



**Randy Lee, P.E.**  
Director of Operations & Maintenance

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General Manager

August 15, 2022

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 April through June 2022**

Dear Ms. Joy,

Inland Empire Utilities Agency and Chino Basin Watermaster hereby submit the *Quarterly Monitoring Report* for the second quarter of 2022 (2Q22), April 1 through June 30, 2022, 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 2Q22, 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 April 1 through June 30, 2022, 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 Sevaime, Turner, and Victoria Basins. In point of fact, there are no domestic or municipal production wells in the buffer zones of the aforementioned recharge sites.

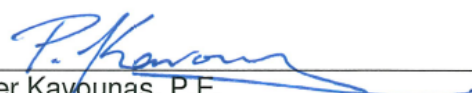
**DECLARATION**

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

Executed on the 15<sup>th</sup> day of August in the Cities of Chino and Rancho Cucamonga.

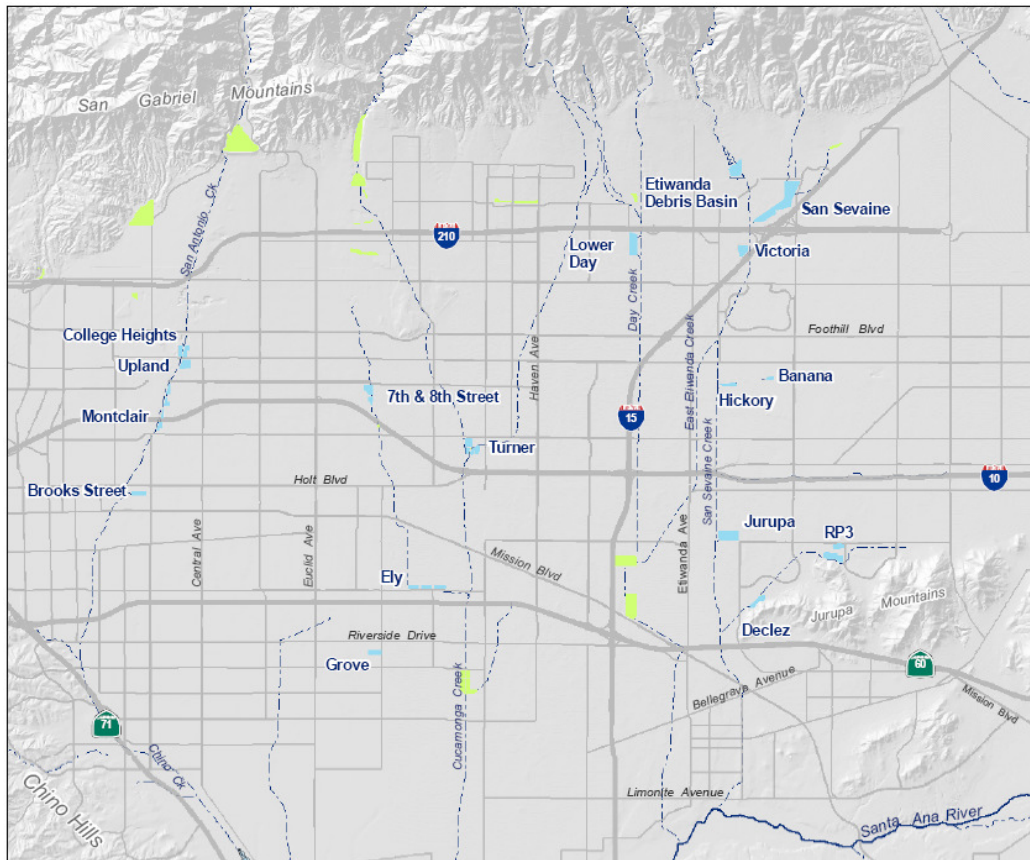
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Director of Operations & Maintenance

  
Peter Kavounas, P.E.  
General Manager

# Chino Basin Recycled Water Groundwater Recharge Program

## Quarterly Monitoring Report April 1 through June 30, 2022



*Prepared by:*



August 15, 2022

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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 second quarter of 2022 (2Q22).

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

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

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

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

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

On October 27, 2010, the Regional Board revised Monitoring and Reporting Program No. R8-2007-0039 (MRP) based on requests for modifications from IEUA and approved by the State Water Resources Control Board – Division of Drinking Water (DDW, formerly California Department of Public Health). The following changes were made to the MRP:

- 1) Sampling Requirements A.3, A.4, and A.5 were modified by specifying that samples shall be collected on a representative day instead of the 10<sup>th</sup> 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, basin surface water, and lysimeter data), diluent water, and groundwater. Section 3 provides an overview of recharge operations including the volume of diluent water and recycled water recharged. Section 4 describes any operational problems and preventive and/or corrective actions taken. Section 5 contains the certification of non-pumping in the 500-foot buffer zones around each basin. Section 6 is a brief overview of the Monte Vista Water District’s (MVWD) Aquifer Storage and Recovery (ASR) project.

## **2. Monitoring Results**

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

The requirements for recycled water monitoring are described in the MRP. Tables 2-1 through 2-4 include all of the requisite 2Q22 data.

Recycled Water Specifications A.5 through A.9 in the Order are the narrative limits established in the permit. The corresponding monitoring data used to determine compliance with the Order are presented in Tables 2-1 and 2-2. 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 5 mg/L (Specification A.7) can also be met at the lysimeters (Table 2-5a) or at locations specified in alternative monitoring plans (Table 2-5b, and discussed in further detail in Section 2.C). During 2Q22, 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 2Q22.



Recycled Water 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 3Q21 through 2Q22 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 2Q22 sampling for these compounds, IEUA chose the 25-foot below ground surface lysimeter at the 8<sup>th</sup> Street Basin (8TH-LYS-25) as the compliance point. The 8<sup>th</sup> Street Basin lysimeter was selected as the compliance point because the basin received consistent recycled water recharge and recycled water was present at the 25-foot depth based on electrical conductivity (EC) measurements.

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 2Q22 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.

The 1,2,3-TCP results from 2Q21 through 2Q22 and a chart of 1,2,3-TCP results are shown below:

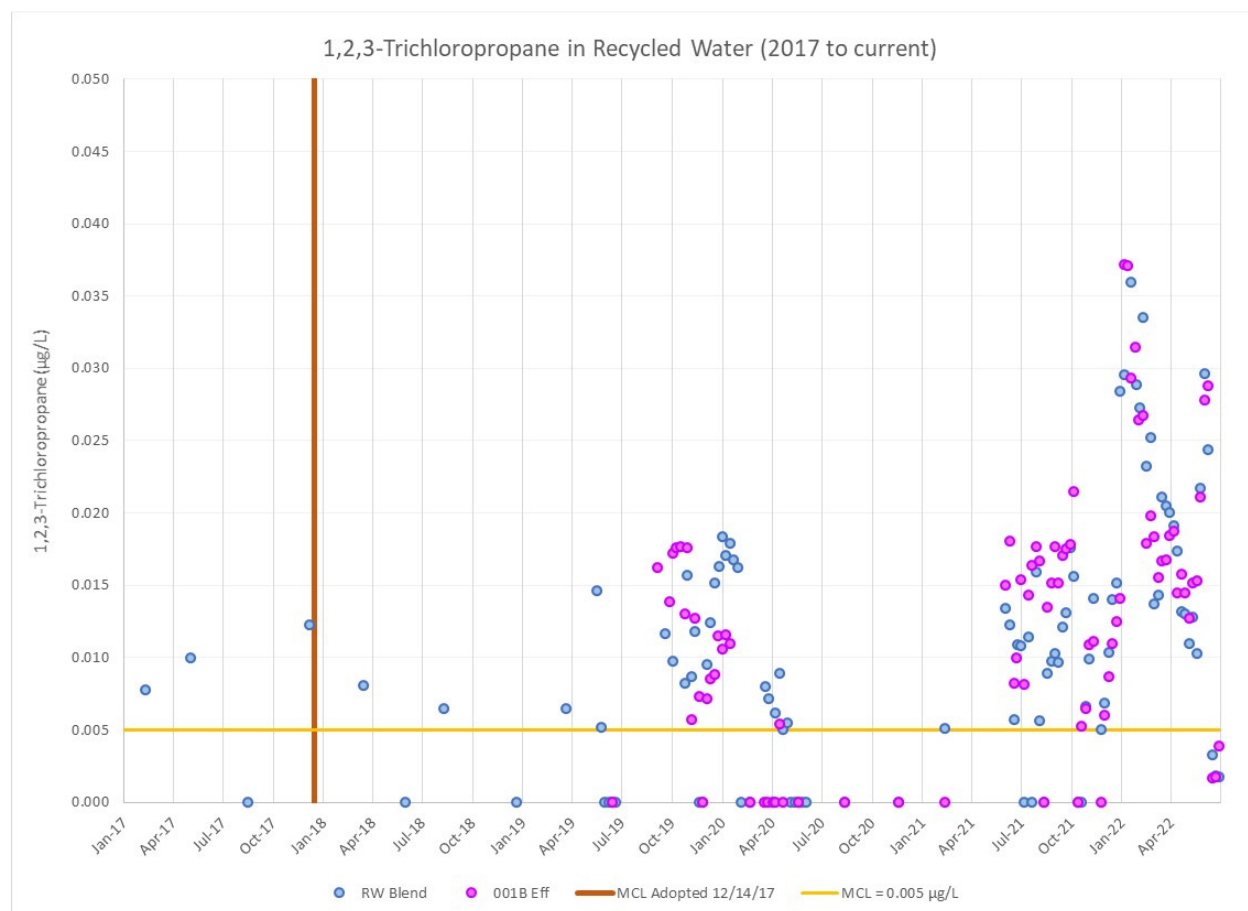
Sample	Date	RW Blend (µg/L)	4-week avg (µg/L)
Original	06/01/21	0.013	--
Confirmation	06/09/21	0.012	--
Week 1	06/18/21	0.006	--
Week 2	06/23/21	0.011	--
Week 3	06/29/21	0.011	--
Week 4	07/06/21	<0.005	0.007
Week 5	07/13/21	0.011	0.008
Week 6	07/20/21	<0.005	0.006
Week 7	07/27/21	0.016	0.007
Week 8	08/03/21	0.006	0.008
Week 9	08/10/21	<0.005	0.005
Week 10	08/17/21	0.009	0.008
Week 11	08/24/21	0.010	0.006
Week 12	08/31/21	0.010	0.007
Week 13	09/07/21	0.010	0.010
Week 14	09/14/21	0.012	0.010
Week 15	09/21/21	0.013	0.011
Week 16	09/28/21	0.018	0.013
Week 17	10/05/21	0.016	0.015
Week 18	10/12/21	<0.005	0.012
Week 19	10/19/21	<0.005	0.008
Week 20	10/26/21	0.007	0.006
Week 21	11/02/21	0.010	0.004
Week 22	11/09/21	0.014	0.008
Week 23	11/16/21	0.006	0.009
Week 24	11/23/21	0.005	0.009
Week 25	11/30/21	0.007	0.008
Week 26	12/07/21	0.010	0.007
Week 27	12/14/21	0.014	0.009
Week 28	12/21/21	0.015	0.012
Week 29	12/28/21	0.028	0.017
Week 30	01/04/22	0.030	0.022
Week 31	01/11/22	0.053	0.032
Week 32	01/18/22	0.036	0.037
Week 33	01/27/22	0.029	0.037
Week 34	02/02/22	0.027	0.036
Week 35	02/09/22	0.034	0.031
Week 36	02/15/22	0.023	0.028
Week 37	02/22/22	0.025	0.027
Week 38	03/01/22	0.014	0.024

Sample	Date	001B Eff (µg/L)	4-week avg (µg/L)
Original	06/01/21	0.015	--
Confirmation	06/09/21	0.018	--
Week 1	06/18/21	0.008	--
Week 2	06/23/21	0.010	--
Week 3	06/29/21	0.015	--
Week 4	07/06/21	0.008	0.010
Week 5	07/13/21	0.014	0.012
Week 6	07/20/21	0.016	0.014
Week 7	07/27/21	0.018	0.014
Week 8	08/03/21	0.017	0.016
Week 9	08/10/21	<0.005	0.013
Week 10	08/17/21	0.014	0.012
Week 11	08/24/21	0.015	0.011
Week 12	08/31/21	0.018	0.012
Week 13	09/07/21	0.015	0.015
Week 14	09/14/21	0.017	0.016
Week 15	09/21/21	0.018	0.017
Week 16	09/28/21	0.018	0.017
Week 17	10/05/21	0.022	0.018
Week 18	10/12/21	<0.005	0.014
Week 19	10/19/21	0.005	0.011
Week 20	10/26/21	0.006	0.008
Week 21	11/02/21	0.011	0.006
Week 22	11/09/21	0.011	0.008
Week 23	11/16/21	0.011	0.010
Week 24	11/23/21	<0.005	0.008
Week 25	11/30/21	0.006	0.007
Week 26	12/07/21	0.009	0.006
Week 27	12/14/21	0.011	0.006
Week 28	12/21/21	0.013	0.010
Week 29	12/28/21	0.014	0.012
Week 30	01/04/22	0.037	0.019
Week 31	01/11/22	0.037	0.025
Week 32	01/18/22	0.029	0.029
Week 33	01/25/22	0.032	0.034
Week 34	02/01/22	0.026	0.031
Week 35	02/08/22	0.027	0.029
Week 36	02/15/22	0.018	0.026
Week 37	02/22/22	0.020	0.023
Week 38	03/01/22	0.018	0.021



Sample	Date	RW Blend (µg/L)	4-week avg (µg/L)
Week 39	03/08/22	0.014	0.019
Week 40	03/15/22	0.021	0.019
Week 41	03/22/22	0.021	0.017
Week 42	03/29/22	0.020	0.019
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

Sample	Date	001B Eff (µg/L)	4-week avg (µg/L)
Week 39	03/08/22	0.016	0.018
Week 40	03/15/22	0.017	0.018
Week 41	03/22/22	0.017	0.017
Week 42	03/29/22	0.018	0.017
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



- 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. 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 RWQCB 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. At the time of reporting, IEUA is still awaiting comments from the DDW and RWQCB.

#### 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.

The PFOA results from 3Q19 to 2Q22 and a chart of PFOA results are shown below:

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Original	09/18/19	6.5	--
Confirmation	--	--	--
Week 1	10/24/19	7.8	--
Week 2	10/29/19	11	--
Week 3	11/12/19	13	--
Week 4	11/12/19	13	11
Week 5	11/19/19	11	12
Week 6	11/26/19	12	12
Week 7	12/03/19	10	12
Week 8	12/10/19	11	11
Week 9	12/17/19	10	11
Week 10	12/26/19	8.7	9.9
Week 11	12/31/19	9.5	9.8
Week 12	01/09/20	9.1	9.3
Week 13	01/14/20	12	9.8
Week 14	01/21/20	10	10
Week 15	01/28/20	11	11
Week 16	02/04/20	14	12
Continued	03/19/20	13	12
Continued	03/26/20	12	13
Continued	04/02/20	14	13
Continued	04/07/20	13	13
Continued	04/14/20	12	13
Continued	04/21/20	14	13
Continued	04/28/20	12	13
Continued	05/05/20	18	13
Continued	05/12/20	14	14
Continued	05/19/20	8.9	15
Continued	05/26/20	10	13
Continued	06/02/20	12	13
Continued	06/09/20	12	11
Continued	06/16/20	10	11
Continued	06/23/20	12	11
Continued	06/30/20	12	12
Continued	07/07/20	12	12
Continued	07/14/20	9.1	12

Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Original	08/28/19	6.2	--
Confirmation	--	--	--
Week 1	10/24/19	6.9	--
Week 2	10/29/19	6.3	--
Week 3	11/06/19	8.6	--
Week 4	11/12/19	7.8	7.4
Week 5	11/19/19	7.7	7.6
Week 6	11/26/19	7.3	7.9
Week 7	12/03/19	9.0	8.0
Week 8	12/10/19	11	8.8
Week 9	12/17/19	7.0	8.6
Week 10	12/24/19	6.4	8.4
Week 11	12/31/19	6.0	7.6
Week 12	01/09/20	6.1	6.4
Week 13	01/14/20	5.6	6.0
Week 14	01/21/20	5.0	5.9
Week 15	02/06/20	18	8.7
Week 16	02/20/20	7.2	9.0
Continued	03/17/20	8.6	9.7
Continued	03/24/20	7.4	10
Continued	03/31/20	7.2	7.6
Continued	04/07/20	8.4	7.9
Continued	04/14/20	7.6	7.7
Continued	04/21/20	8.1	7.8
Continued	04/28/20	7.8	8.0
Continued	05/05/20	8.5	8.0
Continued	05/12/20	7.3	7.9
Continued	05/19/20	7.5	7.8
Continued	05/26/20	6.8	7.5
Continued	06/02/20	7.1	7.2
Continued	06/09/20	6.9	7.1
Continued	06/16/20	7.2	7.0
Continued	06/23/20	7.2	7.1
Continued	06/30/20	8.2	7.4
Continued	07/07/20	7.2	7.5
Continued	07/14/20	6.4	7.3

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Continued	07/21/20	8.6	10
Continued	07/28/20	10	9.9
Continued	08/04/20	7.8	8.9
Continued	08/11/20	8.7	8.8
Continued	08/18/20	8.3	8.7
Continued	08/25/20	8.6	8.4
Continued	09/01/20	11	9.2
Continued	09/08/20	12	10
Continued	09/15/20	13	11
Continued	09/22/20	8.7	11
Continued	09/29/20	8.7	11
Continued	10/06/20	13	11
Continued	10/13/20	15	12
Continued	10/20/20	11	13
Continued	10/28/20	12	13
Continued	11/03/20	14	13
Continued	11/11/20	8.5	11
Continued	11/17/20	12	12
Continued	11/24/20	12	12
Continued	12/01/20	13	11
Continued	12/08/20	18	14
Continued	12/15/20	13	14
Continued	12/22/20	12	14
Continued	12/29/20	19	16
Continued	01/05/21	12	14
Continued	01/12/21	9.4	13
Continued	01/26/21	14	14
Continued	02/02/21	14	12
Continued	02/09/21	16	13
Continued	02/16/21	15	15
Continued	02/23/21	12	14
Continued	03/02/21	14	14
Continued	03/09/21	12	13
Continued	03/16/21	13	13
Continued	04/06/21	12	11
Continued	04/20/21	14	11
Continued	04/13/21	8.1	11
Continued	04/27/21	11	11
Continued	05/03/21	11	11
Continued	05/11/21	10	10

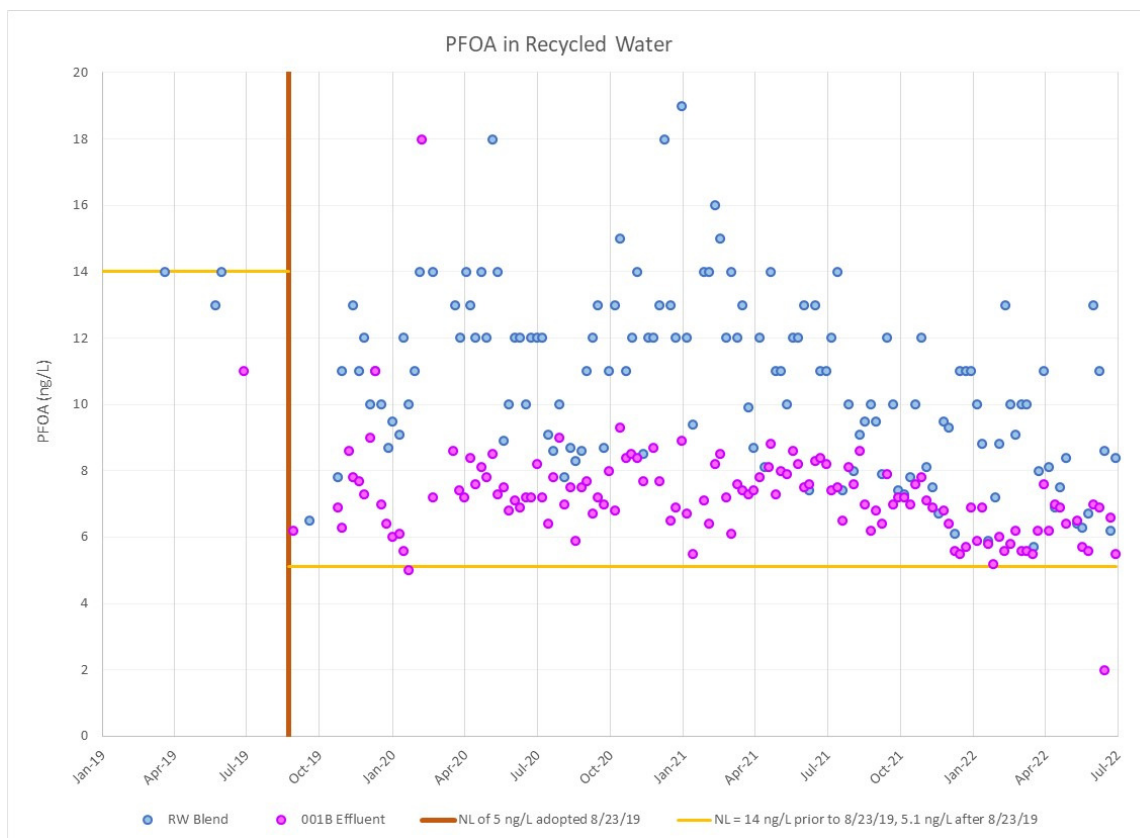
Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Continued	07/21/20	7.8	7.4
Continued	07/28/20	9.0	7.6
Continued	08/04/20	7.0	7.6
Continued	08/11/20	7.5	7.8
Continued	08/18/20	5.9	7.4
Continued	08/25/20	7.5	7.0
Continued	09/01/20	7.7	7.2
Continued	09/08/20	6.7	7.0
Continued	09/15/20	7.2	7.3
Continued	09/22/20	7.0	7.2
Continued	09/29/20	8.0	7.2
Continued	10/06/20	6.8	7.3
Continued	10/13/20	9.3	7.8
Continued	10/20/20	8.4	8.1
Continued	10/27/20	8.5	8.3
Continued	11/03/20	8.4	8.7
Continued	11/11/20	7.7	8.3
Continued	11/24/20	8.7	8.3
Continued	12/01/20	7.7	8.1
Continued	12/08/20	8.2	8.1
Continued	12/15/20	6.5	7.8
Continued	12/22/20	6.9	7.3
Continued	12/29/20	8.9	7.6
Continued	01/05/21	6.7	7.3
Continued	01/12/21	5.5	7.0
Continued	01/26/21	7.1	7.1
Continued	02/02/21	6.4	6.4
Continued	02/09/21	8.2	6.8
Continued	02/16/21	8.5	7.6
Continued	02/23/21	7.2	7.6
Continued	03/02/21	6.1	7.5
Continued	03/09/21	7.6	7.4
Continued	03/16/21	7.4	7.1
Continued	03/23/21	7.3	7.1
Continued	04/06/21	7.8	7.5
Continued	04/20/21	8.8	7.8
Continued	04/13/21	8.1	8.0
Continued	04/27/21	7.3	8.0
Continued	05/03/21	8.0	8.1
Continued	05/11/21	7.9	7.8

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Continued	05/18/21	12	11
Continued	05/25/21	12	11
Continued	06/01/21	13	12
Continued	06/08/21	7.4	11
Continued	06/15/21	13	11
Continued	06/22/21	11	11
Continued	06/29/21	11	11
Continued	07/06/21	12	12
Continued	07/13/21	14	12
Continued	07/20/21	7.4	11
Continued	07/27/21	10	11
Continued	08/03/21	8.0	10
Continued	08/10/21	9.1	8.6
Continued	08/17/21	9.5	9.2
Continued	08/24/21	10	9.2
Continued	08/31/21	9.5	10
Continued	09/07/21	7.9	9.2
Continued	09/14/21	12	10
Continued	09/21/21	10	10
Continued	09/28/21	7.4	9.3
Continued	10/05/21	7.3	9.2
Continued	10/12/21	7.8	8.1
Continued	10/19/21	10	8.1
Continued	10/26/21	12	9.3
Continued	11/02/21	8.1	9.5
Continued	11/09/21	7.5	9.4
Continued	11/17/21	6.7	8.6
Continued	11/23/21	9.5	8.0
Continued	11/30/21	9.3	8.3
Continued	12/07/21	6.1	7.9
Continued	12/14/21	11	9.0
Continued	12/21/21	11	9.4
Continued	12/28/21	11	9.8
Continued	01/04/22	10	11
Continued	01/11/22	8.8	10
Continued	01/18/22	5.9	8.9
Continued	01/27/22	7.2	8.0
Continued	02/02/22	8.8	7.7
Continued	02/09/22	13	8.7
Continued	02/15/22	10	9.8

Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Continued	05/18/21	8.6	8.0
Continued	05/25/21	8.2	8.2
Continued	06/01/21	7.5	8.1
Continued	06/08/21	7.6	8.0
Continued	06/15/21	8.3	7.9
Continued	06/22/21	8.4	8.0
Continued	06/29/21	8.2	8.1
Continued	07/06/21	7.4	8.1
Continued	07/13/21	7.5	7.9
Continued	07/20/21	6.5	7.4
Continued	07/27/21	8.1	7.4
Continued	08/03/21	7.6	7.4
Continued	08/10/21	8.6	7.7
Continued	08/17/21	7.0	7.8
Continued	08/24/21	6.2	7.4
Continued	08/31/21	6.8	7.2
Continued	09/07/21	6.4	6.6
Continued	09/14/21	7.9	6.8
Continued	09/21/21	7.0	7.0
Continued	09/28/21	7.2	7.1
Continued	10/05/21	7.2	7.3
Continued	10/12/21	7.0	7.1
Continued	10/19/21	7.6	7.3
Continued	10/26/21	7.8	7.4
Continued	11/02/21	7.1	7.4
Continued	11/09/21	6.9	7.4
Continued	11/17/21	7.1	7.2
Continued	11/23/21	6.8	7.0
Continued	11/30/21	6.4	6.8
Continued	12/07/21	5.6	6.5
Continued	12/14/21	5.5	6.1
Continued	12/21/21	5.7	5.8
Continued	12/28/21	6.9	5.9
Continued	01/04/22	5.9	6.0
Continued	01/11/22	6.9	6.4
Continued	01/18/22	5.8	6.4
Continued	01/25/22	5.2	6.0
Continued	02/01/22	6.0	6.0
Continued	02/08/22	5.6	5.7
Continued	02/15/22	5.8	5.7

Sample	Date	RW Blend (ng/L)	4-week avg (ng/L)
Continued	02/22/22	9.1	10
Continued	03/01/22	10	11
Continued	03/08/22	10	9.8
Continued	03/17/22	5.7	8.7
Continued	03/23/22	8.0	8.4
Continued	03/29/22	11	8.7
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	0.0	4.9
Continued	06/21/22	6.6	5.1
Continued	06/28/22	5.5	4.8

Sample	Date	001B Eff (ng/L)	4-week avg (ng/L)
Continued	02/22/22	6.2	5.9
Continued	03/01/22	5.6	5.8
Continued	03/08/22	5.6	5.8
Continued	03/15/22	5.5	5.7
Continued	03/22/22	6.2	5.7
Continued	03/29/22	7.6	6.2
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





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## **B. Recycled Water: Basin and Lysimeter Samples**

Total organic carbon (TOC) and nitrogen species sampling and analyses are 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. EC is also measured and reported to assist in identifying the presence of recycled water at various depths in the vadose zone. Basin and lysimeter water quality results from 2Q22 are summarized in Table 2-5a. The table includes surface water and lysimeter data at the 25-foot depth for Brooks and Declez Basin. Most compliance sampling for TOC and TN of the recycled water at each basin is analyzed using alternative monitoring plans (Section 2.C) and not lysimeter data. Currently, the only lysimeter monitoring data used to assess compliance is at Brooks (TN only) and Declez Basins. There were no exceedances of TN and TOC limits at Brooks and Declez Basins based on sampling at the surface lysimeter and/or the lysimeter at 25-ft bgs. Please note that as part of the Compliance Assessment Report comments, the DDW has requested that the TN limit of 10 mg/L be met at the recycled water and not using lysimeter data or an alternative monitoring reduction factor. The recycled water monitoring has met the TN compliance for 2Q22 as demonstrated in Table 2-1.

## **C. Recycled Water: Alternative Monitoring Plans for TOC and TN**

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
- 7<sup>th</sup> & 8<sup>th</sup> 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 2Q22, there were no exceedances of TOC and TN at the basins that have implemented 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 2-5b. 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. However, due to ongoing work with the Regional Board, the alternative monitoring using the reduction factor will continue to be reported for the Regional Board.

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.”

#### **D. 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<sup>st</sup> and 4<sup>th</sup> quarters) and local runoff is sampled during the dry season (2<sup>nd</sup> and 3<sup>rd</sup> 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 2Q22, diluent water quality sampling of three local runoff sites were conducted. Table 2-7a lists the results of the local runoff and stormwater sampling and analyses. The maximum level to trigger a source water evaluation has been exceeded for the notification level for PFOA and PFOS. 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.

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## E. 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<sup>th</sup> & 8<sup>th</sup> Street, Brooks, 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 2Q22 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 2Q22, the following constituents were detected above the MCLs:

### Primary MCL Exceedance

- NO<sub>3</sub>-N samples collected from monitoring wells at RP3, 7<sup>th</sup> & 8<sup>th</sup> Street, Brooks, and Ely were detected above the primary MCL of 10 mg/L. The NO<sub>3</sub>-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<sub>3</sub>-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<sub>3</sub>-N concentrations are comparable to the ambient NO<sub>3</sub>-N concentration in groundwater for each monitoring well's respective groundwater management zone within the Chino Basin.

### Secondary MCL Exceedances

- Turbidity was higher than the secondary MCL of 5 NTU at RP3-1/1, 8TH-1/2, 8TH-2/2, BRK-1/1, and SSV-2.
- Manganese was higher than the secondary MCL of 50 µg/L at RP3-1/1 and DCZ-1/1.
- Odor was higher than the secondary MCL of 3 TON at Alcoa MW1.
- TDS and EC were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in Southridge JHS. The TDS was exceeded at Alcoa MW3. 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](http://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)
7 <sup>th</sup> & 8 <sup>th</sup> 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

### 3. Recharge Operations

IEUA's GWR staff records the daily volumes of water routed to the recharge basins. The 7<sup>th</sup> & 8<sup>th</sup> Street, Banana, Brooks, Declez, Hickory, Ely, RP3, San Sevaine, Turner, 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 2Q22: 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 2Q22; and 8TH-1/1 was out of service due to a collapsed bladder that will be purchased during 3Q22.

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

Watermaster has certified that there was no reported pumping of groundwater in 2Q22 for domestic or municipal use from the buffer zones that extend 500 feet and 6 months underground travel time from the 7<sup>th</sup> & 8<sup>th</sup> Street, Banana, Brooks, Declez, Ely, Hickory, RP3, San Sevaine, Turner, and Victoria Basins. In fact, there are no domestic or municipal production wells within the buffer zones of these aforementioned recharge sites.

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

If a proposed well falls within an abutting parcel, SBCDEHS will review the well location using maps of the basins and buffer zones. If the well falls too near the buffer zone boundary for SBCDEHS to determine the relationship of the proposed well location to the buffer boundary, SBCDEHS will defer to IEUA for a prompt field review of the proposed well location. The field review may include contacting and having the well applicant identify the exact location of the proposed well casing. To conduct a detailed field

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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 within a 500-foot buffer zone.

## **6. MVWD ASR Project**

Reporting for the Monte Vista Water District (MVWD) Aquifer Storage and Recovery (ASR) project was allowed by the 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 no injection during the last year from 3Q21 to 2Q22. 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 3Q21 to 2Q22.

Table 2-1a  
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for April 2022  
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC <sup>7</sup>	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>
Limits	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240
04/01/22	0.7	7.0				7.1	749			<1	0.5	5.7				7.1	714			<1
04/02/22	0.7	7.1				7.0	777			1	0.5	6.0				7.1	715			<1
04/03/22	0.7	7.5	5.1	5.1	5.1	7.0	768	464	155	1	0.5	6.2	3.3	4.1	3.3	7.1	711	434	141	<1
04/04/22	0.7	7.5				7.0	757			4	0.6	6.6				7.0	712			<1
04/05/22	0.6	7.5				7.0	761			<1	0.6	6.7				7.0	709			<1
04/06/22	0.6	6.9	4.6		4.6	6.9	759			<1	0.6	6.3	3.8		3.8	7.0	697			<1
04/07/22	0.6	7.6				6.9	797			<1	0.5	6.1				7.0	695			1
04/08/22	0.7	7.2				7.0	778			<1	0.6	5.9				7.0	697			<1
04/09/22	0.6	7.2				7.0	781			1	0.7	6.2				7.0	708			<1
04/10/22	0.6	7.3	5.0	5.0	5.0	7.0	786	460		<1	0.8	6.4	2.2	3.0	2.2	7.1	708	424		<1
04/11/22	0.6	7.4				6.9	743			<1	0.8	6.3				7.2	753			<1
04/12/22	0.6	7.7				6.9	752			<1	0.7	6.2				7.2	757			<1
04/13/22	0.6	7.3	5.0		5.0	7.0	760			<1	0.7	5.8	2.3		2.3	7.1	753			<1
04/14/22	0.6	7.6				7.0	777			<1	0.7	5.8				7.1	742			<1
04/15/22	0.7	7.8				7.0	785			<1	0.7	5.5				7.1	740			<1
04/16/22	0.7	8.9				7.0	778			<1	0.7	5.6				7.1	732			<1
04/17/22	0.7	7.8	3.7	3.7	3.7	7.0	761	452		<1	1.3	6.1	1.4	2.1	1.4	7.1	734	430		<1
04/18/22	0.7	8.1				7.0	756			<1	0.7	6.0				7.2	730			<1
04/19/22	0.8	8.7				7.0	790			<1	0.7	6.3				7.2	735			1
04/20/22	0.9	8.5	4.7		4.7	7.0	815			<1	0.7	6.0	2.7		2.8	7.2	723			<1
04/21/22	1.0	8.8				7.0	790			<1	0.7	5.7				7.2	728			<1
04/22/22	1.0	8.2				7.1	782			<1	0.7	5.6				7.3	723			<1
04/23/22	1.0	8.3				7.0	784			<1	0.7	5.7				7.2	729			<1
04/24/22	0.8	8.5	5.3	5.3	5.3	7.0	777	470		<1	0.7	5.8	2.6	3.5	2.6	7.2	730	448		<1
04/25/22	0.6	8.1				7.0	769			20	0.6	5.7				7.2	729			<1
04/26/22	0.7	8.0				7.0	792			1	0.6	6.0				7.2	732			<1
04/27/22	0.7	7.5	5.0		5.0	7.0	840			1	0.6	5.6	3.6		3.6	7.2	731			<1
04/28/22	0.7	7.3				7.0	849			<1	0.6	5.5				7.2	801			<1
04/29/22	0.7	6.6				7.0	852			<1	0.5	5.1				7.2	726			<1
04/30/22	0.8	6.8				7.0	851			<1	0.4	5.5				7.2	724			<1
Avg	0.7	7.7	4.8	4.8	4.8	7.0	784	462	155	<2	0.7	5.9	2.7	3.2	2.8	7.1	727	434	141	<1
Min	0.6	6.6	3.7	3.7	3.7	6.9	743	452	155	<1	0.4	5.1	1.4	2.1	1.4	7.0	695	424	141	<1
Max	1.0	8.9	5.3	5.3	5.3	7.1	852	470	155	20	1.3	6.7	3.8	4.1	3.8	7.3	801	448	141	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.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> DDW limit is 10 mg/L, TN compliance met in RW / RWQCB limit is 5 mg/L, TN compliance met at a point prior to reaching the regional groundwater table, including lysimeters, or reduction factors

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



Table 2-1b  
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for May 2022  
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC <sup>7</sup>	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>
Limits	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL	NTU	mg/L	mg/L	mg/L	mg/L	unit	µhmo/cm	mg/L	mg/L	mpn/100mL
	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240
05/01/22	0.8	7.0	5.1	6.1	5.1	7.0	834	466		<1	0.4	5.5	3.2	4.2	3.3	7.2	723	428	156	<1
05/02/22	0.7	7.1				7.0	791			<1	0.4	5.7				7.2	729			<1
05/03/22	0.6	6.9				6.9	759			<1	0.5	5.7				7.2	729			<1
05/04/22	0.6	6.5	4.7		4.7	6.9	760		159	<1	0.5	5.3	4.4		4.4	7.2	730			<1
05/05/22	0.6	6.3				6.9	774			1	0.5	5.3				7.2	735			<1
05/06/22	0.6	6.5				7.0	787			1	0.5	5.2				7.2	733			<1
05/07/22	0.7	6.3				6.9	828			<1	0.5	5.3				7.2	742			<1
05/08/22	0.7	6.3	5.2	6.2	5.2	6.9	846	452		1	0.5	5.4	2.7	3.4	2.7	7.3	739	444		<1
05/09/22	0.6	6.5				6.9	832			<1	0.5	5.6				7.2	752			<1
05/10/22	0.6	6.5				7.0	774			<1	0.5	5.6				7.2	755			<1
05/11/22	0.7	6.6	5.2		5.2	7.0	787			1	0.5	5.5	3.8		3.8	7.1	744			1
05/12/22	0.8	6.3				7.0	757			<1	0.5	5.6				7.1	729			<1
05/13/22	0.8	6.2				7.0	764			<1	0.5	5.3				7.1	740			<1
05/14/22	0.7	6.4				7.0	798			1	0.4	5.4				7.1	791			<1
05/15/22	0.7	6.4	4.0			7.0	782	442		<1	0.4	5.6	2.6	3.3	2.6	7.2	732	434		<1
05/16/22	0.7	6.8	4.5	5.5	4.5	7.0	769			<1	0.5	5.8				7.2	733			<1
05/17/22	0.7	7.3				6.9	835			<1	0.5	5.9				7.2	741			<1
05/18/22	0.7	6.8	4.1		4.1	7.0	854			2	0.5	5.7	3.9		3.9	7.2	744			<1
05/19/22	0.8	6.9				7.0	858			<1	0.5	5.7				7.2	744			<1
05/20/22	0.7	6.5				7.0	863			<1	0.5	5.4				7.2	748			<1
05/21/22	0.7	6.6				7.0	890			<1	0.5	5.4				7.2	753			<1
05/22/22	0.7	6.7	4.5	5.5	4.5	7.0	866	472		<1	0.5	5.8	2.1	3.0	2.1	7.2	747	462		<1
05/23/22	0.8	6.9				6.9	876			1	0.6	5.7				7.2	749			<1
05/24/22	0.8	7.0				6.9	904			<1	0.6	5.7				7.2	747			<1
05/25/22	0.8	7.0	4.1		4.1	6.9	835			<1	0.6	5.6	2.6		2.6	7.2	743			1
05/26/22	0.8	6.8				7.0	781			<1	0.6	5.6				7.2	744			<1
05/27/22	0.8	6.6				7.0	842			<1	0.5	5.6				7.2	743			<1
05/28/22	0.8	6.7				7.0	832			18.7	0.6	5.7				7.2	746			<1
05/29/22	0.8	6.8				7.0	803			<1	0.6	5.6				7.2	750			<1
05/30/22	0.8	6.6	5.9	6.9	5.9	7.0	779	462		<1	0.6	6.0	3.1	4.1	3.1	7.2	751	460		<1
05/31/22	0.8	6.9				7.0	769			<1	0.6	6.1				7.2	753			<1
Avg	0.7	6.7	4.7	6.0	4.8	7.0	814	459	159	<2	0.5	5.6	3.2	3.6	3.2	7.2	743	446	156	<1
Min	0.6	6.2	4.0	5.5	4.1	6.9	757	442	159	<1	0.4	5.2	2.1	3.0	2.1	7.1	723	428	156	<1
Max	0.8	7.3	5.9	6.9	5.9	7.0	904	472	159	19	0.6	6.1	4.4	4.2	4.4	7.3	791	462	156	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.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> DDW limit is 10 mg/L, TN compliance met in RW / RWQCB limit is 5 mg/L, TN compliance met at a point prior to reaching the regional groundwater table, including lysimeters, or reduction factors

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

Table 2-1c  
Recycled Water Monitoring: RP-1 & RP-4 Effluent Water Quality for June 2022  
(Recycled Water Quality Specifications A.5, A.7, A.8, & A.9)

Unit	RP-1 Effluent										RP-4 Effluent									
	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC <sup>7</sup>	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>	Turbidity <sup>1,2,7</sup>	TOC	NO <sub>3</sub> -N	TN	TIN <sup>3</sup>	pH <sup>7</sup>	EC	TDS <sup>3</sup>	Hardness	Coliform <sup>1,2,4</sup>
Limits	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240	2.5;10	16 <sup>5</sup>		10 / 5 <sup>6</sup>		6<pH<9				2.2;23;240
06/01/22	0.7	6.7	5.1		5.1	7.0	763			<1	0.5	5.8	2.8		2.8	7.1	756			<1
06/02/22	0.7	6.6				7.1	772			1	0.5	5.8				7.1	751			<1
06/03/22	0.7	6.3				6.9	836			2	0.4	5.4				7.2	747			<1
06/04/22	0.8	7.3				7.1	796			1	0.4	5.5				7.2	747			<1
06/05/22	0.8	6.7	5.8	5.8	5.8	7.0	807	466	149	1	0.3	5.7	3.5	4.2	3.6	7.1	750	418	135	<1
06/06/22	0.7	7.1				7.0	839			<1	0.4	5.8				7.1	751			<1
06/07/22	0.7	6.5				7.1	719			1	0.4	5.8				7.2	755			<1
06/08/22	0.9	6.8	4.7		4.7	7.1	799			<1	0.4	5.6	3.3		3.4	7.2	755			<1
06/09/22	0.9	6.5				7.0	827			2	0.4	5.6				7.1	754			<1
06/10/22	1.0	6.3				7.0	811			<1	0.4	5.2				7.1	749			<1
06/11/22	1.1	6.3				7.0	786			<1	0.4	5.4				7.1	744			<1
06/12/22	1.2	5.8	5.3	5.3	5.3	7.0	766	476		<1	0.4	5.4	3.1	4.0	3.1	7.2	743	424		<1
06/13/22	0.8	6.3				7.0	772			<1	0.4	5.6				7.2	752			<1
06/14/22	0.6	6.3				7.1	771			<1	0.4	5.6				7.2	758			<1
06/15/22	0.7	5.9	3.8		3.8	7.1	798			<1	0.4	5.5	3.1		3.1	7.2	749			<1
06/16/22	0.7	6.0				7.1	796			<1	0.4	5.5				7.2	745			<1
06/17/22	0.7	5.6				7.1	809			<1	0.4	5.4				7.2	748			<1
06/18/22	0.7	5.9				7.1	809			<1	0.4	5.6				7.2	755			<1
06/19/22	0.6	5.9	5.0	5.0	5.0	7.1	809	444		<1	0.5	5.5	3.0	3.9	3.0	7.2	755	430		<1
06/20/22	0.7	6.0				7.0	798			<1	0.5	5.6				7.2	756			<1
06/21/22	0.7	6.2				7.0	804			1	0.6	5.8				7.2	761			<1
06/22/22	0.7	6.0	5.1		5.1	7.0	791			1	0.5	5.6	2.7		2.8	7.2	762			<1
06/23/22	0.7	6.1				7.0	846			<1	0.5	5.6				7.2	769			<1
06/24/22	0.6	6.0				7.0	803			<1	0.5	5.3				7.2	784			<1
06/25/22	0.6	5.8				7.0	858			<1	0.5	5.4				7.2	779			<1
06/26/22	0.6	5.8	5.1	5.1	5.1	7.1	766	464		<1	0.5	5.8	1.4	2.4	1.4	7.2	782			<1
06/27/22	0.6	6.1				7.0	749			<1	0.5	5.9				7.2	776			<1
06/28/22	0.6	6.1				7.0	866			<1	0.5	5.7				7.3	744			<1
06/29/22	0.5	6.1	3.5		3.5	7.0	1007			<1	0.5	5.5	2.2		2.3	7.3	766	438		<1
06/30/22	0.5	5.9				7.0	1016			<1	0.5	5.4				7.3	653			<1
Avg	0.7	6.2	4.8	5.3	4.8	7.0	813	463	149	<1	0.4	5.6	2.8	3.6	2.8	7.2	753	428	135	<1
Min	0.5	5.6	3.5	5.0	3.5	6.9	719	444	149	<1	0.3	5.2	1.4	2.4	1.4	7.1	653	418	135	<1
Max	1.2	7.3	5.8	5.8	5.8	7.1	1016	476	149	2	0.6	5.9	3.5	4.2	3.6	7.3	784	438	135	<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.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> DDW limit is 10 mg/L, TN compliance met in RW / RWQCB limit is 5 mg/L, TN compliance met at a point prior to reaching the regional groundwater table, including lysimeters, or reduction factors

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

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

	TIN		TDS	
Date	Monthly	12-Mo. Run Avg.	Monthly	12-Mo. Run Avg.
Jul-21	4.7	4.4	498	490
Aug-21	4.1	4.3	497	491
Sep-21	4.3	4.4	486	492
Oct-21	3.6	4.3	483	492
Nov-21	4.4	4.3	486	493
Dec-21	4.1	4.3	493	494
Jan-22	4.5	4.3	485	494
Feb-22	4.2	4.3	479	492
Mar-22	4.5	4.4	468	489
Apr-22	4.8	4.4	491	489
May-22	5.1	4.4	487	488
Jun-22	4.5	4.4	479	486
Avg	4.4	4.4	486	491
Min	3.6	4.3	468	486
Max	5.1	4.4	498	494
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	3Q21	4Q21	1Q22	2Q22	4Q Run. Avg. <sup>1</sup>	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	107	82	135	82	101	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	19	15	27	14	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	<2	2	<2	<2	50	µg/L	EPA 200.8
Chromium VI <sup>2</sup>	0.3	0.3	0.4	0.4	0.34	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	3	2	2	4	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-Dichloropropane	<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	0.6	0.6	<0.5	<0.5	0.6	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 <sup>3</sup>	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 <sup>3</sup>	µg/L	EPA 524.2
1,2,3-Trichloropropane (added 7/2017)	see 3Q21 text	see 4Q21 text	see 1Q22 text	see 2Q22 text	<0.005	0.005	µg/L	CASRL 524M-TCP
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	NA	<0.1	2	µg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	NA	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	<1	4	4	6	4	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	NA	<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	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	NA	<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	3Q21	4Q21	1Q22	2Q22	4Q Run. Avg. <sup>1</sup>	Limit	Unit	Method
Ethylene Dibromide	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	µg/L	EPA 504.1
Glyphosate	<6	<6	<6	<6	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	NA	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	NA	<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	<0.01	<0.01	NA	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	NA	<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	<0.04	<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	NA	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	NA	<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	NA	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	2.9	2.9	3.5	3.5	3.2	1300	µg/L	EPA 200.8
Lead	<0.5	1.0	<0.5	<0.5	<0.6	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	<500	<1000	<1000	<1000	<1000	20,000	pCi/L	EPA 906
Strontium-90	<0.364	<0.94	<2	<2	<3	8	pCi/L	EPA 905
Gross Beta Particle Activity	14	12	14	14	13	50	pCi/L	EPA 900.0
Uranium	<1	<1	<1	<1	<1	20	pCi/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals								
Aluminum	107	82	135	82	101	200	µg/L	EPA 200.8
Copper	2.9	2.9	3.5	3.5	3.2	1000	µg/L	EPA 200.8
Corrosivity	0.3 (Non-Cor.)	-0.6 (Non-Cor.)	-0.1 (Non-Cor.)	-0.2 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) <sup>4</sup>	<0.1	<0.1	<0.1	0.1	<0.1	0.5	mg/L	S5540C/EPA 425.1
Iron <sup>4</sup>	81	87	68	74	73	300	µg/L	EPA 200.7
Manganese	16	11	11	4	11	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	2	2	NR	NR	2	3	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	<0.25	<0.25	100	µg/L	EPA 200.8
Thiobencarb	<0.2	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	41	30	65	36	43	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease <sup>5</sup>	<1	1	<5	<1	--	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<1	<1	<1	<1	<1	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Alternative Compliance Point Data	DCZ2-LYS-25	DCZ2-LYS-25	SSV-2	8TH-LYS-25	<==TTHMs			
	DCZ2-LYS-25	DCZ2-LYS-25	SSV-2	8TH-LYS-25	<==HAA5			
Alternative Compliance Point Data	3Q21	4Q21	1Q22	2Q22				
	3Q21	4Q21	1Q22	2Q22				
Total Trihalomethanes (TTHMs)	<2	<2	87	4	24	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 available at time of reporting

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> The sum of m,p-Xylene and o-Xylene is used to calculate compliance for the Total Xylenes limit

<sup>4</sup> 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.

<sup>5</sup> 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	3Q21	4Q21	1Q22	2Q22	4Q Run. Avg. <sup>1</sup>	Limit	Unit	Method
Inorganic Chemicals								
Aluminum	131	150	90	64	109	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	14	20	17	11	16	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	0.6	1.0	0.6	0.8	0.8	50	µg/L	EPA 200.8
Chromium VI <sup>2</sup>	0.3	0.2	0.3	0.4	0.3	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	4	3	4	4	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-Dichloropropane	<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	1.6	<0.5	<0.5	<0.8	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 <sup>3</sup>	µg/L	EPA 524.2
o-Xylene	<0.5	<0.5	<0.5	<0.5	<0.5	1750 <sup>3</sup>	µg/L	EPA 524.2
1,2,3-Trichloropropane (added 7/2017)	see 3Q21 text	see 4Q21 text	see 1Q22 text	see 2Q22 text	<0.005	0.005	µg/L	CASRL 524M-TCP
Non-Volatile Synthetic Organic Chemicals (SOCs)								
Alachlor (Alanex)	<0.1	<0.1	<0.1	NA	<0.1	2	µg/L	EPA 505
Atrazine	<0.05	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	<0.5	<0.5	18	µg/L	EPA 515.4
Benzo(a)pyrene	<0.02	<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	NA	<0.1	0.1	µg/L	EPA 505
2,4-D	<0.1	<0.1	<0.1	<0.1	<0.1	70	µg/L	EPA 515.4
Dalapon	5	4	3	4	4	200	µg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	µg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.6	<0.5	<0.5	<0.5	<0.6	400	µg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.6	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	<0.2	<0.2	7	µg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	<0.4	<0.4	20	µg/L	EPA 549.2
Endothall	<5	<5	<5	<5	<5	100	µg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	NA	<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	3Q21	4Q21	1Q22	2Q22	4Q Run. Avg. <sup>1</sup>	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	NA	<6	700	µg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	NA	<0.01	0.01	µg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	NA	<0.01	0.01	µg/L	EPA 505
Hexachlorobenzene	<0.05	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.05	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	NA	<0.01	0.2	µg/L	EPA 505
Methoxychlor	<0.05	<0.05	<0.05	NA	<0.05	30	µg/L	EPA 505
Molinate	<0.1	<0.5	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	<0.04	<0.04	<0.04	<0.04	<0.04	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	NA	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	NA	<0.1	0.5	µg/L	EPA 505
Simazine	<0.05	<0.5	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.2	<0.5	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	NA	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Action Level Chemicals								
Copper	4.8	2.6	3.2	3.2	3.5	1300	µg/L	EPA 200.8
Lead	<0.5	<0.5	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides								
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	<500	<1000	<1000	<1000	<1000	20,000	pCi/L	EPA 906
Strontium-90	<0.396	<0.429	<2	<2	<3	8	pCi/L	EPA 905
Gross Beta Particle Activity	32	14	15	8	17	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	131	150	90	64	109	200	µg/L	EPA 200.8
Copper	4.8	2.6	3.2	3.2	3.5	1000	µg/L	EPA 200.8
Corrosivity	-0.2 (Non-Cor.)	-0.4 (Non-Cor.)	0.1 (Non-Cor.)	0.3 (Non-Cor.)	Non-Cor.	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS) <sup>4</sup>	0.1	<0.1	<0.1	0.1	0.1	0.5	mg/L	S5540C/EPA 425.1
Iron <sup>4</sup>	<150	<150	<150	<150	47	300	µg/L	EPA 200.7
Manganese	7	9	6	4	7	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	3	8	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	<0.2	<0.5	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	40	38	41	38	39	5000	µg/L	EPA 200.8
Miscellaneous Regulated Constituents								
Oil & Grease <sup>5</sup>	<1	<1	<5	<1	--	1	mg/L	EPA 1664
Disinfection Byproducts								
Bromate	<1	<1	<1	<1	<1	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 available at time of reporting

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> The sum of m,p-Xylene and o-Xylene is used to calculate compliance for the Total Xylenes limit

<sup>4</sup> 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.

<sup>5</sup> 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	2Q22	Unit	Method	Constituent	2Q22	Unit	Method
Volatile Organic Chemicals (VOCs)				Base/Neutral Extractibles			
Acrolein	NR	µg/L	EPA 624	Phenanthrene	NR	µg/L	EPA 625
Acrylonitrile	NR	µg/L	EPA 624	Pyrene	NR	µg/L	EPA 625
Bromoform	<0.5	µg/L	EPA 524.2/624	Pesticides			
Chlorodibromomethane	3.8	µg/L	EPA 524.2/624	Aldrin	NR	µg/L	EPA 505/525/608
Chloroethane	<0.5	µg/L	EPA 524.2/624	BHC, alpha isomer	NR	µg/L	EPA 525/608
2-Chloroethylvinylether	NR	µg/L	EPA 524.2/624	BHC, beta isomer	NR	µg/L	EPA 525/608
Chloroform	96	µg/L	EPA 524.2/624	BHC, delta isomer	NR	µg/L	EPA 525/608
Dichlorobromomethane	25	µg/L	EPA 524.2/624	4,4'-DDT	NR	µg/L	EPA 525/608
Methyl Bromide	<0.5	µg/L	EPA 524.2/624	4,4'-DDE	NR	µg/L	EPA 525/608
Methyl Chloride	<0.5	µg/L	EPA 524.2/624	4,4'-DDD	NR	µg/L	EPA 525/608
Acid Extractibles				Dieldrin	NR	µg/L	EPA 505/525/608
2-Chlorophenol	NR	µg/L	EPA 625	Endosulfan I	NR	µg/L	EPA 525/608
2,4-Dichlorophenol	NR	µg/L	EPA 625	Endosulfan II	NR	µg/L	EPA 525/608
2,4-Dimethylphenol	NR	µg/L	EPA 625	Endosulfan Sulfate	NR	µg/L	EPA 525/608
2-Methyl-4,6-dinitrophenol	NR	µg/L	EPA 625	Chemicals w/ State Notification Levels (NLs)			NL
2,4-Dinitrophenol	NR	µg/L	EPA 625	Boron	0.3	mg/L	EPA 200.7
2-Nitrophenol	NR	µg/L	EPA 625	n-butylbenzene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	NR	µg/L	EPA 625	sec-butylbenzene	<0.5	µg/L	EPA 524.2
4-Chloro-3-methylphenol	NR	µg/L	EPA 625	tert-butylbenzene	<0.5	µg/L	EPA 524.2
Phenol	NR	µg/L	EPA 625	Carbon disulfide	<0.5	µg/L	EPA 524.2
2,4,6-Trichlorophenol	NR	µg/L	EPA 625	Chlorate* (RW Blend / 8TH-LYS-25)	389 / 361	µg/L	EPA 300.0
Base/Neutral Extractibles				2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthene	NR	µg/L	EPA 625	4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthylene	NR	µg/L	EPA 625	Diazinon	<0.5	µg/L	EPA 525.2
Anthracene	NR	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
Benzidine	NR	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Benzo(a)anthracene	NR	µg/L	EPA 625	Ethylene glycol	<5	mg/L	EPA 8015B
Benzo(b)fluoranthene	NR	µg/L	EPA 625	Formaldehyde	47	µg/L	EPA 556
Benzo(g,h,i)perylene	NR	µg/L	EPA 625	HMX	<0.2	µg/L	EPA 8330B
Benzo(k)fluoranthene	NR	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2
Bis(2-chloroethoxy)methane	NR	µg/L	EPA 625	Manganese	4	µg/L	EPA 200.8
Bis(2-chloroethyl)ether	NR	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
Bis(2-chloroisopropyl)ether	NR	µg/L	EPA 625	Naphthalene	<0.5	µg/L	EPA 525.2/524.2
4-Bromophenyl phenyl ether	NR	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521
Butyl benzyl phthalate	NR	µg/L	EPA 625	N-Nitrosodimethylamine (NDMA)	3.5	ng/L	EPA 521
2-Chloronaphthalene	NR	µg/L	EPA 625	N-Nitrosodi-n-propylamine (NDPA)	<2	ng/L	EPA 521
4-Chlorophenyl phenyl ether	NR	µg/L	EPA 625	Perfluorooctanesulfonic acid (PFOS)	<2.0	ng/L	EPA 537.1
Chrysene	NR	µg/L	EPA 625	Perfluorooctanoic acid (PFOA)**	see report text	ng/L	EPA 537.1
Dibenzo(a,h)anthracene	NR	µg/L	EPA 625	Perfluorobutanesulfonic acid (PFBS)	<2.0	ng/L	EPA 537.1
1,3-Dichlorobenzene	NR	µg/L	EPA 625	Propachlor	<0.5	µg/L	EPA 525.2
3,3-Dichlorobenzidine	NR	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2
Diethyl phthalate	NR	µg/L	EPA 625	RDX	<0.2	µg/L	EPA 8330B
Dimethyl phthalate	NR	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	EPA 524.2
Di-n-butyl phthalate	NR	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2
2,4-Dinitrotoluene	NR	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
2,6-Dinitrotoluene	NR	µg/L	EPA 625	2,4,6-Trinitrotoluene	<0.1	µg/L	EPA 8330B
Di-n-octyl phthalate	NR	µg/L	EPA 625	Vanadium	<5	µg/L	EPA 200.8
Azobenzene	NR	µg/L	EPA 625	Health-based and performance indicator CECs for Surface Application			RP3-1/1
Fluoranthene	NR	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Fluorene	NR	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	3.5	ng/L	EPA 521
Hexachlorobutadiene	NR	µg/L	EPA 625	N-Nitrosomorpholine	13	ng/L	EPA 521
Hexachlorocyclopentadiene	NR	µg/L	EPA 625	Perfluorooctanesulfonic acid (PFOS)	<2.0	ng/L	EPA 537.1
Hexachloroethane	NR	µg/L	EPA 625	Perfluorooctanoic acid (PFOA)	see report text	ng/L	EPA 537.1
Indeno(1,2,3-cd)pyrene	NR	µg/L	EPA 625	Gemfibrozil	<5	ng/L	LC-MS-MS
Isophorone	NR	µg/L	EPA 625	Iohexol	18000	ng/L	LC-MS-MS
Naphthalene	NR	µg/L	EPA 625	Sucralose	100000	ng/L	LC-MS-MS
Nitrobenzene	NR	µg/L	EPA 625	Sulfamethoxazole	<5	ng/L	LC-MS-MS
N-Nitroso-di-n-propylamine	NR	µg/L	EPA 625	ER-α (RW Blend / RP3-1/1)	<0.5 (DNQ)	ng/L	Trussell Tech
N-Nitrosodiphenylamine	NR	µg/L	EPA 625	AhR (method pending approval)	--	ng/L	Trussell Tech

NR: Not Required (Annual Requirement, Phase II FOF, Attachment 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

DNQ - Does not quantify

Table 2-4b

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

Constituent	2Q22	Unit	Method	Constituent	2Q22	Unit	Method
Volatile Organic Chemicals (VOCs)				Base/Neutral Extractibles			
Acrolein	<2	µg/L	EPA 624	Phenanthrene	<5	µg/L	EPA 625
Acrylonitrile	<0.25	µg/L	EPA 624	Pyrene	<10	µg/L	EPA 625
Bromoform	<0.5	µg/L	EPA 524.2/624	Pesticides			
Chlorodibromomethane	2.7	µg/L	EPA 524.2/624	Aldrin	NR	µg/L	EPA 505/608
Chloroethane	<0.5	µg/L	EPA 524.2/624	BHC, alpha isomer	NR	µg/L	EPA 525/608
2-Chloroethylvinylether	NR	µg/L	EPA 524.2/624	BHC, beta isomer	NR	µg/L	EPA 525/608
Chloroform	65	µg/L	EPA 524.2/624	BHC, delta isomer	NR	µg/L	EPA 525/608
Dichlorobromomethane	17	µg/L	EPA 524.2/624	4,4'-DDT	NR	µg/L	EPA 525/608
Methyl Bromide	<0.5	µg/L	EPA 524.2/624	4,4'-DDE	NR	µg/L	EPA 525/608
Methyl Chloride	<0.5	µg/L	EPA 524.2/624	4,4'-DDD	NR	µg/L	EPA 525/608
Acid Extractibles				Dieldrin	NR	µg/L	EPA 505/608
2-Chlorophenol	<5	µg/L	EPA 625	Endosulfan I	NR	µg/L	EPA 525/608
2,4-Dichlorophenol	<5	µg/L	EPA 625	Endosulfan II	NR	µg/L	EPA 525/608
2,4-Dimethylphenol	<2	µg/L	EPA 625	Endosulfan Sulfate	NR	µg/L	EPA 525/608
2-Methyl-4,6-dinitrophenol	<5	µg/L	EPA 625	Chemicals w/ State Notification Levels (NLs)			
2,4-Dinitrophenol	<5	µg/L	EPA 625	Boron	0.3	mg/L	EPA 200.7
2-Nitrophenol	<10	µg/L	EPA 625	n-butylbenzene	<0.5	µg/L	EPA 524.2
4-Nitrophenol	<10	µg/L	EPA 625	sec-butylbenzene	<0.5	µg/L	EPA 524.2
4-Chloro-3-methylphenol	<1	µg/L	EPA 625	tert-butylbenzene	<0.5	µg/L	EPA 524.2
Phenol	<1	µg/L	EPA 625	Carbon disulfide	<0.5	µg/L	EPA 524.2
2,4,6-Trichlorophenol	<10	µg/L	EPA 625	Chlorate* (001B Eff / 8TH-LYS-25)	403 / 361	µg/L	EPA 300.0
Base/Neutral Extractibles				2-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthene	<1	µg/L	EPA 625	4-Chlorotoluene	<0.5	µg/L	EPA 524.2
Acenaphthylene	<10	µg/L	EPA 625	Diazinon	<0.5	µg/L	EPA 525.2
Anthracene	<10	µg/L	EPA 625	Dichlorodifluoromethane (Freon 12)	<0.5	µg/L	EPA 524.2
Benzidine	<5	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Benzo(a)anthracene	<5	µg/L	EPA 625	Ethylene glycol	<50	mg/L	EPA 8015B
Benzo(b)fluoranthene	<10	µg/L	EPA 625	Formaldehyde	36	µg/L	EPA 556
Benzo(g,h,i)perylene	<5	µg/L	EPA 625	HMX	<0.2	µg/L	EPA 8330B
Benzo(k)fluoranthene	<10	µg/L	EPA 625	Isopropylbenzene	<0.5	µg/L	EPA 524.2
Bis(2-chloroethoxy)methane	<5	µg/L	EPA 625	Manganese	7	µg/L	EPA 200.8
Bis(2-chloroethyl)ether	<1	µg/L	EPA 625	Methyl isobutyl ketone (MIBK)	<2	µg/L	EPA 524.2
Bis(2-chloroisopropyl)ether	<2	µg/L	EPA 625	Naphthalene	<0.5	µg/L	EPA 524.2
4-Bromophenyl phenyl ether	<5	µg/L	EPA 625	N-Nitrosodiethylamine (NDEA)	<2	ng/L	EPA 521
Butyl benzyl phthalate	<10	µg/L	EPA 625	N-Nitrosodimethylamine (NDMA)	2.4	ng/L	EPA 521
2-Chloronaphthalene	<10	µg/L	EPA 625	N-Nitrosodi-n-propylamine (NDPA)	<2	ng/L	EPA 521
4-Chlorophenyl phenyl ether	<5	µg/L	EPA 625	Perfluorooctanesulfonic acid (PFOS)	<2.0	ng/L	EPA 537.1
Chrysene	<10	µg/L	EPA 625	Perfluorooctanoic acid (PFOA) **	see report text	ng/L	EPA 537.1
Dibenzo(a,h)anthracene	<10	µg/L	EPA 625	Perfluorobutanesulfonic acid (PFBS)	<2.0	ng/L	EPA 537.1
1,3-Dichlorobenzene	<1	µg/L	EPA 625	Propachlor	<0.5	µg/L	EPA 525.2
3,3-Dichlorobenzidine	<5	µg/L	EPA 625	N-propylbenzene	<0.5	µg/L	EPA 524.2
Diethyl phthalate	<2	µg/L	EPA 625	RDX	<0.2	µg/L	EPA 8330B
Dimethyl phthalate	<2	µg/L	EPA 625	Tertiary butyl alcohol	<2	µg/L	EPA 524.2
Di-n-butyl phthalate	<10	µg/L	EPA 625	1,2,4-trimethylbenzene	<0.5	µg/L	EPA 524.2
2,4-Dinitrotoluene	<5	µg/L	EPA 625	1,3,5-trimethylbenzene	<0.5	µg/L	EPA 524.2
2,6-Dinitrotoluene	<5	µg/L	EPA 625	2,4,6-Trinitrotoluene	<0.1	µg/L	EPA 8330B
Di-n-octyl phthalate	<10	µg/L	EPA 625	Vanadium	5	µg/L	EPA 200.8
Azobenzene	<10	µg/L	EPA 625	Health-based and performance indicator CECs for Surface Application			
Fluoranthene	<1	µg/L	EPA 625	1,4 - Dioxane	<1	µg/L	EPA 522
Fluorene	<10	µg/L	EPA 625	N-nitrosodimethylamine (NDMA)	2.4	ng/L	EPA 521
Hexachlorobutadiene	<1	µg/L	EPA 625	N-Nitrosomorpholine	10	ng/L	EPA 521
Hexachlorocyclopentadiene	<5	µg/L	EPA 625	Perfluorooctanesulfonic acid (PFOS)	<2.0	ng/L	EPA 537.1
Hexachloroethane	<1	µg/L	EPA 625	Perfluorooctanoic acid (PFOA)	see report text	ng/L	EPA 537.1
Indeno(1,2,3-cd)pyrene	<10	µg/L	EPA 625	Gemfibrozil	<5	ng/L	LC-MS-MS
Isophorone	<1	µg/L	EPA 625	Iohexol	20000	ng/L	LC-MS-MS
Naphthalene	<1	µg/L	EPA 625	Sucralose	91000	ng/L	LC-MS-MS
Nitrobenzene	<1	µg/L	EPA 625	Sulfamethoxazole	5	ng/L	LC-MS-MS
N-Nitroso-di-n-propylamine	<5	µg/L	EPA 625	ER-α	<0.5 (DNQ)	ng/L	Trussell Tech
N-Nitrosodiphenylamine	<5	µg/L	EPA 625	AhR (method pending approval)	--	ng/L	Trussell Tech

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

\*Pursuant to the GRP 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

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

Brooks Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	TN*	TIN	NO <sub>3</sub> -N	TKN+NO <sub>2</sub> -N	NO <sub>2</sub> -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
BRK-LYS-00	0	04/27/22	7.83	2.7	1.2	1.2	1.5	<0.01	468
BRK-LYS-00	0	05/26/22	7.44	2.1	1.0	1.0	1.1	<0.01	482
BRK-LYS-00	0	06/22/22	8.43	1.8	0.3	0.3	1.5	<0.01	472
BRK-LYS-25	25	04/27/22	2.53	<0.6	<0.2	<0.1	<0.5	<0.01	537
BRK-LYS-25	25	05/26/22	3.70	<0.6	<0.2	<0.1	<0.5	<0.01	561
Declez Basin									
Site	Depth, bgs	Date	TOC (Limit = 16 mg/L)	TN*	TIN	NO <sub>3</sub> -N	TKN+NO <sub>2</sub> -N	NO <sub>2</sub> -N	EC
Unit==>	feet	mm/dd/yy	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µmho/cm
DCZ2-LYS-00	0	04/13/22	10.53	2.8	0.9	0.7	2.0	0.19	390
DCZ2-LYS-00	0	04/26/22	11.03	1.4	0.2	0.1	1.3	0.09	360
DCZ2-LYS-00	0	05/12/22	15.13	1.9	<0.2	<0.1	1.9	<0.01	580
DCZ2-LYS-00	0	05/25/22	9.9	1.4	0.3	0.3	1.1	<0.01	641
DCZ2-LYS-00	0	06/08/22	10.1	1.4	<0.2	<0.1	1.4	<0.01	631
DCZ2-LYS-25	25	04/13/22	2.73	<0.6	<0.2	<0.1	<0.5	<0.01	584
DCZ2-LYS-25	25	04/26/22	2.80	<0.6	<0.2	<0.1	<0.5	<0.01	593
DCZ2-LYS-25	25	05/12/22	2.67	<0.6	<0.2	<0.1	<0.5	<0.01	570
DCZ2-LYS-25	25	05/25/22	2.53	<0.6	<0.2	<0.1	<0.5	<0.01	550
DCZ2-LYS-25	25	06/08/22	3.37	<0.6	<0.2	<0.1	<0.5	<0.01	545

Table 2-5b  
Alternative Monitoring Plans

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
04/05/22	6.57	4.0	4.3	1.31	2.1	2.3
04/12/22	7.00	4.2	4.1	1.40	2.2	2.2
04/19/22	6.80	3.6	3.9	1.36	1.9	2.1
04/26/22	7.30	5.1	4.3	1.46	2.7	2.3
05/03/22	6.33	4.5	4.8	1.27	2.4	2.5
05/10/22	6.50	6.4	5.5	1.30	3.4	2.9
05/17/22	6.30	4.2	5.3	1.26	2.2	2.8
05/24/22	6.27	3.9	4.0	1.25	2.1	2.1
05/31/22	6.37	4.5	4.2	1.27	2.4	2.2
06/07/22	6.27	4.8	4.7	1.25	2.6	2.5
06/14/22	6.10	4.7	4.8	1.22	2.5	2.5
06/21/22	5.87	4.5	4.6	1.17	2.4	2.4
06/28/22	5.77	3.6	4.0	1.15	1.9	2.1

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)
04/05/22	6.57	4.0	4.3	1.25	2.9	3.1
04/12/22	7.00	4.2	4.1	1.33	3.1	3.0
04/19/22	6.80	3.6	3.9	1.29	2.6	2.8
04/26/22	7.30	5.1	4.3	1.39	3.7	3.2
05/03/22	6.33	4.5	4.8	1.20	3.3	3.5
05/10/22	6.50	6.4	5.5	1.24	4.7	4.0
05/17/22	6.30	4.2	5.3	1.20	3.1	3.9
05/24/22	6.27	3.9	4.0	1.19	2.8	2.9
05/31/22	6.37	4.5	4.2	1.21	3.3	3.1
06/07/22	6.27	4.8	4.7	1.19	3.5	3.4
06/14/22	6.10	4.7	4.8	1.16	3.5	3.5
06/21/22	5.87	4.5	4.6	1.12	3.3	3.4
06/28/22	5.77	3.6	4.0	1.10	2.6	2.9

Turner Basin						
Date	RW Blend*	RW Blend*	Turner 1 & 2	Turner 3 & 4	Turner 1 & 2 Turner 3 & 4	Turner 1 & 2 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)
04/05/22	6.57	4.0	1.97	0.99	0.5	0.6
04/12/22	7.00	4.1	2.10	1.05	0.5	0.5
04/19/22	6.80	3.9	2.04	1.02	0.5	0.5
04/26/22	7.30	4.3	2.19	1.10	0.6	0.5
05/03/22	6.33	4.8	1.90	0.95	0.6	0.6
05/10/22	6.50	5.5	1.95	0.98	0.7	0.7
05/17/22	6.30	5.3	1.89	0.95	0.7	0.7
05/24/22	6.27	4.0	1.88	0.94	0.5	0.6
05/31/22	6.37	4.2	1.91	0.96	0.5	0.5
06/07/22	6.27	4.7	1.88	0.94	0.6	0.6
06/14/22	6.10	4.8	1.83	0.92	0.6	0.6
06/21/22	5.87	4.6	1.76	0.88	0.6	0.6
06/28/22	5.77	4.0	1.73	0.87	0.5	0.5

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)
04/04/22	7.53	6.0	5.9	1.81	2.9	2.8
04/11/22	7.27	5.7	5.8	1.74	2.7	2.8
04/18/22	7.83	5.0	5.3	1.88	2.4	2.6
04/25/22	8.47	6.6	5.8	2.03	3.2	2.8
05/02/22	7.00	6.1	6.4	1.68	2.9	3.1
05/09/22	6.33	5.6	5.9	1.52	2.7	2.8
05/17/22	6.77	5.4	5.5	1.62	2.6	2.6
05/23/22	6.70	5.3	5.4	1.61	2.6	2.6
05/31/22	6.63	6.5	5.9	1.59	3.1	2.9
06/06/22	6.70	6.6	6.6	1.61	3.2	3.2
06/13/22	5.83	6.3	6.4	1.40	3.0	3.1
06/20/22	5.93	5.8	6.0	1.42	2.8	2.9
06/27/22	5.80	5.6	5.7	1.39	2.7	2.7

\*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 2-5b  
Alternative Monitoring Plans

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)
04/05/22	6.57	4.0	4.3	0.79	2.7	2.9
04/12/22	7.00	4.2	4.1	0.84	2.9	2.8
04/19/22	6.80	3.6	3.9	0.82	2.5	2.7
04/26/22	7.30	5.1	4.3	0.88	3.5	3.0
05/03/22	6.33	4.5	4.8	0.76	3.1	3.3
05/10/22	6.50	6.4	5.5	0.78	4.4	3.8
05/17/22	6.30	4.2	5.3	0.76	2.9	3.6
05/24/22	6.27	3.9	4.0	0.75	2.7	2.8
05/31/22	6.37	4.5	4.2	0.76	3.1	2.9
06/07/22	6.27	4.8	4.7	0.75	3.3	3.2
06/14/22	6.10	4.7	4.8	0.73	3.3	3.3
06/21/22	5.87	4.5	4.6	0.70	3.1	3.2
06/28/22	5.77	3.6	4.0	0.69	2.5	2.8

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)
04/05/22	6.57	4.0	4.3	0.79	1.0	1.0
04/12/22	7.00	4.2	4.1	0.84	1.1	1.0
04/19/22	6.80	3.6	3.9	0.82	0.9	1.0
04/26/22	7.30	5.1	4.3	0.88	1.3	1.1
05/03/22	6.33	4.5	4.8	0.76	1.1	1.2
05/10/22	6.50	6.4	5.5	0.78	1.6	1.4
05/17/22	6.30	4.2	5.3	0.76	1.0	1.3
05/24/22	6.27	3.9	4.0	0.75	1.0	1.0
05/31/22	6.37	4.5	4.2	0.76	1.1	1.0
06/07/22	6.27	4.8	4.7	0.75	1.2	1.2
06/14/22	6.10	4.7	4.8	0.73	1.2	1.2
06/21/22	5.87	4.5	4.6	0.70	1.1	1.2
06/28/22	5.77	3.6	4.0	0.69	0.9	1.0

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)
04/05/22	6.57	4.0	4.3	1.45	0.7	0.8
04/12/22	7.00	4.2	4.1	1.54	0.8	0.7
04/19/22	6.80	3.6	3.9	1.50	0.6	0.7
04/26/22	7.30	5.1	4.3	1.61	0.9	0.8
05/03/22	6.33	4.5	4.8	1.39	0.8	0.9
05/10/22	6.50	6.4	5.5	1.43	1.2	1.0
05/17/22	6.30	4.2	5.3	1.39	0.8	1.0
05/24/22	6.27	3.9	4.0	1.38	0.7	0.7
05/31/22	6.37	4.5	4.2	1.40	0.8	0.8
06/07/22	6.27	4.8	4.7	1.38	0.9	0.8
06/14/22	6.10	4.7	4.8	1.34	0.9	0.9
06/21/22	5.87	4.5	4.6	1.29	0.8	0.8
06/28/22	5.77	3.6	4.0	1.27	0.6	0.7

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)
04/05/22	6.57	4.0	4.3	2.50	0.4	0.4
04/12/22	7.00	4.2	4.1	2.66	0.4	0.4
04/19/22	6.80	3.6	3.9	2.58	0.3	0.3
04/26/22	7.30	5.1	4.3	2.77	0.5	0.4
05/03/22	6.33	4.5	4.8	2.41	0.4	0.4
05/10/22	6.50	6.4	5.5	2.47	0.6	0.5
05/17/22	6.30	4.2	5.3	2.39	0.4	0.5
05/24/22	6.27	3.9	4.0	2.38	0.3	0.4
05/31/22	6.37	4.5	4.2	2.42	0.4	0.4
06/07/22	6.27	4.8	4.7	2.38	0.4	0.4
06/14/22	6.10	4.7	4.8	2.32	0.4	0.4
06/21/22	5.87	4.5	4.6	2.23	0.4	0.4
06/28/22	5.77	3.6	4.0	2.19	0.3	0.3

\*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 2-5b  
Alternative Monitoring Plans

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)
04/05/22	6.57	4.0	4.3	0.53	2.6	2.6
04/12/22	7.00	4.2	4.1	0.56	2.8	2.7
04/19/22	6.80	3.6	3.9	0.54	2.4	2.6
04/26/22	7.30	5.1	4.3	0.58	3.4	2.9
05/03/22	6.33	4.5	4.8	0.51	3.0	3.2
05/10/22	6.50	6.4	5.5	0.52	4.2	3.6
05/17/22	6.30	4.2	5.3	0.50	2.8	3.5
05/24/22	6.27	3.9	4.0	0.50	2.6	2.7
05/31/22	6.37	4.5	4.2	0.51	3.0	2.8
06/07/22	6.27	4.8	4.7	0.50	3.2	3.2
06/14/22	6.10	4.7	4.8	0.49	3.1	3.1
06/21/22	5.87	4.5	4.6	0.47	3.0	3.0
06/28/22	5.77	3.6	4.0	0.46	2.4	2.4

Brooks Basin			
Date	BRK-LYS-00	BRK-LYS-00	BRK-LYS-00
	TOC (mg/L)	TN (mg/L)	EC (µmhos/cm)
04/27/22	7.83	2.7	468
05/26/22	7.44	2.1	482
06/22/22	8.43	1.8	472

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
04/27/22	2.5	<0.1	<0.1 537
05/26/22	3.7	<0.1	<0.1 561
June 2022 - basin down for maintenance			

Date	BRK-1/1	BRK-1/1
	TOC* (mg/L)	TN (mg/L)
Limit==>	16 mg/L	
04/27/22	<0.3	2.9
05/25/22	<0.3	2.2
06/22/22	<0.3	1.8

\*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 (Jun 2022)	RWC <sub>Avg</sub> (Jun 2022)	TOC <sub>Avg</sub> Limit* (mg/L)	April 2022 TOC <sub>Avg</sub> (mg/L)	May 2022 TOC <sub>Avg</sub> (mg/L)	Jun 2022 TOC <sub>Avg</sub> (mg/L)	2Q22 TN Limit**	Recharged Water Monitoring Plan
7 <sup>th</sup> & 8 <sup>th</sup> Street	Sep-07	Dec-10	05/23/11	50%	178	25%	2.0	0.8	0.8	0.7	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 88% and TN reduction of 75%
Banana	Jul-05	Jan-06	10/27/06	50%	204	34%	1.5	1.4	1.3	1.2	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 80% and TN reduction of 47%
Brooks	Aug-08	Dec-09	07/29/10	50%	167	14%	3.6	<0.3	<0.3	<0.3	Met	Alternative monitoring: <u>Monthly</u> 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. <u>Monthly</u> 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%	79	8%	6.3	2.6	2.4	2.3	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 62% and TN reduction of 91%
Ely	RW initiated Sep-99	NA	NA	50%	274	26%	1.9	1.9	1.6	1.5	Met	Alternative monitoring: <u>Weekly</u> RP-1 RW sample with TOC reduction of 76% and TN reduction of 52%
Hickory	Sep-05	Feb-06	02/15/07	50%	202	20%	2.5	1.3	1.2	1.1	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 81% and TN reduction of 27%
RP3	Jun-09	Jun-10	12/15/10	50%	157	23%	2.2	0.8	0.8	0.7	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 88% and TN reduction of 31%
San Sevaine 1-3	Aug-20	Sep-21	02/08/22	50%	23	13%	3.8	0.6	0.5	0.5	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 92% and TN reduction of 34%
Turner 1&2	Dec-06	May-07	07/03/08	24%	187	24%	2.1	2.1	1.9	1.8	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 70%; TN reduction of 87%
Turner 3&4	Dec-06	May-07	07/03/08	45%	187	26%	1.9	1.0	1.0	0.9	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 85%; TN reduction of 87%
Victoria	Sep-10	Jul-11	02/08/12	50%	142	27%	1.9	1.5	1.4	1.3	Met	Alternative monitoring: <u>Weekly</u> RW Blend with TOC reduction of 78% and TN reduction of 82%

SUP - Start-Up Period

\*TOC<sub>Avg</sub> limit is 0.5 mg/L divided by the RWC<sub>Avg</sub>. Compliance is determined by checking that monthly TOC<sub>Avg</sub> does not exceed the TOC<sub>Avg</sub> limit. If the TOC<sub>Avg</sub> limit is exceeded, the monthly TOC<sub>Avg</sub> will be shown in bold font.

\*\*TN limit is 5 mg/L on a two-sample average.

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

Constituent	Local Runoff Cucamonga & Deer Creek @ Turner 1&2 Basins 05/31/22	Local Runoff Deer Creek @ Turner 3&4 Basins 05/31/22	Local Runoff West Cucamonga Creek @ Ely Basins 06/01/22	Max Level to Trigger Source Water Evaluation	Unit	Method
NO <sub>2</sub> -N	0.07	<0.05	<0.05	1	mg/L	EPA 300.0
NO <sub>3</sub> -N	1.7	0.12	0.3	10	mg/L	EPA 300.0
TDS	266	286	228	1000	mg/L	SM 2540C
Total Coliform	>1600	540	>1600	-	mpn/100ml	SM 9221B
Oil & Grease	0.8	<0.8	1.6	-	mg/L	EPA 1664A
<b>Inorganic Chemicals</b>						
Aluminum	35	41	<25	1000	μg/L	EPA 200.7
Antimony	<1	<1	<1	6	μg/L	EPA 200.8
Arsenic	<2	<2	<2	10	μg/L	EPA 200.8
Asbestos	<1.1	<1.1	<5.3	7	MFL	EPA 100.2
Barium	43	46	32	1000	μg/L	EPA 200.7
Beryllium	<0.5	<0.5	<0.5	4	μg/L	EPA 200.7
Cadmium	<0.25	<0.25	<0.25	5	μg/L	EPA 200.7
Chromium	2.0	2.0	1.3	50	μg/L	EPA 200.7
Chromium VI	1.3	1.7	0.9	10	μg/L	EPA 218.6
Cyanide	<20	<20	<20	150	μg/L	ASTM D7284/OIA-1677
Fluoride	0.4	0.3	0.3	2	mg/L	SM 4500-F C
Mercury	<0.5	<0.5	<0.5	2	μg/L	EPA 245.2
Nickel	2	2	1	100	μg/L	EPA 200.7
Perchlorate	<2	<2	<2	6	μg/L	EPA 314
Selenium	<2	<2	<2	50	μg/L	EPA 200.8
Thallium	<1	<1	<1	2	μg/L	EPA 200.8
<b>Volatile Organic Chemicals (VOCs)</b>						
Benzene	<0.5	<0.5	<0.5	1	μg/L	EPA 524.2
Carbon Tetrachloride	<0.5	<0.5	<0.5	0.5	μg/L	EPA 524.2
1,2-Dichlorobenzene	<0.5	<0.5	<0.5	600	μg/L	EPA 524.2
1,4-Dichlorobenzene	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
1,1-Dichloroethane	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
1,2-Dichloroethane	<0.5	<0.5	<0.5	0.5	μg/L	EPA 524.2
1,1-Dichloroethylene	<0.5	<0.5	<0.5	6	μg/L	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	<0.5	<0.5	6	μg/L	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	<0.5	<0.5	10	μg/L	EPA 524.2
Dichloromethane	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
1,2-Dichloropropane	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
1,3-Dichloropropene	<0.5	<0.5	<0.5	0.5	μg/L	EPA 524.2
Ethylbenzene	<0.5	<0.5	<0.5	300	μg/L	EPA 524.2
Chlorobenzene	<0.5	<0.5	<0.5	70	μg/L	EPA 524.2
Methyl Tert-butyl ether (MTBE)	<0.5	<0.5	<0.5	13	μg/L	EPA 524.2
Styrene	<0.5	<0.5	<0.5	100	μg/L	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	<0.5	<0.5	1	μg/L	EPA 524.2
Tetrachloroethylene	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
Toluene	<0.5	<0.5	<0.5	150	μg/L	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
1,1,1-Trichloroethane	<0.5	<0.5	<0.5	200	μg/L	EPA 524.2
1,1,2-Trichloroethane	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
Trichloroethylene	<0.5	<0.5	<0.5	5	μg/L	EPA 524.2
Trichlorofluoromethane	<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	1200	μg/L	EPA 524.2
Vinyl Chloride	<0.5	<0.5	<0.5	0.5	μg/L	EPA 524.2
Total Xylenes	<0.5	<0.5	<0.5	1750	μg/L	EPA 524.2
1,2,3-Trichloropropane	<0.005	<0.005	<0.005	0.005	μg/L	CASRL 524M-TCP
<b>Non-Volatile Synthetic Organic Chemicals (SOCs)</b>						
Alachlor (Alanex)	<0.1	<0.1	<0.1	2	μg/L	EPA 505
Atrazine	<0.5	<0.5	<0.5	1	μg/L	EPA 525.2
Bentazon	<0.5	<0.5	<0.5	18	μg/L	EPA 515.4
Benzo(a)pyrene	<0.1	<0.1	<0.1	0.2	μg/L	EPA 525.2
Carbofuran	<0.5	<0.5	<0.5	18	μg/L	EPA 531.2
Chlordane	<0.1	<0.1	<0.1	0.1	μg/L	EPA 505
2,4-D	0.6	0.7	<0.1	70	μg/L	EPA 515.4
Dalapon	<1	<1	<1	200	μg/L	EPA 515.4
Dibromochloropropane	<0.01	<0.01	<0.01	0.2	μg/L	EPA 504.1
Di(2-ethylhexyl)adipate	<0.5	<0.5	<0.5	400	μg/L	EPA 525.2
Di(2-ethylhexyl)phthalate	<0.5	<0.5	<0.5	4	μg/L	EPA 525.2
Dinoseb	<0.2	<0.2	<0.2	7	μg/L	EPA 515.4
Diquat	<0.4	<0.4	<0.4	20	μg/L	EPA 549.2
Endothall	<5	<5	<5	100	μg/L	EPA 548.1
Endrin	<0.01	<0.01	<0.01	2	μg/L	EPA 505
Ethylene Dibromide	<0.01	<0.01	<0.01	0.05	μg/L	EPA 504.1
Glyphosate	<6	9	<6	700	μg/L	EPA 547
Heptachlor	<0.01	<0.01	<0.01	0.01	μg/L	EPA 505
Heptachlor Epoxide	<0.01	<0.01	<0.01	0.01	μg/L	EPA 505
Hexachlorobenzene	<0.5	<0.5	<0.5	1	μg/L	EPA 525.2
Hexachlorocyclopentadiene	<0.5	<0.5	<0.5	50	μg/L	EPA 525.2
Lindane	<0.01	<0.01	<0.01	0.2	μg/L	EPA 505

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

Constituent	Local Runoff Cucamonga & Deer Creek @ Turner 1&2 Basins 05/31/22	Local Runoff Deer Creek @ Turner 3&4 Basins 05/31/22	Local Runoff West Cucamonga Creek @ Ely Basins 06/01/22	Max Level to Trigger Source Water Evaluation	Unit	Method
Methoxychlor	<0.05	<0.05	<0.05	30	µg/L	EPA 505
Molinate	<0.5	<0.5	<0.5	20	µg/L	EPA 525.2
Oxamyl	<0.5	<0.5	<0.5	50	µg/L	EPA 531.2
Pentachlorophenol	0.07	<0.04	0.07	1	µg/L	EPA 515.4
Picloram	<0.1	<0.1	<0.1	500	µg/L	EPA 515.4
PCB 1016	<0.08	<0.08	<0.08	0.5	µg/L	EPA 505
PCB 1221	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1232	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1242	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1248	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1254	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
PCB 1260	<0.1	<0.1	<0.1	0.5	µg/L	EPA 505
Simazine	<0.5	<0.5	<0.5	4	µg/L	EPA 525.2
Thiobencarb	<0.5	<0.5	<0.5	70	µg/L	EPA 525.2
Toxaphene	<0.5	<0.5	<0.5	3	µg/L	EPA 505
2,3,7,8-TCDD (Dioxin)	<5	<5	<5	30	pg/L	EPA 1613
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	50	µg/L	EPA 515.4
Disinfection Byproducts						
Total Trihalomethanes (TTHMs)	<2	<2	<2	80	µg/L	EPA 524.2/624
Total Haloacetic Acids (HAA5)	21	<2	8	60	µg/L	SM 6251B
Bromate	9	<1	<1	10	µg/L	EPA 300.1/317
Chlorite	<0.01	<0.01	<0.01	1	mg/L	EPA 300.0
Action Level Chemicals						
Copper	11	10	4	1300	µg/L	EPA 200.7
Lead	<0.5	<0.5	<0.5	15	µg/L	EPA 200.8
Radionuclides						
Combined Radium-226 & Radium 228	<3	5	<3	5	pCi/L	EPA 903.0
Gross Alpha Particle Activity	<3	5	<3	15	pCi/L	EPA 900.0/SM7110C
Tritium	<500	<1000	<1000	20,000	pCi/L	EPA 906.0
Strontium-90	<2	<2	<2	8	pCi/L	EPA 905.0
Gross Beta Particle Activity	<4	4	<3	50	pCi/L	EPA 900.0
Uranium	1	<1	<1	20	pCi/L	EPA 200.8
Chemicals w/ State Notification Levels						
Boron	0.1	<0.1	0.1	1	mg/L	EPA 200.7
n-butylbenzene	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
sec-butylbenzene	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
tert-butylbenzene	<0.5	<0.5	<0.5	260	µg/L	EPA 524.2
Carbon disulfide	<0.5	<0.5	<0.5	160	µg/L	EPA 524.2
Chlorate	794	121	37	800	µg/L	EPA 300.0
2-Chlorotoluene	<0.5	<0.5	<0.5	140	µg/L	EPA 524.2
4-Chlorotoluene	<0.5	<0.5	<0.5	140	µg/L	EPA 524.2
Diazinon	<0.5	<0.5	<0.5	1.2	µg/L	EPA 525.2
Dichlorodifluoromethane (Freon 12)	<0.5	<0.5	<0.5	1000	µg/L	EPA 524.2
1,4 - Dioxane	<1	<1	<1	1	µg/L	EPA 522
Ethylene glycol	<5	<5	<5	14	mg/L	EPA 8015B/504.1
Formaldehyde	9	9	7	100	µg/L	EPA 556
HMX	<0.1	<0.1	<0.1	350	µg/L	EPA 8330B
Isopropylbenzene	<0.5	<0.5	<0.5	770	µg/L	EPA 524.2
Manganese	3	3	8	500	µg/L	EPA 200.8
Methyl isobutyl ketone (MIBK)	<2	<2	<2	120	µg/L	EPA 524.2
Naphthalene	<0.5	<0.5	<0.5	17	µg/L	EPA 524.2
N-Nitrosodiethylamine (NDEA)	<2	<2	<2	10	ng/L	EPA 521
N-nitrosodimethylamine (NDMA)	<2	<2	<2	10	ng/L	EPA 521
N-Nitrosodi-n-propylamine (NDPA)	<2	<2	<2	10	ng/L	EPA 521
PFOS	15	5.2	<2	6.5	ng/L	EPA 537.1
PFOA	15	11	5	5.1	ng/L	EPA 537.1
Propachlor	<0.5	<0.5	<0.5	90	µg/L	EPA 525.2
N-propylbenzene	<0.5	<0.5	<0.5	200	µg/L	EPA 524.2
RDX	<0.1	<0.1	<0.1	0.3	µg/L	EPA 8330B
Tertiary butyl alcohol	<2	<2	<2	12	µg/L	EPA 524.2
1,2,4 -trimethylbenzene	<0.5	<0.5	<0.5	330	µg/L	EPA 524.2
1,3,5-trimethylbenzene	<0.5	<0.5	<0.5	330	µg/L	EPA 524.2
2,4,6-Trinitrotoluene	<0.1	<0.1	<0.1	1	µg/L	EPA 8330B
Vanadium	19	23	8	50	µg/L	EPA 200.8
Secondary Maximum Contaminant Level Chemicals						
Aluminum	35	41	<25	200	µg/L	EPA 200.7
Corrosivity	1.6	2.3	1.0	Non-Cor.	SI	SM 2330B
Foaming Agents (MBAS)	<0.1	<0.1	<0.1	0.5	mg/L	SM 5540C/EPA 425.1
Iron	290	75	66	300	µg/L	EPA 200.7
Manganese	3	3	8	50	µg/L	EPA 200.7
Odor--Threshold	4	4	6	--	TON	SM 2150B
Silver	<0.25	<0.25	<0.25	100	µg/L	EPA 200.7
Thiobencarb	<0.5	<0.5	<0.5	1	µg/L	EPA 525.2
Zinc	12	9	17	5000	µg/L	EPA 200.7

\* 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

NA: Not analyzed, sampling error

**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-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Unit
Silica	11.2	10.9	3.6	3.9	6.1	Not Yet Available							mg/L
Calcium	25	24	26	26	26								mg/L
Magnesium	6	6	5	5	5								mg/L
Sodium	60	62	65	64	64								mg/L
Potassium	2.0	1.9	1.8	1.9	1.9								mg/L
Carbonate	0	0	2	0	0								mg/L
Bicarbonate	94	96	90	96	101								mg/L
Sulfate	50	51	64	53	56								mg/L
Chloride	60	62	69	63	65								mg/L
Nitrate	2.2	2.1	1.5	1.6	3.0								mg/L
Fluoride	0.1	0.2	0.2	0.2	0.2								mg/L
Total Dissolved Solids	263	268	268	267	278								mg/L
Total Hardness as CaCO <sub>3</sub>	84	85	83	85	89								mg/L
Total Alkalinity as CaCO <sub>3</sub>	77	79	78	79	83								mg/L
Free Carbon Dioxide	1.6	1.4	0.3	0.9	4.6								mg/L
pH	7.99	8.06	8.67	8.25	7.56								unit
Specific Conductance	455	477	478	475	486								µmho/cm
Color	5	--	--	5	--								CU
Turbidity	1.7	0.4	2.2	1.7	1.4								NTU
Temperature	10	9	10	12	18								°C
Bromide	0.22	0.23	0.24	0.23	0.24								mg/L
Total Organic Carbon	2.96	2.90	2.92	2.89	2.81								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
	3600371	Reliant Energy - East Well	4070 downgradient	434-467, 500-513, 553-580, 593-652, & 825-847	20	Active	Industrial
	601001	Inland Empire Utilities Agency - BH-1/1	340 downgradient	365-405	4	Active	Monitoring
	601002	Inland Empire Utilities Agency - BH-1/2	340 downgradient	435-475	4	Active	Monitoring
Turner Basins	3600010	City Of Ontario - 25	2530 crossgradient	370-903	20	Inactive	Municipal
	600453	City Of Ontario - 29	2810 downgradient	400-1095	18	Active	Municipal
	600585	City of Ontario - 38*	4600 crossgradient	500-1010	16	Active	Municipal
	600997	Inland Empire Utilities Agency - TRN-1/1	50 downgradient	340-360	4	Active	Monitoring
	600998	Inland Empire Utilities Agency - TRN-1/2	50 downgradient	380-400	4	Active	Monitoring
	600999	Inland Empire Utilities Agency - TRN-2/1	50 downgradient	350-370	4	Active	Monitoring
	601000	Inland Empire Utilities Agency - TRN-2/2	50 downgradient	392-412	4	Active	Monitoring
	300208	Jurupa Community Services District - 19	8900 downgradient	230-390	18	Active	Municipal
Declerz Basin	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
	601041	Inland Empire Utilities Agency - RP3-1/2	100 downgradient	265-285	4	Active	Monitoring
Jurupa Basin	Not currently planned for recharge						
7th & 8th Street Basins	3601561	San Antonio Water Company No. 12	740 downgradient	379-480, 525-563, 578-609, & 634-679	16	Inactive	Municipal
	3601772	City of Ontario No. 4	3429 downgradient	526-910	16-20	Inactive	Municipal
	--	City of Ontario No. 51	3402 downgradient	Not Yet Constructed	NA	NA	Municipal
	600493	City of Ontario No. 35	9695 downgradient	580-1020	18-36	Active	Municipal
	601036	Inland Empire Utilities Agency - 8TH-1/1	150 downgradient	495-535	4	Active	Monitoring
	601037	Inland Empire Utilities Agency - 8TH-1/2	150 downgradient	595-645	4	Active	Monitoring
	601038	Inland Empire Utilities Agency - 8TH-2/1	2460 downgradient	465-505	4	Active	Monitoring
	601039	Inland Empire Utilities Agency - 8TH-2/2	2460 downgradient	576-616	4	Active	Monitoring
Brooks Basins	1901719	City of Pomona P-10	1983 downgradient	295-784	20	Active	Municipal
	1901713	City of Pomona P-04	2620 downgradient	254-338, & 403-452	NA	Inactive	Municipal
	1904001	City of Pomona P-34	2550 downgradient	363-367,380-400, 419-427	20	Active	Municipal
	1903156	City of Pomona P-30	2160 crossgradient	565-875	20	Inactive	Municipal
	1903016	City of Pomona P-2	3455 downgradient	NA	NA	Active	Municipal
	1901725	City of Pomona P-17	4500 downgradient	454-536	20	Inactive	Municipal
	601050	Inland Empire Utilities Agency - BRK-1/1	144 downgradient	310-350	4	Active	Monitoring
	601051	Inland Empire Utilities Agency - BRK-1/2	144 downgradient	520-560	4	Active	Monitoring
	601048	Inland Empire Utilities Agency - BRK-2/1	1305 downgradient	320-360	4	Active	Monitoring
	601049	Inland Empire Utilities Agency - BRK-2/2	1305 downgradient	560-600	4	Active	Monitoring
San Sevaline 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
	600576	Unitex IRR	~ 1338 downgradient	NA	NA	NA	Private Irrigation
	600462	Unitex 91090	~1601 downgradient	NA	NA	Active	Private Domestic
	600369	Unitex CalDOT	~ 2850 downgradient	400-684	NA	NA	Irrigation
Victoria Basin	600905	Cucamonga Valley Water District No. 39	4329 downgradient	750-870, 940-960, 970-1060, & 1080-1130,	20	Active	Municipal
	601033	Cucamonga Valley Water District No. 43**	8300 downgradient	650-800	32-42	Active	Municipal
	601117	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~39-116 downgradient	570-610	4	Active	Monitoring
	--	Inland Empire Utilities Agency - VCT-1/1 and 1/2	~ 2000 downgradient	570-610	4	Active	Monitoring
Ely Basin	601003	Ely Basin MW-1, Philadelphia Well (Casing 3)	100 downgradient	280 - 300	2	Active	Monitoring
	601004	Ely Basin MW-2, Walnut Well (Casing 2)	3050 downgradient	290 - 310	4	Active	Monitoring
	3600975	Riverside Drive Well (43840-CWW)	6046 downgradient	NA	NA	Active	Private Irrigation
	600134	Bishop Of San Bernardino Corp. - DOM	6500 downgradient	NA	NA	Active	Private Domestic

**Notes:**

- NA = Data not available
- CBWM ID = Chino Basin Water Master well identification number
- bgs = below ground surface
- \* = Ontario Well No. 38 replaced Ontario Well No. 19, which is inactive
- \*\* = Cucamonga Valley Water District No. 43 replaced CVWD Well Nos. 35 & 36, which are inactive.
- \*\*\* = 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 <sub>3</sub> /L)	Na (mg/L)	SO <sub>4</sub> (mg/L)	Nitrogen, Total (mg/L)	NO <sub>2</sub> -N (mg/L)	NO <sub>3</sub> -N (mg/L)	Dissolved Oxygen (mg/L)
Banana & Hickory	Fontana Water Co. - F7a	04/26/22	<0.10	<1.1	7.6	413	<20	<3	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.3	<20	254	12	174	17	14	7.2	<0.05	7.2	6.6
	California Speedway - Infield Well	04/19/22	<0.10	<1.1	7.9	619	<20	5	<3	0.6	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	376	40	259	23	57	9.5	<0.05	9.5	7.2
	California Speedway 2	04/19/22	<0.10	<1.1	7.6	373	<20	5	17	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	222	10	158	17	12	4.1	<0.05	4.1	7.2
	BH-1/2"	05/16/22	<0.10	<1.1	8.0	506	<20	5	<3	0.4	<0.1	<15	<2	<0.5	2	<0.5	<0.2	3.9	<20	314	61	193	22	25	1.1	<0.05	1.1	4.3
Turner	Ontario Well No. 29	05/04/22	<0.10	<1.1	7.9	347	<20	<3	<3	0.3	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	242	7	135	22	11	1.9	<0.05	1.9	6.8
	Ontario Well No. 38	05/04/22	<0.10	<1.1	7.9	318	<20	<3	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	214	6	126	19	6	1.7	<0.05	1.7	7.2
	T-1/2"	05/11/22	<0.10	<1.1	7.5	440	<20	5	<3	-0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.3	<20	284	35	131	37	20	<0.6	<0.05	0.1	2.3
	T-2/2"	05/16/22	0.50	<1.1	7.4	638	<20	<3	<3	-0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.2	<20	362	86	183	54	36	2.3	<0.05	2.3	2.2
RP3	Alcoa MW1*	05/12/22	<0.10	43	7.5	684	<20	<3	<3	-0.1	<0.1	<15	<2	<0.5	4	<0.5	<0.2	0.6	<20	484	45	272	28	47	18.0	<0.05	18.0	5.7
	Alcoa MW3*	05/12/22	0.37	<1.1	7.2	888	<20	<3	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.2	<20	604	107	326	39	50	14.6	<0.05	14.6	5.5
	Fontana Water Co. - F23a	04/26/22	<0.10	<1.1	7.9	367	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	230	12	144	18	16	5.0	<0.05	5.0	7.4
	Southridge JHS*	04/28/22	<0.10	<1.1	7.2	928	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	1.0	<20	580	83	337	53	67	15.8	<0.05	15.8	4.2
	RP3-1/1"	05/11/22	0.40	<1.1	6.7	790	<20	15	10	-0.9	<0.1	<15	667	<0.5	3	<0.5	<0.2	18.4	<20	472	127	171	76	47	2.6	<0.05	2.6	1.8
7th & 8th Street	Ontario Well No. 35	05/04/22	<0.10	<1.1	7.7	390	<20	<3	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	258	9	164	19	19	4.8	<0.05	4.8	6.5
	8TH-1/2"	05/10/22	<0.10	<1.1	7.4	523	<20	10	<3	-0.4	<0.1	<15	23	<0.5	<1	<0.5	<0.2	12.0	<20	338	67	203	17	26	1.2	<0.05	1.2	11.7
	8TH-2/1"	05/03/22	<0.10	<1.1	7.6	571	<20	5	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	1.3	<20	354	24	236	17	26	19.1	<0.05	19.1	6.4
	8TH-2/2"	05/03/22	<0.10	<1.1	7.6	473	<20	10	<3	0.0	<0.1	<15	8	<0.5	<1	<0.5	<0.2	10.0	<20	300	51	195	15	32	3.3	<0.05	3.3	7.2
	Pomona Well No. 10	04/18/22	<0.10	<1.1	7.4	553	<20	5	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	344	42	250	12	42	8.0	<0.05	8.0	3.8
Brooks	BRK-1/1"	04/27/22	<0.10	<1.1	7.6	557	<20	10	<3	0.1	<0.1	<15	9	<0.5	<1	<0.5	<0.2	10.1	<20	330	65	209	30	32	2.8	<0.05	2.8	6.8
	BRK-1/2"	04/27/22	<0.10	<1.1	7.6	649	<20	<3	<3	0.3	<0.1	<15	<2	<0.5	1	<0.5	<0.2	2.7	<20	408	25	283	14	49	22.2	<0.05	22.2	8.5
	BRK-2/1"	05/02/22	<0.10	19	7.6	651	<20	5	<3	0.3	<0.1	<15	<2	<0.5	2	<0.5	<0.2	4.6	<20	388	57	305	12	38	11.0	<0.05	11.0	6.5
	BRK-2/2"	05/02/22	<0.10	8	8.0	428	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.6	<20	262	11	145	30	24	11.0	<0.05	11.0	4.0
	Ely Basin MW2 Walnut St.*	04/21/22	0.47	<1.1	7.4	691	<20	<3	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	434	60	287	30	36	8.0	<0.05	8.0	4.8
Ely	Riverside Well (43840-CWW)	04/18/22	<0.10	<1.1	7.6	705	<20	5	<3	0.5	<0.1	50	5	<0.5	<1	<0.5	<0.2	0.2	36	424	44	333	23	43	14.4	<0.05	14.4	4.6
	Bishop of SB Corp. - DOM	04/27/22	<0.10	<1.1	7.5	822	<20	5	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	21	500	37	367	23	56	19.3	<0.05	19.3	6.0
	SS-1/1"	05/09/22	<0.10	<1.1	7.1	338	<20	<3	<3	-0.9	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	1.4	<20	252	32	119	16	18	2.8	<0.05	2.8	7.9
Victoria & San Sevaline	SSV-2"	04/20/22	0.40	<1.1	7.4	778	<20	15	<3	0.0	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	20.3	<20	466	108	284	48	50	3.7	<0.05	3.7	5.5
	VCT-1/1"	05/09/22	0.97	<1.1	7.1	525	<20	<3	<3	-0.5	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.9	<20	342	71	194	20	27	<0.6	<0.05	0.2	3.0
	VCT-2/2	05/09/22	<0.10	<1.1	7.5	384	<20	5	<3	-0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.4	<20	244	20	147	18	11	5.5	<0.05	5.5	5.7
	CVWD Well No. 39	04/25/22	<0.10	<1.1	7.8	287	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	188	6	106	21	10	2.6	<0.05	2.6	8.5
	CVWD Well No. 43	04/25/22	<0.10	<1.1	7.7	350	<20	5	<3	0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	216	11	140	19	13	3.7	<0.05	3.7	8.6
	Unitex 91090*	04/20/22	<0.10	12	7.5	393	<20	<3	<3	-0.1	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	232	32	174	14	22	2.0	<0.05	2.0	8.7
Decler	JCSD Well No. 13	04/20/22	<0.10	<1.1	7.7	690	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	406	85	271	28	32	9.2	<0.05	9.2	5.1
	JCSD Well No. 17	04/20/22	<0.10	<1.1	7.8	543	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	<0.1	<20	334	46	210	27	37	9.8	<0.05	9.8	5.2
	JCSD Well No. 19	04/20/22	<0.10	<1.1	7.8	372	<20	<3	<3	0.2	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.1	<20	222	14	141	25	13	5.0	<0.05	5.0	7.1
	DCZ-1/1"	04/26/22	1.07	<1.1	7.6	516	<20	5	<3	0.1	<0.1	<15	101	<0.5	1	<0.5	<0.2	1.0	<20	300	55	182	29	38	<0.6	<0.05	0.3	2.0
	DCZ-2"	05/09/22	0.33	<1.1	7.8	594	<20	<3	<3	0.4	<0.1	<15	<2	<0.5	<1	<0.5	<0.2	0.6	156	324	56	195	36	35	9.6	<0.05	9.6	7.7
	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				

\* Total dissolved metals reported for these wells. The remaining wells report total recoverable metals values.



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

Date	Diluent Water																				Recycled Water									
	Imported Water										Local Runoff / Storm Flow																			
	7th & 8th St.	Banana	Brooks	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
Jul-21	0	0	0	0	0	0	0	0	108	0	9	9	5	52	23	0	395	6	41	2	0	89	126	74	195	0	395	329	0	0
Aug-21	0	0	0	0	0	0	0	0	69	0	6	0	0	2	51	218	521	0	20	1	1	79	105	114	6	218	521	343	0	0
Sep-21	0	0	0	0	0	0	0	0	33	0	18	0	0	3	9	298	615	0	53	2	300	97	101	144	44	298	615	147	20	26
<b>3Q21 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>34</b>	<b>9</b>	<b>5</b>	<b>57</b>	<b>82</b>	<b>516</b>	<b>1531</b>	<b>6</b>	<b>114</b>	<b>6</b>	<b>301</b>	<b>265</b>	<b>332</b>	<b>332</b>	<b>245</b>	<b>516</b>	<b>1531</b>	<b>820</b>	<b>20</b>	<b>26</b>
Oct-21	0	0	0	0	0	0	0	0	27	0	31	5	14	24	10	51	565	7	39	2	299	52	75	105	106	51	565	261	211	255
Nov-21	0	0	0	0	0	0	0	0	33	0	6	0	5	7	2	36	567	0	45	0	400	48	44	51	4	36	567	286	137	100
Dec-21	0	0	0	0	0	0	0	0	13	0	458	109	134	207	1073	8	283	732	625	314	118	2	27	0	0	8	283	133	33	96
<b>4Q21 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>496</b>	<b>114</b>	<b>153</b>	<b>239</b>	<b>1085</b>	<b>95</b>	<b>1415</b>	<b>738</b>	<b>709</b>	<b>315</b>	<b>817</b>	<b>102</b>	<b>147</b>	<b>156</b>	<b>110</b>	<b>95</b>	<b>1415</b>	<b>681</b>	<b>381</b>	<b>451</b>
Jan-22	0	0	0	0	0	0	0	0	0	0	31	2	4	4	70	23	393	0	49	0	277	25	3	4	46	23	393	415	65	175
Feb-22	0	0	0	0	0	0	0	0	0	0	36	5	7	10	73	79	306	10	55	6	274	43	68	54	96	79	306	274	39	260
Mar-22	0	0	0	0	0	0	0	0	0	0	134	12	43	205	394	74	255	66	166	23	158	86	0	84	16	74	255	286	37	236
<b>1Q22 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>18</b>	<b>54</b>	<b>218</b>	<b>537</b>	<b>177</b>	<b>953</b>	<b>76</b>	<b>270</b>	<b>29</b>	<b>710</b>	<b>155</b>	<b>71</b>	<b>142</b>	<b>158</b>	<b>177</b>	<b>953</b>	<b>974</b>	<b>141</b>	<b>670</b>
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
<b>2Q22 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>4</b>	<b>39</b>	<b>75</b>	<b>90</b>	<b>323</b>	<b>750</b>	<b>26</b>	<b>99</b>	<b>17</b>	<b>610</b>	<b>56</b>	<b>0</b>	<b>74</b>	<b>267</b>	<b>323</b>	<b>750</b>	<b>1105</b>	<b>132</b>	<b>864</b>

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)
3Q21	Jul-21	0.0	0.2	140	0	13.0	380	(1,815)	(33,396)	(895,843)
	Aug-21	0.0	0.2	140	0	13.0	380	(1,815)	(33,399)	(895,923)
	Sep-21	0.0	0.2	140	0	13.0	380	(1,816)	(33,404)	(896,054)
4Q21	Oct-21	0.0	0.2	140	0	13.0	380	(1,816)	(33,406)	(896,139)
	Nov-21	0.0	0.2	140	0	13.0	380	(1,816)	(33,409)	(896,204)
	Dec-21	0.0	0.2	140	11	13.0	380	(1,827)	(33,583)	(901,314)
1Q22	Jan-22	0.0	0.2	140	0	13.0	380	(1,827)	(33,587)	(901,408)
	Feb-22	0.0	0.2	140	0	13.0	380	(1,827)	(33,590)	(901,492)
	Mar-22	0.0	0.2	140	84	13.0	380	(1,911)	(34,941)	(940,992)
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)

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)
3Q21	Jul-21	0.0	0.2	140	0	12.0	320	738	(40,825)	(251,796)
	Aug-21	0.0	0.2	140	0	12.0	320	738	(40,825)	(251,796)
	Sep-21	0.0	0.2	140	1	12.0	320	737	(40,847)	(252,365)
4Q21	Oct-21	0.0	0.2	140	1	12.0	320	736	(40,859)	(252,689)
	Nov-21	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
	Dec-21	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
1Q22	Jan-22	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
	Feb-22	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
	Mar-22	0.0	0.2	140	0	12.0	320	736	(40,861)	(252,736)
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)

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)
3Q21	Jul-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Aug-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Sep-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
4Q21	Oct-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Nov-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Dec-21	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
1Q22	Jan-22	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Feb-22	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
	Mar-22	0.0	0.2	140	0	12.0	320	(3,066)	(45,143)	(712,136)
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)

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

Cells shaded in grey reflect most recent lab values.

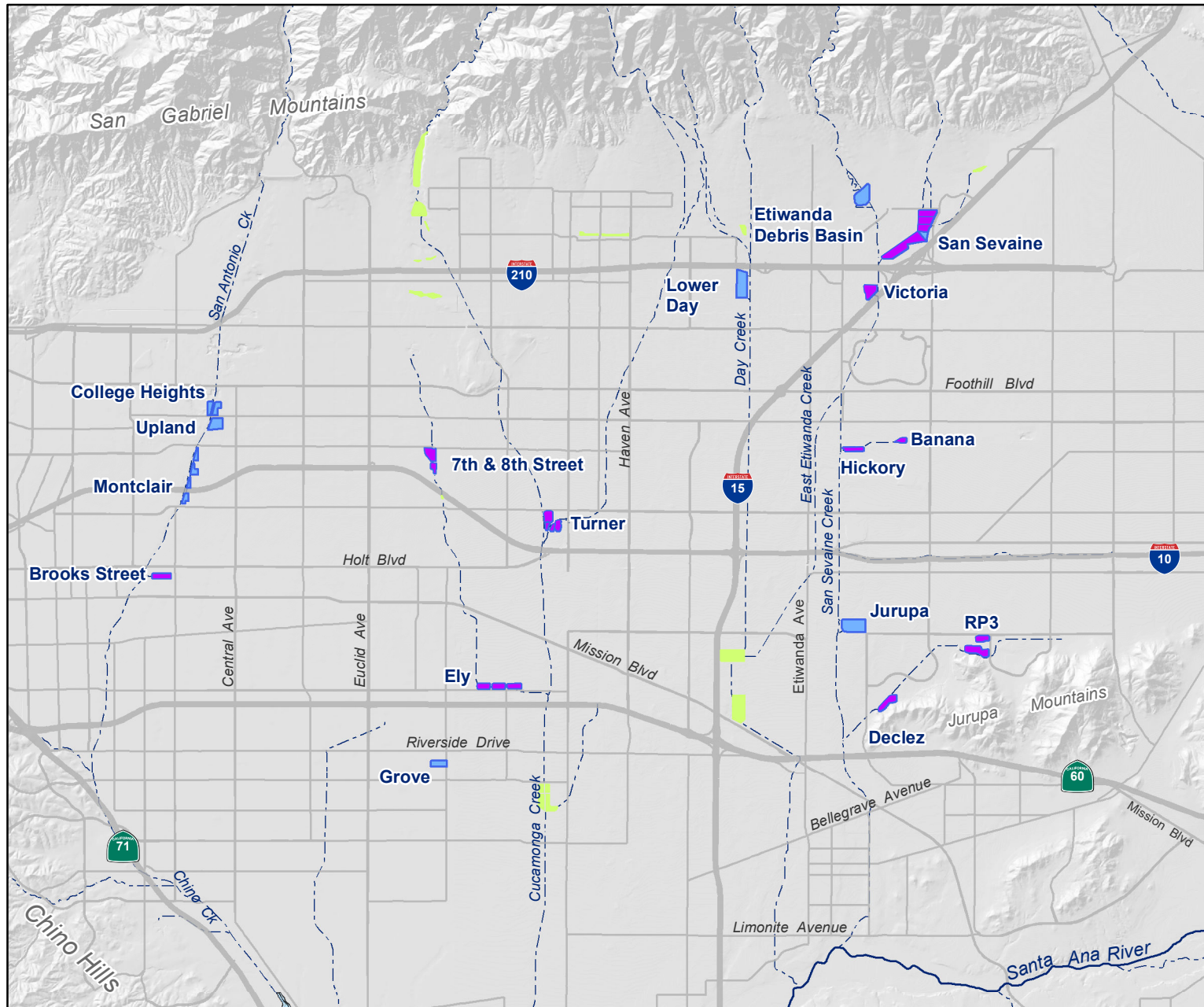
Table 6-1  
MVWD ASR Project - TIN/TDS Mass Balance

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)
3Q21	Jul-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,680)	(1,153,682)
	Aug-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,680)	(1,153,682)
	Sep-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,680)	(1,153,682)
4Q21	Oct-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,680)	(1,153,682)
	Nov-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,680)	(1,153,682)
	Dec-21	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
1Q22	Jan-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Feb-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
	Mar-22	0.0	0.2	140	0	12.0	320	(2,061)	(79,681)	(1,153,705)
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)

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

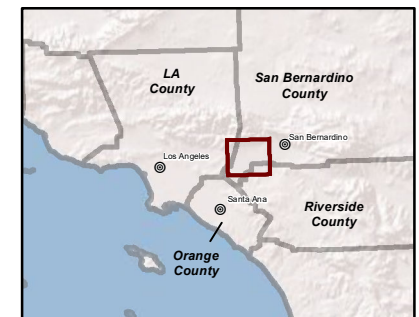
Cells shaded in grey reflect most recent lab values.

Total Project (All Wells)					
	Date		Mass Balance		
			Storage (AF)	TIN (kg)	TDS (kg)
3Q21	Jul-21		(6,204)	(199,045)	(3,013,457)
	Aug-21		(6,204)	(199,048)	(3,013,537)
	Sep-21		(6,206)	(199,073)	(3,014,237)
4Q21	Oct-21		(6,207)	(199,088)	(3,014,645)
	Nov-21		(6,207)	(199,092)	(3,014,758)
	Dec-21		(6,218)	(199,268)	(3,019,891)
1Q22	Jan-22		(6,218)	(199,271)	(3,019,985)
	Feb-22		(6,218)	(199,274)	(3,020,069)
	Mar-22		(6,303)	(200,625)	(3,059,569)
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)



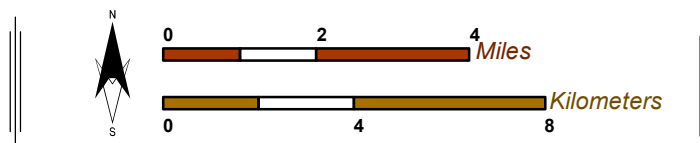
### Main Map Features

- Recharge Basins in the Recycled Water Groundwater Recharge Program (Recycled Water not initiated)
- Recharge Basins in the Recycled Water Groundwater Recharge Program (Recycled Water initiated)
- Non-Program Basins
- Rivers and Streams



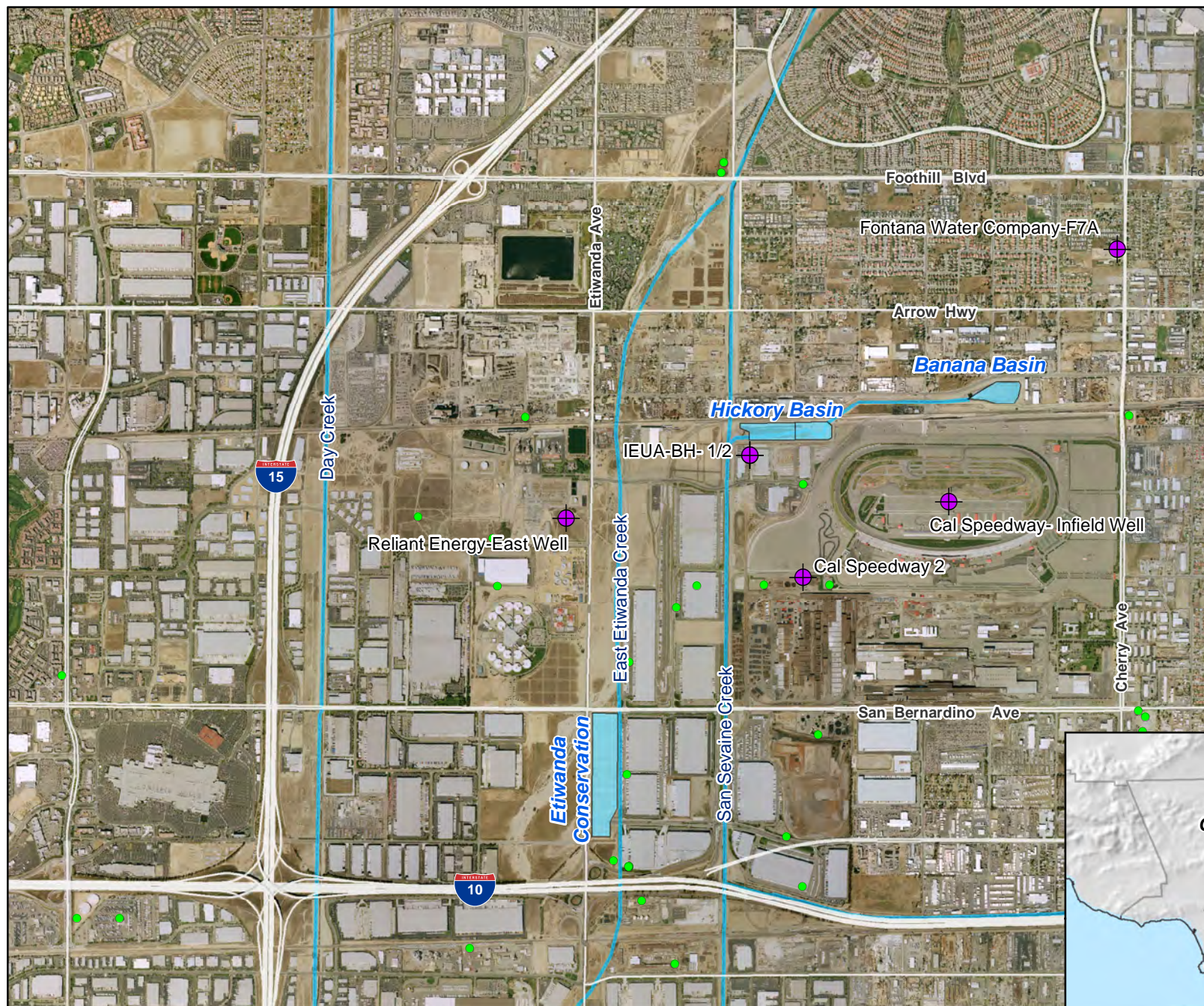
**Chino Basin Recycled Water Groundwater Recharge Program**

*Basin Locations*







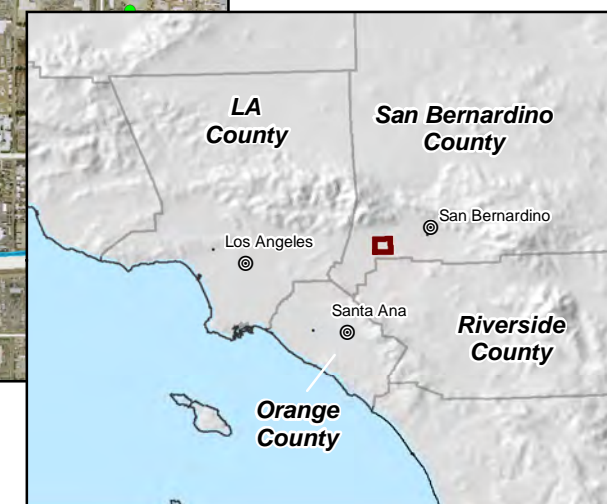
**Figure 1-1**





## Main Map Features

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



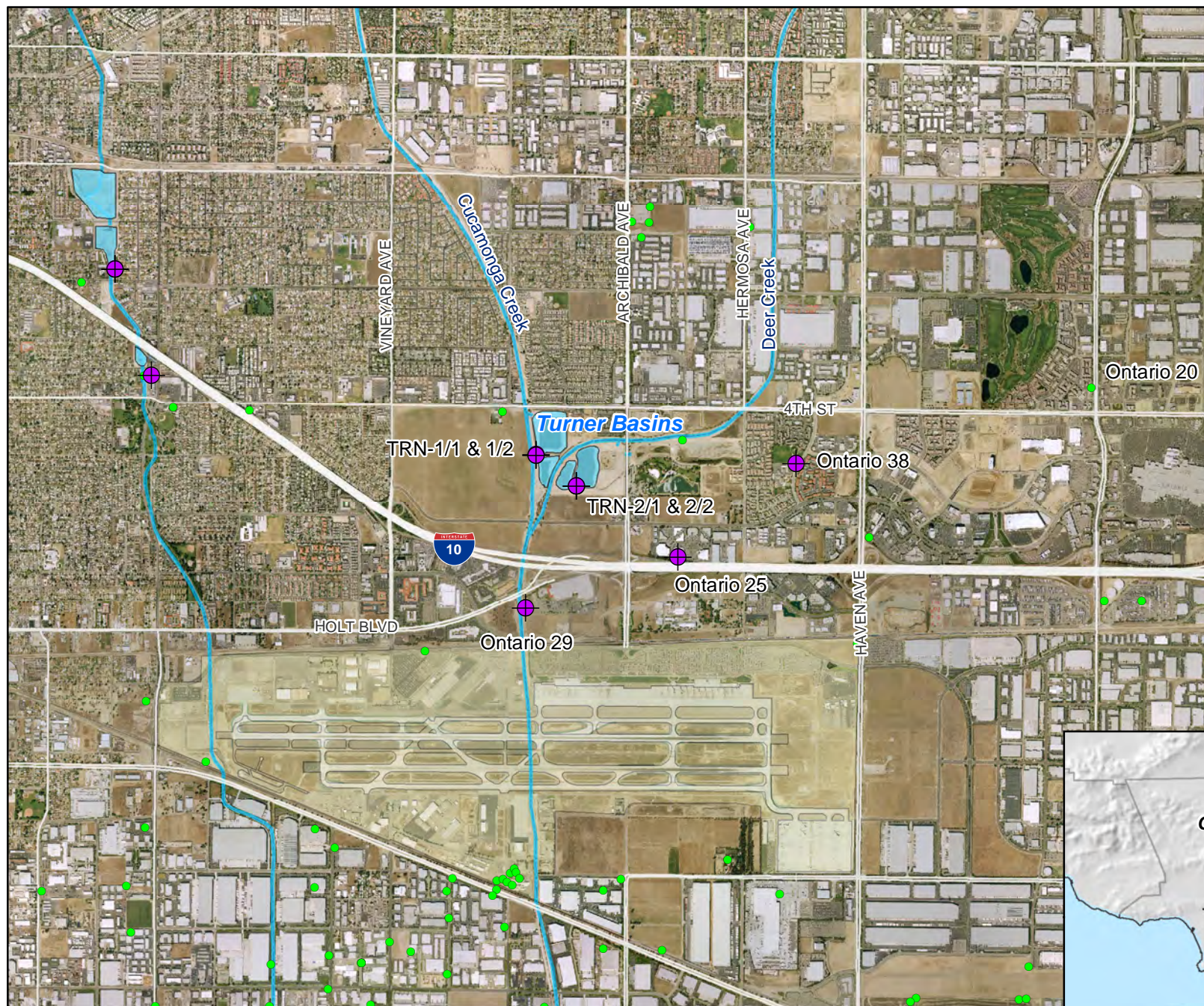
## Monitoring Well Network Hickory and Banana Basins

**Figure 2-1**





Recycled Water Recharge Program







## Main Map Features

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



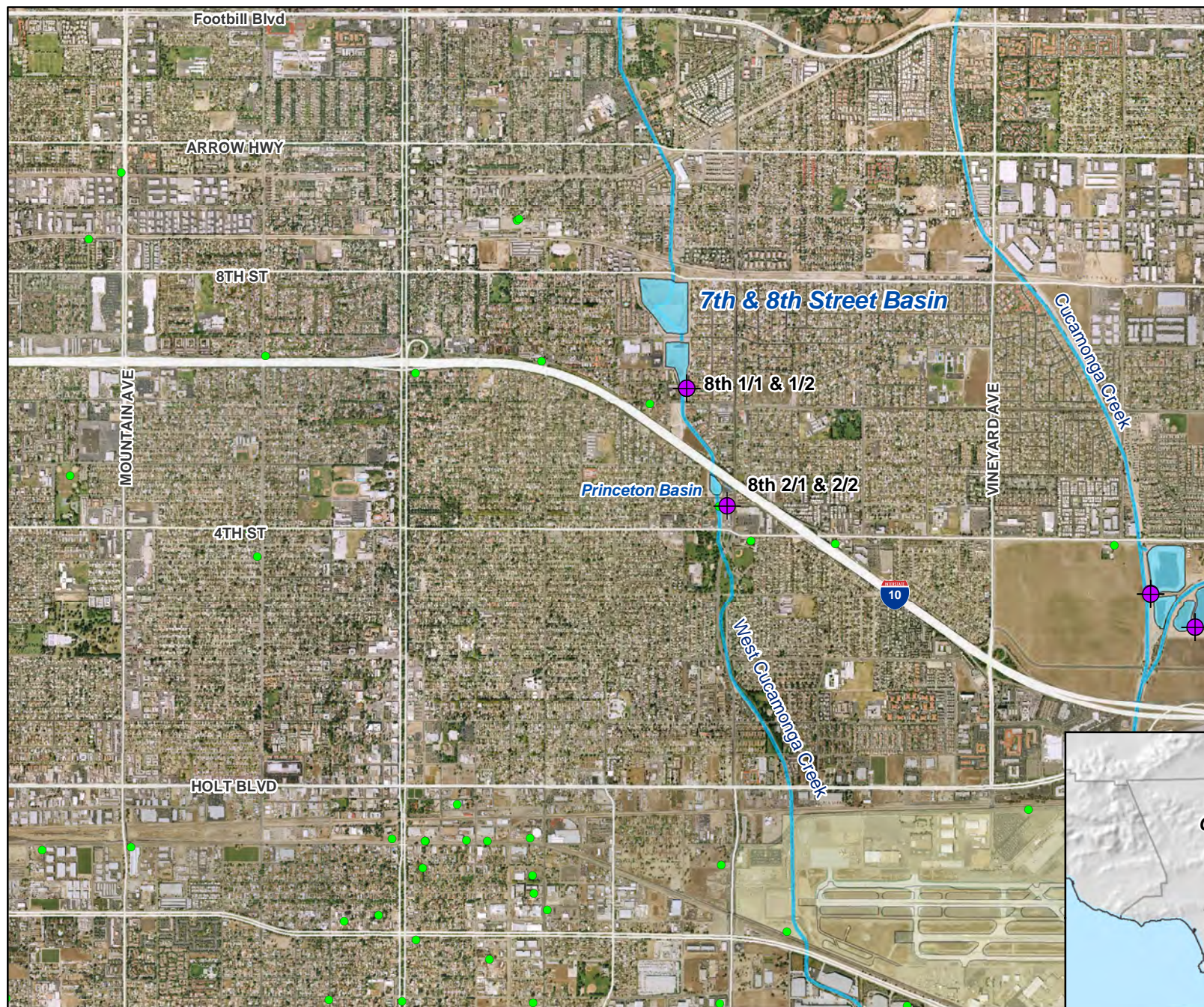
**Monitoring Well Network**  
Turner Basins

**Figure 2-2**





Recycled Water Recharge Program







## Main Map Features

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



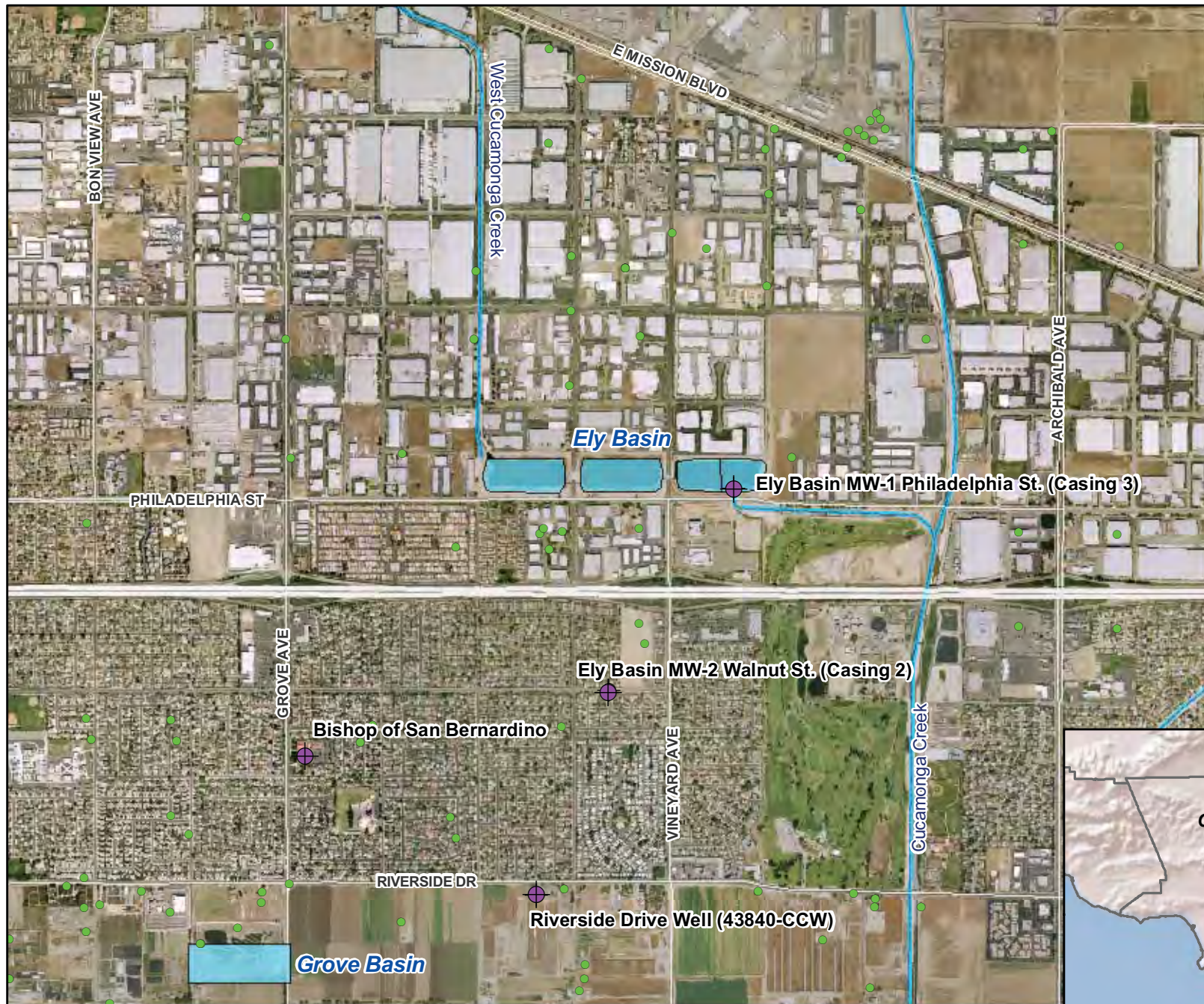
**Monitoring Well Network**  
7th and 8th Street Basin

**Figure 2-3**





Recycled Water Recharge Program







## Main Map Features

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



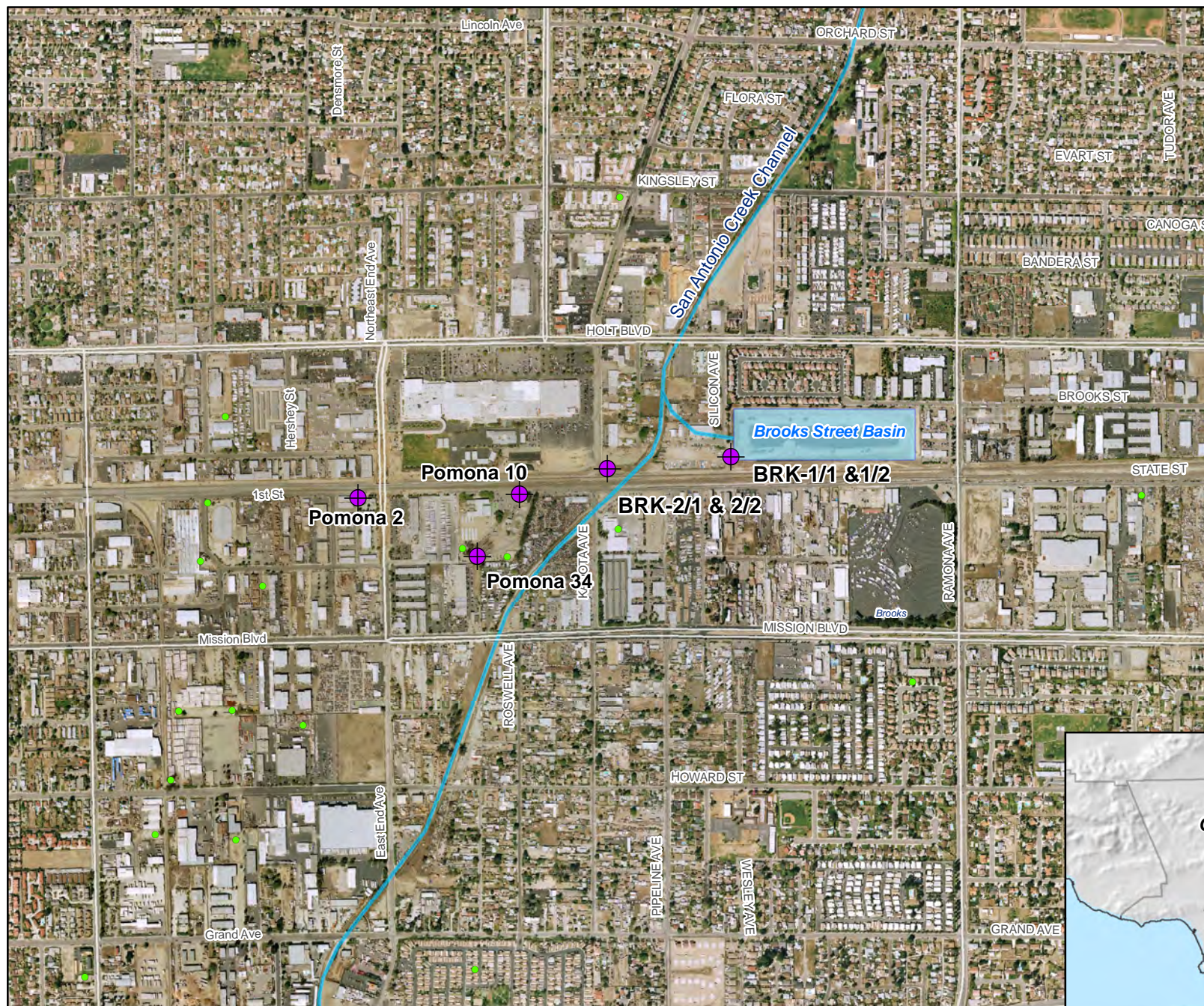
**Monitoring Well Network**  
*Ely Basins*

**Figure 2-4**





Recycled Water Recharge Program







## Main Map Features

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



## Monitoring Well Network

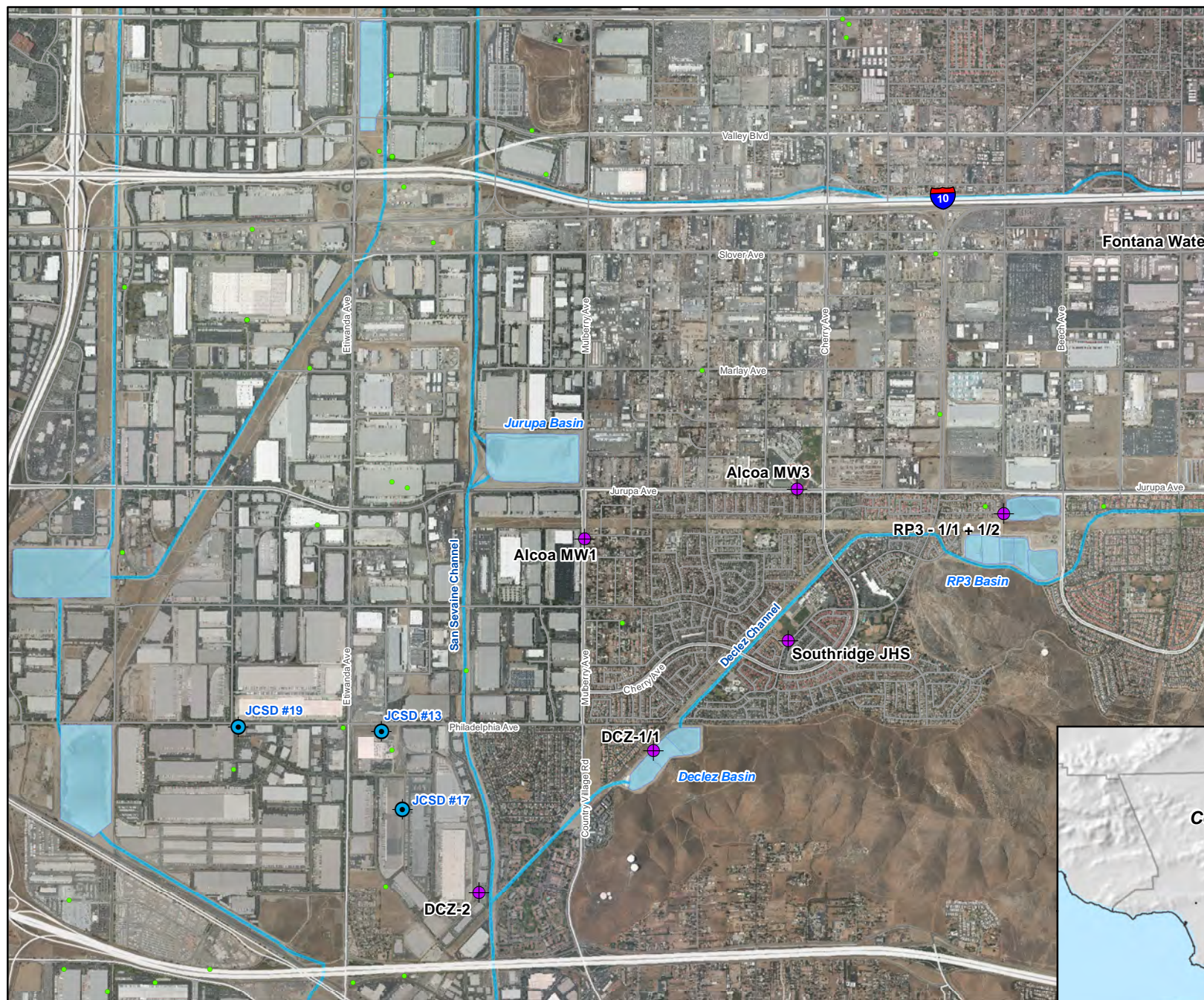
Brooks Street Basin

**Figure 2-5**






Recycled Water Recharge Program







## Main Map Features

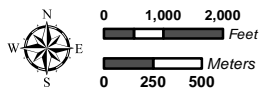
-  JCSD Wells
-  "Other Wells"
-  Existing Monitoring Well
-  Rivers/Streams/Creeks
-  Recharge Basins



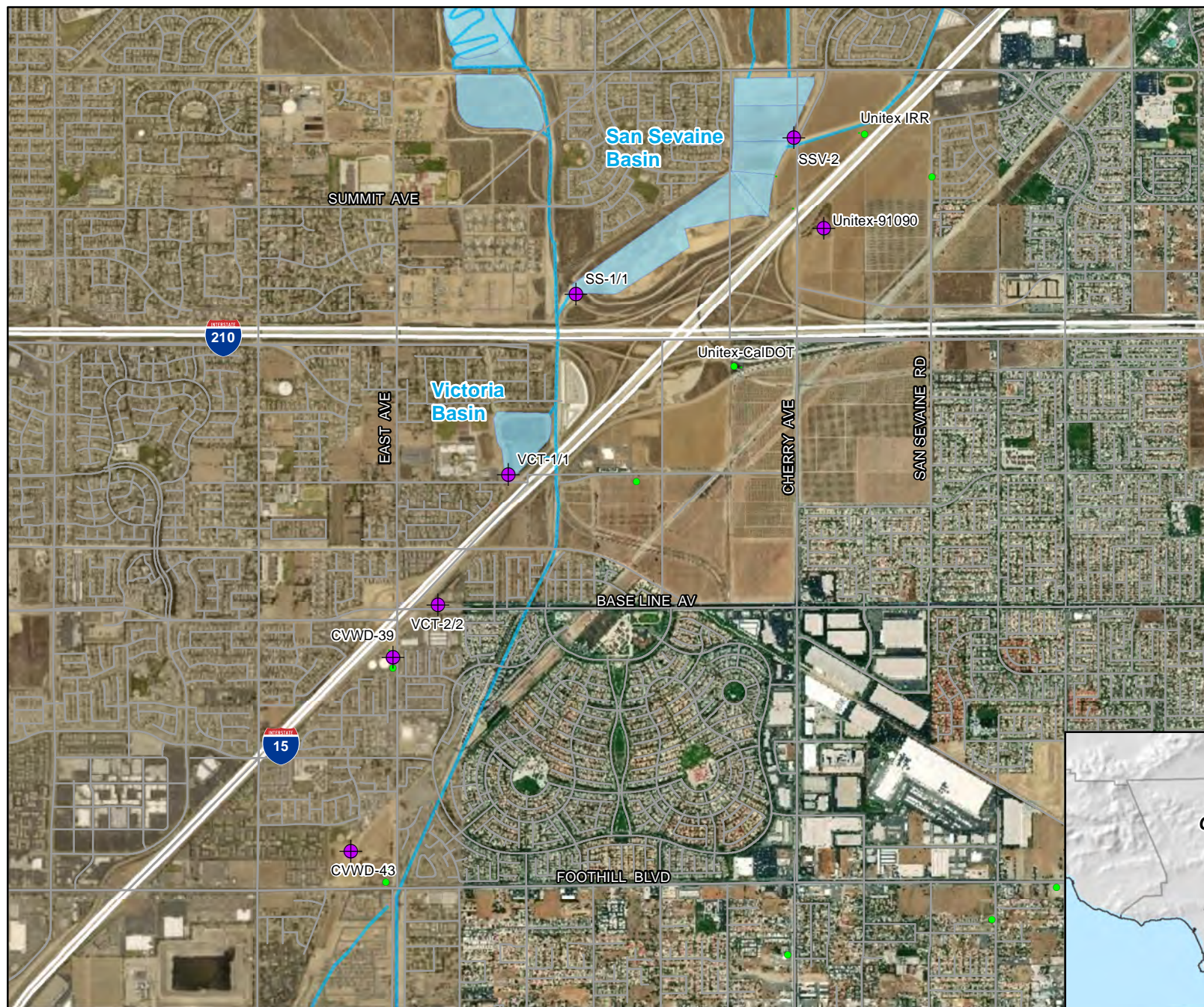
**Monitoring Well Network**  
Declez and RP3 Basins

**Figure 2-6**

Recycled Water Recharge Program







## Main Map Features

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



## Monitoring Well Network San Sevaire and Victoria Basins

**Figure 2-7**

Recycled Water Recharge Program

