L	EPA 200.8
Lindane	<0.01	<0.01	µg/L	ML/EPA 505
Manganese	3	6	µg/L	EPA 200.8
Mercury	<0.2	<0.05	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	3	1	µg/L	EPA 200.8
Nitrate Nitrogen	4.3	4.7	mg/L	EPA 300.0
Nitrite Nitrogen	<0.01	<0.01	mg/L	EPA 300.0
Nitrobenzene	<5	<5	µg/L	ML/EPA625/8270
N-nitrosodiethylamine (NDEA)	<2	<5	ng/l	ML/EPA 521
N-Nitrosodimethylamine (NDMA)	<2	<2	ng/l	ML/EPA 521
N-nitrosodi-n-propylamine (NDPA)	<2	<5	ng/l	ML/EPA 521
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)	4.3	4.7	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	4	4	µg/L	EPA 200.8
Vinyl Chloride	<0.3	<0.3	µg/L	ML/EPA 524.2
Xylenes	<1	<1	µg/L	ML/EPA 524.2



### Explanation

- Recharge Basins in the Recycled Water Groundwater Recharge Program (Blue)
- Non-program basins (Green)
- Rivers and Streams (Dashed Lines)



**Chino Basin Recycled Water Groundwater Recharge Program**

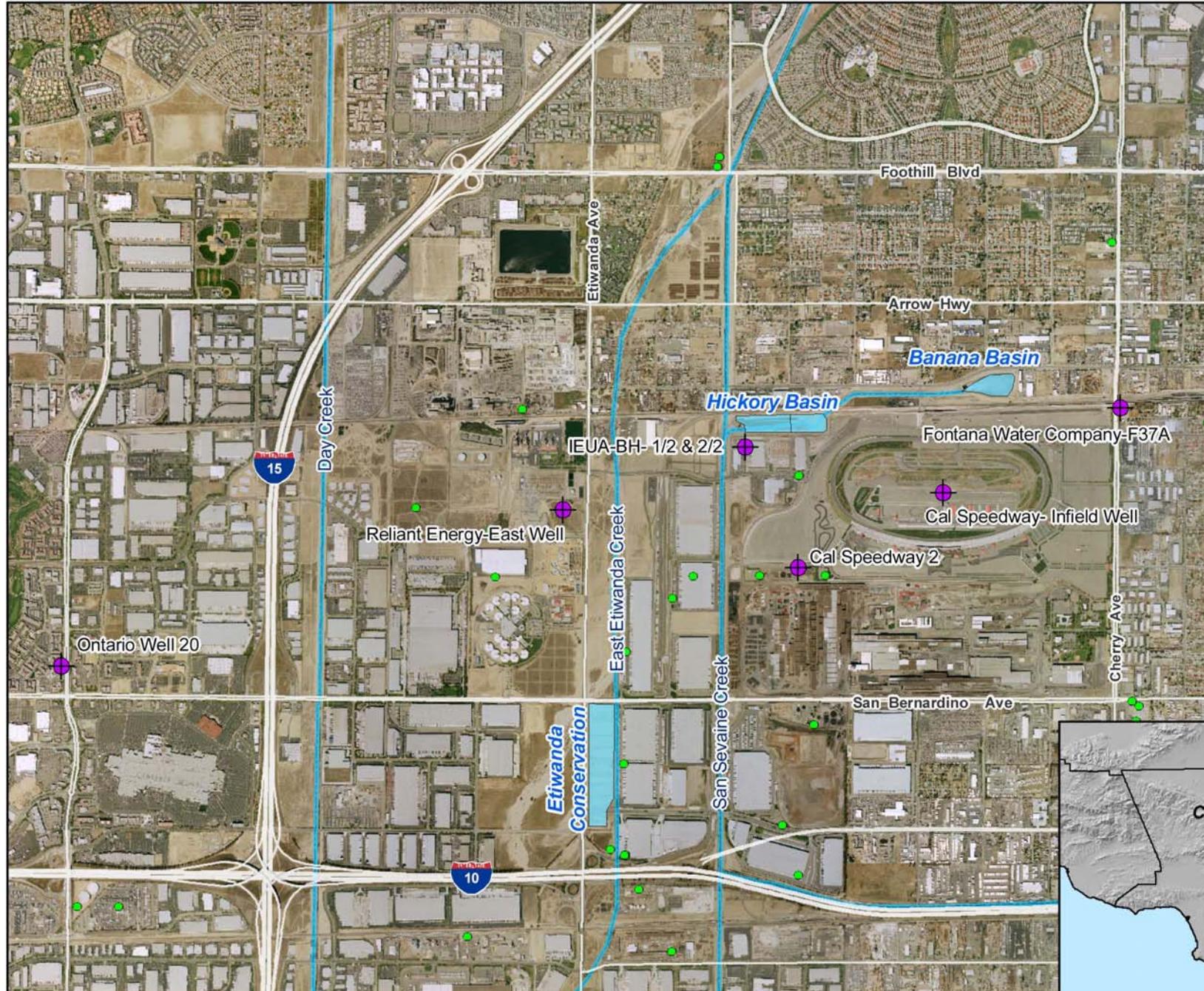
Basin Locations



**Figure 1-1**

## Main Map Features

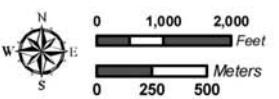
- Existing Monitoring Well
- "Other Wells"
- Rivers/Streams/Creeks
- Recharge Basins

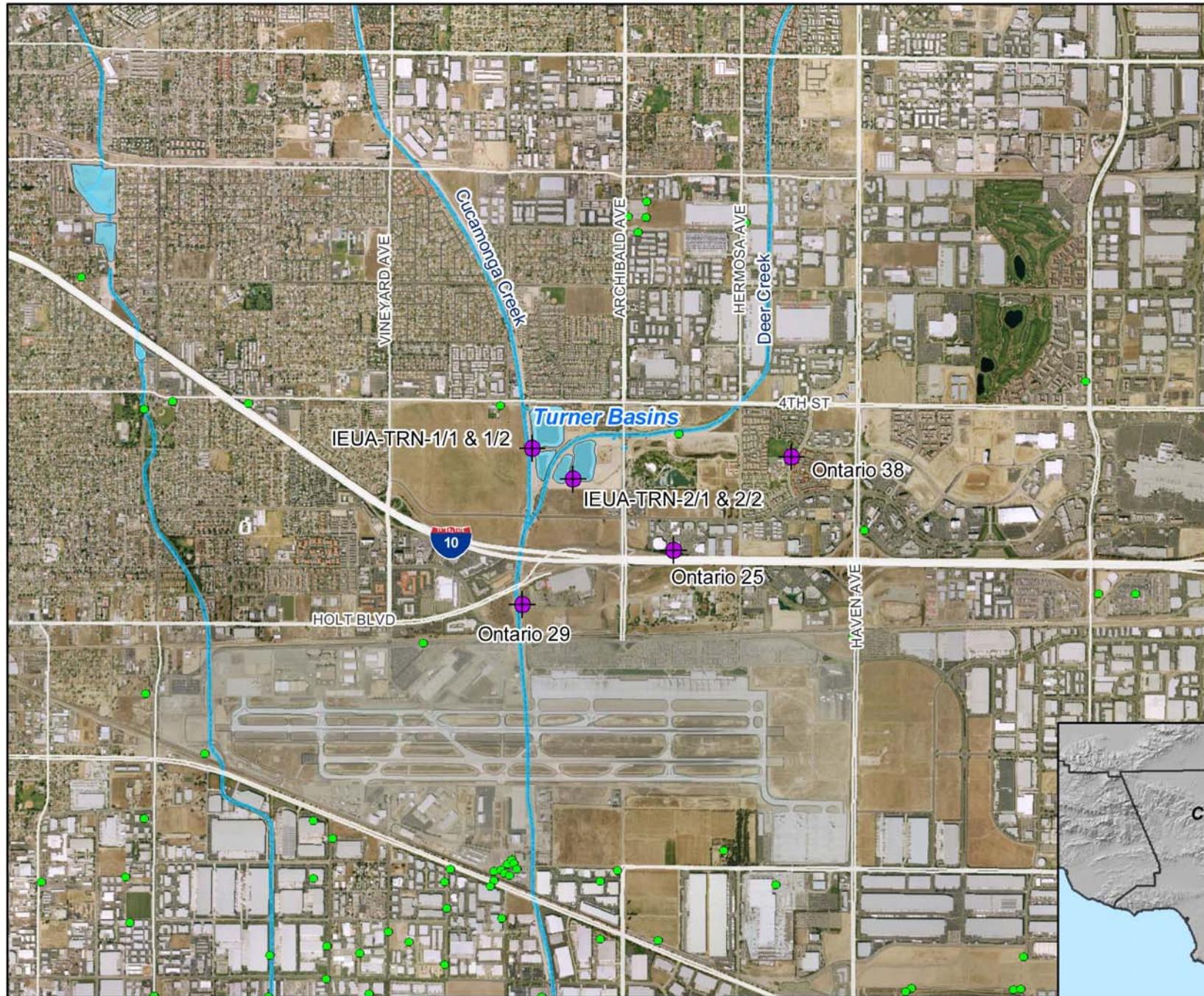


**Monitoring Well Network**  
Hickory and Banana Basins

**Figure 2-1**

Recycled Water Recharge Program





Monitoring Well Network

Turner Basins

Recycled Water Recharge Program

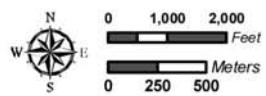


Figure 2-2

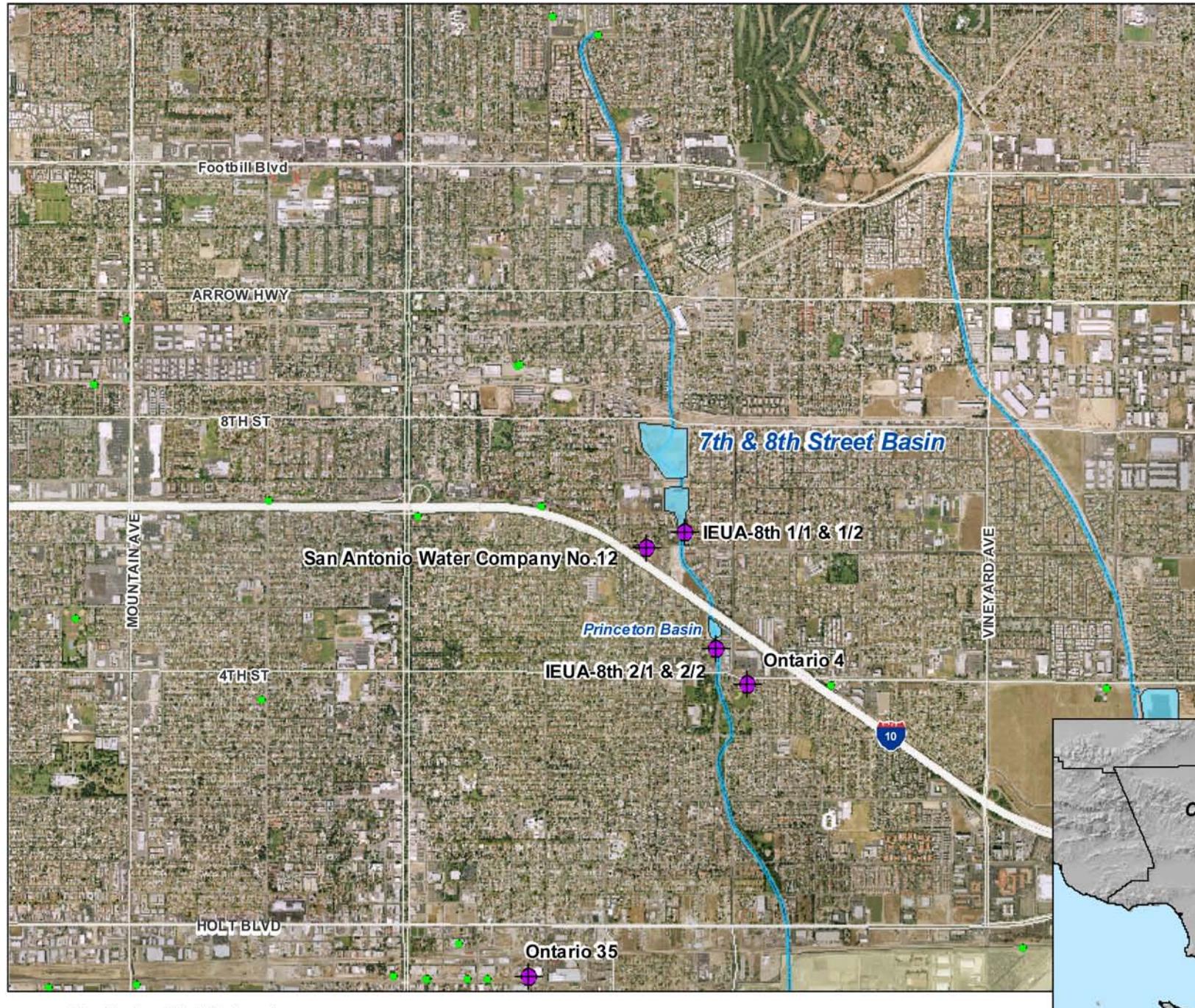
### Main Map Features

- Existing Monitoring Well (Purple dot)
- "Other Wells" (Green dot)
- Rivers/Streams/Creeks (Blue line)
- Recharge Basins (Light blue shaded area)

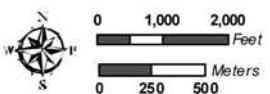


## Main Map Features

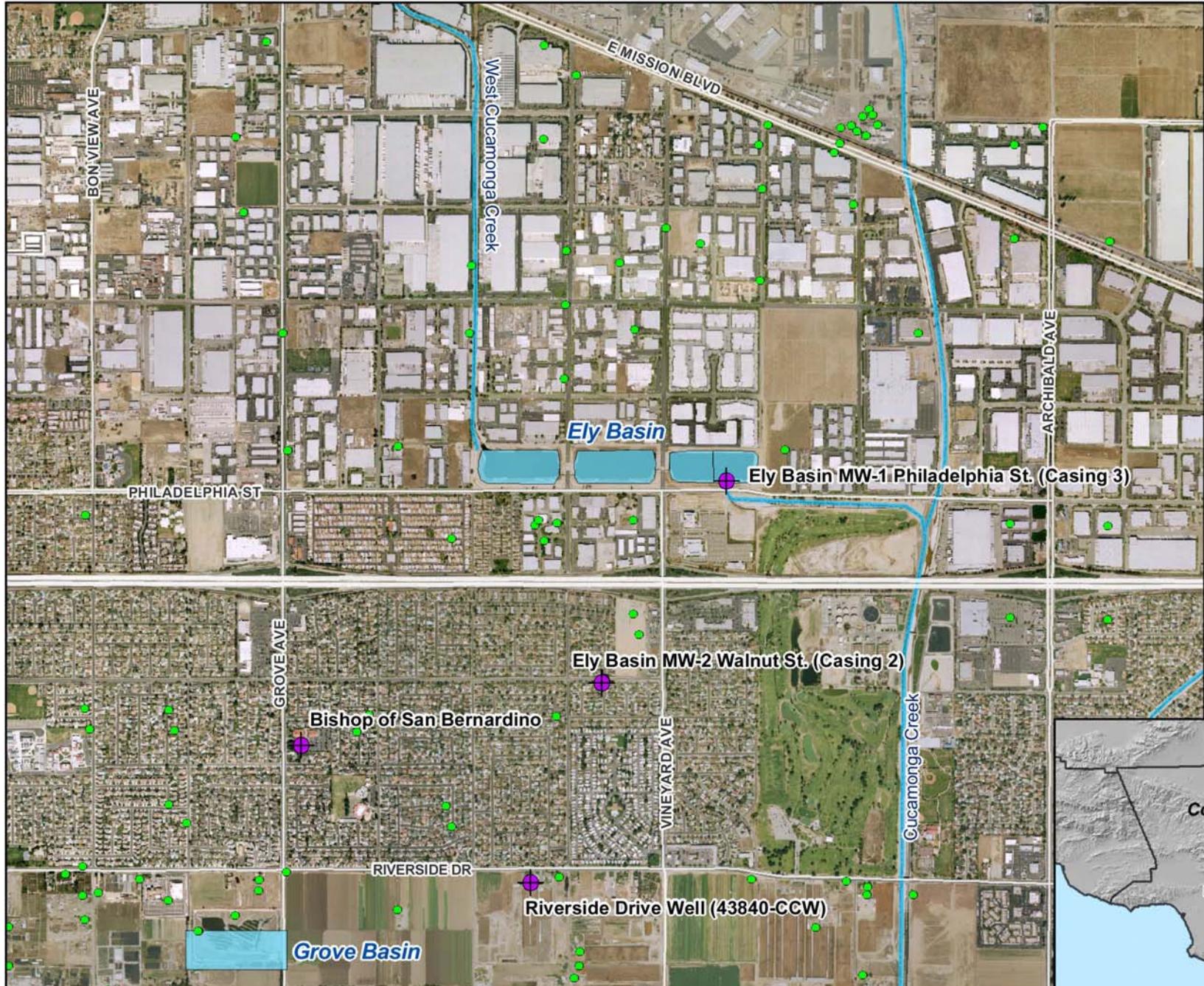
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins



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



**Figure 2-3**



**Figure 2-4**

