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August 15, 2013

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Kurt Berchtold

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

**Subject: Chino Basin Recycled Water Groundwater Recharge Program
Quarterly Monitoring Report for April through June 2013**

Dear Mr. Berchtold,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2013 (2Q13), April 1 through June 30, 2013, 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 2Q13, 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 a total nitrogen (TN) at the Hickory Basin East 25-foot depth lysimeter and an exceedance of the 4-quarter running average for odor (secondary MCL). The TN exceedance at Hickory Basin and its compliance sampling point is discussed in more detail within the report.

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2013, 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.

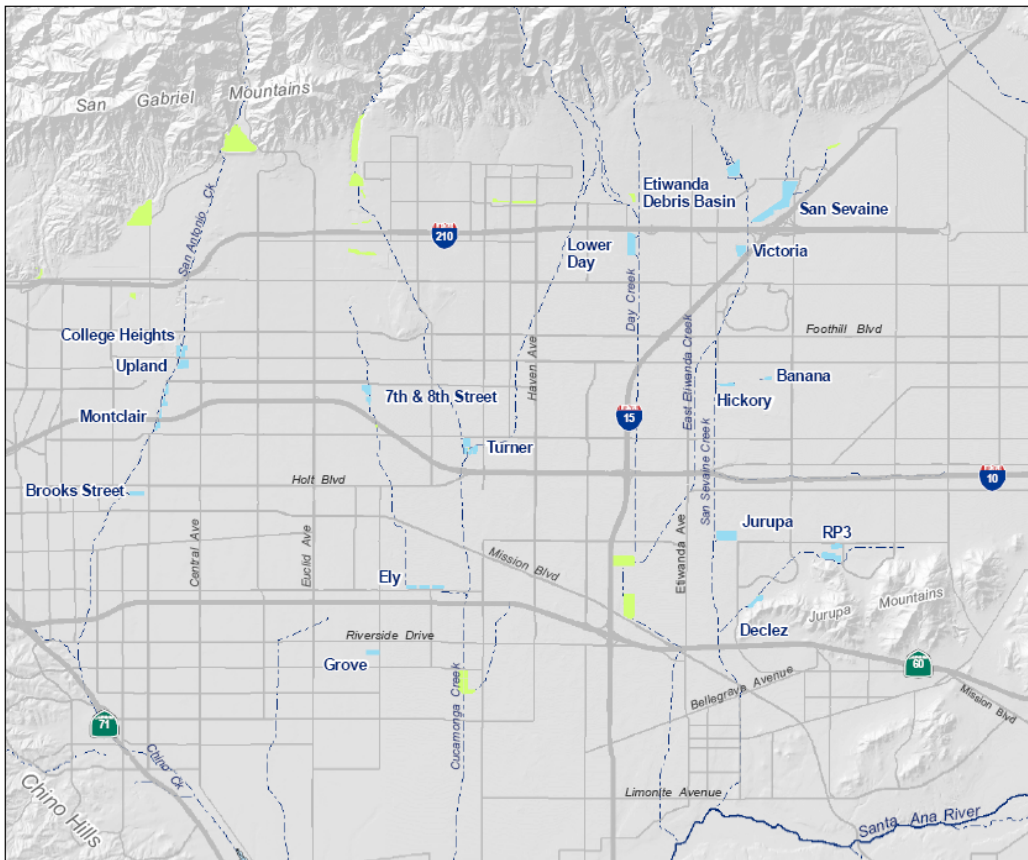
Executed on the 15th day of August 2013 in the Cities of Chino and Rancho Cucamonga.

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General Manager

Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report April 1 through June 30, 2013



Prepared by:



August 15, 2013

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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. Chino Basin Groundwater Recharge Program Basins are presented in Figure 1-1. As a provision of this Order, IEUA and Watermaster must also comply with Monitoring and Reporting Program No. R8-2007-0039 (MRP).

The MRP includes the water quality monitoring requirements of the Chino Basin Recycled Water Groundwater Recharge Program and the requirement for the submittal of quarterly and annual reports. This document is the quarterly report for the second quarter of 2013 (2Q13).

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

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

B. Order No. R8-2009-0057

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

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

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

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

- 2) Groundwater Monitoring Program Requirement V.1. was modified by adding a sentence to the paragraph that allows IEUA to analyze the groundwater samples collected on a quarterly basis from non-active municipal drinking water wells for dissolved metals, instead of total recoverable metals.
- 3) Reporting Requirement VI.B.3.b. has been modified and footnote No. 18 has been 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 2Q13 data.

Recycled Water Specifications A.5 through A.9 are the narrative limits established in the permit. Corresponding monitoring data are presented in Tables 2-1 and 2-2. Recycled water compliance for the total nitrogen (TN) limit of 5 mg/L is met at the lysimeters.

In March 2013, the average of two consecutive TN sample results for the Hickory Basin compliance lysimeter exceeded the 5 mg/L limit. The CDPH and the Regional Board were both notified via e-mail regarding the exceedance. Recycled water deliveries were subsequently suspended on April 11, 2013 after the TN average for four consecutive weeks exceeded 5 mg/L. A letter was sent to the CDPH and the Regional Board on April 11, 2013 requesting the relocation of the TN compliance point to the groundwater mound monitoring well, namely BH-1/2. The four week TN average at the lysimeter decreased through May and fell below 5 mg/L in mid-June. On June 12, 2013, the CDPH issued a letter to the Regional Board concurring with IEUA's recommendation to relocate the compliance point to BH-1/2. Recycled water deliveries were resumed at Hickory Basin on June 15, 2013 in accordance with the Order's requirement that "surface spreading shall not resume until appropriate corrections are made to reduce TN levels to below 5 mg/L of TN for at least one week." TN concentrations will continue to be evaluated at Hickory Basin during 3Q13.

In the Order, compliance for constituents with maximum contaminant levels (MCLs) and secondary MCLs are based on 4-quarter running averages. These constituents are listed in Recycled Water Specifications A.1 through A.3 (Tables I, II, and III in the Order). The 4-quarter running average concentration data for 3Q12 through 2Q13 are summarized in Table 2-3. The table includes the 4-quarter running average for each parameter and the corresponding limits for compliance. Of the Recycled Water Quality Specifications with limitations, only oil & grease does not require the 4-quarter running average for compliance determination. During 2Q13, 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 2Q13, an odor of 3 units was detected. However in 1Q13, an odor of 40 Units was detected, which results in a 4-quarter running average value of 12 Units, causing the threshold odor to exceed the secondary MCL. This one result will continue to impact the 4-quarter running averages for 3Q13 and 4Q13.

Due to the volume of sample required for analyses, IEUA has selected, and CDPH has approved, a recycled water sampling point along the distribution pipeline. IEUA selected the turnout to NRG California South, LP (formerly Reliant Energy) to be representative of the system blend of recycled water used for recharge. Although this sampling location is suitable for most constituents, it is not appropriate for disinfection byproducts (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 2Q13 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the Brooks Basin as the compliance point. The Brooks 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.

B. Recycled Water: Basin and Lysimeter Samples

Total organic carbon (TOC) and nitrogen species sampling and analysis are performed weekly during periods when recycled water is delivered to recharge sites. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. All basin and lysimeter water quality results from 2Q13 are summarized in Table 2-5a. The table includes lysimeter data for 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, and Victoria Basins.

The Turner, Ely, 8th Street, San Sevaine, and Victoria Basins have implemented alternative monitoring plans which include the sampling of recycled water at the GenOn Energy turnout and the application of TOC and TN correction factors for SAT at the basins. The following correction factors were determined from each basin's start-up period findings:

- Turner 1 & 2: TOC reduction of 70 percent and TN reduction of 87 percent
- Turner 3 & 4: TOC reduction of 85 percent and TN reduction of 87 percent
- Ely Basins: TOC reduction of 76 percent and TN reduction of 52 percent
- 8th Street Basin: TOC reduction of 59 percent and TN reduction of 75 percent
- San Sevaine 5: TOC reduction of 78 percent and TN reduction of 69 percent
- Victoria: TOC reduction of 78 percent and TN reduction of 82 percent

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

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

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

C. Diluent Water

For 2Q13, diluent water quality sampling of local runoff was conducted in May 2013 at Declez Basin, and Hickory Basin. Table 2-6 lists the results of the local runoff sampling and analyses. Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the CDPH-approved Diluent Water Monitoring Plan. The quarterly sampling schedule for stormwater and local runoff is presented in Table 4-2 of the plan. Stormwater is sampled during the rainy season (1st and 4th quarters) and local runoff is sampled during the dry season (2nd and 3rd quarters). Samples are collected at about half the locations during each seasonal quarter, alternating between even and odd years. Table 5-2 of the plan summarizes the sample type and reporting frequency for the parameters listed in Tables I, II, III, and IV of the Diluent Water Monitoring requirement III.3 of the MRP.

D. Groundwater Monitoring Wells

During 2Q13, groundwater quality within the vicinity of Banana and Hickory Basins was monitored by sampling a network of six wells. The groundwater quality within the vicinity of Turner Basin was monitored by sampling a network of six wells. The groundwater quality within the vicinity of the RP3 Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the 8th Street Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the Brooks Basin was monitored by sampling a network of seven wells. The groundwater quality within the vicinity of the Ely Basin was monitored by sampling a network of four wells. The groundwater quality within the vicinity of the San Sevaine and Victoria Basins were monitored by sampling a network of six wells. The wells in the monitoring well networks for Hickory and Banana, Turner, 8th Street, Ely, Brooks, RP3, and San Sevaine and Victoria Basins are summarized in Table 2-7, and presented on Figures 2-1 through 2-7, respectively. The groundwater constituents analyzed from the monitoring wells during quarterly is presented in Table 2-8.

Groundwater monitoring is conducted to evaluate water quality conditions in the vicinity of the recharge basins utilizing recycled water. Groundwater monitoring results can be used to assess background conditions, time the arrival of recharge waters, and the impact recharged water has on downgradient water supplies. Any 2Q13 analyses results which exceeded primary or secondary MCLs are shown in the tables in bold italic font. Of note are the analyses for the following wells and constituents:

Turbidity exceeding the secondary MCL of 5 NTU was observed in several monitoring wells, namely: BRK-2/1, Ely MW-1, Bishop of San Bernardino Corporation (Ely), and VCT-1/1. Measurements for pH exceeding the secondary MCL range of 6.5 to 8.5 were found at BRK-2/2, Ely MW-1, and VCT-2/2.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in the Alcoa MW3 and Ely MW2 (Walnut). The wells south of Ely and near RP3 are located in an area with historically high EC levels (>1,000 µmhos/cm). The Bishop of San Bernardino Corporation and Unitex 91090 wells slightly exceeded the TDS secondary MCL.

Color exceeded the secondary MCL of 15 units in monitoring wells BRK-2/1, Ely MW1, and VCT-1/1. Total recoverable iron continues to be above the secondary MCL of 300 µg/L at the Bishop of San Bernardino Corporation. Total recoverable manganese was above the secondary MCL of 50 µg/L at RP3-1/2.

Some monitoring wells in the RP3, 8th Street, Brooks, and Ely monitoring networks also have NO₃-N concentrations above the primary MCL of 10 mg/L. These higher levels are characteristic of groundwater quality in the local area where historically the NO₃-N concentrations ranges from 10-30 mg/L. TDS and NO₃-N concentrations in the area of the RP3 monitoring well network are documented in the CBWM 2012 State of the Basin report.

3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The 8th Street, Banana, Brooks, Hickory, RP3, San Sevaine, Turner, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (local runoff, stormwater, and/or imported water) captured during 2Q13 at the basins that have initiated recharge using recycled water.

4. Operational Problems & Preventive or Corrective Actions

No operational problems were encountered this quarter, therefore no corrective actions were necessary for the following: Regional Water Recycling Facilities - RP-1 & RP-4 and recharge operations.

The 8TH-1/1 monitoring well experienced high turbidity during 1Q13 sampling. It was determined that the well needed to be redeveloped. No samples were analyzed during 1Q13 or 2Q13. The 8TH-1/1 monitoring well will be sampled following redevelopment activities slated during 3Q13.

The Southridge JHS monitoring well pump experienced an electrical short during 2Q13. The well will be sampled after the pump issues are addressed during 3Q13.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 2Q13 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 IEUA Groundwater Recharge

Coordinator with a copy of the well permit application and a timeline for the completion of IEUA's review. Following the review, IEUA will notify SBCDEHS of its findings in writing. IEUA will also notify the California Department of Public Health and the Regional Board of well permit applications that it recommends be declined due to well locations determined to fall within a 500-foot buffer zone.

6. MVWD ASR Project

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

Table 2-1a
 Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2013
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| Unit | RP-1 Effluent | | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|----------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|-----------------|------------------|----------|---------------------------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|---------|------------------|----------|---------------------------|
| | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC ⁷ | TDS ³ | Hardness | Coliform ^{1,2,4} | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC | TDS ³ | Hardness | Coliform ^{1,2,4} |
| | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL |
| Limits | 2;5;10 | 16 ⁵ | | 5 ⁶ | | 6<pH<9 | | | | 2.2;23;240 | 2;5;10 | 16 ⁵ | | 5 ⁶ | | 6<pH<9 | | | | 2.2;23;240 |
| 04/01/13 | 0.5 | 5.6 | 8.4 | | 8.4 | 7.0 | 843 | | | <2 | 0.6 | 3.9 | 4.3 | | 4.3 | 7.1 | 750 | | | <2 |
| 04/02/13 | 0.5 | 5.8 | 8.3 | | 8.3 | 7.0 | 855 | | | <2 | 0.7 | 4.0 | 4.8 | | 4.8 | 7.1 | 750 | | | <2 |
| 04/03/13 | 0.6 | 5.8 | 8.2 | | 8.2 | 6.9 | 884 | | | <2 | 0.6 | 4.0 | 4.6 | | 4.6 | 7.1 | 750 | | | <2 |
| 04/04/13 | 0.6 | 5.7 | | | | 7.0 | 883 | | | <2 | 0.6 | 4.0 | | | 7.1 | 740 | | | | <2 |
| 04/05/13 | 0.6 | 5.5 | | | | 7.0 | 883 | | | <2 | 0.7 | 3.9 | | | 7.1 | 740 | | | | <2 |
| 04/06/13 | 0.6 | 5.5 | | | | 7.0 | 901 | | | <2 | 0.6 | 3.8 | | | 7.1 | 755 | | | | <2 |
| 04/07/13 | 0.6 | 5.7 | 7.1 | 7.1 | 7.1 | 7.0 | 909 | 470 | 153 | <2 | 0.6 | 4.0 | 4.7 | 4.7 | 4.7 | 7.0 | 755 | 452 | 148 | <2 |
| 04/08/13 | 0.7 | 6.1 | 7.3 | | 7.3 | 7.0 | 901 | | | <2 | 0.6 | 4.2 | 4.2 | | 4.2 | 7.1 | 755 | | | <2 |
| 04/09/13 | 0.8 | 6.5 | 8.2 | | 8.2 | 6.9 | 903 | | | <2 | 0.6 | 4.2 | 5.6 | | 5.6 | 7.1 | 760 | | | <2 |
| 04/10/13 | 0.6 | 6.9 | 7.2 | | 7.2 | 6.9 | 910 | | | 2 | 0.7 | 4.2 | 5.4 | | 5.4 | 7.1 | 765 | | | <2 |
| 04/11/13 | 0.6 | 6.6 | | | | 6.9 | 917 | | | <2 | 0.6 | 4.4 | | | 7.1 | 772 | | | | <2 |
| 04/12/13 | 0.5 | 6.3 | | | | 6.9 | 906 | | | <2 | 0.6 | 4.2 | | | 7.1 | 765 | | | | <2 |
| 04/13/13 | 0.5 | 5.9 | | | | 7.0 | 895 | | | <2 | 0.6 | 4.2 | | | 7.1 | 760 | | | | <2 |
| 04/14/13 | 0.5 | 6.0 | 7.8 | 7.8 | 7.8 | 7.0 | 896 | 496 | | <2 | 0.6 | 4.3 | 4.2 | 5.8 | 4.2 | 7.1 | 765 | 464 | | <2 |
| 04/15/13 | 0.6 | 6.0 | 8.6 | | 8.6 | 7.0 | 893 | | | <2 | 0.6 | 4.3 | 4.6 | | 4.6 | 7.1 | 770 | | | <2 |
| 04/16/13 | 0.6 | 6.2 | 8.1 | | 8.1 | 6.9 | 868 | | | <2 | 0.6 | 4.3 | 5.0 | | 5.0 | 7.1 | 785 | | | <2 |
| 04/17/13 | 0.6 | 6.2 | 8.2 | | 8.2 | 6.9 | 875 | | | <2 | 0.6 | 4.2 | 5.0 | | 5.0 | 7.0 | 775 | | | <2 |
| 04/18/13 | 0.6 | 6.2 | | | | 7.0 | 865 | | | <2 | 0.6 | 4.2 | | | 7.1 | 764 | | | | <2 |
| 04/19/13 | 0.6 | 6.1 | | | | 7.0 | 870 | | | <2 | 0.5 | 4.1 | | | 7.0 | 770 | | | | <2 |
| 04/20/13 | 0.7 | 6.0 | | | | 7.0 | 875 | | | <2 | 0.5 | 4.2 | | | 7.0 | 765 | | | | <2 |
| 04/21/13 | 0.5 | 6.3 | 8.0 | 8.0 | 8.0 | 7.0 | 863 | 492 | 2 | 0.5 | 4.4 | 3.4 | 5.8 | 3.4 | 7.1 | 755 | 456 | | | <2 |
| 04/22/13 | 0.5 | 6.2 | 7.5 | | 7.5 | 7.0 | 856 | | | <2 | 0.5 | 4.4 | 3.9 | | 3.9 | 7.1 | 760 | | | <2 |
| 04/23/13 | 0.5 | 6.2 | 7.8 | | 7.8 | 7.0 | 873 | | | <2 | 0.5 | 4.4 | 4.1 | | 4.1 | 7.1 | 760 | | | <2 |
| 04/24/13 | 0.5 | 6.1 | 7.5 | | 7.5 | 7.0 | 872 | | | <2 | 0.4 | 4.3 | 4.1 | | 4.1 | 7.1 | 760 | | | <2 |
| 04/25/13 | 0.6 | 5.8 | 7.8 | | | 7.0 | 859 | | | <2 | 0.4 | 4.3 | 6.3 | | 7.1 | 760 | | | | <2 |
| 04/26/13 | 0.7 | 5.7 | 8.3 | | | 7.0 | 856 | | | <2 | 0.5 | 4.2 | 5.2 | | 7.1 | 745 | | | | <2 |
| 04/27/13 | 0.7 | 5.7 | 7.4 | | | 7.0 | 870 | | | <2 | 0.6 | 4.3 | 4.4 | | 7.1 | 740 | | | | <2 |
| 04/28/13 | 0.7 | 6.0 | 7.4 | 7.4 | 7.4 | 7.0 | 871 | 488 | | <2 | 0.6 | 4.4 | 3.7 | 4.8 | 3.7 | 7.1 | 750 | 454 | | <2 |
| 04/29/13 | 0.8 | 6.0 | 6.8 | | 6.8 | 7.1 | 864 | | | 2 | 0.6 | 4.5 | 3.7 | | 3.7 | 7.1 | 745 | | | <2 |
| 04/30/13 | 0.8 | 6.0 | 7.6 | | 7.6 | 7.0 | 858 | | | <2 | 0.7 | 4.5 | 3.9 | | 3.9 | 7.1 | 755 | | | <2 |
| | | | | | | 0.0 | | | | | | | | | | | | | | |
| Avg | 0.6 | 6.0 | 7.8 | 7.6 | 7.8 | 6.8 | 879 | 487 | 153 | <2 | 0.6 | 4.2 | 4.5 | 5.3 | 4.4 | 7.1 | 758 | 457 | 148 | <2 |
| Min | 0.5 | 5.5 | 6.8 | 7.1 | 6.8 | 0.0 | 843 | 470 | 153 | <2 | 0.4 | 3.8 | 3.4 | 4.7 | 3.4 | 7.0 | 740 | 452 | 148 | <2 |
| Max | 0.8 | 6.9 | 8.6 | 8.0 | 8.6 | 7.1 | 917 | 496 | 153 | 2 | 0.7 | 4.5 | 6.3 | 5.8 | 5.6 | 7.1 | 785 | 464 | 148 | <2 |

Note:

Bolded characters signify an exceedance of a permit limitation

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

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

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

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

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

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

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

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

Table 2-1b
 Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for May 2013
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| Unit | RP-1 Effluent | | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|----------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|-----------------|------------------|----------|---------------------------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|---------|------------------|----------|---------------------------|
| | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC ⁷ | TDS ³ | Hardness | Coliform ^{1,2,4} | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC | TDS ³ | Hardness | Coliform ^{1,2,4} |
| | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL |
| Limits | 2;5;10 | 16 ⁵ | | 5 ⁶ | | 6<pH<9 | | | | 2.2;23;240 | 2;5;10 | 16 ⁵ | | 5 ⁶ | 6<pH<9 | | | | | 2.2;23;240 |
| 05/01/13 | 0.8 | 6.2 | 8.4 | | 8.4 | 7.0 | 880 | | | <2 | 0.8 | 4.5 | 4.3 | | 4.3 | 7.1 | 760 | | | <2 |
| 05/02/13 | 0.7 | 6.1 | 9.3 | | | 7.0 | 896 | | | <2 | 0.8 | 4.5 | 4.8 | | | 7.1 | 755 | | | <2 |
| 05/03/13 | 0.6 | 5.9 | 9.4 | | | 7.0 | 894 | | | <2 | 0.9 | 4.3 | 4.9 | | | 7.0 | 755 | | | <2 |
| 05/04/13 | 0.6 | 6.2 | 8.4 | | | 7.0 | 895 | | | <2 | 0.9 | 4.4 | 3.9 | | | 7.1 | 755 | | | <2 |
| 05/05/13 | 0.6 | 6.4 | 8.4 | 8.4 | 8.4 | 7.1 | 886 | 494 | 162 | <2 | 1.0 | 4.6 | 3.7 | 4.8 | 3.7 | 7.1 | 755 | 448 | 150 | <2 |
| 05/06/13 | 0.6 | 6.7 | 9.3 | | | 9.3 | 880 | | | 2 | 1.2 | 4.6 | 3.6 | | 3.6 | 7.1 | 755 | | | <2 |
| 05/07/13 | 0.7 | 6.7 | 9.7 | | | 9.7 | 883 | | | <2 | 1.0 | 4.6 | 5.8 | | 5.8 | 7.0 | 760 | | | <2 |
| 05/08/13 | 0.7 | 6.5 | 9.0 | | | 9.0 | 882 | | | <2 | 1.0 | 4.6 | 4.1 | | 4.1 | 7.0 | 755 | | | <2 |
| 05/09/13 | 1.2 | 6.8 | | | | 7.1 | 882 | | | <2 | 0.9 | 4.6 | | | | 7.1 | 740 | | | <2 |
| 05/10/13 | 0.8 | 6.6 | | | | 7.0 | 891 | | | <2 | 0.9 | 4.4 | | | | 7.1 | 740 | | | <2 |
| 05/11/13 | 0.9 | 6.6 | | | | 7.0 | 898 | | | <2 | 1.0 | 4.5 | | | | 7.1 | 735 | | | <2 |
| 05/12/13 | 0.9 | 7.0 | 7.7 | 7.7 | 7.7 | 7.1 | 923 | 492 | | <2 | 0.9 | 4.5 | 3.0 | 4.2 | 3.0 | 7.1 | 730 | 446 | | <2 |
| 05/13/13 | 0.9 | 6.8 | 8.7 | | 8.7 | 7.0 | 953 | | | <2 | 0.9 | 4.5 | 2.4 | | 2.4 | 7.1 | 740 | | | <2 |
| 05/14/13 | 0.9 | 6.7 | 9.2 | | 9.2 | 7.1 | 945 | | | <2 | 0.6 | 4.5 | 3.2 | | 3.2 | 7.1 | 751 | | | <2 |
| 05/15/13 | 0.8 | 6.6 | 9.3 | | 9.3 | 7.1 | 887 | | | <2 | 0.4 | 4.3 | 3.1 | | 3.1 | 7.1 | 745 | | | <2 |
| 05/16/13 | 0.8 | 6.6 | | | | 7.1 | 916 | | | <2 | 0.8 | 4.2 | | | | 7.0 | 758 | | | <2 |
| 05/17/13 | 0.7 | 6.4 | | | | 7.1 | 911 | | | <2 | 0.8 | 4.2 | | | | 7.1 | 750 | | | <2 |
| 05/18/13 | 0.7 | 6.5 | | | | 7.1 | 900 | | | <2 | 0.9 | 4.3 | | | | 7.1 | 745 | | | <2 |
| 05/19/13 | 0.7 | 6.7 | 9.6 | 9.6 | 9.6 | 7.1 | 922 | 498 | | <2 | 0.8 | 4.5 | 2.9 | 3.9 | 2.9 | 7.1 | 745 | 452 | | <2 |
| 05/20/13 | 0.7 | 6.7 | 8.4 | | 8.4 | 7.1 | 892 | | | <2 | 0.9 | 4.7 | 3.4 | | 3.4 | 7.1 | 755 | | | <2 |
| 05/21/13 | 0.7 | 6.4 | 8.3 | | 8.3 | 7.1 | 882 | | | <2 | 0.8 | 4.4 | 3.4 | | 3.4 | 7.1 | 765 | | | <2 |
| 05/22/13 | 0.7 | 6.5 | 8.8 | | 8.8 | 7.1 | 873 | | | <2 | 0.7 | 4.4 | 3.4 | | 3.4 | 7.1 | 755 | | | <2 |
| 05/23/13 | 0.7 | 6.7 | | | | 7.2 | 872 | | | <2 | 0.6 | 4.4 | | | | 7.1 | 750 | | | <2 |
| 05/24/13 | 0.6 | 6.5 | | | | 7.1 | 876 | | | <2 | 0.7 | 4.4 | | | | 7.1 | 740 | | | <2 |
| 05/25/13 | 0.6 | 6.0 | | | | 7.2 | 880 | | | <2 | 0.7 | 4.3 | | | | 7.1 | 745 | | | <2 |
| 05/26/13 | 0.6 | 5.7 | | | | 7.2 | 884 | | | <2 | 0.7 | 4.4 | | | | 7.1 | 745 | | | <2 |
| 05/27/13 | 0.6 | 5.8 | 8.3 | | 8.3 | 7.2 | 885 | | | <2 | 0.6 | 4.6 | 3.3 | | 3.4 | 7.1 | 746 | | | <2 |
| 05/28/13 | 0.6 | 5.9 | 7.9 | | 7.9 | 7.2 | 882 | | | <2 | 0.6 | 4.6 | 2.6 | | 2.6 | 7.2 | 755 | | | <2 |
| 05/29/13 | 0.6 | 5.9 | 7.1 | 7.1 | 7.1 | 7.1 | 877 | 486 | | <2 | 0.7 | 4.7 | 2.1 | 2.8 | 2.1 | 7.2 | 760 | 452 | | <2 |
| 05/30/13 | 0.5 | 5.8 | | | | 7.2 | 877 | | | <2 | 0.7 | 4.7 | | | | 7.2 | 760 | | | <2 |
| 05/31/13 | 0.5 | 5.7 | | | | 7.2 | 872 | | | <2 | 0.7 | 4.3 | | | | 7.2 | 755 | | | <2 |
| Avg | 0.7 | 6.4 | 8.7 | 8.2 | 8.6 | 7.1 | 893 | 493 | 162 | <2 | 0.8 | 4.5 | 3.6 | 3.9 | 3.4 | 7.1 | 750 | 450 | 150 | <2 |
| Min | 0.5 | 5.7 | 7.1 | 7.1 | 7.1 | 7.0 | 872 | 486 | 162 | <2 | 0.4 | 4.2 | 2.1 | 2.8 | 2.1 | 7.0 | 730 | 446 | 150 | <2 |
| Max | 1.2 | 7.0 | 9.7 | 9.6 | 9.7 | 7.2 | 953 | 498 | 162 | 2 | 1.2 | 4.7 | 5.8 | 4.8 | 5.8 | 7.2 | 765 | 452 | 150 | <2 |

Note:

Bolded characters signify an exceedance of a permit limitation

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

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

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

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

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

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

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

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

Table 2-1c
 Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for June 2013
 (Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| Unit | RP-1 Effluent | | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|----------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|-----------------|------------------|----------|---------------------------|----------------------------|-----------------|--------------------|----------------|------------------|-----------------|---------|------------------|----------|---------------------------|
| | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC ⁷ | TDS ³ | Hardness | Coliform ^{1,2,4} | Turbidity ^{1,2,7} | TOC | NO ₃ -N | TN | TIN ³ | pH ⁷ | EC | TDS ³ | Hardness | Coliform ^{1,2,4} |
| Limits | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | mg/L | mpn/100mL |
| | 2;5;10 | 16 ⁵ | | 5 ⁶ | | 6<pH<9 | | | | 2.2;23;240 | 2;5;10 | 16 ⁵ | | 5 ⁶ | 6<pH<9 | | | | | 2.2;23;240 |
| 06/01/13 | 0.5 | 5.7 | | | | 7.2 | 875 | | | <2 | 0.9 | 4.2 | | | | 7.2 | 765 | | | <2 |
| 06/02/13 | 0.5 | 6.0 | 6.3 | 6.3 | 6.3 | 7.2 | 873 | 484 | | <2 | 0.7 | 4.5 | 2.3 | 2.9 | 2.3 | 7.2 | 760 | 456 | 144 | <2 |
| 06/03/13 | 0.5 | 5.7 | 6.4 | | 6.4 | 7.2 | 858 | | 157 | <2 | 0.7 | 4.4 | 2.1 | | 2.1 | 7.2 | 770 | | | <2 |
| 06/04/13 | 0.5 | 5.4 | 7.3 | | 7.3 | 7.2 | 858 | | | <2 | 0.6 | 4.3 | 2.3 | | 2.3 | 7.2 | 770 | | | <2 |
| 06/05/13 | 0.4 | 6.4 | 8.1 | | 8.1 | 7.0 | 871 | | | <2 | 0.7 | 4.4 | 2.4 | | 2.4 | 7.1 | 770 | | | <2 |
| 06/06/13 | 0.4 | 6.0 | | | | 6.8 | 884 | | | <2 | 0.7 | 4.9 | | | | 7.0 | 770 | | | <2 |
| 06/07/13 | 0.4 | 5.9 | | | | 6.8 | 881 | | | <2 | 0.8 | 4.7 | | | | 7.0 | 780 | | | <2 |
| 06/08/13 | 0.4 | 6.2 | | | | 6.8 | 878 | | | <2 | 0.8 | 4.8 | | | | 7.1 | 765 | | | <2 |
| 06/09/13 | 0.4 | 6.2 | 6.3 | 6.3 | 6.3 | 6.9 | 876 | 496 | | <2 | 0.9 | 5.0 | 1.1 | 1.1 | 1.1 | 7.1 | 775 | 460 | | <2 |
| 06/10/13 | 0.5 | 6.1 | 7.5 | | 7.5 | 6.8 | 892 | | | <2 | 0.8 | 5.0 | 0.9 | | 0.9 | 7.0 | 785 | | | <2 |
| 06/11/13 | 0.4 | 6.1 | 7.0 | | 7.0 | 6.8 | 892 | | | <2 | 0.7 | 5.0 | 1.2 | | 1.2 | 7.1 | 770 | | | <2 |
| 06/12/13 | 0.4 | 6.0 | 6.6 | | 6.6 | 6.8 | 877 | | | <2 | 0.6 | 4.9 | 2.1 | | 2.1 | 7.1 | 780 | | | <2 |
| 06/13/13 | 0.4 | 6.0 | | | | 6.8 | 866 | | | <2 | 0.7 | 4.8 | | | | 7.1 | 802 | | | <2 |
| 06/14/13 | 0.4 | 5.9 | | | | 6.8 | 864 | | | 2 | 0.7 | 4.7 | | | | 7.1 | 780 | | | <2 |
| 06/15/13 | 0.4 | 5.7 | | | | 6.8 | 865 | | | <2 | 0.7 | 4.7 | | | | 7.1 | 775 | | | <2 |
| 06/16/13 | 0.4 | 5.8 | 8.3 | 8.3 | 8.3 | 6.8 | 862 | 528 | | 2 | 0.8 | 5.0 | 2.3 | 3.2 | 2.3 | 7.1 | 780 | 498 | | <2 |
| 06/17/13 | 0.5 | 6.0 | 8.2 | | 8.2 | 6.8 | 856 | | | <2 | 1.4 | 5.3 | 4.8 | | 4.8 | 7.0 | 805 | | | <2 |
| 06/18/13 | 0.5 | 5.9 | 7.5 | | 7.5 | 6.9 | 862 | | | <2 | 0.6 | 5.0 | 3.0 | | 3.0 | 7.0 | 795 | | | <2 |
| 06/19/13 | 0.5 | 5.8 | 7.0 | | 7.0 | 6.8 | 860 | | | <2 | 0.4 | 4.9 | 2.6 | | 2.6 | 7.1 | 785 | | | <2 |
| 06/20/13 | 0.5 | 5.9 | | | | 6.8 | 853 | | | <2 | 0.6 | 4.9 | | | | 7.0 | 780 | | | <2 |
| 06/21/13 | 0.5 | 5.6 | | | | 6.8 | 864 | | | <2 | 0.8 | 4.9 | | | | 7.0 | 780 | | | <2 |
| 06/22/13 | 0.5 | 5.7 | | | | 6.9 | 884 | | | 2 | 0.8 | 4.9 | | | | 7.0 | 780 | | | <2 |
| 06/23/13 | 0.5 | 5.8 | 6.4 | 6.4 | 6.4 | 6.9 | 885 | 484 | | <2 | 0.9 | 5.1 | 3.3 | 4.2 | 3.3 | 7.0 | 785 | 480 | | <2 |
| 06/24/13 | 0.6 | 6.0 | 5.5 | | 5.5 | 6.9 | 860 | | | <2 | 1.0 | 5.0 | 3.1 | | 3.1 | 7.0 | 800 | | | <2 |
| 06/25/13 | 0.5 | 6.1 | 3.9 | | 3.9 | 6.9 | 846 | | | <2 | 0.8 | 5.1 | 3.0 | | 3.0 | 7.0 | 790 | | | <2 |
| 06/26/13 | 0.4 | 6.3 | 4.9 | | 4.9 | 6.9 | 853 | | | <2 | 0.7 | 5.0 | 3.3 | | 3.3 | 7.0 | 775 | | | <2 |
| 06/27/13 | 0.4 | 6.1 | | | | 6.9 | 871 | | | <2 | 0.6 | 4.7 | | | | 7.0 | 760 | | | <2 |
| 06/28/13 | 0.4 | 5.9 | | | | 6.9 | 874 | | | <2 | 0.6 | 4.5 | | | | 7.0 | 750 | | | <2 |
| 06/29/13 | 0.4 | 6.0 | | | | 6.9 | 880 | | | <2 | 0.6 | 4.4 | | | | 7.0 | 750 | | | <2 |
| 06/30/13 | 0.5 | 6.0 | 4.6 | 4.6 | 4.6 | 6.9 | 893 | 490 | | <2 | 0.5 | 4.7 | 2.4 | 2.4 | 2.4 | 7.0 | 755 | 460 | | <2 |
| Avg | 0.5 | 5.9 | 6.6 | 6.4 | 6.6 | 6.9 | 870 | 496 | 157 | <2 | 0.7 | 4.8 | 2.5 | 2.8 | 2.5 | 6.8 | 776 | 471 | 144 | <2 |
| Min | 0.4 | 5.4 | 3.9 | 4.6 | 3.9 | 6.8 | 846 | 484 | 157 | <2 | 0.4 | 4.2 | 0.9 | 1.1 | 0.9 | 0.0 | 750 | 456 | 144 | <2 |
| Max | 0.6 | 6.4 | 8.3 | 8.3 | 8.3 | 7.2 | 893 | 528 | 157 | 2 | 1.4 | 5.3 | 4.8 | 4.2 | 4.8 | 7.2 | 805 | 498 | 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. 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)

| Date | TIN | | TDS | |
|--------|---------|-----------------|---------|-----------------|
| | Monthly | 12-Mo. Run Avg. | Monthly | 12-Mo. Run Avg. |
| Jul-12 | 5.4 | 6.0 | 477 | 472 |
| Aug-12 | 4.8 | 6.1 | 463 | 473 |
| Sep-12 | 5.1 | 6.0 | 472 | 474 |
| Oct-12 | 4.9 | 6.0 | 486 | 476 |
| Nov-12 | 6.1 | 6.0 | 485 | 479 |
| Dec-12 | 6.0 | 6.0 | 492 | 482 |
| Jan-13 | 6.1 | 5.9 | 495 | 484 |
| Feb-13 | 6.8 | 5.9 | 490 | 486 |
| Mar-13 | 6.1 | 5.9 | 493 | 485 |
| Apr-13 | 6.4 | 5.8 | 501 | 486 |
| May-13 | 6.4 | 5.8 | 503 | 487 |
| Jun-13 | 5.8 | 5.8 | 502 | 488 |
| Avg | 5.8 | 5.9 | 488 | 481 |
| Min | 4.8 | 5.8 | 463 | 472 |
| Max | 6.8 | 6.1 | 503 | 488 |
| Limit | | 8.0 | | 550 |

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

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

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

| Constituent | 3Q12 | 4Q12 | 1Q13 | 2Q13 | 4Q Run. Avg. ¹ | Limit | Unit | Method |
|---|-------|-------|-------|-------|------------------------------|-------------------|------|-------------------|
| Inorganic Chemicals | | | | | | | | |
| Aluminum | 39 | 28 | 29 | 30 | 31 | 1000 | µg/L | EPA 200.8 |
| Antimony | <1 | <1 | <1 | <1 | <1 | 6 | µg/L | EPA 200.8 |
| Arsenic | <2 | <2 | <2 | <2 | <2 | 10 | µg/L | EPA 200.8 |
| Asbestos | <0.8 | <0.4 | <0.7 | <0.7 | <0.8 | 7 | MFL | EPA 100.2 |
| Barium | 4 | 6 | 8 | 10 | 7 | 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 | 0.8 | 1.5 | 0.7 | 0.8 | 0.9 | 50 | µg/L | EPA 200.8 |
| Cyanide | <5 | <5 | 6 | 6 | 6 | 150 | µg/L | SM 4500-CN E |
| Fluoride | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 2 | mg/L | SM 4500-F C |
| Mercury | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 2 | µg/L | EPA 245.2 |
| Nickel | 2 | 2 | 2 | 3 | 2 | 100 | µg/L | EPA 200.8 |
| Perchlorate | <4 | <4 | <2 | <4 | <4 | 6 | µg/L | EPA 314/EPA 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) | | | | | | | | |
| Benzene | <0.5 | <0.5 | <0.5 | 1.0 | <0.6 | 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 |
| Monochlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 70 | µg/L | EPA 524.2 |
| Methyl-tert-butyl ether | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 13 | µg/L | EPA 524.2 |
| Styrene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 100 | µg/L | EPA 524.2 |
| 1,1,1,2-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 |
| m,p-Xylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1750 ² | µg/L | EPA 524.2 |
| o-Xylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | µg/L | EPA 524.2 |
| Non-Volatile Synthetic Organic Chemicals (SOCs) | | | | | | | | |
| Alachlor (Alanex) | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 2 | µg/L | EPA 505 |
| Atrazine | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 1 | µg/L | EPA 525.2 |
| Bentazon | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 18 | µg/L | EPA 515.4 |
| Benzo(a)pyrene | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 0.2 | µg/L | EPA 525.2 |
| Carbofuran | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 18 | µg/L | EPA 531.2 |
| Chlordane | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | µg/L | EPA 505 |
| 2,4-D | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 70 | µg/L | EPA 515.4 |
| Dalapon | 3 | 3 | 3 | <1 | 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 | <0.6 | <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 |

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

| Constituent | | | | | 4Q Run. | | Unit | Method |
|---|-------|-------|-------|-------|-------------------|----------|-------|-------------------|
| | 3Q12 | 4Q12 | 1Q13 | 2Q13 | Avg. ¹ | Limit | | |
| Ethylene Dibromide | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.05 | µg/L | EPA 504.1 |
| Glyphosate | <25 | <6 | <6 | <6 | <25 | 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 | <0.05 | <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 |
| Action Level Chemicals | | | | | | | | |
| Copper | 3.4 | 2.8 | 2.6 | 2.6 | 2.9 | 1300 | µg/L | EPA 200.8 |
| Lead | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 15 | µg/L | EPA 200.8 |
| Radionuclides | | | | | | | | |
| Combined Radium-226 and Radium 228 | <0.43 | <0.27 | <0.23 | <0.31 | <0.43 | 5 | pCi/L | EPA 903.0 |
| Gross Alpha Particle Activity | <2.9 | <3 | <3 | <1.7 | <3 | 15 | pCi/L | EPA 900.0/SM7110C |
| Tritium | <241 | <250 | <264 | <251 | <264 | 20,000 | pCi/L | EPA 906 |
| Strontium-90 | <0.64 | <0.50 | <0.55 | <0.80 | <0.80 | 8 | pCi/L | EPA 905 |
| Gross Beta Particle Activity | 9 | 11 | 10 | 12 | 10 | 50 | pCi/L | EPA 900.0 |
| Uranium | <0.7 | <0.7 | <0.7 | <0.7 | <0.7 | 20 | pCi/L | EPA 200.8 |
| Secondary Maximum Contaminant Level Chemicals | | | | | | | | |
| Aluminum | 39 | 28 | 29 | 30 | 31 | 200 | µg/L | EPA 200.8 |
| Copper | 3.4 | 2.8 | 2.6 | 2.6 | 2.9 | 1000 | µg/L | EPA 200.8 |
| Corrosivity ³ | NR | NR | NR | NR | Non-Cor. | Non-Cor. | SI | SM 2330B |
| Foaming Agents (MBAS) ³ | 0.05 | 0.07 | 0.11 | 0.08 | 0.08 | 0.5 | mg/L | S5540C/EPA 425.1 |
| Iron ³ | NR | NR | NR | NR | 109 | 300 | µg/L | EPA 200.7 |
| Manganese | 4 | 18 | 16 | 33 | 18 | 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 | 3 | 3 | 40 | 3 | 12 | 3 | TON | SM 2150B |
| Silver | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | 100 | µg/L | EPA 200.8 |
| Thiobencarb | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 1 | µg/L | EPA 525.2 |
| Zinc | 23 | 26 | 27 | 26 | 26 | 5000 | µg/L | EPA 200.8 |
| Miscellaneous Regulated Constituents | | | | | | | | |
| Oil & Grease ⁴ | <1 | <1 | <1 | <1 | <1 | 1 | mg/L | EPA 1664 |
| Disinfection Byproducts | | | | | | | | |
| Bromate | <5 | <5 | <5 | <5 | <5 | 10 | µg/L | EPA 300.1 |
| Chlorite | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 1 | mg/L | EPA 300.0 |
| BRK-LYS-25 BNA-LYS-25 BNA-LYS-25 BRK-LYS-25 | | | | | | | | |
| Lysimeter Compliance Point Data | 3Q12 | 4Q12 | 1Q13 | 2Q13 | | | | |
| Total Trihalomethanes (TTHMs) | <4 | <4 | <4 | <4 | <4 | 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

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 | 2Q13 | Unit | Method | Constituent | 2Q13 | Unit | Method |
|-----------------------------------|------|------|-----------|--|------|------|-----------|
| Metals | | | | Pesticides | | | |
| Chromium (III) ¹ | 0.8 | µg/L | EPA 200.8 | Aldrin | NR | µg/L | EPA 608 |
| Volatile Organic Chemicals (VOCs) | | | | BHC, alpha isomer | NR | µg/L | EPA 608 |
| Acrolein | NR | µg/L | EPA 624 | BHC, beta isomer | NR | µg/L | EPA 608 |
| Acrylonitrile | NR | µg/L | EPA 624 | BHC, delta isomer | NR | µg/L | EPA 608 |
| Bromoform | <0.5 | µg/L | EPA 524.2 | 4,4'-DDT | NR | µg/L | EPA 608 |
| Chlorodibromomethane | 4.9 | µg/L | EPA 524.2 | 4,4'-DDE | NR | µg/L | EPA 608 |
| Chloroethane | <0.5 | µg/L | EPA 524.2 | 4,4'-DDD | NR | µg/L | EPA 608 |
| 2-Chloroethylvinylether | NR | µg/L | EPA 624 | Dieldrin | NR | µg/L | EPA 608 |
| Chloroform | 63.0 | µg/L | EPA 524.2 | Endosulfan I | NR | µg/L | EPA 608 |
| Dichlorobromomethane | 23.0 | µg/L | EPA 524.2 | Endosulfan II | NR | µg/L | EPA 608 |
| Methyl Bromide | <1 | µg/L | EPA 524.2 | Endosulfan Sulfate | NR | µg/L | EPA 608 |
| Methyl Chloride | <0.5 | µg/L | EPA 524.2 | Unregulated Chemicals | | | |
| Acid Extractibles | | | | Endrin Aldehyde | NR | µg/L | EPA 608 |
| 2-Chlorophenol | NR | µg/L | EPA 625 | Chromium VI | 0.17 | µg/L | EPA 218.6 |
| 2,4-Dichlorophenol | NR | µg/L | EPA 625 | Ethyl tertiary butyl ether | <0.5 | µg/L | EPA 524.2 |
| 2,4-Dimethylphenol | NR | µg/L | EPA 625 | Tertiary amyl methyl ether | <0.5 | µg/L | EPA 524.2 |
| 2-Methyl-4,6-dinitrophenol | NR | µg/L | EPA 625 | Chemicals w/ State Notification Levels ² | | | |
| 2,4-Dinitrophenol | NR | µg/L | EPA 625 | Boron | 0.3 | mg/L | EPA 200.7 |
| 2-Nitrophenol | NR | µg/L | EPA 625 | n-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| 4-Nitrophenol | NR | µg/L | EPA 625 | sec-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| 4-Chloro-3-methylphenol | NR | µg/L | EPA 625 | tert-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| Phenol | NR | µg/L | EPA 625 | Carbon disulfide | <0.5 | µg/L | EPA 524.2 |
| 2,4,6-Trichlorophenol | NR | µg/L | EPA 625 | Chlorate | NR | µg/L | EPA 300.0 |
| Base/Neutral Extractibles | | | | 2-Chlorotoluene | <0.5 | µg/L | EPA 524.2 |
| Acenaphthene | NR | µg/L | EPA 625 | 4-Chlorotoluene | <0.5 | µg/L | EPA 524.2 |
| Acenaphthylene | NR | µg/L | EPA 625 | Diazinon | NR | µg/L | EPA 525.2 |
| Anthracene | NR | µg/L | EPA 625 | Dichlorodifluoromethane (Freon 12) | <0.5 | µg/L | EPA 524.2 |
| Benidine | NR | µg/L | EPA 625 | 1,4 - Dioxane | <1 | µg/L | EPA 522 |
| Benzo(a)anthracene | NR | µg/L | EPA 625 | Ethylene glycol | NR | mg/L | EPA 8015B |
| Benzo(b)fluoranthene | NR | µg/L | EPA 625 | Formaldehyde | NR | µg/L | EPA 556 |
| Benzo(g,h,i)perylene | NR | µg/L | EPA 625 | HMX | NR | µg/L | EPA 8330B |
| Benzo(k)fluoranthene | NR | µg/L | EPA 625 | Isopropylbenzene | <0.5 | µg/L | EPA 524.2 |
| Bis(2-chloroethoxy)methane | NR | µg/L | EPA 625 | Methyl isobutyl ketone (MIBK) | <2 | µg/L | EPA 524.2 |
| Bis(2-chloroethyl)ether | NR | µg/L | EPA 625 | N-Nitrosodiethylamine (NDEA) | NR | ng/L | EPA 521 |
| Bis(2-chloroisopropyl)ether | NR | µg/L | EPA 625 | N-nitrosodimethylamine (NDMA) | 2.8 | ng/L | EPA 521 |
| 4-Bromophenyl phenyl ether | NR | µg/L | EPA 625 | Propachlor | NR | µg/L | EPA 525.2 |
| Butyl benzyl phthalate | NR | µg/L | EPA 625 | N-propylbenzene | <0.5 | µg/L | EPA 524.2 |
| 2-Chloronaphthalene | NR | µg/L | EPA 625 | RDX | NR | µg/L | EPA 8330B |
| 4-Chlorophenyl phenyl ether | NR | µg/L | EPA 625 | Tertiary butyl alcohol | <2 | µg/L | EPA 524.2 |
| Chrysene | NR | µg/L | EPA 625 | 1,2,3-Trichloropropane (1,2,3-TCP) | <0.5 | µg/L | EPA 524.2 |
| Dibenzo(a,h)anthracene | NR | µg/L | EPA 625 | 1,2,4-trimethylbenzene | <0.5 | µg/L | EPA 524.2 |
| 1,3-Dichlorobenzene | NR | µg/L | EPA 625 | 1,3,5-trimethylbenzene | <0.5 | µg/L | EPA 524.2 |
| 3,3-Dichlorobenzidine | NR | µg/L | EPA 625 | 2,4,6-Trinitrotoluene | NR | µg/L | EPA 8330B |
| Diethyl phthalate | NR | µg/L | EPA 625 | Vanadium | 3 | µg/L | EPA 200.8 |
| Dimethyl phthalate | NR | µg/L | EPA 625 | Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals ² | | | |
| Di-n-butyl phthalate | NR | µg/L | EPA 625 | Acetaminophen | NR | ng/L | LC-MS-MS |
| 2,4-Dinitrotoluene | NR | µg/L | EPA 625 | Bis Phenol A (BPA) | NR | ng/L | LC-MS-MS |
| 2,6-Dinitrotoluene | NR | µg/L | EPA 625 | Caffeine | NR | ng/L | LC-MS-MS |
| Di-n-octyl phthalate | NR | µg/L | EPA 625 | Carbamazepine | NR | ng/L | LC-MS-MS |
| Azobenzene | NR | µg/L | EPA 625 | DEET | NR | ng/L | LC-MS-MS |
| Fluoranthene | NR | µg/L | EPA 625 | Estradiol | NR | ng/L | LC-MS-MS |
| Fluorene | NR | µg/L | EPA 625 | Estrone | NR | ng/L | LC-MS-MS |
| Hexachlorobutadiene | NR | µg/L | EPA 625 | Ethinyl Estradiol - 17 alpha | NR | ng/L | LC-MS-MS |
| Hexachlorocyclopentadiene | NR | µg/L | EPA 625 | Fluoxetine | NR | ng/L | LC-MS-MS |
| Hexachloroethane | NR | µg/L | EPA 625 | Gemfibrozil | NR | ng/L | LC-MS-MS |
| Indeno(1,2,3-cd)pyrene | NR | µg/L | EPA 625 | Ibuprofen | NR | ng/L | LC-MS-MS |
| Isophorone | NR | µg/L | EPA 625 | Iopromide | NR | ng/L | LC-MS-MS |
| Naphthalene | NR | µg/L | EPA 625 | Progesterone | NR | ng/L | LC-MS-MS |
| Nitrobenzene | NR | µg/L | EPA 625 | Testosterone | NR | ng/L | LC-MS-MS |
| N-Nitroso-di-n-propylamine | NR | µg/L | EPA 625 | Sucralose | NR | ng/L | LC-MS-MS |
| N-Nitrosodiphenylamine | NR | µg/L | EPA 625 | Sulfamethoxazole | NR | ng/L | LC-MS-MS |
| Phenanthrene | NR | µg/L | EPA 625 | Trimethoprim | NR | ng/L | LC-MS-MS |
| Pyrene | NR | µg/L | EPA 625 | Triclosan | NR | ng/L | LC-MS-MS |

¹ Trivalent chromium is measured as total chromium

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

NR: Not Required (Annual Requirement)

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

| 8th Street Basin | | | | | | | | | |
|------------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| 8TH-LYS-00 | 0 | 04/09/13 | 6.29 | 7.0 | 4.7 | 4.7 | 2.3 | 0.03 | 770 |
| 8TH-LYS-00 | 0 | 05/16/13 | 8.79 | 3.9 | 2.6 | 2.1 | 1.8 | 0.12 | 680 |
| 8TH-LYS-00 | 0 | 06/12/13 | 5.89 | 2.5 | 1.4 | 1.4 | 1.1 | <0.01 | 740 |
| 8TH-LYS-35 | 35 | 04/09/13 | 2.42 | 1.3 | <0.2 | <0.1 | 1.3 | <0.01 | 575 |
| 8TH-LYS-35 | 35 | 05/16/13 | 3.08 | <0.6 | 0.2 | 0.2 | <0.5 | <0.01 | 685 |
| 8TH-LYS-35 | 35 | 06/12/13 | 3.45 | <0.6 | <0.2 | <0.1 | <0.5 | <0.01 | 680 |

| Banana Basin | | | | | | | | | |
|--------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| BNA-LYS-00 | 0 | 04/02/13 | 5.81 | 3.0 | 0.7 | 0.7 | 2.3 | <0.01 | 545 |
| BNA-LYS-00 | 0 | 04/09/13 | 6.14 | 1.4 | 0.2 | 0.1 | 1.3 | <0.01 | 475 |
| BNA-LYS-00 | 0 | 04/18/13 | 7.23 | | | 2.7 | 2.8 | 0.02 | 635 |
| BNA-LYS-00 | 0 | 04/23/13 | 6.22 | 5.4 | 3.0 | 3.0 | 2.4 | 0.04 | 650 |
| BNA-LYS-00 | 0 | 05/02/13 | 6.77 | 3.5 | 0.4 | 0.3 | 3.2 | 0.06 | 675 |
| BNA-LYS-00 | 0 | 05/09/13 | 8.46 | 4.4 | 0.8 | 0.8 | 3.6 | <0.01 | 655 |
| BNA-LYS-00 | 0 | 05/16/13 | 7.63 | 3.0 | 1.2 | 0.9 | 2.1 | <0.01 | 665 |
| BNA-LYS-00 | 0 | 05/22/13 | 7.74 | 2.9 | 1.2 | 0.7 | 2.2 | <0.01 | 690 |
| BNA-LYS-00 | 0 | 05/29/13 | 7.74 | 2.7 | 1.0 | 1.0 | 1.7 | <0.01 | 733 |
| BNA-LYS-00 | 0 | 06/05/13 | 7.94 | 3.7 | 2.6 | 1.1 | 2.6 | <0.01 | 750 |
| BNA-LYS-00 | 0 | 06/12/13 | 6.65 | 1.6 | 2.2 | 0.9 | 0.7 | 0.08 | 763 |
| BNA-LYS-00 | 0 | 06/19/13 | 7.97 | 2.9 | 0.4 | 0.4 | 2.5 | <0.01 | 770 |
| BNA-LYS-00 | 0 | 06/26/13 | 7.64 | 2.7 | 1.2 | 0.8 | 1.9 | <0.01 | 795 |
| BNA-LYS-25 | 25 | 04/02/13 | 0.54 | 3.3 | 2.0 | 2.0 | 1.3 | <0.01 | 500 |
| BNA-LYS-25 | 25 | 04/09/13 | 0.64 | 1.8 | 1.8 | 1.8 | <0.5 | <0.01 | 490 |
| BNA-LYS-25 | 25 | 04/18/13 | 0.68 | | | 1.8 | 0.9 | <0.01 | 470 |
| BNA-LYS-25 | 25 | 04/23/13 | 0.83 | 3.3 | 1.6 | 1.6 | 1.7 | 0.04 | 455 |
| BNA-LYS-25 | 25 | 05/02/13 | 1.03 | 1.3 | 1.3 | 1.3 | <0.5 | <0.01 | 455 |
| BNA-LYS-25 | 25 | 05/09/13 | 0.97 | 1.4 | 1.4 | 1.4 | <0.5 | <0.01 | 445 |
| BNA-LYS-25 | 25 | 05/16/13 | 0.71 | 1.5 | 1.5 | 1.5 | <0.5 | <0.01 | 440 |
| BNA-LYS-25 | 25 | 05/22/13 | 0.73 | 1.9 | 1.9 | 1.9 | <0.5 | <0.01 | 445 |
| BNA-LYS-25 | 25 | 05/29/13 | 0.76 | 1.8 | 3.0 | 1.8 | <0.5 | <0.01 | 455 |
| BNA-LYS-25 | 25 | 06/05/13 | 0.67 | 1.1 | 1.1 | 1.1 | <0.5 | <0.01 | 475 |
| BNA-LYS-25 | 25 | 06/12/13 | 0.65 | 1.1 | 1.1 | 1.1 | <0.5 | <0.01 | 500 |
| BNA-LYS-25 | 25 | 06/19/13 | 0.72 | 1.9 | 1.1 | 1.1 | 0.8 | <0.01 | 520 |
| BNA-LYS-25 | 25 | 06/26/13 | 0.65 | 0.8 | 0.8 | 0.8 | <0.5 | <0.01 | 550 |

| Brooks Basin | | | | | | | | | |
|--------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| BRK-LYS-00 | 0 | 04/09/13 | 4.71 | 8.3 | 5.6 | 5.6 | 2.7 | 0.03 | 720 |
| BRK-LYS-00 | 0 | 05/16/13 | 6.62 | 3.9 | 1.4 | 1.3 | 2.6 | 0.10 | 685 |
| BRK-LYS-00 | 0 | 06/12/13 | 5.82 | 4.0 | 1.9 | 1.6 | 2.4 | 0.25 | 735 |
| BRK-LYS-25 | 25 | 04/09/13 | 3.43 | 1.3 | 0.4 | 0.4 | 0.9 | <0.01 | 780 |
| BRK-LYS-25 | 25 | 05/16/13 | 3.76 | 0.7 | <0.2 | 0.1 | 0.6 | <0.01 | 735 |
| BRK-LYS-25 | 25 | 06/12/13 | 3.27 | <0.6 | <0.2 | <0.1 | <0.5 | <0.01 | 735 |

| Hickory East Basin | | | | | | | | | |
|--------------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| HKYE-LYS-00 | 0 | 04/02/13 | 5.27 | 7.8 | 5.9 | 5.9 | 1.9 | <0.01 | 780 |
| HKYE-LYS-00 | 0 | 04/09/13 | 4.96 | 7.2 | 6.5 | 6.2 | 1.0 | <0.01 | 790 |
| HKYE-LYS-00 | 0 | 04/18/13 | 5.65 | | | 2.6 | 5.4 | 0.06 | 754 |
| HKYE-LYS-00 | 0 | 04/23/13 | 7.64 | 6.4 | 0.3 | 0.1 | 6.3 | 0.07 | 910 |
| HKYE-LYS-00 | 0 | 05/02/13 | 12.2 | 5.7 | 0.9 | 0.9 | 4.8 | <0.01 | 811 |
| HKYE-LYS-00 | 0 | 05/09/13 | 14.1 | 3.8 | 0.4 | 0.4 | 3.4 | <0.01 | 725 |
| HKYE-LYS-00 | 0 | 05/16/13 | 14.7 | 5.1 | <0.2 | 0.1 | 5.0 | <0.01 | 775 |
| HKYE-LYS-00 | 0 | 05/22/13 | 33.7 | 10.5 | 0.4 | 0.4 | 10.1 | <0.01 | 925 |
| HKYE-LYS-00 | 0 | 05/29/13 | 16.6 | 26.6 | 0.6 | 0.5 | 26.1 | <0.01 | 1320 |
| HKYE-LYS-00 | 0 | 06/05/13 | 1420 | 96.7 | 5.2 | 1.0 | 95.7 | <0.01 | 2440 |
| HKYE-LYS-00 | 0 | 06/12/13 | 2130 | 346 | 2.0 | 0.3 | 346 | <0.01 | 3595 |
| HKYE-LYS-00 | 0 | 06/19/13 | 6.78 | 5.8 | 4.4 | 4.3 | 1.5 | <0.01 | 810 |
| HKYE-LYS-00 | 0 | 06/26/13 | 9.27 | 4.0 | 0.3 | 0.3 | 3.7 | <0.01 | 810 |
| HKYE-LYS-25 | 25 | 04/02/13 | 1.77 | 6.0 | 4.7 | 4.7 | 1.3 | <0.01 | 748 |
| HKYE-LYS-25 | 25 | 04/09/13 | 2.22 | 6.0 | 4.4 | 4.4 | 1.6 | <0.01 | 790 |
| HKYE-LYS-25 | 25 | 04/18/13 | 2.21 | | | 4.7 | 1.4 | <0.01 | 785 |
| HKYE-LYS-25 | 25 | 04/23/13 | 1.80 | 7.0 | 4.5 | 4.4 | 2.6 | <0.01 | 775 |
| HKYE-LYS-25 | 25 | 05/02/13 | 1.50 | 5.0 | 5.0 | 5.0 | <0.5 | <0.01 | 770 |
| HKYE-LYS-25 | 25 | 05/09/13 | 1.52 | 5.2 | 4.5 | 4.4 | 0.8 | <0.01 | 795 |

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

| Hickory East Basin (cont'd) | | | | | | | | | |
|-----------------------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| HKYE-LYS-25 | 25 | 05/16/13 | 1.38 | 5.7 | 4.6 | 4.6 | 1.1 | <0.01 | 780 |
| HKYE-LYS-25 | 25 | 05/22/13 | | 4.9 | 4.9 | 4.9 | <0.5 | <0.01 | |
| HKYE-LYS-25 | 25 | 05/29/13 | | 4.5 | 4.5 | 4.5 | <0.5 | <0.01 | 805 |
| HKYE-LYS-25 | 25 | 06/05/13 | | 4.8 | 3.9 | 3.9 | 0.9 | <0.01 | 790 |
| HKYE-LYS-25 | 25 | 06/12/13 | | 5.0 | 4.3 | 4.3 | 0.7 | <0.01 | 780 |
| HKYE-LYS-25 | 25 | 06/19/13 | 1.29 | 4.3 | 4.3 | 4.3 | <0.5 | <0.01 | 815 |
| HKYE-LYS-25 | 25 | 06/26/13 | 1.75 | 4.1 | 4.1 | 4.1 | <0.5 | <0.01 | 845 |

| RP3 Basin | | | | | | | | | |
|-------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| RP31-LYS-00 | 0 | 04/09/13 | 6.58 | 6.1 | 4.5 | 4.2 | 1.9 | 0.11 | 790 |
| RP31-LYS-00 | 0 | 05/16/13 | 8.39 | 4.0 | 1.6 | 1.4 | 2.6 | 0.16 | 755 |
| RP31-LYS-00 | 0 | 06/12/13 | 8.70 | 1.7 | 0.3 | 0.2 | 1.5 | <0.01 | 740 |
| RP31-LYS-35 | 35 | 04/09/13 | 1.18 | 4.8 | 3.6 | 3.6 | 1.2 | <0.01 | 646 |
| RP31-LYS-35 | 35 | 05/16/13 | 1.41 | 4.4 | 3.5 | 3.5 | 0.9 | <0.01 | 630 |
| RP31-LYS-35 | 35 | 06/12/13 | 1.30 | 3.6 | 3.6 | 3.6 | <0.5 | <0.01 | 630 |

| San Sevaine Basin | | | | | | | | | |
|-------------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| SS5-LYS-00 | 0 | 04/09/13 | 6.48 | 3.6 | 1.9 | 1.7 | 1.9 | 0.06 | 695 |
| SS5-LYS-00 | 0 | 04/18/13 | 5.72 | | | 4.3 | 3.5 | <0.01 | 770 |
| SS5-LYS-00 | 0 | 05/16/13 | 6.67 | 2.6 | 1.2 | 1.2 | 1.4 | <0.01 | 750 |
| SS5-LYS-00 | 0 | 06/12/13 | 278 | 9.0 | 1.3 | 0.1 | 8.9 | <0.01 | 1505 |
| SS5-LYS-15 | 15 | 04/18/13 | 1.63 | | | <0.1 | 2.5 | <0.01 | 605 |
| SS5-LYS-15 | 15 | 05/16/13 | 1.93 | <0.6 | <0.2 | <0.1 | <0.5 | <0.01 | 675 |
| SS5-LYS-15 | 15 | 06/12/13 | 2.51 | <0.6 | <0.2 | <0.1 | <0.5 | <0.01 | 780 |
| SS5-LYS-20 | 20 | 04/18/13 | 1.64 | | | 0.3 | 2.8 | <0.01 | 555 |
| SS5-LYS-20 | 20 | 05/16/13 | 2.09 | <0.6 | <0.2 | 0.1 | <0.5 | <0.01 | 685 |
| SS5-LYS-20 | 20 | 06/12/13 | 2.20 | <0.6 | <0.2 | <0.1 | <0.5 | <0.01 | 725 |

| Victoria Basin | | | | | | | | | |
|----------------|------------|----------|------|------|------|--------------------|------------------------|--------------------|---------|
| Site | Depth, bgs | Date | TOC | TN * | TIN | NO ₃ -N | TKN+NO ₂ -N | NO ₂ -N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| VCT-LYS-00 | 0 | 04/09/13 | 5.88 | 5.0 | 3.4 | 3.2 | 1.8 | 0.12 | 775 |
| VCT-LYS-00 | 0 | 05/16/13 | 5.26 | 3.8 | 2.5 | 2.4 | 1.4 | 0.06 | 755 |
| VCT-LYS-00 | 0 | 06/12/13 | 7.60 | 2.1 | <0.2 | <0.1 | 2.1 | <0.01 | 765 |
| VCT-LYS-35 | 35 | 04/09/13 | 1.44 | 2.0 | 2.0 | 2.0 | <0.5 | 0.03 | 850 |
| VCT-LYS-35 | 35 | 05/16/13 | 0.97 | 1.5 | 1.5 | 1.5 | <0.5 | <0.01 | 753 |
| VCT-LYS-35 | 35 | 06/12/13 | 0.90 | 1.7 | 1.7 | 1.7 | <0.5 | <0.01 | 685 |

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.

Table 2-5b
Alternative Monitoring Plans

| Turner Basin | | | | | |
|--------------|-----------|-----------|---------------------|---------------------|------------------------------|
| Date | RW Blend* | RW Blend* | Turner 1 & 2 | Turner 3 & 4 | Turner 1 & 2 Turner 3 & 4 |
| mg/L==> | TOC | TN | TOC (70% reduction) | TOC (85% reduction) | TN (87% reduction) |
| 04/02/13 | 4.73 | 9.3 | 1.42 | 0.71 | 1.2 |
| 04/09/13 | 4.71 | 8.5 | 1.41 | 0.71 | 1.1 |
| 04/18/13 | 4.60 | 8.3 | 1.38 | 0.69 | 1.1 |
| 04/22/13 | 4.91 | 8.7 | 1.47 | 0.74 | 1.1 |
| 05/02/13 | 5.06 | 7.5 | 1.52 | 0.76 | 1.0 |
| 05/16/13 | 4.37 | 6.4 | 1.31 | 0.66 | 0.8 |
| 05/22/13 | 4.49 | 5.3 | 1.35 | 0.67 | 0.7 |
| 05/29/13 | 4.81 | 4.6 | 1.44 | 0.72 | 0.6 |
| 06/05/13 | 4.94 | 4.4 | 1.48 | 0.74 | 0.6 |
| 06/12/13 | 4.96 | 4.0 | 1.49 | 0.74 | 0.5 |
| 06/19/13 | 4.99 | 6.9 | 1.50 | 0.75 | 0.9 |
| 06/26/13 | 5.11 | 5.0 | 1.53 | 0.77 | 0.7 |

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

| Ely Basin | | | | |
|-----------|---------|---------|---------------------|--------------------|
| Date | RP-1 RW | RP-1 RW | Ely 3 East | Ely 3 East |
| mg/L==> | TOC | TN | TOC (76% reduction) | TN (52% reduction) |
| 04/01/13 | 5.74 | 8.4 | 1.38 | 4.0 |
| 04/08/13 | 5.68 | 8.1 | 1.36 | 3.9 |
| 04/15/13 | 5.97 | 9.7 | 1.43 | 4.7 |
| 04/22/13 | 6.26 | 10.3 | 1.50 | 4.9 |
| 04/29/13 | 5.98 | 9.7 | 1.44 | 4.7 |
| 05/06/13 | 6.39 | 10.6 | 1.53 | 5.1 |
| 05/13/13 | 6.95 | 10.0 | 1.67 | 4.8 |
| 05/20/13 | 6.72 | 11.0 | 1.61 | 5.3 |
| 05/30/13 | 5.94 | 7.9 | 1.43 | 3.8 |
| 06/03/13 | 6.04 | 7.2 | 1.45 | 3.5 |
| 06/10/13 | 6.25 | 6.3 | 1.50 | 3.0 |
| 06/17/13 | 5.81 | 9.7 | 1.39 | 4.7 |
| 06/24/13 | 5.85 | 7.8 | 1.40 | 3.7 |

| Brooks Basin | | | | |
|--------------|------------|------------|------------|------------|
| Date | BRK-LYS-00 | BRK-LYS-00 | BRK-LYS-00 | BRK-LYS-00 |
| mg/L==> | TOC | TN | EC | |
| 04/09/13 | 4.71 | 8.3 | 720 | |
| 05/16/13 | 6.62 | 3.9 | 685 | |
| 06/12/13 | 5.82 | 4.0 | 735 | |
| Date | BRK-LYS-25 | BRK-LYS-25 | BRK-LYS-25 | BRK-LYS-25 |
| mg/L==> | TOC | TN** | EC | |
| 04/09/13 | 3.43 | 1.3 | 780 | |
| 05/16/13 | 3.76 | 0.7 | 735 | |
| 06/12/13 | 3.27 | <0.1 | 735 | |
| Date | BRK-1/1 | BRK-1/1 | BRK-1/1 | BRK-1/1 |
| mg/L==> | TOC** | TN | EC | Cl |
| 04/11/13 | 0.35 | 2.3 | 450 | 48 |
| 05/16/13 | 0.43 | 2.0 | 459 | 54 |
| 06/12/13 | 0.38 | 2.5 | 455 | 51 |

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

| RP3 Basin | | | |
|-----------|------------|------------|------------|
| Date | RP3-LYS-35 | RP3-LYS-35 | RP3-LYS-35 |
| mg/L==> | TOC | TN | EC |
| 04/09/13 | 1.18 | 4.8 | 646 |
| 05/16/13 | 1.41 | 4.4 | 630 |
| 06/12/13 | 1.30 | 3.6 | 630 |

Table 2-5b
Alternative Monitoring Plans

| 8th Street Basin | | | | |
|------------------|-----------|-----------|---------------------|--------------------|
| Date | RW Blend* | RW Blend* | 8th Street | 8th Street |
| mg/L==> | TOC | TN | TOC (59% reduction) | TN (75% reduction) |
| 04/02/13 | 4.73 | 9.3 | 1.94 | 2.3 |
| 04/09/13 | 4.71 | 8.5 | 1.93 | 2.1 |
| 04/18/13 | 4.60 | 8.3 | 1.89 | 2.1 |
| 04/22/13 | 4.91 | 8.7 | 2.01 | 2.2 |
| 05/02/13 | 5.06 | 7.5 | 2.07 | 1.9 |
| 05/16/13 | 4.37 | 6.4 | 1.79 | 1.6 |
| 05/22/13 | 4.49 | 5.3 | 1.84 | 1.3 |
| 05/29/13 | 4.81 | 4.6 | 1.97 | 1.2 |
| 06/05/13 | 4.94 | 4.4 | 2.03 | 1.1 |
| 06/12/13 | 4.96 | 4.0 | 2.03 | 1.0 |
| 06/19/13 | 4.99 | 6.9 | 2.05 | 1.7 |
| 06/26/13 | 5.11 | 5.0 | 2.10 | 1.3 |

| San Sevaine 5 Basin | | | | |
|---------------------|-----------|-----------|---------------------|--------------------|
| Date | RW Blend* | RW Blend* | San Sevaine 5 | San Sevaine 5 |
| mg/L==> | TOC | TN | TOC (78% reduction) | TN (69% reduction) |
| 04/02/13 | 4.73 | 9.3 | 1.04 | 2.9 |
| 04/09/13 | 4.71 | 8.5 | 1.04 | 2.6 |
| 04/18/13 | 4.60 | 8.3 | 1.01 | 2.6 |
| 04/22/13 | 4.91 | 8.7 | 1.08 | 2.7 |
| 05/02/13 | 5.06 | 7.5 | 1.11 | 2.3 |
| 05/16/13 | 4.37 | 6.4 | 0.96 | 2.0 |
| 05/22/13 | 4.49 | 5.3 | 0.99 | 1.6 |
| 05/29/13 | 4.81 | 4.6 | 1.06 | 1.4 |
| 06/05/13 | 4.94 | 4.4 | 1.09 | 1.4 |
| 06/12/13 | 4.96 | 4.0 | 1.09 | 1.2 |
| 06/19/13 | 4.99 | 6.9 | 1.10 | 2.1 |
| 06/26/13 | 5.11 | 5.0 | 1.12 | 1.6 |

| Victoria Basin | | | | |
|----------------|-----------|-----------|---------------------|--------------------|
| Date | RW Blend* | RW Blend* | Victoria | Victoria |
| mg/L==> | TOC | TN | TOC (78% reduction) | TN (82% reduction) |
| 04/02/13 | 4.73 | 9.3 | 1.04 | 1.7 |
| 04/09/13 | 4.71 | 8.5 | 1.04 | 1.5 |
| 04/18/13 | 4.60 | 8.3 | 1.01 | 1.5 |
| 04/22/13 | 4.91 | 8.7 | 1.08 | 1.6 |
| 05/02/13 | 5.06 | 7.5 | 1.11 | 1.4 |
| 05/16/13 | 4.37 | 6.4 | 0.96 | 1.2 |
| 05/22/13 | 4.49 | 5.3 | 0.99 | 1.0 |
| 05/29/13 | 4.81 | 4.6 | 1.06 | 0.8 |
| 06/05/13 | 4.94 | 4.4 | 1.09 | 0.8 |
| 06/12/13 | 4.96 | 4.0 | 1.09 | 0.7 |
| 06/19/13 | 4.99 | 6.9 | 1.10 | 1.2 |
| 06/26/13 | 5.11 | 5.0 | 1.12 | 0.9 |

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

Table 2-6
Diluent Water Monitoring*: Local Runoff

| Constituent | Declez Channel @ Declez Basin | San Sevaine Creek @ Hickory Basin | Unit | Method |
|--|----------------------------------|--------------------------------------|-----------|--------------|
| | 05/30/13 | 05/30/13 | | |
| NO ₂ -N | <0.02 | <0.02 | mg/L | EPA 300.0 |
| NO ₃ -N | 0.1 | <0.1 | mg/L | EPA 300.0 |
| TDS | 280 | 508 | mg/L | SM 2540C |
| Total Coliform | >2300 | 2300 | mpn/100ml | SM 9221B |
| Oil & Grease | 1 | <1 | mg/L | EPA 1664A |
| Inorganic Chemicals | | | | |
| Aluminum | 850 | 47 | µg/L | EPA 200.7 |
| Antimony | 1 | <1 | µg/L | EPA 200.8 |
| Arsenic | 5 | <2 | µg/L | EPA 200.8 |
| Asbestos | <7 | <7 | MFL | EPA 100.2 |
| Barium | 87 | 24 | µg/L | EPA 200.7 |
| Beryllium | <0.5 | <0.5 | µg/L | EPA 200.7 |
| Cadmium | <0.25 | <0.25 | µg/L | EPA 200.7 |
| Chromium | 5.0 | 1.2 | µg/L | EPA 200.7 |
| Cyanide | <0.005 | <0.005 | mg/L | SM 4500-CN E |
| Fluoride | 0.2 | 0.2 | mg/L | SM 4500-F C |
| Mercury | <0.05 | <0.05 | µg/L | EPA 245.2 |
| Nickel | 5 | 3 | µg/L | EPA 200.7 |
| Perchlorate | <4 | <4 | µg/L | EPA 314 |
| Selenium | <2 | <2 | µg/L | EPA 200.8 |
| Thallium | <1 | <1 | µg/L | EPA 200.8 |
| Volatile Organic Chemicals (VOCs) | | | | |
| Benzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Carbon Tetrachloride | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,2-Dichlorobenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,4-Dichlorobenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1-Dichloroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,2-Dichloroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1-Dichloroethylene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| cis-1,2-Dichloroethylene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| trans-1,2-Dichloroethylene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Dichloromethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,2-Dichloropropane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,3-Dichloropropane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Ethylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Chlorobenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Methyl Tert-butyl ether (MTBE) | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Styrene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1,2,2-Tetrachloroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Tetrachloroethylene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Toluene | 387 | 2.2 | µg/L | EPA 524.2 |
| 1,2,4-Trichlorobenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1,1-Trichloroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1,2-Trichloroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Trichloroethylene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Trichlorofluoromethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Vinyl Chloride | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Total Xylenes | <1 | <1 | µg/L | EPA 524.2 |
| Non-Volatile Synthetic Organic Chemicals (SOCs) | | | | |
| Alachlor (Alanex) | <0.1 | <0.1 | µg/L | EPA 505 |
| Atrazine | <0.05 | <0.05 | µg/L | EPA 525.2 |
| Bentazon | <0.5 | <0.5 | µg/L | EPA 515.4 |
| Benzo(a)pyrene | <0.02 | <0.02 | µg/L | EPA 525.2 |
| Carbofuran | <0.5 | <0.5 | µg/L | EPA 531.2 |
| Chlordane | <0.1 | <0.1 | µg/L | EPA 505 |
| 2,4-D | 0.4 | 1.2 | µg/L | EPA 515.4 |
| Dalapon | <1 | <1 | µg/L | EPA 515.4 |
| Dibromochloropropane | <0.01 | <0.01 | µg/L | EPA 504.1 |
| Di(2-ethylhexyl)adipate | <0.6 | <0.6 | µg/L | EPA 525.2 |
| Di(2-ethylhexyl)phthalate | <0.6 | <0.6 | µg/L | EPA 525.2 |
| Dinoseb | <0.2 | <0.2 | µg/L | EPA 515.4 |
| Diquat | <0.4 | <0.4 | µg/L | EPA 549.2 |
| Endothall | <5 | <5 | µg/L | EPA 548.1 |
| Endrin | <0.01 | <0.01 | µg/L | EPA 505 |
| Ethylene Dibromide | <0.01 | <0.01 | µg/L | EPA 504.1 |
| Glyphosate | <6 | 12 | µg/L | EPA 547 |
| Heptachlor | <0.01 | <0.01 | µg/L | EPA 505 |

Table 2-6
Diluent Water Monitoring*: Local Runoff

| Constituent | Declez Channel | San Sevaine Creek | Unit | Method |
|---|----------------------------|-----------------------------|-------|--------------------|
| | @ Declez Basin 05/30/13 | @ Hickory Basin 05/30/13 | | |
| Heptachlor Epoxide | <0.01 | <0.01 | µg/L | EPA 505 |
| Hexachlorobenzene | <0.05 | <0.05 | µg/L | EPA 525.2 |
| Hexachlorocyclopentadiene | <0.05 | <0.05 | µg/L | EPA 525.2 |
| Lindane | <0.01 | <0.01 | µg/L | EPA 505 |
| Methoxychlor | <0.05 | <0.05 | µg/L | EPA 505 |
| Molinate | <0.1 | <0.1 | µg/L | EPA 525.2 |
| Oxamyl | <0.5 | <0.5 | µg/L | EPA 531.2 |
| Pentachlorophenol | <0.04 | <0.04 | µg/L | EPA 515.4 |
| Picloram | <0.1 | <0.1 | µg/L | EPA 515.4 |
| PCB 1016 | <0.08 | <0.08 | µg/L | EPA 505 |
| PCB 1221 | <0.1 | <0.1 | µg/L | EPA 505 |
| PCB 1232 | <0.1 | <0.1 | µg/L | EPA 505 |
| PCB 1242 | <0.1 | <0.1 | µg/L | EPA 505 |
| PCB 1248 | <0.1 | <0.1 | µg/L | EPA 505 |
| PCB 1254 | <0.1 | <0.1 | µg/L | EPA 505 |
| PCB 1260 | <0.1 | <0.1 | µg/L | EPA 505 |
| Simazine | <0.05 | <0.05 | µg/L | EPA 525.2 |
| Thiobencarb | <0.2 | <0.2 | µg/L | EPA 525.2 |
| Toxaphene | <0.5 | <0.5 | µg/L | EPA 505 |
| 2,3,7,8-TCDD (Dioxin) | <5 | <5 | pg/L | EPA 1613 |
| 2,4,5-TP (Silvex) | <0.2 | <0.2 | µg/L | EPA 515.4 |
| Disinfection Byproducts | | | | |
| Total Trihalomethanes (TTHMs) | <2 | <2 | µg/L | EPA 524.2/624 |
| Total Haloacetic Acids (HAA5) | <2 | 22 | µg/L | SM 6251B |
| Bromate | <1 | <1 | µg/L | EPA 300.1/317 |
| Chlorite | <0.01 | <0.01 | mg/L | EPA 300.0 |
| Action Level Chemicals | | | | |
| Copper | 26.8 | 11.3 | µg/L | EPA 200.7 |
| Lead | 3.1 | <0.5 | µg/L | EPA 200.8 |
| Radionuclides | | | | |
| Combined Radium-226 & Radium 228 | <0.965 | <0.624 | pCi/L | EPA 903.0 |
| Gross Alpha Particle Activity | <3 | 4 | pCi/L | EPA 900.0/SM7110C |
| Tritium | <270 | <271 | pCi/L | EPA 906.0 |
| Strontium-90 | <1.49 | <0.49 | pCi/L | EPA 905.0 |
| Gross Beta Particle Activity | 6.5 | 8.4 | pCi/L | EPA 900.0 |
| Uranium | <0.7 | <0.7 | pCi/L | EPA 200.8 |
| Unregulated Chemicals | | | | |
| Chromium VI | 0.65 | 0.38 | µg/L | EPA 218.6 |
| Ethyl tertiary butyl ether | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Tertiary amyl methyl ether | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Chemicals w/ State Notification Levels | | | | |
| Boron | <0.1 | 0.3 | mg/L | EPA 200.7 |
| n-butylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| sec-butylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| tert-butylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Carbon disulfide | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 2-Chlorotoluene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 4-Chlorotoluene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Dichlorodifluoromethane (Freon 12) | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,4 - Dioxane | <1 | <1 | µg/L | EPA 522 |
| Isopropylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Methyl isobutyl ketone (MIBK) | <2 | <2 | µg/L | EPA 524.2 |
| N-nitrosodimethylamine (NDMA) | <2 | <2 | ng/l | EPA 521 |
| N-propylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,2,3-Trichloropropane (1,2,3-TCP) | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,2,4 -trimethylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| 1,3,5-trimethylbenzene | <0.5 | <0.5 | µg/L | EPA 524.2 |
| Vanadium | 20 | 3 | µg/L | EPA 200.8 |
| Secondary Maximum Contaminant Level Chemicals | | | | |
| Aluminum | 850 | 47 | µg/L | EPA 200.7 |
| Corrosivity | 2.2 | 1.7 | SI | SM 2330B |
| Foaming Agents (MBAS) | <0.05 | 0.06 | mg/L | SM 5540C/EPA 425.1 |
| Iron | 1743 | 177 | µg/L | EPA 200.7 |
| Manganese | 71 | 22 | µg/L | EPA 200.7 |
| Odor--Threshold | 200 | 200 | TON | SM 2150B |
| Silver | <0.25 | <0.25 | µg/L | EPA 200.7 |
| Thiobencarb | <0.2 | <0.2 | µg/L | EPA 525.2 |
| Zinc | 61 | 12 | µg/L | EPA 200.7 |

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

Table 2-7
Summary of Wells in Groundwater Monitoring Networks

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

Notes:

- NA = Data not available
- CBWM ID = Chino Basin Water Master well identification number
- bgs = below ground surface
- * = Ontario Well No. 38 replaced Ontario Well No. 19, which is inactive
- ** = Cucamonga Valley Water District No. 43 replaced CVWD Well Nos. 35 & 36, which are inactive.

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

| Date | Diluent Water | | | | | | | | | | | | | | | | | | Recycled Water | | | | | | | | |
|-------------------|----------------|----------|----------|----------|----------|----------|-------------|----------|----------|---------------------------|-----------|-----------|------------|------------|------------|-------------|------------|-----------|----------------|------------|------------|------------|------------|------------|-------------|------------|------------|
| | Imported Water | | | | | | | | | Local Runoff / Storm Flow | | | | | | | | | | | | | | | | | |
| | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaïne | Turner | Victoria | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaïne | Turner | Victoria | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaïne | Turner | Victoria |
| Jul-12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 1 | 7 | 22 | 50 | 0 | 108 | 3 | 137 | 41 | 33 | 0 | 57 | 12 | 122 | 51 | 94 |
| Aug-12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 2 | 7 | 50 | 12 | 1 | 72 | 5 | 0 | 2 | 39 | 0 | 44 | 0 | 84 | 35 | 118 |
| Sep-12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 2 | 5 | 29 | 4 | 0 | 62 | 1 | 124 | 188 | 51 | 0 | 0 | 0 | 39 | 24 | 55 |
| 3Q12 Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 5 | 18 | 101 | 65 | 1 | 242 | 9 | 261 | 231 | 123 | 0 | 101 | 12 | 245 | 110 | 266 |
| Oct-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 11 | 0 | 5 | 51 | 18 | 1 | 83 | 1 | 309 | 103 | 0 | 0 | 0 | 0 | 63 | 9 | 131 |
| Nov-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 5 | 0 | 9 | 13 | 101 | 14 | 91 | 6 | 248 | 120 | 0 | 80 | 177 | 154 | 66 | 5 | 71 |
| Dec-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 278 | 49 | 0 | 335 | 6 | 361 | 79 | 337 | 19 | 103 | 15 | 0 | 67 | 144 | 220 | 1 | 5 | 21 |
| 3Q12 Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373 | 66 | 0 | 349 | 70 | 480 | 94 | 511 | 25 | 660 | 237 | 0 | 148 | 320 | 374 | 130 | 19 | 222 |
| Jan-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 18 | 35 | 72 | 0 | 147 | 21 | 164 | 35 | 230 | 28 | 342 | 145 | 115 | 353 | 59 | 0 | 12 |
| Feb-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 20 | 26 | 37 | 8 | 113 | 9 | 141 | 10 | 227 | 2 | 299 | 225 | 3 | 297 | 19 | 26 | 10 |
| Mar-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 8 | 32 | 63 | 13 | 78 | 13 | 62 | 7 | 240 | 42 | 238 | 314 | 147 | 275 | 53 | 21 | 57 |
| 1Q13 Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224 | 45 | 93 | 171 | 21 | 338 | 43 | 366 | 51 | 697 | 73 | 879 | 683 | 265 | 924 | 132 | 47 | 79 |
| Apr-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 1 | 0 | 40 | 5 | 0 | 1 | 152 | 55 | 231 | 79 | 71 | 386 | 41 | 0 | 98 |
| May-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 3 | 17 | 23 | 6 | 50 | 4 | 0 | 5 | 221 | 39 | 152 | 259 | 0 | 262 | 26 | 0 | 93 |
| Jun-13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 4 | 1 | 20 | 0 | 0 | 1 | 271 | 35 | 120 | 209 | 116 | 239 | 2 | 0 | 82 |
| 2Q13 Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 3 | 17 | 28 | 7 | 110 | 9 | 0 | 7 | 644 | 128 | 503 | 547 | 186 | 887 | 69 | 0 | 272 |

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

| ASR Well No. 4 | | | | | | | | | | |
|----------------|--------|-------------|------------|------------|-------------|------------|------------|--------------|----------|-----------|
| | Date | Injection | | | Recovery | | | Mass Balance | | |
| | | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q12 | Jul-12 | 0.0 | 0.40 | 140 | 0 | 14.0 | 370 | (328) | (8,362) | (189,590) |
| | Aug-12 | 0.0 | 0.40 | 140 | 1 | 14.0 | 370 | (329) | (8,374) | (189,900) |
| | Sep-12 | 0.0 | 0.40 | 140 | 0 | 14.0 | 370 | (329) | (8,376) | (189,941) |
| 4Q12 | Oct-12 | 0.0 | 0.40 | 140 | 33 | 14.0 | 370 | (362) | (8,954) | (205,218) |
| | Nov-12 | 0.0 | 0.40 | 140 | 8 | 14.0 | 370 | (370) | (9,087) | (208,738) |
| | Dec-12 | 0.0 | 0.40 | 140 | 0 | 14.0 | 370 | (370) | (9,089) | (208,792) |
| 1Q13 | Jan-13 | 0.0 | 0.40 | 140 | 0 | 14.0 | 370 | (370) | (9,089) | (208,792) |
| | Feb-13 | 0.0 | 0.40 | 140 | 8 | 14.0 | 370 | (378) | (9,219) | (212,230) |
| | Mar-13 | 0.0 | 0.40 | 140 | 57 | 14.0 | 370 | (434) | (10,195) | (238,037) |
| 2Q13 | Apr-13 | 0.0 | 0.40 | 140 | 70 | 14.0 | 370 | (504) | (11,398) | (269,820) |
| | May-13 | 0.0 | 0.40 | 140 | 38 | 14.0 | 370 | (542) | (12,051) | (287,087) |
| | Jun-13 | 0.0 | 0.40 | 140 | 24 | 14.0 | 370 | (565) | (12,461) | (297,919) |

| ASR Well No. 30 | | | | | | | | | | |
|-----------------|--------|-------------|------------|------------|-------------|------------|------------|--------------|----------|----------|
| | Date | Injection | | | Recovery | | | Mass Balance | | |
| | | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q12 | Jul-12 | 0.0 | 0.40 | 140 | 2 | 3.5 | 310 | 748 | (1,967) | 165,209 |
| | Aug-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 747 | (1,968) | 165,091 |
| | Sep-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 747 | (1,968) | 165,091 |
| 4Q12 | Oct-12 | 0.0 | 0.40 | 140 | 14 | 3.5 | 310 | 733 | (2,028) | 159,740 |
| | Nov-12 | 0.0 | 0.40 | 140 | 177 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| | Dec-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| 1Q13 | Jan-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| | Feb-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| | Mar-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| 2Q13 | Apr-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,779) | 92,226 |
| | May-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 557 | (2,780) | 92,134 |
| | Jun-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 310 | 556 | (2,781) | 92,043 |

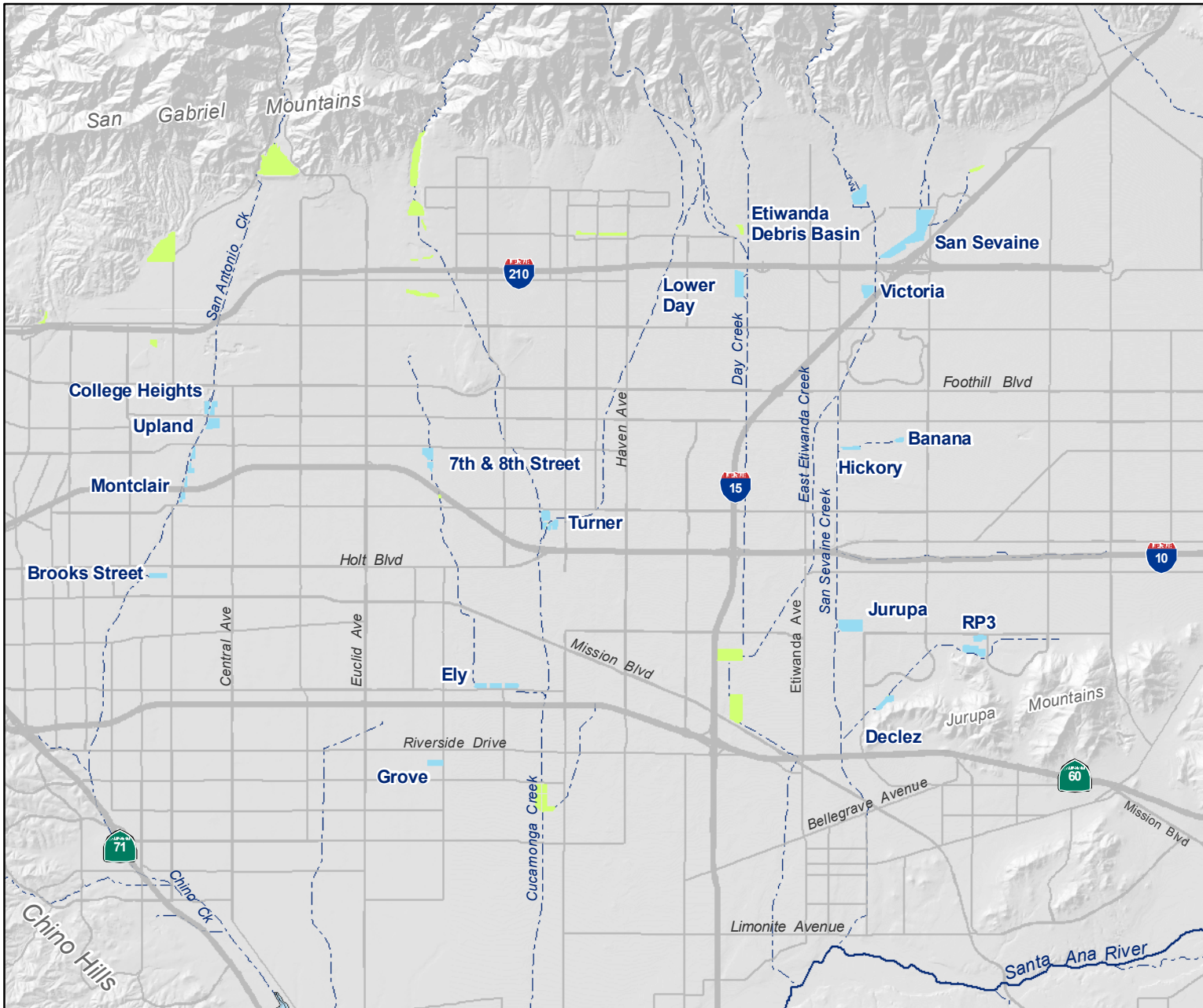
| ASR Well No. 32 | | | | | | | | | | |
|-----------------|--------|-------------|------------|------------|-------------|------------|------------|--------------|----------|-----------|
| | Date | Injection | | | Recovery | | | Mass Balance | | |
| | | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q12 | Jul-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,330) | (1,190) | (32,990) |
| | Aug-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,330) | (1,190) | (32,990) |
| | Sep-12 | 0.0 | 0.40 | 140 | 85 | 3.5 | 340 | (1,416) | (1,558) | (68,743) |
| 4Q12 | Oct-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,416) | (1,559) | (68,789) |
| | Nov-12 | 0.0 | 0.40 | 140 | 17 | 3.5 | 340 | (1,433) | (1,632) | (75,945) |
| | Dec-12 | 0.0 | 0.40 | 140 | 9 | 3.5 | 340 | (1,442) | (1,670) | (79,573) |
| 1Q13 | Jan-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,442) | (1,670) | (79,573) |
| | Feb-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,442) | (1,670) | (79,573) |
| | Mar-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 340 | (1,442) | (1,670) | (79,573) |
| 2Q13 | Apr-13 | 0.0 | 0.40 | 140 | 250 | 3.5 | 340 | (1,691) | (2,749) | (184,399) |
| | May-13 | 0.0 | 0.40 | 140 | 201 | 3.5 | 340 | (1,893) | (3,617) | (268,723) |
| | Jun-13 | 0.0 | 0.40 | 140 | 262 | 3.5 | 340 | (2,154) | (4,747) | (378,465) |

| ASR Well No. 33 | | | | | | | | | | |
|-----------------|--------|-------------|------------|------------|-------------|------------|------------|--------------|----------|-----------|
| | Date | Injection | | | Recovery | | | Mass Balance | | |
| | | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q12 | Jul-12 | 0.0 | 0.40 | 140 | 0 | 3.5 | 370 | (245) | (1,191) | (124,332) |
| | Aug-12 | 0.0 | 0.40 | 140 | 9 | 3.5 | 370 | (254) | (1,228) | (128,299) |
| | Sep-12 | 0.0 | 0.40 | 140 | 123 | 3.5 | 370 | (377) | (1,761) | (184,583) |
| 4Q12 | Oct-12 | 0.0 | 0.40 | 140 | 146 | 3.5 | 370 | (523) | (2,392) | (251,261) |
| | Nov-12 | 0.0 | 0.40 | 140 | 79 | 3.5 | 370 | (603) | (2,735) | (287,535) |
| | Dec-12 | 0.0 | 0.40 | 140 | 37 | 3.5 | 370 | (640) | (2,895) | (304,511) |
| 1Q13 | Jan-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 370 | (640) | (2,895) | (304,511) |
| | Feb-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 370 | (640) | (2,895) | (304,511) |
| | Mar-13 | 0.0 | 0.40 | 140 | 0 | 3.5 | 370 | (640) | (2,895) | (304,511) |
| 2Q13 | Apr-13 | 0.0 | 0.40 | 140 | 24 | 3.5 | 370 | (664) | (2,998) | (315,415) |
| | May-13 | 0.0 | 0.40 | 140 | 81 | 3.5 | 370 | (745) | (3,350) | (352,607) |
| | Jun-13 | 0.0 | 0.40 | 140 | 55 | 3.5 | 370 | (800) | (3,588) | (377,711) |

The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.
During 2Q11, WFA-treated water was sampled for TDS and TIN (NO₃-N + NO₂-N, assuming no NH₃-N in drinking water) on 04/19/11.

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

| Total Project (All Wells) | | | | | |
|---------------------------|--------|--|--------------|----------|-----------|
| | Date | | Mass Balance | | |
| | | | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q12 | Jul-12 | | (1,156) | (12,710) | (181,703) |
| | Aug-12 | | (1,166) | (12,761) | (186,098) |
| | Sep-12 | | (1,374) | (13,663) | (278,177) |
| 4Q12 | Oct-12 | | (1,568) | (14,931) | (365,529) |
| | Nov-12 | | (1,849) | (16,233) | (479,992) |
| | Dec-12 | | (1,895) | (16,433) | (500,650) |
| 1Q13 | Jan-13 | | (1,895) | (16,433) | (500,650) |
| | Feb-13 | | (1,902) | (16,563) | (504,087) |
| | Mar-13 | | (1,959) | (17,539) | (529,895) |
| 2Q13 | Apr-13 | | (2,302) | (19,924) | (677,408) |
| | May-13 | | (2,623) | (21,798) | (816,283) |
| | Jun-13 | | (2,964) | (23,576) | (962,053) |



Main Map Features

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



Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations

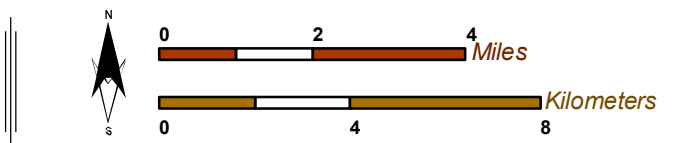
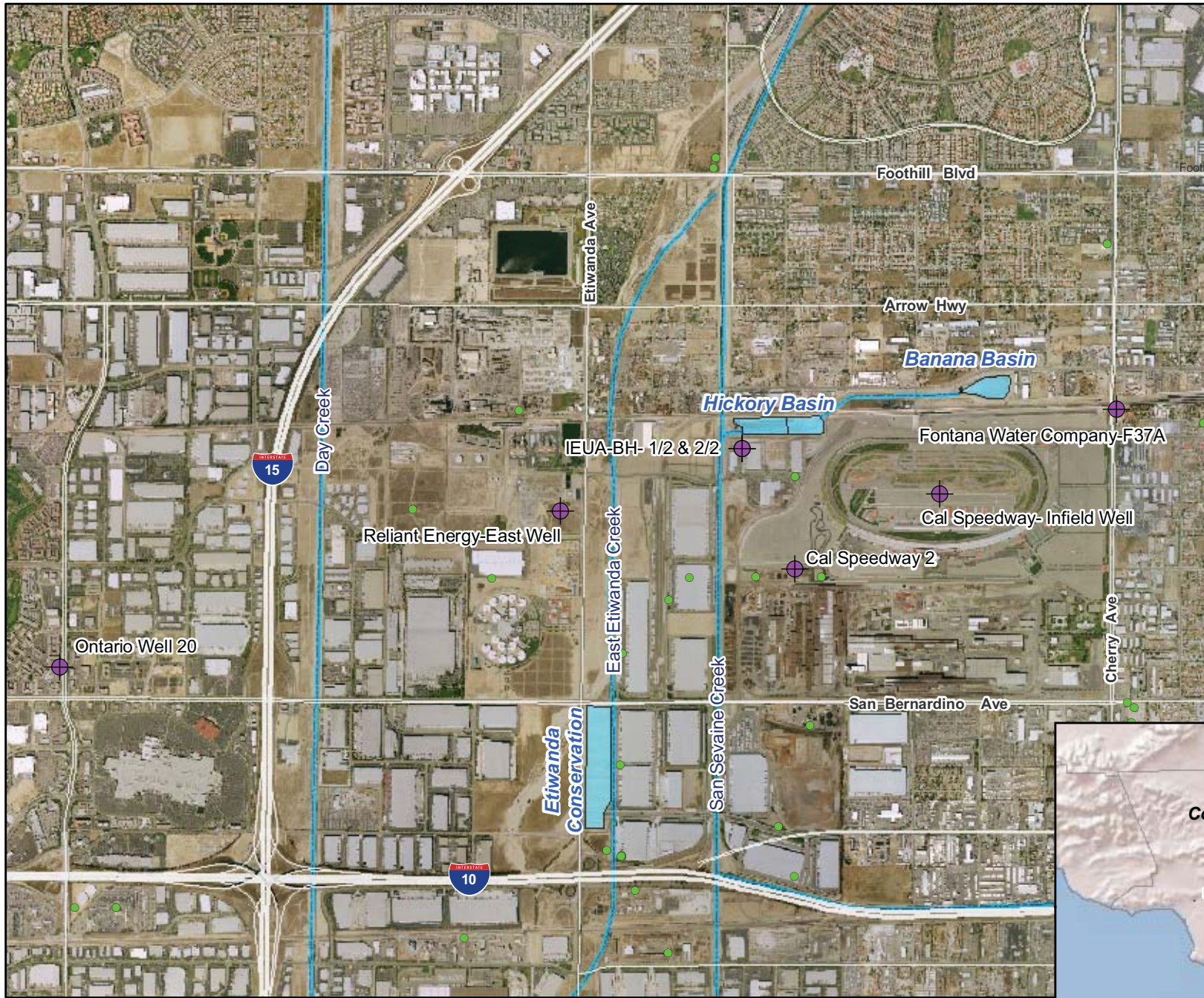






Figure 1-1



Main Map Features

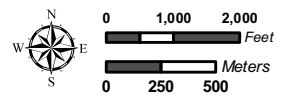
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

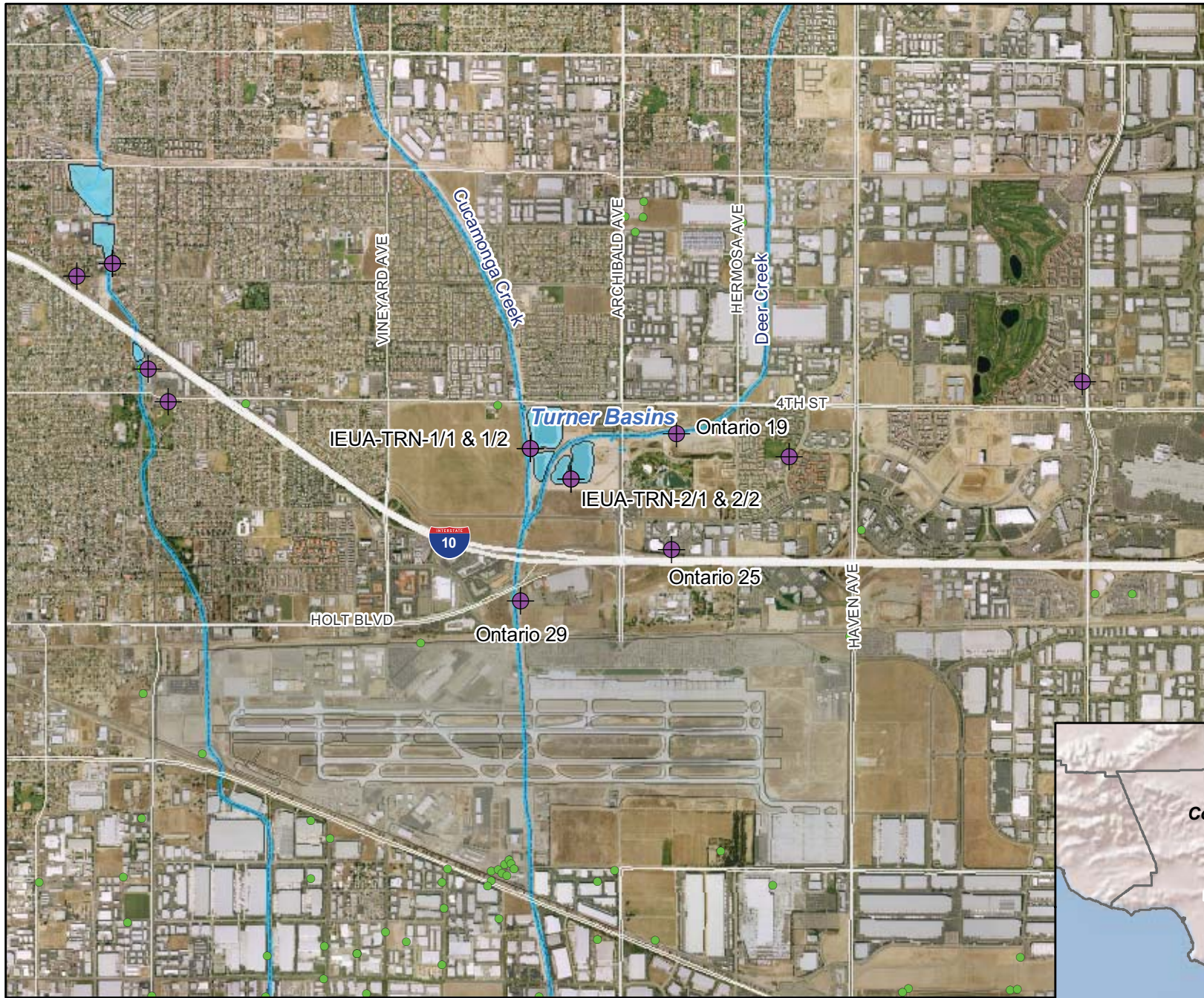


Monitoring Well Network
Hickory and Banana Basins





Figure 2-1

Recycled Water Recharge Program





Main Map Features

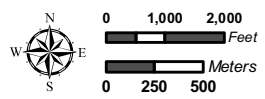
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

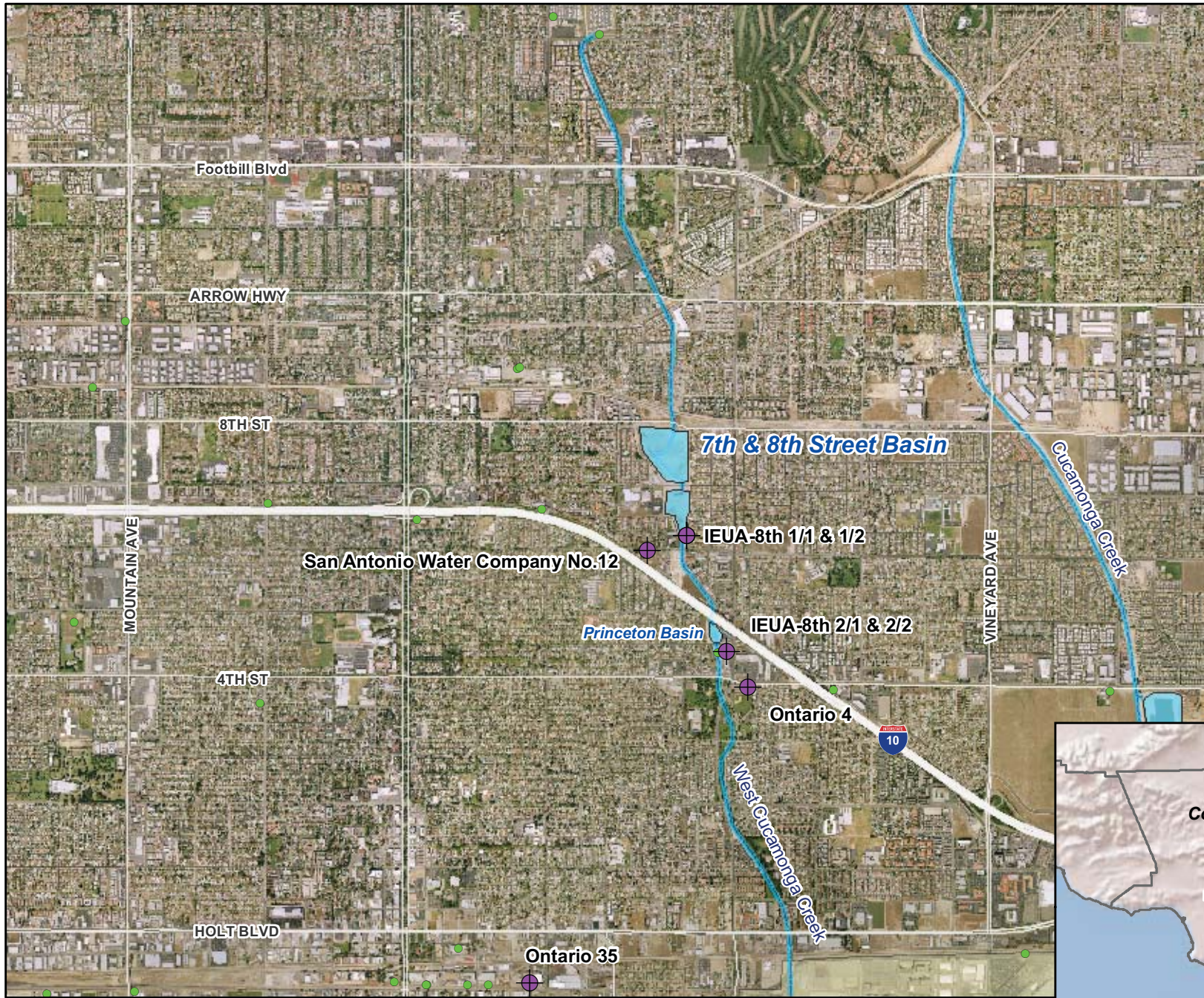


Monitoring Well Network
Turner Basins





Figure 2-2

Recycled Water Recharge Program





Main Map Features

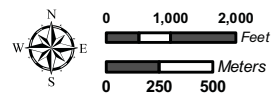
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

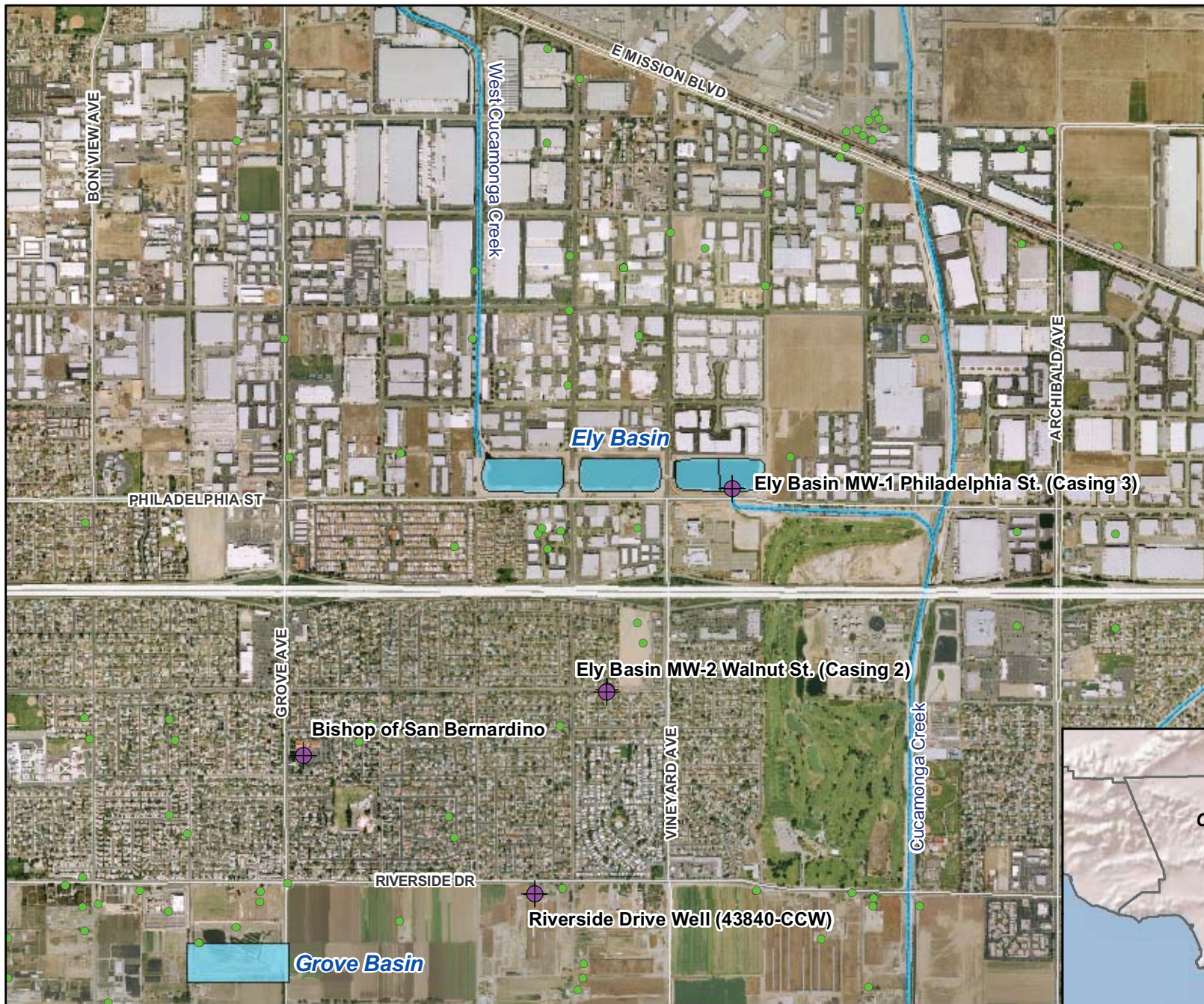


Monitoring Well Network
7th and 8th Street Basin





Figure 2-3

Recycled Water Recharge Program





Main Map Features

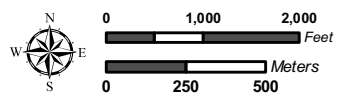
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

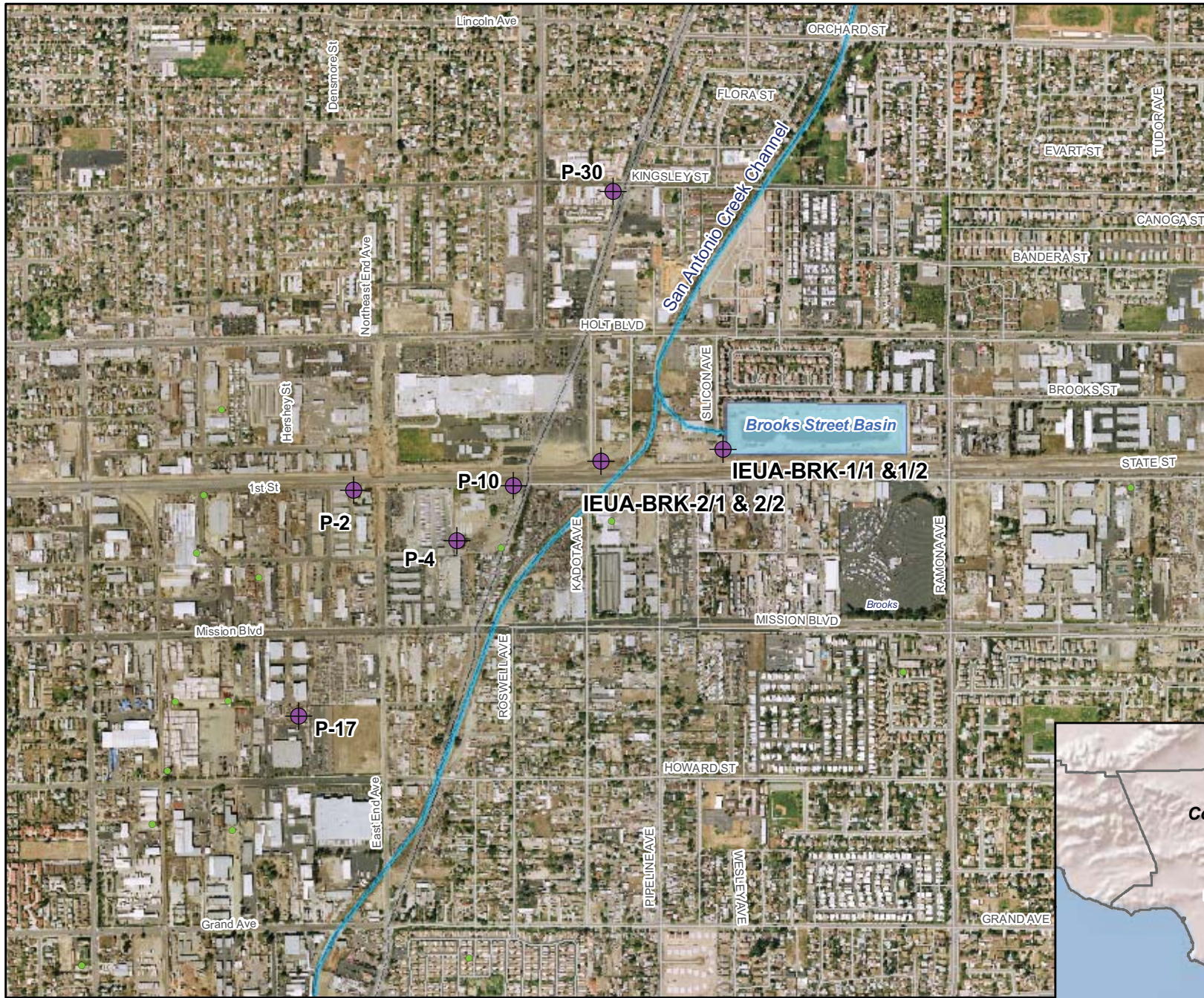


Monitoring Well Network
Ely Basins






Figure 2-4

Recycled Water Recharge Program





Main Map Features

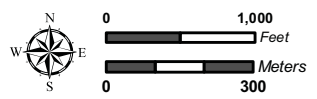
-  Existing Monitoring Well
-  "Other" Wells
-  Rivers/Streams/Creeks
-  Recharge Basins
-  County Boundary

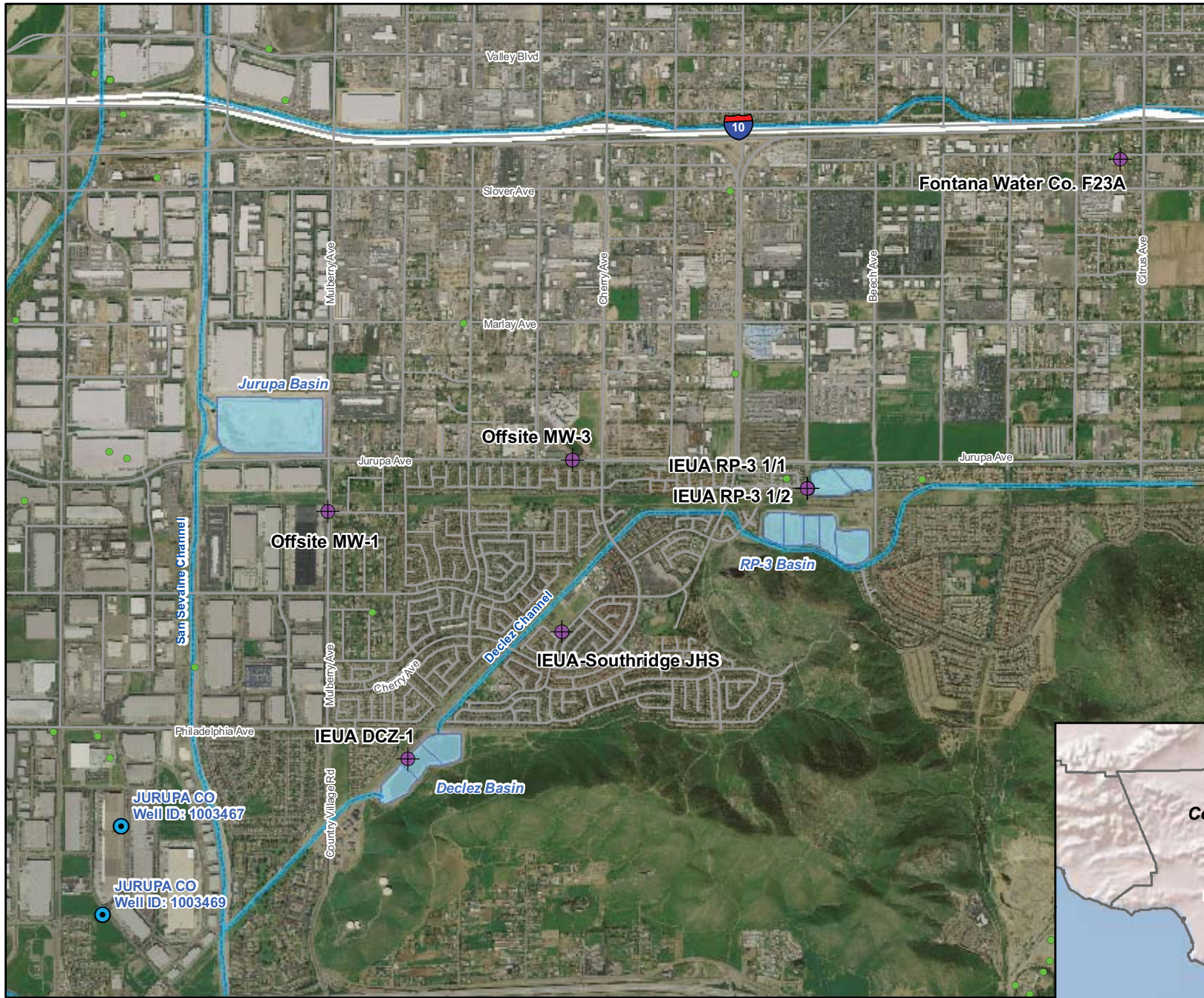


Monitoring Well Network
Brooks Street Basin






Figure 2-5

Recycled Water Recharge Program





Main Map Features

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

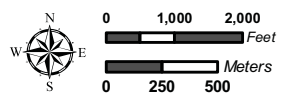


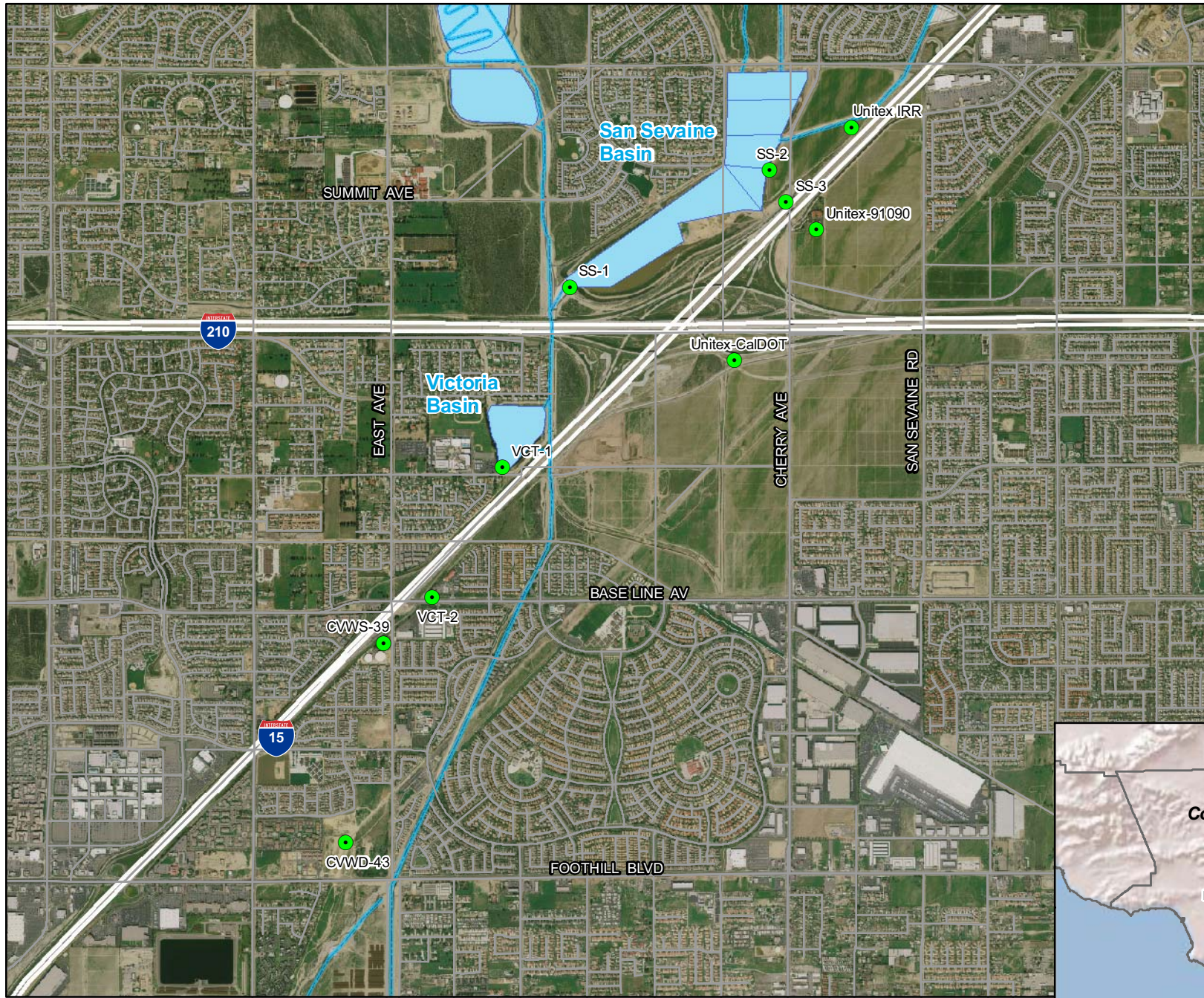
Monitoring Well Network

RP-3 Basin

Figure 2-6

Recycled Water Recharge Program





Main Map Features

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



Monitoring Well Network
San Seavaine and Victoria Basin

Figure 2-7

Recycled Water Recharge Program

