**Sylvie Lee, P.E.**
Manager of Planning & Environmental Resources

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General Manager

August 13, 2015

Regional Water Quality Control Board, Santa Ana Region
**Attention: Mr. Kurt Berchtold**
3737 Main Street, Suite 500
Riverside, California 92501-3348

**Subject: Chino Basin Recycled Water Groundwater Recharge Program Quarterly Monitoring Report for April through June 2015**

Dear Mr. Berchtold,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2015 (2Q15), April 1 through June 30, 2015, 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 2Q15, 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 total nitrogen (TN) at RP3 Basin and an exceedance of the 4-quarter running average for odor (secondary MCL).

Chino Basin Watermaster hereby certifies that, during the period of April 1 through June 30, 2015, 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 13th day of August 2015 in the Cities of Chino and Rancho Cucamonga.

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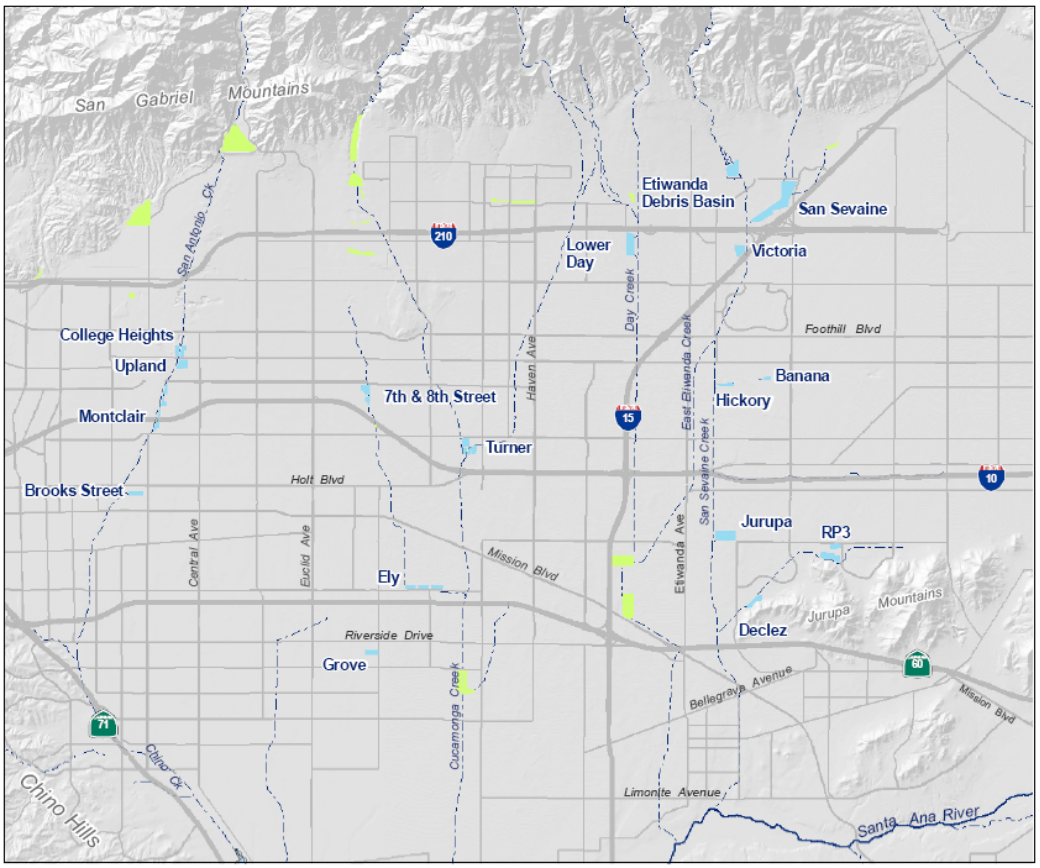
# Chino Basin Recycled Water Groundwater Recharge Program

## Quarterly Monitoring Report

**April 1 through June 30, 2015**




*Prepared by:*

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

August 15, 2015

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# 1. Introduction

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

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

On June 29, 2007, the Santa Ana Regional Water Quality Control Board (Regional Board) adopted Order No. R8-2007-0039 (Order) which prescribes the requirements for recycled water use for groundwater recharge in 13 recharge sites within the Chino North Management Zone. The locations of recharge basins in the Chino Basin Groundwater Recharge Program are shown 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 2015 (2Q15).

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

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

## B. Order No. R8-2009-0057

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

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

On October 27, 2010, the Regional Board revised Monitoring and Reporting Program No. R8-2007-0039 (MRP) based on requests for modifications from IEUA and approved by the State Water Resources Control Board – Division of Drinking Water (DDW, formerly California Department of Public Health). 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 10$^{th}$ day.

2) Groundwater Monitoring Program Requirement V.1. was modified by adding a sentence to the paragraph that allows IEUA to analyze the groundwater samples collected on a quarterly basis from non-active municipal drinking water wells for dissolved metals, instead of total recoverable metals.

3) Reporting Requirement VI.B.3.b. was modified and footnote No. 18 was added to reflect that IEUA uses groundwater monitoring information contained in the *State of the Basin* report prepared on a biennial basis by the Chino Basin Watermaster, amongst other sources, for the annual determination of the recycled water groundwater flow path.

### D. Outline of the Quarterly Report

Section 2 of this quarterly report discusses the water quality monitoring results for recycled water recharge (water recycling plant effluent, distribution system, basin surface water, and lysimeter data), diluent water, and groundwater. Section 3 provides an overview of recharge operations including the volume of diluent water and recycled water recharged. Section 4 describes any operational problems and preventive and/or corrective actions taken. Section 5 contains the certification of non-pumping in the 500-foot buffer zones around each basin. Section 6 is a brief overview of the Monte Vista Water District's (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 2Q15 data.

Recycled Water Specifications A.5 through A.9 in the Order are the narrative limits established in the permit. The corresponding monitoring data used to determine compliance with the Order are presented in Tables 2-1 and 2-2. This data is typically collected from samples of RP-1 and RP-4 effluent; however, recycled water compliance with the total nitrogen (TN) limit of 5 mg/L (Specification A.7) can also be met at the lysimeters (Table 2-5a) or at locations specified in alternative monitoring plans (Table 2-5b, and discussed in further detail in Section 2.B). During 2Q15, there was one exceedance of the TN limit.

In May 2015, the average of two consecutive TN sample results for the RP3 Basin using the TN reduction factor of 31% exceeded 5 mg/L. The DDW and the Regional Board were both notified on June 1, 2015 via e-mail regarding the exceedance.

In the Groundwater Replenishment Regulations adopted by the DDW on June 18, 2014, the new TN limit for recycled water recharge is 10 mg/L. On March 12, 2014, IEUA submitted a letter to the DDW and the Regional Board requesting that the higher limit (proposed limit at that time) in the Groundwater Replenishment Regulations be adopted for the IEUA's GWR program. Per the request of the Regional Board, additional data was submitted to support the increased TN limit. IEUA has yet to receive approval of the new limit and continues to report based on the 5 mg/L limit.

Recycled Water Specifications A.1 through A.4 of the Order are numerical limits based on the EPA's primary maximum contaminant levels (MCLs), secondary MCLs, and Action Levels. Recycled Water Specification A.15 is a numerical limit for oil and grease. The corresponding monitoring data used to determine compliance with the Order are presented in Table 2-3. Due to the volume of samples required for laboratory analyses, IEUA selected, and DDW approved, a sampling point along the recycled water distribution pipeline as the compliance point for the numerical limits. IEUA selected the turnout to NRG California South, LP (formerly Reliant Energy) as representative of the system blend of recycled water used for recharge.

In the Order, compliance for all constituents with MCLs or Action Levels is based on a 4-quarter running average (Recycled Water Specifications A.1 through A.4). Table 2-3 summarizes the 4-quarter running average concentration data for each parameter from 3Q14 through 2Q15, and lists the corresponding limits for compliance.

During 1Q15, the annual samples were inadvertently not sent to the contract laboratory for analysis. As a result, some of the quarterly monitoring parameters were missed. Two sets of samples were collected during 2Q15 on different days (May 13 and June 10) to make up for the missed quarterly parameters. The June 10, 2015 samples were the make-up samples for 1Q15 and are annotated accordingly in the report tables.

For the parameters that were analyzed during 2Q15, 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 the last 4 quarters, the threshold odor was found to be 8 Units. This results in a 4-quarter running average value of 8 Units, causing the threshold odor compliance metric to exceed the secondary MCL. The odor has been identified by Eaton Analytical (contract laboratory) as chlorine. Recycled water used for groundwater recharge must meet disinfected tertiary recycled water standards in accordance to Title 22. Sodium hypochlorite is used as the disinfection agent at the RP-1 and RP-4 water recycling facilities; hence, the smell of chlorine is prominent in recycled water and is therefore unavoidable. Order No. R8-2007-0039 allows compliance for secondary MCLs to be determined at the mound monitoring well. Based on the mound monitoring well data (Table 2-8), threshold odor did not exceed 3 Units at any of the monitoring wells during 2Q15.

Although NRG turnout is a suitable sampling location for most constituents, it is not appropriate for disinfection byproducts (DBPs), more specifically: Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance samples for these DBPs are taken from lysimeters at basins actively receiving recycled water. At these locations, the samples better represent the DBPs present in the recycled water prior to reaching the groundwater table. Once a quarter, a single representative sample is collected from a selected compliance lysimeter and analyzed for DBPs. For the 2Q15 sampling for DBPs, IEUA chose the 25-foot below ground surface lysimeter at the RP3 Basin (RP3-LYS-25) as the compliance point. The RP3 Basin lysimeter was selected as the compliance point because the basin received consistent recycled water recharge and recycled water was present at the 25-foot depth based on electrical conductivity (EC) measurements.

For constituents with no specified limits, quarterly monitoring data are summarized in Table 2-4. All quarterly constituents were analyzed as required; additionally the annual constituents that were missed during the annual sampling event that occurred during 1Q15 were tested this quarter and 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 at basins when recycled water is delivered, for the determination of compliance with Recycled Water Sepcifications A.7, A.10, and A.11. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. Basin and lysimeter water quality results from 2Q15 are summarized in Table 2-5a. The table includes lysimeter data for Banana, Brooks, and Hickory Basins. During 2Q15, there were no exceedances of TOC and TN at the compliance lysimeters at the abovementioned basins.

As indicated in Recycled Water Compliance Determination B.6 of the Order, alternative monitoring programs for TOC and TN compliance under Specifications A.7, A.10 and A11 can be developed based on start-up period findings. The alternative monitoring plans can be found in the Start-Up Period Report for each basin. The alternative TOC and TN monitoring plans approved by the Regional Board and DDW for Turner, RP3, Ely, 8th Street, San Sevaine, and Victoria Basins include alternative monitoring locations (RP1 effluent for Ely Basin, and recycled water at the NRG turnout for all other basins), and the application of correction factors for soil aquifer treatment (SAT). The following correction factors were determined from each basin's start-up period findings:

- Turner 1 & 2: TOC reduction of 70 percent and TN reduction of 87 percent
- Turner 3 & 4: TOC reduction of 85 percent and TN reduction of 87 percent
- Ely Basins: TOC reduction of 76 percent and TN reduction of 52 percent
- RP3 Basin: TOC reduction of 88 percent and TN reduction of 31 percent
- 8$^{th}$ Street Basin: TOC reduction of 59 percent and TN reduction of 75 percent
- San Sevaine 5: TOC reduction of 78 percent and TN reduction of 69 percent
- Victoria: TOC reduction of 78 percent and TN reduction of 82 percent

The TOC and TN values calculated based on the alternative monitoring locations and the application of these correction factors listed above are summarized in Table 2-5b.

An alternative monitoring plan has also been implemented at the Brooks Basin 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. Brooks Basin alternative monitoring data are summarized in Table 2-5b.

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

During 2Q15, there were no exceedances of TOC and one exceedance of TN (RP3 Basin, as discussed in Section 2.A.) at the basins that have implemented alternative monitoring plans.

## C. Diluent Water

For 2Q15, diluent water quality sampling of stormwater was conducted during the month of June 2015. 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 DDW-approved Diluent Water Monitoring Plan. The quarterly sampling schedule for stormwater and local runoff is presented in Table 4-2 of the plan. Stormwater is sampled during the rainy season (1$^{st}$ and 4$^{th}$ quarters) and local runoff is sampled during the dry season (2$^{nd}$ and 3$^{rd}$ quarters). Samples are collected at about half the locations during each seasonal quarter, alternating between even and odd years. Table 5-1 of the plan summarizes the sample type and reporting frequency for the parameters listed in Tables I, II, III, and IV of the Diluent Water Monitoring requirement III.3 of the MRP. During 2Q15, the San Sevaine Creek sample exceeded the "maximum level to trigger source water evaluation" for haloacetic acids. IEUA will conduct a source water evaluation of San Sevaine Creek.

### D. Groundwater Monitoring Wells

Monitoring is conducted at groundwater monitoring wells quarterly and annually to evaluate groundwater quality conditions in the vicinity of the recharge basins utilizing recycled water. Groundwater monitoring results can be used to assess background conditions, time the arrival of recharge waters, and the impact that recharged water has on downgradient water supplies. The wells in the monitoring well networks for Hickory and Banana, Turner, 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. Groundwater quality samples are collected and tested quarterly for all constituents listed in Table 1 of Section V in the MRP R8-2007-0039, and annually for constituents specified in the Phase II Findings of Fact, Attachment A in the permit (Bullet 27 in the Conditions Section). The groundwater constituents analyzed from the monitoring wells during quarterly monitoring are presented in Table 2-8.

Any 2Q15 which exceeded primary or secondary MCLs are shown in the table in bold italic font. The DDW is notified within 48 hours of receiving the results for primary MCL exceedances or coliform presence at active municipal drinking water wells. Exceedances of primary MCLs and coliform presence at non-drinking water monitoring wells and all secondary MCL exceedances will only be reported in the quarterly reports. Of note are the analyses for the following wells and constituents:

Turbidity exceeding the secondary MCL of 5 NTU was observed in seven monitoring wells, namely: Alcoa MW1, RP3-1/1, 8TH-1/1, BRK-2/1, Ely MW2, SS-1/1, and VCT-1/1. The secondary MCL of 15 units for color was also exceeded at 8TH-1/1.

TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in Southridge JHS, Alcoa MW3 and Ely MW2 (Walnut). RP3-1/1 slightly exceeded the TDS secondary MCL. The distribution of TDS concentrations observed at wells in the Chino Basin is summarized in Watermaster's State of the Basin Reports.

Some monitoring wells in the Banana & Hickory, RP3, 8th Street, Brooks, and Ely monitoring networks have nitrate as nitrogen ($NO_3$-N) concentrations above the primary MCL of 10 mg/L. These higher levels of $NO_3$-N are characteristic of groundwater in these portions of the Chino Basin, where historically the $NO_3$-N concentrations range from 10-30 mg/L, as reported in Watermaster's State of the Basin reports. No notifications were made to the DDW as these high $NO_3$-N concentrations are comparable to the ambient N03-N concentration in groundwater for each monitoring well's respective groundwater management zone within the Chino Basin. The distribution of $NO_3$-N concentrations observed at wells in the Chino Basin is summarized in Watermaster's State of the Basin Reports.

The current State of the Basin Report, which is the "Chino Basin Optimum Basin Management Program 2014 State of the Basin Report" published in June 2015 was prepared by Wildermuth Environmental for the Chino Basin Watermaster

Total coliform was detected at Reliant Energy – East Well, Ontario Well No. 20, Ontario Well No. 38, T-1/2, Southridge JHS, Fontana Water Company Well F23a, Alcoa MW1, BRK-2/2, Ely MW2, Riverside Well (Ely), and SS-1/1. The total coliform found at these well locations did not come from recycled water, as the total coliform levels found in the recycled water are usually non-detect. In accordance with the MRP, notification to the DDW of coliform presence in municipal drinking water wells must be made within 48 hours of receiving the results. On May 26 and June 22, 2015, IEUA notified the DDW of coliform presence at Ontario Well No. 20, Ontario Well No. 38, and Fontana Water Company Well F23a.

## 3. Recharge Operations

IEUA's Groundwater Recharge Coordinator recorded the daily volumes of water routed to all basins. The Banana, Brooks, Ely, Hickory, RP3, Turner, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (local runoff, stormwater,

and/or imported water) captured during 2Q15 at the basins that have initiated recharge using recycled water.

## 4. Operational Problems & Preventive or Corrective Actions

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

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

Watermaster has certified that there was no reported pumping of groundwater in 2Q15 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In fact, there are no domestic or municipal production wells within the buffer zones of these aforementioned recharge sites.

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

If a proposed well falls within an abutting parcel, SBCDEHS will review the well location using maps of the basins and buffer zones. If the well falls too near the buffer zone boundary for SBCDEHS to determine the relationship of the proposed well location to the buffer boundary, SBCDEHS will defer to IEUA for a prompt field review of the proposed well location. The field review may include contacting and having the well applicant identify the exact location of the proposed well casing. To conduct a detailed field review, SBCDEHS will contact and provide the IEUA Groundwater Recharge Coordinator with a copy of the well permit application and a timeline for the completion of IEUA's review. Following the review, IEUA will notify SBCDEHS of its findings in writing. IEUA will also notify the DDW and the Regional Board of well permit applications that it recommends should be declined due to well locations determined to fall with a 500-foot buffer zone.

## 6. MVWD ASR Project

Reporting for the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project was allowed by the Regional Board to be included under IEUA/Watermaster Phase I Groundwater Recharge Order No. R8-2005-0033 and subsequent permit updates. In April 2007, MVWD, Watermaster, and IEUA entered into an agreement to report the MVWD ASR project groundwater injection/recovery volumes and TIN/TDS mass balance in the recharge program quarterly reports. Initial injection began in June 2007. In May 2008, MVWD discontinued groundwater injection at the ASR wells for an extended period of time. In June 2011, MVWD groundwater injection activities resumed at four ASR wells. MVWD continued injection of imported water through September 2011. No significant volume of imported water has been injected since September 2011. During the last four quarters (3Q14 through 2Q15), no imported water was injected into the groundwater basin. Table 6-1 summarizes the monthly volumes and TIN/TDS of injected and recovered water. The table also includes the mass balance of TIN/TDS from the injection-recovery cycles.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| | RP-1 Effluent | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC [7] | Hardness | Coliform [1,2,4] | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC | TDS [3] | Hardness | Coliform [1,2,4] |
| Unit | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | 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 |
| 04/01/15 | 0.5 | 5.3 | 5.1 | 6.0 | 5.2 | 7.1 | 844 | | <2 | 0.5 | 4.1 | 7.0 | 7.7 | 7.1 | 7.2 | 789 | | | <2 |
| 04/02/15 | 0.5 | 5.2 | 5.6 | | 5.7 | 7.2 | 928 | | <2 | 0.5 | 4.0 | 8.3 | | 8.4 | 7.1 | 798 | | | <2 |
| 04/03/15 | 0.5 | 5.1 | | | | 7.2 | 942 | | <2 | 0.5 | 3.8 | | | | 7.1 | 800 | | | <2 |
| 04/04/15 | 0.4 | 5.2 | | | | 7.2 | 942 | | <2 | 0.5 | 3.8 | | | | 7.1 | 802 | | | <2 |
| 04/05/15 | 0.5 | 5.3 | 5.1 | 6.0 | 5.2 | 7.2 | 942 | 146 | <2 | 0.5 | 3.9 | 6.8 | 6.9 | 6.9 | 7.1 | 794 | 486 | 143 | <2 |
| 04/06/15 | 0.5 | 5.2 | 6.1 | | 6.2 | 7.1 | 942 | | <2 | 0.5 | 4.0 | 5.0 | | 5.1 | 7.2 | 795 | | | <2 |
| 04/07/15 | 0.5 | 5.4 | 6.1 | | 6.2 | 7.0 | 942 | | <2 | 0.5 | 4.1 | 6.4 | | 6.5 | 7.1 | 806 | | | <2 |
| 04/08/15 | 0.5 | 5.6 | 6.4 | | 6.5 | 7.0 | 942 | | <2 | 0.5 | 4.0 | 7.4 | | 7.5 | 7.1 | 803 | | | <2 |
| 04/09/15 | 0.5 | 5.5 | 5.9 | | 6.0 | 7.0 | 934 | | 2 | 0.5 | 4.8 | 7.9 | | 8.0 | 7.1 | 754 | | | <2 |
| 04/10/15 | 0.5 | 5.2 | | | | 7.0 | 953 | | <2 | 0.5 | 3.8 | | | | 7.1 | 813 | | | <2 |
| 04/11/15 | 0.5 | 5.2 | | | | 7.0 | 985 | | <2 | 0.5 | 3.8 | | | | 7.1 | 820 | | | <2 |
| 04/12/15 | 0.5 | 5.2 | 6.6 | 7.5 | 6.7 | 7.0 | 990 | | 2 | 0.5 | 3.9 | 6.2 | 7.1 | 6.3 | 7.1 | 814 | | | <2 |
| 04/13/15 | 0.5 | 5.3 | 6.2 | | 6.3 | 7.0 | 962 | | 2 | 0.5 | 3.9 | 4.8 | | 4.9 | 7.1 | 820 | | | <2 |
| 04/14/15 | 0.5 | 5.4 | 6.0 | | 6.1 | 7.0 | 1004 | | <2 | 0.5 | 3.9 | 5.2 | | 5.3 | 7.1 | 800 | | | <2 |
| 04/15/15 | 0.5 | 3.8 | 6.0 | | 6.1 | 7.0 | 1095 | | <2 | 0.4 | 3.8 | 6.4 | | 6.5 | 7.0 | 824 | | | <2 |
| 04/16/15 | 0.5 | 5.5 | 5.7 | | 5.8 | 7.0 | 1106 | | <2 | 0.5 | 3.7 | 6.6 | | 6.7 | 7.1 | 770 | | | <2 |
| 04/17/15 | 0.5 | 5.3 | | | | 7.0 | 1104 | | <2 | 0.4 | 3.6 | | | | 7.1 | 815 | | | <2 |
| 04/18/15 | 0.5 | 5.4 | | | | 7.0 | 1086 | | <2 | 0.4 | 3.7 | | | | 7.1 | 808 | | | <2 |
| 04/19/15 | 0.5 | 5.4 | 5.5 | 6.4 | 5.6 | 7.0 | 1116 | | <2 | 0.4 | 3.8 | 5.9 | 6.8 | 6.0 | 7.1 | 806 | 500 | | <2 |
| 04/20/15 | 0.6 | 5.4 | 4.1 | | 4.2 | 7.0 | 1096 | | <2 | 0.5 | 3.9 | 4.6 | | 4.7 | 7.1 | 806 | | | <2 |
| 04/21/15 | 0.5 | 5.5 | 5.0 | | 5.1 | 7.0 | 1000 | | <2 | 0.5 | 3.9 | 4.8 | | 4.9 | 7.1 | 814 | | | <2 |
| 04/22/15 | 0.5 | 5.4 | 5.5 | | 5.6 | 7.0 | 917 | | <2 | 0.5 | 3.8 | 6.1 | | 6.2 | 7.1 | 812 | | | <2 |
| 04/23/15 | 0.5 | 5.5 | 5.9 | | 6.0 | 7.0 | 900 | | <2 | 0.5 | 3.7 | 6.2 | | 6.3 | 7.0 | 790 | | | <2 |
| 04/24/15 | 0.5 | 5.6 | | | | 7.0 | 894 | | <2 | 0.4 | 3.6 | | | | 7.1 | 824 | | | <2 |
| 04/25/15 | 0.5 | 5.8 | | | | 7.0 | 888 | | 2 | 0.4 | 3.6 | | | | 7.1 | 828 | | | <2 |
| 04/26/15 | 0.5 | 5.9 | 7.7 | 8.6 | 7.8 | 6.9 | 873 | | <2 | 0.5 | 3.8 | 6.5 | 7.5 | 6.6 | 7.1 | 828 | 506 | | <2 |
| 04/27/15 | 0.4 | 6.0 | 6.0 | | 6.1 | 7.0 | 865 | | 4 | 0.5 | 4.1 | 5.1 | | 5.2 | 7.1 | 846 | | | <2 |
| 04/28/15 | 0.5 | 6.1 | 4.6 | | 4.7 | 7.0 | 869 | | 4 | 0.4 | 4.1 | 4.9 | | 5.0 | 7.1 | 847 | | | <2 |
| 04/29/15 | 0.5 | 6.1 | 4.3 | | 4.4 | 7.0 | 878 | | 2 | 0.9 | 4.1 | 5.0 | | 5.1 | 7.2 | 823 | | | <2 |
| 04/30/15 | 0.5 | 6.0 | 6.4 | | 6.5 | 6.9 | 863 | | <2 | 0.4 | 4.0 | 5.2 | | 5.3 | 7.3 | 808 | | | <2 |
| Avg | 0.5 | 5.4 | 5.7 | 6.9 | 5.8 | 7.0 | 960 | 146 | <2 | 0.5 | 3.9 | 6.0 | 7.2 | 6.1 | 7.1 | 809 | 497 | 143 | <2 |
| Min | 0.4 | 3.8 | 4.1 | 6.0 | 4.2 | 6.9 | 844 | 146 | <2 | 0.4 | 3.6 | 4.6 | 6.8 | 4.7 | 7.0 | 754 | 486 | 143 | <2 |
| Max | 0.6 | 6.1 | 7.7 | 8.6 | 7.8 | 7.2 | 1116 | 146 | 4 | 0.9 | 4.8 | 8.3 | 7.7 | 8.4 | 7.3 | 847 | 506 | 143 | <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 ˙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 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| | RP-1 Effluent | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC [7] | Hardness | Coliform [1,2,4] | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC | TDS [3] | Hardness | Coliform [1,2,4] |
| Unit | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | 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 |
| 05/01/15 | 0.5 | 5.6 | | | | 7.0 | 865 | | 7 | 0.4 | 3.8 | | | | 7.3 | 814 | | | <2 |
| 05/02/15 | 0.5 | 5.6 | | | | 7.0 | 854 | | <2 | 0.4 | 3.8 | | | | 7.3 | 800 | | | <2 |
| 05/03/15 | 0.5 | 5.7 | 7.2 | 7.3 | 7.3 | 7.0 | 870 | 147 | <2 | 0.5 | 4.0 | 5.7 | 6.8 | 5.8 | 7.3 | 794 | 482 | 141 | <2 |
| 05/04/15 | 0.7 | 5.5 | 7.1 | | 7.2 | 7.0 | 882 | | <2 | 0.6 | 4.0 | 5.0 | | 5.1 | 7.3 | 799 | | | <2 |
| 05/05/15 | 0.8 | 5.8 | 7.4 | | 7.5 | 6.9 | 878 | | <2 | 0.6 | 4.0 | 4.8 | | 4.8 | 7.3 | 790 | | | <2 |
| 05/06/15 | 0.7 | 6.0 | 7.5 | | 7.6 | 7.0 | 879 | | 2 | 0.7 | 4.2 | 5.7 | | 5.8 | 7.2 | 781 | | | <2 |
| 05/07/15 | 0.7 | 5.6 | 6.5 | | 6.5 | 7.1 | 896 | | <2 | 0.6 | 3.8 | 6.5 | | 6.5 | 7.1 | 777 | | | <2 |
| 05/08/15 | 0.7 | 5.7 | | | | 7.0 | 908 | | <2 | 0.4 | 3.8 | | | | 7.1 | 781 | | | <2 |
| 05/09/15 | 0.7 | 5.8 | | | | 7.0 | 912 | | <2 | 0.5 | 3.8 | | | | 7.0 | 800 | | | <2 |
| 05/10/15 | 0.7 | 6.2 | 8.3 | 8.4 | 8.4 | 7.1 | 925 | | <2 | 0.5 | 4.2 | 6.0 | 7.5 | 6.1 | 7.0 | 833 | 506 | | <2 |
| 05/11/15 | 0.7 | 6.1 | 8.4 | | 8.5 | 7.1 | 928 | | <2 | 0.5 | 4.3 | 4.9 | | 5.0 | 7.0 | 844 | | | <2 |
| 05/12/15 | 0.8 | 6.4 | 8.2 | | 8.3 | 7.1 | 911 | | <2 | 0.6 | 4.2 | 4.9 | | 5.0 | 7.2 | 840 | | | <2 |
| 05/13/15 | 0.7 | 5.6 | 7.7 | | 7.8 | 7.1 | 879 | | 4 | 0.7 | 3.7 | 5.2 | | 5.3 | 7.2 | 839 | | | <2 |
| 05/14/15 | 0.7 | 5.4 | 8.1 | | 8.1 | 7.1 | 877 | | <2 | 0.7 | 3.7 | 6.1 | | 6.2 | 7.2 | 818 | | | <2 |
| 05/15/15 | 0.7 | 5.4 | | | | 7.0 | 868 | | <2 | 0.7 | 3.7 | | | | 7.2 | 810 | | | <2 |
| 05/16/15 | 0.7 | 5.5 | | | | 7.0 | 872 | | <2 | 0.7 | 3.7 | | | | 7.2 | 825 | | | <2 |
| 05/17/15 | 0.7 | 5.8 | 8.5 | 8.6 | 8.6 | 7.0 | 840 | | <2 | 0.8 | 4.0 | 5.4 | 5.5 | 5.5 | 7.2 | 826 | 504 | | <2 |
| 05/18/15 | 0.9 | 5.9 | 7.5 | | 7.6 | 7.1 | 840 | | <2 | 0.9 | 4.0 | 4.6 | | 4.7 | 7.3 | 833 | | | <2 |
| 05/19/15 | 0.8 | 5.9 | 6.2 | | 6.3 | 7.1 | 866 | | <2 | 0.6 | 4.2 | 5.6 | | 5.7 | 7.2 | 844 | | | <2 |
| 05/20/15 | 0.8 | 5.8 | 6.7 | | 6.8 | 7.1 | 864 | | <2 | 0.3 | 4.2 | 5.8 | | 5.9 | 7.2 | 848 | | | <2 |
| 05/21/15 | 0.7 | 5.6 | 8.1 | | 8.2 | 7.0 | 835 | | <2 | 0.3 | 4.1 | 6.2 | | 6.3 | 7.3 | 830 | | | <2 |
| 05/22/15 | 0.7 | 5.4 | | | | 7.0 | 872 | | <2 | 0.3 | 3.8 | | | | 7.2 | 819 | | | <2 |
| 05/23/15 | 0.7 | 5.2 | | | | 7.1 | 863 | | <2 | 0.3 | 3.8 | | | | 7.2 | 823 | | | <2 |
| 05/24/15 | 0.6 | 5.2 | | | | 7.1 | 846 | | <2 | 0.3 | 4.0 | | | | 7.3 | 827 | | | <2 |
| 05/25/15 | 0.7 | 5.3 | 8.1 | | 8.2 | 7.1 | 873 | | <2 | 0.3 | 4.1 | 6.2 | | 6.3 | 7.2 | 829 | | | <2 |
| 05/26/15 | 0.6 | 5.5 | 8.6 | | 8.7 | 7.1 | 866 | | <2 | 0.4 | 4.3 | 4.8 | | 4.9 | 7.3 | 826 | | | <2 |
| 05/27/15 | 0.8 | 5.5 | 6.5 | 6.6 | 6.6 | 7.1 | 881 | | <2 | 0.3 | 4.2 | 4.6 | 5.7 | 4.7 | 7.3 | 818 | 502 | | <2 |
| 05/28/15 | 0.8 | 5.3 | 6.2 | | 6.3 | 7.1 | 906 | | 2 | 0.3 | 4.0 | 5.9 | | 6.0 | 7.3 | 824 | | | <2 |
| 05/29/15 | 0.8 | 5.4 | | | | 7.2 | 886 | | <2 | 0.3 | 4.2 | | | | 7.3 | 835 | | | <2 |
| 05/30/15 | 0.8 | 4.2 | | | | 7.2 | 898 | | <2 | 0.3 | 3.9 | | | | 7.3 | 828 | | | <2 |
| 05/31/15 | 0.8 | 5.4 | 7.1 | 7.2 | 7.2 | 7.2 | 888 | | <2 | 0.4 | 4.3 | 5.3 | 6.2 | 5.4 | 7.3 | 798 | 494 | | <2 |
| Avg | 0.7 | 5.6 | 7.5 | 7.6 | 7.6 | 7.1 | 878 | 147 | <2 | 0.5 | 4.0 | 5.5 | 6.3 | 5.5 | 7.2 | 818 | 498 | 141 | <2 |
| Min | 0.5 | 4.2 | 6.2 | 6.6 | 6.3 | 6.9 | 835 | 147 | <2 | 0.3 | 3.7 | 4.6 | 5.5 | 4.7 | 7.0 | 777 | 482 | 141 | <2 |
| Max | 0.9 | 6.4 | 8.6 | 8.6 | 8.7 | 7.2 | 928 | 147 | 7 | 0.9 | 4.3 | 6.5 | 7.5 | 6.5 | 7.3 | 848 | 506 | 141 | <2 |

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

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

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

[2] Turbidity limits: 2 NTU average daily; 5 NTU no more than 5% of day; 10 NTU at any ˙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 2015
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

| | RP-1 Effluent | | | | | | | | | RP-4 Effluent | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC [7] | Hardness | Coliform [1,2,4] | Turbidity [1,2,7] | TOC | $NO_3$-N | TN | TIN [3] | pH [7] | EC | TDS [3] | Hardness | Coliform [1,2,4] |
| Unit | NTU | mg/L | mg/L | mg/L | mg/L | unit | µhmo/cm | mg/L | 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 |
| 06/01/15 | 0.9 | 5.4 | 7.7 | | 7.8 | 7.2 | 888 | | 2 | 0.4 | 4.1 | 5.1 | | 5.2 | 7.3 | 795 | | | <2 |
| 06/02/15 | 0.9 | 5.6 | 5.4 | | 5.5 | 7.2 | 873 | | <2 | 0.4 | 4.1 | 4.8 | | 4.9 | 7.3 | 790 | | | <2 |
| 06/03/15 | 0.9 | 5.5 | 5.1 | | 5.2 | 7.2 | 912 | | 2 | 0.4 | 4.1 | 5.7 | | 5.8 | 7.3 | 784 | | | <2 |
| 06/04/15 | 1.0 | 5.4 | 3.5 | | 3.6 | 7.2 | 860 | | 2 | 0.4 | 3.8 | 6.6 | | 6.7 | 7.3 | 767 | | | <2 |
| 06/05/15 | 1.0 | 5.4 | | | | 7.2 | 875 | | <2 | 0.4 | 3.8 | | | | 7.3 | 773 | | | <2 |
| 06/06/15 | 0.9 | 5.4 | | | | 7.2 | 866 | | <2 | 0.4 | 3.8 | | | | 7.3 | 773 | | | <2 |
| 06/07/15 | 0.8 | 5.4 | 2.8 | 2.9 | 2.9 | 7.2 | 867 | 160 | <2 | 0.4 | 4.0 | 5.7 | 6.6 | 5.8 | 7.2 | 772 | 494 | 143 | <2 |
| 06/08/15 | 0.7 | 5.3 | 2.5 | | 2.6 | 7.2 | 866 | | <2 | 0.4 | 4.0 | 4.0 | | 4.1 | 7.3 | 777 | | | <2 |
| 06/09/15 | 0.9 | 5.7 | 2.9 | | 3.0 | 7.2 | 854 | | 2 | 0.4 | 4.1 | 3.8 | | 3.9 | 7.3 | 774 | | | <2 |
| 06/10/15 | 0.6 | 5.7 | 2.6 | | 2.7 | 7.2 | 871 | | <2 | 0.4 | 4.1 | 4.6 | | 4.7 | 7.3 | 778 | | | <2 |
| 06/11/15 | 0.5 | 5.4 | 3.4 | | 3.5 | 7.2 | 876 | | 2 | 0.4 | 4.0 | 4.8 | | 4.9 | 7.3 | 778 | | | <2 |
| 06/12/15 | 0.5 | 5.4 | | | | 7.2 | 876 | | <2 | 0.4 | 4.1 | | | | 7.2 | 776 | | | <2 |
| 06/13/15 | 0.5 | 5.4 | | | | 7.3 | 892 | | <2 | 0.4 | 4.1 | | | | 7.3 | 776 | | | <2 |
| 06/14/15 | 0.5 | 5.6 | 2.9 | 3.0 | 3.0 | 7.3 | 896 | | <2 | 0.4 | 4.2 | 4.8 | 5.3 | 5.0 | 7.2 | 779 | 492 | | <2 |
| 06/15/15 | 0.5 | 5.6 | 3.1 | | 3.2 | 7.3 | 887 | | <2 | 0.4 | 4.3 | 4.1 | | 4.2 | 7.2 | 780 | | | <2 |
| 06/16/15 | 0.5 | 5.7 | 2.9 | | 3.0 | 7.2 | 972 | | <2 | 0.4 | 4.3 | 3.5 | | 3.6 | 7.3 | 787 | | | <2 |
| 06/17/15 | 0.5 | 5.8 | 2.8 | | 2.9 | 7.2 | 1044 | | <2 | 0.5 | 4.2 | 4.3 | | 4.4 | 7.2 | 792 | | | <2 |
| 06/18/15 | 0.5 | 5.7 | 2.5 | | 2.6 | 7.2 | 1039 | | <2 | 0.5 | 4.0 | 4.6 | | 4.6 | 7.1 | 785 | | | <2 |
| 06/19/15 | 0.6 | 5.9 | | | | 7.3 | 1063 | | <2 | 0.5 | 4.2 | | | | 7.2 | 786 | | | <2 |
| 06/20/15 | 0.6 | 5.7 | | | | 7.3 | 1057 | | 2 | 0.5 | 4.2 | | | | 7.1 | 791 | | | <2 |
| 06/21/15 | 0.5 | 5.5 | 6.8 | 6.9 | 6.9 | 7.2 | 1036 | | 2 | 0.4 | 4.4 | 3.1 | 3.8 | 3.2 | 7.1 | 792 | 482 | | <2 |
| 06/22/15 | 0.5 | 5.3 | 8.1 | | 8.2 | 7.2 | 1047 | | <2 | 0.4 | 4.4 | 3.2 | | 3.3 | 7.1 | 797 | | | <2 |
| 06/23/15 | 0.5 | 5.1 | 7.3 | | 7.4 | 7.2 | 1031 | | <2 | 0.4 | 4.2 | 2.9 | | 3.0 | 7.1 | 813 | | | <2 |
| 06/24/15 | 0.5 | 5.1 | 6.5 | | 6.6 | 7.2 | 974 | | <2 | 0.6 | 4.0 | 3.0 | | 3.2 | 7.2 | 810 | | | <2 |
| 06/25/15 | 0.6 | 4.9 | 6.2 | | 6.3 | 7.1 | 882 | | 4 | 0.6 | 3.8 | 3.8 | | 3.9 | 7.2 | 799 | | | <2 |
| 06/26/15 | 0.6 | 4.7 | | | | 7.1 | 857 | | <2 | 0.6 | 3.7 | | | | 7.3 | 830 | | | <2 |
| 06/27/15 | 0.6 | 4.8 | | | | 7.1 | 864 | | <2 | 0.7 | 3.6 | | | | 7.3 | 832 | | | <2 |
| 06/28/15 | 0.6 | 4.9 | 6.8 | 6.9 | 6.9 | 7.1 | 856 | | <2 | 0.7 | 3.9 | 3.6 | 3.7 | 3.7 | 7.3 | 786 | 484 | | <2 |
| 06/29/15 | 0.6 | 4.9 | 7.0 | | 7.1 | 7.1 | 856 | | 2 | 0.7 | 3.9 | 3.1 | | 3.3 | 7.3 | 814 | | | <2 |
| 06/30/15 | 0.6 | 4.9 | 6.3 | | 6.4 | 7.1 | 860 | | <2 | 0.7 | 3.9 | 2.9 | | 3.0 | 7.3 | 804 | | | <2 |
| Avg | 0.6 | 5.4 | 4.8 | 4.9 | 4.9 | 7.2 | 920 | 160 | <2 | 0.5 | 4.0 | 4.2 | 4.8 | 4.3 | 7.2 | 790 | 488 | 143 | <2 |
| Min | 0.5 | 4.7 | 2.5 | 2.9 | 2.6 | 7.1 | 854 | 160 | <2 | 0.4 | 3.6 | 2.9 | 3.7 | 3.0 | 7.1 | 767 | 482 | 143 | <2 |
| Max | 1.0 | 5.9 | 8.1 | 6.9 | 8.2 | 7.3 | 1063 | 160 | 4 | 0.7 | 4.4 | 6.6 | 6.6 | 6.7 | 7.3 | 832 | 494 | 143 | <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 Coliform limits: 2.2 MPN/100mL 7-day median; 23 MPN/100mL in no more than 1 sample per month; 240 MPN/100mL at any time.

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

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

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

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

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

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

| | TIN | | TDS | |
|---|---|---|---|---|
| Date | **Monthly** | **12-Mo. Run Avg.** | **Monthly** | **12-Mo. Run Avg.** |
| Jul-14 | 3.5 | 6.0 | 494 | 505 |
| Aug-14 | 3.5 | 5.7 | 508 | 506 |
| Sep-14 | 4.1 | 5.4 | 524 | 508 |
| Oct-14 | 4.9 | 5.2 | 541 | 512 |
| Nov-14 | 5.9 | 5.1 | 571 | 518 |
| Dec-14 | 6.2 | 5.0 | 565 | 522 |
| Jan-15 | 7.9 | 5.2 | 546 | 525 |
| Feb-15 | 7.4 | 5.3 | 560 | 529 |
| Mar-15 | 6.2 | 5.4 | 528 | 532 |
| Apr-15 | 5.2 | 5.4 | 531 | 533 |
| May-15 | 6.1 | 5.4 | 520 | 533 |
| Jun-15 | 4.6 | 5.4 | 515 | 534 |
| Avg | 5.5 | 5.4 | 537 | 518 |
| Min | 3.5 | 5.0 | 494 | 505 |
| Max | 7.9 | 6.0 | 571 | 532 |
| Limit | | 8.0 | | 550 |

Date source: IEUA NPDES monthly self-monitoring report (MRP No. R8-2009-0021).
Per the Regional Board, TDS is calculated using the flow-weighted averages based on discharged effluent flows and recycled water flows; TIN is calculated using the flow-weighted averages based on discharged effluent flows only.
The data reported above will supersede any information submitted for previous quarters. Agency-wide TIN & TDS were in compliance with permit limits at all times.

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

| Constituent | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 4Q Run. Avg.[1] | Limit | Unit | Method |
|---|---|---|---|---|---|---|---|---|
| Inorganic Chemicals | | | | | | | | |
| Aluminum | 28 | 40 | 40 | 34 | 35 | 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 | <0.4 | <0.8 | <2.0 | <0.7 | <2.0 | 7 | MFL | EPA 100.2 |
| Barium | 13 | 11 | 16 | 11 | 13 | 1000 | µg/L | EPA 200.8 |
| Beryllium | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 4 | µg/L | EPA 200.8 |
| Cadmium | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | 5 | µg/L | EPA 200.8 |
| Chromium | 0.8 | 0.6 | 0.6 | 0.8 | 0.7 | 50 | µg/L | EPA 200.8 |
| Chromium VI | 0.22 | 0.19 | 0.26 | 0.17 | 0.21 | 10 | µg/L | EPA 218.6 |
| Cyanide | <5 | <5 | <20 | <0.02 | <20 | 150 | µg/L | SM 4500-CN E |
| Fluoride | 0.2 | 0.2 | 0.2 | 0.3 | 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 | 1 | 2 | 2 | 100 | µg/L | EPA 200.8 |
| Perchlorate | <4 | <4 | <4 | <4 | <4 | 6 | µg/L | EPA 314/331.0 |
| Selenium | <2 | <2 | <2 | <2 | <2 | 50 | µg/L | EPA 200.8 |
| Thallium | <1 | <1 | <1 | <1 | <1 | 2 | µg/L | EPA 200.8 |
| Volatile Organic Chemicals (VOCs) | | | | | | | | |
| Benzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1 | µg/L | EPA 524.2/624 |
| Carbon Tetrachloride | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2/624 |
| 1,2-Dichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 600 | µg/L | EPA 524.2/624 |
| 1,4-Dichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| 1,1-Dichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| 1,2-Dichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2/624 |
| 1,1-Dichloroethylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 6 | µg/L | EPA 524.2/624 |
| cis-1,2-Dichloroethylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 6 | µg/L | EPA 524.2/624 |
| trans-1,2-Dichloroethylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 10 | µg/L | EPA 524.2/624 |
| Dichloromethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| 1,2-Dichloropropane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| 1,3-Dichloropropene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2/624 |
| Ethylbenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 300 | µg/L | EPA 524.2/624 |
| Monochlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 70 | µg/L | EPA 524.2/624 |
| Methyl-tert-butyl ether | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 13 | µg/L | EPA 524.2/624 |
| Styrene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 100 | µg/L | EPA 524.2/624 |
| 1,1,2,2-Tetrachloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1 | µg/L | EPA 524.2/624 |
| Tetrachloroethylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| Toluene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 150 | µg/L | EPA 524.2/624 |
| 1,2,4-Trichlorobenzene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| 1,1,1-Trichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 200 | µg/L | EPA 524.2/624 |
| 1,1,2-Trichloroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| Trichloroethylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2/624 |
| Trichlorofluoromethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 150 | µg/L | EPA 524.2/624 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1200 | µg/L | EPA 524.2/624 |
| Vinyl Chloride | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2/624 |
| m,p-Xylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1750 [2] | µg/L | EPA 524.2/624 |
| o-Xylene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | µg/L | EPA 524.2/624 |
| Non-Volatile Synthetic Organic Chemicals (SOCs) | | | | | | | | |
| Alachlor (Alanex) | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 2 | µg/L | EPA 505 |
| Atrazine | <0.5 | <0.05 | <0.05* | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Bentazon | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 18 | µg/L | EPA 515.4 |
| Benzo(a)pyrene | <0.2 | <0.02 | <0.02* | <0.2 | <0.2 | 0.2 | µg/L | EPA 525.2 |
| Carbofuran | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 18 | µg/L | EPA 531.2 |
| Chlordane | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | µg/L | EPA 505 |
| 2,4-D | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 70 | µg/L | EPA 515.4 |
| Dalapon | 5 | 4 | 6 | 3 | 5 | 200 | µg/L | EPA 515.4 |
| Dibromochloropropane | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.2 | µg/L | EPA 504.1 |
| Di(2-ethylhexyl)adipate | <0.5 | <0.6 | <0.6* | <0.5 | <0.6 | 400 | µg/L | EPA 525.2 |
| Di(2-ethylhexyl)phthalate | <0.5 | <0.6 | <0.6* | <0.5 | <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 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 4Q Run. Avg.[1] | Limit | Unit | Method |
|---|---|---|---|---|---|---|---|---|
| Ethylene Dibromide | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.05 | µg/L | EPA 504.1 |
| Glyphosate | <6 | <6 | <6 | <6 | <6 | 700 | µg/L | EPA 547 |
| Heptachlor | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.01 | µg/L | EPA 505 |
| Heptachlor Epoxide | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.01 | µg/L | EPA 505 |
| Hexachlorobenzene | <0.5 | <0.05 | <0.05* | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Hexachlorocyclopentadiene | <0.5 | <0.05 | <0.05* | <0.5 | <0.5 | 50 | µg/L | EPA 525.2 |
| Lindane | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.2 | µg/L | EPA 505 |
| Methoxychlor | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 30 | µg/L | EPA 505 |
| Molinate | <0.5 | <0.1 | <0.1* | <0.5 | <0.5 | 20 | µg/L | EPA 525.2 |
| Oxamyl | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 50 | µg/L | EPA 531.2 |
| Pentachlorophenol | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | 1 | µg/L | EPA 515.4 |
| Picloram | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 500 | µg/L | EPA 515.4 |
| PCB 1016 | <0.08 | <0.08 | <0.08 | <0.08 | <0.08 | 0.5 | µg/L | EPA 505 |
| PCB 1221 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1232 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1242 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1248 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1254 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1260 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| Simazine | <0.5 | <0.05 | <0.05* | <0.5 | <0.5 | 4 | µg/L | EPA 525.2 |
| Thiobencarb | <0.5 | <0.2 | <0.2* | <0.5 | <0.5 | 70 | µg/L | EPA 525.2 |
| Toxaphene | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 3 | µg/L | EPA 505 |
| 2,3,7,8-TCDD (Dioxin) | <5 | <5 | <5 | <5 | <5 | 30 | pg/L | EPA 1613 |
| 2,4,5-TP (Silvex) | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 50 | µg/L | EPA 515.4 |
| Action Level Chemicals | | | | | | | | |
| Copper | 3.7 | 5.4 | 6.4 | 4.0 | 4.9 | 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 | <0.44 | <0.57 | 0.25 | <0.42 | <0.57 | 5 | pCi/L | EPA 903.0 |
| Gross Alpha Particle Activity | <3 | <2 | <3 | <3 | <3 | 15 | pCi/L | EPA 900.0/SM7110C |
| Tritium | <447 | <1000 | <299 | <1000 | <1000 | 20,000 | pCi/L | EPA 906 |
| Strontium-90 | <0.28 | <0.49 | <0.82 | <0.52 | <0.82 | 8 | pCi/L | EPA 905 |
| Gross Beta Particle Activity | 13 | 14 | 14 | 12 | 13 | 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 | 28 | 40 | 40 | 34 | 36 | 200 | µg/L | EPA 200.8 |
| Copper | 3.7 | 5.4 | 6.4 | 4.0 | 4.9 | 1000 | µg/L | EPA 200.8 |
| Corrosivity [3] | NR | -0.7 (Non-Cor.) | -1.0 (Non-Cor.) | -0.7 (Non-Cor.) | Non-Cor. | Non-Cor. | SI | SM 2330B |
| Foaming Agents (MBAS) [3] | <0.05 | 0.07 | 0.06 | 0.09 | 0.07 | 0.5 | mg/L | S5540C/EPA 425.1 |
| Iron [3] | NR | 42 | 29 | NR | 131 | 300 | µg/L | EPA 200.7 |
| Manganese | 6 | 14 | 13 | 10 | 11 | 50 | µg/L | EPA 200.8 |
| Methyl-tert-butyl ether (MTBE) [3] | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| Odor--Threshold [3] | 8 | 8 | 8 | 8 | **8** | 3 | TON | SM 2150B |
| Silver | <0.25 | <0.25 | <0.25 | 0.74 | 0.28 | 100 | µg/L | EPA 200.8 |
| Thiobencarb | <0.5 | <0.2 | <0.2* | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Zinc | 19 | 40 | 42 | 27 | 32 | 5000 | µg/L | EPA 200.8 |
| Miscellaneous Regulated Constituents | | | | | | | | |
| Oil & Grease [4] | NA | <1 | <1 | <1 | <1 | 1 | mg/L | EPA 1664 |
| Disinfection Byproducts | | | | | | | | |
| Bromate | <1 | <1 | 2 | <1 | <5 | 10 | µg/L | EPA 300.1/317 |
| Chlorite | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 1 | mg/L | EPA 300.0 |
| Lysimeter Compliance Point Data | RP3-LYS-25 3Q14 | HKYE-LYS-25 4Q14 | RP3-LYS-25 1Q15 | RP3-LYS-25 2Q15 | | | | |
| Total Trihalomethanes (TTHMs) | 4 | 28 | <4 | 4 | 10 | 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.**

*During 1Q15, sample was collected but not analyzed for these parameters. Two sets of samples were collected in 2Q15; the 6/10/15 set is reported where data is missing for 1Q15.

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

| Constituent | 2Q15 | Unit | Method |
|---|---|---|---|
| **Metals** | | | |
| Chromium (III) [1] | 0.8 | µg/L | EPA 200.8 |
| **Volatile Organic Chemicals (VOCs)** | | | |
| Acrolein | NR | µg/L | EPA 624 |
| Acrylonitrile | NR | µg/L | EPA 624 |
| Bromoform | <0.5 | µg/L | EPA 524.2/624 |
| Chlorodibromomethane | 3.9 | µg/L | EPA 524.2/624 |
| Chloroethane | <0.5 | µg/L | EPA 524.2/624 |
| 2-Chloroethylvinylether | NR | µg/L | EPA 524.2/624 |
| Chloroform | 54.4 | µg/L | EPA 524.2/624 |
| Dichlorobromomethane | 23.1 | µg/L | EPA 524.2/624 |
| Methyl Bromide | <1 | µg/L | EPA 524.2/624 |
| Methyl Chloride | <0.5 | µg/L | EPA 524.2/624 |
| **Acid Extractibles** | | | |
| 2-Chlorophenol | NR | µg/L | EPA 625 |
| 2,4-Dichlorophenol | NR | µg/L | EPA 625 |
| 2,4-Dimethylphenol | NR | µg/L | EPA 625 |
| 2-Methyl-4,6-dinitrophenol | NR | µg/L | EPA 625 |
| 2,4-Dinitrophenol | NR | µg/L | EPA 625 |
| 2-Nitrophenol | NR | µg/L | EPA 625 |
| 4-Nitrophenol | NR | µg/L | EPA 625 |
| 4-Chloro-3-methylphenol | NR | µg/L | EPA 625 |
| Phenol | NR | µg/L | EPA 625 |
| 2,4,6-Trichlorophenol | NR | µg/L | EPA 625 |
| **Base/Neutral Extractibles** | | | |
| Acenaphthene | NR | µg/L | EPA 625 |
| Acenaphthylene | NR | µg/L | EPA 625 |
| Anthracene | NR | µg/L | EPA 625 |
| Benzidine | NR | µg/L | EPA 625 |
| Benzo(a)anthracene | NR | µg/L | EPA 625 |
| Benzo(b)fluoranthene | NR | µg/L | EPA 625 |
| Benzo(g,h,i)perylene | NR | µg/L | EPA 625 |
| Benzo(k)fluoranthene | NR | µg/L | EPA 625 |
| Bis(2-chloroethoxy)methane | NR | µg/L | EPA 625 |
| Bis(2-chloroethyl)ether | NR | µg/L | EPA 625 |
| Bis(2-chloroisopropyl)ether | NR | µg/L | EPA 625 |
| 4-Bromophenyl phenyl ether | NR | µg/L | EPA 625 |
| Butyl benzyl phthalate | NR | µg/L | EPA 625 |
| 2-Chloronaphthalene | NR | µg/L | EPA 625 |
| 4-Chlorophenyl phenyl ether | NR | µg/L | EPA 625 |
| Chrysene | NR | µg/L | EPA 625 |
| Dibenzo(a,h)anthracene | NR | µg/L | EPA 625 |
| 1,3-Dichlorobenzene | NR | µg/L | EPA 625 |
| 3,3-Dichlorobenzidine | NR | µg/L | EPA 625 |
| Diethyl phthalate | NR | µg/L | EPA 625 |
| Dimethyl phthalate | NR | µg/L | EPA 625 |
| Di-n-butyl phthalate | NR | µg/L | EPA 625 |
| 2,4-Dinitrotoluene | NR | µg/L | EPA 625 |
| 2,6-Dinitrotoluene | NR | µg/L | EPA 625 |
| Di-n-octyl phthalate | NR | µg/L | EPA 625 |
| Azobenzene | NR | µg/L | EPA 625 |
| Fluoranthene | NR | µg/L | EPA 625 |
| Fluorene | NR | µg/L | EPA 625 |
| Hexachlorobutadiene | NR | µg/L | EPA 625 |
| Hexachlorocyclopentadiene | NR | µg/L | EPA 625 |
| Hexachloroethane | NR | µg/L | EPA 625 |
| Indeno(1,2,3-cd)pyrene | NR | µg/L | EPA 625 |
| Isophorone | NR | µg/L | EPA 625 |
| Naphthalene | NR | µg/L | EPA 625 |
| Nitrobenzene | NR | µg/L | EPA 625 |
| N-Nitroso-di-n-propylamine | NR | µg/L | EPA 625 |
| N-Nitrosodiphenylamine | NR | µg/L | EPA 625 |
| Phenanthrene | NR | µg/L | EPA 625 |
| Pyrene | NR | µg/L | EPA 625 |

| Constituent | 2Q15 | Unit | Method |
|---|---|---|---|
| **Pesticides** | | | |
| Aldrin | NR | µg/L | EPA 608 |
| BHC, alpha isomer | NR | µg/L | EPA 608 |
| BHC, beta isomer | NR | µg/L | EPA 608 |
| BHC, delta isomer | NR | µg/L | EPA 608 |
| 4,4'-DDT | NR | µg/L | EPA 608 |
| 4,4'-DDE | NR | µg/L | EPA 608 |
| 4,4'-DDD | NR | µg/L | EPA 608 |
| Dieldrin | NR | µg/L | EPA 608 |
| Endosulfan I | NR | µg/L | EPA 608 |
| Endosulfan II | NR | µg/L | EPA 608 |
| Endosulfan Sulfate | NR | µg/L | EPA 608 |
| **Unregulated Chemicals** | | | |
| Endrin Aldehyde | NR | µg/L | EPA 608 |
| Ethyl tertiary butyl ether | <0.5 | µg/L | EPA 524.2 |
| Tertiary amyl methyl ether | <0.5 | µg/L | EPA 524.2 |
| **Chemicals w/ State Notification Levels[2]** | | | |
| Boron | 0.3 | mg/L | EPA 200.7 |
| n-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| sec-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| tert-butylbenzene | <0.5 | µg/L | EPA 524.2 |
| Carbon disulfide | <0.5 | µg/L | EPA 524.2 |
| Chlorate | 170* | µg/L | EPA 300.0 |
| 2-Chlorotoluene | <0.5 | µg/L | EPA 524.2 |
| 4-Chlorotoluene | <0.5 | µg/L | EPA 524.2 |
| Diazinon | <0.1* | µg/L | EPA 525.2 |
| Dichlorodifluoromethane (Freon 12) | <0.5 | µg/L | EPA 524.2 |
| 1,4 - Dioxane | <1* | µg/L | EPA 522 |
| Ethylene glycol | <4* | mg/L | EPA 8015B |
| Formaldehyde | 34 | µg/L | EPA 556 |
| HMX | <0.4* | µg/L | EPA 8330B |
| Isopropylbenzene | <0.5 | µg/L | EPA 524.2 |
| Methyl isobutyl ketone (MIBK) | <2 | µg/L | EPA 524.2 |
| N-Nitrosodiethylamine (NDEA) | <2* | ng/L | EPA 521 |
| N-nitrosodimethylamine (NDMA) | <2* | ng/L | EPA 521 |
| Propachlor | <0.05* | µg/L | EPA 525.2 |
| N-propylbenzene | <0.5 | µg/L | EPA 524.2 |
| RDX | <0.4* | µg/L | EPA 8330B |
| Tertiary butyl alcohol | <2 | µg/L | EPA 524.2 |
| 1,2,3-Trichloropropane (1,2,3-TCP) | <0.5 | µg/L | EPA 524.2 |
| 1,2,4–trimethylbenzene | <0.5 | µg/L | EPA 524.2 |
| 1,3,5-trimethylbenzene | <0.5 | µg/L | EPA 524.2 |
| 2,4,6-Trinitrotoluene | <0.4* | µg/L | EPA 8330B |
| Vanadium | 3 | µg/L | EPA 200.8 |
| **Endocrine Disrupting Chemicals, Pharmaceuticals and Other Chemicals[2]** | | | |
| Acetominophen | 66* | ng/L | LC-MS-MS |
| Bis Phenol A (BPA) | <10* | ng/L | LC-MS-MS |
| Caffeine | <5* | ng/L | LC-MS-MS |
| Carbamazepine | 88* | ng/L | LC-MS-MS |
| DEET | 60* | ng/L | LC-MS-MS |
| Estradiol | <5* | ng/L | LC-MS-MS |
| Estrone | <5* | ng/L | LC-MS-MS |
| Ethinyl Estradiol - 17 alpha | <5* | ng/L | LC-MS-MS |
| Fluoxetine | 28* | ng/L | LC-MS-MS |
| Gemfibrozil | <5* | ng/L | LC-MS-MS |
| Ibuprofen | 10* | ng/L | LC-MS-MS |
| Iopromide | 240* | ng/L | LC-MS-MS |
| Progesterone | <5* | ng/L | LC-MS-MS |
| Sucralose | 12000 | ng/L | LC-MS-MS |
| Sulfamethoxazole | <5* | ng/L | LC-MS-MS |
| Testosterone | <5* | ng/L | LC-MS-MS |
| Triclosan | <10* | ng/L | LC-MS-MS |
| Trimethoprim | <5* | ng/L | LC-MS-MS |
| Warfarin | <5* | ng/L | LC-MS-MS |

[1] Trivalent chromium is measured as total chromium

Levels, Nitrosamines, and EDC,

*Sampling for annual constituents during 2Q15 was performed to make up for some annual constituents that did not get measured during the original 1Q15 sampling event.

NR: Not Required (Annual Requirement)

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

| Banana Basin | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Site | Depth, bgs | Date | TOC (Limit = 16 mg/L) | TN* (Limit = 5 mg/L) | TIN | $NO_3$-N | TKN+$NO_2$-N | $NO_2$-N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| BNA-LYS-00 | 0 | 04/01/15 | 5.07 | 5.4 | 4.7 | 4.6 | 0.8 | 0.08 | 808 |
| BNA-LYS-00 | 0 | 04/22/15 | 5.17 | 7.1 | 6.1 | 5.9 | 1.2 | 0.08 | 830 |
| BNA-LYS-00 | 0 | 04/29/15 | 4.89 | 5.7 | 4.1 | 4.0 | 1.7 | 0.07 | 827 |
| BNA-LYS-00 | 0 | 05/06/15 | 4.83 | 6.9 | 6.0 | 6.0 | 0.9 | <0.01 | 811 |
| BNA-LYS-00 | 0 | 05/13/15 | 5.3 | 8.0 | 6.7 | 6.6 | 1.4 | 0.07 | 844 |
| BNA-LYS-00 | 0 | 05/27/15 | 5.12 | 7.2 | 6.8 | 6.5 | 0.7 | 0.08 | 808 |
| BNA-LYS-00 | 0 | 06/03/15 | 5.39 | | | 5.5 | 1.3 | 0.09 | 795 |
| BNA-LYS-25** | 25 | 04/01/15 | 1.00 | 3.6 | 3.6 | 3.5 | <0.5 | 0.09 | 554 |
| BNA-LYS-25** | 25 | 04/08/15 | 0.93 | 5.5 | 3.3 | 3.2 | 2.3 | 0.09 | 600 |
| BNA-LYS-25** | 25 | 04/15/15 | 0.90 | 3.2 | 3.2 | 3.1 | <0.5 | 0.11 | 635 |
| BNA-LYS-25** | 25 | 04/22/15 | 0.90 | 3.3 | 3.3 | 3.2 | <0.5 | 0.10 | 662 |
| BNA-LYS-25** | 25 | 04/29/15 | 1.16 | 4.6 | 4.0 | 3.9 | 0.7 | 0.10 | 708 |
| BNA-LYS-25** | 25 | 05/06/15 | 0.86 | 3.7 | 3.7 | 3.7 | <0.5 | <0.01 | 693 |
| BNA-LYS-25** | 25 | 05/13/15 | 0.76 | 4.6 | 3.8 | 3.7 | 0.9 | 0.09 | 716 |
| BNA-LYS-25** | 25 | 05/20/15 | 0.86 | 4.1 | 4.1 | 4.0 | <0.5 | 0.09 | 720 |
| BNA-LYS-25** | 25 | 05/27/15 | 0.80 | 4.3 | 4.3 | 4.2 | <0.5 | 0.08 | 706 |
| BNA-LYS-25** | 25 | 06/03/15 | 0.82 | 5.3 | 4.5 | 4.4 | 0.9 | 0.08 | 717 |
| BNA-LYS-25** | 25 | 06/10/15 | 0.91 | 4.5 | 4.5 | 4.4 | <0.5 | 0.08 | 736 |
| BNA-LYS-25** | 25 | 06/17/15 | 0.94 | 5.5 | 4.4 | 4.3 | 1.2 | 0.08 | 743 |
| BNA-LYS-25** | 25 | 06/24/15 | 0.94 | 5.3 | 4.7 | 4.4 | 0.9 | 0.08 | 776 |

| Brooks Basin | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Site | Depth, bgs | Date | TOC | TN* (Limit = 5 mg/L) | TIN | $NO_3$-N | TKN+$NO_2$-N | $NO_2$-N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| BRK-LYS-00 | 0 | 04/22/15 | 4.43 | 5.5 | 4.6 | 4.3 | 1.2 | 0.12 | 698 |
| BRK-LYS-00 | 0 | 05/13/15 | 4.38 | 5.7 | 4.6 | 4.3 | 1.4 | 0.12 | 736 |
| BRK-LYS-00 | 0 | 06/03/15 | 5.30 | 6.0 | 4.2 | 4.1 | 1.9 | 0.12 | 741 |
| BRK-LYS-25** | 25 | 04/22/15 | 3.11 | <0.6 | 0.3 | <0.1 | <0.5 | 0.16 | 743 |
| BRK-LYS-25** | 25 | 05/13/15 | 2.55 | 1.1 | <0.2 | <0.1 | 1.1 | <0.01 | 698 |
| BRK-LYS-25** | 25 | 06/03/15 | 2.71 | 0.8 | 0.4 | <0.1 | 0.8 | 0.14 | 679 |

| Hickory East Basin | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Site | Depth, bgs | Date | TOC (Limit = 16 mg/L) | TN* | TIN | $NO_3$-N | TKN+$NO_2$-N | $NO_2$-N | EC |
| Unit==> | feet | mm/dd/yy | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | µmho/cm |
| HKYE-LYS-00 | 0 | 04/01/15 | 6.43 | 8.4 | 6.6 | 6.5 | 1.9 | 0.10 | 819 |
| HKYE-LYS-00 | 0 | 04/08/15 | 4.51 | | 5.8 | 5.7 | | 0.08 | 816 |
| HKYE-LYS-00 | 0 | 04/15/15 | 4.57 | 6.2 | 6.2 | 6.1 | <0.5 | 0.07 | 823 |
| HKYE-LYS-00 | 0 | 04/22/15 | 4.52 | 6.4 | 5.5 | 5.4 | 1.0 | 0.08 | 835 |
| HKYE-LYS-00 | 0 | 04/29/15 | 5.96 | 6.3 | 4.0 | 3.9 | 2.4 | 0.09 | 831 |
| HKYE-LYS-00 | 0 | 05/06/15 | 6.47 | 6.9 | 4.7 | 4.6 | 2.3 | 0.08 | 809 |
| HKYE-LYS-00 | 0 | 05/13/15 | 6.02 | 7.9 | 5.4 | 5.2 | 2.7 | 0.07 | 821 |
| HKYE-LYS-00 | 0 | 05/20/15 | 6.43 | 6.1 | 5.1 | 4.5 | 1.6 | 0.13 | 827 |
| HKYE-LYS-00 | 0 | 05/27/15 | 6.74 | 6.4 | 4.9 | 4.8 | 1.6 | 0.10 | 814 |
| HKYE-LYS-00 | 0 | 06/03/15 | 9.48 | 5.8 | 1.7 | 1.5 | 4.3 | 0.24 | 807 |
| HKYE-LYS-00 | 0 | 06/10/15 | 7.09 | 5.4 | 3.0 | 3.0 | 2.4 | <0.01 | 776 |
| HKYE-LYS-00 | 0 | 06/17/15 | 5.77 | 4.3 | 3.1 | 2.8 | 1.5 | 0.10 | 803 |
| HKYE-LYS-00 | 0 | 06/24/15 | 7.07 | 5.1 | 2.0 | 1.9 | 3.2 | 0.10 | 817 |
| HKYE-LYS-25** | 25 | 04/01/15 | 1.64 | 5.5 | 5.5 | 5.4 | <0.5 | 0.09 | 800 |
| HKYE-LYS-25** | 25 | 04/08/15 | 1.44 | 6.3 | 5.6 | 5.6 | 0.7 | <0.01 | 822 |
| HKYE-LYS-25** | 25 | 04/15/15 | 1.31 | 5.9 | 5.9 | 5.8 | <0.5 | 0.08 | 811 |
| HKYE-LYS-25** | 25 | 04/22/15 | 1.43 | 6.1 | 6.1 | 6.0 | <0.5 | 0.09 | 854 |
| HKYE-LYS-25** | 25 | 04/29/15 | 1.71 | 6.7 | 5.7 | 5.6 | 1.1 | 0.08 | 824 |
| HKYE-LYS-25** | 25 | 05/06/15 | 1.83 | 5.7 | 5.0 | 5.0 | 0.7 | <0.01 | 838 |
| HKYE-LYS-25** | 25 | 05/13/15 | 1.92 | 5.8 | 4.7 | 4.6 | 1.2 | 0.07 | 818 |
| HKYE-LYS-25** | 25 | 05/20/15 | 1.98 | 4.1 | 4.1 | 4.0 | <0.5 | 0.07 | 787 |
| HKYE-LYS-25** | 25 | 05/27/15 | 2.01 | 3.6 | 3.8 | 3.5 | <0.5 | 0.07 | 808 |
| HKYE-LYS-25** | 25 | 06/03/15 | 1.96 | 4.1 | 4.1 | 4.0 | <0.5 | 0.07 | 835 |
| HKYE-LYS-25** | 25 | 06/10/15 | 1.82 | 2.5 | 2.5 | 2.4 | <0.5 | 0.07 | 815 |
| HKYE-LYS-25** | 25 | 06/17/15 | 1.92 | 1.3 | 1.4 | 1.2 | <0.5 | 0.08 | 796 |
| HKYE-LYS-25** | 25 | 06/24/15 | 1.91 | 1.5 | 1.2 | 0.8 | 0.7 | 0.08 | 835 |

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

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

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

Table 2-5b
Alternative Monitoring Plans

| Turner Basin | | | | | |
|---|---|---|---|---|---|
| Date | RW Blend* | RW Blend* | Turner 1 & 2 | Turner 3 & 4 | Turner 1 & 2 Turner 3 & 4 |
| mg/L==> | TOC | TN | TOC (70% reduction) | TOC (85% reduction) | TN (87% reduction) |
| Limit ==> | | | 16 mg/L | 16 mg/L | 5 mg/L |
| 04/01/15 | 4.44 | 7.1 | 1.33 | 0.67 | 0.9 |
| 04/08/15 | 4.34 | 6.5 | 1.30 | 0.65 | 0.8 |
| 04/15/15 | 4.35 | 6.6 | 1.31 | 0.65 | 0.9 |
| 04/22/15 | 3.77 | 7.1 | 1.13 | 0.57 | 0.9 |
| 04/29/15 | 4.47 | 7.2 | 1.34 | 0.67 | 0.9 |
| 05/06/15 | 4.27 | 8.3 | 1.28 | 0.64 | 1.1 |
| 05/13/15 | 3.66 | 7.0 | 1.10 | 0.55 | 0.9 |
| 05/20/15 | 4.94 | 8.5 | 1.48 | 0.74 | 1.1 |
| 05/27/15 | 4.95 | 7.6 | 1.49 | 0.74 | 1.0 |
| 06/03/15 | 4.60 | 6.4 | 1.38 | 0.69 | 0.8 |
| 06/10/15 | 4.07 | 6.0 | 1.22 | 0.61 | 0.8 |
| 06/17/15 | 4.81 | 5.4 | 1.44 | 0.72 | 0.7 |
| 06/24/15 | 4.48 | 5.7 | 1.34 | 0.67 | 0.7 |

| Ely Basin | | | | |
|---|---|---|---|---|
| Date | RP-1 RW | RP-1 RW | Ely 3 East | Ely 3 East |
| mg/L==> | TOC | TN | TOC (76% reduction) | TN (52% reduction) |
| Limit ==> | | | 16 mg/L | 5 mg/L |
| 04/02/15 | 5.28 | 6.0 | 1.27 | 2.9 |
| 04/06/15 | 5.28 | 6.9 | 1.27 | 3.3 |
| 04/13/15 | 5.16 | 7.9 | 1.24 | 3.8 |
| 04/20/15 | 5.44 | 6.5 | 1.31 | 3.1 |
| 04/27/15 | 5.91 | 8.8 | 1.42 | 4.2 |
| 05/04/15 | 5.68 | 8.7 | 1.36 | 4.2 |
| 05/11/15 | 6.17 | 9.8 | 1.48 | 4.7 |
| 05/18/15 | 5.80 | 8.6 | 1.39 | 4.1 |
| 05/28/15 | 5.52 | 7.6 | 1.32 | 3.6 |
| 06/01/15 | 5.35 | 8.6 | 1.28 | 4.1 |
| 06/08/15 | 5.36 | 4.4 | 1.29 | 2.1 |
| 06/15/15 | 5.56 | 3.8 | 1.33 | 1.8 |
| 06/22/15 | 5.53 | 8.2 | 1.33 | 3.9 |
| 06/29/15 | 4.88 | 6.9 | 1.17 | 3.3 |

| RP3 Basin | | | | |
|---|---|---|---|---|
| Date | RW Blend* | RW Blend* | RP3 | RP3 |
| mg/L==> | TOC | TN | TOC (88% reduction) | TN (31% reduction) |
| Limit ==> | | | 16 mg/L | 5 mg/L |
| 04/01/15 | 4.44 | 7.1 | 0.53 | 4.9 |
| 04/08/15 | 4.34 | 6.5 | 0.52 | 4.5 |
| 04/15/15 | 4.35 | 6.6 | 0.52 | 4.5 |
| 04/22/15 | 3.77 | 7.1 | 0.45 | 4.9 |
| 04/29/15 | 4.47 | 7.2 | 0.54 | 4.9 |
| 05/06/15 | 4.27 | 8.3 | 0.51 | 5.7 |
| 05/13/15 | 3.66 | 7.0 | 0.44 | 4.8 |
| 05/20/15 | 4.94 | 8.5 | 0.59 | **5.8** |
| 05/27/15 | 4.95 | 7.6 | 0.59 | **5.2** |
| 06/03/15 | 4.60 | 6.4 | 0.55 | 4.4 |
| 06/10/15 | 4.07 | 6.0 | 0.49 | 4.1 |
| 06/17/15 | 4.81 | 5.4 | 0.58 | 3.7 |
| 06/24/15 | 4.48 | 5.7 | 0.54 | 3.9 |

| 8th Street Basin | | | | |
|---|---|---|---|---|
| Date | RW Blend* | RW Blend* | 8th Street | 8th Street |
| mg/L==> | TOC | TN | TOC (59% reduction) | TN (75% reduction) |
| Limit ==> | | | 16 mg/L | 5 mg/L |
| 04/01/15 | 4.44 | 7.1 | 1.82 | 1.8 |
| 04/08/15 | 4.34 | 6.5 | 1.78 | 1.6 |
| 04/15/15 | 4.35 | 6.6 | 1.78 | 1.6 |
| 04/22/15 | 3.77 | 7.1 | 1.55 | 1.8 |
| 04/29/15 | 4.47 | 7.2 | 1.83 | 1.8 |
| 05/06/15 | 4.27 | 8.3 | 1.75 | 2.1 |
| 05/13/15 | 3.66 | 7.0 | 1.50 | 1.7 |
| 05/20/15 | 4.94 | 8.5 | 2.03 | 2.1 |
| 05/27/15 | 4.95 | 7.6 | 2.03 | 1.9 |
| 06/03/15 | 4.60 | 6.4 | 1.89 | 1.6 |
| 06/10/15 | 4.07 | 6.0 | 1.67 | 1.5 |
| 06/17/15 | 4.81 | 5.4 | 1.97 | 1.4 |
| 06/24/15 | 4.48 | 5.7 | 1.84 | 1.4 |

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

Table 2-5b
Alternative Monitoring Plans

| San Sevaine 5 Basin | | | | |
|---|---|---|---|---|
| Date | RW Blend* | RW Blend* | San Sevaine 5 | San Sevaine 5 |
| mg/L==> | TOC | TN | TOC (78% reduction) | TN (69% reduction) |
| Limit ==> | | | 16 mg/L | 5 mg/L |
| 04/01/15 | 4.44 | 7.1 | 0.98 | 2.2 |
| 04/08/15 | 4.34 | 6.5 | 0.95 | 2.0 |
| 04/15/15 | 4.35 | 6.6 | 0.96 | 2.0 |
| 04/22/15 | 3.77 | 7.1 | 0.83 | 2.2 |
| 04/29/15 | 4.47 | 7.2 | 0.98 | 2.2 |
| 05/06/15 | 4.27 | 8.3 | 0.94 | 2.6 |
| 05/13/15 | 3.66 | 7.0 | 0.81 | 2.2 |
| 05/20/15 | 4.94 | 8.5 | 1.09 | 2.6 |
| 05/27/15 | 4.95 | 7.6 | 1.09 | 2.3 |
| 06/03/15 | 4.60 | 6.4 | 1.01 | 2.0 |
| 06/10/15 | 4.07 | 6.0 | 0.90 | 1.9 |
| 06/17/15 | 4.81 | 5.4 | 1.06 | 1.7 |
| 06/24/15 | 4.48 | 5.7 | 0.99 | 1.8 |

| Victoria Basin | | | | |
|---|---|---|---|---|
| Date | RW Blend* | RW Blend* | Victoria | Victoria |
| mg/L==> | TOC | TN | TOC (78% reduction) | TN (82% reduction) |
| Limit ==> | | | 16 mg/L | 5 mg/L |
| 04/01/15 | 4.44 | 7.1 | 0.98 | 1.3 |
| 04/08/15 | 4.34 | 6.5 | 0.95 | 1.2 |
| 04/15/15 | 4.35 | 6.6 | 0.96 | 1.2 |
| 04/22/15 | 3.77 | 7.1 | 0.83 | 1.3 |
| 04/29/15 | 4.47 | 7.2 | 0.98 | 1.3 |
| 05/06/15 | 4.27 | 8.3 | 0.94 | 1.5 |
| 05/13/15 | 3.66 | 7.0 | 0.81 | 1.3 |
| 05/20/15 | 4.94 | 8.5 | 1.09 | 1.5 |
| 05/27/15 | 4.95 | 7.6 | 1.09 | 1.4 |
| 06/03/15 | 4.60 | 6.4 | 1.01 | 1.1 |
| 06/10/15 | 4.07 | 6.0 | 0.90 | 1.1 |
| 06/17/15 | 4.81 | 5.4 | 1.06 | 1.0 |
| 06/24/15 | 4.48 | 5.7 | 0.99 | 1.0 |

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

| Brooks Basin | | | | |
|---|---|---|---|---|
| Date | BRK-LYS-00 | BRK-LYS-00 | BRK-LYS-00 | BRK-LYS-00 |
| mg/L==> | TOC | TN | EC | |
| 04/22/15 | 4.43 | 5.5 | 698 | |
| 05/13/15 | 4.38 | 5.7 | 736 | |
| 06/03/15 | 5.30 | 6.0 | 741 | |
| Date | BRK-LYS-25 | BRK-LYS-25 | BRK-LYS-25 | BRK-LYS-25 |
| mg/L==> | TOC | TN* (Limit = 5 mg/L) | EC | |
| 04/22/15 | 3.11 | <0.1 | 743 | |
| 05/13/15 | 2.55 | 1.1 | 698 | |
| 06/03/15 | 2.71 | 0.8 | 679 | |
| Date | BRK-1/1 | BRK-1/1 | BRK-1/1 | BRK-1/1 |
| mg/L==> | TOC* (Limit = 16 mg/L) | TN | EC | Cl |
| 04/28/15 | 0.76 | 1.7 | 673 | 105 |
| 05/12/15 | 0.58 | 1.9 | 685 | 106 |
| 06/03/15 | 0.58 | 2.1 | 689 | 107 |

| Hickory Basin | | |
|---|---|---|
| Date | BH-1/2** | BH-1/2 |
| mg/L==> | TN (Limit - 5 mg/L) | EC |
| 04/29/15 | 1.9 | 500 |
| 05/12/15 | 2.9 | 505 |
| 06/16/15 | 3.4 | 805 |

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

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

Table 2-6
Diluent Water Monitoring*: Local Runoff

| Constituent | Declez Channel @ Declez Basin 06/10/15 | San Sevaine Creek @ Hickory Basin 06/10/2015 | Max Level to Trigger Source Water Evaluation | Unit | Method |
|---|---|---|---|---|---|
| $NO_2$-N | 0.09 | <0.02 | 1 | mg/L | EPA 300.0 |
| $NO_3$-N | 1.9 | <0.1 | 10 | mg/L | EPA 300.0 |
| TDS | 316 | 338 | 420 | mg/L | SM 2540C |
| Total Coliform | >23 | >23 | NA | mpn/100ml | SM 9221B |
| Oil & Grease | <1 | <1 | NA | mg/L | EPA 1664A |
| Inorganic Chemicals | | | | | |
| Aluminum | 114 | 82 | 1000 | µg/L | EPA 200.7 |
| Antimony | 2.4 | 0.9 | 6 | µg/L | EPA 200.8 |
| Arsenic | 2 | <2 | 10 | µg/L | EPA 200.8 |
| Asbestos | <6.92 | <3.63 | 7 | MFL | EPA 100.2 |
| Barium | 27 | 21 | 1000 | µg/L | EPA 200.7 |
| Beryllium | <0.5 | <0.5 | 4 | µg/L | EPA 200.7 |
| Cadmium | <0.25 | <0.25 | 5 | µg/L | EPA 200.7 |
| Chromium | 4.2 | 2.0 | 50 | µg/L | EPA 200.7 |
| Chromium VI | 0.89 | 0.38 | 10 | µg/L | EPA 218.6 |
| Cyanide | <5 | <5 | 150 | µg/L | ASTM D7284 |
| Fluoride | 0.6 | 0.4 | 2 | mg/L | SM 4500-F C |
| Mercury | <0.05 | <0.05 | 2 | µg/L | EPA 245.2 |
| Nickel | 2 | 2 | 100 | µg/L | EPA 200.7 |
| Perchlorate | <4 | <4 | 6 | µg/L | EPA 314 |
| Selenium | <2 | <2 | 50 | µg/L | EPA 200.8 |
| Thallium | <1 | <1 | 2 | µg/L | EPA 200.8 |
| Volatile Organic Chemicals (VOCs) | | | | | |
| Benzene | <0.5 | <0.5 | 1 | µg/L | EPA 524.2 |
| Carbon Tetrachloride | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2 |
| 1,2-Dichlorobenzene | <0.5 | <0.5 | 600 | µg/L | EPA 524.2 |
| 1,4-Dichlorobenzene | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| 1,1-Dichloroethane | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| 1,2-Dichloroethane | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2 |
| 1,1-Dichloroethylene | <0.5 | <0.5 | 6 | µg/L | EPA 524.2 |
| cis-1,2-Dichloroethylene | <0.5 | <0.5 | 6 | µg/L | EPA 524.2 |
| trans-1,2-Dichloroethylene | <0.5 | <0.5 | 10 | µg/L | EPA 524.2 |
| Dichloromethane | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| 1,2-Dichloropropane | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| 1,3-Dichloropropene | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2 |
| Ethylbenzene | <0.5 | <0.5 | 300 | µg/L | EPA 524.2 |
| Chlorobenzene | <0.5 | <0.5 | 70 | µg/L | EPA 524.2 |
| Methyl Tert-butyl ether (MTBE) | <0.5 | <0.5 | 13 | µg/L | EPA 524.2 |
| Styrene | <0.5 | <0.5 | 100 | µg/L | EPA 524.2 |
| 1,1,2,2-Tetrachloroethane | <0.5 | <0.5 | 1 | µg/L | EPA 524.2 |
| Tetrachloroethylene | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| Toluene | <0.5 | <0.5 | 150 | µg/L | EPA 524.2 |
| 1,2,4-Trichlorobenzene | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| 1,1,1-Trichloroethane | <0.5 | <0.5 | 200 | µg/L | EPA 524.2 |
| 1,1,2-Trichloroethane | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| Trichloroethylene | <0.5 | <0.5 | 5 | µg/L | EPA 524.2 |
| Trichlorofluoromethane | <0.5 | <0.5 | 150 | µg/L | EPA 524.2 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | <0.5 | <0.5 | 1200 | µg/L | EPA 524.2 |
| Vinyl Chloride | <0.5 | <0.5 | 0.5 | µg/L | EPA 524.2 |
| Total Xylenes | <1 | <1 | 1750 | µg/L | EPA 524.2 |
| Non-Volatile Synthetic Organic Chemicals (SOCs) | | | | | |
| Alachlor (Alanex) | <0.1 | <0.1 | 2 | µg/L | EPA 505 |
| Atrazine | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Bentazon | <0.5 | <0.5 | 18 | µg/L | EPA 515.4 |
| Benzo(a)pyrene | <0.2 | <0.2 | 0.2 | µg/L | EPA 525.2 |
| Carbofuran | <0.5 | <0.5 | 18 | µg/L | EPA 531.2 |
| Chlordane | <0.1 | <0.1 | 0.1 | µg/L | EPA 505 |
| 2,4-D | <0.1 | <0.1 | 70 | µg/L | EPA 515.4 |
| Dalapon | <1 | 5 | 200 | µg/L | EPA 515.4 |
| Dibromochloropropane | <0.01 | <0.01 | 0.2 | µg/L | EPA 504.1 |
| Di(2-ethylhexyl)adipate | <0.5 | <0.5 | 400 | µg/L | EPA 525.2 |
| Di(2-ethylhexyl)phthalate | <0.5 | <0.5 | 4 | µg/L | EPA 525.2 |
| Dinoseb | <0.2 | <0.2 | 7 | µg/L | EPA 515.4 |
| Diquat | <0.4 | <0.4 | 20 | µg/L | EPA 549.2 |
| Endothall | <5 | <5 | 100 | µg/L | EPA 548.1 |
| Endrin | <0.01 | <0.01 | 2 | µg/L | EPA 505 |
| Ethylene Dibromide | <0.01 | <0.01 | 0.05 | µg/L | EPA 504.1 |
| Glyphosate | 37 | <6 | 700 | µg/L | EPA 547 |

Table 2-6
Diluent Water Monitoring*: Local Runoff

| Constituent | Declez Channel @ Declez Basin 06/10/15 | San Sevaine Creek @ Hickory Basin 06/10/2015 | Max Level to Trigger Source Water Evaluation | Unit | Method |
|---|---|---|---|---|---|
| Heptachlor | <0.01 | <0.01 | 0.01 | µg/L | EPA 505 |
| Heptachlor Epoxide | <0.01 | <0.01 | 0.01 | µg/L | EPA 505 |
| Hexachlorobenzene | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Hexachlorocyclopentadiene | <0.5 | <0.5 | 50 | µg/L | EPA 525.2 |
| Lindane | <0.01 | <0.01 | 0.2 | µg/L | EPA 505 |
| Methoxychlor | <0.05 | <0.05 | 30 | µg/L | EPA 505 |
| Molinate | <0.5 | <0.5 | 20 | µg/L | EPA 525.2 |
| Oxamyl | <0.5 | <0.5 | 50 | µg/L | EPA 531.2 |
| Pentachlorophenol | <0.04 | <0.04 | 1 | µg/L | EPA 515.4 |
| Picloram | <0.1 | <0.1 | 500 | µg/L | EPA 515.4 |
| PCB 1016 | <0.08 | <0.08 | 0.5 | µg/L | EPA 505 |
| PCB 1221 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1232 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1242 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1248 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1254 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| PCB 1260 | <0.1 | <0.1 | 0.5 | µg/L | EPA 505 |
| Simazine | <0.5 | <0.5 | 4 | µg/L | EPA 525.2 |
| Thiobencarb | <0.5 | <0.5 | 70 | µg/L | EPA 525.2 |
| Toxaphene | <0.5 | <0.5 | 3 | µg/L | EPA 505 |
| 2,3,7,8-TCDD (Dioxin) | <2.02 | <2.09 | 30 | pg/L | EPA 1613 |
| 2,4,5-TP (Silvex) | <0.2 | <0.2 | 50 | µg/L | EPA 515.4 |
| **Disinfection Byproducts** | | | | | |
| Total Trihalomethanes (TTHMs) | <2 | <2 | 80 | µg/L | EPA 524.2/624 |
| Total Haloacetic Acids (HAA5) | 17 | ***70*** | 60 | µg/L | SM 6251B |
| Bromate | <1 | 1 | 10 | µg/L | EPA 300.1/317 |
| Chlorite | <0.01 | <0.04 | 1 | mg/L | EPA 300.0 |
| **Action Level Chemicals** | | | | | |
| Copper | 20.3 | 14.5 | 1300 | µg/L | EPA 200.7 |
| Lead | <0.5 | 0.6 | 15 | µg/L | EPA 200.8 |
| **Radionuclides** | | | | | |
| Combined Radium-226 & Radium 228 | 0.200 | 0.130 | 5 | pCi/L | EPA 903.0 |
| Gross Alpha Particle Activity | 3 | <3 | 15 | pCi/L | EPA 900.0/SM7110C |
| Tritium | <1000 | <1000 | 20,000 | pCi/L | EPA 906.0 |
| Strontium-90 | <0.569 | <0.582 | 8 | pCi/L | EPA 905.0 |
| Gross Beta Particle Activity | 8.4 | 14.0 | 50 | pCi/L | EPA 900.0 |
| Uranium | <0.7 | <0.7 | 20 | pCi/L | EPA 200.8 |
| **Unregulated Chemicals** | | | | | |
| 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 | 0.1 | - | 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 | 5 | - | 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 | 15 | - | µg/L | EPA 200.8 |
| **Secondary Maximum Contaminant Level Chemicals** | | | | | |
| Aluminum | 114 | 82 | 1000 | µg/L | EPA 200.7 |
| Corrosivity | 2.7 | 2.1 | Non-Cor. | SI | SM 2330B |
| Foaming Agents (MBAS) | 0.23 | 0.07 | 0.5 | mg/L | SM 5540C/EPA 425.1 |
| Iron | 118 | 109 | 300 | µg/L | EPA 200.7 |
| Manganese | 5 | 19 | 50 | µg/L | EPA 200.7 |
| Odor--Threshold | 100 | 100 | 3 | TON | SM 2150B |
| Silver | <0.25 | <0.25 | 100 | µg/L | EPA 200.7 |
| Thiobencarb | <0.5 | <0.5 | 1 | µg/L | EPA 525.2 |
| Zinc | 13 | 27 | 5000 | 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 Sevaine Basins | 600905 | Cucamonga Valley Water District No. 39 | 8300-13170 downgradient | 750-870, 940-960, 970-1060, & 1080-1130, | 20 | Active | Municipal |
| | 601115 | Inland Empire Utilities Agency - SS-1/1 and 1/2 | ~39-116 downgradient | 640-680 | 4 | Active | Monitoring |
| | 600462 | Unitex 91090 | ~1601 downgradient | NA | NA | Active | Private Domestic |
| Victoria Basin | 600905 | Cucamonga Valley Water District No. 39 | 4329 downgradient | 750-870, 940-960, 970-1060, & 1080-1130, | 20 | Active | Municipal |
| | 601033 | Cucamonga Valley Water District No. 43** | 8300 downgradient | 650-800 | 32-42 | Active | Municipal |
| | 601117 | Inland Empire Utilities Agency - VCT-1/1 and 1/2 | ~39-116 downgradient | 570-610 | 4 | Active | Monitoring |
| Ely Basin | 601003 | Ely Basin MW-1, Philadelphia Well (Casing 3) | 100 downgradient | 280 - 300 | 2 | Active | Monitoring |
| | 601004 | Ely Basin MW-2, Walnut Well (Casing 2) | 3050 downgradient | 290 - 310 | 4 | Active | Monitoring |
| | 3600975 | Riverside Drive Well (43840-CWW) | 6046 downgradient | NA | NA | Active | Private Irrigation |
| | 600134 | Bishop Of San Bernardino Corp. - DOM | 6500 downgradient | NA | NA | Active | Private Domestic |

**Notes:**

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

Table 2-8
Groundwater Monitoring Well Results (Quarterly)

| | Sample Location | Date | TOC (mg/L) | Total Coliform (MPN/100mL) | pH | EC (µmho/cm) | Al (µg/L) | Color (units) | Cu (µg/L) | Corrosivity Index (SI) | Foaming Agents (mg/L) | Fe (µg/L) | Mn (µg/L) | MTBE (µg/L) | Odor Threshold (TON) | Ag (µg/L) | Thiobencarb (µg/L) | Turbidity (NTU) | Zn (µg/L) | TDS (mg/L) | Cl (mg/L) | Hardness (mg $CaCO_3$/L) | Na (mg/L) | $SO_4$ (mg/L) | Nitrogen, Total (mg/L) | $NO_2$-N (mg/L) | $NO_3$-N (mg/L) | Dissolved Oxygen (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Banana & Hickory | California Speedway - Infield Well | 05/28/15 | 0.15 | <1.1 | 7.4 | 536 | <25 | <3 | 1.1 | 0.3 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 1 | 276 | 26 | 226 | 19 | 49 | 8.1 | 0.14 | 8.0 | 6.30 |
| | California Speedway 2 | 05/28/15 | 0.12 | <1.1 | ***6.4*** | 414 | <25 | <3 | 1.5 | 0.3 | <0.05 | <15 | <1 | <0.5 | 1 | <0.25 | <0.2 | 0.05 | 2 | 356 | 17 | 179 | 18 | 23 | 6.4 | 0.15 | 5.6 | 7.10 |
| | Reliant Energy - East Well | 05/28/15 | 0.11 | 23.0 | 7.6 | 385 | <25 | <3 | 5.1 | -0.1 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.20 | 3 | 260 | 29 | 157 | 18 | 20 | 8.3 | 0.12 | 7.7 | 8.20 |
| | Ontario Well No. 20 | 05/21/15 | 0.20 | 23.0 | 7.7 | 364 | <25 | <3 | 1.2 | 0.6 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 1 | 244 | 9 | 163 | 13 | 6 | 2.6 | 0.17 | 2.4 | 7.30 |
| | BH-1/2* | 04/29/15 | 0.61 | <1.1 | 7.3 | 617 | <25 | 10 | 0.9 | 0.3 | <0.05 | <15 | 3 | <0.5 | <1 | <0.25 | <0.2 | 4.90 | <1 | 424 | 99 | 244 | 28 | 31 | 4.4 | 0.08 | 3.3 | 8.00 |
| Turner | Ontario Well No. 25 | 05/21/15 | 0.16 | <1.1 | 7.6 | 442 | <25 | <3 | 0.9 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.05 | <1 | 280 | 19 | 180 | 22 | 16 | 4.9 | 0.17 | 4.7 | 8.40 |
| | Ontario Well No. 38 | 05/21/15 | <0.10 | 23.0 | 7.9 | 304 | <25 | <3 | 0.6 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.05 | <1 | 208 | 5 | 120 | 18 | 7 | 1.6 | 0.16 | 1.4 | 5.80 |
| | T-1/2* | 04/14/15 | 1.09 | 5.1 | 7.4 | 727 | <25 | 5 | 1.3 | 0.3 | <0.05 | <15 | 2 | <0.5 | <1 | <0.25 | <0.2 | 0.90 | <1 | 466 | 108 | 288 | 29 | 42 | 1.7 | 0.09 | 0.8 | 9.60 |
| | T-2/1* | 04/14/15 | 0.74 | <1.1 | 7.4 | 691 | <25 | <3 | 1.4 | 0.1 | <0.05 | <15 | 1 | <0.5 | <1 | <0.25 | <0.2 | 1.30 | <1 | 444 | 102 | 251 | 39 | 48 | 3.9 | 0.08 | 3.2 | 5.50 |
| | T-2/2* | 04/14/15 | 0.68 | <1.1 | 7.3 | 685 | <25 | <3 | 1.5 | 0.1 | <0.05 | <15 | <1 | <0.5 | <1 | 0.61 | <0.2 | 0.50 | <1 | 458 | 102 | 250 | 33 | 46 | 3.2 | 0.08 | 3.1 | 4.90 |
| RP3 | Southridge JHS* | 05/05/15 | 0.52 | 1.1 | 7.7 | ***933*** | <25 | 15 | 2.4 | 0.1 | <0.05 | <15 | 2 | <0.5 | <1 | <0.25 | <0.2 | 5.00 | 2 | ***620*** | 87 | 377 | 58 | 72 | 15.3 | 0.13 | ***15.2*** | 7.10 |
| | Fontana Water Co. - F23a | 06/16/15 | 0.21 | 3.6 | 7.2 | 449 | <25 | <3 | 0.9 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.15 | 1 | 326 | 27 | 190 | 18 | 24 | 8.7 | 0.13 | 8.6 | 7.00 |
| | Alcoa MW1* | 06/09/15 | 0.32 | 23.0 | 7.5 | 612 | <25 | 5 | 0.9 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | ***11.0*** | 1 | 444 | 51 | 242 | 27 | 33 | 14.1 | 0.11 | ***14.0*** | 7.20 |
| | Alcoa MW3* | 05/20/15 | 0.45 | <1.1 | 7.0 | ***965*** | <25 | <3 | 1.4 | 0.3 | <0.05 | <15 | 1 | <0.5 | <1 | <0.25 | <0.2 | 0.35 | 2 | ***660*** | 89 | 388 | 45 | 52 | 17.6 | <0.02 | ***17.6*** | 4.00 |
| | RP3-1/1* | 04/23/15 | 0.94 | <1.1 | 7.3 | 756 | <25 | 10 | 2.1 | 0.2 | <0.05 | <15 | 50 | <0.5 | 1 | <0.25 | <0.2 | ***7.30*** | <1 | ***520*** | 108 | 262 | 46 | 48 | 3.6 | 0.10 | 3.5 | 0.50 |
| 8th Street | 8TH-1/1* | 04/16/15 | 0.70 | <1.1 | 7.2 | 639 | <25 | ***100*** | 0.8 | 0.0 | <0.05 | <15 | 15 | <0.5 | <1 | <0.25 | <0.2 | ***90.0*** | 1 | 462 | 110 | 279 | 15 | 40 | 2.7 | 0.06 | 2.6 | 5.00 |
| | 8TH-1/2* | 04/16/15 | 0.45 | <1.1 | 7.5 | 384 | <25 | 5 | 0.6 | 0.2 | <0.05 | <15 | 5 | <0.5 | <1 | <0.25 | <0.2 | 4.70 | <1 | 256 | 32 | 155 | 18 | 15 | 3.8 | 0.11 | 3.7 | 6.40 |
| | 8TH-2/2* | 04/15/15 | 0.39 | <1.1 | 7.5 | 593 | <25 | <3 | <0.5 | -0.2 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | <1 | 264 | 20 | 163 | 14 | 29 | 7.1 | 0.13 | 7.0 | 8.00 |
| Brooks | Pomona Well No. 10 | 05/14/15 | 0.22 | <1.1 | 7.8 | 504 | <25 | <3 | 0.8 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.1 | 2 | 338 | 38 | 228 | 10 | 39 | 6.7 | 0.13 | 6.6 | 6.70 |
| | Pomona Well No. 2 | 05/14/15 | 0.27 | <1.1 | 7.8 | 594 | <25 | <3 | 2.6 | 0.6 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 5 | 396 | 38 | 264 | 11 | 57 | 11.0 | 0.14 | ***10.2*** | 8.10 |
| | Pomona Well No. 34 | 05/14/15 | 0.21 | <1.1 | 7.8 | 549 | <25 | <3 | 5.2 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.05 | 2 | 380 | 30 | 251 | 11 | 41 | 14.2 | 0.14 | ***13.5*** | 5.40 |
| | BRK-1/1* | 04/28/15 | 0.76 | <1.1 | 7.4 | 673 | <25 | 5 | 1.0 | 0.2 | <0.05 | <15 | 5 | <0.5 | <1 | <0.25 | <0.2 | 4.20 | <1 | 440 | 105 | 285 | 22 | 37 | 1.1 | 0.09 | 1.0 | 5.70 |
| | BRK-1/2* | 04/30/15 | 0.30 | <1.1 | 7.6 | 602 | <25 | 5 | 0.6 | 0.5 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.20 | 1 | 394 | 23 | 282 | 15 | 49 | 20.8 | 0.14 | ***20.7*** | 7.70 |
| | BRK-2/1* | 06/09/15 | 0.36 | <1.1 | 7.8 | 531 | <25 | 15 | <0.5 | 0.4 | <0.05 | <15 | 1 | <0.5 | <1 | <0.25 | <0.2 | ***8.40*** | <1 | 370 | 57 | 255 | 10 | 34 | 4.4 | 0.10 | 3.4 | 8.20 |
| | BRK-2/2* | 04/30/15 | 0.26 | 23.0 | 7.8 | 321 | <25 | <3 | 0.9 | 0.4 | <0.05 | <15 | <1 | <0.5 | 1 | <0.25 | <0.2 | 0.30 | <1 | 212 | 6 | 95 | 31 | 19 | 6.6 | 0.14 | 5.6 | 10.00 |
| Ely | Ely Basin MW1 Philadelphia St.* | 06/03/15 | 0.87 | <1.1 | 7.3 | 638 | <25 | 5 | 1.0 | 0.2 | <0.05 | 121 | 41 | <0.5 | 2 | <0.25 | <0.2 | 3.80 | <1 | 436 | 90 | 245 | 33 | 43 | 1.7 | <0.02 | 1.2 | 6.80 |
| | Ely Basin MW2 Walnut St.* | 06/02/15 | 0.80 | 3.6 | 7.0 | ***1130*** | <25 | 15 | 1.3 | 0.5 | 0.06 | <15 | 32 | <0.5 | 2 | <0.25 | <0.2 | ***16.0*** | 3 | ***744*** | 76 | 532 | 34 | 78 | 27.8 | 0.15 | ***27.6*** | 7.30 |
| | Riverside Well (43840-CWW)* | 05/18/15 | 0.33 | 1.1 | 7.7 | 591 | <25 | <3 | 0.8 | 0.4 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.15 | 41 | 380 | 30 | 248 | 19 | 35 | 12.9 | 0.17 | ***11.5*** | 4.10 |
| | Bishop of SB Corp. - DOM | 05/18/15 | 0.39 | <1.1 | 7.8 | 747 | <25 | <3 | 1.0 | 0.7 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 156 | 490 | 35 | 344 | 21 | 60 | 18.9 | 0.18 | ***18.7*** | 4.40 |
| Victoria & San Sevaine | SS-1/1* | 05/05/15 | 0.29 | 1.1 | 7.4 | 260 | <25 | 5 | <0.5 | -0.7 | <0.05 | <15 | 1 | <0.5 | <1 | <0.25 | <0.2 | ***8.60*** | <1 | 192 | 10 | 110 | 16 | 20 | 2.5 | 0.11 | 2.4 | 7.80 |
| | VCT-1/1* | 05/19/15 | 0.47 | <1.1 | 7.2 | 558 | <25 | 15 | 0.8 | -0.1 | <0.05 | <15 | 1 | <0.5 | <1 | <0.25 | <0.2 | ***17.0*** | 1 | 420 | 89 | 223 | 20 | 23 | 1.0 | 0.09 | 0.9 | 5.90 |
| | VCT-2/2* | 05/19/15 | 0.19 | <1.1 | 7.8 | 257 | <25 | <3 | <0.5 | -0.3 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.35 | 4 | 180 | 4 | 102 | 15 | 8 | 1.8 | 0.14 | 0.9 | 5.10 |
| | CVWD Well No. 39 | 05/26/15 | 0.10 | <1.1 | 7.7 | 278 | <25 | <3 | 7.5 | -0.1 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 4 | 194 | 5 | 98 | 21 | 10 | 2.3 | 0.14 | 2.2 | 7.40 |
| | CVWD Well No. 43 | 05/26/15 | 0.10 | <1.1 | 7.6 | 330 | <25 | <3 | 1.5 | 0.1 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.05 | 2 | 224 | 8 | 133 | 18 | 14 | 3.2 | 0.15 | 3.0 | 8.10 |
| | Unitex 91090 | 05/18/15 | 0.21 | <1.1 | 7.8 | 396 | <25 | <3 | 0.8 | -0.1 | <0.05 | 20 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.15 | 3 | 258 | 29 | 178 | 11 | 30 | 1.8 | 0.13 | 1.7 | 4.20 |
| Declez** | JCSD Well No. 13 | 05/27/15 | 0.31 | <1.1 | 7.8 | 501 | <25 | <3 | 1.5 | 0.3 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.10 | 2 | 334 | 68 | 176 | 26 | 15 | 2.2 | 0.10 | 2.1 | 8.40 |
| | JCSD Well No. 17 | 05/27/15 | 0.27 | <1.1 | 7.7 | 602 | <25 | <3 | 2.0 | 0.3 | <0.05 | <15 | <1 | <0.5 | 2 | <0.25 | <0.2 | 0.05 | <1 | 426 | 65 | 224 | 26 | 39 | 10.3 | 0.10 | ***10.2*** | 8.20 |
| | JCSD Well No. 19 | 05/27/15 | 0.11 | <1.1 | 7.9 | 308 | <25 | <3 | 1.9 | 0.2 | <0.05 | <15 | <1 | <0.5 | <1 | <0.25 | <0.2 | 0.15 | 1 | 208 | 7 | 102 | 27 | 12 | 2.0 | 0.15 | 1.8 | 8.30 |
| | DCZ-1/1* | 04/23/15 | 1.13 | <1.1 | 7.4 | 494 | <25 | ***20*** | 0.9 | 0.0 | <0.05 | <15 | 18 | <0.5 | <1 | <0.25 | <0.2 | ***25.0*** | <1 | 322 | 52 | 186 | 25 | 29 | 1.7 | 0.13 | 1.1 | 7.10 |
| | ***Primary Maximum Contaminant Level*** | | | | | | 1000 | | 1300 | | | | | 13 | | | 70 | | | | | | | | | 1 | 10 | |
| | ***Secondary Maximum Contaminant Level*** | | | | 6.5-8.5 | 900 | 200 | 15 | 1000 | | 0.5 | 300 | 50 | 5 | 3 | 100 | 1 | 5 | 5000 | 500 | 250 | | | 250 | | | | |

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

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

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

NS - No sample. Original JCSD Well No. 17 sample exceeded holding time and well went offline before it could be re-sampled during 1Q15.

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

| | Diluent Water | | | | | | | | | | | | | | | | | | Recycled Water | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Imported Water | | | | | | | | | Local Runoff / Storm Flow | | | | | | | | | | | | | | | | | |
| Date | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaine | Turner | Victoria | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaine | Turner | Victoria | 7th & 8th St. | Banana | Brooks | Ely | Hickory | RP3 | San Sevaine | Turner | Victoria |
| Jul-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 16 | 0 | 9 | 0 | 11 | 2 | 8 | 0 | 72 | 101 | 118 | 184 | 0 | 0 | 91 |
| Aug-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 7 | 16 | 0 | 23 | 6 | 76 | 5 | 8 | 82 | 141 | 8 | 82 | 192 | 0 | 205 | 107 |
| Sep-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 1 | 15 | 0 | 40 | 1 | 54 | 2 | 32 | 72 | 157 | 121 | 236 | 243 | 1 | 128 | 155 |
| **3Q14 Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **53** | **0** | **9** | **46** | **0** | **72** | **7** | **142** | **9** | **48** | **153** | **369** | **231** | **436** | **619** | **1** | **333** | **353** |
| Oct-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 16 | 0 | 25 | 0 | 39 | 3 | 0 | 206 | 56 | 286 | 226 | 335 | 0 | 63 | 75 |
| Nov-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146 | 7 | 28 | 170 | 0 | 112 | 18 | 108 | 57 | 0 | 173 | 37 | 70 | 272 | 250 | 0 | 58 | 4 |
| Dec-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 353 | 145 | 95 | 392 | 185 | 419 | 246 | 603 | 153 | 0 | 67 | 0 | 5 | 46 | 6 | 0 | 2 | 0 |
| **4Q14 Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **499** | **152** | **129** | **578** | **185** | **555** | **264** | **750** | **213** | **0** | **445** | **93** | **361** | **544** | **592** | **0** | **123** | **79** |
| Jan-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 24 | 19 | 44 | 8 | 132 | -5 | 121 | 18 | 0 | 144 | 10 | 183 | 194 | 29 | 0 | 0 | 63 |
| Feb-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 16 | 27 | 72 | 47 | 94 | 39 | 157 | 40 | 0 | 47 | 92 | 222 | 180 | 243 | 0 | 113 | 57 |
| Mar-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 2 | 13 | 15 | 0 | 69 | 2 | 123 | 12 | 0 | 80 | 69 | 157 | 115 | 325 | 0 | 298 | 79 |
| **1Q15 Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **194** | **42** | **58** | **131** | **55** | **295** | **36** | **401** | **70** | **0** | **272** | **171** | **562** | **489** | **597** | **0** | **412** | **199** |
| Apr-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 3 | 10 | 100 | 0 | 41 | 0 | 39 | 0 | 0 | 90 | 101 | 165 | 229 | 282 | 0 | 0 | 127 |
| May-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 21 | 231 | 3 | 121 | 17 | 0 | 13 | 0 | 161 | 120 | 160 | 139 | 348 | 102 | 0 | 141 |
| Jun-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 | 0 | 2 | 1 | 0 | 26 | 156 | 273 | 197 | 531 | 38 | 81 | 32 |
| **2Q15 Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **94** | **3** | **30** | **331** | **3** | **174** | **17** | **41** | **14** | **0** | **277** | **377** | **598** | **565** | **1161** | **140** | **81** | **300** |

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

| | ASR Well No. 4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Injection | | | Recovery | | | Mass Balance | | |
| | Date | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q14 | Jul-14 | 0.0 | 0.7 | 320 | 25 | 11.0 | 380 | (623) | (12,442) | (296,988) |
| | Aug-14 | 0.0 | 0.7 | 320 | 14 | 11.7 | 380 | (637) | (12,646) | (303,607) |
| | Sep-14 | 0.0 | 0.7 | 320 | 0 | 11.7 | 380 | (637) | (12,646) | (303,607) |
| 4Q14 | Oct-14 | 0.0 | 0.7 | 320 | 0 | 11.7 | 380 | (637) | (12,646) | (303,607) |
| | Nov-14 | 0.0 | 0.7 | 320 | 45 | 10.8 | 380 | (682) | (13,243) | (324,534) |
| | Dec-14 | 0.0 | 0.7 | 320 | 14 | 10.2 | 380 | (696) | (13,415) | (330,965) |
| 1Q15 | Jan-15 | 0.0 | 0.7 | 320 | 61 | 10.2 | 380 | (756) | (14,176) | (359,411) |
| | Feb-15 | 0.0 | 0.7 | 320 | 47 | 10.2 | 380 | (803) | (14,759) | (381,219) |
| | Mar-15 | 0.0 | 0.7 | 320 | 40 | 10.2 | 380 | (843) | (15,260) | (399,961) |
| 2Q15 | Apr-15 | 0.0 | 0.7 | 320 | 41 | 10.2 | 380 | (884) | (15,771) | (419,083) |
| | May-15 | 0.0 | 0.7 | 320 | 47 | 10.2 | 380 | (931) | (16,365) | (441,299) |
| | Jun-15 | 0.0 | 0.7 | 320 | 4 | 10.2 | 380 | (935) | (16,415) | (443,179) |

| | ASR Well No. 30 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Injection | | | Recovery | | | Mass Balance | | |
| | Date | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q14 | Jul-14 | 0.0 | 0.7 | 320 | 274 | 15.6 | 370 | 81 | (20,400) | (169,142) |
| | Aug-14 | 0.0 | 0.7 | 320 | 241 | 16.0 | 370 | (160) | (25,167) | (279,160) |
| | Sep-14 | 0.0 | 0.7 | 320 | 2 | 16.0 | 370 | (161) | (25,200) | (279,931) |
| 4Q14 | Oct-14 | 0.0 | 0.7 | 320 | 0 | 16.5 | 370 | (161) | (25,200) | (279,931) |
| | Nov-14 | 0.0 | 0.7 | 320 | 0 | 16.5 | 370 | (162) | (25,209) | (280,132) |
| | Dec-14 | 0.0 | 0.7 | 320 | 0 | 16.5 | 370 | (162) | (25,209) | (280,132) |
| 1Q15 | Jan-15 | 0.0 | 0.7 | 320 | 3 | 16.5 | 370 | (165) | (25,270) | (281,510) |
| | Feb-15 | 0.0 | 0.7 | 320 | 23 | 16.5 | 370 | (187) | (25,732) | (291,867) |
| | Mar-15 | 0.0 | 0.7 | 320 | 0 | 16.5 | 370 | (187) | (25,732) | (291,867) |
| 2Q15 | Apr-15 | 0.0 | 0.7 | 320 | 6 | 16.5 | 370 | (193) | (25,854) | (294,606) |
| | May-15 | 0.0 | 0.7 | 320 | 16 | 16.5 | 370 | (210) | (26,188) | (302,101) |
| | Jun-15 | 0.0 | 0.7 | 320 | 0 | 16.5 | 370 | (210) | (26,188) | (302,101) |

| | ASR Well No. 32 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Injection | | | Recovery | | | Mass Balance | | |
| | Date | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q14 | Jul-14 | 0.0 | 0.7 | 320 | 0 | 17.0 | 300 | (3,643) | (42,890) | (825,638) |
| | Aug-14 | 0.0 | 0.7 | 320 | 0 | 17.0 | 300 | (3,643) | (42,890) | (825,638) |
| | Sep-14 | 0.0 | 0.7 | 320 | 0 | 19.4 | 300 | (3,643) | (42,890) | (825,638) |
| 4Q14 | Oct-14 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,643) | (42,890) | (825,638) |
| | Nov-14 | 0.0 | 0.7 | 320 | 3 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| | Dec-14 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| 1Q15 | Jan-15 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| | Feb-15 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| | Mar-15 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| 2Q15 | Apr-15 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| | May-15 | 0.0 | 0.7 | 320 | 0 | 18.3 | 300 | (3,646) | (42,960) | (826,781) |
| | Jun-15 | 0.0 | 0.7 | 320 | 9 | 18.3 | 300 | (3,654) | (43,156) | (829,997) |

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

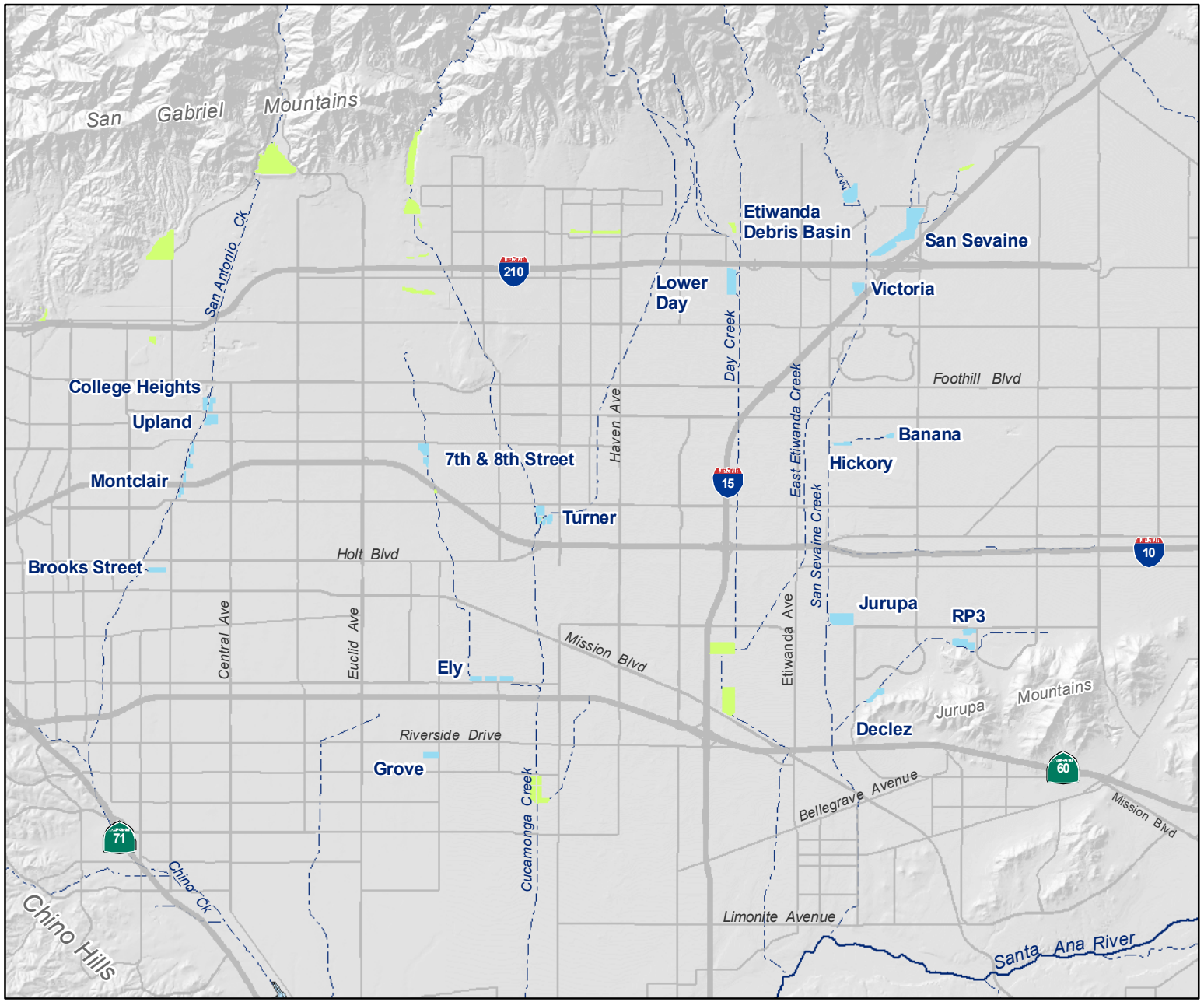
Cells shaded in grey reflect most recent lab values.

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

| | ASR Well No. 33 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Injection | | | Recovery | | | Mass Balance | | |
| | Date | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Volume (AF) | TIN (mg/L) | TDS (mg/L) | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q14 | Jul-14 | 0.0 | 0.7 | 320 | 155 | 15.1 | 340 | (1,256) | (26,307) | (479,855) |
| | Aug-14 | 0.0 | 0.7 | 320 | 0 | 18.3 | 340 | (1,256) | (26,307) | (479,855) |
| | Sep-14 | 0.0 | 0.7 | 320 | 0 | 18.5 | 340 | (1,256) | (26,307) | (479,855) |
| 4Q14 | Oct-14 | 0.0 | 0.7 | 320 | 0 | 18.1 | 340 | (1,256) | (26,307) | (479,864) |
| | Nov-14 | 0.0 | 0.7 | 320 | 0 | 17.8 | 340 | (1,256) | (26,307) | (479,864) |
| | Dec-14 | 0.0 | 0.7 | 320 | 0 | 16.0 | 340 | (1,256) | (26,307) | (479,864) |
| 1Q15 | Jan-15 | 0.0 | 0.7 | 320 | 429 | 16.0 | 340 | (1,685) | (34,799) | (659,963) |
| | Feb-15 | 0.0 | 0.7 | 320 | 442 | 16.0 | 340 | (2,126) | (43,532) | (845,158) |
| | Mar-15 | 0.0 | 0.7 | 320 | 654 | 16.0 | 340 | (2,781) | (56,471) | (1,119,567) |
| 2Q15 | Apr-15 | 0.0 | 0.7 | 320 | 758 | 16.0 | 340 | (3,539) | (71,469) | (1,437,645) |
| | May-15 | 0.0 | 0.7 | 320 | 691 | 16.0 | 340 | (4,230) | (85,131) | (1,727,385) |
| | Jun-15 | 0.0 | 0.7 | 320 | 972 | 16.0 | 340 | (5,202) | (104,363) | (2,135,231) |

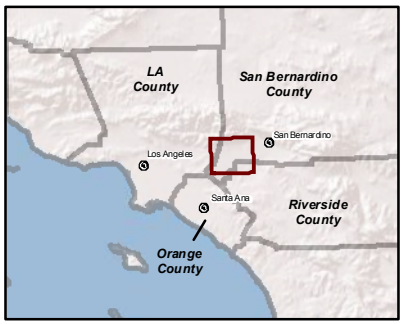
The injected water is WFA-treated water, which meets CCR Title 22 drinking water standards.
Cells shaded in grey reflect most recent lab values.

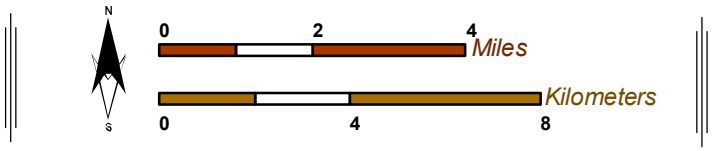
| | Total Project (All Wells) | | | |
|---|---|---|---|---|
| | | | Mass Balance | |
| | Date | Storage (AF) | TIN (kg) | TDS (kg) |
| 3Q14 | Jul-14 | (5,440) | (102,039) | (1,771,623) |
| | Aug-14 | (5,695) | (107,009) | (1,888,260) |
| | Sep-14 | (5,697) | (107,043) | (1,889,031) |
| 4Q14 | Oct-14 | (5,697) | (107,043) | (1,889,039) |
| | Nov-14 | (5,745) | (107,719) | (1,911,310) |
| | Dec-14 | (5,759) | (107,891) | (1,917,742) |
| 1Q15 | Jan-15 | (6,252) | (117,205) | (2,127,665) |
| | Feb-15 | (6,762) | (126,982) | (2,345,025) |
| | Mar-15 | (7,457) | (140,422) | (2,638,177) |
| 2Q15 | Apr-15 | (8,262) | (156,054) | (2,978,115) |
| | May-15 | (9,016) | (170,644) | (3,297,566) |
| | Jun-15 | (10,001) | (190,122) | (3,710,508) |




## Main Map Features

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

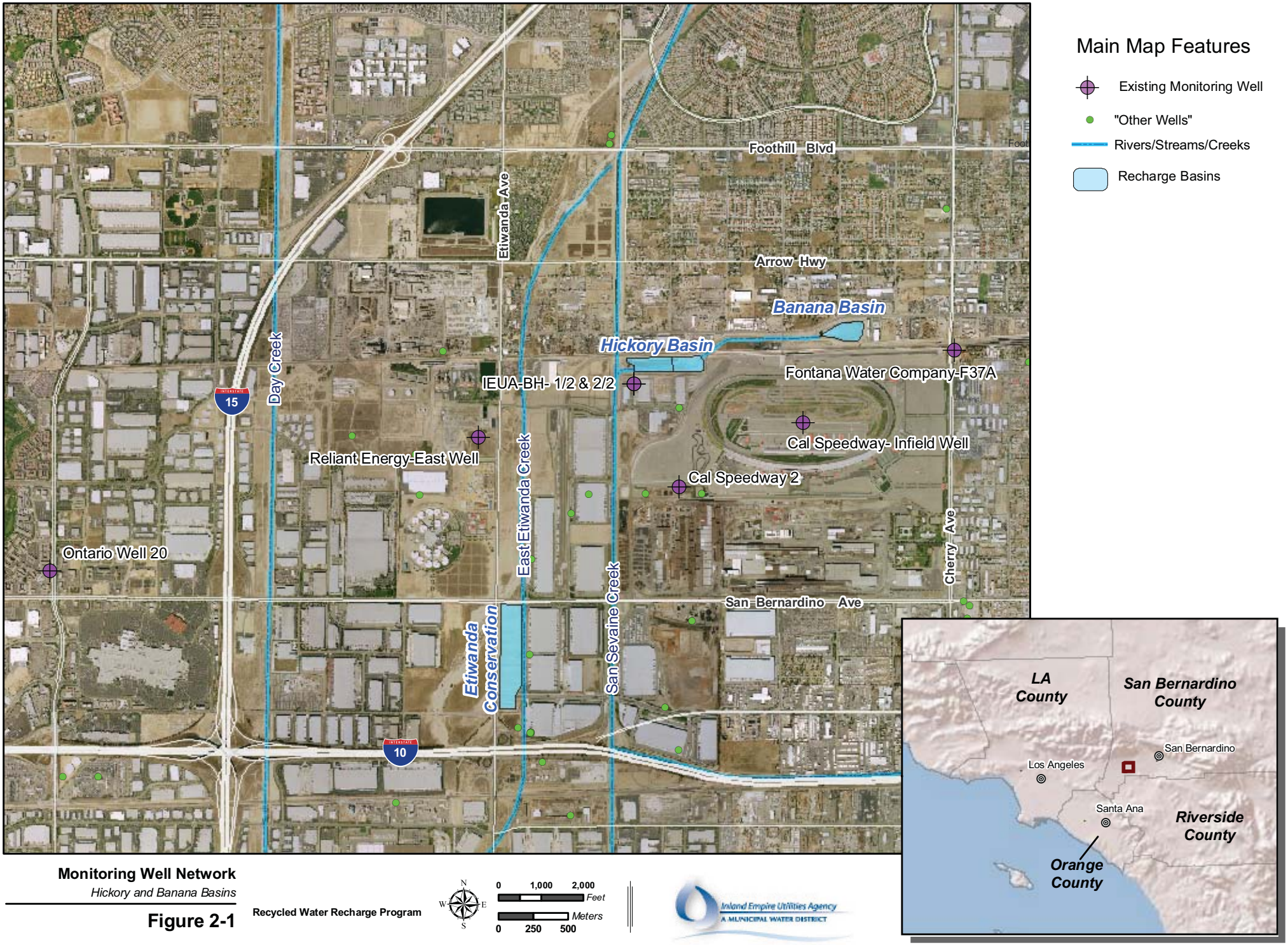



**Chino Basin Recycled Water Groundwater Recharge Program**

*Basin Locations*

**Figure 1-1**

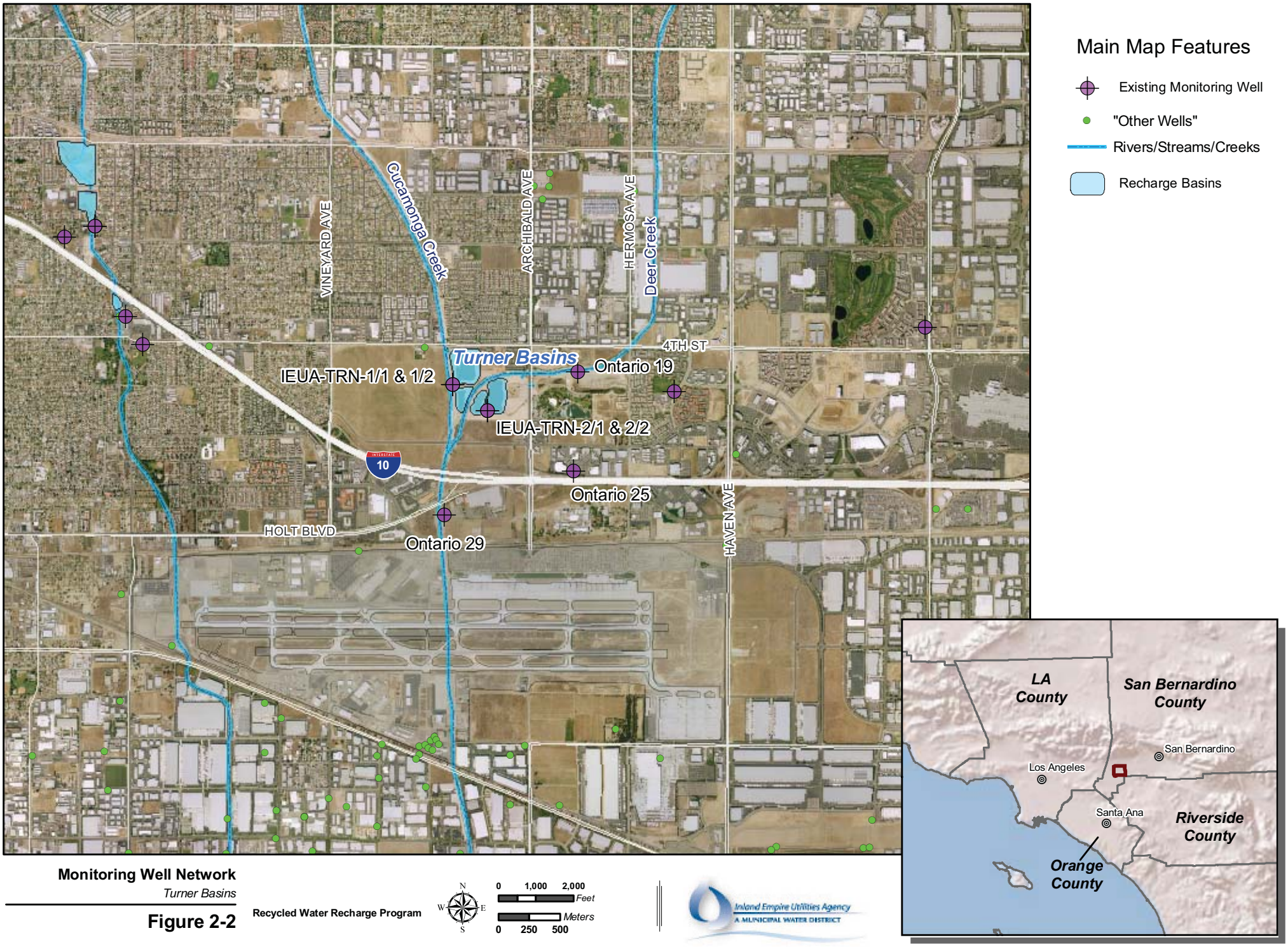



**Monitoring Well Network**

*Hickory and Banana Basins*

**Figure 2-1**

**Recycled Water Recharge Program**




**Monitoring Well Network**

*Turner Basins*

**Figure 2-2**

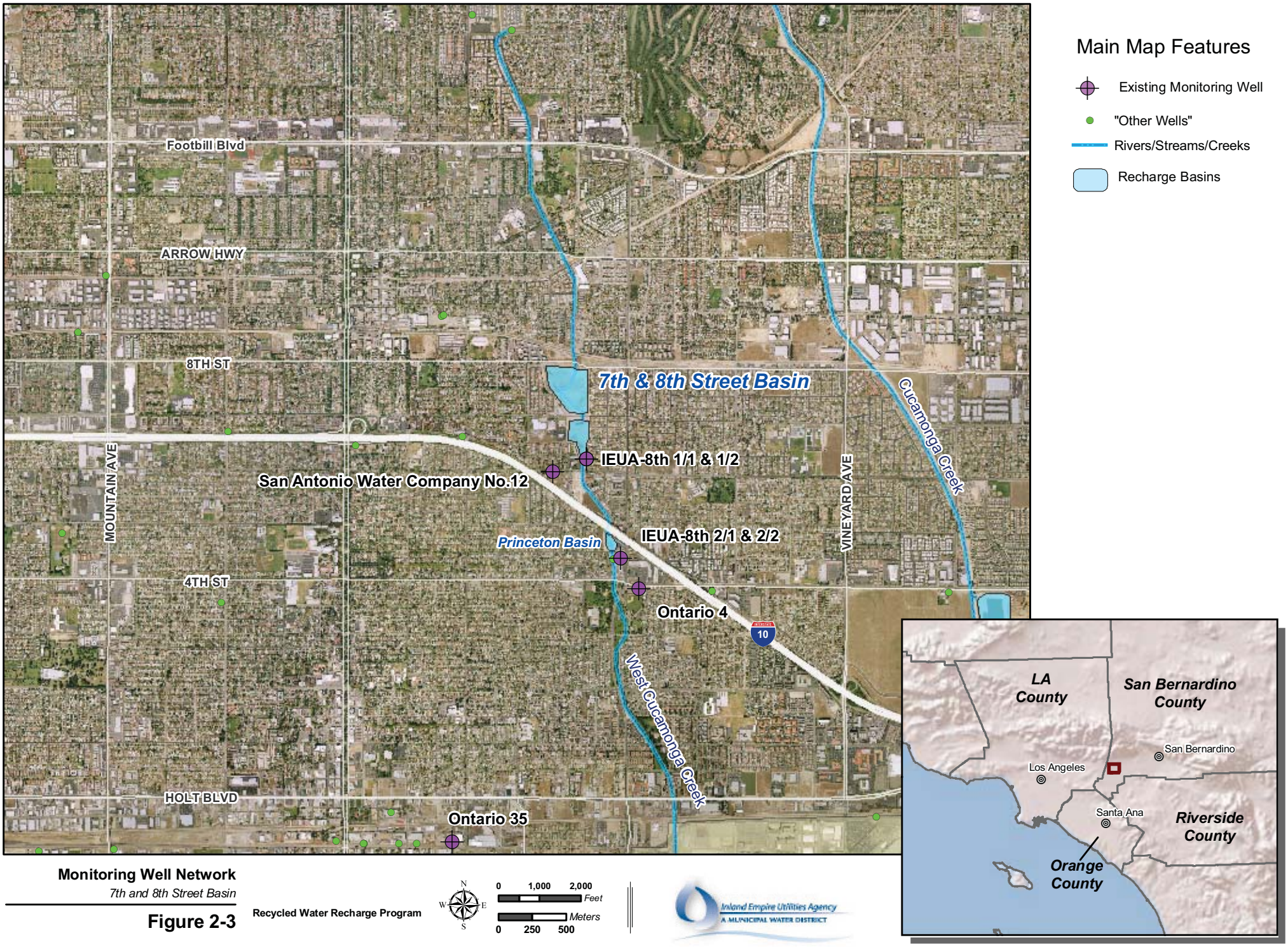
**Recycled Water Recharge Program**

N W E S

0 1,000 2,000 Feet

0 250 500 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

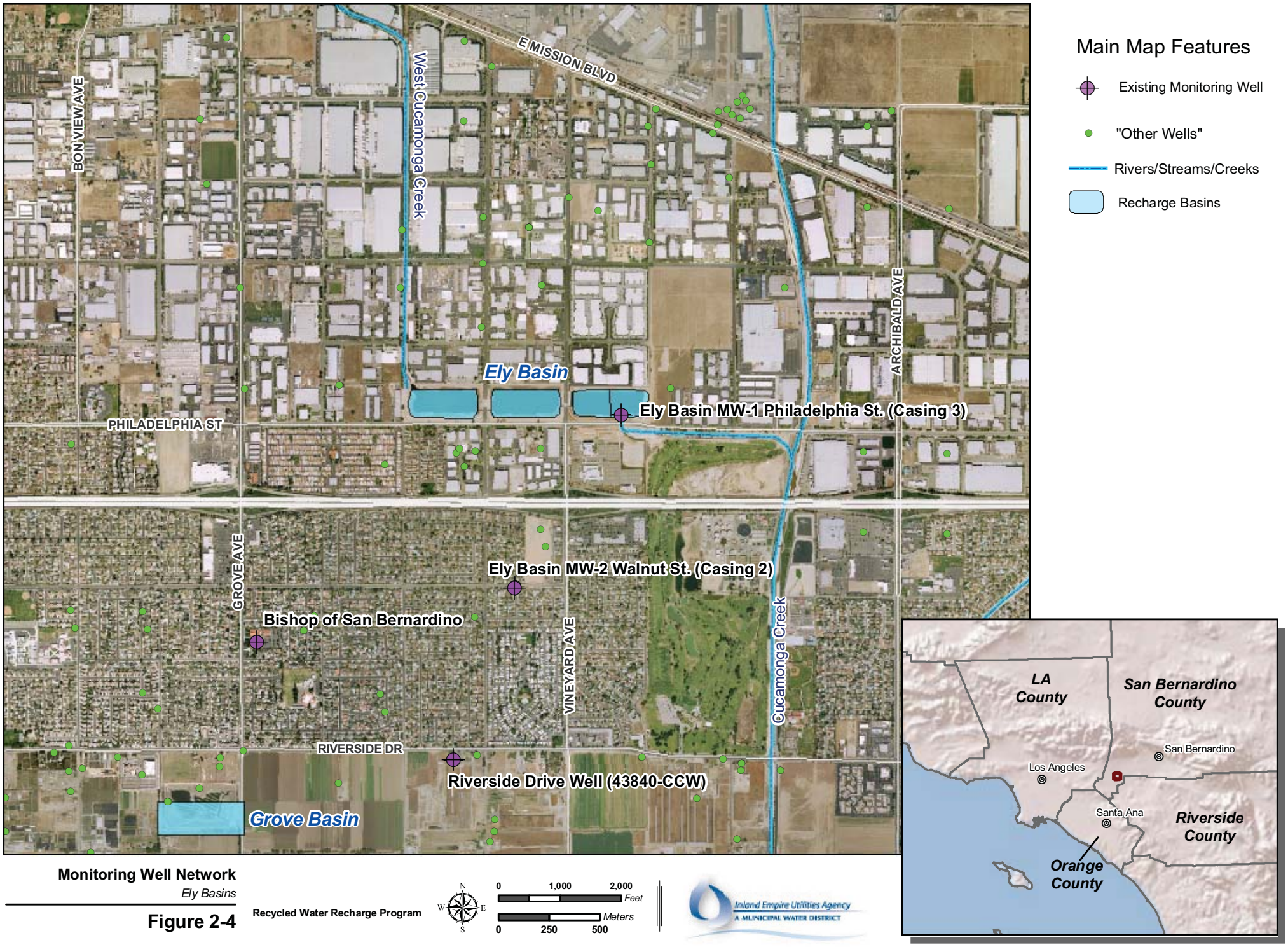



**Monitoring Well Network**

*7th and 8th Street Basin*

**Figure 2-3**

**Recycled Water Recharge Program**

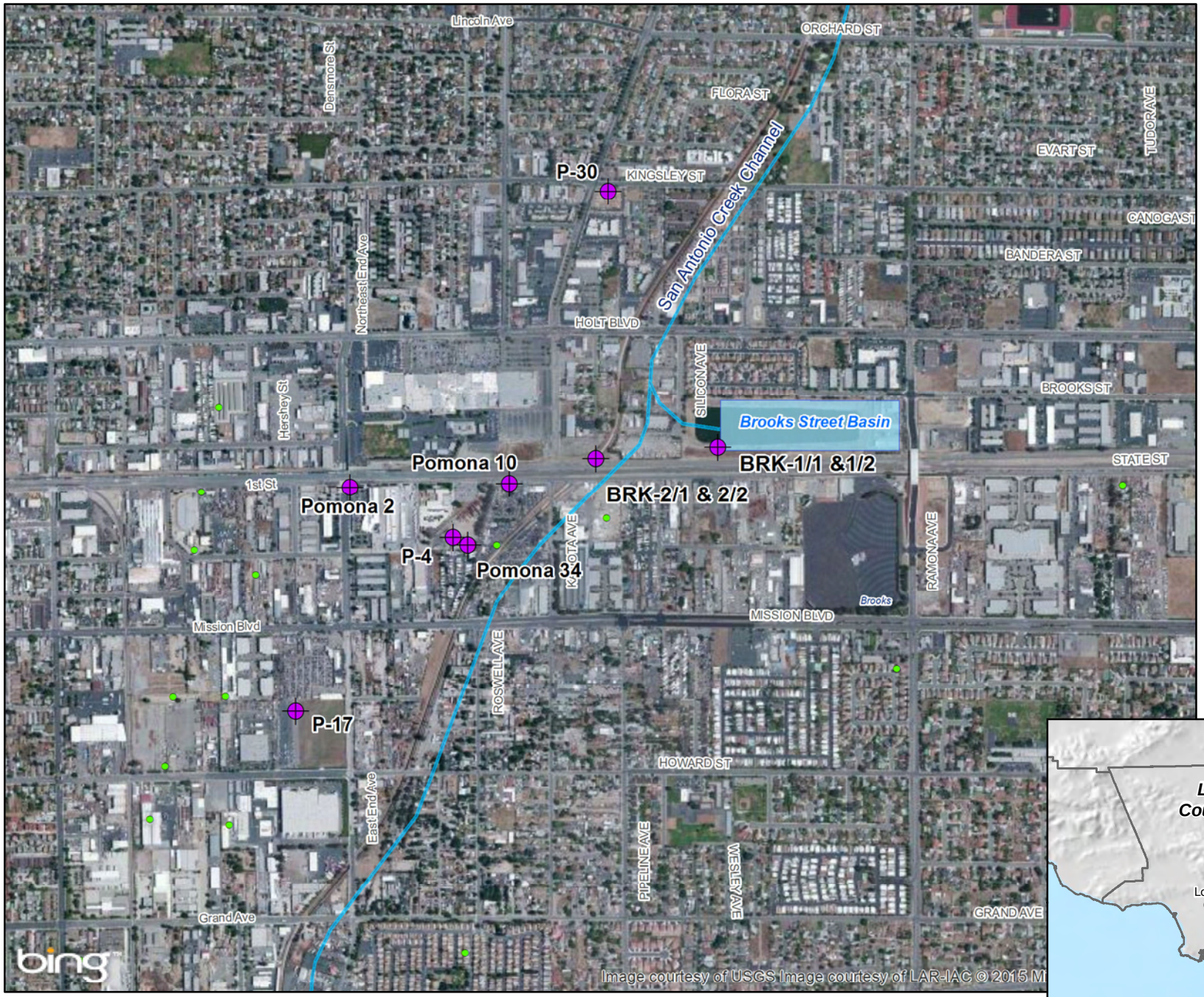



**Monitoring Well Network**

*Ely Basins*

**Figure 2-4**

**Recycled Water Recharge Program**




## Main Map Features

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


**Monitoring Well Network**
*Brooks Street Basin*

**Figure 2-5**

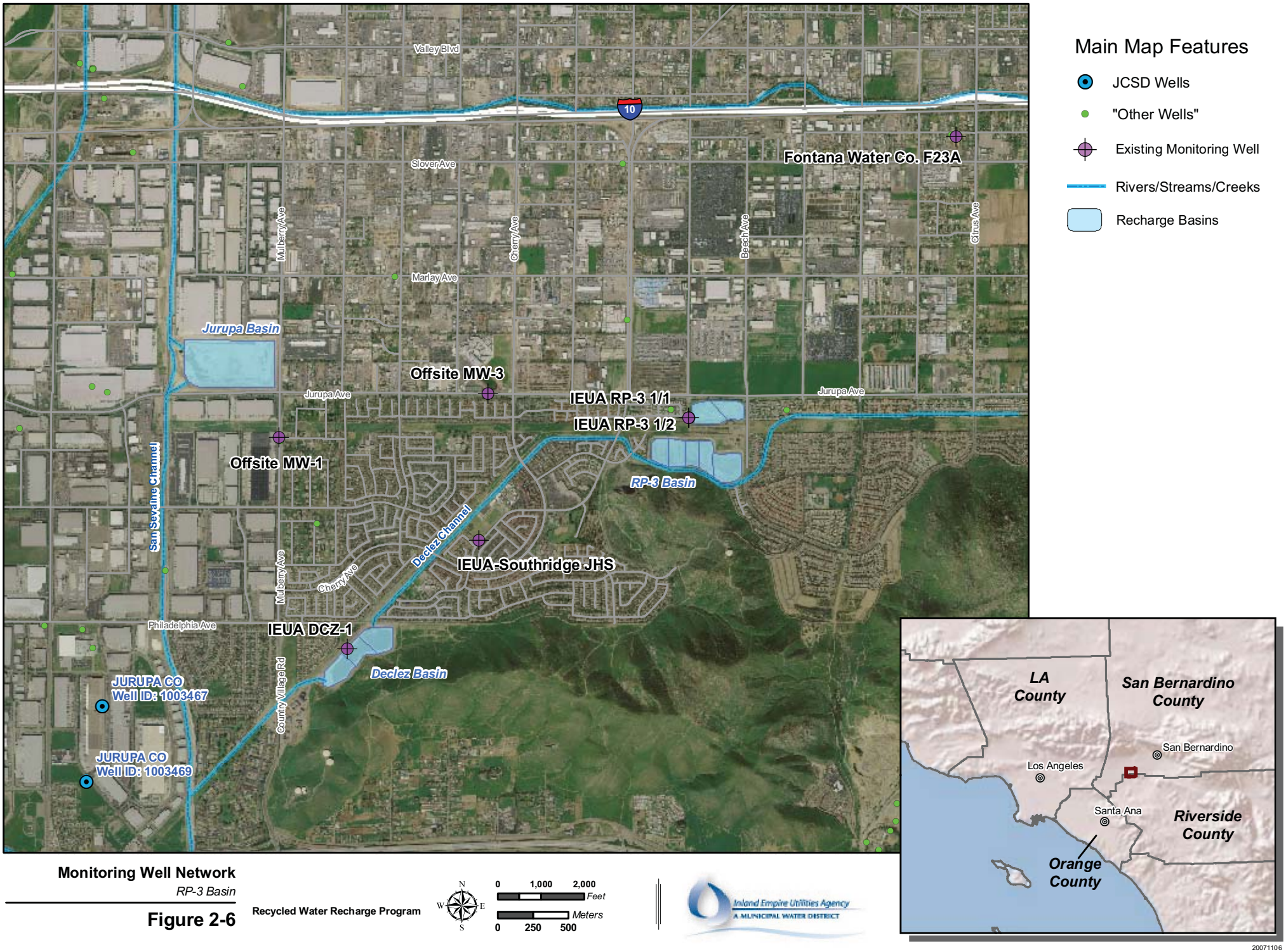
**Recycled Water Recharge Program**

N W E S

0 1,000 Feet
0 300 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

20071106

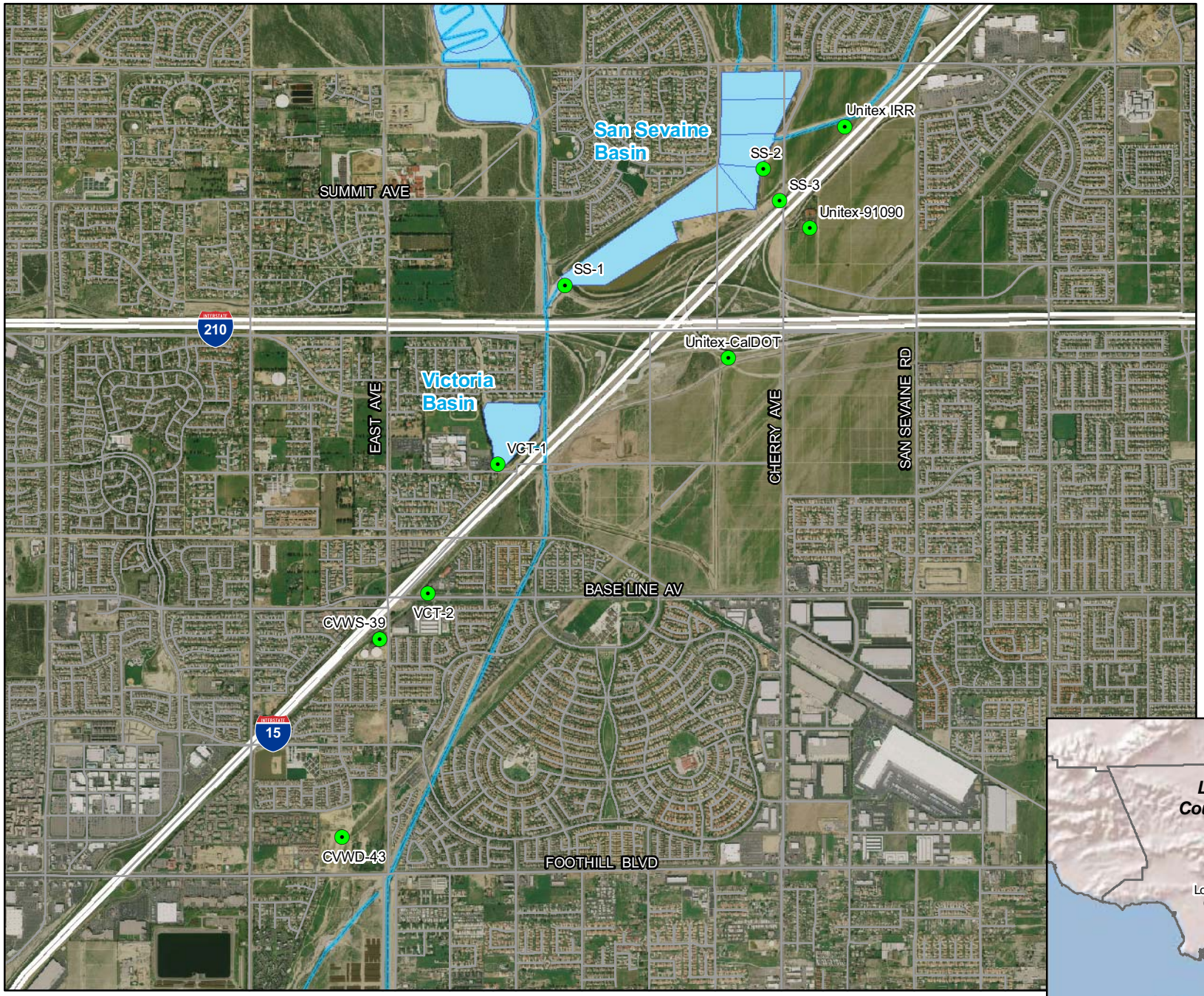



**Monitoring Well Network**

*RP-3 Basin*

**Figure 2-6**

**Recycled Water Recharge Program**




## Main Map Features

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


**Monitoring Well Network**

*San Sevaine and Victoria Basin*

**Figure 2-7**

**Recycled Water Recharge Program**

N W E S

0 1,000 2,000 Feet

0 250 500 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

20071106