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

Peter Kavounas, P.E.
General Manager

February 15, 2015

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 October through December 2014

Dear Mr. Berchtold,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the fourth quarter of 2014 (4Q14), October 1 through December 31, 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 4Q14, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of an exceedance of the 4-quarter running average for odor (secondary MCL).

Chino Basin Watermaster hereby certifies that, during the period of October 1 through December 31, 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 Sevaine, 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 February 2015 in the Cities of Chino and Rancho Cucamonga.

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

Peter Kavounas, P.E.
General Manager

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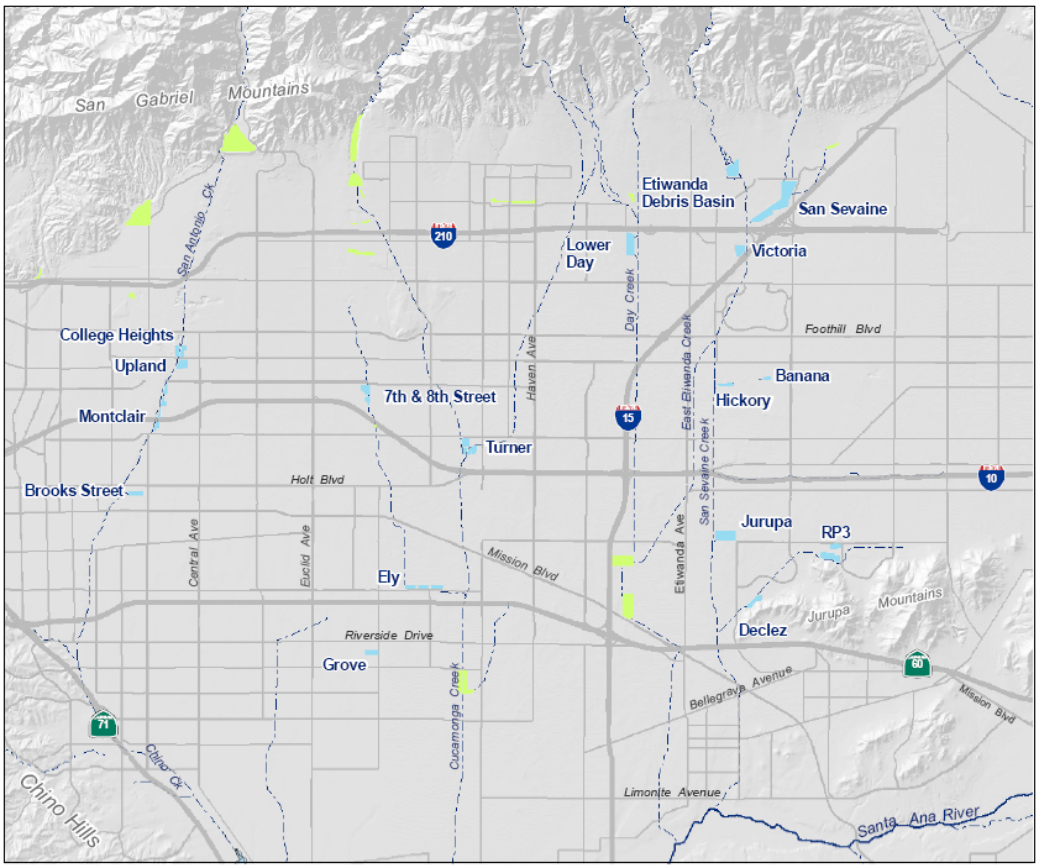
Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report

October 1 through December 31, 2014



Prepared by:

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

February 15, 2015

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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 fourth quarter of 2014 (4Q14).

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 State Water Resources Control Board – Division of Drinking Water (DDW, formerly 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 4Q14 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) or at locations specified in alternative monitoring plans (Table 2-6a, and discussed in further detail in Section 2.B). During 4Q14, there were no exceedances of the narrative limits.

Recycled Water Specifications A.1 through A.4 of the Order are numerical limits based on the EPA's primary maximum contaminant levels (MCLs), secondary MCLs, and Action Levels. Recycled Water Specification A.15 is a numerical limit for oil and grease. 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 DDW 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 all constituents with MCLs or Action Levels is based on a 4-quarter running average (Recycled Water Specifications A.1 through A.4). Table 2-3 summarizes the 4-quarter running average concentration data for each parameter from 1Q14 through 4Q14, and lists the corresponding limits for compliance. During 4Q14, 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 both 3Q14 and 4Q14, the threshold odor was found to be 8 Units. This results in a 4-quarter running average value of 5

Units, causing the threshold odor compliance metric to exceed the secondary MCL. 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 4Q14.

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 4Q14 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Hickory 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 4Q14.

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly at basins when recycled water is delivered, for the determination of compliance with Recycled Water Sepcifications 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 4Q14 are summarized in Table 2-5a. The table includes lysimeter data for Banana, Brooks, and Hickory Basins. During 4Q14, there were no exceedances of TOC and TN at the compliance lysimeters at the abovementioned 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 A11 can be developed based on start-up period findings. The alternative monitoring plans can be found in the Start-Up Period Report for each basin. The alternative TOC and TN monitoring plans approved by the Regional Board and DDW for Turner, RP3, Ely, 8th Street, San Sevaine, and Victoria Basins include alternative monitoring locations (RP1 effluent for Ely Basin, and recycled water at the NRG turnout for all other basins), and the application of correction factors 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
- RP3 Basin: TOC reduction of 88 percent and TN reduction of 31 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 alternative monitoring locations and the application of these correction factors listed above are summarized in Table 2-5b.

The Brooks Basin has also implemented an alternative monitoring plan 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. If sufficient SAT is demonstrated, 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 Basin 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.

During 4Q14, there were no exceedances of TOC and TN at any of the basins that have implemented alternative monitoring plans.

C. Diluent Water

For 4Q14, diluent water quality sampling of stormwater was conducted during the months of November and December 2014. Table 2-6 lists the results of the stormwater sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the DDW-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 (1^{st} and 4^{th} quarters) and local runoff is sampled during the dry season (2^{nd} and 3^{rd} 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. During 4Q14, diluent water samples did not exceed the "maximum level to trigger source water evaluation" for any of the constituents listed in Appendix A of the Diluent Water Monitoring Plan.

D. Groundwater Monitoring Wells

Monitoring is conducted at groundwater monitoring wells quarterly and annually to evaluate groundwater 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 that recharged water has on downgradient water supplies. The wells in the monitoring well networks for Hickory and Banana, Turner, 8^{th} 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 annual groundwater monitoring well sampling occurred in the month of October 2014. The groundwater constituents analyzed from the monitoring wells during quarterly and annual monitoring are presented in Table 2-8a and Table 2-8b.

Any 4Q14 or annual 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:

During the annual sampling event, perchlorate concentration above the primary MCL of 6 µg/L was detected at BRK-1/2. Perchlorate concentrations at BRK-1/2 have always been at levels slightly above the MCL since sampling at this well began in early 2007, prior to recycled water recharge. The perchlorate concentrations in BRK-1/2 are consistent with historical background groundwater

concentration founds at nearby wells in the Pomona area. The perchlorate concentrations in this area are reported in the CBWM's State of the Basin reports.

Turbidity exceeding the secondary MCL of 5 NTU was observed in two monitoring wells, namely: T-2/1 and Unitex 91090. The secondary MCL of 15 units for color was also exceeded at Unitex 91090. Additionally, pH exceeding the secondary MCL of 8.5 was observed at Ontario Well Nos. 20, 25, 29, and 38; BRK-2/2; and VCT-2/2. On February 12, 2015, IEUA notified the DDW of the secondary MCL exceedances of pH at the municipal drinking water wells: Ontario Well Nos. 20, 25, 29, and 38.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in Southridge JHS and Ely MW2 (Walnut). Bishop of San Bernardino Corporation and Alcoa MW3 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. South of the Ely Basins, TDS is about 500 mg/L and EC is about 750 µmhos/cm. In the RP3 Basins area, TDS is about 750 mg/L and EC is about 1,000 µmhos/cm. TDS concentrations measured at wells in the monitoring well networks for the basins listed above are documented in the CBWM's State of the Basin reports.

Dissolved manganese was above the secondary MCL of 50 µg/L at RP3-1/2. Recycled water manganese concentrations are generally less than 20 µg/L. Historical stormwater manganese analyses performed at the IEUA laboratory have been observed to fall within the range of 10 to 180 µg/L.

Some monitoring wells in the Banana & Hickory, RP3, Brooks, and Ely monitoring networks have NO_3-N concentrations above the primary MCL of 10 mg/L. These higher levels of NO_3-N are characteristic of groundwater quality in the local area, where historically the NO_3-N concentrations range from 10-30 mg/L, as reported in CBWM's State of the Basin reports. No notifications were made to the DDW as these areas have been previously identified to have monitoring wells with high NO_3-N concentrations. NO_3-N concentrations measured at wells in the monitoring well networks for the basins listed above are documented in the CBWM's State of the Basin reports.

Total coliform was detected at Fontana Water Company Well F23a, Alcoa MW1, Ely Basin MW2, VCT-2/2, and Unitex 91090. The highest total coliform result of 23 MPN/100 mL was found at the Unitex 91090 during 4Q14. 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 DDW of coliform presence in municipal drinking water wells must be made within 48 hours of receiving the results. On November 11, 2014, IEUA notified the DDW of coliform presence at the Fontana Water Company Well F23a. IEUA will continue to notify the DDW 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 Banana, Brooks, Ely, Hickory, RP3, 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 4Q14 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.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 4Q14 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 DDW and the Regional Board of well permit applications that it recommends should be declined due to well locations determined to fall with 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 (1Q14 through 4Q14), no imported water was injected into the groundwater basin. 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 October 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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
10/01/14	0.6	5.3	5.1		5.3	6.9	889			<2	0.6	4.3	2.6		2.7	7.3	795			<2
10/02/14	0.6	5.3	5.3		5.4	6.9	881			<2	0.6	4.2	3.0		3.1	7.4	795			<2
10/03/14	0.6	5.3				6.8	880			<2	0.7	4.6				7.3	835			<2
10/04/14	0.5	5.3				6.8	888			<2	1.0	4.8				7.3	805			<2
10/05/14	0.5	5.3	5.1	5.3	5.3	6.9	887	510	157	<2	0.8	4.7	2.9	3.1	3.1	7.4	790	472	144	<2
10/06/14	0.5	5.3	5.2		5.3	7.0	878			<2	0.8	4.7	2.6		2.7	7.3	800			<2
10/07/14	0.6	5.4	4.4		4.5	6.8	868			12	0.6	4.5	3.0		3.1	7.3	975			<2
10/08/14	0.5	5.2	5.0		5.2	6.8	864			<2	0.6	4.4	3.7		3.8	7.4	792			<2
10/09/14	0.5	5.2	5.8		6.0	6.8	855			<2	0.5	4.2	3.8		3.9	7.4	800			<2
10/10/14	0.4	5.2				6.8	853			<2	0.5	4.3				7.4	795			<2
10/11/14	0.4	5.1				6.9	851			<2	0.5	4.3				7.4	790			<2
10/12/14	0.4	5.3	5.2	5.4	5.4	7.0	852	500		<2	0.5	4.5	2.6	2.7	2.7	7.4	790	546		<2
10/13/14	0.6	5.1	5.4		5.4	7.0	847			<2	0.5	4.3	2.7		2.7	7.4	800			<2
10/14/14	0.6	5.1	5.5		5.5	6.9	851			<2	0.5	3.9	2.9		2.9	7.4	790			<2
10/15/14	0.6	5.2	6.8		6.8	6.9	861			<2	0.4	4.2	3.5		3.5	7.4	795			<2
10/16/14	0.7	5.5	5.9		5.9	6.8	870			<2	0.4	4.1	4.4		4.4	7.4	795			<2
10/17/14	0.8	5.3				6.9	868			<2	0.4	4.1				7.3	800			<2
10/18/14	0.7	5.2				6.9	872			<2	0.4	4.2				7.3	805			<2
10/19/14	0.7	5.3	4.9	4.9	4.9	6.9	861	540		<2	0.4	4.3	3.0	3.0	3.0	7.4	805	512		<2
10/20/14	0.8	5.4	4.6		4.6	6.9	861			<2	0.4	4.4	2.8		2.8	7.4	805			<2
10/21/14	0.7	5.4	5.0		5.0	6.9	862			<2	0.4	4.4	3.3		3.3	7.4	804			<2
10/22/14	0.7	5.5	3.6		3.6	6.9	849			<2	0.4	4.4	4.2		4.2	7.3	805			<2
10/23/14	0.7	5.5	4.3		4.3	6.9	845			<2	0.4	4.3	4.2		4.3	7.3	796			<2
10/24/14	0.6	5.4				6.9	839			<2	0.4	4.2				7.3	800			<2
10/25/14	0.7	5.3				7.0	838			<2	0.4	4.3				7.4	805			<2
10/26/14	0.6	5.4	5.1	5.1	5.1	7.0	849	578		<2	0.4	4.5	1.9	1.9	1.9	7.4	805	520		<2
10/27/14	0.7	5.5	5.3		5.3	7.0	848			2	0.4	4.4	2.3		2.3	7.4	805			<2
10/28/14	0.7	5.5	5.3		5.3	7.0	848			<2	0.4	4.3	2.7		2.7	7.3	805			<2
10/29/14	0.7	5.4	5.6		5.6	7.0	860			<2	0.3	4.2	3.2		3.2	7.3	793			<2
10/30/14	0.6	5.3	5.4		5.4	7.0	873			<2	0.4	4.2	4.8		4.8	7.3	800			<2
10/31/14	0.7	5.3				7.0	881			<2	0.4	4.2				7.3	805			<2
Avg	0.6	5.3	5.2	5.2	5.2	6.9	862	532	157	<2	0.5	4.3	3.2	2.7	3.2	7.3	806	513	144	<2
Min	0.4	5.1	3.6	4.9	3.6	6.8	838	500	157	<2	0.3	3.9	1.9	1.9	1.9	7.3	790	472	144	<2
Max	0.8	5.5	6.8	5.4	6.8	7.0	889	578	157	12	1.0	4.8	4.8	3.1	4.8	7.4	975	546	144	<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 November 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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
11/01/14	0.7	5.7				7.0	884			<2	0.6	4.4				7.3	805			2
11/02/14	0.6	5.6	6.8	6.8	6.8	6.9	881	558	171	<2	0.6	5.2	5.4	5.4	5.4	7.2	825	554	147	<2
11/03/14	0.6	5.7	6.3		6.3	6.9	885			<2	0.5	4.8	3.0		3.0	7.3	830			<2
11/04/14	0.6	5.8	5.4		5.4	6.9	884			2	0.4	4.6	3.4		3.4	7.4	825			<2
11/05/14	0.7	5.9	4.8		4.8	7.0	891			<2	0.4	4.7	3.7		3.7	7.3	825			<2
11/06/14	0.6	5.8	4.8		4.8	7.0	892			<2	0.4	4.5	3.6		3.6	7.2	816			<2
11/07/14	0.6	5.6				7.0	900			<2	0.4	4.5				7.2	805			<2
11/08/14	0.5	5.7				7.0	902			<2	0.4	4.5				7.2	810			<2
11/09/14	0.5	5.6	6.6	6.6	6.6	7.0	899	572		<2	0.4	4.7	3.1	3.1	3.1	7.3	805	518		<2
11/10/14	0.6	6.0	6.2		6.2	7.0	886			<2	0.4	4.7	2.0		2.0	7.3	805			<2
11/11/14	0.7	6.0	6.8		6.8	6.9	880			<2	0.4	4.5	3.1		3.1	7.4	810			<2
11/12/14	0.6	6.1	6.4		6.5	7.0	852			<2	0.4	4.5	4.2		4.3	7.3	818			<2
11/13/14	0.7	6.0	6.4		6.5	7.0	877			2	0.4	4.5	5.2		5.3	7.3	830			<2
11/14/14	0.7	5.9				7.0	885			<2	0.4	4.4				7.3	835			<2
11/15/14	0.7	5.9				7.0	904			<2	0.5	4.3				7.3	835			<2
11/16/14	0.7	6.1	7.0	7.1	7.1	7.0	ND	572		<2	0.5	4.5	6.3	7.7	6.4	7.3	840	538		<2
11/17/14	0.7	6.1	7.1		7.1	6.9	ND			<2	0.4	4.5	5.1		5.1	7.4	850			<2
11/18/14	0.8	6.1	6.7		6.8	6.9	ND			<2	0.4	4.5	5.2		5.3	7.2	840			<2
11/19/14	0.7	6.3	7.7		7.7	6.8	ND			<2	0.3	4.5	6.0		6.0	7.3	840			<2
11/20/14	0.7	6.1	8.4		8.4	6.8	ND			<2	0.3	4.5	7.2		7.2	7.3	836			<2
11/21/14	0.7	6.0				6.8	ND			<2	0.3	4.4				7.2	830			<2
11/22/14	0.7	5.9				6.9	ND			<2	0.3	4.4				7.2	830			<2
11/23/14	0.7	6.1	7.2	7.3	7.3	6.9	ND	544		2	0.3	4.8	5.2	6.2	5.3	7.2	840	526		<2
11/24/14	0.7	6.1	7.0		7.1	6.9	ND			<2	0.5	4.7	3.7		3.7	7.3	840			<2
11/25/14	0.7	6.0	6.7		6.7	6.8	ND			<2	0.5	4.7	3.7		3.7	7.3	845			2
11/26/14	0.7	6.2				6.8	ND			<2	0.4	4.8				7.2	840			<2
11/27/14	0.7	6.0				6.8	ND			<2	0.4	4.9				7.2	840			<2
11/28/14	0.7	5.9				6.9	ND			<2	0.4	4.8				7.3	840			<2
11/29/14	0.7	6.0				6.8	ND			<2	0.4	4.9				7.3	845			<2
11/30/14	0.8	6.3	8.8	8.9	8.9	6.8	ND	542		<2	0.4	4.9	4.8	5.6	4.9	7.3	845	538		<2
Avg	0.7	6.0	6.7	7.3	6.7	6.9	887	558	171	<2	0.4	4.6	4.4	5.6	4.4	7.3	829	535	147	<2
Min	0.5	5.6	4.8	6.6	4.8	6.8	852	542	171	<2	0.3	4.3	2.0	3.1	2.0	7.2	805	518	147	<2
Max	0.8	6.3	8.8	8.9	8.9	7.0	904	572	171	2	0.6	5.2	7.2	7.7	7.2	7.4	850	554	147	2

Note: **Bolded characters signify an exceedance of a permit limitation** ND: No Discharge

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 December 2014
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	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]
Unit	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
12/01/14	0.7	6.3	6.4		6.4	6.8	ND			<2	0.4	4.9	4.9		4.9	7.3	840			<2
12/02/14	0.8	5.6	6.2		6.2	6.8	ND			<2	0.4	4.4	6.5		6.5	7.2	840			<2
12/03/14	0.7	5.4	7.1		7.1	6.6	ND			<2	0.4	4.4	6.1		6.1	7.2	815			<2
12/04/14	0.8	5.2	6.7		6.7	6.6	ND			2	0.4	4.4	6.2		6.2	7.2	812			<2
12/05/14	0.7	5.5				6.7	ND			<2	0.3	4.3				7.2	815			<2
12/06/14	0.7	5.5				6.7	ND			<2	0.3	4.3				7.2	835			<2
12/07/14	0.7	5.7	7.5	7.6	7.6	6.7	ND	582	158	<2	0.3	4.4	7.0	8.0	7.1	7.2	845	542	156	<2
12/08/14	0.7	5.7	6.3		6.4	6.7	ND			<2	0.2	4.3	5.6		5.7	7.2	855			<2
12/09/14	0.6	5.8	7.1		7.1	6.7	978			<2	0.3	4.3	5.0		5.0	7.2	850			<2
12/10/14	0.5	5.4	7.3		7.3	6.7	908			2	0.3	4.3	5.8		5.8	7.2	850			<2
12/11/14	0.6	5.5	7.5		7.5	6.8	827			2	0.2	4.2	6.4		6.4	7.3	860			<2
12/12/14	0.6	5.3				6.7	823			<2	0.4	4.0				7.3	850			<2
12/13/14	0.6	5.2				6.7	763			2	0.3	4.1				7.2	825			<2
12/14/14	0.5	5.6	8.3	8.4	8.4	6.7	709	532		<2	0.3	4.1	7.8	8.6	7.8	7.2	855	518		<2
12/15/14	0.6	5.5	8.7		8.8	6.7	742			<2	0.3	4.1	6.4		6.5	7.3	830			<2
12/16/14	0.7	5.4	9.1		9.2	6.7	744			<2	0.3	4.1	5.8		5.9	7.3	840			<2
12/17/14	0.6	5.6	8.2		8.2	6.7	637			<2	0.3	4.1	6.8		6.8	7.3	830			<2
12/18/14	0.6	5.5	7.8		7.8	6.7	736			<2	0.3	4.0	7.2		7.2	7.2	820			<2
12/19/14	0.5	5.5				6.7	852			2	0.3	4.0				7.2	835			<2
12/20/14	0.5	5.4				6.8	859			<2	0.3	4.0				7.3	840			<2
12/21/14	0.5	5.4	8.1	8.2	8.2	6.7	845	556		2	0.3	4.1	5.6	6.4	5.7	7.3	820	526		<2
12/22/14	0.6	5.7	8.5		8.6	6.7	852			2	0.2	4.4	4.8		4.9	7.3	830			<2
12/23/14	0.6	5.9	8.6		8.6	6.8	857			<2	0.2	4.3	4.8		4.8	7.3	830			<2
12/24/14	0.6	5.6				6.9	858			<2	0.3	4.2				7.3	840			<2
12/25/14	0.5	5.3				6.9	849			<2	0.3	4.1				7.4	835			<2
12/26/14	0.5	5.4				6.8	831			<2	0.3	4.1				7.4	830			<2
12/27/14	0.6	6.0				6.8	841			<2	0.2	4.3				7.3	840			<2
12/28/14	0.6	6.0	7.2	7.3	7.3	6.8	849	582		<2	0.2	4.4	5.4	6.6	5.5	7.3	825	518		<2
12/29/14	0.6	6.0	7.1		7.3	6.8	839			2	0.2	4.3	5.4		5.4	7.3	820			<2
12/30/14	0.6	6.1	7.6		7.6	6.8	850			2	0.3	4.3	4.5		4.5	7.4	815			<2
12/31/14	0.6	6.0				6.9	812			2	0.2	4.3				7.3	810			<2
Avg	0.6	5.6	7.6	7.9	7.6	6.7	820	563	158	<2	0.3	4.2	5.9	7.4	5.9	7.3	833	526	156	<2
Min	0.5	5.2	6.2	7.3	6.2	6.6	637	532	158	<2	0.2	4.0	4.5	6.4	4.5	7.2	810	518	156	<2
Max	0.8	6.3	9.1	8.4	9.2	6.9	978	582	158	2	0.4	4.9	7.8	8.6	7.8	7.4	860	542	156	<2

Note: **Bolded characters signify an exceedance of a permit limitation** ND: No Discharge

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 2-2
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.**
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
Jul-14	3.5	6.0	494	505
Aug-14	3.5	5.7	508	506
Sep-14	4.1	5.4	524	508
Oct-14	4.9	5.2	541	512
Nov-14	5.9	5.1	571	518
Dec-14	6.2	5.0	565	522
Avg	5.0	5.9	522	508
Min	3.5	5.0	494	500
Max	6.2	6.6	571	522
Limit		8.0		550

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021).
Per the Regional Board, 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: Recycled Water Quality Specifications A.1, A.2, A.3, & A.15

Constituent	1Q14	2Q14	3Q14	4Q14	4Q Run. Avg.[1]	Limit	Unit	Method
Inorganic Chemicals with Primary MCLs								
Aluminum	41	28	28	40	34	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	<0.2	<0.4	<0.4	<0.8	<0.8	7	MFL	EPA 100.2
Barium	7	13	13	11	11	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	1.9	0.8	0.8	0.6	1.0	50	µg/L	EPA 200.8
Chromium VI	0.18	0.18	0.22	0.19	0.19	10	µg/L	EPA 218.6
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	2	2	2	2	100	µg/L	EPA 200.8
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314/331.0
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) with Primary MCLs								
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2/624
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	<0.5	<0.5	<0.5	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	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2/624
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2/624
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	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	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2/624
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2/624
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	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) with Primary MCLs								
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.05	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.2	<0.2	<0.2	<0.02	<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	<1	3	5	4	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	<0.5	<0.5	<0.5	<0.6	<0.5	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.5	<0.5	<0.5	<0.6	<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: Recycled Water Quality Specifications A.1, A.2, A.3, & A.15

Constituent	1Q14	2Q14	3Q14	4Q14	4Q Run. Avg.[1]	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.05	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.05	<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	<0.5	<0.5	<0.5	<0.1	<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	<0.5	<0.5	<0.5	<0.05	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.2	<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	2.4	2.5	3.7	5.4	3.5	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides with MCLs								
Combined Radium-226 and Radium 228	<0.45	<0.06	<0.44	<0.57	<0.57	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<2	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<233	<221	<447	<1000	<1000	20,000	pCi/L	EPA 906
Strontium-90	<0.49	<0.28	<0.28	<0.49	<0.49	8	pCi/L	EPA 905
Gross Beta Particle Activity	10	13	13	14	12	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	230	41	28	40	85	200	µg/L	EPA 200.8
Copper	2.4	2.5	3.7	5.4	3.5	1000	µg/L	EPA 200.8
Corrosivity [3]	0.9 (Non-Cor.)	NR	NR	-0.7 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) [3]	0.09	0.05	<0.05	0.07	0.07	0.5	mg/L	S5540C/EPA 425.1
Iron [3]	NR	NR	NR	42	131	300	µg/L	EPA 200.7
Manganese	19	6	6	14	11	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]	2	2	8	8	**5**	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.5	<0.5	<0.5	<0.2	<0.5	1	µg/L	EPA 525.2
Zinc	24	32	19	40	28	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease [4]	<1	<1	NA	<1	<1	1	mg/L	EPA 1664
Disinfection Byproducts with MCLs								
Bromate	<5	<5	<1	<1	<5	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Lysimeter Compliance Point Data	BRK-LYS-25 1Q14	25 2Q14	RP3-LYS-25 3Q14	HKYE-LYS-25 4Q14				
Total Trihalomethanes (TTHMs)	<2	70	4	28	26	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 1Q15 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	4Q14	Unit	Method
Metals			
Chromium (III) [1]	0.6	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)			
Acrolein	<2	µg/L	EPA 624
Acrylonitrile	<2	µg/L	EPA 624
Bromoform	<0.5	µg/L	EPA 524.2/624
Chlorodibromomethane	7.7	µg/L	EPA 524.2/624
Chloroethane	<0.5	µg/L	EPA 524.2/624
2-Chloroethylvinylether	<1	µg/L	EPA 524.2/624
Chloroform	71	µg/L	EPA 524.2/624
Dichlorobromomethane	<0.5	µg/L	EPA 524.2/624
Methyl Bromide	<1	µg/L	EPA 524.2/624
Methyl Chloride	<0.5	µg/L	EPA 524.2/624
Acid Extractibles			
2-Chlorophenol	<1	µg/L	EPA 625
2,4-Dichlorophenol	<2	µg/L	EPA 625
2,4-Dimethylphenol	<1	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<2	µg/L	EPA 625
2,4-Dinitrophenol	<3	µg/L	EPA 625
2-Nitrophenol	<1	µg/L	EPA 625
4-Nitrophenol	<3	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	µg/L	EPA 625
Phenol	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<1	µg/L	EPA 625
Base/Neutral Extractibles			
Acenaphthene	<1	µg/L	EPA 625
Acenaphthylene	<1	µg/L	EPA 625
Anthracene	<1	µg/L	EPA 625
Benzidine	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	µg/L	EPA 625
Benzo(b)fluoranthene	<1	µg/L	EPA 625
Benzo(g,h,i)perylene	<2	µg/L	EPA 625
Benzo(k)fluoranthene	<1	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<2	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<1	µg/L	EPA 625
4-Bromophenyl phenyl ether	<1	µg/L	EPA 625
Butyl benzyl phthalate	<1	µg/L	EPA 625
2-Chloronaphthalene	<1	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<1	µg/L	EPA 625
Chrysene	<1	µg/L	EPA 625
Dibenzo(a,h)anthracene	<1	µg/L	EPA 625
1,3-Dichlorobenzene	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	µg/L	EPA 625
Diethyl phthalate	<2	µg/L	EPA 625
Dimethyl phthalate	<1	µg/L	EPA 625
Di-n-butyl phthalate	<1	µg/L	EPA 625
2,4-Dinitrotoluene	<1	µg/L	EPA 625
2,6-Dinitrotoluene	<2	µg/L	EPA 625
Di-n-octyl phthalate	<1	µg/L	EPA 625
Azobenzene	<1	µg/L	EPA 625
Fluoranthene	<1	µg/L	EPA 625
Fluorene	<1	µg/L	EPA 625
Hexachlorobutadiene	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	µg/L	EPA 625
Hexachloroethane	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<2	µg/L	EPA 625
Isophorone	<1	µg/L	EPA 625
Naphthalene	<1	µg/L	EPA 625
Nitrobenzene	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<1	µg/L	EPA 625
N-Nitrosodiphenylamine	<1	µg/L	EPA 625
Phenanthrene	<1	µg/L	EPA 625
Pyrene	<1	µg/L	EPA 625

Constituent	4Q14	Unit	Method
Pesticides			
Aldrin	<0.005	µg/L	EPA 608
BHC, alpha isomer	<0.01	µg/L	EPA 608
BHC, beta isomer	<0.005	µg/L	EPA 608
BHC, delta isomer	<0.007	µg/L	EPA 608
4,4'-DDT	<0.01	µg/L	EPA 608
4,4'-DDE	<0.01	µg/L	EPA 608
4,4'-DDD	<0.01	µg/L	EPA 608
Dieldrin	<0.01	µg/L	EPA 608
Endosulfan I	<0.01	µg/L	EPA 608
Endosulfan II	<0.01	µg/L	EPA 608
Endosulfan Sulfate	<0.01	µg/L	EPA 608
Unregulated Chemicals			
Endrin Aldehyde	<0.1	µg/L	EPA 608
Ethyl tertiary butyl ether	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels[2]			
Boron	0.3	mg/L	EPA 200.7
n-butylbenzene	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	µg/L	EPA 524.2
Chlorate	380	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Diazinon	<0.1	µg/L	EPA 525.2
Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	µg/L	EPA 522
Ethylene glycol	<5	mg/L	EPA 8015B
Formaldehyde	48	µg/L	EPA 556
HMX	<0.4	µg/L	EPA 8330B
Isopropylbenzene	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521
N-nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521
Propachlor	<0.05	µg/L	EPA 525.2
N-propylbenzene	<0.5	µg/L	EPA 524.2
RDX	<0.4	µg/L	EPA 8330B
Tertiary butyl alcohol	<2	µg/L	EPA 524.2
1,2,3-Trichloropropane (1,2,3-TCP)	<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
2,4,6-Trinitrotoluene	<0.4	µg/L	EPA 8330B
Vanadium	3	µg/L	EPA 200.8
Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals[2]			
Acetominophen	<5	ng/L	LC-MS-MS
Bis Phenol A (BPA)	44	ng/L	LC-MS-MS
Caffeine	<5	ng/L	LC-MS-MS
Carbamazepine	65	ng/L	LC-MS-MS
DEET	24	ng/L	LC-MS-MS
Dilantin	61	ng/L	LC-MS-MS
Estradiol	5.2	ng/L	LC-MS-MS
Estrone	<5	ng/L	LC-MS-MS
Ethinyl Estradiol - 17 alpha	28	ng/L	LC-MS-MS
Fluoxetine	<10	ng/L	LC-MS-MS
Gemfibrozil	<5	ng/L	LC-MS-MS
Ibuprofen	<10	ng/L	LC-MS-MS
Iopromide	180	ng/L	LC-MS-MS
Progesterone	<5	ng/L	LC-MS-MS
Sucralose	18000	ng/L	LC-MS-MS
Sulfamethoxazole	<5	ng/L	LC-MS-MS
Testosterone	<5	ng/L	LC-MS-MS
Triclosan	<10	ng/L	LC-MS-MS
Trimethoprim	<5	ng/L	LC-MS-MS

[1] Trivalent chromium is measured as total chromium

[2] Chemicals with State Notification

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

Banana Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	TN* (Limit = 5 mg/L)	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	10/01/14	5.10	4.3	3.7	3.3	1.0	0.16	829
BNA-LYS-00	0	10/08/14	5.03	4.8	4.2	4.1	0.7	0.13	814
BNA-LYS-00	0	10/15/14	4.84	4.3	3.7	3.7	0.6	0.03	805
BNA-LYS-00	0	10/22/14	5.91	2.5	1.1	0.9	1.6	0.05	810
BNA-LYS-00	0	11/04/14	15.7	2.7	2.1	1.1	1.6	0.08	105
BNA-LYS-00	0	11/19/14	5.61	7.4	6.2	6.1	1.3	0.11	870
BNA-LYS-00	0	11/25/14	5.93	8.4	7.3	7.2	1.2	0.12	830
BNA-LYS-00	0	12/03/14	7.71	1.8	1.0	0.6	1.2	0.04	64
BNA-LYS-00	0	12/10/14	4.05	<0.6	0.4	0.4	<0.5	0.03	60
BNA-LYS-00	0	12/17/14	3.97	1.6	0.8	0.6	1.0	<0.01	56
BNA-LYS-00	0	12/23/14	3.21	1.9	0.8	0.5	1.4	<0.01	97
BNA-LYS-00	0	12/31/14	4.41	6.3	4.9	4.9	1.4	<0.01	830
BNA-LYS-25**	25	10/01/14	1.29	3.4	3.5	3.2	<0.5	0.15	766
BNA-LYS-25**	25	10/08/14	1.31	2.8	2.8	2.7	<0.5	0.13	776
BNA-LYS-25**	25	10/15/14	1.34	3.0	3.0	3.0	<0.5	0.03	765
BNA-LYS-25**	25	10/22/14	1.27	3.2	3.2	3.2	<0.5	0.02	760
BNA-LYS-25**	25	10/29/14	1.18	3.6	3.8	3.6	<0.5	<0.01	760
BNA-LYS-25**	25	11/04/14	1.11	3.6	3.6	3.6	<0.5	<0.01	765
BNA-LYS-25**	25	11/12/14	0.97	3.6	3.6	3.6	<0.5	<0.01	765
BNA-LYS-25**	25	11/19/14	1.29	5.3	4.7	4.6	0.7	0.11	750
BNA-LYS-25**	25	11/25/14	1.50	5.1	5.1	5.0	<0.5	0.10	765
BNA-LYS-25**	25	12/03/14	1.60	4.5	4.5	4.5	<0.5	<0.01	750
BNA-LYS-25**	25	12/10/14	0.97	4.5	4.5	4.5	<0.5	<0.01	710
BNA-LYS-25**	25	12/17/14	4.15	3.2	3.2	3.1	<0.5	0.09	535
BNA-LYS-25**	25	12/23/14	1.01	3.0	3.0	3.0	<0.5	<0.01	490
BNA-LYS-25**	25	12/31/14	0.76	3.1	2.3	2.3	0.8	<0.01	375

Brooks Basin									
Site	Depth, bgs	Date	TOC	TN* (Limit = 5 mg/L)	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	10/27/14	4.41	3.2	2.1	1.7	1.5	0.09	775
BRK-LYS-00	0	11/11/14	5.14	3.0	1.8	1.6	1.4	0.10	760
BRK-LYS-00	0	12/03/14	1.31	4.0	2.3	1.8	2.2	0.10	595
BRK-LYS-25**	25	10/27/14	2.73	0.9	0.2	<0.1	0.9	0.03	764
BRK-LYS-25**	25	11/11/14	3.07	0.7	0.4	<0.1	0.7	0.03	888
BRK-LYS-25**	25	12/03/14	6.03	<0.6	<0.2	0.1	<0.5	0.02	880

Hickory East Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	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	10/01/14	5.03	2.3	2.0	1.6	0.7	0.21	830
HKYE-LYS-00	0	10/08/14	5.04	3.6	2.7	2.3	1.3	0.18	816
HKYE-LYS-00	0	10/15/14	6.91	2.2	<0.2	<0.1	2.2	0.02	780
HKYE-LYS-00	0	10/22/14	5.44	4.1	3.4	3.3	0.8	0.03	820
HKYE-LYS-00	0	10/29/14	4.81	4.8	3.7	3.4	1.4	0.02	830
HKYE-LYS-00	0	11/04/14	5.29	3.4	3.5	3.4	<0.5	<0.01	835
HKYE-LYS-00	0	11/12/14	5.18	5.6	4.6	4.6	1.0	<0.01	855
HKYE-LYS-00	0	11/19/14	9.63	4.2	0.8	0.3	3.9	0.21	965
HKYE-LYS-00	0	11/25/14	5.35	6.7	5.9	5.9	0.8	<0.01	850
HKYE-LYS-00	0	12/03/14	5.00	3.5	2.7	2.4	1.1	0.05	385
HKYE-LYS-00	0	12/10/14	4.48	1.3	0.7	0.7	0.6	0.04	128
HKYE-LYS-00	0	12/17/14	4.19	1.8	1.1	0.8	1.0	0.07	76
HKYE-LYS-00	0	12/23/14	4.21	2.2	1.1	0.8	1.4	<0.01	87
HKYE-LYS-00	0	12/31/14	4.07	5.4	4.6	4.4	1.0	<0.01	675
HKYE-LYS-25**	25	10/01/14	1.86	4.6	4.6	4.4	<0.5	0.15	800
HKYE-LYS-25**	25	10/08/14	1.61	4.4	3.9	3.5	0.9	0.15	808
HKYE-LYS-25**	25	10/15/14	1.56	3.8	3.2	3.2	0.6	<0.01	805
HKYE-LYS-25**	25	10/22/14	1.56	2.2	2.2	2.2	<0.5	<0.01	790
HKYE-LYS-25**	25	10/29/14	1.55	3.0	2.4	2.2	0.8	<0.01	795
HKYE-LYS-25**	25	11/04/14	1.65	2.9	2.9	2.9	<0.5	<0.01	825
HKYE-LYS-25**	25	11/12/14	2.03	3.1	3.1	3.1	<0.5	<0.01	825
HKYE-LYS-25**	25	11/19/14	2.49	6.2	3.7	3.5	2.7	0.15	835
HKYE-LYS-25**	25	11/25/14	1.87	5.2	4.3	4.2	1.0	0.12	850
HKYE-LYS-25**	25	12/03/14	1.72	5.7	5.1	5.1	0.6	<0.01	870
HKYE-LYS-25**	25	12/10/14	1.44						780
HKYE-LYS-25**	25	12/17/14	1.03	2.9	2.9	2.8	<0.5	0.11	875
HKYE-LYS-25**	25	12/23/14	1.13	1.4	1.4	1.3	<0.5	0.10	329
HKYE-LYS-25**	25	12/31/14	1.02	1.1	1.2	1.1	<0.5	<0.01	285

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)
Limit ==>			16 mg/L	16 mg/L	5 mg/L
10/01/14	4.47	3.2	1.34	0.67	0.4
10/08/14	4.78	4.1	1.43	0.72	0.5
10/15/14	4.35	4.1	1.31	0.65	0.5
10/22/14	4.51	4.5	1.35	0.68	0.6
10/29/14	4.55	4.7	1.37	0.68	0.6
11/04/14	4.54	2.9	1.36	0.68	0.4
11/12/14	4.77	5.9	1.43	0.72	0.8
11/19/14	4.44	6.9	1.33	0.67	0.9
11/24/14	4.66	6.2	1.40	0.70	0.8
12/03/14	4.32	6.0	1.30	0.65	0.8
12/10/14	4.07	6.0	1.22	0.61	0.8
12/17/14	1.39	5.9	0.42	0.21	0.8
12/23/14	4.01	5.3	1.20	0.60	0.7
12/31/14	4.12	6.2	1.24	0.62	0.8

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)
Limit ==>			16 mg/L	5 mg/L
10/06/14	5.34	6.5	1.28	3.1
10/13/14	5.32	6.4	1.28	3.1
10/20/14	5.34	5.5	1.28	2.6
10/27/14	5.41	6.3	1.30	3.0
11/03/14	5.64	6.8	1.35	3.3
11/10/14	5.63	6.6	1.35	3.2
11/17/14	6.14	8.7	1.47	4.2
11/24/14	6.14	8.8	1.47	4.2
12/01/14	6.31	9.7	1.51	4.7
12/08/14	5.67	8.9	1.36	4.3
12/15/14	5.57	9.3	1.34	4.5
12/22/14	5.42	9.0	1.30	4.3
12/29/14	6.02	8.6	1.44	4.1

RP3 Basin

Date	RW Blend*	RW Blend*	RP3	RP3
mg/L==>	TOC	TN	TOC (88% reduction)	TN (31% reduction)
Limit ==>			16 mg/L	5 mg/L
10/01/14	4.47	3.2	0.54	2.2
10/08/14	4.78	4.1	0.57	2.8
10/15/14	4.35	4.1	0.52	2.8
10/22/14	4.51	4.5	0.54	3.1
10/29/14	4.55	4.7	0.55	3.2
11/04/14	4.54	2.9	0.54	2.0
11/12/14	4.77	5.9	0.57	4.1
11/19/14	4.44	6.9	0.53	4.8
11/24/14	4.66	6.2	0.56	4.3
12/03/14	4.32	6.0	0.52	4.1
12/10/14	4.07	6.0	0.49	4.1
12/17/14	1.39	5.9	0.17	4.1
12/23/14	4.01	5.3	0.48	3.7
12/31/14	4.12	6.2	0.49	4.3

8th Street Basin

Date	RW Blend*	RW Blend*	8th Street	8th Street
mg/L==>	TOC	TN	TOC (59% reduction)	TN (75% reduction)
Limit ==>			16 mg/L	5 mg/L
10/01/14	4.47	3.2	1.83	0.8
10/08/14	4.78	4.1	1.96	1.0
10/15/14	4.35	4.1	1.78	1.0
10/22/14	4.51	4.5	1.85	1.1
10/29/14	4.55	4.7	1.87	1.2
11/04/14	4.54	2.9	1.86	0.7
11/12/14	4.77	5.9	1.96	1.5
11/19/14	4.44	6.9	1.82	1.7
11/24/14	4.66	6.2	1.91	1.6
12/03/14	4.32	6.0	1.77	1.5
12/10/14	4.07	6.0	1.67	1.5
12/17/14	1.39	5.9	0.57	1.5
12/23/14	4.01	5.3	1.64	1.3
12/31/14	4.12	6.2	1.69	1.6

*The recycled water blend of RP-1 & RP-4 effluent is sampled at the NRG Energy (formerly Reliant Energy) turnout point

Table 2-5b
Alternative Monitoring Plans

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)
Limit ==>			16 mg/L	5 mg/L
10/01/14	4.47	3.2	0.98	1.0
10/08/14	4.78	4.1	1.05	1.3
10/15/14	4.35	4.1	0.96	1.3
10/22/14	4.51	4.5	0.99	1.4
10/29/14	4.55	4.7	1.00	1.5
11/04/14	4.54	2.9	1.00	0.9
11/12/14	4.77	5.9	1.05	1.8
11/19/14	4.44	6.9	0.98	2.2
11/24/14	4.66	6.2	1.03	1.9
12/03/14	4.32	6.0	0.95	1.9
12/10/14	4.07	6.0	0.90	1.9
12/17/14	1.39	5.9	0.31	1.8
12/23/14	4.01	5.3	0.88	1.6
12/31/14	4.12	6.2	0.91	1.9

Victoria Basin				
Date	RW Blend*	RW Blend*	Victoria	Victoria
mg/L==>	TOC	TN	TOC (78% reduction)	TN (82% reduction)
Limit ==>			16 mg/L	5 mg/L
10/01/14	4.47	3.2	0.98	0.6
10/08/14	4.78	4.1	1.05	0.7
10/15/14	4.35	4.1	0.96	0.7
10/22/14	4.51	4.5	0.99	0.8
10/29/14	4.55	4.7	1.00	0.8
11/04/14	4.54	2.9	1.00	0.5
11/12/14	4.77	5.9	1.05	1.1
11/19/14	4.44	6.9	0.98	1.2
11/24/14	4.66	6.2	1.03	1.1
12/03/14	4.32	6.0	0.95	1.1
12/10/14	4.07	6.0	0.90	1.1
12/17/14	1.39	5.9	0.31	1.1
12/23/14	4.01	5.3	0.88	1.0
12/31/14	4.12	6.2	0.91	1.1

*The recycled water blend of RP-1 & RP-4 effluent is sampled at the NRG Energy (formerly Reliant Energy) turnout point

Brooks Basin				
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
mg/L==>	TOC	TN	EC	
10/27/14	4.41	3.2	775	
11/11/14	5.14	3.0	760	
12/03/14	1.31	4.0	595	
Date	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25	BRK-LYS-25
mg/L==>	TOC	TN* (Limit = 5 mg/L)	EC	
10/27/14	2.73	<0.1	764	
11/11/14	3.07	<0.1	888	
12/03/14	6.03	0.1	880	
Date	BRK-1/1	BRK-1/1	BRK-1/1	BRK-1/1
mg/L==>	TOC* (Limit = 16 mg/L)	TN	EC	Cl
10/06/14	0.53	3.4	620	93
11/20/14	0.63	1.8	626	99
12/08/14	0.53	1.9	635	101

Hickory Basin		
Date	BH-1/2**	BH-1/2
mg/L==>	TN (Limit - 5 mg/L)	EC
10/22/14	1.9	500
11/19/14	2.9	505
12/09/14	3.4	805

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

**BH-1/2 was approved to be the TN compliance point for Hickory Basin by the RWQCB on 7/29/13

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	Cucamonga Creek @ Turner 1 & 2 12/02 & 12/19/14	Day Creek @ Lower Day 11/05/14	Deer Creek @ Turner 3 & 4 12/03 & 12/22/14	San Antonio Creek @ Montclair Basin 11/05/14	W. Cucamonga Creek @ 7th & 8th Street 11/24, 11/25 & 12/16/14	Unit	Method
NO_2-N	0.20	0.20	0.1	0.50	0.20	mg/L	EPA 300.0
NO_3-N	0.0	0.1	0.0	0.1	1.0	mg/L	EPA 300.0
TDS	78	158	67	128	104	mg/L	SM 2540C
Total Coliform	230000	1400	1400000	900000	2400000	mpn/100ml	SM 9221B
Oil & Grease	<1	<1	<1	<1	<1	mg/L	EPA 1664A
Inorganic Chemicals							
Aluminum	2250	301	1852	190	336	µg/L	EPA 200.7
Antimony	2	<1	<1	2	2	µg/L	EPA 200.8
Arsenic	<2	<2	<2	<2	<2	µg/L	EPA 200.8
Asbestos	<6.71	<2.01	<6.71	<6.71	<6.70	MFL	EPA 100.2
Barium	42	35	29	26	29	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 200.7
Cadmium	0.92	<0.25	0.67	<0.25	<0.25	µg/L	EPA 200.7
Chromium	5.0	1.0	3.1	1.8	1.7	µg/L	EPA 200.7
Cyanide	<5	<5	<5	<5	<5	µg/L	ASTM D7284
Fluoride	0.2	0.2	0.1	0.5	0.2	mg/L	SM 4500-F C
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 245.2
Nickel	3	1	2	3	3	µg/L	EPA 200.7
Perchlorate	<4	<4	<4	<4	<4	µg/L	EPA 314
Selenium	<2	<2	<2	<2	<2	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	<1	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	<1	µg/L	EPA 524.2
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 515.4
Benzo(a)pyrene	<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	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
2,4-D	0.3	0.3	<0.1	<0.1	0.4	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	<1	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	1.22	<0.5	0.85	<0.5	<0.5	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	<5	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 504.1
Glyphosate	6	9	<6	6	15	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505

Table 2-6
Diluent Water Monitoring*: Stormwater

Constituent	Cucamonga Creek @ Turner 1 & 2 12/02 & 12/19/14	Day Creek @ Lower Day 11/05/14	Deer Creek @ Turner 3 & 4 12/03 & 12/22/14	San Antonio Creek @ Montclair Basin 11/05/14	W. Cucamonga Creek @ 7th & 8th Street 11/24, 11/25 & 12/16/14	Unit	Method
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	<0.01	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	<0.05	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 531.2
Pentachlorophenol	0.13	<0.04	0.04	0.08	0.10	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<2.08	<1.99	<2.07	<2.00	<2.06	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	µg/L	EPA 515.4
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	<2	<2	<2	<2	<2	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	<2	µg/L	SM 6251B
Bromate	1	<1	2	<1	<1	µg/L	EPA 300.1/317
Chlorite	0.04	<0.01	0.05	<0.01	0.02	mg/L	EPA 300.0
Action Level Chemicals							
Copper	16.7	5.1	9.4	10.1	9.2	µg/L	EPA 200.7
Lead	4.5	<0.5	1.8	1.3	3.3	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 & Radium 228	<0.356	<0.429	<0.334	<0.398	<0.340	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	5	<3	<3	<3	pCi/L	EPA 900.0/SM7110C
Tritium	<338	<1000	<1000	<1000	<1000	pCi/L	EPA 906.0
Strontium-90	<0.788	<0.592	<0.888	<0.446	<0.493	pCi/L	EPA 905.0
Gross Beta Particle Activity	<3	4.0	<3	6	3	pCi/L	EPA 900.0
Uranium	<0.7	1.2	<0.7	<0.7	<0.7	pCi/L	EPA 200.8
Unregulated Chemicals							
Chromium VI	0.59	0.09	0.30	<0.02	<0.02	µg/L	EPA 218.6
Ethyl tertiary butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Tertiary amyl methyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Chemicals w/ State Notification Levels							
Boron	<0.1	<0.1	<0.1	<0.1	<0.1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	<1	<1	µg/L	EPA 522
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Methyl isobutyl ketone (MIBK)	4	<2	<2	<2	<2	µg/L	EPA 524.2
N-nitrosodimethylamine (NDMA)	<2	<2	<2	<2	5	ng/l	EPA 521
N-propylbenzene	<0.5	<0.5	<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	<0.5	<0.5	µg/L	EPA 524.2
1,2,4 –trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 524.2
Vanadium	7	3	6	4	4	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals							
Aluminum	2250	301	1852	190	336	µg/L	EPA 200.7
Corrosivity	-1.6	0.3	-1.5	-1.5	-2.0	SI	SM 2330B
Foaming Agents (MBAS)	0.07	0.08	0.12	0.25	0.38	mg/L	SM 5540C/EPA 425.1
Iron	2477	182	1697	381	555	µg/L	EPA 200.7
Manganese	46	6	36	75	47	µg/L	EPA 200.7
Odor--Threshold	8	8	4	3	40	TON	SM 2150B
Silver	<0.25	<0.25	0.36	<0.25	<0.25	µg/L	EPA 200.7
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	µg/L	EPA 525.2
Zinc	107	15	42	87	60	µg/L	EPA 200.7

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

4Q14 Note: Deer Creek @ Turner 1&2 was not sampled because it was same sample as Deer Creek @ Turner 3&4. West Cucamonga Creek @ Ely not sampled and collected at secondary location at 7th & 8th Street due to Ely RW delivery schedule.

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
	601039	Inland Empire Utilities Agency - 8TH-2/2	2460 downgradient	576-616	4	Active	Monitoring
Brooks Basins	1901719	City of Pomona P-10	1983 downgradient	295-784	20	Active	Municipal
	1904001	City of Pomona P-34	2250 downgradient	363-367,380-400, 419-427	20	Active	Municipal
	1903016	City of Pomona P-2	3455 downgradient	NA	NA	Active	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 Sevaine 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
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 numbe
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 2-8a
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)	Thiobencarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	Cl (mg/L)	Hardness (mg $CaCO_3$/L)	Na (mg/L)	SO_4(mg/L)	NH_3-N (mg/L)	NO_2-N (mg/L)	NO_3-N (mg/L)	Nitrogen, Total (mg/L)	TKN (mg/L)	Alkalinity (mg $CaCO_3$/L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Co. - F37a	10/14/14	0.18	<1.1	8.4	505	380	<25	<3	1.9	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.30	11	24	229	19	26	<0.1	0.05	***12.2***	12.3	<0.5	157	3.05
	California Speedway - Infield Well	11/03/14	0.27	<1.1	7.8	515	360	<25	<3	0.8	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.07	<1	22	227	21	52	<0.1	0.03	7.6	7.6	<0.5	157	5.86
	California Speedway 2	10/27/14	0.21	<1.1	7.6	415	270	<25	<3	1.3	0.2	<0.05	<15	<1	<0.5	1	0.72	<0.2	0.12	<1	15	180	19	18	<0.1	0.05	5.4	5.5	<0.5	158	5.04
	Reliant Energy - East Well	11/11/14	0.23	<1.1	7.8	340	234	<25	<3	1.7	0.0	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.14	3	10	140	20	12	<0.1	0.04	3.9	3.9	<0.5	137	5.48
	Ontario Well No. 20	10/15/14	0.13	<1.1	***8.6***	375	264	<25		1.4	0.4	<0.05	17	<1	<0.5	1	<0.25	<0.2	0.20	<1	10	177	14	7	<0.1	0.07	2.5	2.6	<0.5	172	1.75
	BH-1/2*	10/22/14	0.51	<1.1	***8.7***	500	328	<25	<3	0.7	0.3	<0.05	<15	1	<0.5	1	<0.25	<0.2	1.00	<1	64	198	26	29	<0.1	0.03	1.9	1.9	<0.5	121	5.85
Turner	Ontario Well No. 25	10/15/14	0.20	<1.1	***8.6***	435	290	<25	<3	<0.5	0.3	<0.05	<15	2	<0.5	1	<0.25	<0.2	0.08	<1	20	187	23	16	0.1	0.05	4.5	4.6	<0.5	171	2.24
	Ontario Well No. 29	10/15/14	0.15	<1.1	***8.7***	330	224	<25	<3	<0.5	0.3	<0.05	57	<1	<0.5	1	<0.25	<0.2	0.90	<1	7	137	22	12	<0.1	0.06	1.4	1.5	<0.5	151	1.99
	Ontario Well No. 38	10/15/14	0.17	<1.1	***8.7***	305	190	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.05	<1	5	125	20	8	<0.1	0.06	1.4	1.5	<0.5	143	2.01
	T-1/2*	10/21/14	1.10	<1.1	8.3	575	390	<25	<3	1.0	0.1	<0.05	21	2	<0.5	2	<0.25	<0.2	0.45	1	79	240	26	37	<0.1	0.03	0.6	1.2	0.6	135	4.47
	T-2/1*	10/22/14	0.95	<1.1	8.4	705	480	<25	5	1.3	0.2	<0.05	<15	3	<0.5	1	0.88	<0.2	***6.20***	<1	105	280	37	49	<0.1	0.02	3.5	3.5	<0.5	141	3.56
	T-2/2*	11/06/14	0.68	<1.1	7.5	687	500	<25	<3	1.9	0.1	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.25	<1	105	259	33	46	<0.1	<0.02	3.9	3.9	<0.5	130	2.67
RP3	Fontana Water Co. - F23a	10/29/14	0.35	12	7.9	460	342	<25	<3	0.7	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.08	1	30	190	20	23	<0.1	0.04	8.8	8.8	<0.5	134	5.67
	Southridge JHS*	11/10/14	0.55	<1.1	7.4	***925***	***632***	<25	5	9.2	0.2	<0.05	<15	6	<0.5	1	<0.25	<0.2	4.20	6	92	359	55	75	<0.1	0.02	***16.6***	16.6	<0.5	209	4.38
	Alcoa MW1*	11/18/14	0.29	1.1	7.5	580	374	<25	<3	0.8	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.46	1	29	259	28	41	<0.1	0.02	***15.9***			163	5.84
	Alcoa MW3*	11/11/14	0.43	<1.1	7.4	865	***602***	<25	<3	1.1	0.3	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.25	<1	71	358	44	52	<0.1	0.02	***18.5***	18.5	<0.5	228	4.07
	RP3-1/1*	10/21/14	0.75	<1.1	8.3	715	480	<25	10	1.6	0.2	<0.05	<15	22	<0.5	2	<0.25	<0.2	4.30	<1	104	254	51	43	<0.1	0.03	3.1	3.1	<0.5	152	0.61
	RP3-1/2*	11/06/14	0.92	<1.1	7.4	715	500	<25	5	2.0	0.0	<0.05	<15	***155***	<0.5	1	<0.25	<0.2	1.10	2	109	262	50	45	<0.1	0.08	1.9	2.0	<0.5	150	0.69
8th Street	Ontario Well No. 35	11/12/14	0.24	<1.1	7.7	385	268	<25	<3	1.3	0.2	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.16	2	11	174	21	22	<0.1	0.04	4.3	4.3	<0.5	151	3.85
	8TH-1/1*	10/01/14	0.58	<1.1	7.9	590	460	<25	10	0.5	-0.1	<0.05	<15	6	<0.5	1	<0.25	<0.2	4.60	4	93	257	13	27	0.2	0.11	3.0	3.1	<0.5	105	9.94
	8TH-1/2*	10/01/14	0.32		7.9	335	224	<25	5	0.6	-0.1	<0.05	<15	4	<0.5	1	1.16	<0.2	1.10	2	37	139	15	15	<0.1	0.06	1.4	1.5	<0.5	96	2.18
	8TH-2/1*	10/07/14	0.23	<1.1	8.2	420	300	<25	<3	<0.5	0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.07	1	18	199	14	14	0.3	<0.02	7.2	7.7	0.5	158	0.46
	8TH-2/2*	10/07/14	0.20	<1.1	8.3	371	256	<25	<3	<0.5	-0.1	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.13	<1	20	160	15	27	<0.1	<0.02	5.8	5.8	<0.5	109	0.41
Brooks	Pomona Well No. 10	10/28/14	0.25	<1.1	7.9	505	364	<25	<3	0.7	0.5	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.12	2	38	245	12	39	<0.1	0.03	6.9	6.9	<0.5	138	5.23
	Pomona Well No. 2	10/28/14	0.36	<1.1	7.9	560	412	<25	<3	1.2	0.5	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.06	<1	40	269	13	52	0.2	0.03	8.5	8.5	<0.5	147	6.09
	Pomona Well No. 34	10/28/14	0.29	<1.1	7.9	545	394	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.06	2	31	260	12	41	0.2	0.04	***13.1***	13.1	<0.5	143	5.58
	BRK-1/1*	10/06/14	0.53	<1.1	8.2	620	400	<25	5	0.8	0.2	<0.05	<15	<1	<0.5	2	<0.25	<0.2	2.60	2	93	266	20	31	0.3	0.11	1.8	3.4	1.5	132	2.39
	BRK-1/2*	10/06/14	0.20	<1.1	8.4	590	382	<25	<3	<0.5	0.4	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.06	<1	23	270	15	46	0.2	0.07	***20.3***	21.2	0.8	150	2.47
	BRK-2/1*	10/16/14	0.37	<1.1	8.4	575	394	<25	5	<0.5	0.4	<0.05	<15	1	<0.5	1	<0.25	<0.2	3.90	1	39	282	11	45	<0.1	0.04	8.7	8.7	<0.5	166	2.05
	BRK-2/2*	10/16/14	0.13	<1.1	***8.7***	300	202	<25	<3	0.8	0.4	<0.05	<15	<1	<0.5	1	1.34	<0.2	0.10	<1	5	93	32	21	<0.1	0.05	3.8	3.9	<0.5	114	1.27
Ely	Ely Basin MW1 Philadelphia St.*	10/20/14	0.84	<1.1	8.5	700	454	<25	<3	0.9	0.2	<0.05	<15	19	<0.5	1	<0.25	<0.2	0.65	2	116	275	35	43	<0.1	0.04	1.6	1.6	<0.5	131	0.32
	Ely Basin MW2 Walnut St.*	10/08/14	0.75	1.1	8.1	***1010***	***642***	<25	5	0.8	0.4	<0.05	<15	3	<0.5	1	<0.25	<0.2	2.40	<1	66	480	32	70	0.2	0.09	***22.7***	22.8	<0.5	306	2.10
	Riverside Well (43840-CWW)	10/22/14	0.44	<1.1	8.5	585	404	<25	<3	<0.5	0.5	<0.05	24	<1	<0.5	1	<0.25	<0.2	0.29	20	31	272	22	36	<0.1	0.05	***11.8***	11.9	<0.5	187	5.46
	Bishop of SB Corp. - DOM	10/27/14	0.34	<1.1	7.9	755	***514***	<25	<3	3.1	0.8	<0.05	***841***	3	<0.5	2	<0.25	<0.2	0.17	2	36	368	24	61	<0.1	0.04	***19.5***	20.1	0.6	219	4.78
Victoria & San Sevaine	SS-1/1*	10/14/14	0.14	<1.1	8.2	260	210	<25	<3	<0.5	-0.7	<0.05	<15	<1	<0.5	1	<0.25	<0.2	0.08	2	11	101	15	22	<0.1	0.05	2.5	2.6	<0.5	82	2.02
	VCT-1/1*	10/13/14	0.41	<1.1	8.1	505	412	<25	5	0.8	-0.3	<0.05	<15	3	<0.5	1	<0.25	<0.2	2.10	3	81	208	21	19	<0.1	0.08	1.0	1.9	0.8	107	4.28
	VCT-2/2*	10/14/14	0.20	1.1	***8.6***	282	220	<25	<3	0.5	0.0	<0.05	<15	<1	<0.5	1	<0.25	<0.2	4.30	6	6	114	17	9	<0.1	0.06	3.4	4.1	0.6	117	2.13
	CVWD Well No. 39	11/12/14	0.16	<1.1	7.8	275	208	<25	<3	0.8	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.08	<1	5	109	23	10	<0.1	0.04	2.4	2.4	<0.5	120	4.58
	CVWD Well No. 43	11/12/14	<0.10	<1.1	7.7	329	236	<25	<3	0.8	0.2	<0.05	<15	1	<0.5	<1	<0.25	<0.2	0.10	<1	7	146	20	14	<0.1	0.04	2.9	2.9	<0.5	140	4.83
	Unitex 91090	10/27/14	0.38	23	7.7	365	262	71	***20***	39.1	-0.1	<0.05	***3790***	50	<0.5	1	<0.25	<0.2	***12.1***	16	27	143	23	27	<0.1	0.03	1.5	2.1	0.6	114	4.17
Declez**	JCSD Well No. 17	11/04/14	0.30	<1.1	8.0	600	440	<25	<3	2.0	0.4	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.09	5	66	236	28	39	<0.1	0.02	***10.3***	10.3	<0.5	128	3.75
	JCSD Well No. 19	11/04/14	0.10	1.1	8.2	295	212	<25	<3	1.4	0.2	<0.05	46	2	<0.5	2	<0.25	<0.2	0.35	<1	7	98	28	12	<0.1	0.04	1.4	1.4	<0.5	130	5.71
	DCZ-1/1*	10/21/14	0.91	<1.1	8.1	475	322	<25	***20***	0.9	0.3	<0.05	<15	6	<0.5	1	<0.25	<0.2	***9.00***	<1	28	196	28	23	<0.1	0.05	1.3	1.4	<0.5	181	0.65
	Primary Maximum Contaminant Level							1000		1300					13			70								1	10				
	Secondary Maximum Contaminant Level				6.5-8.5	900	500	200	15	1000		0.5	300	50	5	3	100	1	5	5000	250			250							

Blank cells indicate that analysis was not run for a constituent on that particular date. On certain dates, supplemental analysis was conducted on several monitoring wells. On those occasions, a full set of analysis was not necessary and only parameters of interest were analyzed.

* Total dissolved metals reported for these wells. The remaining wells report total recoverable metals values. Please note Fontana Water Co. Well No. 37A is a municipal well that has not been in production since May 2005 and is currently only used for monitoring.

** Recycled water delivery has not been initiated at this basin. Data collected and reported is for background monitoring purposes only and will not be discussed in report text until the basin starts receiving recycled water.

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

Constituent	Ely Basin MW-1 10/20/14	Ely Basin MW-2 10/08/14	SS-1/1 10/14/14	VCT-1/1 10/13/14	VCT-2/2 10/14/14	MCL	Unit	Method
Inorganic Chemicals								
Asbestos	<0.2	<0.2	<0.2	<2.0	<2.0	7	MFL	EPA 100.2
Cyanide	<0.005	<0.005	<0.005	0.0005	<0.005	150	mg/L	SM 4500-CN E/ASTM D7284
Perchlorate	<4	<4	<4	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.2	0.1	0.2	<0.1	0.2	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	<2	<2	10	µg/L	EPA 200.8
Barium, Dissolved	78	123	42	102	51	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	<0.5	3.7	0.7	<0.5	2.0	50	µg/L	EPA 200.8
Copper, Dissolved	0.9	0.8	<0.5	0.8	0.5	1300	µg/L	EPA 200.8
Iron, Dissolved	<15	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	2	3	<1	13	1	100	µg/L	EPA 200.8
Manganese, Dissolved	19	3	<1	3	<1	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	<0.25	<0.25	<0.25	<0.25	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	2	<1	2	3	6	5000 (sec.)	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)								
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	<1	1750	µg/L	EPA 524.2

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

Constituent	Ely Basin MW-1 10/20/14	Ely Basin MW-2 10/08/14	SS-1/1 10/14/14	VCT-1/1 10/13/14	VCT-2/2 10/14/14	MCL	Unit	Method
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
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	<1	<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	<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
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	<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	0.12	<0.05	<0.05	<0.05	<0.05	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
Notification Level Chemicals								
Copper, Dissolved	0.9	0.8	<0.5	0.8	0.5	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<0.298	<0.609	<0.157	0.150	<0.207	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	15	pCi/l	EPA 900.0
Tritium	<455	<1000	<1000	<1000	<1000	20,000	pCi/l	EPA 906
Strontium-90	<0.393	<1.09	<0.429	<0.405	<0.649	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	7	<3	<3	<3	50	pCi/l	EPA 900.0
Uranium	<0.7	9.8	<0.7	<0.7	<0.7	20	pCi/l	EPA 200.8

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

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

Constituent	8TH-1/1 10/01/14	8TH-1/2 10/01/14	8TH-2/1 10/07/14	8TH-2/2 10/07/14	MCL	Unit	Method
Inorganic Chemicals							
Asbestos	<0.2	<0.2	<0.2	<0.2	7	MFL	EPA 100.2
Cyanide	0.005	0.007	<0.005	<0.005	150	mg/L	SM 4500-CN E/ASTM D7284
Perchlorate	<4	<4	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.2	0.3	0.2	0.4	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	<2	10	µg/L	EPA 200.8
Barium, Dissolved	51	30	42	35	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	0.35	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	0.8	1.6	1.2	2.8	50	µg/L	EPA 200.8
Copper, Dissolved	0.5	0.6	<0.5	<0.5	1300	µg/L	EPA 200.8
Iron, Dissolved	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	47	36	1	1	100	µg/L	EPA 200.8
Manganese, Dissolved	6	4	<1	<1	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	1.16	<0.25	<0.25	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	4	2	1	<1	5000 (sec.)	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<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	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<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	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	1750	µg/L	EPA 524.2

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

Constituent	8TH-1/1 10/01/14	8TH-1/2 10/01/14	8TH-2/1 10/07/14	8TH-2/2 10/07/14	MCL	Unit	Method
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
Atrazine	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<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	0.2	µg/L	EPA 525.2
Carbofuran	<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	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	200	µg/L	EPA 515.4
Dibromochloropropane	<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	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.6	<0.6	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<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	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	0.11	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Notification Level Chemicals							
Copper, Dissolved	0.5	0.6	<0.5	<0.5	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 228	<0.210	<0.209	0.580	<0.543	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	3	<3	15	pCi/l	EPA 900.0
Tritium	<176	<179	<1000	<1000	20,000	pCi/l	EPA 906
Strontium-90	<0.593	<0.390	<0.632	<0.612	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	<3	<3	6	50	pCi/l	EPA 900.0
Uranium	1.2	<0.7	1.3	0.8	20	pCi/l	EPA 200.8

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

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

Constituent	BRK-1/1 10/06/14	BRK-1/2 10/06/14	BRK-2/1 10/16/14	BRK-2/2 10/16/14	MCL	Unit	Method
Inorganic Chemicals							
Asbestos	<0.2	<0.2	<0.2	<0.2	7	MFL	EPA 100.2
Cyanide	<0.005	<0.005	<0.005	<0.005	150	mg/L	SM 4500-CN E/ASTM D7284
Perchlorate	<4	**12**	<4	<4	6	µg/L	EPA 314
Mercury	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 245.2
Fluoride	0.3	0.1	0.3	0.2	2	mg/L	SM 4500-F C
Aluminum, Dissolved	<25	<25	<25	<25	1000	µg/L	EPA 200.8
Antimony, Dissolved	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic, Dissolved	<2	<2	<2	3	10	µg/L	EPA 200.8
Barium, Dissolved	34	71	40	40	1000	µg/L	EPA 200.8
Beryllium, Dissolved	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.8
Cadmium, Dissolved	<0.25	<0.25	<0.25	<0.25	5	µg/L	EPA 200.8
Chromium, Dissolved	<0.5	5.0	4.1	8.4	50	µg/L	EPA 200.8
Copper, Dissolved	0.8	<0.5	<0.5	0.8	1300	µg/L	EPA 200.8
Iron, Dissolved	<15	<15	<15	<15	300 (sec.)	µg/L	EPA 200.8
Nickel, Dissolved	12	2	25	8	100	µg/L	EPA 200.8
Manganese, Dissolved	<1	<1	1	<1	50 (sec.)	µg/L	EPA 200.8
Selenium, Dissolved	<2	<2	<2	<2	50	µg/L	EPA 200.8
Silver, Dissolved	<0.25	<0.25	<0.25	1.34	100 (sec.)	µg/L	EPA 200.8
Thallium, Dissolved	<1	<1	<1	<1	2	µg/L	EPA 200.8
Zinc, Dissolved	2	<1	1	<1	5000 (sec.)	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<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	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<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	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	1.0	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	<1	<1	<1	<1	1750	µg/L	EPA 524.2

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

Constituent	BRK-1/1 10/06/14	BRK-1/2 10/06/14	BRK-2/1 10/16/14	BRK-2/2 10/16/14	MCL	Unit	Method
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.05	<0.05	<0.05	<0.05	2	µg/L	EPA 525.2
Atrazine	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Bentazon	<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	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA531.2
Chlordane	<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	70	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	0.05	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<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	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<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	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.05	<0.05	<0.05	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.05	<0.05	<0.05	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.1	<0.1	<0.1	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05	<0.05	<0.05	<0.05	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.2	<0.2	<0.2	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Notification Level Chemicals							
Copper, Dissolved	0.8	<0.5	<0.5	0.8	1300	µg/L	EPA 200.8
Lead, Dissolved	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 and Radium 228	<0.192	<0.236	<0.156	<0.140	5	pCi/l	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	15	pCi/l	EPA 900.0
Tritium	<1000	<1000	<485	<516	20,000	pCi/l	EPA 906
Strontium-90	<0.671	<0.489	<0.390	<0.336	8	pCi/l	EPA 905
Gross Beta Particle Activity	<3	<3	<3	<3	50	pCi/l	EPA 900.0
Uranium	1.5	1.4	2.2	<0.7	20	pCi/l	EPA 200.8

Bold signifies an exceedance of an Maximum Contaminant Level. Explained in further detail in the report text.

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

	Diluent Water																		Recycled Water								
	Imported Water									Local Runoff / Storm Flow																	
Date	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Ely	Hickory	RP3	San Sevaine	Turner	Victoria
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**	**62**	**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**
Jul-14	0	0	0	0	0	0	0	0	0	25	0	0	16	0	9	0	11	2	8	0	72	101	118	184	0	0	91
Aug-14	0	0	0	0	0	0	0	0	0	15	0	7	16	0	23	6	76	5	8	82	141	8	82	192	0	205	107
Sep-14	0	0	0	0	0	0	0	0	0	14	0	1	15	0	40	1	54	2	32	72	157	121	236	243	1	128	155
3Q14 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**53**	**0**	**9**	**46**	**0**	**72**	**7**	**142**	**9**	**48**	**153**	**369**	**231**	**436**	**619**	**1**	**333**	**353**
Oct-14	0	0	0	0	0	0	0	0	0	0	0	6	16	0	25	0	39	3	0	206	56	286	226	335	0	63	75
Nov-14	0	0	0	0	0	0	0	0	0	146	7	28	170	0	112	18	108	57	0	173	37	70	272	250	0	58	4
Dec-14	0	0	0	0	0	0	0	0	0	353	145	95	392	185	419	246	603	153	0	67	0	5	46	6	0	2	0
4Q14 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**499**	**152**	**129**	**578**	**185**	**555**	**264**	**750**	**213**	**0**	**445**	**93**	**361**	**544**	**592**	**0**	**123**	**79**

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

	ASR Well No. 4									
		Injection			Recovery			Mass Balance		
	Date	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
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)
3Q14	Jul-14	0.0	0.7	320	25	14.0	370	(623)	(13,460)	(324,306)
	Aug-14	0.0	0.7	320	14	14.0	370	(637)	(13,703)	(330,751)
	Sep-14	0.0	0.7	320	0	14.0	370	(637)	(13,703)	(330,751)
4Q14	Oct-14	0.0	0.7	320	0	14.0	370	(637)	(13,703)	(330,751)
	Nov-14	0.0	0.7	320	45	14.0	370	(682)	(14,474)	(351,127)
	Dec-14	0.0	0.7	320	14	14.0	370	(696)	(14,711)	(357,389)

	ASR Well No. 30									
		Injection			Recovery			Mass Balance		
	Date	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
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
3Q14	Jul-14	0.0	0.7	320	274	3.5	310	81	(4,806)	(89,601)
	Aug-14	0.0	0.7	320	241	3.5	310	(160)	(5,832)	(181,778)
	Sep-14	0.0	0.7	320	2	3.5	310	(161)	(5,839)	(182,425)
4Q14	Oct-14	0.0	0.7	320	0	3.5	310	(161)	(5,839)	(182,425)
	Nov-14	0.0	0.7	320	0	3.5	310	(162)	(5,841)	(182,593)
	Dec-14	0.0	0.7	320	0	3.5	310	(162)	(5,841)	(182,593)

	ASR Well No. 32									
		Injection			Recovery			Mass Balance		
	Date	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
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)
3Q14	Jul-14	0.0	0.7	320	0	3.5	340	(3,643)	(11,173)	(1,002,771)
	Aug-14	0.0	0.7	320	0	3.5	340	(3,643)	(11,173)	(1,002,771)
	Sep-14	0.0	0.7	320	0	3.5	340	(3,643)	(11,173)	(1,002,771)
4Q14	Oct-14	0.0	0.7	320	0	3.5	340	(3,643)	(11,173)	(1,002,771)
	Nov-14	0.0	0.7	320	3	3.5	340	(3,646)	(11,187)	(1,004,068)
	Dec-14	0.0	0.7	320	0	3.5	340	(3,646)	(11,187)	(1,004,068)

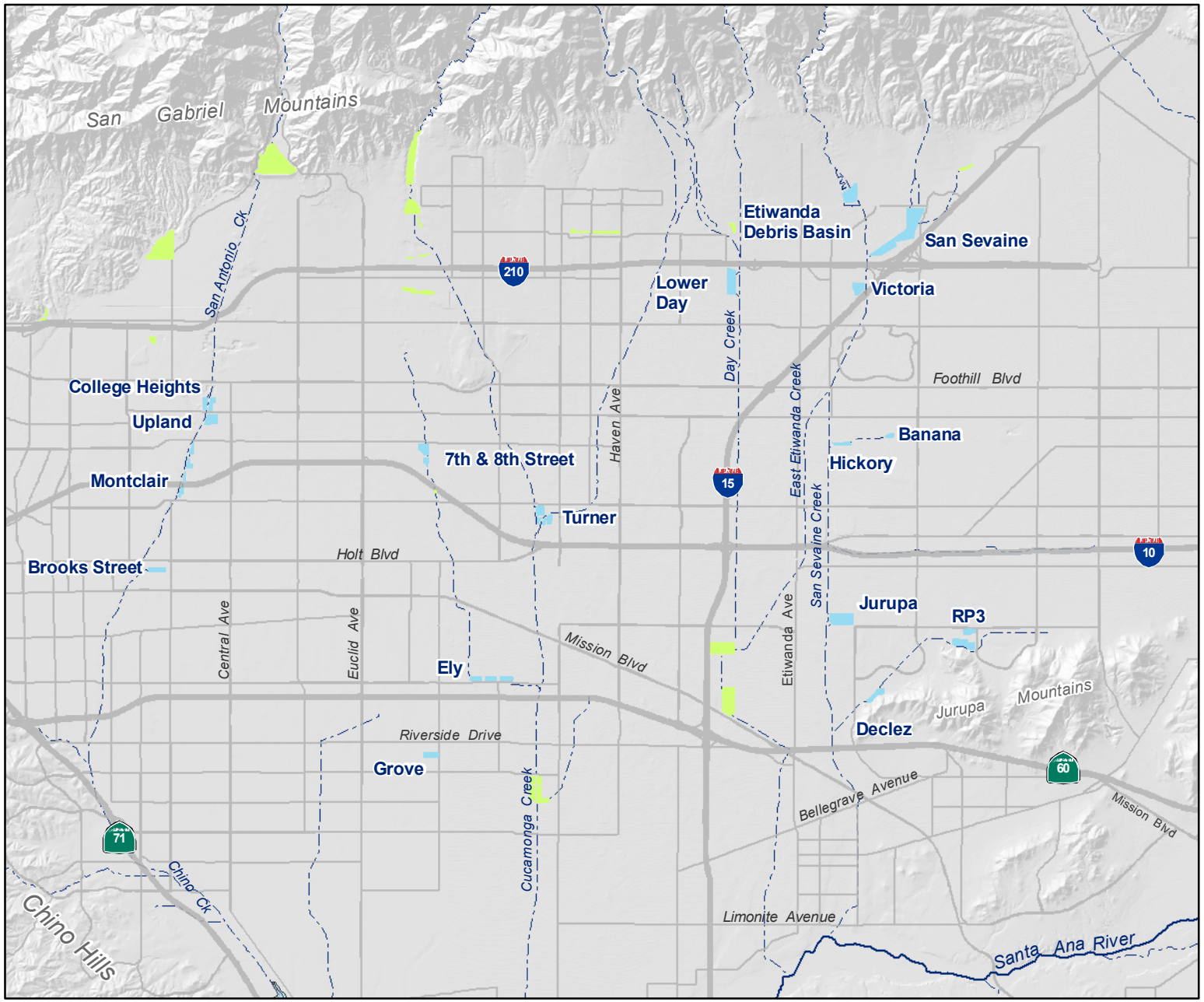
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.

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

	ASR Well No. 33									
		Injection			Recovery			Mass Balance		
	Date	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
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)
3Q14	Jul-14	0.0	0.7	320	155	3.5	370	(1,256)	(5,553)	(585,446)
	Aug-14	0.0	0.7	320	0	3.5	370	(1,256)	(5,553)	(585,446)
	Sep-14	0.0	0.7	320	0	3.5	370	(1,256)	(5,553)	(585,446)
4Q14	Oct-14	0.0	0.7	320	0	3.5	370	(1,256)	(5,553)	(585,455)
	Nov-14	0.0	0.7	320	0	3.5	370	(1,256)	(5,553)	(585,455)
	Dec-14	0.0	0.7	320	0	3.5	370	(1,256)	(5,553)	(585,455)

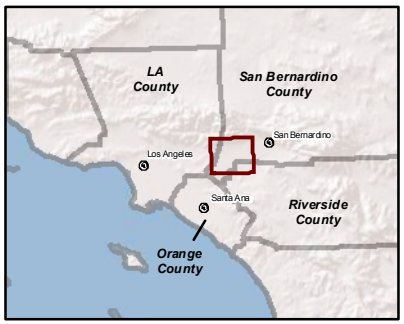
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.

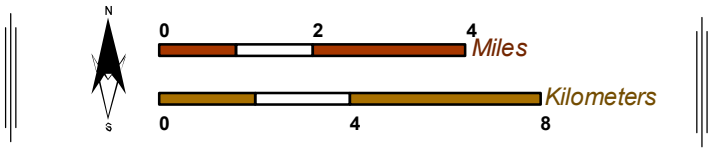
	Total Project (All Wells)			
			Mass Balance	
	Date		Storage (AF)	TIN (kg)	TDS (kg)
1Q14	Jan-14		(4,643)	(30,828)	(1,674,322)
	Feb-14		(4,651)	(30,867)	(1,677,609)
	Mar-14		(4,651)	(30,867)	(1,677,609)
2Q14	Apr-14		(4,683)	(31,003)	(1,691,969)
	May-14		(4,745)	(31,464)	(1,720,451)
	Jun-14		(4,986)	(32,720)	(1,815,197)
3Q14	Jul-14		(5,440)	(34,992)	(2,002,124)
	Aug-14		(5,695)	(36,261)	(2,100,746)
	Sep-14		(5,697)	(36,268)	(2,101,393)
4Q14	Oct-14		(5,697)	(36,269)	(2,101,402)
	Nov-14		(5,745)	(37,055)	(2,123,242)
	Dec-14		(5,759)	(37,292)	(2,129,504)



Main Map Features

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

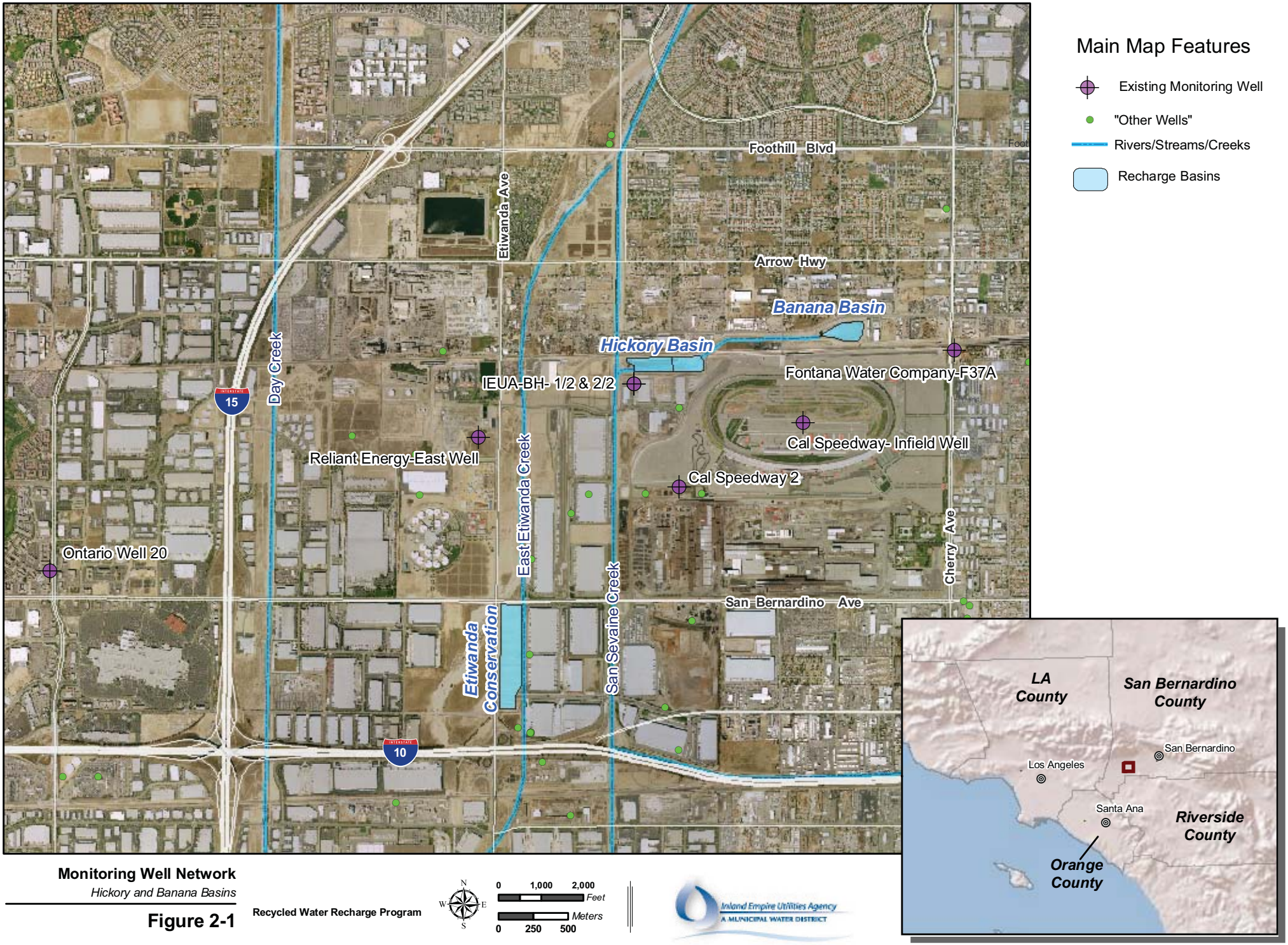




Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations

Figure 1-1

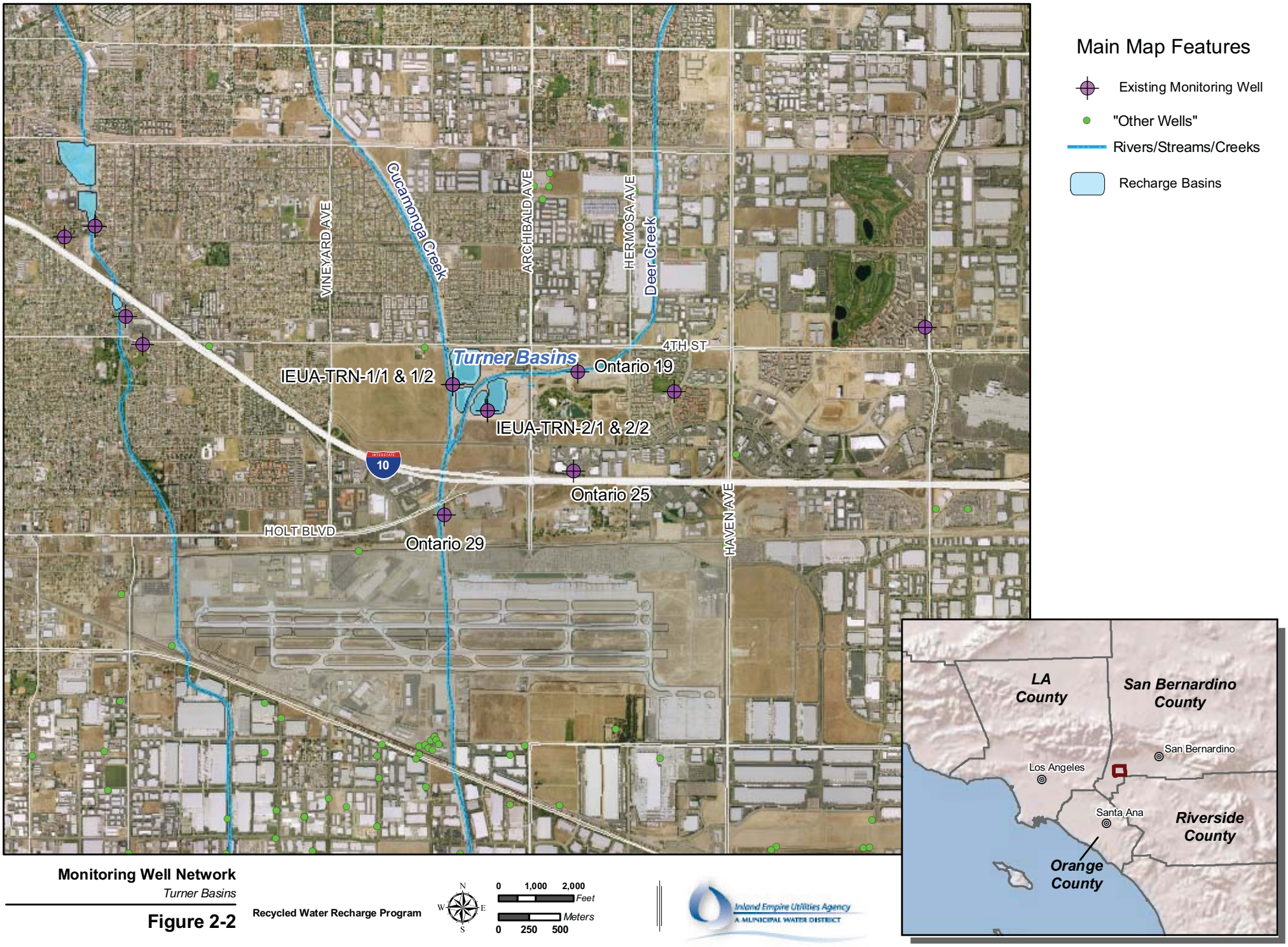


Monitoring Well Network

Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program



Monitoring Well Network

Turner Basins

Figure 2-2

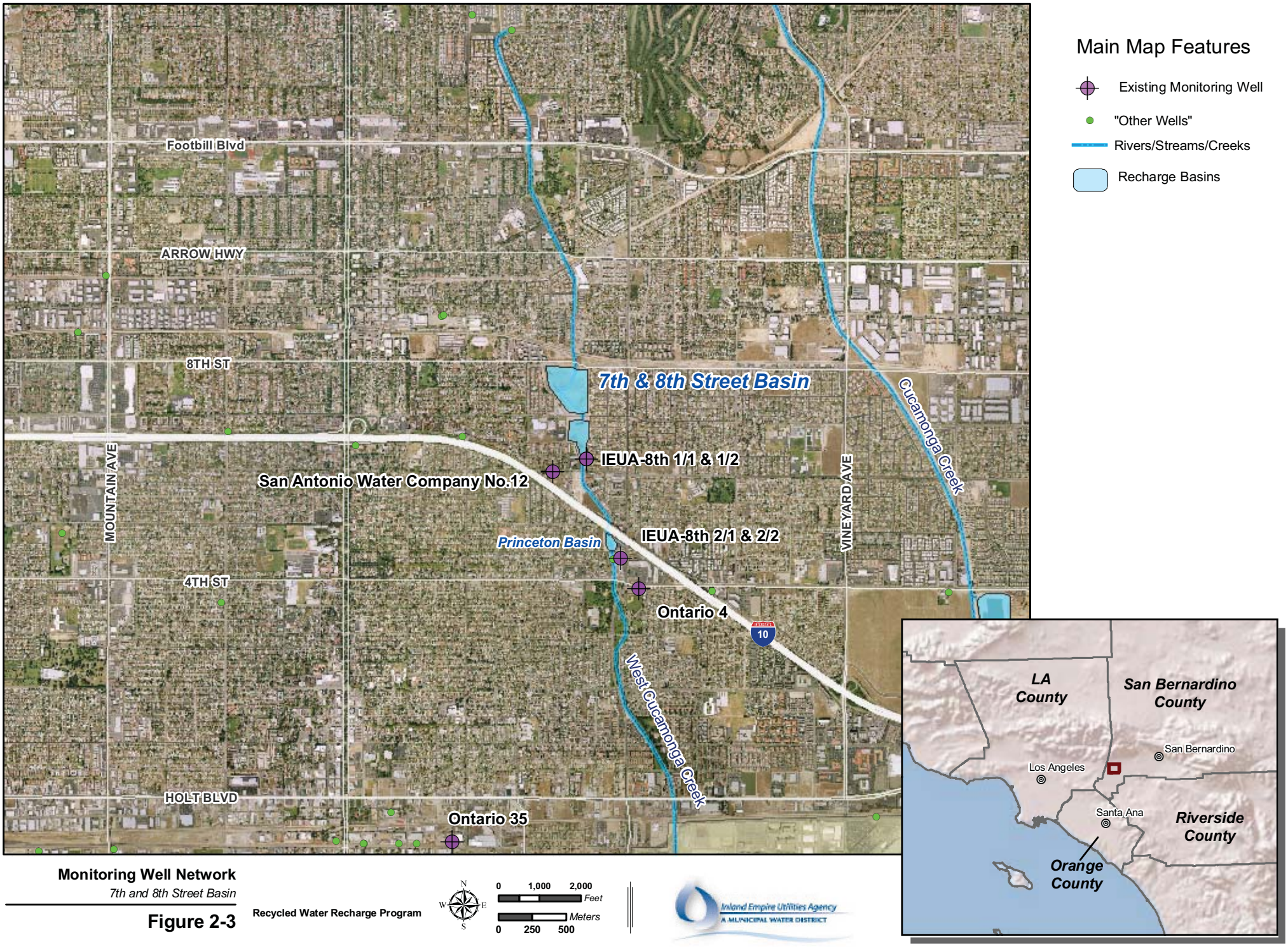
Recycled Water Recharge Program

N W E S

0 1,000 2,000 Feet

0 250 500 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

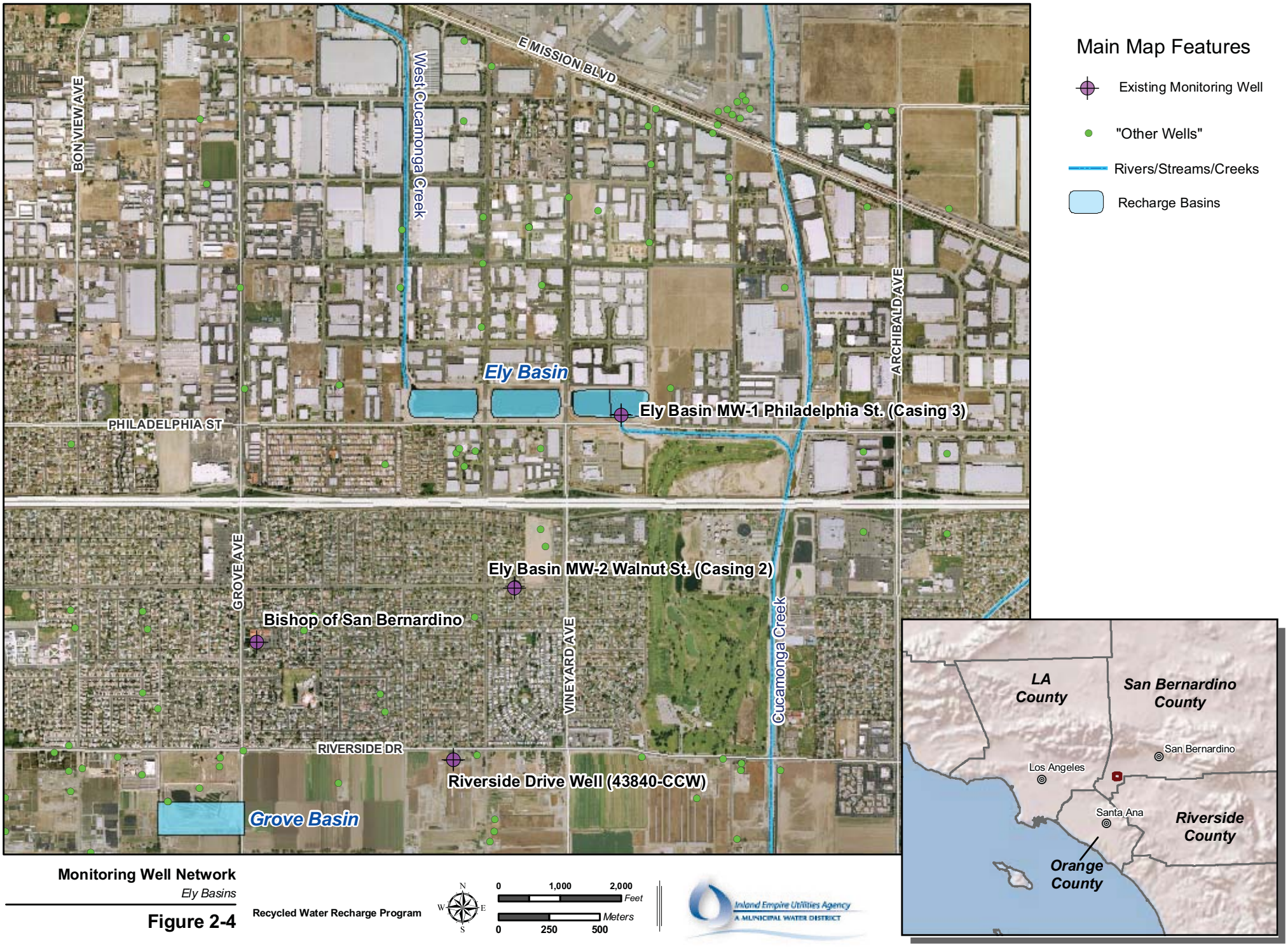


Monitoring Well Network

7th and 8th Street Basin

Figure 2-3

Recycled Water Recharge Program



Monitoring Well Network

Ely Basins

Figure 2-4

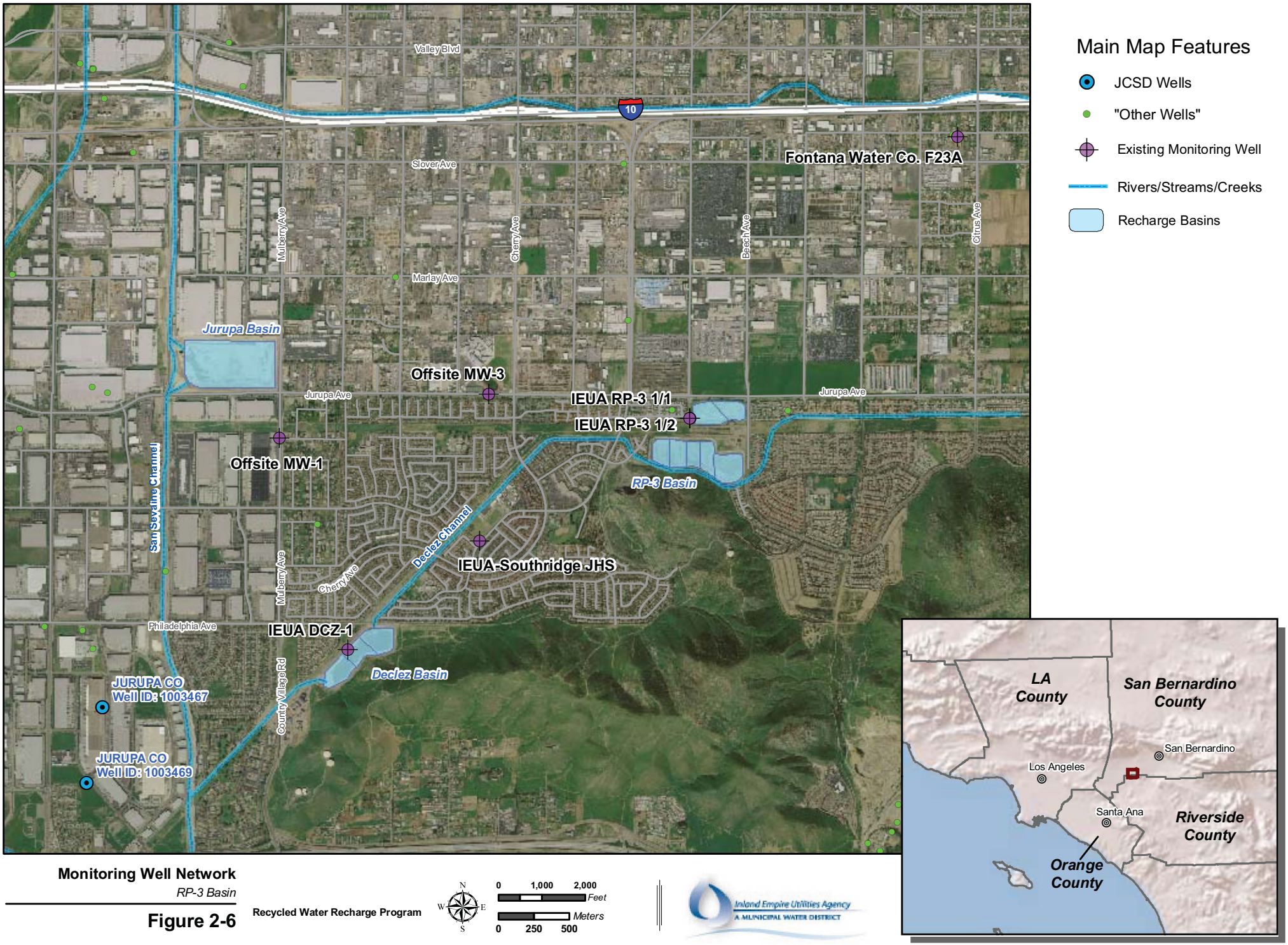
Recycled Water Recharge Program

Monitoring Well Network

Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program

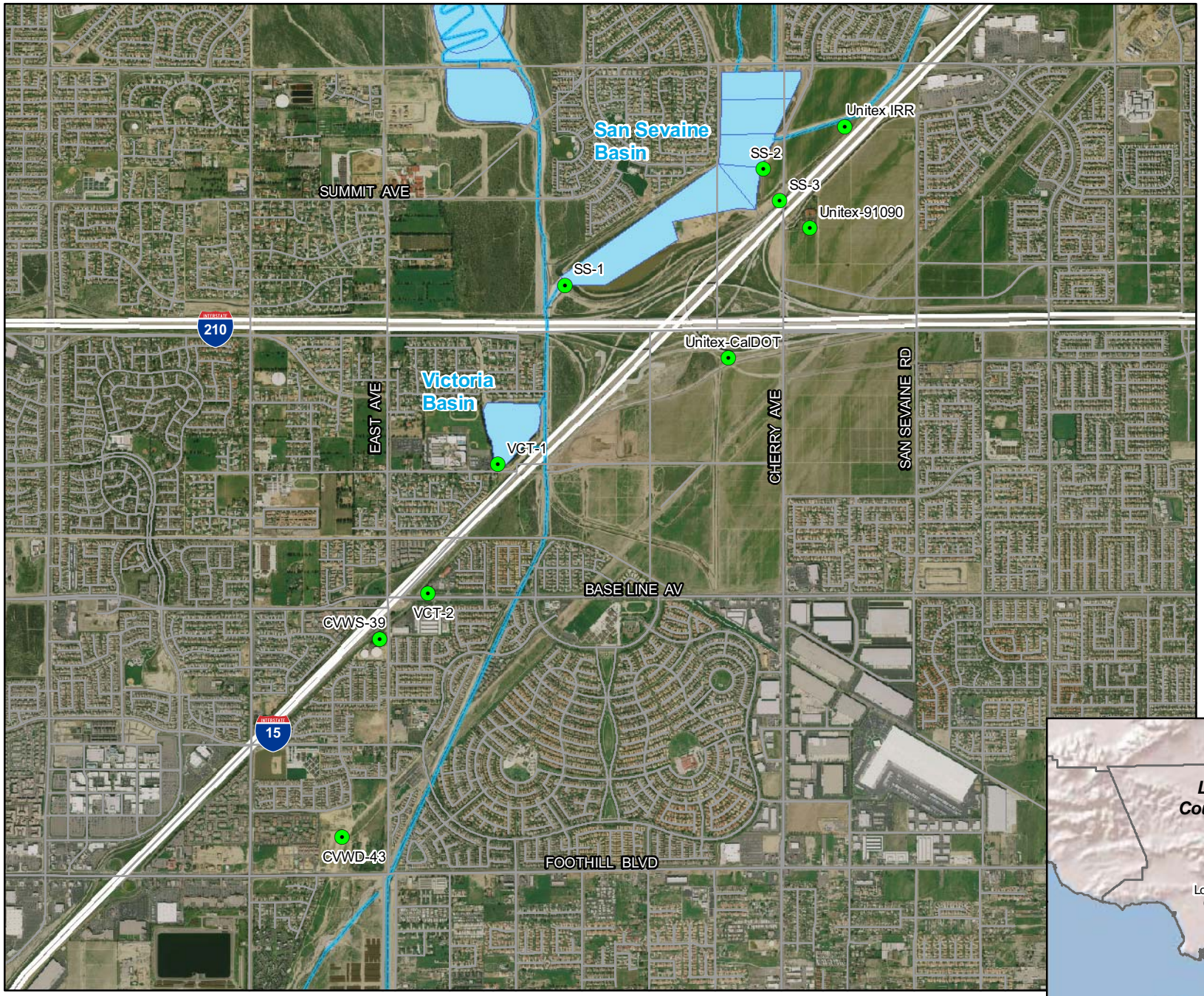


Monitoring Well Network

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 Sevaine and Victoria Basin

Figure 2-7

Recycled Water Recharge Program

N W E S

0 1,000 2,000 Feet

0 250 500 Meters

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20071106