Randy Lee, P.E.
Acting Director of Finance

Peter Kavounas, P.E.
General Manager

May 15, 2023

Regional Water Quality Control Board, Santa Ana Region
Attention: Ms. Jayne Joy
3737 Main Street, Suite 500
Riverside, California 92501-3348

Subject: Chino Basin Recycled Water Groundwater Recharge Program: Quarterly Monitoring Report for January through March 2023

Dear Ms. Joy,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the first quarter of 2023 (1Q23), January 1 through March 31, 2023, 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 1Q23, the Groundwater Recharge Program was in compliance with all monitoring and reporting requirements as specified in the Order, with the exception of exceedances of the maximum contaminant level (MCL) for 1,2,3-Trichloropropane (1,2,3-TCP), and notification level for Perfluorooctanoic acid (PFOA).

Chino Basin Watermaster hereby certifies that, during the period of January 1 through March 31, 2023, 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 7th & 8th Street, Banana, Brooks, Declez, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In point of fact, there are no domestic or municipal production wells in the buffer zones of the aforementioned recharge sites.

DECLARATION

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

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

for Randy Lee, P.E.
Acting Director of Finance

Peter Kavounas, P.E.
General Manager

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Chino Basin Watermaster
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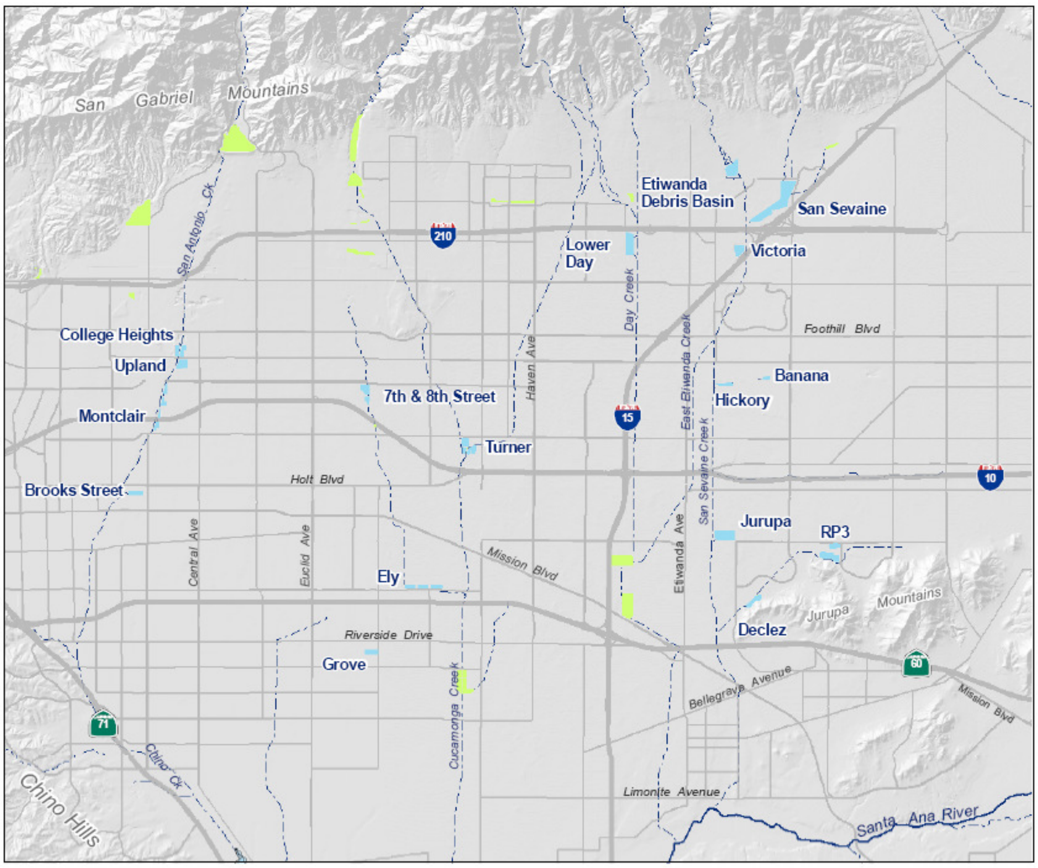
Chino Basin Recycled Water Groundwater Recharge Program

Quarterly Monitoring Report
January 1 through March 31, 2023



Prepared by:

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

May 15, 2023

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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 Program (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 Groundwater 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 first quarter of 2023 (1Q23).

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

- Monitoring results for recycled water, 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 10th day.

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

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

D. Title 22, Division 4, Chapter 3. Article 5.1 §60320.100

On June 18, 2014, the DDW adopted new regulations pertaining to Groundwater Replenishment Reuse Projects (GRRP), which can be found in Title 22 California Code of Regulations, Division 4, Chapter 3. Article 5.1 “Indirect Potable Reuse: Groundwater Replenishment - Surface Application” found in Sections §60320.100 through 60320.130. Pursuant to the new GRRP regulations, additional monitoring and reporting began in 3Q15.

The DDW GRRP regulations require that all GRRPs permitted prior to June 18, 2014 submit a report to the DDW and Regional Board to assess compliance of the existing permit in alignment with the GRRP requirements. The IEUA submitted the Compliance Assessment Report (CAR) for the Chino Basin Recycled Water Groundwater Recharge Project dated June 18, 2015 and a revised CAR dated December 12, 2018. On July 25, 2019, the DDW sent a letter to IEUA with their comments on the CAR. The DDW granted a deadline extension for IEUA to submit responses in an October 21, 2019 email. IEUA responded to the DDW comment letter on November 27, 2019.

E. 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, and basin surface water), 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 described in the MRP. Tables 2-1 through 2-4 include all of the requisite 1Q23 data.

Recycled Water Quality 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. The monitoring data in Table 2-1 is collected from samples of RP-1 and RP-4 effluent; however, recycled water compliance with the total nitrogen (TN) limit of 10 mg/L (Title 22, §60320.110). The previous method of TN compliance determination was based on alternative monitoring plans with reduction factors (Table 2-5 and discussed in further detail in Section 2.B). During 1Q23, there were no exceedances of the TN limit. Table 2-2 shows the agency-wide monthly and 12-month running average concentrations for Total Inorganic Nitrogen (TIN) and Total Dissolved Solids (TDS). TDS and TIN were not exceeded during 1Q23.

Recycled Water Quality Specifications A.1 through A.4 of the Order are numerical limits based on the Federal and State primary maximum contaminant levels (MCLs), secondary MCLs, and Action Levels. Recycled Water Specification A.15 is a numerical limit for oil and grease.

Table 2-3a shows the results for the DDW approved sample location representative of the recycled water blend from RP-1 and RP-4 used for recharge located at the RP-4 1299 Pressure Zone Pump Station (RW Blend). Table 2-3b shows results for the RP-1 001B effluent. During the CAR review, DDW identified that 001B effluent must be sampled and reported independently of the RW Blend.

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 2-3a (RW Blend) and Table 2-3b (RP-1 001B effluent) summarize the 4-quarter running average concentration for each parameter from 2Q22 through 1Q23 and lists the corresponding compliance limits.

Although the RW Blend sample from the RP-4 1299 Pump Station is a suitable sample location for most constituents in recycled water, it is not appropriate for Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5). Compliance samples for these compounds are taken from lysimeters or monitoring wells at basins actively receiving recycled water. At these locations, the samples better represent the compounds present in the recycled water prior to reaching the groundwater table, as the concentrations of these constituents change through the recharge process. Once a quarter, a representative sample is collected from a selected compliance lysimeter/monitoring well and analyzed for these compounds. For the 1Q23 sampling for these compounds, IEUA chose the Banana-Hickory monitoring well (BH-1/2) as the compliance point. The BH-1/2 mound monitoring well was selected as the compliance monitoring point for 1Q23, as it has received many years of recycled water deliveries and would not be influenced by the recent storm events. Recycled water was present based on electrical conductivity (EC) measurements.

Tables 2-4a (RW Blend) and 2-4b (RP-1 001B Effluent) summarize the quarterly monitoring results of recycled water for constituents with no MCLs or Action Levels; this includes priority pollutants, chemicals of emerging concern (CECs), and chemicals with state notification levels.

Note that in Tables 2-4a and 2-4b there is a section named “Health-based and performance indicator CECs for Surface Application”, which includes CECs listed as monitoring requirements in the State Water Resources Control Board’s (State Water Board) amendment to the Policy for Water Quality Control for Recycled Water (Recycled Water Policy) adopted on December 11, 2018, and effective as of April 8, 2019. The amendment included updates to the CECs monitoring list based on the 2018 Science Advisory Panel recommendations.

There were no exceedances for the parameters analyzed during 1Q23 in the following categories: primary MCLs for inorganic chemicals; volatile organic compounds (VOCs), *with the exception of 1,2,3-Trichloropropane (1,2,3-TCP)*; non-volatile synthetic organic chemicals (SOCs); radionuclides; disinfection byproducts; action levels for lead and copper; notification level chemicals (NLs), *with the exception of Perfluorooctanoic acid (PFOA)*; secondary MCLs for required constituents; and oil & grease. 1,2,3-TCP and PFOA exceedances are detailed below:

1,2,3-TCP

In September 2019, 1,2,3-TCP was detected above the MCL of 0.005 µg/L at both the RW Blend and 001B Effluent recycled water locations. Accelerated weekly sampling for 1,2,3-TCP continued through 2Q20 until 1,2,3-TCP was found to be below the MCL. During 2Q21, 1,2,3-TCP was detected again above the MCL at both the RW Blend and 001B Effluent. A confirmation sample was collected within 72 hours of notification of the first results, and in accordance with §60320.112(d)(2), weekly sampling began on 06/18/21.

- In accordance with §60320.112(d)(2), "the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the contaminant's MCL."
- §60320.112(d)(2)(A) states that "If the running four-week average exceeds the contaminant's MCL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred."
- During a meeting with the DDW and Regional Board on July 15, 2021, Faraz Asad (DDW) requested that a revised corrective action report from the one submitted to the DDW and Regional Board on February 13, 2020 be prepared and submitted. IEUA continues to exceed the MCL after accelerated monitoring was implemented and the corrective actions report was submitted to the DDW and the Regional Board on Thursday, August 12, 2021.
- IEUA has been actively implementing the corrective actions, which includes: evaluations of monitoring wells, lysimeters, source control, and the analysis method; and an investigation of disinfection byproducts. IEUA has contracted with Trussell Technologies on October 5, 2021 to assist with the investigation of 1,2,3-TCP and possible mitigation measures. The objective of this study is to have 1,2,3-TCP designated as a disinfection byproduct specific to surface spreading activities. As of January 2022, the project team has identified the potential strategies to carry out the 1,2,3-TCP investigation. A 1,2,3-TCP method assessment plan was submitted to DDW and Regional Board for their review and comment on March 22, 2022 and the last set of comments were received on April 27, 2022. Trussell Technologies revised the plan, and the plan was re-submitted for review on June 13, 2022. On September 16, 2022, IEUA received an email from DDW asking if the DWRL_123TCP method has been incorporated in the method assessment plan. IEUA Compliance staff is confirming this information with Lab staff. At the time of reporting, some preliminary testing has taken place to evaluate the analytical methods and impact of preservative impacts on 1,2,3-TCP concentrations. Additionally, IEUA and Los Angeles County Sanitations Districts (LACSD) meet regularly to discuss 1,2,3-TCP, as both agencies utilize surface application for groundwater recharge and are regularly experiencing 1,2,3-TCP concentrations above the MCL.

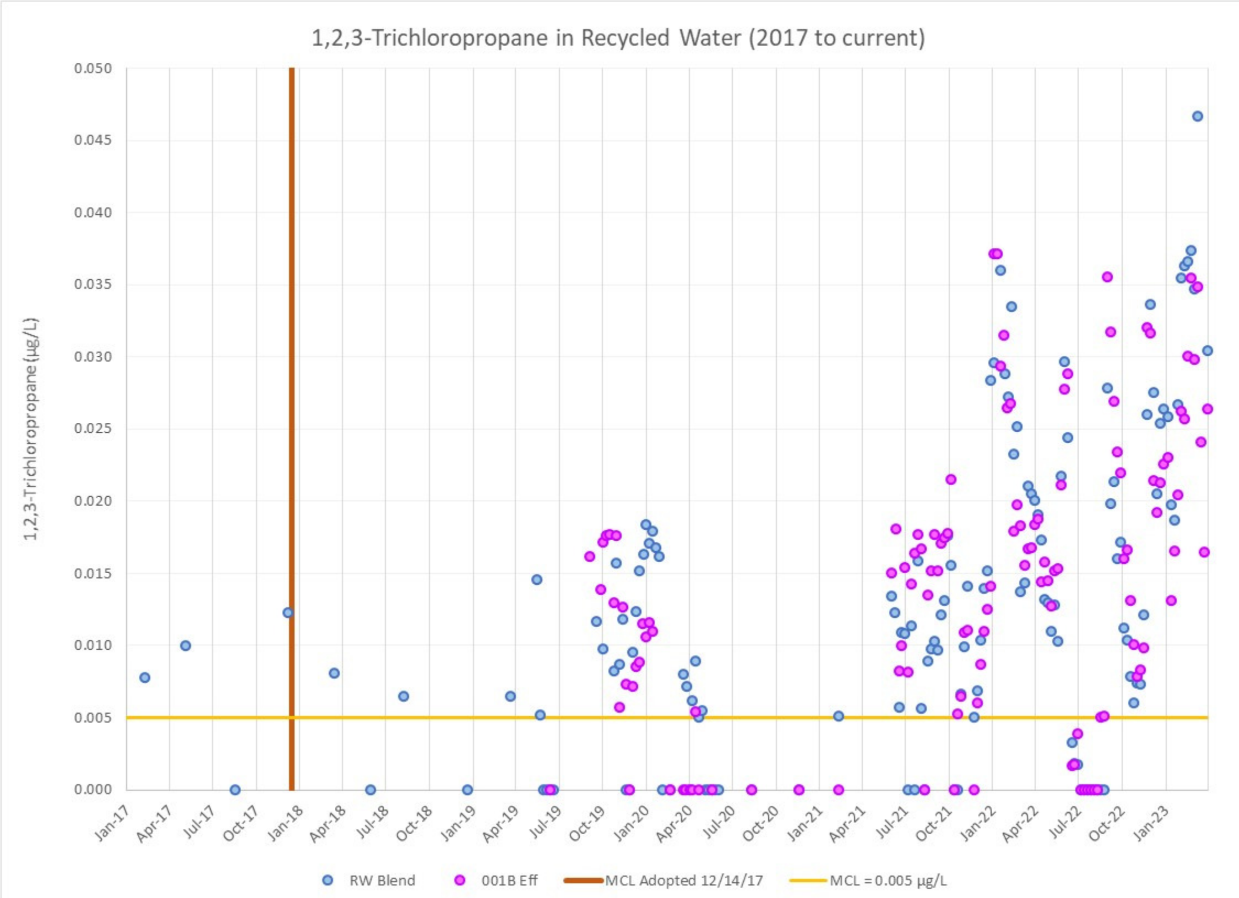
The weekly 1,2,3-TCP results from 2Q22 through 1Q23, and a chart of all the 1,2,3-TCP results since 2017 are shown below:

Sample	Date	RW Blend (µg/L)	4-week avg (µg/L)
Week 43	04/05/22	0.019	0.020
Week 44	04/12/22	0.014	0.018
Week 45	04/19/22	0.016	0.017
Week 46	04/26/22	0.015	0.016
Week 47	05/03/22	0.013	0.014
Week 48	05/10/22	0.015	0.015
Week 49	05/17/22	0.015	0.014
Week 50	05/24/22	0.021	0.016
Week 51	05/31/22	0.028	0.020
Week 52	06/07/22	0.029	0.023
Week 53	06/16/22	<0.005	0.019
Week 54	06/21/22	<0.005	0.014
Week 55	06/28/22	<0.005	0.007
Week 55	07/05/22	<0.005	<0.005
Week 56	07/12/22	<0.005	<0.005
Week 57	07/19/22	<0.005	<0.005

Sample	Date	001B Eff (µg/L)	4-week avg (µg/L)
Week 43	04/05/22	0.019	0.018
Week 44	04/12/22	0.014	0.017
Week 45	04/19/22	0.016	0.017
Week 46	04/26/22	0.015	0.016
Week 47	05/03/22	0.013	0.014
Week 48	05/10/22	0.015	0.015
Week 49	05/17/22	0.015	0.014
Week 50	05/24/22	0.021	0.016
Week 51	05/31/22	0.028	0.020
Week 52	06/07/22	0.029	0.023
Week 53	06/16/22	<0.005	0.019
Week 54	06/21/22	<0.005	0.014
Week 55	06/28/22	<0.005	0.007
Week 55	07/05/22	<0.005	<0.005
Week 56	07/12/22	<0.005	<0.005
Week 57	07/19/22	<0.005	<0.005

Sample	Date	RW Blend (µg/L)	4-week avg (µg/L)
Week 58	07/26/22	<0.005	<0.005
Week 59	08/03/22	<0.005	<0.005
Week 60	08/09/22	<0.005	<0.005
Week 61	08/16/22	<0.005	<0.005
Week 62	08/23/22	<0.005	<0.005
Week 63	08/30/22	0.028	0.007
Week 64	09/06/22	0.020	0.012
Week 65	09/13/22	0.021	0.017
Week 66	09/20/22	0.016	0.021
Week 67	09/27/22	0.017	0.019
Week 68	10/05/22	0.011	0.016
Week 69	10/12/22	0.010	0.014
Week 70	10/19/22	0.008	0.012
Week 71	10/26/22	0.006	0.009
Week 72	11/02/22	0.007	0.008
Week 73	11/09/22	0.007	0.007
Week 74	11/16/22	0.012	0.008
Week 75	11/23/22	0.026	0.013
Week 76	11/30/22	0.034	0.020
Week 77	12/07/22	0.028	0.025
Week 78	12/14/22	0.021	0.027
Week 79	12/21/22	0.025	0.027
Week 80	12/28/22	0.026	0.025
Week 81	01/04/23	0.026	0.025
Week 82	01/11/23	0.020	0.024
Week 83	01/18/23	0.019	0.023
Week 84	01/25/23	0.027	0.023
Week 85	02/01/23	0.035	0.025
Week 86	02/08/23	0.036	0.029
Week 87	02/15/23	0.037	0.034
Week 88	02/22/23	0.037	0.036
Week 89	03/01/23	0.035	0.036
Week 90	03/08/23	0.047	0.039
Week 91	03/15/23	0.052	0.043
Week 92	03/22/23	0.053	0.047

Sample	Date	001B Eff (µg/L)	4-week avg (µg/L)
Week 58	07/26/22	<0.005	<0.005
Week 59	08/03/22	<0.005	<0.005
Week 60	08/09/22	<0.005	<0.005
Week 61	08/16/22	0.005	0.001
Week 62	08/23/22	0.005	0.003
Week 63	08/30/22	0.036	0.011
Week 64	09/06/22	0.032	0.019
Week 65	09/13/22	0.027	0.025
Week 66	09/20/22	0.023	0.029
Week 67	09/27/22	0.022	0.026
Week 68	10/05/22	0.016	0.022
Week 69	10/12/22	0.017	0.020
Week 70	10/19/22	0.013	0.017
Week 71	10/26/22	0.010	0.014
Week 72	11/02/22	0.008	0.012
Week 73	11/09/22	0.008	0.010
Week 74	11/16/22	0.010	0.009
Week 75	11/23/22	0.032	0.015
Week 76	11/30/22	0.032	0.020
Week 77	12/07/22	0.021	0.024
Week 78	12/14/22	0.019	0.026
Week 79	12/21/22	0.021	0.023
Week 80	12/28/22	0.023	0.021
Week 81	01/04/23	0.023	0.022
Week 82	01/11/23	0.013	0.020
Week 83	01/18/23	0.017	0.019
Week 84	01/25/23	0.020	0.018
Week 85	02/01/23	0.026	0.019
Week 86	02/08/23	0.026	0.022
Week 87	02/15/23	0.030	0.026
Week 88	02/22/23	0.035	0.029
Week 89	03/01/23	0.030	0.030
Week 90	03/08/23	0.035	0.033
Week 91	03/15/23	0.024	0.031
Week 92	03/22/23	0.016	0.026



PFOA

In August 2019, the NL for PFOA was lowered from 14 ng/L to 5.1 ng/L and the NL for Perfluorooctanesulfonic acid (PFOS) was lowered from 13 ng/L to 6.5 ng/L. PFOS concentrations have never exceeded the NL in the recycled water. However, since the NLs were lowered during 3Q19, PFOA concentrations in the recycled water have exceeded the NL at both the RW Blend and 001B Effluent sample locations. No confirmation sample was collected within 72 hours of notification of the first results in exceedance, and in accordance with §60320.120(b) weekly sampling began on 10/24/19.

- §60320.120(b)(1) states that "If the running four-week average exceeds the contaminant's NL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department." IEUA continued to exceed the four-week average after accelerated monitoring was implemented and the corrective actions report was submitted to the DDW and the Regional Board on February 13, 2020.
- IEUA completed the sixteen consecutive weeks of sampling the RW Blend and 001B Effluent per §60320.120(b)(2) during 1Q20 and notified the DDW and the Regional Board after the final results were received. Notifications of exceedance were emailed to the Regional Board and DDW on February 25, 2020 for the RW Blend and on March 5, 2020 for the 001B Effluent.
- In a March 5, 2020 email, DDW stated that IEUA needs to continue with weekly samples for PFOA in the recycled water. Weekly sampling was reinitiated during the third week of March 2020.
- At time of reporting, IEUA is awaiting the reevaluation of the request to reduce the PFOA monitoring frequency from weekly to monthly. During an August 5, 2021 meeting, the DDW and the Regional

Board requested additional information and a revised PFOA corrective actions report, which was submitted to both regulatory agencies on November 3, 2021.

- A follow-up meeting took place on February 28, 2022 and the DDW requested additional information on dry weather flow diversions. A revised corrective actions report was submitted to the DDW and RWQCB on May 2, 2022. At time of reporting, IEUA has not received a response from the DDW.

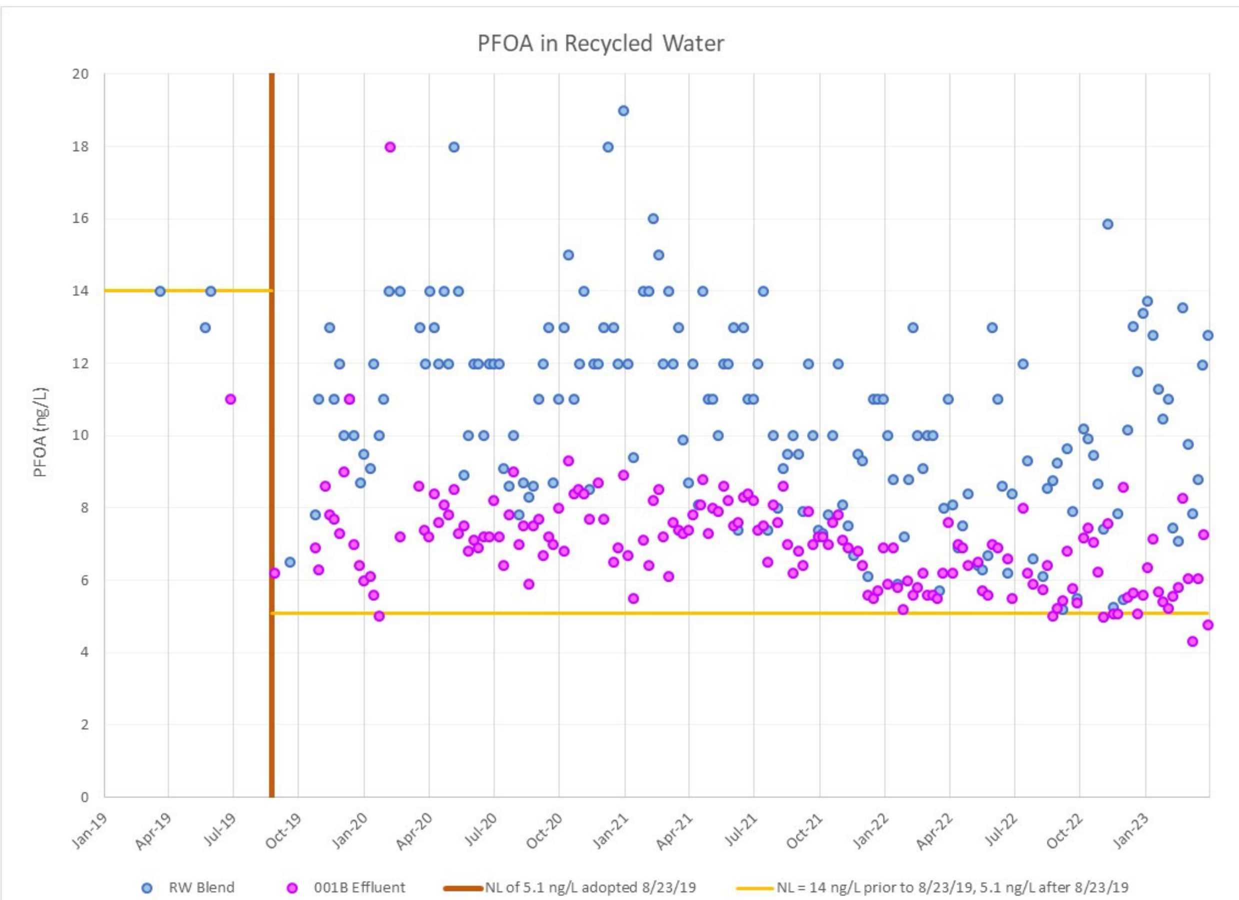
The weekly PFOA results from 2Q22 through 1Q23, and a chart of all the PFOA results since 2019 are shown below:

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Continued	04/05/22	6.2	6.4
Continued	04/12/22	7.0	6.8
Continued	04/19/22	6.9	6.9
Continued	04/26/22	6.4	6.6
Continued	05/10/22	6.5	6.7
Continued	05/17/22	5.7	6.4
Continued	05/24/22	5.6	6.1
Continued	05/31/22	7.0	6.2
Continued	06/07/22	6.9	6.3
Continued	06/14/22	<2.0	4.9
Continued	06/21/22	6.6	5.1
Continued	06/28/22	5.5	4.8
Continued	07/05/22	12.0	8.8
Continued	07/12/22	9.3	9.0
Continued	07/19/22	6.6	9.1
Continued	07/26/22	6.1	8.5
Continued	08/02/22	8.5	7.1
Continued	08/09/22	8.8	7.8
Continued	08/16/22	9.3	8.2
Continued	08/23/22	5.2	7.9
Continued	08/30/22	9.7	8.2
Continued	09/06/22	7.9	8.0
Continued	09/13/22	5.5	7.1
Continued	09/20/22	6.1	8.5
Continued	09/27/22	8.5	7.1
Continued	10/05/22	10.2	8.3
Continued	10/12/22	9.9	8.4
Continued	10/19/22	9.5	8.8
Continued	10/26/22	8.7	9.6
Continued	11/02/22	7.4	8.9
Continued	11/09/22	15.9	10.4
Continued	11/16/22	5.3	9.3
Continued	11/23/22	7.8	9.1
Continued	11/30/22	5.5	8.6
Continued	12/07/22	10.2	7.2
Continued	12/14/22	13.0	9.1
Continued	12/21/22	11.8	10.1

Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Continued	04/05/22	8.1	8.2
Continued	04/12/22	6.9	8.5
Continued	04/19/22	7.5	8.4
Continued	04/26/22	8.4	7.7
Continued	05/10/22	6.4	7.3
Continued	05/17/22	6.3	7.2
Continued	05/24/22	6.7	7.0
Continued	05/31/22	13.0	8.1
Continued	06/07/22	11.0	9.3
Continued	06/14/22	8.6	9.8
Continued	06/21/22	6.2	9.7
Continued	06/28/22	8.4	8.6
Continued	07/05/22	8.0	5.0
Continued	07/12/22	6.2	6.6
Continued	07/19/22	5.9	6.4
Continued	07/26/22	5.7	6.5
Continued	08/02/22	6.4	6.0
Continued	08/09/22	5.0	5.7
Continued	08/16/22	5.2	5.6
Continued	08/23/22	5.4	5.5
Continued	08/30/22	6.8	5.6
Continued	09/06/22	5.8	5.8
Continued	09/13/22	5.4	5.8
Continued	09/20/22	5.7	6.5
Continued	09/27/22	6.4	6.0
Continued	10/05/22	7.2	6.3
Continued	10/12/22	7.5	6.4
Continued	10/19/22	7.1	6.8
Continued	10/26/22	6.2	7.0
Continued	11/02/22	5.0	6.4
Continued	11/09/22	7.6	6.5
Continued	11/16/22	5.1	6.0
Continued	11/23/22	5.1	5.7
Continued	11/30/22	8.6	6.6
Continued	12/07/22	5.5	6.1
Continued	12/14/22	5.6	6.2
Continued	12/21/22	5.1	6.2

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Continued	12/28/22	13.4	12.1
Continued	01/04/23	13.7	13.0
Continued	01/11/23	12.8	12.9
Continued	01/18/23	11.3	12.8
Continued	01/25/23	10.5	12.1
Continued	02/01/23	11.0	11.4
Continued	02/08/23	7.4	10.1
Continued	02/15/23	7.1	9.0
Continued	02/22/23	13.5	9.8
Continued	03/01/23	9.8	9.5
Continued	03/08/23	7.8	9.5
Continued	03/15/23	8.8	10.0
Continued	03/22/23	12.0	9.6
Continued	03/29/23	12.8	10.3

Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Continued	12/28/22	5.6	5.5
Continued	01/04/23	6.4	5.7
Continued	01/11/23	7.2	6.0
Continued	01/18/23	5.7	6.2
Continued	01/25/23	5.4	6.2
Continued	02/01/23	5.2	5.9
Continued	02/08/23	5.6	5.5
Continued	02/15/23	5.8	5.5
Continued	02/22/23	8.3	6.2
Continued	03/01/23	6.1	6.4
Continued	03/08/23	4.3	6.1
Continued	03/15/23	6.0	6.2
Continued	03/22/23	7.3	5.9
Continued	03/29/23	4.8	5.6



B. Recycled Water: Alternative Monitoring Plans for TOC and TN

Total organic carbon (TOC) and nitrogen species sampling and analyses were performed weekly or monthly at lysimeters at some basins when recycled water is being delivered, for the determination of compliance with Recycled Water Specifications A.7 and A.9 of the Order. However, starting 3Q22 all recharge basins have transitioned to alternative monitoring plans to determine compliance with TOC and TN, and lysimeter monitoring is no longer used.

As indicated in Recycled Water Compliance Determination B.5 and B.6 of the Order, alternative monitoring plans to the lysimeter-based compliance sampling for TOC and TN under Recycled Water Specifications A.7 and A.9 can be established upon development of a soil-aquifer treatment factor using recharge demonstration studies. The alternative monitoring plans can be determined in the basin Start-up Period Reports or First Year Operations Reports. The alternative TOC and TN monitoring plans approved by the Regional Board and DDW include alternative monitoring locations that include: sampling at a recycled water distribution turnout with the application of a correction factor; monitoring at one basin lysimeter; and/or monitoring at a basin monitoring well. The following are the alternative monitoring plans for each basin:

- Banana Basin: Sampling at the RW Blend with a correction factor of 80 percent for TOC and 47 percent for TN
- Hickory Basin: Sampling at the RW Blend with a correction factor of 81 percent for TOC and 27 percent for TN
- Turner Basins 1 & 2: Sampling at the RW Blend with a correction factor of 70 percent for TOC and 87 percent for TN
- Turner Basins 3 & 4: Sampling at the RW Blend with a correction factor of 85 percent for TOC and 87 percent for TN
- Ely Basins: Sampling 001B Effluent with a correction factor of 76 percent for TOC and 52 percent for TN
- RP3 Basin: Sampling at the RW Blend with a correction factor of 88 percent for TOC and 31 percent for TN
- 7th & 8th Street Basin: Sampling at the RW Blend with a correction factor of 88 percent for TOC and 75 percent for TN
- Victoria Basin: Sampling at the RW Blend with a correction factor of 78 percent for TOC and 82 percent for TN
- Brooks Basin: Sampling at the 25-foot lysimeter is the compliance point for TN, and sampling at well BRK-1/1 is the compliance point for TOC
- Declez Basin: Sampling at the RW Blend with a correction factor of 62 percent for TOC and 91 percent for TN
- San Sevaine Basin 1-3: Sampling at the RW Blend with a correction factor of 92 percent for TOC and 34 percent for TN. Revised start-up period report was submitted during 1Q22.

During 1Q23, there were no exceedances of TOC and TN at basins based on the alternative monitoring plans.

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 2-5. As part of the CAR review, the DDW identified that the TN limit could not be met using a reduction factor we had previously established for alternative monitoring. The DDW clarified that the 10 mg/L TN limit from the GRRP regulations would need to be met at the recycled water. The recycled water monitoring has met the TN compliance for 1Q23 as demonstrated in Table 2-1. However, the alternative monitoring using the reduction factor will continue to be reported for the Regional Board until a new GWR permit is issued.

Table 2-6 is a compliance summary table for RWC, TOC average, and TN compliance. It includes the following: when the basin started receiving recycled water, when the startup period was completed, the RWC limit, the current RWC, the current TOC average limit (based on Recycled Water Specification A.10), the calculated monthly TOC averages, compliance with the TN limit, and recharged water monitoring plans for TOC and TN.

In June 2015, the DDW issued a letter that approved the request for 50% RWC for most of the basins where recycled water recharge had initiated, with the exception of San Sevaine 5 (no longer being recharged with recycled water) and Turner Basins. The letter stated that based on the data that was provided: "For most of the recharge basins, the data does show an increasing amount of EC and chloride in the mound monitoring wells over time, indicating that recycled water is reaching the mound. Corresponding TOC data from the mound monitoring wells also show a consistent TOC level of less than 1.0 mg/L when recycled water is present; therefore, increasing the RWC limit to 50 percent for some basins is justified."

C. Diluent Water

In addition to recycled water recharge, the two other recharge water sources are imported water and stormwater / local runoff; these two types of water are considered diluent water. Imported water and stormwater / local runoff must be sampled quarterly in accordance with the DDW-approved Diluent Water Monitoring Plan.

Details on the methods used to measure daily diluent water flow and diluent water monitoring schedule can be found in the 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. For 1Q23, diluent water quality sampling of four storm water sites were conducted. Table 2-7a list the results of the local runoff and stormwater sampling and analyses for 1Q23. The maximum level to trigger a source water evaluation has been exceeded for aluminum, PFOA, and PFOS during prior monitoring events. IEUA has submitted a preliminary evaluation of potential source for all the contaminants where concentrations exceed the maximum level to trigger a source evaluation as part of the CAR and is awaiting a response from DDW regarding the need to complete a source water evaluation.

Table 2-7b lists the results from Metropolitan Water District's (MWD) general mineral and physical analysis of source water from Silverwood Lake.

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 assess the impact that recharged water has on downgradient water supplies. The wells in the monitoring well networks for Hickory and Banana, Turner, Declez, RP3, 7^{th} & 8^{th} Street, Brooks Street, San Sevaine, Victoria, and Ely Basins are summarized in Table 2-8, 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 2-9.

Any 1Q23 sample which exceeded primary or secondary MCLs are shown in Table 2-9 in magenta (primary MCL) and green (secondary MCL) 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 are not reported to the DDW but are reported in the quarterly reports. In 1Q23, the following constituents were detected above the MCLs:

Primary MCL Exceedance

- NO_3-N samples collected from monitoring wells at Banana & Hickory, RP3, 7th & 8th Street, Brooks, and Ely were detected above the primary MCL of 10 mg/L. The NO_3-N concentrations at these wells range from 11 to 22 mg/L and are characteristic of groundwater quality in these areas of 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. No notifications were made to the DDW as these high NO_3-N concentrations are comparable to the ambient NO_3-N concentration in groundwater for each monitoring well's respective groundwater management zone within the Chino Basin.

Secondary MCL Exceedances

- Color was higher than the secondary MCL of 15 units at BRK-2/1 and DCZ-1/1.
- Turbidity was higher than the secondary MCL of 5 NTU at 8TH-1/2, 8TH-2/2, BRK-2/1, SSV-2, and DCZ-1/1.
- TDS was higher than its secondary MCL of 500 mg/L at ALCOA MW3, Southridge JHS, and Bishop of SB Corp. – DOM and EC was higher than its secondary MCL of 900 µmhos/cm at ALCOA MW3 and Southridge JHS. The wells near the RP3 Basins are located in areas where the TDS and EC concentrations in groundwater are historically elevated. The distribution of TDS 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 2020 State of the Basin Report" published in June 2021 was prepared by West Yost Associates for the CBWM. The 2020 State of the Basin report can be downloaded from CBWM's website, www.cbwm.org.

The 2014 GRRP regulations require two downgradient monitoring wells to be monitored quarterly for Priority Toxic Pollutants, and that the wells are located (A) no less than two weeks but no more than six months of travel through the unsaturated zone affected by the project, and (B) at least 30 days upgradient of the nearest drinking water well be monitored quarterly for Priority Toxic Pollutants. The table below shows the monitoring wells that meet the (A) and (B) criteria specified above.

Basins	Monitoring Well (A)	Monitoring Well (B)
7th & 8th Street	8TH-1/2	8TH-2/1
Banana & Hickory	BH-1/2	Reliant Energy – East Well (currently out of service)
Brooks	BRK-1/1	BRK-2/1
Ely	Ely MW1 (currently out of service)	Ely MW2
RP3	RP3-1/1	Southridge JHS
Turner	T-1/2	T-2/2
Victoria & San Sevaine	SSV-2 & VCT-1/1	VCT-2/1
Declez	DCZ-1/1	DCZ-2

Groundwater quality samples are collected and tested annually for constituents specified in the Phase II Findings of Fact, Attachment A in the permit (Bullet 27 in the Conditions Section). The annual groundwater monitoring well sampling was started during 1Q23. However, due to the relocation of the

Eurofins Eaton Analytical (EEA) Laboratory, we were advised by EEA staff to stopped collecting the annual monitoring well samples to reduce the possibility of lost samples. The 1Q23 data will be reported in the 2Q23 report when the remaining monitoring wells are sampled.

3. Recharge Operations

IEUA's GWR staff records the daily volumes of water routed to the recharge basins. The 7th & 8th St, Banana, Brooks, RP3, San Sevaine, and Victoria Basins received recycled water this quarter. Table 3-1 lists the volumes of recycled water and diluent water (imported water and/or local runoff/storm flow) captured during the most recent four quarters 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.

Several monitoring wells were not sampled during 1Q23: Ely MW1 well is damaged and requires replacement; Ontario Well 25 was taken out of service indefinitely by the DDW; Pomona Well 34 was having issues that were not resolved during 1Q23; 8TH-1/1 was out of service due to a collapsed bladder and is awaiting quotes to rehabilitate the well; Alcoa MW1 is out of service due to possible water in the line; California Speedway – Infield Well has a motor issue; and JCSD Well 17 is out of service due to water quality issues.

5. Certification of Non-Pumping in the Buffer Zones

Watermaster has certified that there was no reported pumping of groundwater in 1Q23 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 7th & 8th St, Banana, Brooks, Declez, Ely, Hickory, RP3, San Sevaine, Turner, 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. Injection activities have been periodic since the program began in 2007. There was not injection during the last year from 2Q22 to 1Q23. 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 for 2Q22 to 1Q23.

Table 2-1a
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for January 2023
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	RP-1 Effluent (001B Effluent)										**RP-4 Effluent**									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240
01/01/23	0.5	6.4				7.0	1061			<1	0.5	5.6				7.1	813			<1
01/02/23	0.5	7.4				7.0	1061			2	0.6	5.8	6.2			7.0	807			<1
01/03/23	0.5	8.4				7.0	1061			<1	0.6	6.0				7.0	829			<1
01/04/23	0.6	9.4	4.9		4.9	7.0	1061	444		2	0.6	5.9	6.3	6.5	6.3	7.0	826	454		<1
01/05/23	0.6	10.4				7.0	1061			<1	0.6	5.6				7.0	812			<1
01/06/23	0.6	11.4				7.0	1061			<1	0.7	5.3				7.0	774			<1
01/07/23	0.6	12.4				7.0	1061			<1	0.6	5.2				7.0	767			<1
01/08/23	0.7	13.4	5.1	5.1	5.1	7.0	1061	430	148	1	0.7	5.4	8.7	8.7	8.7	7.0	760	438	144	<1
01/09/23	0.8	14.4				7.0	1061			<1	0.6	5.5				7.1	747			<1
01/10/23	0.7	15.4				7.0	1061			<1	0.5	5.4				7.1	721			1
01/11/23	0.7	16.4	5.3		5.3	7.0	1061			<1	0.4	5.3	9.2		9.2	7.0	688			<1
01/12/23	0.8	17.4				7.0	1061			1	0.4	5.3				7.0	719			<1
01/13/23	0.8	18.4				7.0	1061			<1	0.4	5.0				7.0	718			<1
01/14/23	0.9	19.4				7.0	1061			1	0.4	5.1				7.0	725			<1
01/15/23	0.7	20.4	4.2	4.2	4.2	7.0	1061	368		<1	0.5	5.1	9.1	9.1	9.1	7.0	680	400		<1
01/16/23	0.8	21.4				7.0	1061			1	0.5	5.3				7.0	662			<1
01/17/23	1.1	22.4				7.0	1061			1	0.4	5.3				7.0	657			<1
01/18/23	1.0	23.4	4.6		4.6	7.0	1061			<1	0.3	5.3	6.1		6.2	7.1	682			<1
01/19/23	1.1	24.4				7.0	1061			<1	0.3	5.3				7.1	724			<1
01/20/23	1.2	25.4				7.0	1061			<1	0.3	5.1				7.1	741			<1
01/21/23	1.2	26.4				7.0	1061			1	0.4	5.2				7.0	751			<1
01/22/23	1.2	27.4	5.5	5.5	5.5	7.0	1061	436		1	0.4	5.4	6.5	6.5	6.7	7.1	727	424		<1
01/23/23	1.0	28.4				7.0	1061			<1	0.4	6.2				7.1	719			<1
01/24/23	0.7	29.4				7.0	1061			<1	0.4	5.5				7.1	725			<1
01/25/23	0.7	30.4	5.8		5.8	7.0	1061			<1	0.4	5.7	6.6		6.7	7.1	719			<1
01/26/23	0.6	31.4				7.0	1061			30	0.4	5.7				7.2	716			<1
01/27/23	0.6	32.4				7.0	1061			<1	0.4	5.5				7.1	724			<1
01/28/23	0.5	33.4				7.0	1061			1	0.4	5.6				7.1	722			<1
01/29/23	0.5	34.4	6.4	6.4	6.4	7.0	1061	432		<1	0.4	5.9	6.7	6.7	6.8	7.1	715	432		<1
01/30/23	0.5	35.4				7.0	1061			<1	0.4	6.3				7.1	712			2
01/31/23	0.4	36.4				7.0	1061			<1	0.4	6.2				7.2	714			<1
Avg	0.8	21.4	5.2	5.3	5.2	7.0	1061	422	148	<2	0.5	5.5	7.3	7.5	7.4	7.0	735	430	144	<1
Min	0.4	6.4	4.2	4.2	4.2	7.0	1061	368	148	<1	0.3	5.0	6.1	6.5	6.2	7.0	657	400	144	<1
Max	1.2	36.4	6.4	6.4	6.4	7.0	1061	444	148	30	0.7	6.3	9.2	9.1	9.2	7.2	829	454	144	2

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

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

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

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

[3] TDS and TIN limits are based on the 12-month running average of the combined effluent from all plants, 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 reaching the regional groundwater table, including lysimeters.

[6] DDW limit is 10 mg/L and compliance is evaluated in recycled water samples. RWQCB limit is 5 mg/L and compliance can be evaluated using applied correction factor of alternative monitoring plans

[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 February 2023
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

	RP-1 Effluent (001B Effluent)										RP-4 Effluent									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240
02/01/23	0.5	6.4	5.5		5.5	7.0	1061			<1	0.4	5.8	7.3		7.3	7.1	717			<1
02/02/23	0.5	7.4				7.0	1061			1	0.4	5.8				7.0	716			<1
02/03/23	0.6	8.4				7.0	1061			<1	0.4	5.6				7.0	713			<1
02/04/23	0.6	9.4				7.0	1061			<1	0.5	5.7				7.0	715			<1
02/05/23	0.7	10.4	5.7	5.7	5.7	7.0	1061	470	169	2	0.6	6.0	6.2	6.2	6.2	7.1	715	408	154	<1
02/06/23	0.9	11.4				7.0	1061			<1	0.6	6.2				7.1	713			<1
02/07/23	1.0	12.4				7.0	1061			<1	0.5	6.1				7.1	717			<1
02/08/23	1.1	13.4	5.7		5.9	7.0	1061			<1	0.4	5.8	5.7		5.8	7.1	716			<1
02/09/23	0.9	14.4				7.0	1061			<1	0.4	5.8				7.1	714			<1
02/10/23	0.6	15.4				7.0	1061			<1	0.4	5.8				7.1	713			<1
02/11/23	0.6	16.4				7.0	1061			<1	0.4	5.7				7.1	714			<1
02/12/23	0.6	17.4	5.8	5.8	5.8	7.0	1061	414		1	0.4	0.0				7.1				<1
02/13/23	0.6	18.4				7.0	1061			<1	0.5	6.0	4.4	4.6	4.4	7.1	711	410		<1
02/14/23	0.8	19.4				7.0	1061			2	0.5	6.3				7.2	724			<1
02/15/23	0.6	20.4	8.4		8.4	7.0	1061			<1	0.5	5.9	3.6		3.6	7.2	725			<1
02/16/23	0.6	21.4				7.0	1061			<1	0.4	5.9				7.2	718			<1
02/17/23	0.6	22.4				7.0	1061			1	0.4	5.4				7.1	725			<1
02/18/23	0.6	23.4				7.0	1061			<1	0.4	5.4				7.1	724			<1
02/19/23	0.6	24.4				7.0	1061			<1	0.4	5.6				7.1	720			<1
02/20/23	0.7	25.4				7.0	1061			<1	0.4	6.1				7.1	715			<1
02/21/23	0.6	26.4				7.0	1061			<1	0.5	6.2				7.2	717			<1
02/22/23	0.9	27.4	6.1		6.1	7.0	1061	440		<1	0.4	5.8	3.7	4.2	3.7	7.2	713	400		<1
02/23/23	1.3	28.4				7.0	1061			<1	0.4	5.9				7.2	711			<1
02/24/23	1.1	29.4				7.0	1061			1	0.3	5.4				7.1	706			<1
02/25/23	0.4	30.4				7.0	1061			<1	0.3	5.2				7.1	670			<1
02/26/23	0.4	31.4	5.0		5.0	7.0	1061	386		<1	0.3	5.1	6.0	6.0	6.0	7.0	642	372		36
02/27/23	0.5	32.4				7.0	1061			<1	0.4	5.5				7.0	661			<1
02/28/23	0.6	33.4				7.0	1061			<1	0.4	5.4				7.0	678			<1
Avg	0.7	19.9	6.0	5.8	6.1	7.0	1061	428	169	<1	0.4	5.5	5.3	5.3	5.3	7.1	708	398	154	<2
Min	0.4	6.4	5.0	5.7	5.0	7.0	1061	386	169	<1	0.3	0.0	3.6	4.2	3.6	7.0	642	372	154	<1
Max	1.3	33.4	8.4	5.8	8.4	7.0	1061	470	169	2	0.6	6.3	7.3	6.2	7.3	7.2	725	410	154	36

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

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

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

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

[3] TDS and TIN limits are based on the 12-month running average of the combined effluent from all plants, 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 reaching the regional groundwater table, including lysimeters.

[6] DDW limit is 10 mg/L and compliance is evaluated in recycled water samples. RWQCB limit is 5 mg/L and compliance can be evaluated using applied correction factor of alternative monitoring plans

[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 March 2023

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

	RP-1 Effluent (001B Effluent)										RP-4 Effluent									
	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC [7]	TDS [3]	Hardness	Coliform [1,2,4]	Turbidity [1,2,7]	TOC	NO_3-N	TN	TIN [3]	pH [7]	EC	TDS [3]	Hardness	Coliform [1,2,4]
Unit	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
Limits	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240	2;5;10	16 [5]		10 / 5 [6]		6<pH<9				2.2;23;240
03/01/23	0.6	6.4	5.0		5.0	7.0	1061			<1	0.4	5.3	5.4		5.5	7.0	676			<1
03/02/23	0.6	7.4				7.0	1061			<1	0.3	5.3				7.0	676			<1
03/03/23	0.6	8.4				7.0	1061			1	0.3	5.1				6.9	695			<1
03/04/23	0.6	9.4				7.0	1061			<1	0.3	5.2				7.0	713			<1
03/05/23	0.6	10.4	5.7	5.7	5.7	7.0	1061	458	144	<1	0.4	5.7	4.7	4.7	4.8	7.0	731	418	146	<1
03/06/23	0.6	11.4				7.0	1061			<1	0.5	6.0				7.1	737			<1
03/07/23	1.0	12.4				7.0	1061			1	0.5	5.8				7.1	745			<1
03/08/23	1.2	13.4	4.8		4.8	7.0	1061			<1	0.5	5.9	4.7		4.7	7.1	754			<1
03/09/23	1.2	14.4				7.0	1061			<1	0.4	6.1				7.0	762			<1
03/10/23	1.0	15.4				7.0	1061			<1	0.4	5.9				7.0	759			<1
03/11/23	0.8	16.4				7.0	1061			<1	0.4	5.7				7.0	746			<1
03/12/23	0.8	17.4	4.3		4.3	7.0	1061	434		<1	0.4	6.1	4.3	5.1	4.4	7.0	737	424		<1
03/13/23	0.8	18.4				7.0	1061			<1	0.5	6.4				7.0	749			<1
03/14/23	0.7	19.4				7.0	1061			1	0.5	6.4				7.0	752			<1
03/15/23	0.6	20.4	5.7		5.7	7.0	1061			<1	0.5	6.1	3.9		4.0	7.0	712			<1
03/16/23	0.7	21.4				7.0	1061			<1	0.4	5.5				7.0	685			<1
03/17/23	0.7	22.4				7.0	1061			<1	0.5	5.4				6.9	719			<1
03/18/23	0.6	23.4				7.0	1061			<1	0.5	5.7				7.0	746			<1
03/19/23	0.7	24.4	5.7		5.7	7.0	1061	434		<1	0.7	6.1	3.2	4.2	3.3	7.0	752	420		<1
03/20/23	0.6	25.4				7.0	1061			<1	0.7	6.6				7.0	736			<1
03/21/23	0.6	26.4				7.0	1061			1	0.6	6.2				7.0	737			<1
03/22/23	0.6	27.4	6.0		6.0	7.0	1061			<1	0.5	5.9	3.7		3.7	7.0	704			<1
03/23/23	0.7	28.4				7.0	1061			<1	0.5	5.8				6.9	708			<1
03/24/23	0.8	29.4				7.0	1061			<1	0.5	5.7				7.0	717			<1
03/25/23	0.9	30.4				7.0	1061			<1	0.5	6.0				7.0	732			<1
03/26/23	1.0	31.4	6.2		6.2	7.0	1061	430		<1	0.5	6.2	3.8	4.9	3.8	7.0	737	424		<1
03/27/23	0.6	32.4				7.0	1061			<1	0.5	6.4				7.0	739			<1
03/28/23	0.4	33.4				7.0	1061			<1	0.5	6.5				7.0	744			<1
03/29/23	0.4	34.4	5.7		5.7	7.0	1061			<1	0.5	6.5	3.9		3.9	7.0	739			<1
03/30/23	0.5	35.4				7.0	1061			<1	0.5	6.1				7.0	733			<1
03/31/23	0.5	36.4				7.0	1061			<1	0.5	6.0				6.9	743			<1
Avg	0.7	21.4	5.5	5.7	5.5	7.0	1061	439	144	<1	0.5	5.9	4.2	4.7	4.2	7.0	730	422	146	<1
Min	0.4	6.4	4.3	5.7	4.3	7.0	1061	430	144	<1	0.3	5.1	3.2	4.2	3.3	6.9	676	418	146	<1
Max	1.2	36.4	6.2	5.7	6.2	7.0	1061	458	144	1	0.7	6.6	5.4	5.1	5.5	7.1	762	424	146	<1

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

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

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

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

[3] TDS and TIN limits are based on the 12-month running average of the combined effluent from all plants, 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 reaching the regional groundwater table, including lysimeters.

[6] DDW limit is 10 mg/L and compliance is evaluated in recycled water samples. RWQCB limit is 5 mg/L and compliance can be evaluated using applied correction factor of alternative monitoring plans

[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.**
Apr-22	4.8	4.4	491	489
May-22	5.1	4.4	487	488
Jun-22	4.5	4.4	479	486
Jul-22	4.3	4.4	494	486
Aug-22	4.4	4.4	482	484
Sep-22	4.8	4.4	493	485
Oct-22	5.4	4.6	483	485
Nov-22	4.0	4.6	506	487
Dec-22	3.8	4.5	497	487
Jan-23	4.3	4.5	468	485
Feb-23	5.2	4.6	465	484
Mar-23	4.3	4.6	491	486
Avg	4.6	4.5	486	486
Min	3.8	4.4	465	484
Max	5.4	4.6	506	489
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 2-3a
Recycled Water Monitoring - RW Blend (RP1/RP-4): Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, A.4 & A.15)

Constituent	2Q22	3Q22	4Q22	1Q23	4Q Run. Avg.[1]	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	82	142	129	206	140	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	NR	NR	NR	NR	<2	7	MFL	EPA 100.2
Barium	14	24	13	25	19	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	<2	3	<2	<2	<2	50	µg/L	EPA 200.8
Chromium VI [2]	0.4	0.5	0.3	0.3	0.4	10	µg/L	EPA 218.6
Cyanide	<20	<20	<20	<20	<20	150	µg/L	OIA-1677, DW
Fluoride	0.2	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.5	<0.5	<0.5	<0.5	<0.5	2	µg/L	EPA 245.1
Nickel	4	3	2	2	3	100	µg/L	EPA 200.8
Perchlorate	<2	<2	<2	<2	<2	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
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 [3]	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
1,2,3-Trichloropropane (added 7/2017)	see 2Q22 text	see 3Q22 text	see 4Q22 text	see 1Q23 text	<0.005	0.005	µg/L	CASRL 524M-TCP
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	NA	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	NA	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.9	<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	1.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	6	<1	2	5	3	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	<0.5	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.5	<0.5	<0.5	<0.5	<0.6	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.1	<0.1	<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	NA	<0.01	<0.01	<0.01	2	µg/L	EPA 505

Table 2-3a
Recycled Water Monitoring - RW Blend (RP1/RP-4): Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, A.4 & A.15)

Constituent	2Q22	3Q22	4Q22	1Q23	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	NA	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	NA	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	NA	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	NA	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<1	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<4	<4	<4	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.1	<0.1	<0..2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	3.5	4.2	4.0	7.0	4.7	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<3	<3	<3	<3	<3	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<1000	<1000	<335	<335	<1000	20,000	pCi/L	EPA 906
Strontium-90	<2	<3	<3	<3	<3	8	pCi/L	EPA 905
Gross Beta Particle Activity	14	10	6	8	9	50	pCi/L	EPA 900.0
Uranium	<1	<1	<1	<1	<1	20	pCi/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	82	129	129	206	137	200	µg/L	EPA 200.8
Copper	3.5	4.0	4.0	7.0	4.6	1000	µg/L	EPA 200.8
Corrosivity	-0.2 (Non-Cor.)	0.1 (Non-Cor.)	0.1 (Non-Cor.)	-0.3 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) [4]	0.1	<0.1	<0.1	<0.1	<0.1	0.5	mg/L	S5540C/EPA 425.1
Iron [4]	74	41	58	<15	73	300	µg/L	EPA 200.7
Manganese	4	8	9	12	8	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold	NR	8	NR	NR	3	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	36	35	30	55	39	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease [5]	<1	<1	<1	<1	--	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<1	<5	<5	<5	<4	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
	8TH-LYS-25	SSV-2	8TH-LYS-25	BH-1/2	<==TTHMs			
	8TH-LYS-25	SSV-2	8TH-LYS-25	BH-1/2	<==HAA5			
Alternative Compliance Point Data	2Q22	3Q22	4Q22	1Q23				
Total Trihalomethanes (TTHMs)	4	40	<2	12	15	80	µg/L	EPA 524.2
Total Haloacetic Acids (HAA5)	<2	<2	<2	<2	<2	60	µg/L	S6251B

NR: Not required this quarter NA: Not analyzed by contract lab

[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] As of September 11, 2017 the MCL for hexavalent chromium that was established in 2014 is no longer in effect; the State Board does plan on establishing a new MCL in the near future.

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

[4] 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.

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

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

Table 2-3b
Recycled Water Monitoring - RP-1 (001B Effluent): Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, A.4 & A.15)

Constituent	2Q22	3Q22	4Q22	1Q23	4Q Run. Avg.[1]	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	64	162	71	120	104	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	NR	NR	NR	NR	<0.2	7	MFL	EPA 100.2
Barium	11	16	15	12	14	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	0.7	0.7	0.7	0.7	50	µg/L	EPA 200.8
Chromium VI [2]	0.4	0.5	0.3	0.2	0.4	10	µg/L	EPA 218.6
Cyanide	<20	<20	<20	<20	<20	150	µg/L	OIA-1677, DW
Fluoride	0.2	0.2	0.2	0.2	0.2	2	mg/L	SM 4500-F C
Mercury	<0.025	<0.025	<0.025	<0.025	<0.025	2	µg/L	EPA 245.1
Nickel	4	3	3	3	3	100	µg/L	EPA 200.8
Perchlorate	<2	<2	<2	<2	<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
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Monochlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl-tert-butyl ether	<0.5	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
m,p-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 [3]	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5		µg/L	EPA 524.2
1,2,3-Trichloropropane (added 7/2017)	see 2Q22 text	see 3Q22 text	see 4Q22 text	see 1Q23 text	<0.005	0.005	µg/L	CASRL 524M-TCP
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	NA	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	NA	<0.5	0.6	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.1	<0.1	<0.1	<0.1	<0.1	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	0.5	<0.1	<0.2	70	µg/L	EPA 515.4
Dalapon	4	<1	<1	4	2	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	<0.5	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.1	<0.1	<0.1	<0.1	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	NA	<0.01	<0.01	<0.01	2	µg/L	EPA 505

Table 2-3b
Recycled Water Monitoring - RP-1 (001B Effluent): Primary & Secondary Maximum Contaminant Levels
(Recycled Water Quality Specifications A.1, A.2, A.3, A.4 & A.15)

Constituent	2Q22	3Q22	4Q22	1Q23	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	NA	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	NA	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	NA	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	NA	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	NA	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	0.08	<0.05	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.1	<0.1	<0.2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	3.2	3.9	3.8	5.0	4.0	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
Combined Radium-226 and Radium 228	<3	<3	Sample Interference	<3	<3	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	7	5	<3	4	15	pCi/L	EPA 900.0/SM7110C
Tritium	<1000	<1000	<335	<251	<1000	20,000	pCi/L	EPA 906
Strontium-90	<2	<3	<3	<3	<3	8	pCi/L	EPA 905
Gross Beta Particle Activity	8	10	12	8	9	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	64	162	71	120	104	200	µg/L	EPA 200.8
Copper	3.2	3.9	3.8	5.0	4.0	1000	µg/L	EPA 200.8
Corrosivity	0.3 (Non-Cor.)	0.2 (Non-Cor.)	NR	-0.5 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) [4]	0.1	<0.1	<0.1	<0.1	<0.1	0.5	mg/L	S5540C/EPA 425.1
Iron [4]	<150	<150	<150	<150	47	300	µg/L	EPA 200.7
Manganese	4	13	11	3	8	50	µg/L	EPA 200.8
Methyl-tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Odor--Threshold	NR	6	NR	NR	6	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	38	29	28	36	33	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease [5]	<1	<1	<1	<1	--	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<1	<5	<5	<5	<4	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0

NR: Not required this quarter NA: Not analyzed by contract lab

[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] As of September 11, 2017 the MCL for hexavalent chromium that was established in 2014 is no longer in effect; the State Board does plan on establishing a new MCL in the near future.

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

[4] 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.

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

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

Table 2-4a

Recycled Water Monitoring - RW Blend (RP1/RP-4): Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals

(Monitoring & Reporting Program)

Constituent	1Q23	Unit	Method
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	2.6	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	78	µg/L	EPA 524.2/624
Dichlorobromomethane	18	µg/L	EPA 524.2/624
Methyl Bromide	<0.5	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

NR: Not Required (Annual Requirement,Phase II FOF, Attachement A, Page 26, Item 19)

*Pursuant to the GRRP regulations,

**PFOA is being analyzed weekly for the exceedance of the NL and is reported in Section 2A of this report

Constituent	1Q23	Unit	Method	
Pesticides				
Aldrin	<0.01	µg/L	EPA 505/525/608	
BHC, alpha isomer	NR	µg/L	EPA 525/608	
BHC, beta isomer	NR	µg/L	EPA 525/608	
BHC, delta isomer	NR	µg/L	EPA 525/608	
4,4'-DDT	NR	µg/L	EPA 525/608	
4,4'-DDE	NR	µg/L	EPA 525/608	
4,4'-DDD	NR	µg/L	EPA 525/608	
Dieldrin	<0.01	µg/L	EPA 505/525/608	
Endosulfan I	NR	µg/L	EPA 525/608	
Endosulfan II	NR	µg/L	EPA 525/608	
Endosulfan Sulfate	NR	µg/L	EPA 525/608	
Chemicals w/ State Notification Levels (NLs)				NL
Boron	0.4	mg/L	EPA 200.7	1
n-butylbenzene	<0.5	µg/L	EPA 524.2	260
sec-butylbenzene	<0.5	µg/L	EPA 524.2	260
tert-butylbenzene	<0.5	µg/L	EPA 524.2	260
Carbon disulfide	<0.5	µg/L	EPA 524.2	160
Chlorate* (RW Blend / BH-1/2)	336 / 136	µg/L	EPA 300.0	800
2-Chlorotoluene	<0.5	µg/L	EPA 524.2	140
4-Chlorotoluene	<0.5	µg/L	EPA 524.2	140
Diazinon	<0.5	µg/L	EPA 525.2	1.2
Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2	1000
1,4 - Dioxane	<1	µg/L	EPA 522	1
Ethylene glycol	<5	mg/L	EPA 8015B	14
Formaldehyde	35	µg/L	EPA 556	100
HMX	<0.1	µg/L	EPA 8330B	350
Isopropylbenzene	<0.5	µg/L	EPA 524.2	770
Manganese	12	µg/L	EPA 200.8	500
Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2	120
Naphthalene	<0.5	µg/L	EPA 525.2/524.2	17
N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521	10
N-Nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521	10
N-Nitrosodi-n-propylamine (NDPA)	<2	ng/L	EPA 521	10
Perfluorobutanesulfonic acid (PFBS)	2.5	ng/L	EPA 537.1	500
Perfluorohexanesulfonic acid (PFHxS)	0.9	ng/L	EPA 537.1	3.0
Perfluorooctanoic acid (PFOA)**	10.6	ng/L	EPA 537.1	5.1
Perfluorooctanesulfonic acid (PFOS)	1.4	ng/L	EPA 537.1	6.5
Propachlor	<0.5	µg/L	EPA 525.2	90
N-propylbenzene	<0.5	µg/L	EPA 524.2	200
Tertiary butyl alcohol	<2	µg/L	EPA 524.2	12
1,2,4–trimethylbenzene	<0.5	µg/L	EPA 524.2	330
1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2	330
2,4,6-Trinitrotoluene	<0.1	µg/L	EPA 8330B	1
Vanadium	<5	µg/L	EPA 200.8	50
Health-based and performance indicator CECs for Surface Application				RP3-1/1
1,4 - Dioxane	<1	µg/L	EPA 522	<0.36
N-nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521	<2
N-Nitrosomorphline	3.8	ng/L	EPA 521	4.1
Perfluorooctanesulfonic acid (PFOS)	1.4	ng/L	EPA 537.1	13.7
Perfluorooctanoic acid (PFOA)	10.6	ng/L	EPA 537.1	16.1
Gemfibrozil	<5	ng/L	LC-MS-MS	<4
Iohexol	7400	ng/L	LC-MS-MS	NA
Sucralose	89000	ng/L	LC-MS-MS	NA
Sulfamethoxazole	NA	ng/L	LC-MS-MS	27
ER-α (RW Blend / RP3-1/1)	<0.5	ng/L	Trussell Tech	<0.5
AhR (method pending approval)	--	ng/L	Trussell Tech	--

NA: Not available from EEA Lab at time of reporting

Table 2-4b

Recycled Water Monitoring - RP-1 (001B Effluent): Remaining Priority Pollutants, EDCs & Pharmaceuticals, and Unregulated Chemicals (Monitoring & Reporting Program)

Constituent	1Q23	Unit	Method
Volatile Organic Chemicals (VOCs)			
Acrolein	2.0	µg/L	EPA 624
Acrylonitrile	0.51	µg/L	EPA 624
Bromoform	<0.5	µg/L	EPA 524.2/624
Chlorodibromomethane	4.0	µg/L	EPA 524.2/624
Chloroethane	<0.5	µg/L	EPA 524.2/624
2-Chloroethylvinylether	<1	µg/L	EPA 524.2/624
Chloroform	62	µg/L	EPA 524.2/624
Dichlorobromomethane	19	µg/L	EPA 524.2/624
Methyl Bromide	<0.5	µg/L	EPA 524.2/624
Methyl Chloride	<0.5	µg/L	EPA 524.2/624
Acid Extractibles			
2-Chlorophenol	<5	µg/L	EPA 625
2,4-Dichlorophenol	<5	µg/L	EPA 625
2,4-Dimethylphenol	<2	µg/L	EPA 625
2-Methyl-4,6-dinitrophenol	<5	µg/L	EPA 625
2,4-Dinitrophenol	<5	µg/L	EPA 625
2-Nitrophenol	<10	µg/L	EPA 625
4-Nitrophenol	<10	µg/L	EPA 625
4-Chloro-3-methylphenol	<1	µg/L	EPA 625
Phenol	<1	µg/L	EPA 625
2,4,6-Trichlorophenol	<10	µg/L	EPA 625
Base/Neutral Extractibles			
Acenaphthene	<1	µg/L	EPA 625
Acenaphthylene	<10	µg/L	EPA 625
Anthracene	<10	µg/L	EPA 625
Benzidine	<5	µg/L	EPA 625
Benzo(a)anthracene	<5	µg/L	EPA 625
Benzo(b)fluoranthene	<10	µg/L	EPA 625
Benzo(g,h,i)perylene	<5	µg/L	EPA 625
Benzo(k)fluoranthene	<10	µg/L	EPA 625
Bis(2-chloroethoxy)methane	<5	µg/L	EPA 625
Bis(2-chloroethyl)ether	<1	µg/L	EPA 625
Bis(2-chloroisopropyl)ether	<2	µg/L	EPA 625
4-Bromophenyl phenyl ether	<5	µg/L	EPA 625
Butyl benzyl phthalate	<10	µg/L	EPA 625
2-Chloronaphthalene	<10	µg/L	EPA 625
4-Chlorophenyl phenyl ether	<5	µg/L	EPA 625
Chrysene	<10	µg/L	EPA 625
Dibenzo(a,h)anthracene	<10	µg/L	EPA 625
1,3-Dichlorobenzene	<1	µg/L	EPA 625
3,3-Dichlorobenzidine	<5	µg/L	EPA 625
Diethyl phthalate	<2	µg/L	EPA 625
Dimethyl phthalate	<2	µg/L	EPA 625
Di-n-butyl phthalate	<10	µg/L	EPA 625
2,4-Dinitrotoluene	<5	µg/L	EPA 625
2,6-Dinitrotoluene	<5	µg/L	EPA 625
Di-n-octyl phthalate	<10	µg/L	EPA 625
Azobenzene	<10	µg/L	EPA 625
Fluoranthene	<1	µg/L	EPA 625
Fluorene	<10	µg/L	EPA 625
Hexachlorobutadiene	<1	µg/L	EPA 625
Hexachlorocyclopentadiene	<5	µg/L	EPA 625
Hexachloroethane	<1	µg/L	EPA 625
Indeno(1,2,3-cd)pyrene	<10	µg/L	EPA 625
Isophorone	<1	µg/L	EPA 625
Naphthalene	<1	µg/L	EPA 625
Nitrobenzene	<1	µg/L	EPA 625
N-Nitroso-di-n-propylamine	<5	µg/L	EPA 625
N-Nitrosodiphenylamine	<5	µg/L	EPA 625
Phenanthrene	<5	µg/L	EPA 625
Pyrene	<10	µg/L	EPA 625

NR: Not Required (Annual Requirement,Phase II FOF, Attachement A, Page 26, Item 19)

*Pursuant to the GRRP regulations, recharge water may be monitored in lieu of recycled water.

**PFOA is being analyzed weekly for the exceedance of the NL and is reported in Section 2A of this report

Constituent	1Q23	Unit	Method	
Pesticides				
Aldrin	<0.01	µg/L	EPA 505/608	
BHC, alpha isomer	NR	µg/L	EPA 525/608	
BHC, beta isomer	NR	µg/L	EPA 525/608	
BHC, delta isomer	NR	µg/L	EPA 525/608	
4,4'-DDT	NR	µg/L	EPA 525/608	
4,4'-DDE	NR	µg/L	EPA 525/608	
4,4'-DDD	NR	µg/L	EPA 525/608	
Dieldrin	<0.01	µg/L	EPA 505/608	
Endosulfan I	NR	µg/L	EPA 525/608	
Endosulfan II	NR	µg/L	EPA 525/608	
Endosulfan Sulfate	NR	µg/L	EPA 525/608	
Chemicals w/ State Notification Levels (NLs)				NL
Boron	0.4	mg/L	EPA 200.7	1
n-butylbenzene	<0.5	µg/L	EPA 524.2	260
sec-butylbenzene	<0.5	µg/L	EPA 524.2	260
tert-butylbenzene	<0.5	µg/L	EPA 524.2	260
Carbon disulfide	<0.5	µg/L	EPA 524.2	160
Chlorate* (001B Eff / BH-1/2)	165 / 136	µg/L	EPA 300.0	800
2-Chlorotoluene	<0.5	µg/L	EPA 524.2	140
4-Chlorotoluene	<0.5	µg/L	EPA 524.2	140
Diazinon	0.05	µg/L	EPA 525.2	1.2
Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2	1000
1,4 - Dioxane	<1	µg/L	EPA 522	1
Ethylene glycol	<5	mg/L	EPA 8015B	14
Formaldehyde	32	µg/L	EPA 556	100
HMX	<1	µg/L	EPA 8330B	350
Isopropylbenzene	<0.5	µg/L	EPA 524.2	770
Manganese	3	µg/L	EPA 200.8	500
Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2	120
Naphthalene	<0.5	µg/L	EPA 524.2	17
N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521	10
N-Nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521	10
N-Nitrosodi-n-propylamine (NDPA)	<2	ng/L	EPA 521	10
Perfluorobutanesulfonic acid (PFBS)	0.8	ng/L	EPA 537.1	500
Perfluorohexanesulfonic acid (PFHxS)	1.2	ng/L	EPA 537.1	3.0
Perfluorooctanoic acid (PFOA)**	6.0	ng/L	EPA 537.1	5.1
Perfluorooctanesulfonic acid (PFOS)	2.1	ng/L	EPA 537.1	6.5
Propachlor	<0.5	µg/L	EPA 525.2	90
N-propylbenzene	<0.5	µg/L	EPA 524.2	200
Tertiary butyl alcohol	<2	µg/L	EPA 524.2	12
1,2,4–trimethylbenzene	<0.5	µg/L	EPA 524.2	330
1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2	330
2,4,6-Trinitrotoluene	<0.1	µg/L	EPA 8330B	1
Vanadium	3	µg/L	EPA 200.8	50
Health-based and performance indicator CECs for Surface Application				RP3-1/1
1,4 - Dioxane	<1	µg/L	EPA 522	<0.36
N-nitrosodimethylamine (NDMA)	<2	ng/L	EPA 521	<2
N-Nitrosomorphline	9.1	ng/L	EPA 521	4.1
Perfluorooctanesulfonic acid (PFOS)	2.1	ng/L	EPA 537.1	13.7
Perfluorooctanoic acid (PFOA)	6.0	ng/L	EPA 537.1	16.1
Gemfibrozil	NA	ng/L	LC-MS-MS	<4
Iohexol	NA	ng/L	LC-MS-MS	NA
Sucralose	NA	ng/L	LC-MS-MS	NA
Sulfamethoxazole	NA	ng/L	LC-MS-MS	27
ER-α	<0.5	ng/L	Trussell Tech	<0.5
AhR (method pending approval)	--	ng/L	Trussell Tech	--

NA: Not available from EEA Lab at time of reporting

Table 2-5
Alternative Monitoring Plans: TOC & TN

Banana Basin						
Date	RW Blend*	RW Blend*	RW Blend*	Banana	Banana	
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (80% reduction)	TN (47% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L		5 mg/L
01/04/23	5.60	6.4	5.9	1.12	3.4	3.1
01/11/23	5.30	8.3	7.3	1.06	4.4	3.9
01/18/23	5.23	6.6	7.5	1.05	3.5	4.0
01/25/23	5.57	6.8	6.7	1.11	3.6	3.6
02/01/23	5.93	5.8	6.3	1.19	3.1	3.4
02/08/23	6.10	5.1	5.5	1.22	2.7	2.9
02/15/23	6.13	4.4	4.8	1.23	2.3	2.5
02/22/23	5.93	3.8	4.1	1.19	2.0	2.2
03/01/23	5.47	4.8	4.3	1.09	2.6	2.3
03/08/23	6.00	4.0	4.4	1.20	2.1	2.4
03/15/23	6.07	4.6	4.3	1.21	2.4	2.3
03/20/23	6.27	4.4	4.5	1.25	2.3	2.4
03/29/23	6.43	4.3	4.4	1.29	2.3	2.3

Hickory Basin						
Date	RW Blend*	RW Blend*	RW Blend*	Hickory	Hickory	Hickory
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (81% reduction)	TN (27% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L		5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	1.06	4.7	4.3
01/11/23	5.30	8.3	7.3	1.01	6.0	5.4
01/18/23	5.23	6.6	7.5	0.99	4.9	5.4
01/25/23	5.57	6.8	6.7	1.06	5.0	4.9
02/01/23	5.93	5.8	6.3	1.13	4.3	4.6
02/08/23	6.10	5.1	5.5	1.16	3.7	4.0
02/15/23	6.13	4.4	4.8	1.16	3.2	3.5
02/22/23	5.93	3.8	4.1	1.13	2.8	3.0
03/01/23	5.47	4.8	4.3	1.04	3.5	3.2
03/08/23	6.00	4.0	4.4	1.14	3.0	3.2
03/15/23	6.07	4.6	4.3	1.15	3.4	3.2
03/20/23	6.27	4.4	4.5	1.19	3.2	3.3
03/29/23	6.43	4.3	4.4	1.22	3.2	3.2

Turner Basin						
					Turner 1 & 2	Turner 1 & 2
Date	RW Blend*	RW Blend*	Turner 1 & 2	Turner 3 & 4	Turner 3 & 4	Turner 3 & 4
mg/L==>	TOC	TN - 2 sample avg.	TOC (70% reduction)	TOC (85% reduction)	TN (87% reduction)	TN - 2 sample avg.
Limit ==>		10 mg/L (DDW)	16 mg/L	16 mg/L		5 mg/L (RWQCB)
01/04/23	5.60	6.4	1.68	0.84	0.8	0.8
01/11/23	5.30	7.3	1.59	0.80	1.0	0.9
01/18/23	5.23	7.5	1.57	0.78	1.0	1.0
01/25/23	5.57	6.7	1.67	0.84	0.9	0.9
02/01/23	5.93	6.3	1.78	0.89	0.8	0.8
02/08/23	6.10	5.5	1.83	0.92	0.7	0.8
02/15/23	6.13	4.8	1.84	0.92	0.6	0.7
02/22/23	5.93	4.1	1.78	0.89	0.5	0.6
03/01/23	5.47	4.3	1.64	0.82	0.6	0.5
03/08/23	6.00	4.4	1.80	0.90	0.6	0.6
03/15/23	6.07	4.3	1.82	0.91	0.6	0.6
03/20/23	6.27	4.5	1.88	0.94	0.6	0.6
03/29/23	6.43	4.4	1.93	0.96	0.6	0.6

Ely Basin						
Date	RP-1 RW	RP-1 RW	RP-1 RW	Ely 3 East	Ely 3 East	Ely 3 East
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (76% reduction)	TN (52% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L		5 mg/L (RWQCB)
01/05/23	7.33	5.7	5.3	1.76	2.7	2.6
01/09/23	6.63	5.9	5.8	1.59	2.8	2.8
01/16/23	5.60	5.4	5.6	1.34	2.6	2.7
01/23/23	6.80	6.0	5.7	1.63	2.9	2.7
01/30/23	6.43	6.3	6.1	1.54	3.0	2.9
02/06/23	6.47	5.7	6.0	1.55	2.7	2.9
02/13/23	7.03	5.2	5.4	1.69	2.5	2.6
02/23/23	6.97	5.4	5.3	1.67	2.6	2.5
02/27/23	6.30	5.9	5.7	1.51	2.9	2.7
03/06/23	7.77	6.4	6.2	1.86	3.1	3.0
03/13/23	7.57	6.1	6.2	1.82	2.9	3.0
03/20/23	7.00	6.1	6.1	1.68	2.9	2.9
03/27/23	6.90	5.7	5.9	1.66	2.7	2.8

*The recycled water blend of RP-1 &RP-4 effluent is sampled at the RP-4 1299 Pump Station
Note: TOC & TN compliance is based on two consecutive sample results.

Table 2-5
Alternative Monitoring Plans: TOC & TN

RP3 Basin						
Date	RW Blend*	RW Blend*	RW Blend*	RP3	RP3	RP3
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (88% reduction)	TN (31% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L		5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	0.67	4.4	4.1
01/11/23	5.30	8.3	7.3	0.64	5.7	5.1
01/18/23	5.23	6.6	7.5	0.63	4.6	5.2
01/25/23	5.57	6.8	6.7	0.67	4.7	4.6
02/01/23	5.93	5.8	6.3	0.71	4.0	4.4
02/08/23	6.10	5.1	5.5	0.73	3.5	3.8
02/15/23	6.13	4.4	4.8	0.74	3.0	3.3
02/22/23	5.93	3.8	4.1	0.71	2.7	2.8
03/01/23	5.47	4.8	4.3	0.66	3.3	3.0
03/08/23	6.00	4.0	4.4	0.72	2.8	3.1
03/15/23	6.07	4.6	4.3	0.73	3.2	3.0
03/20/23	6.27	4.4	4.5	0.75	3.0	3.1
03/29/23	6.43	4.3	4.4	0.77	3.0	3.0

7th & 8th Street Basin						
Date	RW Blend*	RW Blend*	RW Blend*	8th Street	8th Street	8th Street
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (88% reduction)**	TN (75% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L	5 mg/L	5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	0.67	1.6	1.5
01/11/23	5.30	8.3	7.3	0.64	2.1	1.8
01/18/23	5.23	6.6	7.5	0.63	1.7	1.9
01/25/23	5.57	6.8	6.7	0.67	1.7	1.7
02/01/23	5.93	5.8	6.3	0.71	1.5	1.6
02/08/23	6.10	5.1	5.5	0.73	1.3	1.4
02/15/23	6.13	4.4	4.8	0.74	1.1	1.2
02/22/23	5.93	3.8	4.1	0.71	1.0	1.0
03/01/23	5.47	4.8	4.3	0.66	1.2	1.1
03/08/23	6.00	4.0	4.4	0.72	1.0	1.1
03/15/23	6.07	4.6	4.3	0.73	1.2	1.1
03/20/23	6.27	4.4	4.5	0.75	1.1	1.1
03/29/23	6.43	4.3	4.4	0.77	1.1	1.1

Victoria Basin						
Date	RW Blend*	RW Blend*	RW Blend*	Victoria	Victoria	Victoria
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (78% reduction)	TN (82% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L	5 mg/L	5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	1.23	1.2	1.1
01/11/23	5.30	8.3	7.3	1.17	1.5	1.3
01/18/23	5.23	6.6	7.5	1.15	1.2	1.3
01/25/23	5.57	6.8	6.7	1.23	1.2	1.2
02/01/23	5.93	5.8	6.3	1.30	1.1	1.1
02/08/23	6.10	5.1	5.5	1.34	0.9	1.0
02/15/23	6.13	4.4	4.8	1.35	0.8	0.9
02/22/23	5.93	3.8	4.1	1.30	0.7	0.7
03/01/23	5.47	4.8	4.3	1.20	0.9	0.8
03/08/23	6.00	4.0	4.4	1.32	0.7	0.8
03/15/23	6.07	4.6	4.3	1.34	0.8	0.8
03/20/23	6.27	4.4	4.5	1.38	0.8	0.8
03/29/23	6.43	4.3	4.4	1.41	0.8	0.8

Declez Basin						
Date	RW Blend*	RW Blend*	RW Blend*	Declez	Declez	Declez
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (62% reduction)	TN (91% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L	5 mg/L	5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	2.13	0.6	0.5
01/11/23	5.30	8.3	7.3	2.01	0.7	0.7
01/18/23	5.23	6.6	7.5	1.99	0.6	0.7
01/25/23	5.57	6.8	6.7	2.12	0.6	0.6
02/01/23	5.93	5.8	6.3	2.25	0.5	0.6
02/08/23	6.10	5.1	5.5	2.32	0.5	0.5
02/15/23	6.13	4.4	4.8	2.33	0.4	0.4
02/22/23	5.93	3.8	4.1	2.25	0.3	0.4
03/01/23	5.47	4.8	4.3	2.08	0.4	0.4
03/08/23	6.00	4.0	4.4	2.28	0.4	0.4
03/15/23	6.07	4.6	4.3	2.31	0.4	0.4
03/20/23	6.27	4.4	4.5	2.38	0.4	0.4
03/29/23	6.43	4.3	4.4	2.44	0.4	0.4

*The recycled water blend of RP-1 &RP-4 effluent is sampled at the RP-4 1299 Pump Station

Note: TOC & TN compliance is based on two consecutive sample results.

San Sevaine 1-3

Date	RW Blend*	RW Blend*	RW Blend*	San Sevaine 1-3	San Sevaine 1-3	San Sevaine 1-3
mg/L==>	TOC	TN	TN - 2 sample avg.	TOC (92% reduction)	TN (34% reduction)	TN - 2 sample avg.
Limit ==>			10 mg/L (DDW)	16 mg/L	5 mg/L	5 mg/L (RWQCB)
01/04/23	5.60	6.4	5.9	0.45	4.2	4.2
01/11/23	5.30	8.3	7.3	0.42	5.5	4.8
01/18/23	5.23	6.6	7.5	0.42	4.4	4.9
01/25/23	5.57	6.8	6.7	0.45	4.5	4.4
02/01/23	5.93	5.8	6.3	0.47	3.9	4.2
02/08/23	6.10	5.1	5.5	0.49	3.4	3.6
02/15/23	6.13	4.4	4.8	0.49	2.9	3.1
02/22/23	5.93	3.8	4.1	0.47	2.5	2.7
03/01/23	5.47	4.8	4.3	0.44	3.2	2.9
03/08/23	6.00	4.0	4.4	0.48	2.7	2.7
03/15/23	6.07	4.6	4.3	0.49	3.0	3.0
03/20/23	6.27	4.4	4.5	0.50	2.9	2.9
03/29/23	6.43	4.3	4.4	0.51	2.9	2.9

Brooks Basin

Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
	TOC (mg/L)	TN (mg/L)	EC (µmhos/cm)
	Sample not collected due to rain		
02/27/23	4.7	2.6	331
	Sample not collected due to rain		

Date	BRK-LYS-25	BRK-LYS-25		BRK-LYS-25
	TOC (mg/L)	TN* (mg/L)	TN - 2 sample avg.	EC (µmhos/cm)
Limit==>			5 mg/L	
		Sample not collected due to rain		
02/27/23	3.2	<0.6	<0.6	538
		Sample not collected due to rain		

Date	BRK-1/1	BRK-1/1
	TOC* (mg/L)	TN (mg/L)
Limit==>	16 mg/L	
01/31/23	0.4	0.8
02/27/23	0.3	1.0
	Sample not collected due to rain	

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

Table 2-6
RWC, TOC Average, and TN Compliance Summary

Basin	SUP Start Date	SUP End Date	SUP Report Submittal	RWC Limit	Mos. in Operation (Mar 2023)	RWC_{Avg} (Mar 2023)	TOC_{Avg} Limit* (mg/L)	Jan 2023 TOC_{Avg} (mg/L)	Feb 2023 TOC_{Avg} (mg/L)	Mar 2023 TOC_{Avg} (mg/L)	1Q23 TN Limit** Compliance	Recharged Water Monitoring Plan
7th & 8th Street	Sep-07	Dec-10	05/23/11	50%	187	24%	2.1	0.7	0.7	0.7	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 88% and TN reduction of 75%
Banana	Jul-05	Jan-06	10/27/06	50%	213	33%	1.5	1.1	1.2	1.2	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 80% and TN reduction of 47%
Brooks	Aug-08	Dec-09	07/29/10	50%	176	14%	3.6	0.4	0.3	0.0	Met	**Alternative monitoring:** *Monthly* lysimeter monitoring at 0- and 25-feet bgs & BRK-1/1 for EC, TOC, TN. 25-foot lysimeter compliance point for TN and BRK-1/1 for TOC. *Monthly* BRK-1/1 analyzed for chloride to verify presence of RW (monitoring ceased 3Q18 since RW presence has been verified).
Declez	Dec-15	Sep-16	05/21/18	initial 20%	88	7%	7.1	2.1	2.2	2.4	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 62% and TN reduction of 91%
Ely	RW initiated Sep-99	NA	NA	50%	283	25%	2.0	1.6	1.6	1.8	Met	**Alternative monitoring:** *Weekly* RP-1 RW sample with TOC reduction of 76% and TN reduction of 52%
Hickory	Sep-05	Feb-06	02/15/07	50%	211	19%	2.6	1.0	1.1	1.2	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 81% and TN reduction of 27%
RP3	Jun-09	Jun-10	12/15/10	50%	166	25%	2.0	0.7	0.7	0.7	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 88% and TN reduction of 31%
San Sevaine 1-3	Aug-20	Sep-21	02/08/22	50%	32	18%	2.8	0.4	0.5	0.5	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 92% and TN reduction of 34%
Turner 1&2	Dec-06	May-07	07/03/08	24%	196	24%	2.1	1.6	1.8	1.9	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 70%; TN reduction of 87%
Turner 3&4	Dec-06	May-07	07/03/08	45%	196	25%	2.0	0.8	0.9	0.9	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 85% ; TN reduction of 87%
Victoria	Sep-10	Jul-11	02/08/12	50%	151	27%	1.9	1.2	1.3	1.4	Met	**Alternative monitoring:** *Weekly* RW Blend with TOC reduction of 78% and TN reduction of 82%

SUP - Start-Up Period
*TOC_{Avg} limit is 0.5 mg/L divided by the RWC_{Avg}. Compliance is determined by checking that monthly TOC_{Avg} does not exceed the TOC_{Avg} limit. If the TOC_{Avg} limit is exceeded, the monthly TOC_{Avg} will be shown in bold font.
**TN limit is 10 mg/L based on a two-sample average.

Table 2-7a
Diluent Water Monitoring*: Local Runoff/ Stormwater

Constituent	Stormwater Declez Channel @ Declez Basin 01/19/23	Stormwater Etiwanda Creek @ Etiwanda Debris Basin 01/18/23	Stormwater San Sevaine Creek @ San Sevaine 1-5 01/18/23	Stormwater W. Fontana Channel @ Banana Basin 01/19/23	Max Level to Trigger Source Water Evaluation	Unit	Method
NO_2-N	<0.05	<0.05	<0.05	<0.05	1	mg/L	EPA 300.0
NO_3-N	0.7	0.1	0.2	0.2	10	mg/L	EPA 300.0
TDS	82	130	168	33	1000	mg/L	SM 2540C
Total Coliform	>1600	18	700	>1600	-	mpn/100ml	SM 9221B
Oil & Grease	2	4	4	2	-	mg/L	EPA 1664A
Inorganic Chemicals							
Aluminum	**1869**	64	129	**1010**	1000	µg/L	EPA 200.7
Antimony	<1	<1	<1	<1	6	µg/L	EPA 200.8
Arsenic	3	<2	<2	<2	10	µg/L	EPA 200.8
Asbestos	<2.1	<0.19	<0.42	<1.1	7	MFL	EPA 100.2
Barium	25	24	29	17	1000	µg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 200.7
Cadmium	<0.25	0.25	<0.25	<0.25	5	µg/L	EPA 200.7
Chromium	3.0	0.9	0.9	3.2	50	µg/L	EPA 200.7
Chromium VI	0.30	0.03	0.10	0.73	10	µg/L	EPA 218.6
Cyanide	<20	<20	<20	<20	150	µg/L	ASTM D7284/OIA-1677
Fluoride	<0.1	0.1	<0.1	0.1	2	mg/L	SM 4500-F C
Mercury	<0.5	<0.5	<0.5	<0.5	2	µg/L	EPA 245.2
Nickel	3	1	2	2	100	µg/L	EPA 200.7
Perchlorate	<2	<2	<2	<2	6	µg/L	EPA 314
Selenium	<2	<2	<2	<2	50	µg/L	EPA 200.8
Thallium	<1	<1	<1	<1	2	µg/L	EPA 200.8
Volatile Organic Chemicals (VOCs)							
Benzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	600	µg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	6	µg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	<0.5	10	µg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	300	µg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	<0.5	13	µg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	<0.5	100	µg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	<0.5	5	µg/L	EPA 524.2
Trichlorofluoromethane	<0.5	<0.5	<0.5	<0.5	150	µg/L	EPA 524.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.5	<0.5	<0.5	<0.5	1200	µg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	<0.5	0.5	µg/L	EPA 524.2
Total Xylenes	0.6	<0.5	<0.5	<0.5	1750	µg/L	EPA 524.2
1,2,3-Trichloropropane	<0.005	<0.005	<0.005	<0.005	0.005	µg/L	CASRL 524M-TCP
Non-Volatile Synthetic Organic Chemicals (SOCs)							
Alachlor (Alanex)	<0.1	<0.1	<0.1	<0.1	2	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.1	<0.1	<0.1	<0.1	0.2	µg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	<1	<1	<1	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	<0.5	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	0.8	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.1	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	<0.01	2	µg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	9	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 505

Table 2-7a
Diluent Water Monitoring*: Local Runoff/ Stormwater

Constituent	Stormwater Declez Channel @ Declez Basin 01/19/23	Stormwater Etiwanda Creek @ Etiwanda Debris Basin 01/18/23	Stormwater San Sevaine Creek @ San Sevaine 1-5 01/18/23	Stormwater W. Fontana Channel @ Banana Basin 01/19/23	Max Level to Trigger Source Water Evaluation	Unit	Method
Methoxychlor	<0.05	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	0.07	<0.04	<0.04	0.19	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<4	<4	<4	<4	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.1	<0.2	50	µg/L	EPA 515.4
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	<2	<2	<2	<2	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	<2	<2	<2	2	60	µg/L	SM 6251B
Bromate	<5	<5	<5	<5	10	µg/L	EPA 300.1/317
Chlorite	<10	<10	<10	<10	1	µg/L	EPA 300.0
Action Level Chemicals							
Copper	7	2	2	12	1300	µg/L	EPA 200.7
Lead	2.7	<0.5	<0.5	4.5	15	µg/L	EPA 200.8
Radionuclides							
Combined Radium-226 & Radium 228	<3	<3	<3	<3	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	<3	<3	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<1000	<1000	<1000	<1000	20,000	pCi/L	EPA 906.0
Strontium-90	0.5	0.7	0.2	0.3	8	pCi/L	EPA 905.0
Gross Beta Particle Activity	1	2	1	1	50	pCi/L	EPA 900.0
Uranium	<1	<1	<1	<1	20	pCi/L	EPA 200.8
Chemicals w/ State Notification Levels							
Boron	<0.1	<0.1	<0.1	<0.1	1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	<0.5	160	µg/L	EPA 524.2
Chlorate	76	<20	46	26	800	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	140	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	<0.5	140	µg/L	EPA 524.2
Diazinon	<0.5	<0.5	<0.5	<0.5	1.2	µg/L	EPA 525.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	<0.5	1000	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	<1	1	µg/L	EPA 522
Ethylene glycol	NS	NS	NS	NS	14	mg/L	EPA 8015B/504.1
Formaldehyde	<5	18	<5	<5	100	µg/L	EPA 556
HMX	<0.1	<0.1	<0.1	<0.1	350	µg/L	EPA 8330B
Isopropylbenzene	<0.5	<0.5	<0.5	<0.5	770	µg/L	EPA 524.2
Manganese	56	2	3	37	500	µg/L	EPA 200.8
Methyl isobutyl ketone (MIBK)	<2	<2	<2	<2	120	µg/L	EPA 524.2
Naphthalene	<0.5	<0.5	<0.5	<0.5	17	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	<2	<2	<2	<2	10	ng/L	EPA 521
N-nitrosodimethylamine (NDMA)	<2	<2	<2	<2	10	ng/L	EPA 521
N-Nitrosodi-n-propylamine (NDPA)	<2	<2	<2	<2	10	ng/L	EPA 521
PFOS	4.7	< 0.4	0.9	2.7	6.5	ng/L	EPA 537.1
PFOA	**6.1**	< 0.4	1.5	3.4	5.1	ng/L	EPA 537.1
Propachlor	<0.5	<0.5	<0.5	<0.5	90	µg/L	EPA 525.2
N-propylbenzene	<0.5	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
RDX	<0.1	<0.1	<0.1	<0.1	0.3	µg/L	EPA 8330B
Tertiary butyl alcohol	<2	<2	<2	<2	12	µg/L	EPA 524.2
1,2,4 –trimethylbenzene	0.5	<0.5	<0.5	<0.5	330	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	<0.5	330	µg/L	EPA 524.2
2,4,6-Trinitrotoluene	<0.1	<0.1	<0.1	<0.1	1	µg/L	EPA 8330B
Vanadium	5	<5	<5	<5	50	µg/L	EPA 200.8

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

** Asbestos and Tritium were not analyzed in time for reporting by Eurofins Eaton Analytical

NS: Not sampled

Bold signifies an exceedance of the maximum level to trigger a source water evaluation. Explained in further detail in the report text.

Table 2-7b

Diluent Water Monitoring: State Water Project - Silverwood Lake

Constituent	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Unit
Silica	12.3	12.7	Not Yet Available										mg/L
Calcium	24	24											mg/L
Magnesium	6	6											mg/L
Sodium	64	57											mg/L
Potassium	2.1	2.2											mg/L
Carbonate	0	0											mg/L
Bicarbonate	85	85											mg/L
Sulfate	52	47											mg/L
Chloride	66	59											mg/L
Nitrate	2.2	2.4											mg/L
Fluoride	0.2	0.2											mg/L
Total Dissolved Solids	271	253											mg/L
Total Hardness as $CaCO_3$	81	81											mg/L
Total Alkalinity as $CaCO_3$	70	70											mg/L
Free Carbon Dioxide	1.5	1.1											mg/L
pH	7.98	8.10											unit
Specific Conductance	479	443											µmho/cm
Color	5	--											CU
Turbidity	0.7	0.8											NTU
Temperature	10	9											°C
Bromide	0.25	0.20											mg/L
Total Organic Carbon	3.09	3.70											mg/L

Table 2-8
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	600490	Fontana Water Company - F7a***	3330 upgradient	590-1000	18	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
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	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 - DCZ-2	4,100 downgradient	240-270	4	Active	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
Jurupa Basin	Not currently planned for recharge						
7th & 8th Street Basins	600493	City of Ontario No. 35	9695 downgradient	580-1020	18-36	Active	Municipal
	601036	Inland Empire Utilities Agency - 8TH-1/1	150 downgradient	495-535	4	Active	Monitoring
	601037	Inland Empire Utilities Agency - 8TH-1/2	150 downgradient	595-645	4	Active	Monitoring
	601038	Inland Empire Utilities Agency - 8TH-2/1	2460 downgradient	465-505	4	Active	Monitoring
	601039	Inland Empire Utilities Agency - 8TH-2/2	2460 downgradient	576-616	4	Active	Monitoring
Brooks Basins	1901719	City of Pomona P-10	1983 downgradient	295-784	20	Active	Municipal
	1904001	City of Pomona P-34	2550 downgradient	363-367,380-400, 419-427	20	Active	Municipal
	601050	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	601051	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	601048	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	Active	Monitoring
	601049	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	Active	Monitoring
San Sevaine Basins	600905	Cucamonga Valley Water District No. 39	8300-13170 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601115	Inland Empire Utilities Agency - SS-1/1	~39-116 downgradient	640-680	4	Active	Monitoring
	--	Inland Empire Utilities Agency - SSV-2	200 downgradient	370-395	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	~39-116 downgradient	570-610	4	Active	Monitoring
	--	Inland Empire Utilities Agency - VCT-2/2	~ 2000 downgradient	570-610	4	Active	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	Active	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	Active	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

Notes:

NA = Data not available
CBWM ID = Chino Basin Water Master well identification number
bgs = below ground surface
* = Ontario Well No. 38 replaced Ontario Well No. 19, which is inactive
** = Cucamonga Valley Water District No. 43 replaced CVWD Well Nos. 35 & 36, which are inactive.
*** = Fontana Water Company Well 7A replaced Fontana Water Company Well 37A (1Q18)

Table 2-9
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	Fontana Water Co. - F7a	01/24/23	0.90	<1.1	7.8	483	<20	5	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	36	260	17	208	16	19	11.3	<0.05	***11.3***	6.5
	California Speedway 2	03/09/23	<0.10	<1.1	7.8	380	<20	<3	<3	0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	256	11	158	18	9	4.6	<0.05	4.6	7.8
	BH-1/2*	03/20/23	0.30	<1.1	8.3	519	<20	5	<3	0.6	<0.1	<15	<2	<0.5	1	<0.5	<0.2	0.2	<20	292	72	185	23	20	1.5	<0.05	1.5	7.9
Turner	Ontario Well No. 29	02/01/23	<0.10	<1.1	7.3	342	<20	5	3.9	-0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	212	8	135	22	10	1.8	<0.05	1.8	8.7
	Ontario Well No. 38	02/01/23	<0.10	<1.1	7.6	314	<20	5	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	198	6	129	19	6	1.8	<0.05	1.8	5.9
	T-1/2*	02/01/23	0.33	<1.1	7.7	344	<20	5	<3	0.0	<0.1	<15	2	<0.5	<1	<0.5	<0.2	0.4	<20	216	20	106	36	10	<0.6	<0.05	<0.1	1.3
	T-2/2*	02/23/23	0.46	<1.1	7.7	521	<20	5	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.6	<20	310	62	151	52	25	0.7	<0.05	0.7	3.2
RP3	Alcoa MW3*	03/28/23	<0.10	<1.1	7.2	***1116***	<20	<3	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	***682***	155	417	56	59	16.7	<0.05	***16.7***	5.7
	Fontana Water Co. - F23a	01/24/23	<0.10	<1.1	7.9	382	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	26	204	13	153	18	17	5.5	<0.05	5.5	7.1
	Southridge JHS*	03/07/23	0.37	<1.1	7.1	***911***	<20	<3	<3	0.0	<0.1	<15	3	<0.5	<1	<0.5	<0.2	1.1	<20	***562***	81	336	55	63	16.0	<0.05	***16.0***	5.0
	RP3-1/1*	02/22/23	0.60	<1.1	6.8	781	<20	5	5	-0.7	<0.1	<15	11	<0.5	<1	<0.5	<0.2	5.2	<20	466	113	169	87	44	4.6	<0.05	4.6	2.1
7th & 8th Street	Ontario Well No. 35	02/01/23	<0.10	<1.1	7.8	342	<20	<3	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	214	7	133	22	16	3.0	<0.05	3.0	8.2
	8TH-1/2*	03/27/23	1.53	<1.1	7.3	513	<20	10	<3	-0.2	<0.1	<15	27	<0.5	<1	<0.5	<0.2	***12.9***	<20	312	68	216	18	25	1.1	<0.05	1.1	2.7
	8TH-2/1*	03/23/23	<0.10	<1.1	7.7	497	<20	5	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.8	<20	288	25	220	17	20	13.5	<0.05	***13.5***	6.1
	8TH-2/2*	03/23/23	<0.10	<1.1	7.8	448	<20	10	<3	0.3	<0.1	<15	5	<0.5	<1	<0.5	<0.2	***5.8***	<20	258	44	187	16	26	2.9	<0.05	2.9	6.0
	Pomona Well No. 10	01/24/23	0.44	<1.1	7.8	551	<20	5	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	292	43	247	13	36	7.6	<0.05	7.6	6.9
Brooks	BRK-1/1*	01/31/23	0.37	<1.1	7.7	576	<20	<3	<3	0.2	<0.1	<15	7	<0.5	<1	<0.5	<0.2	5.3	<20	318	78	206	34	22	0.8	<0.05	0.8	2.3
	BRK-1/2*	01/31/23	0.30	<1.1	7.6	658	<20	5	<3	0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	1.2	<20	394	26	302	15	49	22.1	<0.05	***22.1***	8.6
	BRK-2/1*	02/27/23	<0.10	<1.1	7.9	608	<20	***20***	<3	0.5	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	***9.3***	<20	370	61	272	11	36	7.0	<0.05	7.0	5.3
	BRK-2/2*	02/27/23	<0.10	<1.1	8.2	426	<20	<3	<3	0.8	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.2	<20	262	10	281	31	26	11.6	<0.05	***10.9***	4.0
	Ely Basin MW2 Walnut St.*	02/02/23	<0.10	<1.1	7.5	659	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	386	55	262	33	30	7.3	<0.05	7.3	5.6
Ely	Riverside Well (43840-CWW)	01/23/23	1.27	2	7.5	542	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.4	<20	304	28	235	20	25	8.2	<0.05	8.2	7.1
	Bishop of SB Corp. - DOM	01/23/23	0.37	<1.1	7.5	898	<20	5	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.2	454	***518***	42	415	24	65	22.2	<0.05	***22.2***	6.0
	SS-1/1*	03/06/23	<0.10	<1.1	7.1	383	<20	5	<3	-0.7	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	2.1	<20	256	49	147	18	16	2.7	<0.05	2.7	6.7
Victoria & San Sevaine	SSV-2*	03/06/23	0.47	<1.1	7.3	646	<20	15	<3	-0.1	<0.1	<15	6	<0.5	<1	<0.5	<0.2	***16.7***	<20	378	69	238	43	34	4.7	<0.05	4.7	4.7
	VCT-1/1*	03/08/23	<0.10	<1.1	7.2	538	<20	<3	<3	-0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.9	<20	340	83	206	22	22	<0.6	<0.05	0.4	5.5
	VCT-2/2	03/08/23	<0.10	9	7.8	310	<20	<3	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.7	<20	216	13	122	16	8	3.1	<0.05	3.1	6.8
	CVWD Well No. 39	01/25/23	<0.10	<1.1	7.7	292	<20	<3	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.8	<20	172	7	108	21	10	2.5	<0.05	2.5	6.1
	CVWD Well No. 43	01/25/23	<0.10	<1.1	7.7	347	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	204	11	141	19	12	3.5	<0.05	3.5	6.7
	Unitex 91090*	03/07/23	0.30	<1.1	7.2	602	<20	<3	<3	-0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.2	<20	372	75	227	29	28	2.9	<0.05	2.9	5.1
Declez	JCSD Well No. 13	02/02/23	<0.10	<1.1	7.7	572	<20	<3	<3	0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.3	<20	336	69	218	28	19	4.3	<0.05	4.3	7.5
	JCSD Well No. 19	02/02/23	<0.10	<1.1	7.6	332	<20	5	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	206	9	117	26	10	2.9	<0.05	2.9	7.1
	DCZ-1/1*	03/20/23	1.10	<1.1	7.6	592	<20	***20***	<3	0.1	<0.1	<15	11	<0.5	<1	<0.5	<0.2	***34.0***	<20	346	89	216	33	25	<0.6	<0.05	<0.1	2.5
	DCZ-2*	03/07/23	<0.10	<1.1	7.8	592	<20	<3	<3	0.3	<0.1	<15	<2	<0.5	<1	18.38	<0.2	0.4	158	348	62	203	38	34	8.8	<0.05	8.8	4.6
	Detection Limit		0.3	1			20	3	3.0		0.10	15	2	1	1	0.50	0.20	0.1	20		2	3	1	1	0.6	0.05	0.1	
	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.

NA: Not analyzed due to broken field equipment

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	Declez	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Declez	Ely	Hickory	RP3	San Sevaine	Turner	Victoria	7th & 8th St.	Banana	Brooks	Declez	Ely	Hickory	RP3	San Sevaine	Turner	Victoria
Apr-22	0	0	0	0	0	0	0	0	0	0	42	4	36	21	28	81	330	26	49	17	233	56	0	0	0	81	330	318	19	289
May-22	0	0	0	0	0	0	0	0	0	0	8	0	1	5	50	102	316	0	14	0	243	0	0	74	180	102	316	341	67	440
Jun-22	0	0	0	0	0	0	0	0	0	0	9	0	2	48	13	139	103	0	37	0	134	0	0	0	87	139	103	447	46	135
2Q22 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**58**	**4**	**39**	**75**	**90**	**323**	**750**	**26**	**99**	**17**	**610**	**56**	**0**	**74**	**267**	**323**	**750**	**1105**	**132**	**864**
Jul-22	0	0	0	0	0	0	0	0	0	0	9	0	0	4	134	0	1	3	27	2	314	0	0	0	98	38	344	477	63	51
Aug-22	0	0	0	0	0	0	0	0	0	0	6	0	0	5	9	0	0	0	26	0	160	125	6	0	0	50	592	394	58	0
Sep-22	0	0	0	0	0	0	0	0	0	0	76	1	6	17	41	29	2	43	83	28	22	289	203	0	0	6	799	408	0	0
3Q22 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**91**	**1**	**7**	**25**	**185**	**29**	**3**	**46**	**136**	**30**	**496**	**415**	**209**	**0**	**98**	**94**	**1735**	**1279**	**121**	**51**
Oct-22	0	0	0	0	0	0	0	0	0	0	79	7	33	65	21	4	16	22	144	38	243	132	162	28	0	0	819	423	17	55
Nov-22	0	0	0	0	0	0	0	0	0	0	183	58	57	135	128	62	38	208	174	62	69	49	87	0	27	24	742	225	0	169
Dec-22	0	0	0	0	0	0	0	0	0	0	298	111	76	208	576	51	125	316	359	118	17	0	104	3	0	0	1056	102	0	84
4Q22 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**560**	**176**	**165**	**408**	**725**	**117**	**180**	**547**	**678**	**218**	**330**	**181**	**352**	**31**	**27**	**24**	**2616**	**749**	**17**	**309**
Jan-23	0	0	0	0	0	0	0	0	0	0	160	51	303	85	413	24	427	388	286	360	10	0	53	0	0	0	531	0	0	22
Feb-23	0	0	0	0	0	0	0	0	59	0	210	74	86	195	310	41	149	349	135	120	50	2	64	0	0	0	776	84	0	110
Mar-23	0	0	0	0	0	0	0	0	64	0	3	0	0	8	10	0	178	80	41	0	0	0	0	0	0	0	253	0	0	2
1Q23 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**123**	**0**	**373**	**125**	**388**	**288**	**733**	**65**	**754**	**817**	**462**	**480**	**59**	**3**	**117**	**0**	**0**	**0**	**1560**	**84**	**0**	**134**

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

	ASR Well No. 4									
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
2Q22	Apr-22	0.0	0.2	140	69	13.0	380	(1,980)	(36,043)	(973,212)
	May-22	0.0	0.2	140	111	13.0	380	(2,091)	(37,818)	(1,025,083)
	Jun-22	0.0	0.2	140	113	13.0	380	(2,203)	(39,622)	(1,077,835)
3Q22	Jul-22	0.0	0.2	140	108	13.0	380	(2,312)	(41,359)	(1,128,595)
	Aug-22	0.0	0.2	140	103	13.0	380	(2,415)	(43,011)	(1,176,899)
	Sep-22	0.0	0.2	140	0	13.0	380	(2,415)	(43,014)	(1,176,983)
4Q22	Oct-22	0.0	0.2	140	3	13.0	380	(2,418)	(43,060)	(1,178,315)
	Nov-22	0.0	0.2	140	18	13.0	380	(2,436)	(43,348)	(1,186,739)
	Dec-22	0.0	0.2	140	3	13.0	380	(2,439)	(43,403)	(1,188,337)
1Q23	Jan-23	0.0	0.2	140	0	13.0	380	(2,439)	(43,403)	(1,188,356)
	Feb-23	0.0	0.2	140	0	13.0	380	(2,439)	(43,405)	(1,188,417)
	Mar-23	0.0	0.2	140	0	13.0	380	(2,439)	(43,407)	(1,188,464)

	ASR Well No. 30									
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
2Q22	Apr-22	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
	May-22	0.0	0.2	140	8	12.0	320	728	(40,983)	(256,009)
	Jun-22	0.0	0.2	140	51	12.0	320	677	(41,736)	(276,086)
3Q22	Jul-22	0.0	0.2	140	8	12.0	320	668	(41,861)	(279,422)
	Aug-22	0.0	0.2	140	118	12.0	320	550	(43,613)	(326,131)
	Sep-22	0.0	0.2	140	38	12.0	320	512	(44,180)	(341,258)
4Q22	Oct-22	0.0	0.2	140	170	12.0	320	342	(46,694)	(408,302)
	Nov-22	0.0	0.2	140	121	12.0	320	221	(48,485)	(456,041)
	Dec-22	0.0	0.2	140	216	12.0	320	5	(51,679)	(541,231)
1Q23	Jan-23	0.0	0.2	140	32	12.0	320	(27)	(52,151)	(553,816)
	Feb-23	0.0	0.2	140	50	12.0	320	(77)	(52,896)	(573,685)
	Mar-23	0.0	0.2	140	8	12.0	320	(85)	(53,021)	(577,025)

	ASR Well No. 32									
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
2Q22	Apr-22	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	May-22	0.0	0.2	140	2	12.0	320	(3,068)	(45,178)	(713,071)
	Jun-22	0.0	0.2	140	4	12.0	320	(3,072)	(45,236)	(714,607)
3Q22	Jul-22	0.0	0.2	140	2	12.0	320	(3,074)	(45,263)	(715,349)
	Aug-22	0.0	0.2	140	18	12.0	320	(3,092)	(45,528)	(722,403)
	Sep-22	0.0	0.2	140	11	12.0	320	(3,103)	(45,688)	(726,667)
4Q22	Oct-22	0.0	0.2	140	0	12.0	320	(3,103)	(45,688)	(726,675)
	Nov-22	0.0	0.2	140	89	12.0	320	(3,191)	(47,002)	(761,718)
	Dec-22	0.0	0.2	140	10	12.0	320	(3,201)	(47,144)	(765,492)
1Q23	Jan-23	0.0	0.2	140	2	12.0	320	(3,203)	(47,172)	(766,242)
	Feb-23	0.0	0.2	140	1	12.0	320	(3,204)	(47,189)	(766,700)
	Mar-23	0.0	0.2	140	4	12.0	320	(3,208)	(47,254)	(768,425)

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

Cells shaded in grey reflect most recent lab values.

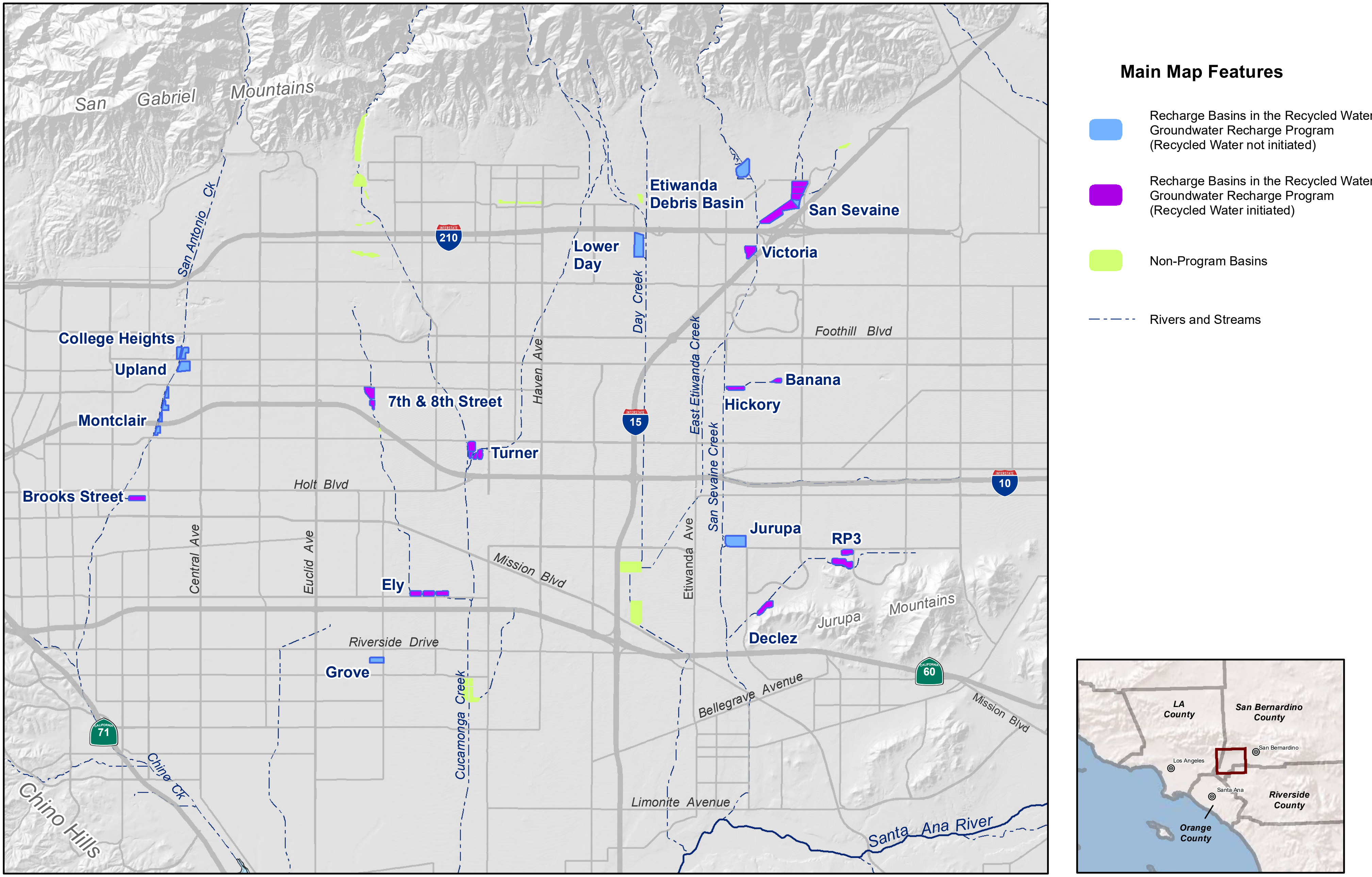
Table 6-1
MVWD ASR Project - TIN/TDS Mass Balance

	ASR Well No. 33									
	Date	Injection			Recovery			Mass Balance		
		Volume (AF)	TIN (mg/L)	TDS (mg/L)	Volume (AF)	TIN (mg/L)	TDS (mg/L)	Storage (AF)	TIN (kg)	TDS (kg)
2Q22	Apr-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	May-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Jun-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
3Q22	Jul-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Aug-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Sep-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
4Q22	Oct-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Nov-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Dec-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
1Q23	Jan-23	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Feb-23	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Mar-23	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)

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)				
	Date		Mass Balance		
			Storage (AF)	TIN (kg)	TDS (kg)
2Q22	Apr-22		(6,371)	(201,728)	(3,091,789)
	May-22		(6,493)	(203,660)	(3,147,868)
	Jun-22		(6,660)	(206,275)	(3,222,234)
3Q22	Jul-22		(6,779)	(208,165)	(3,277,072)
	Aug-22		(7,018)	(211,833)	(3,379,139)
	Sep-22		(7,067)	(212,563)	(3,398,614)
4Q22	Oct-22		(7,240)	(215,123)	(3,466,996)
	Nov-22		(7,467)	(218,516)	(3,558,203)
	Dec-22		(7,696)	(221,907)	(3,648,766)
1Q23	Jan-23		(7,730)	(222,407)	(3,662,120)
	Feb-23		(7,782)	(223,172)	(3,682,507)
	Mar-23		(7,795)	(223,363)	(3,687,619)



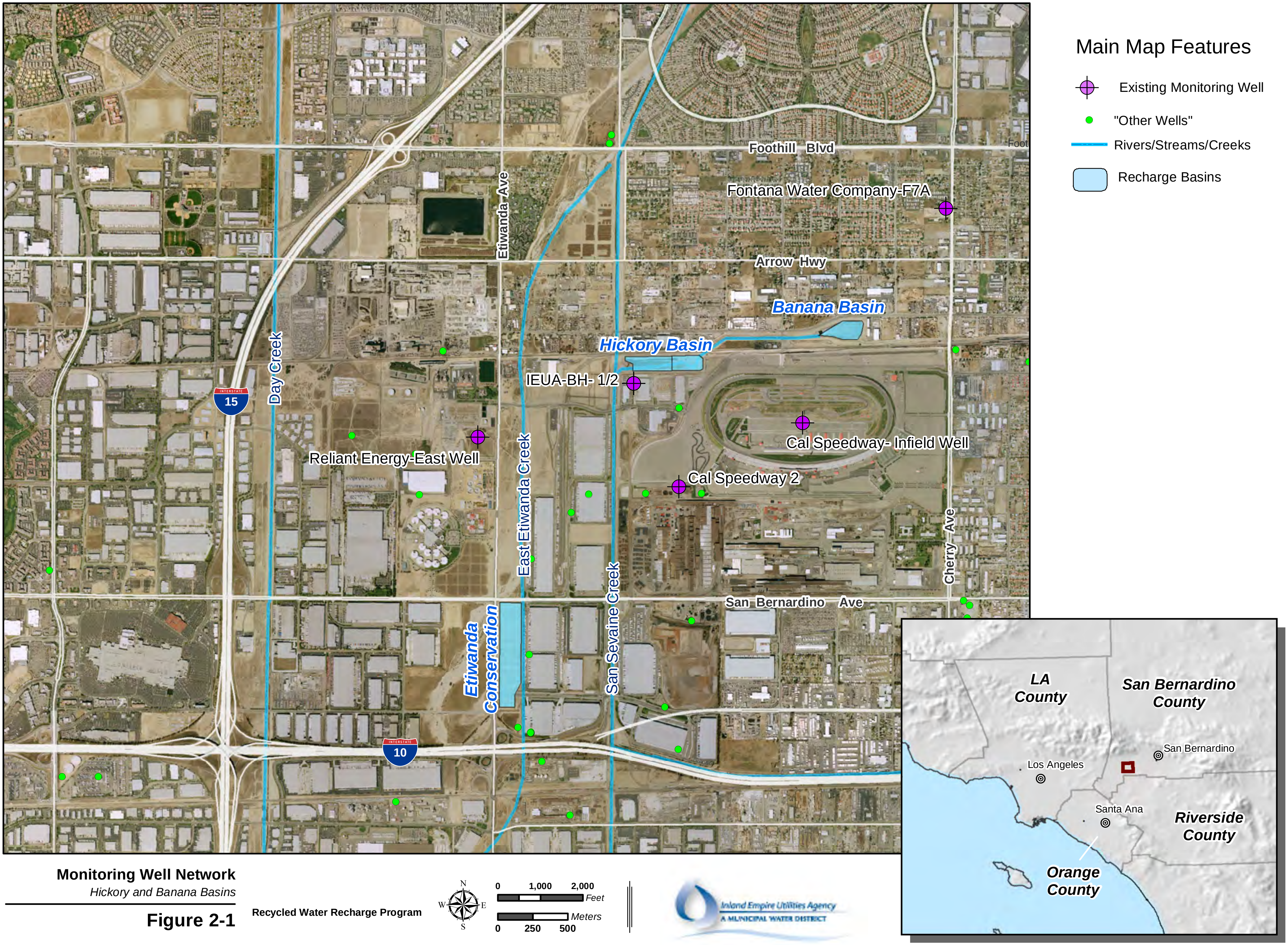
0 2 4 Miles

0 4 8 Kilometers

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

0 1,000 2,000 *Feet*

0 250 500 *Meters*

Inland Empire Utilities Agency
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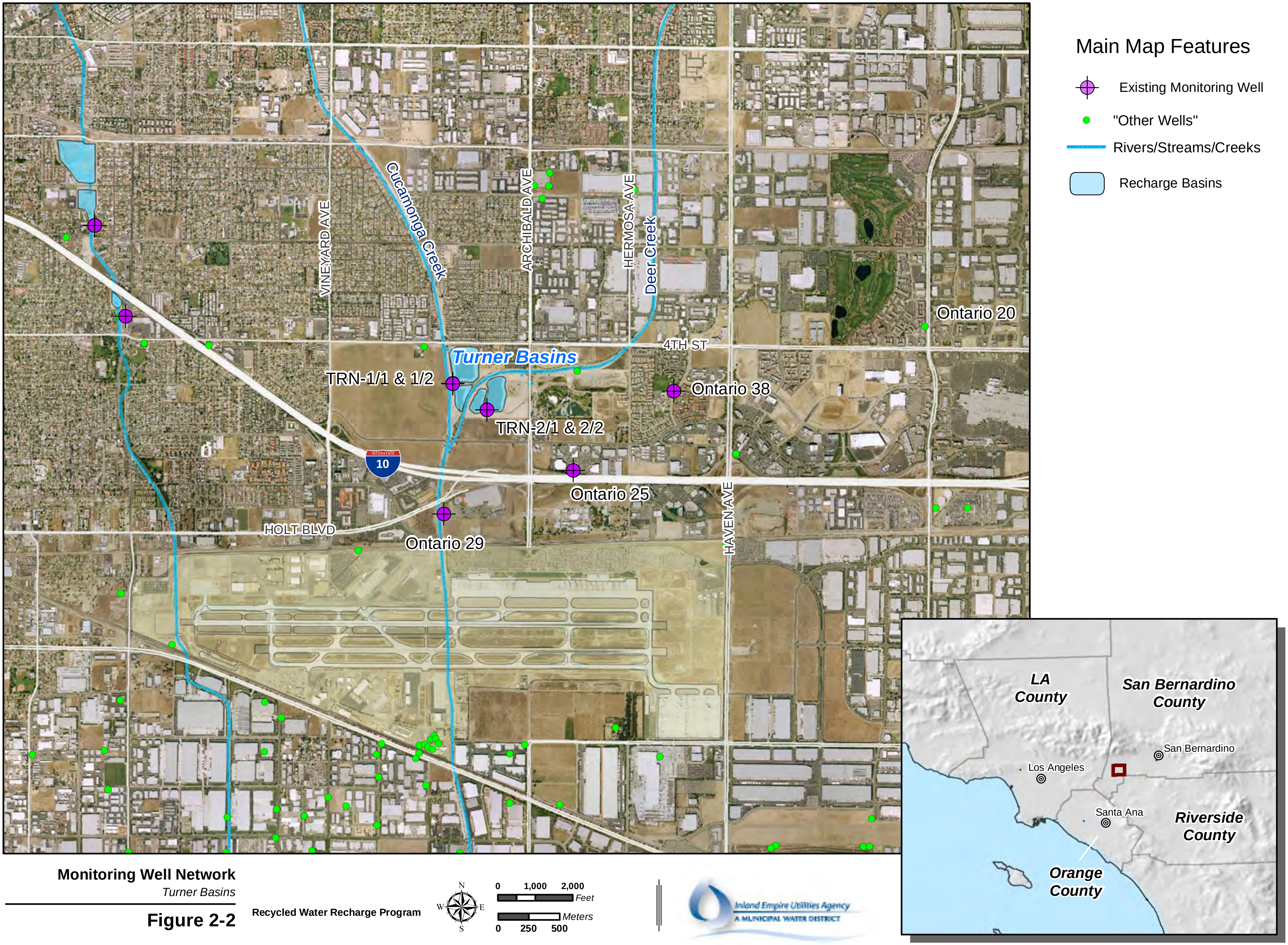
20160203



Monitoring Well Network

Turner Basins

Figure 2-2

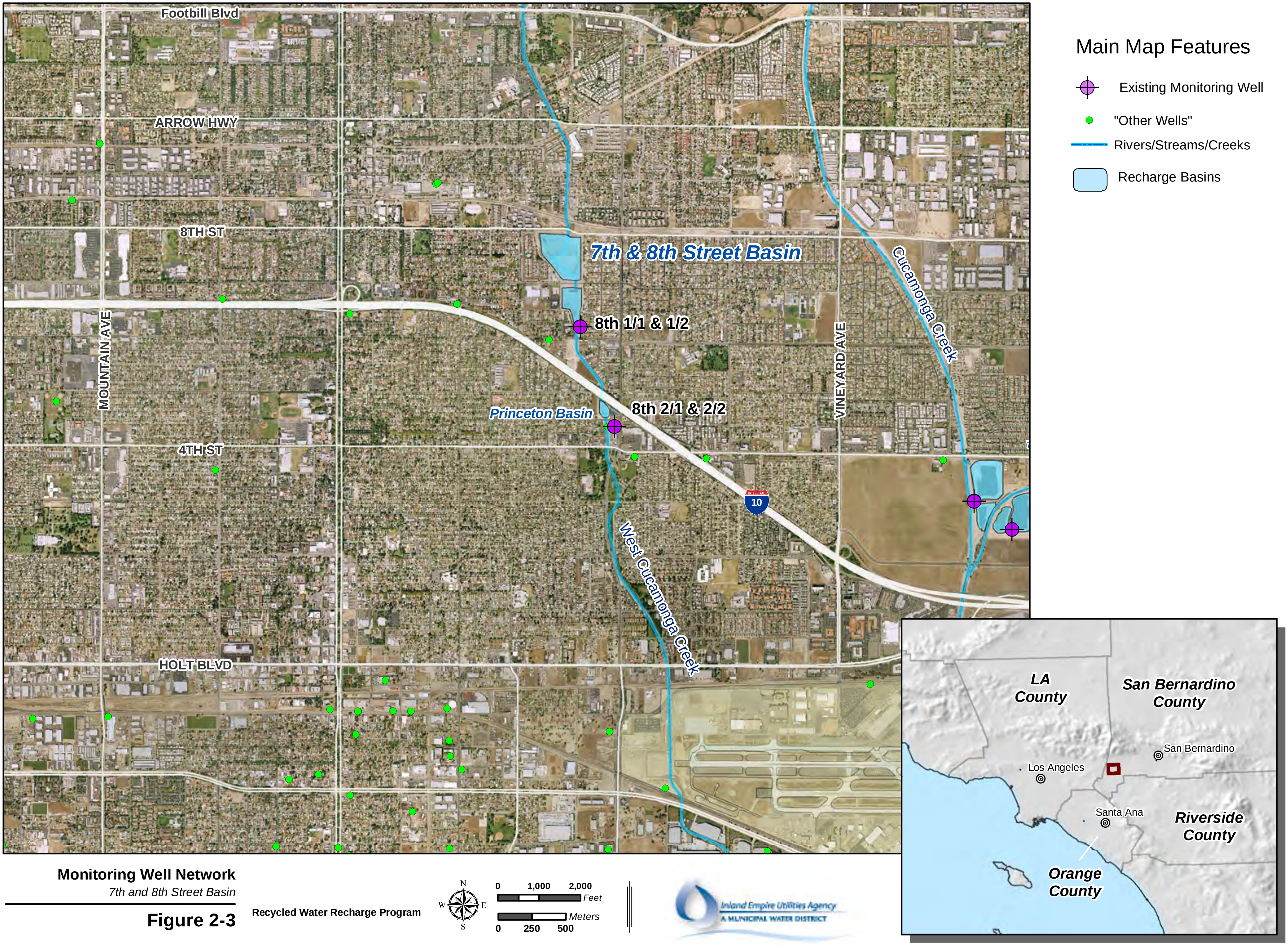
Recycled Water Recharge Program

N S W E

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

20160203

Monitoring Well Network

Ely Basins

Figure 2-4

Recycled Water Recharge Program

20071106

Monitoring Well Network

Brooks Street Basin

Recycled Water Recharge Program

Figure 2-5

Inland Empire Utilities Agency
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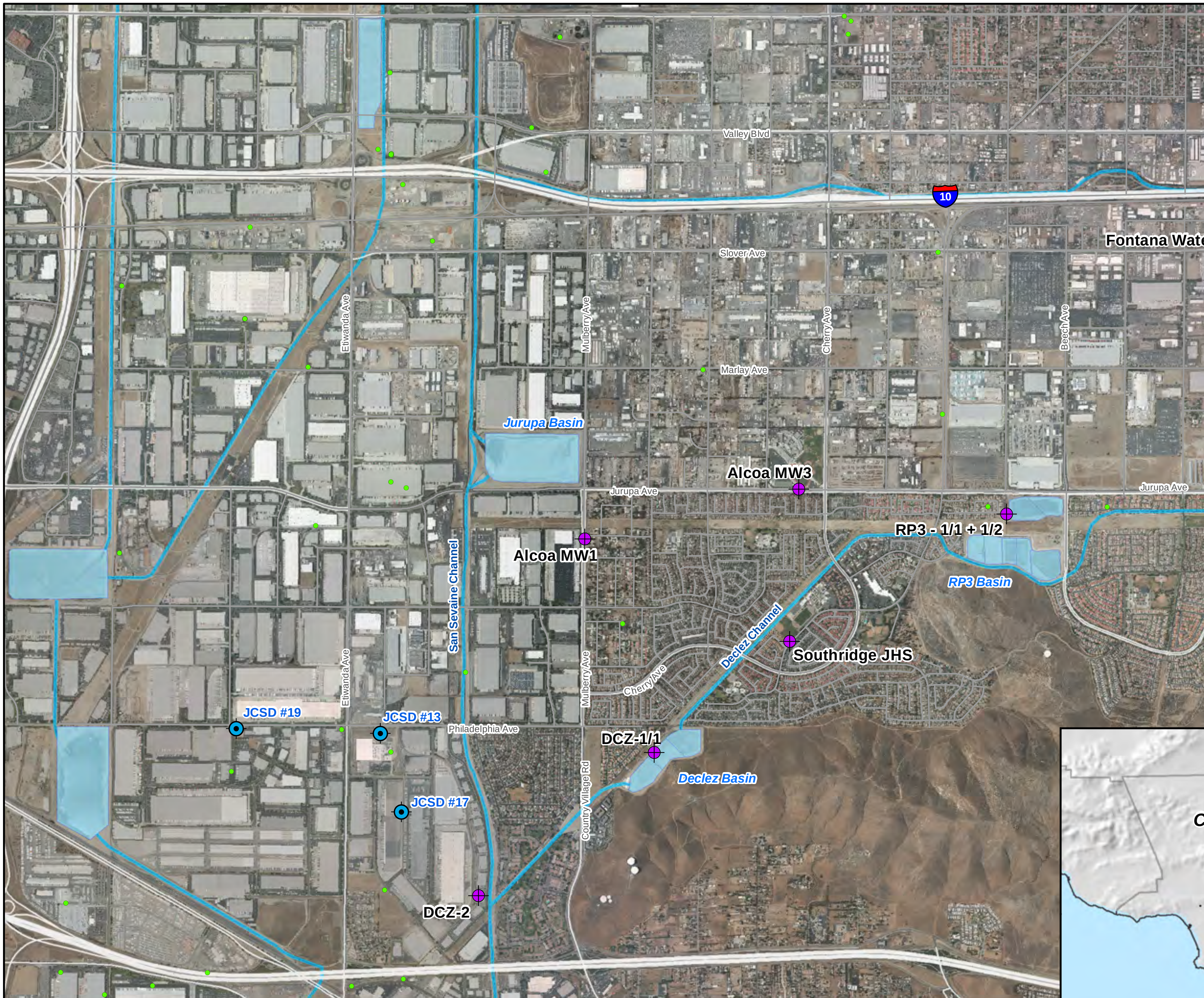

Main Map Features

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

Monitoring Well Network

Declez and RP3 Basins

Figure 2-6

Recycled Water Recharge Program

N S E W

0 1,000 2,000 *Feet*

Meters 0 250 500

Inland Empire Utilities Agency
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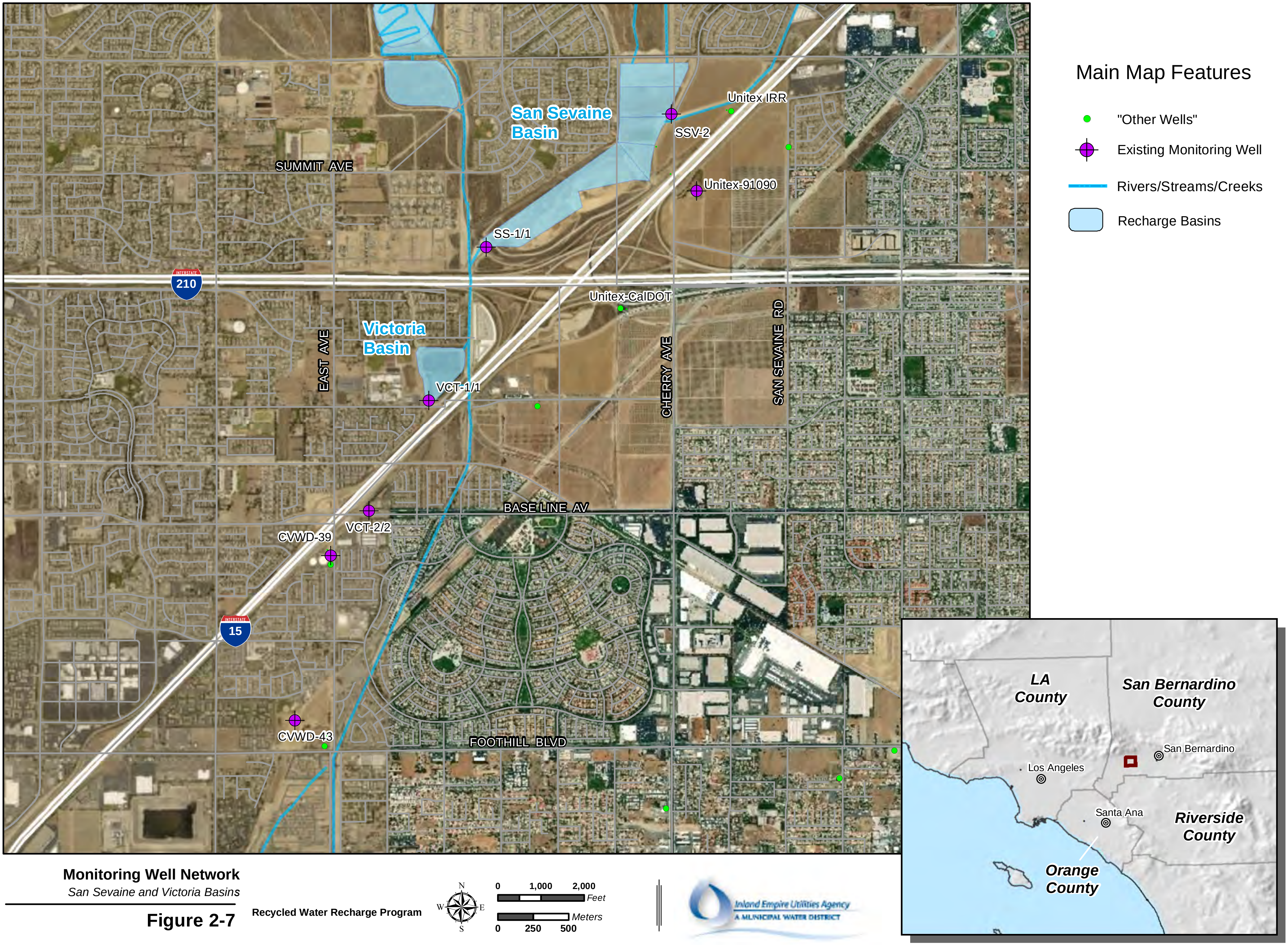
20071106



Monitoring Well Network

San Sevaine and Victoria Basins

Figure 2-7

Recycled Water Recharge Program

Inland Empire Utilities Agency
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