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August 15, 2014

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Kurt Berchtold

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

**Subject: Chino Basin Recycled Water Groundwater Recharge Program
Quarterly Monitoring Report for April through June 2014**

Dear Mr. Berchtold,

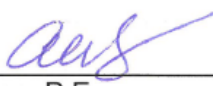
Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2014 (2Q14), April 1 through June 30, 2014, for the *Chino Basin Recycled Water Groundwater Recharge Program*. This document is submitted pursuant to requirements in Order No. R8-2007-0039. All required monitoring and reporting for the quarter are presented in the attached report. During 2Q14, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of exceedances of total nitrogen (TN) at Banana Basin and an exceedance of the 4-quarter running average for odor (secondary MCL).

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2014, there was no reported pumping for drinking water purposes in the buffer zones extending 500 feet laterally and 6 months underground travel time from each of the recharge sites using recycled water, namely 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaime, Turner, and Victoria Basins. In point of fact, there are no domestic or municipal production wells in the buffer zones of the aforementioned recharge sites.

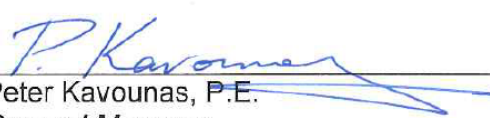
DECLARATION

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

Executed on the 15th day of August 2014 in the Cities of Chino and Rancho Cucamonga.



Sylvie Lee, P.E.
Manager of Planning &
Environmental Compliance

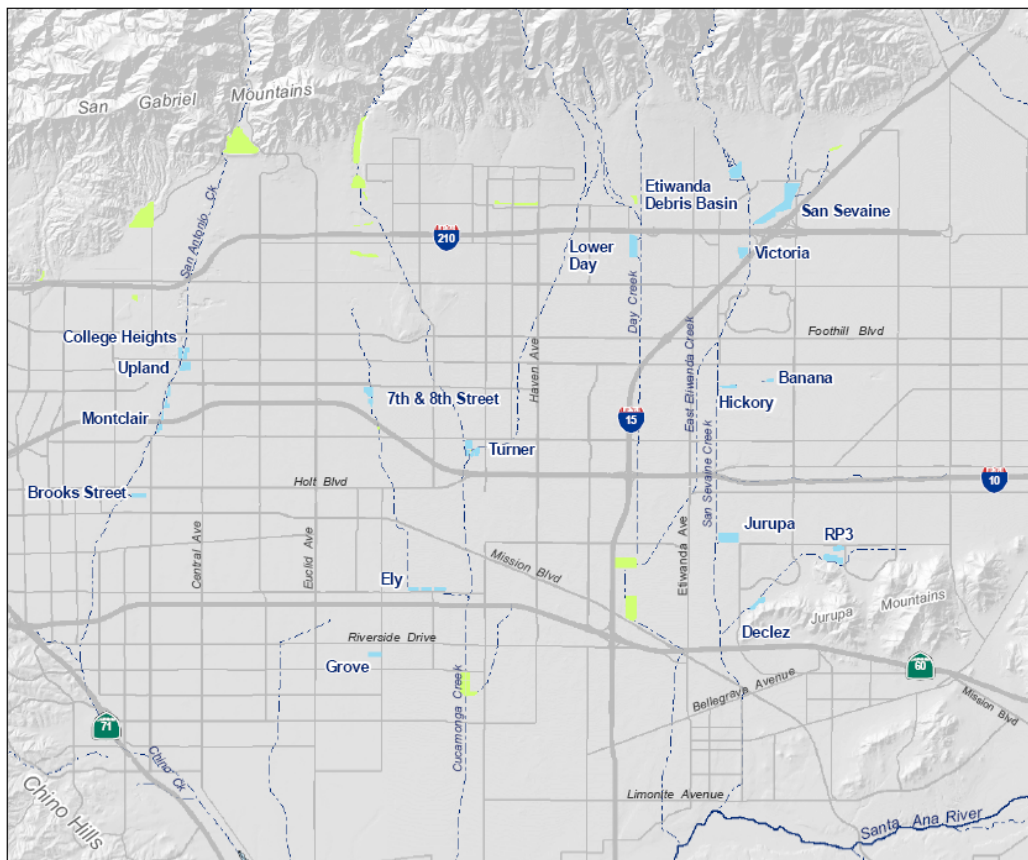


Peter Kavounas, P.E.
General Manager

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report

April 1 through June 30, 2014



Prepared by:



August 15, 2014

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1. Introduction

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

A. Order No. R8-2007-0039

On June 29, 2007, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Order No. R8-2007-0039 (Order) which prescribes the requirements for recycled water use for groundwater recharge in 13 recharge sites within the Chino North Management Zone. The locations of the 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 (MRP). The MRP includes the water quality monitoring requirements of the Chino Basin Recycled Water Groundwater Recharge Program and the requirement for the submittal of quarterly and annual reports. This document is the quarterly report for the second quarter of 2014 (2Q14).

The quarterly report includes the following elements as prescribed in the MRP:

- 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 for domestic water supply use from the buffer zone that extends 500 feet and 6-months underground travel time from the recharge basin(s) where recycled water is applied.

B. Order No. R8-2009-0057

On October 23, 2009, the Regional Board adopted Order No. R8-2009-0057, which amended the recharge permit (Order No. R8-2007-0039) by extending the previously 60-month averaging period to 120 months for determining a recharge site's recycled water contribution (RWC). The Order No. R8-2009-0057 also allowed a fraction of the groundwater underflow of the Chino Basin aquifers to be used as a source of diluent water when calculating the running average RWC.

C. Revised Monitoring & Reporting Program No. R8-2007-0039

On October 27, 2010, the Regional Board revised Monitoring and Reporting Program No. R8-2007-0039 (MRP) based on requests for modifications from IEUA and approved by the CDPH. The following changes were made to the MRP:

- 1) Sampling Requirements A.3, A.4, and A.5 were modified by specifying that samples shall be collected on a representative day instead of the 10th day.

- 2) Groundwater Monitoring Program Requirement V.1. was modified by adding a sentence to the paragraph that allows IEUA to analyze the groundwater samples collected on a quarterly basis from non-active municipal drinking water wells for dissolved metals, instead of total recoverable metals.
- 3) Reporting Requirement VI.B.3.b. was modified and footnote No. 18 was added to reflect that IEUA uses groundwater monitoring information contained in the *State of the Basin* report prepared on a biennial basis by the Chino Basin Watermaster, amongst other sources, for the annual determination of the recycled water groundwater flow path.

D. Outline of the Quarterly Report

Section 2 of this quarterly report discusses the water quality monitoring results for recycled water recharge (water recycling plant effluent, distribution system, basin surface water, and lysimeter data), diluent water, and groundwater. Section 3 provides an overview of recharge operations including the volume of diluent water and recycled water recharged. Section 4 describes any operational problems and preventive and/or corrective actions taken. Section 5 contains the certification of non-pumping in the 500-foot buffer zones around each basin. Section 6 is a brief overview of the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project.

2. Monitoring Results

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

The requirements for recycled water monitoring are presented in the MRP. Tables 2-1 through 2-4 include all of the requisite 2Q14 data.

Recycled Water Specifications A.5 through A.9 in the Order are the narrative limits established in the permit. The corresponding monitoring data used to determine compliance with the Order are presented in Tables 2-1 and 2-2. This data is typically collected from samples of RP-1 and RP-4 effluent, however recycled water compliance with the total nitrogen (TN) limit of 5 mg/L (Specification A.7) can also be met at the lysimeters (Table 2-5a), at the monitoring well (Hickory Basin only, Table 2-5b), or as part of an alternative monitoring plan (discussed in further detail in Section 2.B).

In May 2014, the average of two consecutive TN sample results for the Banana Basin compliance lysimeter exceeded the 5 mg/L limit. The CDPH and the Regional Board were both notified via e-mail regarding the exceedance. Recycled water deliveries were voluntarily suspended on May 23, 2014. A letter was sent to the CDPH and the Regional Board on December 11, 2013 requesting the relocation of the Banana Basin TN compliance point to the groundwater mound monitoring well, namely BH-1/2. BH-1/2 is the approved TN compliance point for Hickory Basin, per the July 29, 2013 letter from the Regional Board. At time of reporting, IEUA has not yet received correspondence in acceptance of the proposal to relocate the Banana Basin TN compliance point. Recycled water deliveries to Banana Basin were resumed on June 2, 2014.

Recycled Water Specifications A.1 through A.3 and A.15 of the Order are the numerical limits, based on primary maximum contaminant levels (MCLs) and secondary MCLs. The corresponding monitoring data used to determine compliance with the Order are presented in Table 2-3. Due to the volume of samples required for laboratory analyses, IEUA selected, and CDPH approved, a sampling point along the recycled water distribution pipeline as the compliance point for the numerical limits. IEUA selected the turnout to NRG California South, LP (formerly Reliant Energy) as representative of the system blend of recycled water used for recharge.

In the Order, compliance for most constituents with MCLs is based on 4-quarter running averages (Specifications A.1 through 3). The exception is oil & grease, which must be less than 1 mg/L in all

samples (Specification A.15). Table 2-3 summarizes the 4-quarter running average concentration data for each parameter from 3Q13 through 2Q14, and lists the corresponding limits for compliance. During 2Q14, there were no exceedances in the following categories: primary MCLs for inorganic chemicals, volatile organic compounds (VOCs), non-volatile synthetic organic chemicals (SOCs), radionuclides, and disinfection byproducts; action levels for lead and copper; secondary MCLs for required constituents, with the exception of odor; and oil and grease.

Odor has a secondary MCL of 3 Units in Recycled Water Specification A.3. During 3Q13 and 4Q13 the threshold odor was found to be 8 Units and 17 Units, respectively. This results in a 4-quarter running average value of 7 Units, causing the threshold odor to exceed the secondary MCL. This result will continue to impact the 4-quarter running average for 3Q14. The odor has been identified by Eaton Analytical (contract laboratory) as chlorine. Recycled water used for groundwater recharge must meet disinfected tertiary recycled water standards in accordance to Title 22. Sodium hypochlorite is used as the disinfection agent at the RP-1 and RP-4 water recycling facilities; hence, the smell of chlorine is prominent in recycled water and is therefore unavoidable. Order No. R8-2007-0039 allows compliance for secondary MCLs to be determined at the mound monitoring well. Based on the mound monitoring well data (Table 2-8a), threshold odor did not exceed 3 Units at any of the monitoring wells during 2Q14.

Although NRG turnout is a suitable sampling location for most constituents, it is not appropriate for disinfection byproducts (DBPs), more specifically, Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance samples for these DBPs are taken from lysimeters at basins actively receiving recycled water. At these locations, the samples better represent the DBPs present in the recycled water prior to reaching the groundwater table. Once a quarter, a single representative sample is collected from a selected compliance lysimeter and analyzed for DBPs. For the 2Q14 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Hickory East Basin (HKYE-LYS-25) as the compliance point. The Hickory Basin lysimeter was selected as the compliance point because the basin received consistent recycled water recharge and recycled water was present at the 25-foot depth based on electrical conductivity (EC) measurements.

For constituents with no specified limits, quarterly monitoring data are summarized in Table 2-4. All required constituents were analyzed in 2Q14

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, for compliance determination of Recycled Water Specifications A.7, A.10, and A.11. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. Basin and lysimeter water quality results from 2Q14 are summarized in Table 2-5a. The table includes lysimeter data for 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, and Victoria Basins.

As indicated in Recycled Water Compliance Determination B.6 of the Order, alternative monitoring programs for TOC and TN compliance under Specifications A.7, A.10 and A.11 have been implemented at some basins. The alternative TOC and TN monitoring plans approved for Turner, Ely, 8th Street, and Victoria Basins include sampling of recycled water at the NRG turnout (RP-1 effluent for Ely Basin only) and the application of a correction factor for soil aquifer treatment (SAT). The following correction factors were determined from each basin's start-up period findings:

- Turner 1 & 2: TOC reduction of 70 percent and TN reduction of 87 percent
- Turner 3 & 4: TOC reduction of 85 percent and TN reduction of 87 percent
- Ely Basins: TOC reduction of 76 percent and TN reduction of 52 percent

- 8th Street Basin: TOC reduction of 59 percent and TN reduction of 75 percent
- San Sevaine 5: TOC reduction of 78 percent and TN reduction of 69 percent
- Victoria: TOC reduction of 78 percent and TN reduction of 82 percent

The TOC and TN values calculated based on the correction factors provided above are summarized in Table 2-5b.

The Brooks and RP3 Basins have also implemented alternative monitoring plans based on start-up period findings. The Brooks Basin alternative monitoring plan includes monthly sampling of the Brooks Basin surface water, 25-foot lysimeter, and monitoring well BRK-1/1 for EC, TOC, and TN to be conducted as long as recycled water has been recharged in the prior 180 days. Additionally, chloride will be analyzed for BRK-1/1 and used to verify the presence of recycled water. The 25-foot lysimeter will be the compliance point for TN and the monitoring well will be the compliance point for TOC.

The RP3 alternative monitoring plan includes monthly sampling of the 35-foot deep lysimeter for EC, TOC, and TN. The monitoring schedule would be conducted during the initial year of recycled water recharge at the RP3 Basin. If sufficient SAT is demonstrated in this initial year, the alternative monitoring plan proposes compliance monitoring from samples collected from the recycled water distribution pipeline and applying a performance-based TOC correction factor determined from past lysimeter monitoring. Brooks and RP3 Basins alternative monitoring data are summarized in Table 2-5b.

On July 29, 2013, the Regional Board approved the relocation of Hickory Basin TN compliance point from HKYE-LYS-25 to groundwater mound monitoring well, BH-1/2. The TN monitoring data for BH-1/2 can be found in Table 2-5b.

C. Diluent Water

For 2Q14, diluent water quality sampling of local runoff was conducted May 2014 at Turner 1 & 2, Turner 3 & 4, and 7th & 8th Street Basins. Table 2-6 lists the results of the local runoff sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the CDPH-approved Diluent Water Monitoring Plan. The quarterly sampling schedule for stormwater and local runoff is presented in Table 4-2 of the plan. Stormwater is sampled during the rainy season (1st and 4th quarters) and local runoff is sampled during the dry season (2nd and 3rd quarters). Samples are collected at about half the locations during each seasonal quarter, alternating between even and odd years. Table 5-1 of the plan summarizes the sample type and reporting frequency for the parameters listed in Tables I, II, III, and IV of the Diluent Water Monitoring requirement III.3 of the MRP.

D. Groundwater Monitoring Wells

Groundwater monitoring is conducted to evaluate water quality conditions in the vicinity of the recharge basins utilizing recycled water. Groundwater monitoring results can be used to assess background conditions, time the arrival of recharge waters, and the impact recharged water has on downgradient water supplies. The wells in the monitoring well networks for Hickory and Banana, Turner, 8th Street, Ely, Brooks, RP3, and San Sevaine and Victoria Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-7, respectively. The groundwater constituents analyzed from the monitoring wells during quarterly monitoring are presented in Table 2-8. Any 2Q14 analyses results which exceeded primary or secondary MCLs are shown in the tables in bold italic font. Of note are the analyses for the following wells and constituents:

Turbidity exceeding the secondary MCL of 5 NTU was observed in two monitoring wells, namely: BRK-2/1 and VCT-1/1.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 $\mu\text{mhos/cm}$, respectively, in Alcoa MW3 and Ely MW2 (Walnut). JCSD Well No. 13 slightly exceeded the TDS secondary MCL. The wells south of the Ely Basins and near the RP3 Basins are located in areas where the TDS and EC concentrations in groundwater are elevated; in the RP3 Basins area, TDS is about 750 mg/L and EC is about 1,000 $\mu\text{mhos/cm}$, and south of the Ely Basins, TDS is about 500 mg/L and EC is about 750 $\mu\text{mhos/cm}$.

Dissolved manganese was above the secondary MCL of 50 $\mu\text{g/L}$ at RP3-1/2. Recycled water manganese concentrations are generally less than 20 $\mu\text{g/L}$. Historical stormwater manganese analyses have been observed to fall within the range of 5 to 150 $\mu\text{g/L}$.

Some monitoring wells in the Banana & Hickory, RP3, 8th Street, Brooks, and Ely monitoring networks have $\text{NO}_3\text{-N}$ concentrations above the primary MCL of 10 mg/L. These higher levels are characteristic of groundwater quality in the local area where historically the $\text{NO}_3\text{-N}$ concentrations ranges from 10-30 mg/L. No notifications were made to the CDPH as these areas have been previously identified to have monitoring wells with high $\text{NO}_3\text{-N}$ concentrations. $\text{NO}_3\text{-N}$ concentrations in monitoring well network for the basins listed above are documented in the CBWM's State of the Basin reports.

Total coliform was detected at California Speedway – Infield Well, California Speedway 2, T-1/2, RP3-1/1, RP3-1/2, BRK 1/1, Ely Basin MW2, and Riverside Well (Ely). The highest total coliform result of 23 MPN/100 mL was found at the Riverside Well during 2Q14. The total coliform found at these well locations did not come from recycled water, as the total coliform levels found in the recycled water are usually non-detect. In accordance with the MRP, notification to the CDPH of coliform presence must be made within 48 hours of receiving the results. However, CDPH has not been previously notified of coliform presence since the start of the Groundwater Recharge Program. On August 14, 2014, IEUA notified the CDPH of coliform presence at the abovementioned monitoring wells for 2Q14. IEUA will continue to notify the CDPH for coliform presence, unless it is deemed that reporting these findings in the quarterly report is sufficient.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, Turner, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (local runoff, stormwater, and/or imported water) captured during 2Q14 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 Water Recycling Facilities - RP-1 & RP-4 and recharge operations.

The RP3 Basins' second closest downgradient monitoring well, Southridge JHS, pump experienced an electrical short during 2Q13. No samples were analyzed since 1Q13. In July 2014, the Southridge JHS well was rehabilitated by wire brushing, swapping, bailing, and pump development. A new sampling pump was purchased and installed in early August 2014. A quarterly sample will be collected in 3Q14.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 2Q14 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In fact, there are no domestic or municipal production wells within the buffer zones of these aforementioned recharge sites.

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

If a proposed well falls within an abutting parcel, SBCDEHS will review the well location using maps of the basins and buffer zones. If the well falls too near the buffer zone boundary for SBCDEHS to determine the relationship of the proposed well location to the buffer boundary, SBCDEHS will defer to IEUA for a prompt field review of the proposed well location. The field review may include contacting and having the well applicant identify the exact location of the proposed well casing. To conduct a detailed field review, SBCDEHS will contact and provide the 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 should be declined due to well locations determined to fall within a 500-foot buffer zone.

6. MVWD ASR Project

Reporting for the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project was allowed by the RWQCB to be included under IEUA/CBWM Phase I Groundwater Recharge Order No. R8-2005-0033 and subsequent permit updates. In April 2007, MVWD, Watermaster, and IEUA entered into an agreement to report the MVWD ASR project groundwater injection/recovery volumes and TIN/TDS mass balance in the recharge program quarterly reports. Initial injection began in June 2007. In May 2008, MVWD discontinued groundwater injection at the ASR wells for an extended period of time. In June 2011, MVWD groundwater injection activities resumed at four ASR wells. MVWD continued injection of imported water through September 2011. No significant volume of imported water has been injected since September 2011. During the last four quarters (3Q13 through 2Q14), a total of 0.8 acre-feet of imported water was injected into the groundwater basin during facility tours for demonstration purposes. Table 6-1 summarizes the monthly volumes and TIN/TDS of injected and recovered water. The table also includes the mass balance of TIN/TDS from the injection-recovery cycles.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
04/01/14	0.5	5.9	6.3		6.4	7.2	838			<2	0.3	4.1	5.0		5.1	7.3	735			<2
04/02/14	0.6	5.7	5.9		5.9	7.1	820			2	0.4	3.8	5.8		5.8	7.5	730			<2
04/03/14	0.6	5.6	6.1		6.2	7.1	805			<2	0.4	3.8	6.4		6.4	7.4	730			<2
04/04/14	0.5	5.4				7.1	812			<2	0.5	3.7				7.4	755			<2
04/05/14	0.5	5.4				7.1	816			<2	0.5	3.8				7.4	745			<2
04/06/14	0.4	5.7	5.5	5.5	5.5	7.1	823	526	162	<2	0.5	4.0	5.5	6.5	5.5	7.4	755	486	156	2
04/07/14	0.5	5.8	6.0		6.0	7.1	818			<2	0.5	3.9	5.1		5.1	7.4	750			<2
04/08/14	0.4	5.7	5.1		5.1	7.1	848			<2	0.5	4.0	5.2		5.2	7.4	755			<2
04/09/14	0.4	5.4	5.5		5.5	7.1	860			<2	0.4	3.7	6.1		6.1	7.4	760			<2
04/10/14	0.5	5.5	5.9		5.9	7.1	895			<2	0.4	3.9	7.2		7.2	7.4	765			<2
04/11/14	0.4	5.6				7.1	908			<2	0.5	3.9				7.4	775			<2
04/12/14	0.4	5.3				7.1	894			<2	0.5	3.9				7.4	780			<2
04/13/14	0.5	5.7	6.2	6.2	6.2	7.1	872	518		<2	0.6	4.2	7.2	7.2	7.2	7.4	785	484		<2
04/14/14	0.6	5.9	5.5		5.5	7.1	864			<2	0.7	4.2	6.7		6.7	7.3	780			<2
04/15/14	0.6	5.9	4.9		5.0	7.2	870			<2	0.7	4.2	5.5		5.5	7.2	860			<2
04/16/14	0.7	6.0	4.9		5.0	7.2	886			2	0.6	4.2	5.9		6.0	7.2	805			<2
04/17/14	0.7	5.7	5.2		5.2	7.2	879			<2	0.6	4.1	5.2		5.2	7.2	765			<2
04/18/14	0.7	5.7				7.2	893			<2	0.6	3.9				7.1	770			<2
04/19/14	0.7	5.4				7.2	880			<2	0.7	3.9				7.1	775			<2
04/20/14	0.6	5.5	4.6	4.7	4.7	7.2	873	502		<2	0.6	4.1	5.0	5.9	5.1	7.1	770	488		<2
04/21/14	0.8	5.5	6.0		6.1	7.2	861			<2	0.6	4.2	5.1		5.2	7.2	775			<2
04/22/14	0.7	5.8	5.2		5.2	7.2	861			2	0.7	4.3	5.3		5.3	7.2	795			<2
04/23/14	0.7	5.8	4.5		4.6	7.1	854			2	0.6	4.2	5.8		5.8	7.1	775			<2
04/24/14	0.7	5.5	4.8		4.8	7.2	862			<2	0.5	4.0	6.3		6.3	7.1	760			<2
04/25/14	0.7	5.6				7.2	887			<2	0.5	3.8				7.1	760			<2
04/26/14	0.7	5.6				7.3	887			<2	0.6	3.9				7.1	760			<2
04/27/14	0.7	5.6	4.8	4.8	4.8	7.2	878	486		2	0.5	4.1	6.2	6.9	6.2	7.1	770	476		<2
04/28/14	0.7	5.8	5.1		5.1	7.2	863			<2	0.5	4.3	5.7		5.7	7.1	795			<2
04/29/14	0.8	5.4	4.3		4.3	7.2	854			2	0.5	4.0	5.3		5.3	7.2	810			<2
04/30/14	0.7	5.3	5.4		5.9	7.2	858			<2	0.5	3.9	7.2		7.4	7.2	805			<2
Avg	0.6	5.6	5.4	5.3	5.4	7.2	861	508	162	<2	0.5	4.0	5.9	6.6	5.9	7.3	772	484	156	<2
Min	0.4	5.3	4.3	4.7	4.3	7.1	805	486	162	<2	0.3	3.7	5.0	5.9	5.1	7.1	730	476	156	<2
Max	0.8	6.0	6.3	6.2	6.4	7.3	908	526	162	2	0.7	4.3	7.2	7.2	7.4	7.5	860	488	156	2

Note:

Bolded characters signify an exceedance of a permit limitation

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

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detect" values equal to 2. Determination of "less than" is dependent on the number of "non-detect" occurrences more than half the days in the month.

⁵ TOC shall not exceed 16 mg/L for more than two consecutive samples and an average of the last 4 sample results.

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

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

Table 2-1b
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for May 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent										
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}	
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	
05/01/14	0.7	5.2	5.5		5.5	7.2	878			2	0.4	3.8	8.1		8.1	7.1		815		<2	
05/02/14	0.8	5.2				7.2	874			<2	0.4	3.7				7.0		825		<2	
05/03/14	0.8	5.1				7.2	874			<2	0.4	3.7				7.0		815		<2	
05/04/14	0.8	5.2	5.7	5.7	5.7	7.2	874	524	163	<2	0.4	4.1	4.3		4.7	7.0				<2	
05/05/14	0.8	5.3	5.1		5.1	7.3	874			<2	0.4	4.0	4.2	5.7	4.2	7.1		825	490	148	<2
05/06/14	0.8	5.2	5.0		5.0	7.3	857			2	0.3	3.8	4.8		4.8	7.2		815		<2	
05/07/14	0.8	5.3	5.7		5.7	7.2	877			<2	0.3	4.0	7.5		7.5	7.1		830		<2	
05/08/14	0.8	5.2	5.5		5.5	7.2	854			<2	0.3	3.7	8.0		8.0	7.0		820		<2	
05/09/14	0.8	5.3				7.2	848			2	0.3	3.8				7.0		810		<2	
05/10/14	0.7	5.2				7.2	855			2	0.4	3.7				7.0		805		<2	
05/11/14	0.8	5.5	6.1	6.1	6.1	7.2	863	500		<2	0.4	3.9	6.4	7.6	6.4	7.1		800	478	<2	
05/12/14	0.8	5.8	5.7		5.7	7.2	853			<2	0.4	4.2	5.5		5.5	7.0		815		<2	
05/13/14	0.8	5.9	5.6		5.6	7.1	829			2	0.4	4.3	4.7		4.7	7.0		920		<2	
05/14/14	0.9	6.2	5.7		5.7	7.0	833			<2	0.6	4.6	4.7		4.7	7.1		805		<2	
05/15/14	0.9	5.6	4.8		4.8	7.0	837			<2	0.6	3.9	4.7		4.7	7.0		835		<2	
05/16/14	0.8	5.4				7.0	844			<2	0.6	3.5				7.0		790		<2	
05/17/14	0.8	5.3				7.0	849			<2	0.7	3.8				7.0		790		<2	
05/18/14	0.8	5.6	5.9	5.9	5.9	7.0	839	512		2	0.7	3.9	2.5	3.5	2.5	7.1		800	488	2	
05/19/14	0.8	6.0	5.7		5.7	7.0	844			<2	0.6	4.0	2.1		2.1	7.2		785		<2	
05/20/14	0.8	5.9	5.4		5.4	7.0	835			<2	0.7	4.2	2.6		2.6	7.2		780		<2	
05/21/14	0.7	5.8	5.7		5.9	6.9	840			2	0.5	4.2	3.2		3.2	7.1		780		<2	
05/22/14	0.7	5.6	6.0		6.0	7.0	860			<2	0.3	4.1	3.5		3.5	7.1		775		<2	
05/23/14	0.7	5.6				7.0	808			2	0.3	4.1				7.1		770		<2	
05/24/14	0.6	5.5				6.9	815			<2	0.3	4.2				7.1		765		<2	
05/25/14	0.6	5.6				7.0	816			<2	0.3	4.4				7.1		770		<2	
05/26/14	0.6	5.6	5.6		5.6	7.0	810			<2	0.3	4.2	4.3		4.3	7.1		775		<2	
05/27/14	0.6	5.5	6.6		6.6	7.0	812			<2	0.3	4.3	3.7		3.7	7.1		770		<2	
05/28/14	0.6	6.0	4.8	4.8	4.8	7.1	807	496		<2	0.3	4.5	3.6	4.9	3.6	7.2		775	518	<2	
05/29/14	0.6	5.8	4.7		4.7	7.1	822			<2	0.3	4.4	3.8		3.8	7.1		765		<2	
05/30/14	0.6	5.8				7.0	859			<2	0.4	4.4				7.1		775		<2	
05/31/14	0.6	5.7				7.1	911			<2	0.4	4.4				7.1		770		<2	
Avg	0.7	5.5	5.5	5.6	5.6	7.1	847	508	163	<2	0.4	4.1	4.6	5.4	4.6	7.1		799	494	148	<2
Min	0.6	5.1	4.7	4.8	4.7	6.9	807	496	163	<2	0.3	3.5	2.1	3.5	2.1	7.0		765	478	148	<2
Max	0.9	6.2	6.6	6.1	6.6	7.3	911	524	163	2	0.7	4.6	8.1	7.6	8.1	7.2		920	518	148	2

Note:

Bolded characters signify an exceedance of a permit limitation

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

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detect" values equal to 2. Determination of "less than" is dependent on the number of "non-detect" occurrences more than half the days in the month.

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

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

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

Table 2-1c
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for June 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC ⁷	TDS ³	Hardness	Coliform ^{1,2,4}	Turbidity ^{1,2,7}	TOC	NO ₃ -N	TN	TIN ³	pH ⁷	EC	TDS ³	Hardness	Coliform ^{1,2,4}
	NTU	mg/L	mg/L	mg/L	mg/L	unit	µmho/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µmho/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240	2;5;10	16 ⁵		5 ⁶		6<pH<9				2.2;23;240
06/01/14	0.5	5.2				7.0	877			<2	0.6	4.0	4.5	5.5	4.5	7.0	770			<2
06/02/14	0.5	5.8	7.2	7.2	7.2	7.1	876	478	154	<2	0.6	4.2	4.4		4.4	7.0	775	448	139	<2
06/03/14	0.5	6.0	8.2		8.2	7.2	890			<2	0.7	4.6	5.2		5.2	7.1	780			<2
06/04/14	0.5	6.0	8.9		8.9	7.2	838			4	0.8	4.6	4.9		5.0	7.1	769			<2
06/05/14	0.4	6.4	8.9		8.9	7.2	791			<2	0.8	4.5	4.6		4.6	7.1	760			<2
06/06/14	0.4	5.8	8.9		8.9	7.2	821			2	0.7	4.1				7.0	775			<2
06/07/14	0.5	5.8				7.2	834			<2	0.7	4.0				7.1	790			<2
06/08/14	0.6	5.7				7.2	840			<2	0.7	3.9	5.2	6.5	5.2	7.1	780			<2
06/09/14	0.6	6.2	7.7	7.7	7.7	7.2	844	496		<2	0.6	4.1	4.2		4.2	7.1	775	456		<2
06/10/14	0.7	6.1	7.6		7.6	7.2	845			<2	0.6	4.1	4.0		4.1	7.1	765			<2
06/11/14	0.6	6.0	7.9		7.9	7.2	854			2	0.9	4.7	4.9		4.9	7.1	760			<2
06/12/14	0.6	6.1	8.0		8.0	7.3	855			<2	0.7	4.4				7.1	755			<2
06/13/14	0.5	5.7	7.2		7.2	7.3	850			2	0.7	4.0				7.1	760			<2
06/14/14	0.6	5.6				7.3	842			<2	0.6	4.6				7.1	770			<2
06/15/14	0.5	5.6				7.3	837			<2	0.6	3.7	4.6		4.6	7.1				<2
06/16/14	0.5	6.1	3.9	3.9	3.9	7.3	839	490		<2	0.5	3.9	5.1		5.1	7.1	770	450		<2
06/17/14	0.5	5.9	4.9		4.9	7.2	825			<2	0.5	3.9	4.9	5.5	4.9	7.1	775			<2
06/18/14	0.6	6.1	4.3		4.4	7.1	838			<2	0.4	4.0	5.2		5.2	7.2	775			<2
06/19/14	0.6	6.4	5.3		5.3	7.1	834			<2	0.4	4.2	4.7		4.8	7.1	775			<2
06/20/14	0.8	6.1	5.4		5.4	7.1	824			<2	0.4	4.0				7.1	770			<2
06/21/14	0.5	5.7				7.1	834			<2	0.4	3.9				7.1	775			<2
06/22/14	0.5	5.8				7.1	830			<2	0.4	3.9	4.0	5.0	4.9	7.1	775			<2
06/23/14	0.5	6.1	6.7	6.7	6.7	7.1	828	468		<2	0.4	4.3	3.8		3.9	7.1	775	448		<2
06/24/14	0.5	6.0	7.3		7.3	7.1	820			<2	0.4	4.3	5.2		5.3	7.1	805			<2
06/25/14	0.5	6.0	7.2		7.2	7.1	814			2	0.3	4.3	4.7		4.8	7.1	790			<2
06/26/14	0.5	6.4	6.4		6.4	7.1	822			<2	0.5	4.5	5.3		5.4	7.2	745			<2
06/27/14	0.5	6.2	7.3		7.6	7.1	827			<2	0.3	4.4				7.1	750			<2
06/28/14	0.6	6.2				7.0	836			<2	0.2	4.3				7.1	750			<2
06/29/14	0.6	6.1				7.1	850			2	0.2	4.2	3.5	4.3	3.5	7.0	745			<2
06/30/14	0.6	6.4	5.6	5.6	5.6	7.1	841	478		2	0.2	4.5	3.5		3.6	7.1	740	458		<2
Avg	0.6	6.0	6.9	6.2	6.9	7.2	838	482	154	<2	0.5	4.2	4.6	5.4	4.7	7.1	769	452	139	<2
Min	0.4	5.2	3.9	3.9	3.9	7.0	791	468	154	<2	0.2	3.7	3.5	4.3	3.5	7.0	740	448	139	<2
Max	0.8	6.4	8.9	7.7	8.9	7.3	890	496	154	4	0.9	4.7	5.3	6.5	5.4	7.2	805	458	139	<2

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

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

¹ Turbidity and coliform must meet water quality standards for disinfected tertiary treated recycled water, as specified in NPDES No. CA8000409, Order No. R8-2009-0021.

² Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any time. Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

³ TDS and TIN limits are based on a 12-month running average values which are presented in Table 2-2

⁴ Monthly average for coliform is based on "non-detected" values equal to 2. Determination of "less than" is dependent on the number of "non-detected" occurrences more than half the days in the month.

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

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

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

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

	TIN		TDS	
Date	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jul-13	5.6	5.8	496	490
Aug-13	6.9	6.0	496	493
Sep-13	7.3	6.2	499	495
Oct-13	7.4	6.4	496	496
Nov-13	6.7	6.4	507	497
Dec-13	7.6	6.6	511	499
Jan-14	5.9	6.6	510	500
Feb-14	6.1	6.5	509	502
Mar-14	5.5	6.5	497	502
Apr-14	5.2	6.4	517	504
May-14	5.2	6.3	524	505
Jun-14	4.4	6.1	506	506
Avg	6.1	6.3	506	499
Min	4.4	5.8	496	490
Max	7.6	6.6	524	506
Limit		8.0		550

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021).

Per the 2004 Basin Plan Amendment, TDS is calculated using the flow-weighted averages based on discharged effluent flows and recycled water flows; TIN is calculated using the flow-weighted averages based on discharged effluent flows only.

The data reported above will supersede any information submitted for previous quarters. Agency-wide TIN & TDS were in compliance with permit limits at all times.

Table 2-3
Recycled Water Monitoring: Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, & A.15)

Constituent	3Q13	4Q13	1Q14	2Q14	4Q Run. Avg. ¹	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	36	30	230	41	84	1000	µg/L	EPA 200.8
Antimony	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<0.8	<1.9	<0.2	<0.2	<1.9	7	MFL	EPA 100.2
Barium	7	10	8	7	8	1000	µg/L	EPA 200.8
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium	3.1	1.4	0.9	1.9	1.8	50	µg/L	EPA 200.8
Cyanide	<5	<5	<5	<5	<5	150	µg/L	SM 4500-CN E
Fluoride	0.2	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Nickel	2	3	2	2	2	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314/331.0
Selenium	2	3	2	<2	2	50	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)								
Benzene	<0.5	<1	<0.5	<0.5	<1	1	µg/L	EPA 524.2/624
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
1,2-Dichlorobenzene	<0.5	<1	<0.5	<0.5	<1	600	µg/L	EPA 524.2/624
1,4-Dichlorobenzene	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2/624
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
1,1-Dichloroethylene	<0.5	<1	<0.5	<0.5	<1	6	µg/L	EPA 524.2/624
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2/624
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2/624
Dichloromethane	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2/624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,3-Dichloropropene	<0.5	<1	<0.5	<0.5	<1	0.5	µg/L	EPA 524.2/624
Ethylbenzene	<0.5	<1	<0.5	<0.5	<1	300	µg/L	EPA 524.2/624
Monochlorobenzene	<0.5	<1	<0.5	<0.5	<1	70	µg/L	EPA 524.2/624
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2/624
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2/624
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2/624
Tetrachloroethylene	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2/624
Toluene	<0.5	<1	<0.5	<0.5	<1	150	µg/L	EPA 524.2/624
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,1,1-Trichloroethane	<0.5	<1	<0.5	<0.5	<1	200	µg/L	EPA 524.2/624
1,1,2-Trichloroethane	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2/624
Trichloroethylene	<0.5	<1	<0.5	<0.5	<1	5	µg/L	EPA 524.2/624
Trichlorofluoromethane	<0.5	<2	<0.5	<0.5	<2	150	µg/L	EPA 524.2/624
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2/624
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 ²	µg/L	EPA 524.2/624
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2/624
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	NA	<0.5	<0.5	<0.5	<0.5	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	NA	<0.2	<0.2	<0.2	<0.2	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	4	4	<1	3	3	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	NA	<0.5	<0.5	<0.5	<0.5	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	NA	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	<5	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: Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, & A.15)

Constituent	3Q13	4Q13	1Q14	2Q14	4Q Run. Avg. ¹	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	NA	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	NA	<0.5	<0.5	<0.5	<0.5	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	NA	<0.5	<0.5	<0.5	<0.5	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	NA	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	NA	<0.5	<0.5	<0.5	<0.5	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	2.9	1.9	2.4	2.5	2.4	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<0.25	<0.12	<0.45	<0.06	<0.45	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	5	<1	<3	<3	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<215	<203	<233	<221	<233	20,000	pCi/L	EPA 906
Strontium-90	<0.65	<0.33	<0.49	<0.28	<0.65	8	pCi/L	EPA 905
Gross Beta Particle Activity	11	10	10	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	36	30	230	41	84	200	µg/L	EPA 200.8
Copper	2.9	1.9	2.4	2.5	2.4	1000	µg/L	EPA 200.8
Corrosivity ³	-0.3 (Non-Cor.)	NR	0.9 (Non-Cor.)	NR	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) ³	0.06	0.08	0.09	<0.05	0.06	0.5	mg/L	S5540C/EPA 425.1
Iron ³	41	NR	NR	NR	109	300	µg/L	EPA 200.7
Manganese	10	16	19	6	13	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE) ³	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold ³	8	17	2	2	7	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	NA	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	25	19	24	32	25	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease ⁴	<1	<1	<1	<1	<1	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<5	<5	<5	<5	<5	10	µg/L	EPA 300.1
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
BRK-LYS-25 BRK-LYS-25 BRK-LYS-25 HKYE-LYS-25								
Lysimeter Compliance Point Data	3Q13	4Q13	1Q14	2Q14				
Total Trihalomethanes (TTHMs)	<2	2	<2	70	18	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	<2	60	µg/L	S6251B

NR: Not required this quarter

NA: Not Analyzed. Two samples were collected during 4Q13 and the average reported

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

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

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

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

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

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

Constituent	2Q14	Unit	Method	Constituent	2Q14	Unit	Method
Metals				Pesticides			
Chromium (III) ¹	1.9	µg/L	EPA 200.8	Aldrin	NR	µg/L	EPA 608
Volatile Organic Chemicals (VOCs)				BHC, alpha isomer	NR	µg/L	EPA 608
Acrolein	NR	µg/L	EPA 624	BHC, beta isomer	NR	µg/L	EPA 608
Acrylonitrile	NR	µg/L	EPA 624	BHC, delta isomer	NR	µg/L	EPA 608
Bromoform	<0.5	µg/L	EPA 524.2/624	4,4'-DDT	NR	µg/L	EPA 608
Chlorodibromomethane	6.9	µg/L	EPA 524.2/624	4,4'-DDE	NR	µg/L	EPA 608
Chloroethane	<0.5	µg/L	EPA 524.2/624	4,4'-DDD	NR	µg/L	EPA 608
2-Chloroethylvinylether	NR	µg/L	EPA 524.2/624	Dieldrin	NR	µg/L	EPA 608
Chloroform	33	µg/L	EPA 524.2/624	Endosulfan I	NR	µg/L	EPA 608
Dichlorobromomethane	22	µg/L	EPA 524.2/624	Endosulfan II	NR	µg/L	EPA 608
Methyl Bromide	<1	µg/L	EPA 524.2/624	Endosulfan Sulfate	NR	µg/L	EPA 608
Methyl Chloride	<0.5	µg/L	EPA 524.2/624	Unregulated Chemicals			
Acid Extractables				Endrin Aldehyde	NR	µg/L	EPA 608
2-Chlorophenol	NR	µg/L	EPA 625	Chromium VI	0.18	µg/L	EPA 218.6
2,4-Dichlorophenol	NR	µg/L	EPA 625	Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
2,4-Dimethylphenol	NR	µg/L	EPA 625	Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625	Chemicals w/ State Notification Levels ²			
2,4-Dinitrophenol	NR	µg/L	EPA 625	Boron	0.3	mg/L	EPA 200.7
2-Nitrophenol	NR	µg/L	EPA 625	n-butylbenzene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	NR	µg/L	EPA 625	sec-butylbenzene	<0.5	µg/L	EPA 524.2
4-Chloro-3-methylphenol	NR	µg/L	EPA 625	tert-butylbenzene	<0.5	µg/L	EPA 524.2
Phenol	NR	µg/L	EPA 625	Carbon disulfide	<0.5	µg/L	EPA 524.2
2,4,6-Trichlorophenol	NR	µg/L	EPA 625	Chlorate	NR	µg/L	EPA 300.0
Base/Neutral Extractables				2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthene	NR	µg/L	EPA 625	4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthylene	NR	µg/L	EPA 625	Diazinon	NR	µg/L	EPA 525.2
Anthracene	NR	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
Benzidine	NR	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Benzo(a)anthracene	NR	µg/L	EPA 625	Ethylene glycol	NR	mg/L	EPA 8015B
Benzo(b)fluoranthene	NR	µg/L	EPA 625	Formaldehyde	NR	µg/L	EPA 556
Benzo(g,h,i)perylene	NR	µg/L	EPA 625	HMX	NR	µg/L	EPA 8330B
Benzo(k)fluoranthene	NR	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	NR	ng/L	EPA 521
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625	Propachlor	NR	µg/L	EPA 525.2
Butyl benzyl phthalate	NR	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2
2-Chloronaphthalene	NR	µg/L	EPA 625	RDX	NR	µg/L	EPA 8330B
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	EPA 524.2
Chrysene	NR	µg/L	EPA 625	1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	µg/L	EPA 524.2
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2
1,3-Dichlorobenzene	NR	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
3,3-Dichlorobenzidine	NR	µg/L	EPA 625	2,4,6-Trinitrotoluene	NR	µg/L	EPA 8330B
Diethyl phthalate	NR	µg/L	EPA 625	Vanadium	3	µg/L	EPA 200.8
Dimethyl phthalate	NR	µg/L	EPA 625	Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ²			
Di-n-butyl phthalate	NR	µg/L	EPA 625	Acetaminophen	NR	ng/L	LC-MS-MS
2,4-Dinitrotoluene	NR	µg/L	EPA 625	Bis Phenol A (BPA)	NR	ng/L	LC-MS-MS
2,6-Dinitrotoluene	NR	µg/L	EPA 625	Caffeine	NR	ng/L	LC-MS-MS
Di-n-octyl phthalate	NR	µg/L	EPA 625	Carbamazepine	NR	ng/L	LC-MS-MS
Azobenzene	NR	µg/L	EPA 625	DEET	NR	ng/L	LC-MS-MS
Fluoranthene	NR	µg/L	EPA 625	Estradiol	NR	ng/L	LC-MS-MS
Fluorene	NR	µg/L	EPA 625	Estrone	NR	ng/L	LC-MS-MS
Hexachlorobutadiene	NR	µg/L	EPA 625	Ethinyl Estradiol - 17 alpha	NR	ng/L	LC-MS-MS
Hexachlorocyclopentadiene	NR	µg/L	EPA 625	Fluoxetine	NR	ng/L	LC-MS-MS
Hexachloroethane	NR	µg/L	EPA 625	Gemfibrozil	NR	ng/L	LC-MS-MS
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625	Ibuprofen	NR	ng/L	LC-MS-MS
Isophorone	NR	µg/L	EPA 625	Iopromide	NR	ng/L	LC-MS-MS
Naphthalene	NR	µg/L	EPA 625	Progesterone	NR	ng/L	LC-MS-MS
Nitrobenzene	NR	µg/L	EPA 625	Sucralose	NR	ng/L	LC-MS-MS
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625	Sulfamethoxazole	NR	ng/L	LC-MS-MS
N-Nitrosodiphenylamine	NR	µg/L	EPA 625	Testosterone	NR	ng/L	LC-MS-MS
Phenanthrene	NR	µg/L	EPA 625	Triclosan	NR	ng/L	LC-MS-MS
Pyrene	NR	µg/L	EPA 625	Trimethoprim	NR	ng/L	LC-MS-MS

¹ Trivalent chromium is measured as total chromium

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

NR: Not Required (Annual Requirement)

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

8th Street Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
8TH-LYS-00	0	04/18/14	7.91	3.8	2.4	1.4	2.4	<0.01	350
8TH-LYS-00	0	05/28/14	8.24	2.3	0.9	0.8	1.5	0.04	580
8TH-LYS-00	0	06/04/14	8.62	1.9	0.8	0.3	1.6	0.04	590
8TH-LYS-35	35	04/18/14	2.44	<0.6	<0.2	<0.1	<0.5	0.12	645
8TH-LYS-35	35	05/28/14	2.70	0.9	<0.2	<0.1	0.9	<0.01	505
8TH-LYS-35	35	06/04/14	2.39	<0.6	<0.2	<0.1	<0.5	<0.01	480

Banana Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BNA-LYS-00	0	04/03/14	8.57	4.4	3.5	3.0	1.4	0.05	380
BNA-LYS-00	0	04/23/14					0.8		
BNA-LYS-00	0	04/30/14	5.10	6.4	5.5	5.3	1.1	0.09	815
BNA-LYS-00	0	05/07/14	7.75	7.4	5.1	5.0	2.4	<0.01	837
BNA-LYS-00	0	05/14/14	4.92	6.2	5.1	5.1	1.1	<0.01	840
BNA-LYS-00	0	05/22/14	5.01	4.4	3.3	3.3	1.1	<0.01	805
BNA-LYS-00	0	06/04/14	4.74	5.6	4.5	4.5	1.1	<0.01	793
BNA-LYS-00	0	06/11/14	4.60	4.7	3.7	3.7	1.0	<0.01	775
BNA-LYS-00	0	06/18/14	4.75	3.4	2.2	2.0	1.4	0.14	765
BNA-LYS-25**	25	04/03/14	1.13	4.4	4.4	4.4	<0.5	0.02	565
BNA-LYS-25**	25	04/10/14	0.76	4.8	3.9	3.9	0.9	<0.01	495
BNA-LYS-25**	25	04/17/14	0.67	4.4	4.5	4.3	<0.5	0.08	615
BNA-LYS-25**	25	04/23/14	0.82			4.4		<0.01	642
BNA-LYS-25**	25	04/30/14	1.11	4.6	4.6	4.5	<0.5	0.10	660
BNA-LYS-25**	25	05/07/14	1.18	4.2	4.2	4.2	<0.5	<0.01	503
BNA-LYS-25**	25	05/14/14	1.43	6.0	5.3	5.3	0.7	<0.01	760
BNA-LYS-25**	25	05/22/14	1.26	5.4	4.9	4.9	0.5	<0.01	720
BNA-LYS-25**	25	05/29/14	1.18	5.6	4.7	4.7	0.9	<0.01	710
BNA-LYS-25**	25	06/04/14	0.80	4.9	4.3	4.3	0.6	<0.01	718
BNA-LYS-25**	25	06/11/14	1.26	5.0	4.0	4.0	1.0	<0.01	750
BNA-LYS-25**	25	06/18/14	1.22	4.7	3.8	3.8	0.9	<0.01	730
BNA-LYS-25**	25	06/25/14	0.75	4.4	4.4	4.3	<0.5	0.07	735

Brooks Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BRK-LYS-00	0	04/18/14	4.78	6.3	5.7	5.4	0.9	0.09	710
BRK-LYS-00	0	05/28/14	4.68			3.5	1.2	0.05	705
BRK-LYS-00	0	06/04/14	4.43	4.9	3.6	3.5	1.4	0.06	698
BRK-LYS-25**	25	04/18/14	2.97	<0.6	0.3	0.2	<0.5	0.13	755
BRK-LYS-25**	25	05/28/14	3.01			<0.1	0.5	<0.01	750
BRK-LYS-25**	25	06/04/14	2.54	0.7	<0.2	<0.1	0.7	<0.01	736

Hickory East Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
HKYE-LYS-00	0	04/03/14	4.64	5.2	5.2	5.2	<0.5	<0.01	755
HKYE-LYS-00	0	04/10/14	4.84	6.4	5.2	5.2	1.2	<0.01	790
HKYE-LYS-00	0	04/17/14	5.01	5.6	5.6	5.6	<0.5	<0.01	805
HKYE-LYS-00	0	04/23/14	5.13	5.6	4.7	4.7	0.9	<0.01	805
HKYE-LYS-00	0	04/30/14	16.2	4.8	0.3	0.1	4.7	<0.01	920
HKYE-LYS-00	0	05/07/14	5.61	5.5	3.6	3.5	2.0	0.03	830
HKYE-LYS-00	0	05/14/14	5.15	5.7	3.7	3.6	2.1	0.07	765
HKYE-LYS-00	0	05/22/14	5.59	2.3	1.2	0.9	1.4	0.06	790
HKYE-LYS-00	0	05/29/14	4.64	5.0	3.8	3.8	1.2	<0.01	795
HKYE-LYS-00	0	06/04/14	4.42	3.9	2.5	2.5	1.4	0.04	783
HKYE-LYS-00	0	06/11/14	24.1	5.8	<0.2	<0.1	5.8	<0.01	1030
HKYE-LYS-00	0	06/18/14	5.30	5.8	4.9	4.7	1.1	<0.01	790
HKYE-LYS-00	0	06/25/14	4.03	3.7	3.7	3.6	<0.5	0.08	810
HKYE-LYS-25**	25	04/03/14	1.52	6.2	6.2	6.2	<0.5	<0.01	735
HKYE-LYS-25**	25	04/10/14	1.65	5.9	5.9	5.9	<0.5	<0.01	780
HKYE-LYS-25**	25	04/17/14	1.71	6.1	6.1	6.0	<0.5	0.09	780
HKYE-LYS-25**	25	04/23/14	1.88	5.1	5.1	5.1	<0.5	<0.01	770
HKYE-LYS-25**	25	04/30/14	2.45			4.9		<0.01	780
HKYE-LYS-25**	25	05/07/14	2.04	5.8	4.8	4.8	1.0	<0.01	782
HKYE-LYS-25**	25	05/14/14	1.69	5.7	4.9	4.9	0.8	<0.01	800
HKYE-LYS-25**	25	05/22/14	1.59	4.7	4.7	4.7	<0.5	<0.01	800
HKYE-LYS-25**	25	05/29/14	1.66	4.7	4.7	4.7	<0.5	<0.01	800
HKYE-LYS-25**	25	06/04/14	1.66	4.3	3.6	3.6	0.7	<0.01	800

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

Hickory East Basin (cont'd)									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
HKYE-LYS-25**	25	06/11/14	1.73	5.6	4.8	4.8	0.8	<0.01	780
HKYE-LYS-25**	25	06/18/14	1.42	4.8	4.3	4.1	0.7	<0.01	775
HKYE-LYS-25**	25	06/25/14	1.12	3.4	3.4	3.3	<0.5	0.08	800

RP3 Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
RP31-LYS-00	0	04/03/14	14.5						280
RP31-LYS-00	0	04/10/14	8.33						540
RP31-LYS-00	0	04/17/14	12.0						595
RP31-LYS-00	0	04/23/14	8.51						775
RP31-LYS-00	0	04/30/14	11.0						575
RP31-LYS-00	0	05/07/14	15.1						656
RP31-LYS-00	0	05/22/14	246	48.2	10.0	0.1	48.1	<0.01	2650
RP31-LYS-00	0	06/25/14	6.55	1.7	0.9	0.5	1.2	0.17	790
RP31-LYS-35**	35	04/03/14	1.11						640
RP31-LYS-35**	35	04/10/14	0.91						620
RP31-LYS-35**	35	04/17/14	1.10						670
RP31-LYS-35**	35	04/23/14	1.14	2.6	2.6	2.6	<0.5	<0.01	625
RP31-LYS-35**	35	04/30/14	0.94						595
RP31-LYS-35**	35	05/07/14	1.13						587
RP31-LYS-35**	35	05/15/14	0.93						590
RP31-LYS-35**	35	05/22/14	1.29	3.0	2.2	2.2	0.8	0.02	600
RP31-LYS-35**	35	06/04/14	1.05	3.1	2.4	2.4	0.7	<0.01	599
RP31-LYS-35**	35	06/25/14	0.83	2.2	2.2	2.2	<0.5	0.04	595

San Sevaine Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
SS5-LYS-00	0	04/17/14	9.54	8.7	7.6	7.2	1.5	0.17	855
SS5-LYS-20	20	05/27/14	1.87	2.7	2.7	2.7	<0.5	<0.01	875
SS5-LYS-20	20	06/04/14	1.90	4.0	3.3	3.3	0.7	<0.01	882

Victoria Basin									
Site	Depth, bgs	Date	TOC	TN *	TIN	NO ₃ -N	TKN+NO ₂ -N	NO ₂ -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
VCT-LYS-00	0	04/17/14	5.18	4.0	4.0	3.8	<0.5	0.20	750
VCT-LYS-00	0	05/27/14	4.75	4.5	3.3	3.3	1.2	<0.01	800
VCT-LYS-00	0	06/04/14	4.51	3.4	2.1	2.1	1.3	0.02	789
VCT-LYS-35	35	04/17/14	1.28	4.4	3.5	3.4	1.0	0.13	810
VCT-LYS-35	35	05/27/14	1.55	2.6	1.9	1.9	0.7	<0.01	725
VCT-LYS-35	35	06/04/14	1.49	2.3	1.6	1.6	0.7	<0.01	700

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

* If TN limit of 5 mg/L is not met prior to the RW distribution system, TN compliance can be met at a point prior to reaching the regional groundwater, including lysimeters.

**Compliance lysimeter for their respective basin (Specifications A.7, A.10, and A.11 of the Order). The Brooks Basin and Hickory Basin lysimeters are part of alternative monitoring plans; the Brooks Basin lysimeter is only used for compliance with TN, and the Hickory Basin lysimeter is only used for compliance with TOC. Compliance with TOC at Brooks Basin, TN at Hickory Basin, and both constituents at other basins is measured at alternative points (see Table 2-5b)

Table 2-5b
Alternative Monitoring Plans

Turner Basin					
Date	RW Blend*	RW Blend*	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4
mg/L==>	TOC	TN	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)
04/03/14	4.19	5.6	1.26	0.63	0.7
04/10/14	4.68	6.8	1.40	0.70	0.9
04/17/14	3.92	7.2	1.18	0.59	0.9
04/23/14	4.64	6.5	1.39	0.70	0.8
04/30/14	4.60	5.6	1.38	0.69	0.7
05/07/14	4.54	6.6	1.36	0.68	0.9
05/14/14	3.95	4.7	1.19	0.59	0.6
05/22/14	4.18	5.7	1.25	0.63	0.7
05/28/14	4.35	4.5	1.31	0.65	0.6
06/03/14	4.68	4.9	1.40	0.70	0.6
06/11/14	4.01	5.5	1.20	0.60	0.7
06/18/14	4.40	6.6	1.32	0.66	0.9
06/25/14	3.61	5.6	1.08	0.54	0.7

Ely Basin				
Date	RP-1 RW	RP-1 RW	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TOC (76% reduction)	TN (52% reduction)
04/07/14	5.73	6.3	1.38	3.0
04/14/14	5.66	6.9	1.36	3.3
04/21/14	5.53	5.5	1.33	2.6
04/28/14	5.55	5.8	1.33	2.8
05/05/14	5.21	6.9	1.25	3.3
05/12/14	5.47	6.9	1.31	3.3
05/19/14	5.64	7.6	1.35	3.6
05/29/14	6.03	5.8	1.45	2.8
06/02/14	5.83	5.7	1.40	2.7
06/09/14	5.26	6.0	1.26	2.9
06/16/14	5.17	5.4	1.24	2.6
06/23/14	5.34	5.1	1.28	2.4
06/30/14	5.35	4.3	1.28	2.0

Brooks Basin				
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
mg/L==>	TOC	TN	EC	
04/18/14	4.78	6.3	710	
05/28/14	4.68	4.7	705	
06/04/14	4.43	4.9	698	
Date	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25
mg/L==>	TOC	TN**	EC	
04/18/14	2.97	<0.1	755	
05/28/14	3.01	<0.1	750	
06/04/14	2.54	0.7	736	
Date	BRK-1/1	BRK-1/1	BRK-1/1	BRK-1/1
mg/L==>	TOC**	TN	EC	Cl
04/03/14	0.43	1.4	515	78
05/28/14	0.66	2.0	555	86
06/03/14	0.48	2.8	555	91

RP3 Basin			
Date	RP3-LYS-35	RP3-LYS-35	RP3-LYS-35
mg/L==>	TOC	TN	EC
04/23/14	1.14	2.6	625
05/22/14	1.29	3.0	600
06/25/14	0.83	2.2	595

*Recycled water blend from RP-1 & RP-4 sampled at NRG Energy (formerly Reliant Energy)

**BRK-LYS-25 is the compliance point for TN and BRK-1/1 is the compliance point for TOC.

Table 2-5b
Alternative Monitoring Plans

8th Street Basin				
Date	RW Blend*	RW Blend*	8th Street	8th Street
mg/L==>	TOC	TN	TOC (59% reduction)	TN (75% reduction)
04/03/14	4.19	5.6	1.72	1.4
04/10/14	4.68	6.8	1.92	1.7
04/17/14	3.92	7.2	1.61	1.8
04/23/14	4.64	6.5	1.90	1.6
04/30/14	4.60	5.6	1.89	1.4
05/07/14	4.54	6.6	1.86	1.7
05/14/14	3.95	4.7	1.62	1.2
05/22/14	4.18	5.7	1.71	1.4
05/28/14	4.35	4.5	1.78	1.1
06/03/14	4.68	4.9	1.92	1.2
06/11/14	4.01	5.5	1.64	1.4
06/18/14	4.40	6.6	1.80	1.6
06/25/14	3.61	5.6	1.48	1.4

San Sevaine 5 Basin				
Date	RW Blend*	RW Blend*	San Sevaine 5	San Sevaine 5
mg/L==>	TOC	TN	TOC (78% reduction)	TN (69% reduction)
04/03/14	4.19	5.6	0.92	1.7
04/10/14	4.68	6.8	1.03	2.1
04/17/14	3.92	7.2	0.86	2.2
04/23/14	4.64	6.5	1.02	2.0
04/30/14	4.60	5.6	1.01	1.7
05/07/14	4.54	6.6	1.00	2.0
05/14/14	3.95	4.7	0.87	1.5
05/22/14	4.18	5.7	0.92	1.8
05/28/14	4.35	4.5	0.96	1.4
06/03/14	4.68	4.9	1.03	1.5
06/11/14	4.01	5.5	0.88	1.7
06/18/14	4.40	6.6	0.97	2.0
06/25/14	3.61	5.6	0.79	1.7

Victoria Basin				
Date	RW Blend*	RW Blend*	Victoria	Victoria
mg/L==>	TOC	TN	TOC (78% reduction)	TN (82% reduction)
04/03/14	4.19	5.6	0.92	1.0
04/10/14	4.68	6.8	1.03	1.2
04/17/14	3.92	7.2	0.86	1.3
04/23/14	4.64	6.5	1.02	1.2
04/30/14	4.60	5.6	1.01	1.0
05/07/14	4.54	6.6	1.00	1.2
05/14/14	3.95	4.7	0.87	0.8
05/22/14	4.18	5.7	0.92	1.0
05/28/14	4.35	4.5	0.96	0.8
06/03/14	4.68	4.9	1.03	0.9
06/11/14	4.01	5.5	0.88	1.0
06/18/14	4.40	6.6	0.97	1.2
06/25/14	3.61	5.6	0.79	1.0

Hickory Basin		
Date	BH-1/2**	BH-1/2
mg/L==>	TN	EC
04/16/14	1.3	495
05/21/14	2.6	500
05/28/14	2.0	495
06/03/14	3.4	500
06/10/14	2.1	495
06/24/14	2.2	495

*Recycled water blend from RP-1 & RP-4 sampled at NRG California South, LP (formerly Reliant Energy)

**TN compliance point for Hickory Basin (approved by RWQCB 07/29/13)

Table 2-6
Diluent Water Monitoring*: Local Runoff

Constituent	Cucamonga Creek @ Turner Basins 1 & 2 05/28/14	Deer Creek @ Turner Basins 3 & 4 05/28/14	W. Cucamonga Creek @ 7th & 8th Street Basins 05/29/14	Unit	Method
NO ₂ -N	0.09	<0.02	<0.02	mg/L	EPA 300.0
NO ₃ -N	2.1	<0.1	1.2	mg/L	EPA 300.0
TDS	348	354	406	mg/L	SM 2540C
Total Coliform	700000	110	30000	mpn/100ml	SM 9221B
Oil & Grease	<1	<1	<1	mg/L	EPA 1664A
Inorganic Chemicals					
Aluminum	<25	88	151	µg/L	EPA 200.7
Antimony	<1	<1	<1	µg/L	EPA 200.8
Arsenic	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<4.03	<4.03	<6.72	MFL	EPA 100.2
Barium	49	32	48	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Chromium	1.6	2.6	1.2	µg/L	EPA 200.7
Cyanide	<5	<5	<5	µg/L	ASTM D7284
Fluoride	0.6	0.5	0.4	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	3	2	3	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)					
Benzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)					
Alachlor (Alanex)	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<0.2	<0.2	<0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	0.5	0.4	<0.1	µg/L	EPA 515.4
Dalapon	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	<5	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	10	10	<6	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	µg/L	EPA 505

Table 2-6
Diluent Water Monitoring*: Local Runoff

Constituent	Cucamonga Creek @ Turner Basins 1 & 2 05/28/14	Deer Creek @ Turner Basins 3 & 4 05/28/14	W. Cucamonga Creek @ 7th & 8th Street Basins 05/29/14	Unit	Method
Heptachlor Epoxide	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	0.05	<0.04	0.07	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<1.95	<1.96	<1.92	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts					
Total Trihalomethanes (TTHMs)	<2	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	6	11	<2	µg/L	SM 6251B
Bromate	6.6	25	<5	µg/L	EPA 300.1/317
Chlorite	<0.01	0.05	<0.01	mg/L	EPA 300.0
Action Level Chemicals					
Copper	17.4	12.8	8.8	µg/L	EPA 200.7
Lead	<0.5	<0.5	<0.5	µg/L	EPA 200.8
Radionuclides					
Combined Radium-226 & Radium 228	<0.364	<0.288	0.200	pCi/L	EPA 903.0
Gross Alpha Particle Activity	7	<3	<3	pCi/L	EPA 900.0/SM7110C
Tritium	<206	<221	<218	pCi/L	EPA 906.0
Strontium-90	<1.06	<1.03	<0.367	pCi/L	EPA 905.0
Gross Beta Particle Activity	5.6	3	9.2	pCi/L	EPA 900.0
Uranium	<0.7	<0.7	1.4	pCi/L	EPA 200.8
Unregulated Chemicals					
Chromium VI	0.7	1.2	0.3	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels					
Boron	0.1	0.2	0.1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	<2	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 -trimethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	13	16	3	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals					
Aluminum	<25	88	151	µg/L	EPA 200.7
Corrosivity	2.4	2.4	0.6	SI	SM 2330B
Foaming Agents (MBAS)	0.08	0.06	0.05	mg/L	SM 5540C/EPA 425.1
Iron	59	79	187	µg/L	EPA 200.7
Manganese	4	6	5	µg/L	EPA 200.7
Odor--Threshold	4	4	2	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Zinc	8	13	27	µg/L	EPA 200.7

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

Table 2-7
Summary of Wells in Groundwater Monitoring Networks

BASIN	CBWM_ID	OWNER/LOCAL NAME	SEPARATION DISTANCE (feet)	SCREENED INTERVAL(S) (feet bgs)	CASING DIAMETER (inches)	STATUS	TYPE
Hickory and Banana Basins	3600573	Fontana Water Company - F37a	2240 upgradient	378-810	20	Active	Municipal
	600660	California Speedway - Infield Well	2070 downgradient	NA	NA	Active	Industrial
	3601365	California Speedway 2	2780 downgradient	451-455, 491-603, & 664-780	20	Active	Industrial
	3600371	Reliant Energy - East Well	4070 downgradient	434-467, 500-513, 553-580, 593-652, & 825-847	20	Active	Industrial
	3602267	City Of Ontario - 20	14500 downgradient	NA	20	Active	Municipal
	601001	Inland Empire Utilities Agency - BH-1/1	340 downgradient	365-405	4	Active	Monitoring
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Inactive	Municipal
	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600997	Inland Empire Utilities Agency - TRN-1/1	50 downgradient	340-360	4	Active	Monitoring
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
Declez Basin	300208	Jurupa Community Services District - 19	8900 downgradient	230-390	18	Active	Municipal
	300207	Jurupa Community Services District - 17	5240 downgradient	259-290, & 300-400	NA	Active	Municipal
	300200	Jurupa Community Services District - 13	5730 downgradient	220-446	16-34	Active	Municipal
	300484	Inland Empire Utilities Agency - DCZ-1	50 downgradient	155-175	4	Active	Monitoring
	--	Inland Empire Utilities Agency - D-1/2	50 downgradient	185-205	4	NA	Monitoring
RP-3 Basins	600492	Fontana Water Company - F23a	7900 upgradient	450-740	18	Active	Municipal
	600477	Inland Empire Utilities Agency - Southridge JHS	5500 downgradient	NA	NA	Active	Monitoring
	600848	Alcoa - Offsite MW1	9480 downgradient	NA	NA	Active	Monitoring
	600850	Alcoa - Offsite MW3	4725 downgradient	NA	NA	Active	Monitoring
	601040	Inland Empire Utilities Agency - RP3-1/1	100 downgradient	215-235	4	Active	Monitoring
	601041	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	Active	Monitoring
Jurupa Basin	Not currently planned for recharge						
7th & 8th Street Basins	3601561	San Antonio Water Company No. 12	740 downgradient	379-480, 525-563, 578-609, & 634-679	16	Inactive	Municipal
	3601772	City of Ontario No. 4	3429 downgradient	526-910	16-20	Inactive	Municipal
	--	City of Ontario No. 51	3402 downgradient	Not Yet Constructed	NA	NA	Municipal
	600493	City of Ontario No. 35	9695 downgradient	580-1020	18-36	Active	Municipal
	601036	Inland Empire Utilities Agency - 8TH-1/1	150 downgradient	495-535	4	Active	Monitoring
	601037	Inland Empire Utilities Agency - 8TH-1/2	150 downgradient	595-645	4	Active	Monitoring
	601038	Inland Empire Utilities Agency - 8TH-2/1	2460 downgradient	465-505	4	Active	Monitoring
Brooks Basins	601039	Inland Empire Utilities Agency - 8TH-2/2	2460 downgradient	576-616	4	Active	Monitoring
	1901719	City of Pomona P-10	1983 downgradient	295-784	20	Active	Municipal
	1901713	City of Pomona P-04	2620 downgradient	254-338, & 403-452	NA	Inactive	Municipal
	1903156	City of Pomona P-30	2160 crossgradient	565-875	20	Inactive	Municipal
	1903016	City of Pomona P-2	3455 downgradient	NA	NA	Active	Municipal
	1901725	City of Pomona P-17	4500 downgradient	454-536	20	Inactive	Municipal
	601050	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	601051	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	601048	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	Active	Monitoring
	601049	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	Active	Monitoring
San Seavine Basins	600905	Cucamonga Valley Water District No. 39	8300-13170 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601115	Inland Empire Utilities Agency - SS-1/1 and 1/2	~39-116 downgradient	640-680	4	Active	Monitoring
	600462	Unitex 91090	~1601 downgradient	NA	NA	Active	Private Domestic
Victoria Basin	600905	Cucamonga Valley Water District No. 39	4329 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601033	Cucamonga Valley Water District No. 43**	8300 downgradient	650-800	32-42	Active	Municipal
	601117	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~39-116 downgradient	570-610	4	Active	Monitoring
	--	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~ 2000 downgradient	570-610	4	Active	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	Active	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	Active	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

Notes:

NA = Data not available

CBWM ID = Chino Basin Water Master well identification number

bgs = below ground surface

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

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

Table 2-8
Groundwater Monitoring Well Results (Quarterly)

	Sample Location	Date	TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	TDS (mg/L)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TON)	Ag (µg/L)	Thiocarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	Cl (mg/L)	Hardness (mg CaCO ₃ /L)	Na (mg/L)	SO ₄ (mg/L)	NH ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg CaCO ₃ /L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Co. - F37a	04/17/14	0.21	<1.1	8.1	495	334	<25	<3	0.6	0.6	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.31	3	21	219	19	26	<0.1	<0.02	11.5	11.5	<0.5	157	2.83
	California Speedway - Infield Well	04/17/14	0.16	2.2	8.1	540	364	<25	<3	<0.5	0.5	0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.07	<1	25	241	21	69	<0.1	<0.02	7.9	7.9	<0.5	155	2.05
	California Speedway 2	04/17/14	0.21	5.1	8.2	405	274	<25	<3	1.0	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.07	<1	14	174	18	19	<0.1	0.07	5.8	5.9	<0.5	153	2.03
	Reliant Energy - East Well	05/06/14	0.39	<1.1	7.0	345	228	<25	<3	0.9	0.2	<0.05	17	<1	<0.5	<1	<0.25	<0.2	0.13	<1	24	158	22	19	<0.1	0.03	5.0	5.0	<0.5	130	4.27
	Ontario Well No. 20	04/15/14	0.23	<1.1	8.3	360	244	<25	<3	0.6	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.18	<1	9	170	14	7	0.1	<0.02	2.6	2.6	<0.5	166	1.85
	BH-1/2*	04/16/14	0.30	<1.1	8.1	495	322	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	1.33	<1	75	210	26	28	0.3	<0.02	1.3	1.3	<0.5	120	2.83
Turner	Ontario Well No. 25	04/15/14	0.14	<1.1	8.2	420	284	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.15	<1	16	179	23	16	0.1	<0.02	4.8	4.8	<0.5	168	2.02
	Ontario Well No. 29	05/01/14	0.17	<1.1	7.1	325	230	<25	<3	<0.5	0.3	<0.05	43	2	<0.5	<1	<0.25	<0.2	0.49	<1	7	137	22	12	<0.1	0.08	1.8	1.9	<0.5	147	4.84
	Ontario Well No. 38	04/15/14	<0.10	<1.1	8.3	310	214	<25	<3	0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.12	<1	6	134	18	10	<0.1	<0.02	1.8	1.8	<0.5	143	1.78
	T-1/2*	04/08/14	0.55	1.1	8.1	420	266	<25	<3	<0.5	0.2		<15	<1	<0.5	<1	<0.25	<0.2	0.22	<1	37	177	22	16	<0.1	<0.02	0.5	<0.6	<0.5	149	2.00
	T-2/1*	04/08/14	0.72	<1.1	8.0	625	390	<25	<3	0.6	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.47	<1	97	236	33	32	<0.1	<0.02	2.8	3.5	0.7	132	1.70
	T-2/2*	04/08/14	0.60	<1.1	8.0	610	384	<25	<3	0.6	0.0	<0.05	<15	1	<0.5	<1	<0.25	<0.2	0.31	1	97	229	32	33	<0.1	<0.02	2.6	3.7	1.1	120	2.01
RP3	Fontana Water Co. - F23a	04/17/14	0.26	1.1	8.2	440	310	<25	<3	<0.5	0.8	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.17	<1	35	184	19	26	<0.1	<0.02	8.4	8.4	<0.5	130	2.42
	Alcoa MW1*	04/09/14	0.22	<1.1	8.1	575	410	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.39	<1	34	230	27	47	<0.1	<0.02	14.6	15.8	1.2	172	2.50
	Alcoa MW3*	04/09/14	0.30	<1.1	7.7	985	656	<25	<3	1	0.4	0.07	<15	<1	<0.5	<1	<0.25	<0.2	0.23	1	88	395	47	59	<0.1	0.08	23.7	25.2	1.4	242	3.26
	RP3-1/1*	04/16/14	0.80	5.1	7.9	665	432	<25	<3	1.1	0.1	<0.05	<15	21	<0.5	1	<0.25	<0.2	0.72	2	96	220	48	38	0.3	0.06	3.8	3.9	<0.5	146	0.33
	RP3-1/2*	04/16/14	1.05	9.2	7.9	660	424	<25	<3	1.2	-0.1	<0.05	<15	160	<0.5	<1	<0.25	<0.2	0.44	2	103	217	47	40	0.3	0.08	2.4	2.5	<0.5	148	0.83
8th Street	Ontario Well No. 35	04/15/14	0.14	<1.1	8.2	340	238	<25	<3	<0.5	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	8	133	23	22	<0.1	<0.02	3.2	3.2	<0.5	137	1.85
	8TH-1/1*	04/01/14	0.48	<1.1	7.8	505	346	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.60	8	63	237	13	35	<0.1	<0.02	3.9	3.9	<0.5	125	1.50
	8TH-1/2*	04/01/14	0.30	<1.1	8.0	330	222	<25	<3	<0.5	-0.2	<0.05	<15	4	<0.5	<1	<0.25	<0.2	1.30	5	38	146	14	17	<0.1	<0.02	1.4	1.4	<0.5	90	1.29
	8TH-2/1*	04/01/14	0.21	<1.1	8.0	450	302	<25	<3	<0.5	0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.14	5	14	203	16	19	<0.1	0.08	14.2	16.8	2.5	143	1.18
	8TH-2/2*	04/02/14	0.21	<1.1	8.1	360	250	<25	<3	1.6	0.0	<0.05	67	1	<0.5	<1	<0.25	<0.2	0.58	<1	26	154	15	25	<0.1	0.06	5.1	5.2	<0.5	111	1.19
Brooks	Pomona Well No. 10	04/11/14	0.19	<1.1	8.1	505	324	<25	<3	2.0	0.5	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.14	3	39	229	12	42	<0.1	<0.02	7.6	7.6	<0.5	138	2.60
	Pomona Well No. 2	04/11/14	0.19	<1.1	8.2	550	368	<25	<3	11.9	0.6	<0.05	20	<1	<0.5	<1	<0.25	<0.2	0.51	10	50	259	13	53	<0.1	<0.02	8.9	8.9	<0.5	144	1.96
	Pomona Well No. 34	04/11/14	0.16	<1.1	8.2	545	358	<25	<3	6.2	0.5	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.39	3	32	257	12	43	<0.1	<0.02	13.5	13.5	<0.5	140	2.10
	BRK-1/1*	04/03/14	0.43	6.9	8.1	515	354	<25	<3	<0.5	0.0	<0.05	<15	1	<0.5	<1	<0.25	<0.2	0.64	1	78	215	17	26	<0.1	0.03	1.4	1.4	<0.5	111	2.67
	BRK-1/2*	04/03/14	0.26	<1.1	8.1	585	408	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.19	1	23	271	15	48	<0.1	0.05	20.5	20.6	<0.5	144	2.69
	BRK-2/1*	04/18/14	0.49	<1.1	8.1	560	380	<25	15	<0.5	0.3	<0.05	<15	3	<0.5	2	<0.25	<0.2	15.0	<1	38	305	11	47	<0.1	0.10	11.3	11.4	<0.5	162	2.68
	BRK-2/2*	04/18/14	0.23	<1.1	8.5	320	226	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.65	<1	6	108	33	21	<0.1	0.07	6.4	7.4	0.9	121	1.62
Ely	Ely Basin MW1 Philadelphia St.*	04/02/14	0.59	<1.1	8.2	490	326	<25	<3	<0.5	0.0	<0.05	82	11	<0.5	<1	<0.25	<0.2	1.10	<1	79	188	29	19	<0.1	0.05	2.8	2.9	<0.5	95	0.40
	Ely Basin MW2 Walnut St.*	04/02/14	0.81	1.1	7.7	1150	754	<25	<3	0.6	0.5	<0.05	<15	4		1	<0.25	<0.2	1.16	<1	77	565	38	89	<0.1	0.11	28.8	28.9	<0.5	328	0.74
	Riverside Well (43840-CWW)	04/03/14	0.33	23	7.7	520	352	<25	<3	1.1	0.5	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.11	1	25	234	20	32	<0.1	0.06	9.5	9.6	<0.5	169	2.20
	Bishop of SB Corp. - DOM	04/23/14	0.46	<1.1	8.3	725	468	<25	<3	2.0	0.8	<0.05	20	1	<0.5	<1	<0.25	<0.2	0.19	3	45	354	23	56	<0.1	0.04	16.8	16.8	<0.5	210	1.24
Declez**	JCSD Well No. 13	04/23/14	0.30	<1.1	8.1	730	530	<25	<3	0.5	0.5	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.05	4	109	309	29	27	<0.1	<0.02	6.9	6.9	<0.5	127	2.31
	JCSD Well No. 17	04/23/14	0.27	<1.1	8.2	565	398	<25	<3	0.8	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.07	2	52	235	29	38	<0.1	0.03	12.0	12.0	<0.5	112	2.56
	JCSD Well No. 19	04/23/14	0.22	<1.1	8.3	355	242	<25	<3	0.8	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.05	1	15	134	25	19	<0.1	0.06	5.2	5.3	<0.5	135	2.13
	DCZ-1/1*	04/16/14	0.87	<1.1	8.1	385	264	<25	5	<0.5	0.2	<0.05	<15	4	<0.5	<1	<0.25	<0.2	7.35	<1	34	161	26	12	0.2	0.09	1.0	1.8	0.7	142	0.63
Victoria & San Sevaline	SS-1/1*	04/10/14	0.17	<1.1	7.9	260	204	<25	<3	<0.5	-0.6	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	2.27	<1	11	111	17	23	<0.1	<0.02	2.5	3.6	1.1	84	2.74
	VCT-1/1*	04/10/14	0.46	<1.1	8.0	435	302	<25	10	<0.5	-0.3	<0.05	<15	2	<0.5	<1	<0.25	<0.2	14.2	<1	63	201	21	23	<0.1	<0.02	2.6	4.1	1.5	107	1.97
	VCT-2/2*	04/10/14	<0.10	<1.1	8.2	275	200	<25	<3	<0.5	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.18	6	11	108	19	10	<0.1	<0.02	2.9	4.3	1.4	116	2.06
	CVWD Well No. 39	04/22/14	0.15	<1.1	8.3	275	194	50	<3	0.7	0.0	<0.05	46	<1	<0.5	<1	<0.25	<0.2	1.31	1	18	110	23	15	<0.1	0.05	2.0	2.1	<0.5	118	2.42
	CVWD Well No. 43	04/22/14	0.13																												

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

Date	Diluent Water																		Recycled Water								
	Imported Water									Local Runoff / Storm Flow																	
	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Savaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Savaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Savaine	Turner	Victoria
Jul-13	0	0	0	0	0	0	0	0	0	13	0	1	6	4	72	0	0	2	186	15	169	157	201	129	0	0	74
Aug-13	0	0	0	0	0	0	0	0	0	13	0	1	4	0	68	0	0	2	118	12	197	334	11	209	0	0	42
Sep-13	0	0	0	0	0	0	0	0	0	11	0	28	6	0	58	0	24	2	150	0	182	457	0	336	154	107	46
3Q13 Total	0	0	0	0	0	0	0	0	0	37	0	30	17	4	198	0	24	6	455	27	547	948	212	674	154	107	162
Oct-13	0	0	0	0	0	0	0	0	0	48	0	23	15	1	54	11	20	7	239	385	108	358	1	218	69	117	0
Nov-13	0	0	0	0	0	0	0	0	0	49	22	4	21	59	60	39	17	12	249	102	94	421	339	64	9	89	0
Dec-13	0	0	0	0	0	0	0	0	0	45	6	8	24	8	73	5	77	10	121	0	104	413	108	324	0	259	118
4Q13 Total	0	0	0	0	0	0	0	0	0	142	28	35	60	68	186	56	113	29	609	487	306	1192	447	606	78	465	118
Jan-14	0	8	0	0	3	86	0	0	0	27	9	3	8	9	44	0	61	2	118	0	109	211	86	92	12	241	158
Feb-14	0	16	0	0	1	66	0	0	0	59	39	47	294	19	131	69	156	37	78	0	102	194	67	131	16	191	191
Mar-14	22	0	0	0	0	160	0	0	0	45	9	12	63	13	103	20	113	99	26	85	130	108	224	103	0	67	142
1Q14 Total	22	24	0	0	4	312	0	0	0	131	57	61	364	41	277	88	331	137	222	85	341	512	376	325	27	498	491
Apr-14	0	0	0	0	10	38	0	0	0	79	2	14	83	23	47	17	61	15	21	88	65	218	379	96	2	105	250
May-14	0	0	0	0	0	0	0	0	0	26	0	0	9	33	3	0	44	2	65	194	0	241	292	3	12	304	214
Jun-14	0	0	0	0	0	0	0	0	0	24	0	19	15	2	6	0	35	2	52	190	48	186	212	178	0	86	144
2Q14 Total	0	0	0	0	10	38	0	0	0	129	2	33	107	57	56	17	140	18	137	472	113	645	883	278	13	495	607

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

ASR Well No. 4										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q13	Jul-13	0.0	<0.4	300	0	14.0	370	(565)	(12,461)	(297,919)
	Aug-13	0.0	<0.4	300	0	14.0	370	(565)	(12,461)	(297,919)
	Sep-13	0.0	<0.4	300	0	14.0	370	(565)	(12,462)	(297,932)
4Q13	Oct-13	0.0	<0.4	320	0	14.0	370	(565)	(12,462)	(297,932)
	Nov-13	0.0	<0.4	320	0	14.0	370	(565)	(12,462)	(297,932)
	Dec-13	0.0	<0.4	320	0	14.0	370	(566)	(12,463)	(297,960)
1Q14	Jan-14	0.0	0.7	320	0	14.0	370	(566)	(12,463)	(297,960)
	Feb-14	0.0	0.7	320	0	14.0	370	(566)	(12,463)	(297,960)
	Mar-14	0.0	0.7	320	0	14.0	370	(566)	(12,463)	(297,960)
2Q14	Apr-14	0.0	0.7	320	0	14.0	370	(566)	(12,463)	(297,960)
	May-14	0.0	0.7	320	15	14.0	370	(580)	(12,718)	(304,697)
	Jun-14	0.0	0.7	320	18	14.0	370	(598)	(13,022)	(312,739)

ASR Well No. 30										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q13	Jul-13	0.0	<0.4	300	3	3.5	310	554	(2,792)	91,129
	Aug-13	0.0	<0.4	300	2	3.5	310	552	(2,801)	90,292
	Sep-13	0.0	<0.4	300	1	3.5	310	551	(2,805)	89,986
4Q13	Oct-13	0.0	<0.4	320	0	3.5	310	551	(2,805)	89,978
	Nov-13	0.0	<0.4	320	0	3.5	310	551	(2,805)	89,978
	Dec-13	0.0	<0.4	320	0	3.5	310	551	(2,805)	89,978
1Q14	Jan-14	0.0	0.7	320	0	3.5	310	551	(2,806)	89,837
	Feb-14	0.8	0.7	320	9	3.5	310	542	(2,846)	86,550
	Mar-14	0.0	0.7	320	0	3.5	310	542	(2,846)	86,550
2Q14	Apr-14	0.0	0.7	320	0	3.5	310	542	(2,846)	86,550
	May-14	0.0	0.7	320	0	3.5	310	542	(2,846)	86,550
	Jun-14	0.0	0.7	320	187	3.5	310	356	(3,639)	15,211

ASR Well No. 32										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q13	Jul-13	0.0	<0.4	300	272	3.5	340	(2,426)	(5,921)	(492,574)
	Aug-13	0.0	<0.4	300	273	3.5	340	(2,699)	(7,099)	(606,963)
	Sep-13	0.0	<0.4	300	241	3.5	340	(2,940)	(8,139)	(708,040)
4Q13	Oct-13	0.0	<0.4	320	278	3.5	340	(3,218)	(9,339)	(824,556)
	Nov-13	0.0	<0.4	320	202	3.5	340	(3,419)	(10,209)	(909,132)
	Dec-13	0.0	<0.4	320	104	3.5	340	(3,524)	(10,659)	(952,833)
1Q14	Jan-14	0.0	0.7	320	82	3.5	340	(3,606)	(11,015)	(987,407)
	Feb-14	0.0	0.7	320	0	3.5	340	(3,606)	(11,015)	(987,407)
	Mar-14	0.0	0.7	320	0	3.5	340	(3,606)	(11,015)	(987,407)
2Q14	Apr-14	0.0	0.7	320	0	3.5	340	(3,606)	(11,015)	(987,407)
	May-14	0.0	0.7	320	0	3.5	340	(3,606)	(11,015)	(987,407)
	Jun-14	0.0	0.7	320	37	3.5	340	(3,643)	(11,173)	(1,002,771)

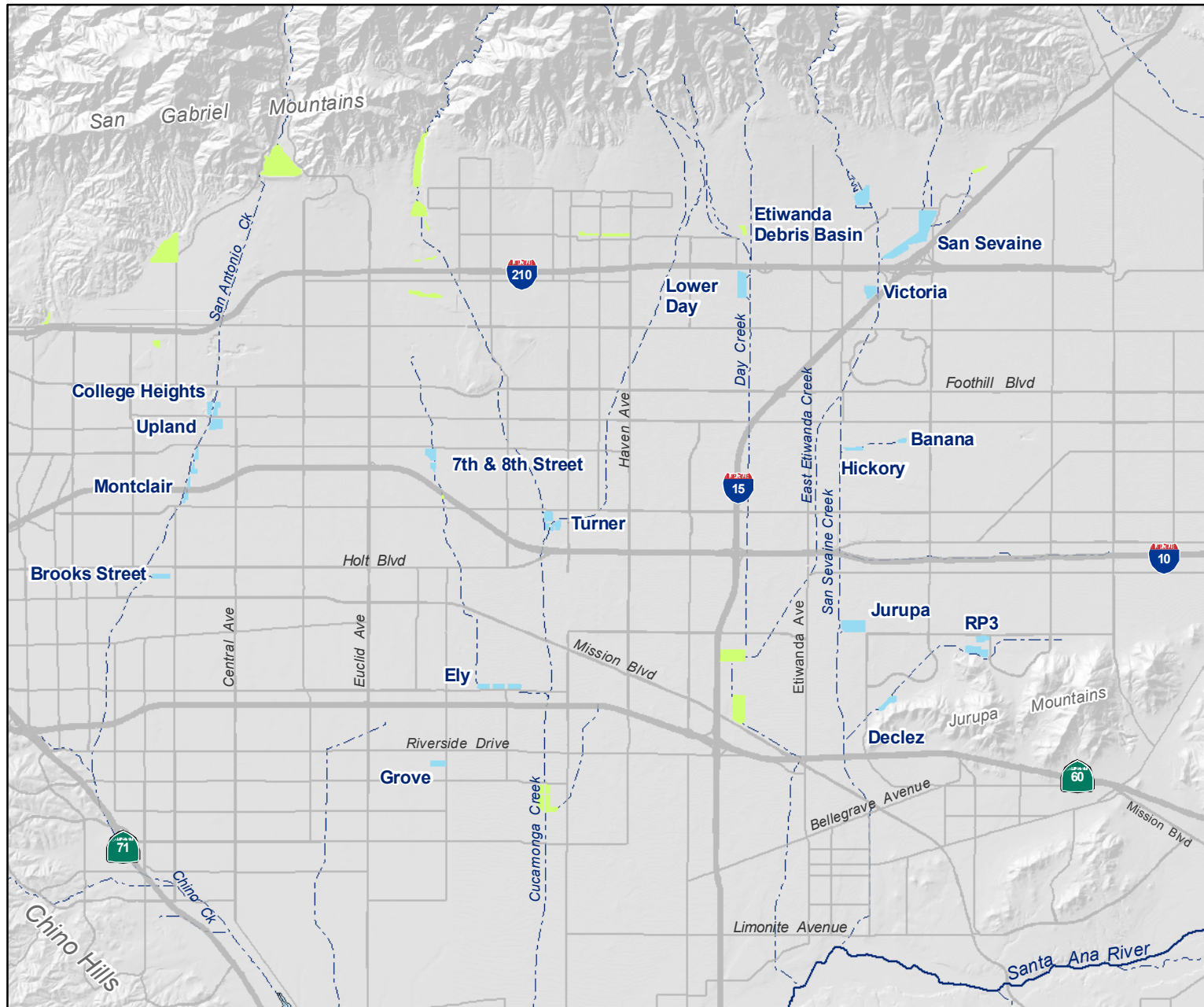
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.

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

ASR Well No. 33										
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
3Q13	Jul-13	0.0	<0.4	300	137	3.5	370	(937)	(4,178)	(440,094)
	Aug-13	0.0	<0.4	300	8	3.5	370	(945)	(4,210)	(443,527)
	Sep-13	0.0	<0.4	300	11	3.5	370	(956)	(4,257)	(448,511)
4Q13	Oct-13	0.0	<0.4	320	0	3.5	370	(956)	(4,257)	(448,511)
	Nov-13	0.0	<0.4	320	38	3.5	370	(994)	(4,422)	(465,947)
	Dec-13	0.0	<0.4	320	28	3.5	370	(1,022)	(4,544)	(478,792)
1Q14	Jan-14	0.0	0.7	320	0	3.5	370	(1,022)	(4,544)	(478,792)
	Feb-14	0.0	0.7	320	0	3.5	370	(1,022)	(4,544)	(478,792)
	Mar-14	0.0	0.7	320	0	3.5	370	(1,022)	(4,544)	(478,792)
2Q14	Apr-14	0.0	0.7	320	31	3.5	370	(1,053)	(4,680)	(493,152)
	May-14	0.0	0.7	320	48	3.5	370	(1,101)	(4,885)	(514,897)
	Jun-14	0.0	0.7	320	0	3.5	370	(1,101)	(4,885)	(514,897)

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

Total Project (All Wells)					
	Date		Mass Balance		
			Storage (AF)	TIN (kg)	TDS (kg)
3Q13	Jul-13		(3,375)	(25,352)	(1,139,457)
	Aug-13		(3,657)	(26,571)	(1,258,117)
	Sep-13		(3,910)	(27,663)	(1,364,497)
4Q13	Oct-13		(4,188)	(28,862)	(1,481,021)
	Nov-13		(4,427)	(29,898)	(1,583,033)
	Dec-13		(4,560)	(30,470)	(1,639,606)
1Q14	Jan-14		(4,643)	(30,828)	(1,674,322)
	Feb-14		(4,651)	(30,867)	(1,677,609)
	Mar-14		(4,651)	(30,867)	(1,677,609)
2Q14	Apr-14		(4,683)	(31,003)	(1,691,969)
	May-14		(4,745)	(31,464)	(1,720,451)
	Jun-14		(4,986)	(32,720)	(1,815,197)



Main Map Features

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



Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations

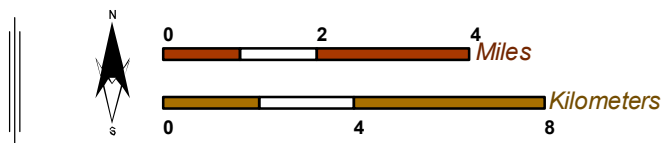
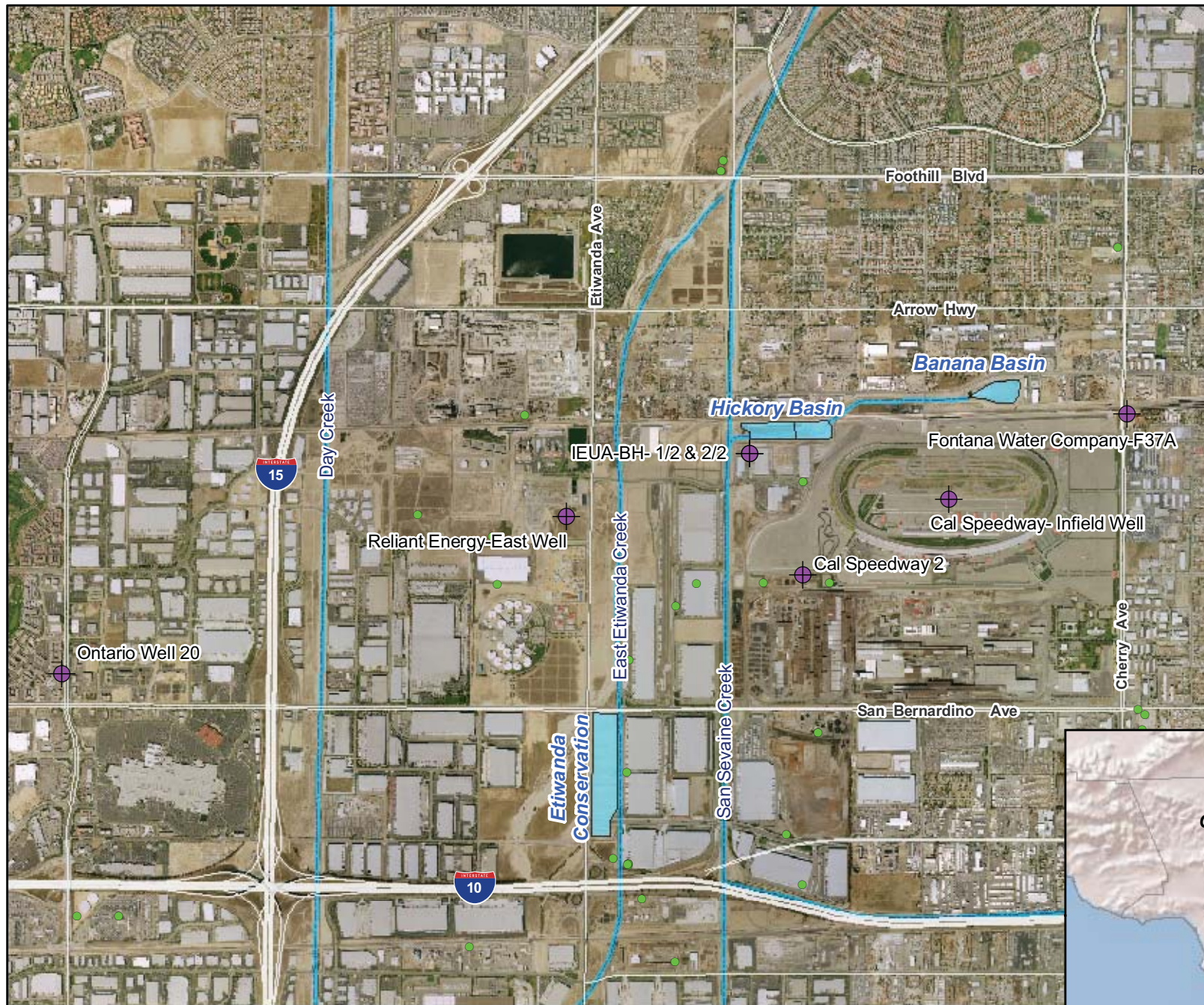


Figure 1-1



Main Map Features

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

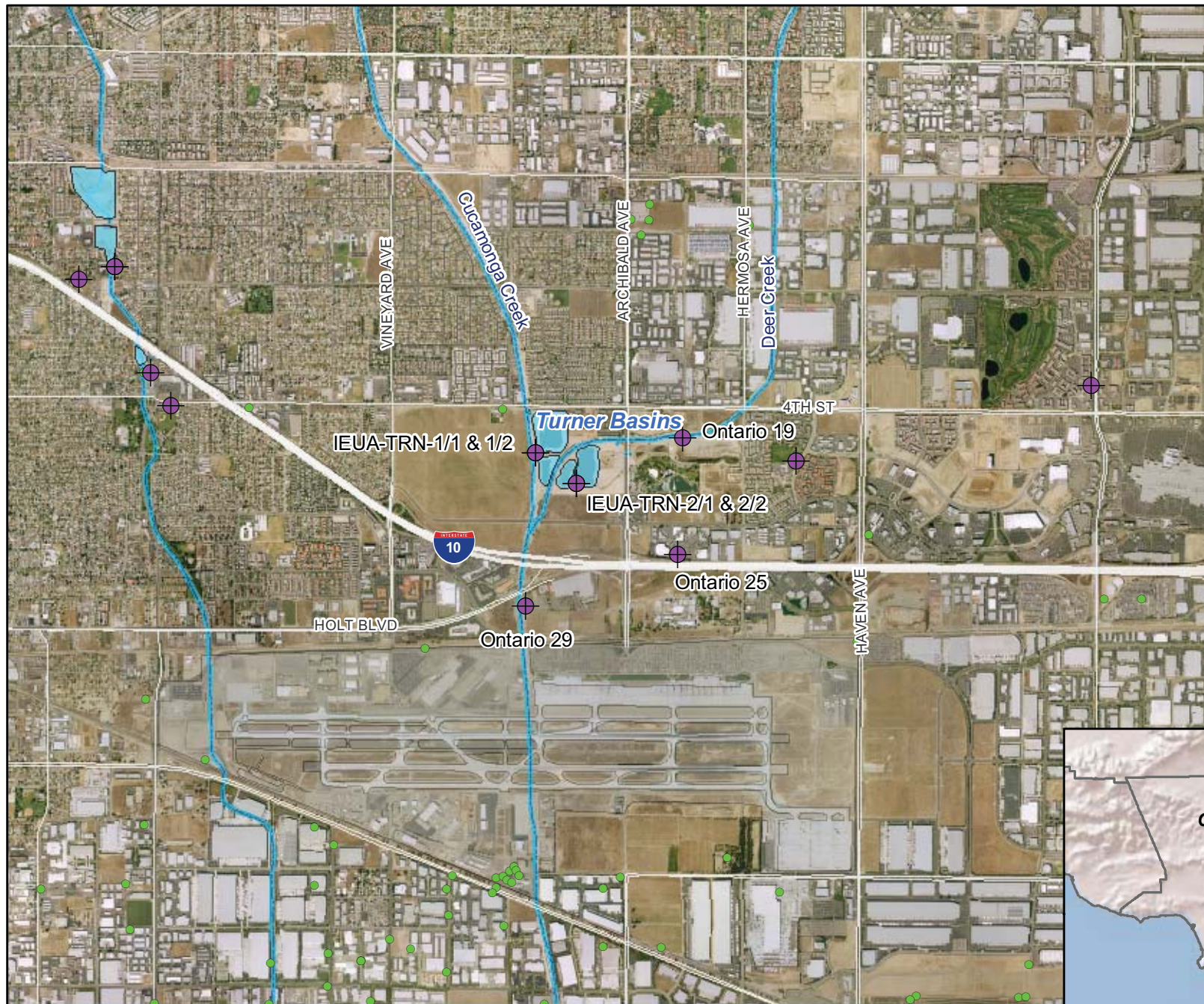


Monitoring Well Network
Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program





Main Map Features

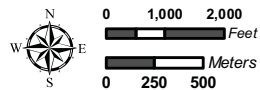
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

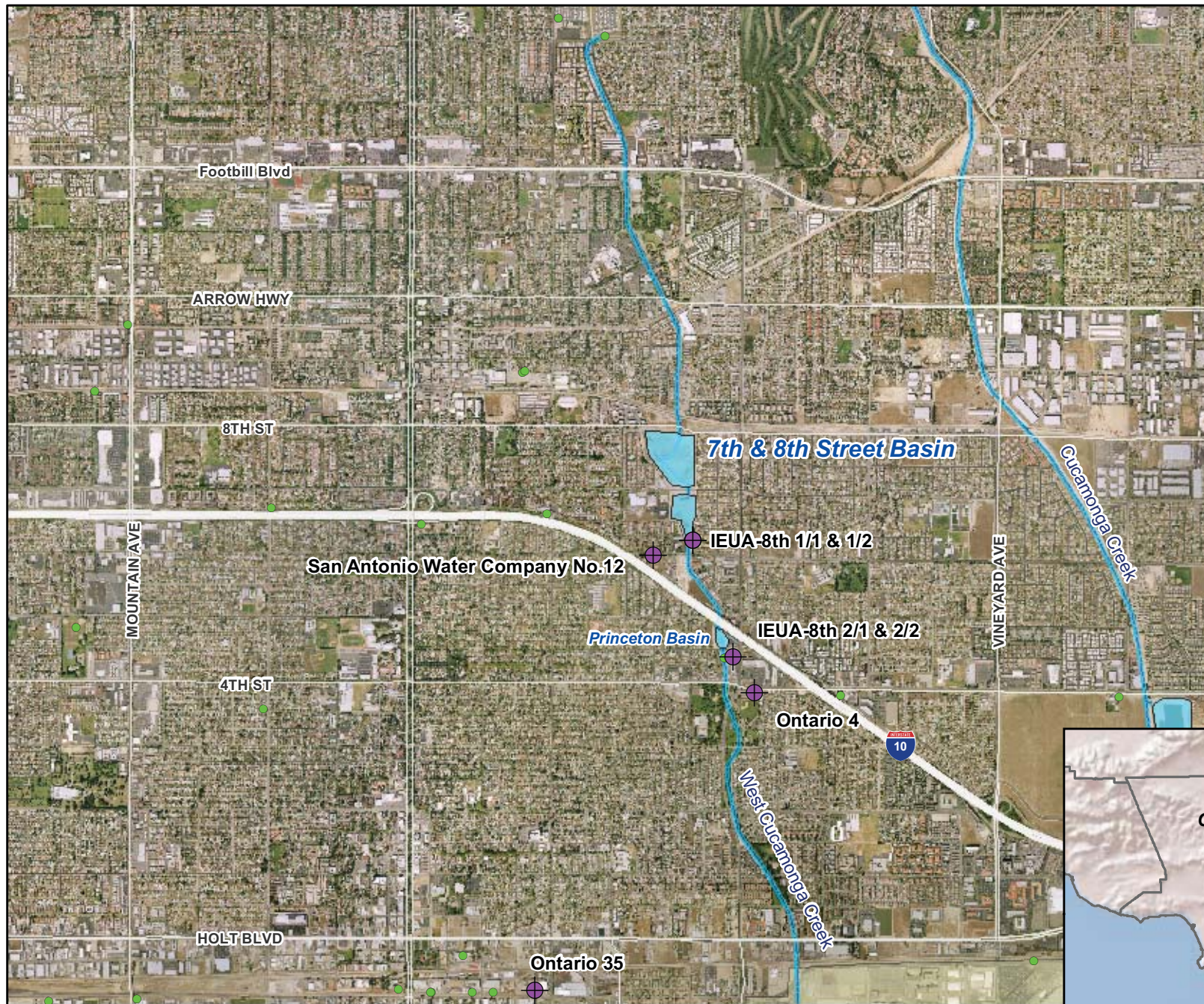


Monitoring Well Network
Turner Basins

Figure 2-2

Recycled Water Recharge Program





Main Map Features

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

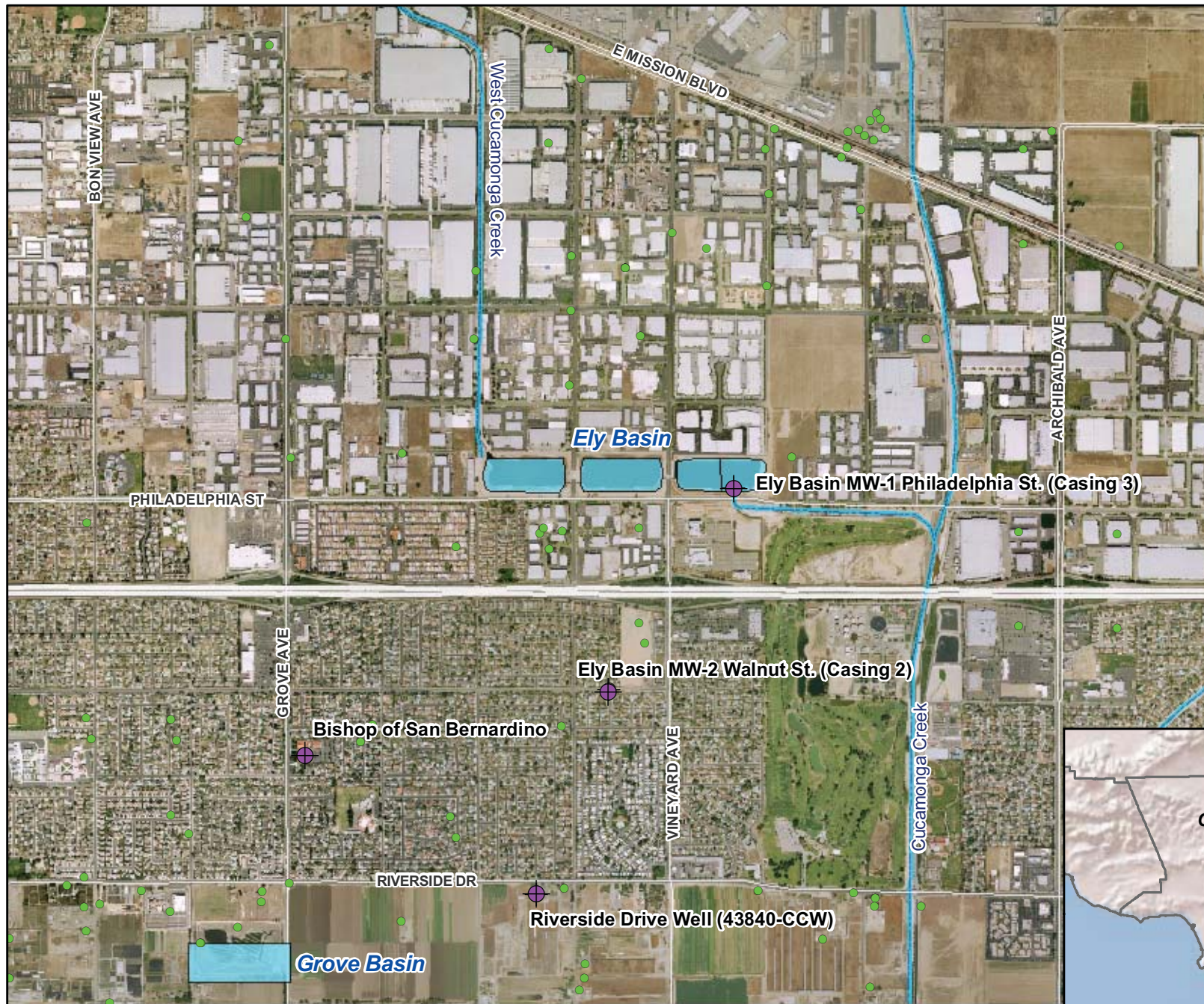


Monitoring Well Network
7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program





Main Map Features

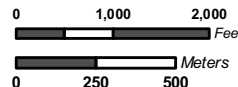
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

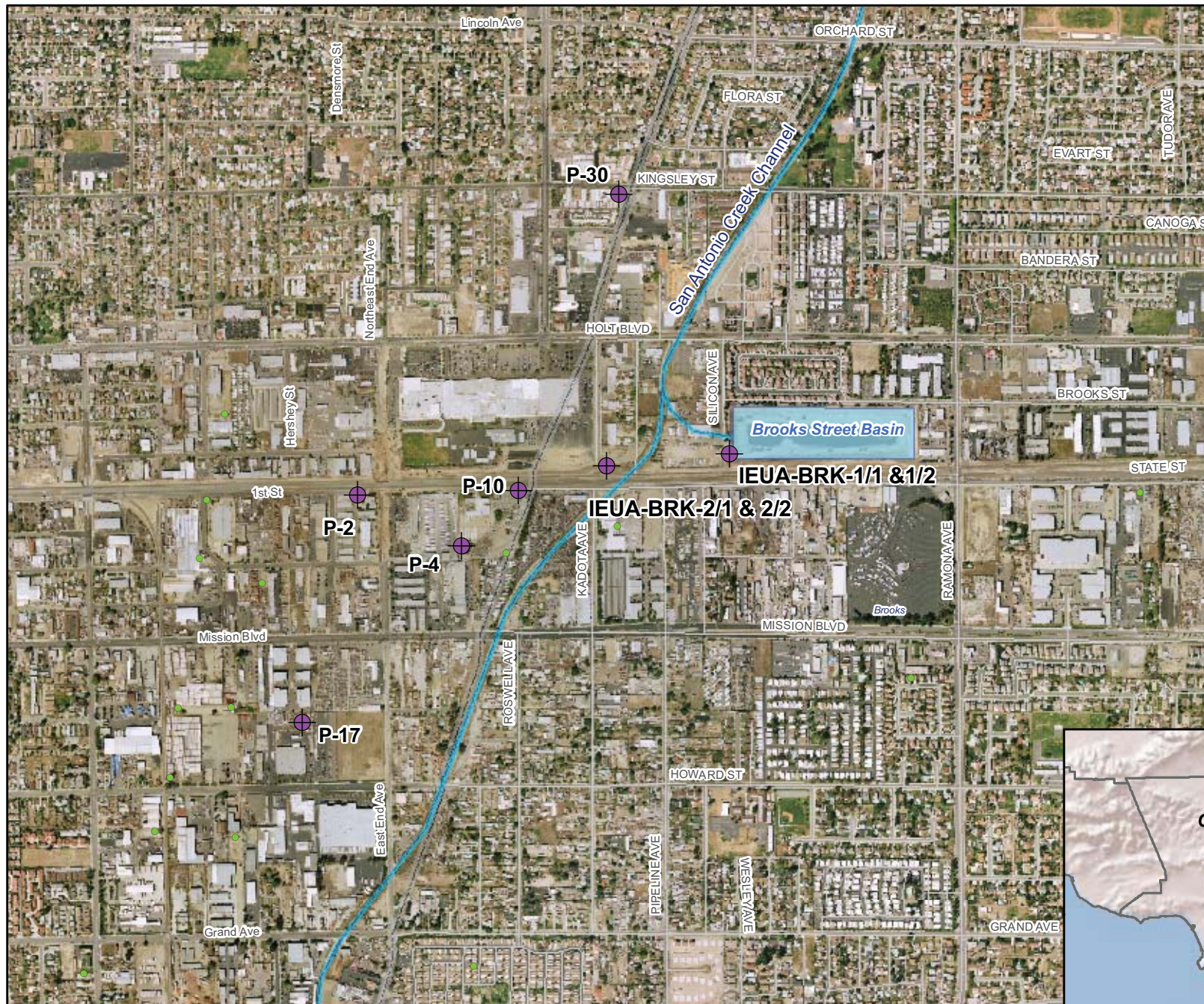


Monitoring Well Network
Ely Basins

Figure 2-4

Recycled Water Recharge Program





Main Map Features

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



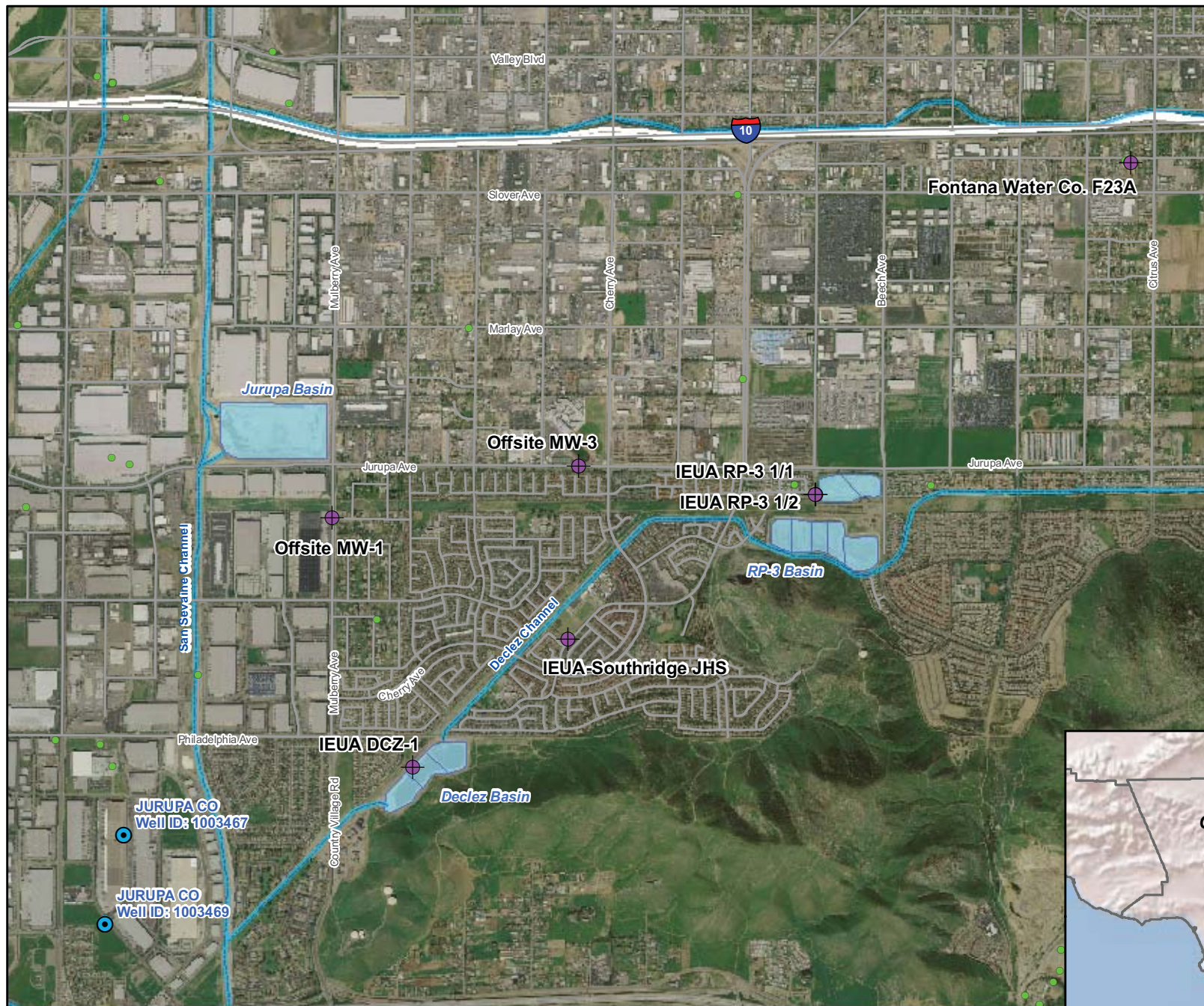
Monitoring Well Network

Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program





Main Map Features

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

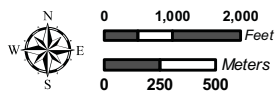


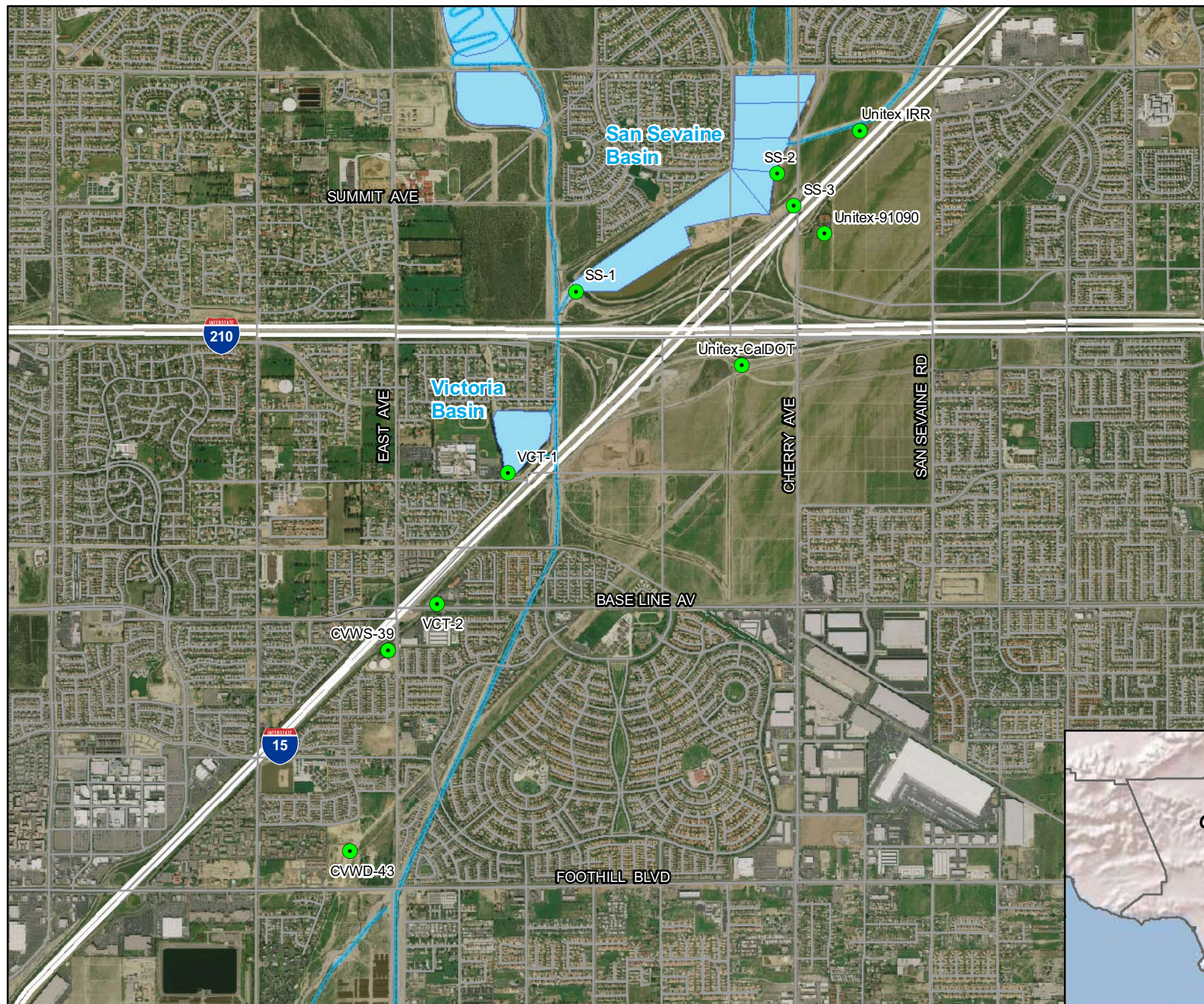
Monitoring Well Network

RP-3 Basin

Figure 2-6

Recycled Water Recharge Program





Main Map Features

- Existing Monitoring Well
- Rivers/Streams/Creeks
- Recharge Basins



Monitoring Well Network
San Sevaime and Victoria Basin

Figure 2-7

Recycled Water Recharge Program

