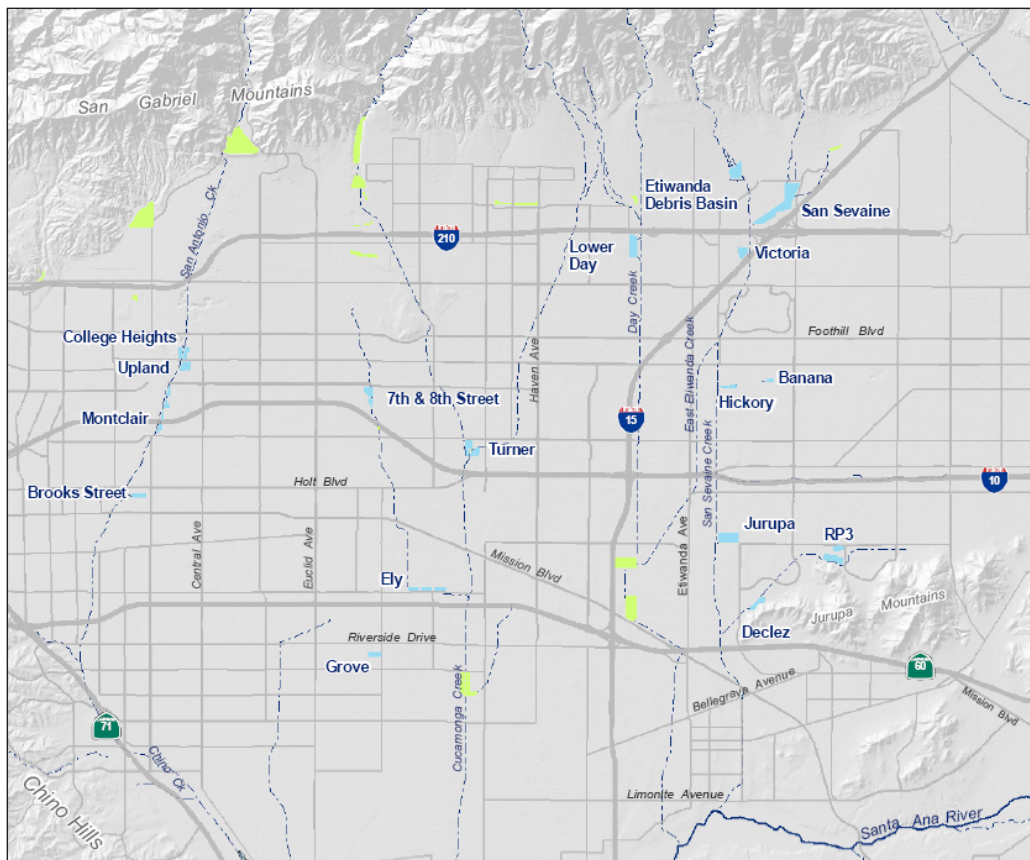


Chino Basin Recycled Water Groundwater Recharge Program

2022 Annual Report



May 1, 2023



Randy Lee, P.E.
Acting Director of Finance

Peter Kavounas, P.E.
General Manager

May 1, 2023

Regional Water Quality Control Board, Santa Ana Region

Attention: Ms. Jayne Joy
3737 Main Street, Suite 500
Riverside, California 92501-3348

**Subject: Transmittal of the Annual Report for 2022
Chino Basin Recycled Water Groundwater Recharge Program**

Dear Ms. Joy:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) hereby submit the *2022 Annual Report* for the *Recycled Water Groundwater Recharge Program*. The recycled water groundwater recharge program is being implemented by IEUA and CBWM and its annual reporting is pursuant to requirements of the following orders:

- California Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2007-0039. Water Recycling Requirements for IEUA and CBWM. Chino Basin Recycled Water Groundwater Recharge Program: Phase I and Phase II Projects, San Bernardino County, June 29, 2007.
- California Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2009-0057 Amending Order No. R8-2007-0039 for IEUA and CBWM. Chino Basin Recycled Water Groundwater Recharge Program: Phase I and Phase II Projects, San Bernardino County, October 23, 2009.

ACTIVITIES, FINDINGS, AND CONCLUSIONS

The following bullets summarize the principal activities, findings, and conclusions of the *Recycled Water Groundwater Recharge Program* for 2022:


- The 2022 calendar year include annual program recharge of 24,142.8 acre-feet (AF), which includes 7,233.4 AF of storm water and dry weather flows (including well pump to waste recharge); 16,909.4 AF of recycled water; and 0 AF of imported water.
- During 2022, recycled water quality monitoring was conducted in accordance with Monitoring and Reporting Program No. R8-2007-0039. No primary or secondary regulated maximum contaminant limits (MCLs) or notification levels (NLs) were exceeded during 2022 with the exception of the primary MCL for 1,2,3-trichloropropane (1,2,3-TCP) and NL for perfluorooctanoic acid (PFOA).
- No corrective actions were necessary for RP-1 and RP-4. No unit process changes occurred during 2022.

- In-aquifer blending of recycled water, diluent water, and native groundwater is evident at monitoring wells near 8th Street, Banana, Hickory, Brooks, Ely, Turner, Victoria, and RP3 Basins. For 8th Street, Banana, Hickory, and Brooks Basins, blending was observed to be occurring both in the groundwater mound and downgradient. Evidence includes variations in water chemistry, variations in water levels, and recharge ratios of water sources.
- At the end of 2022, the volume-based 120-month running average recycled water contributions (RWCs), inclusive of groundwater underflow, by basin were: 8th Street - 24%; Banana - 33%; Brooks - 14%; Declez 7%, Ely - 26%, Hickory - 19%, RP3 - 25%; San Sevaine - 18%; Turner Basin Cells 1&2 - 24%; Turner Basin Cells 3&4 – 25%; and Victoria - 27%. These basins are all in compliance with their maximum RWC limits.
- CBWM has verified in the Recycled Water Groundwater Recharge Quarterly Monitoring Reports that there was no reported pumping of groundwater in 2022 for domestic or municipal use from zones that extend 500 feet and 6-months underground travel time from the 8th Street, Banana, Brooks, Declez, Ely, Hickory, Turner, RP3, San Sevaine, and Victoria recharge sites.
- Sufficient data exist to estimate approximate arrival times of recycled water at several monitoring wells based on observed trends in EC, TDS, and chloride concentration at the following monitoring wells 8TH-1/1 (22 months) 8TH-2/2 (123 months) for 8th Street Basin; BRK-1/1 (5 months), BRK-1/2 (17 months) and BRK-2/1 (28 months) for Brooks Basin; Philadelphia Well (13 months) for Ely Basin, BH-1/2 (2 months) for Hickory Basin; California Speedway Infield Well (29 months) and Speedway 2 (83 months) for Banana Basin; T-1/2 (3.2 months) for Turner Cell 1; T-2/2 (13 months) and Ontario Well No. 25 (48 months) for Turner Cell 4; VCT-1/1 (7.5 months) for Victoria Basin, DCZ-1/1 (21 months), RP3-1 (3.3 months) for RP3 Basin Cell 1, and SSV-2 (4.9 months) for San Sevaine Basin 2. Other monitoring wells have not yet shown definitive variations in EC, TDS, and chloride that would signal arrival of recycled water at these well sites.
- Comparison of the pre-recharge groundwater elevation contour map (Fall 2003) with the most recent groundwater elevation contour map (Spring 2020) indicates that for area near the recharge basins, there were minor regional changes in groundwater elevation, but the recharge program has not significantly changed groundwater flow directions. The 2020 groundwater elevations measured in the program monitoring wells have generally changed less than the contour interval (25 feet) used in the past regional groundwater elevation maps. The only significant differences in groundwater flow direction between the 2003 through 2020 maps is 1) the mound at 8th Street, which between 2012 and 2016 had a more westward direction as opposed to a south-southwest direction in 2003 and 2) a large mound at the Turner Basin that influences the contour at the basin in 2018. For 8th Street Basin, the difference may indicate the 8th Street Basin downgradient monitoring well location (8TH-2) is not appropriately located to characterize downgradient recharge water quality. Other differences include a deeper and larger area pumping depression has developed in the vicinity of the Chino Desalter well field (area of hydraulic control) and a smaller pumping depression has developed in Pomona west of Brooks Basin. Some changes in the contouring style/methodology are evident between the 2003 and 2020 contour maps. For example, the groundwater contours in the area north of Victoria and San Sevaine Basins have not been interpreted since the 2008 contour map.


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 fines and imprisonment.

Executed on the 1st day of May 2023 in the Cities of Chino and Rancho Cucamonga.



Randy Lee, P.E.
Acting Director of Finance



Peter Kavounas, P.E.
General Manager

Chino Basin Recycled Water Groundwater Recharge Program

2022 Annual Report

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May 1, 2023

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1 INTRODUCTION

This is the 2022 Annual Report for the Chino Basin Recycled Water Groundwater Recharge Program. Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster (CBWM), 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. The recharge program is part of a comprehensive 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 storm water, imported water and recycled water. Figure 1-1 is a location map of the recharge basin locations used in the Recycled Water Groundwater Recharge Program. Recharge operations for 8th Street, Banana, Brooks, Ely, Hickory, RP3, Turner, San Sevaine, and Victoria Basins have previously been summarized in the four 2022 quarterly monitoring reports to the Regional Board Water Quality Control Board (Regional Board) for these basins where recharge of recycled water has been initiated.

In calendar year 2022, 24,142.8 acre-feet (AF) of water were recharged in the Chino Basin, this includes: 7,233.4 AF of storm water and dry weather flows (including pump to waste recharge), 16,909.4 AF of recycled water, and 0 AF of imported water. The reported recharge volumes for supplemental water (imported and recycled) include the application of a reduction factor to the metered volumes to account for evaporative losses.

1.1 Requirements of Order No. R8-2007-0039

This Recycled Water Groundwater Recharge Program is subject to requirements in the following documents issued by the California Regional Water Quality Control Board Santa Ana Region:

- Order No. R8-2007-0039 Water Recycling Requirements for IEUA and CBWM, Chino Basin Recycled Water Groundwater Recharge Program, Phase I and Phase II Projects, San Bernardino County, June 29, 2007;
- Monitoring and Reporting Program No. R8-2007-0039 for IEUA and CBWM, Chino Basin Recycled Water Groundwater Recharge Program Phase I and Phase II Projects, San Bernardino County, June 29, 2007;
- Order No. R8-2009-0057 Amending Order No. R8-2007-0039 for IEUA and CBWM, Chino Basin Recycled Water Groundwater Recharge Program: Phase I and Phase II Projects, San Bernardino County, October 23, 2009; and
- Revised Monitoring and Reporting Program No. R8-2007-0039 for IEUA and CBWM. Chino Basin Recycled Water Groundwater Recharge Program: Phase I and Phase II Projects, San Bernardino County, October 27, 2010.

The Monitoring and Reporting Program (MRP) in the Order No. R8-2007-0039 describes the requirements for the Annual Reports. The following is an excerpt from Section VI of the MRP:

3. The annual report shall include the following:
 - a. A list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures. The report shall restate, for the record, the laboratories used by the users to monitor compliance with this Order and their status of certification. Upon request by Regional Board staff, the users shall also provide a summary of performance.
 - b. A mass balance to ensure that blending is occurring in the aquifer at each recharge basin. Recharge water groundwater flow paths shall be determined annually from groundwater elevation contours and compared to the flow and transport model's flow paths, travel of recharge waters, including leading edge of the recharged water plume, any anticipated changes. The flow and transport model shall be updated to match as closely as possible the actual flow patterns observed within the aquifer if the flow paths have significantly changed.
 - c. A summary of corrective actions taken as a result of violations, suspensions of recharge, detections of monitored constituents and any observed trends, information on the travel of the recycled water (estimated location of the leading edge), description of any changes in operation of any unit processes or facilities, and description of any anticipated changes, including any impacts on other unit processes.
 - d. A summary of calibration records for equipment, such as pH meters, flow meters, turbidity meters, and lysimeters.
 - e. All downgradient public drinking water systems. A summary discussion on whether domestic drinking water wells extracted water within the buffer zone defined by the area less than 500 feet and 6 months underground travel time from the recharge basins, including the actions/measures that were undertaken to prevent reoccurrence. If there were none, a statement to that effect shall be written.
 - f. A summary of the results and recommendations of any tracer testing conducted during the past year.
4. At least one year after the blended recharged water has reached at least one groundwater monitoring well, the users shall submit a report to the CDHS and Regional Board evaluating the compliance with the minimum underground retention time, distance to the nearest point of extraction, blending, and the maximum RWC requirements. The annual report shall include water quality data on turbidity, coliform, total nitrogen, dissolved oxygen, regulated contaminants, TOC, and non-regulated contaminants compliance.

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

On June 18, 2014, the State Water Resources Control Board – Division of Drinking Water (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.

The DDW GRRP regulations require that all GRRPs permitted prior to June 18, 2014 submit a report to the DDW and the Regional Board to assess compliance of the existing permit 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 began additional monitoring and reporting in 3Q15. IEUA submitted revised CAR to DDW in December 2018. The DDW provided comments on the CAR in July 2019. The IEUA responded to the DDW comments in November 2019.

1.3 Organization of the Annual Report

The remainder of this report describes the requirements of the annual report per the MRP in Order R8-2007-0039 and is organized as follows:

- Section 2 – Recycled Water Quality Monitoring discusses compliance with recycled water production specifications and other water quality requirements.
- Section 3 – Groundwater Recharge Monitoring discusses the blending and movement of recycled water recharge in the groundwater basin.
- Section 4 – References includes supporting information consulted in performing the analyses described herein and in preparing this report.

2 RECYCLED WATER QUALITY MONITORING

2.1 Recycled Water Quality Specifications

During 2022, recycled water quality monitoring was conducted in accordance with the required frequency for all parameters as specified in MRP No. R8-2007-0039. All monitoring and compliance data for the year can be found in the quarterly monitoring reports submitted to the Regional Board (IEUA 2022a, 2022b, 2022c, 2023).

2.1.1 *Detections and Compliance with Narrative Limits*

Recycled Water Specifications A.5 through A.9 are narrative limits in the Order No. R8-2008-0039. The 2022 recycled water quality monitoring data and associated limits for specifications A.5 through A.9 are shown in Tables 2-1 and 2-2 of the quarterly monitoring reports.

Table 2-1 of the quarterly reports presents monitoring and compliance data for the narrative permit limits in Order R8-2008-0039 for pH, turbidity, total nitrogen (TN), total inorganic nitrogen (TIN), total organic carbon (TOC), and total dissolved solids (TDS). The monitoring and compliance for the parameters in Table 2-1 of the quarterly monitoring reports is based on the analysis of the two separate recycled water sources, Regional Plant No. 1 (RP-1) and Regional Plant No. 4 (RP-4) sampled at the IEUA National Pollutant Discharge Elimination System (NPDES) permit monitoring locations (M-001B/REC-001 and REC-002) at their respective facilities. In accordance with MRP No. R8-2007-0039, the required monitoring frequency for turbidity and pH is continuous; total inorganic nitrogen, total nitrogen, and total organic carbon is weekly; and total dissolved solids is monthly. Compliance with the TN limit of 5 mg/L can also be met at the lysimeters (Table 2-5a of quarterly reports) or at locations specified in alternative monitoring plans (Table 2-5b of quarterly reports). None of the narrative limits for turbidity, TDS, TIN, pH, or TOC were exceeded during 2022.

Table 2-2 of the quarterly report presents IEUA's Agency-wide 12-month running average for TDS and TIN as required by the NPDES permit. During 2022, there were no exceedances of the agency-wide 12-month running average for TDS and TIN.

2.1.2 *Detections and Compliance with Regulated and Non-regulated Contaminants*

Recycled Water Specifications A.1 through A.3 and A.15 of Order No. R8-2007-0039 are limits based primary maximum contaminant levels (MCLs), secondary MCLs, and Action Levels established by the Environmental Protection Agency (EPA). The monitoring for compliance of these parameters is based on the analysis of a sample collected at a recycled water sampling point along the distribution pipeline. The sample point was the RP-4 1299 Pressure Zone Pump Station, as it represents a mixture of recycled water from both RP-1 and RP-4 (RW Blend). During the Compliance Assessment Report (CAR) review, DDW identified that 001B effluent must be sampled and reported independently of the RW Blend.

The 2022 recycled water quality monitoring data and associated limits for Recycled Water Specifications A.1 through A.3 are shown in Table 2-3a (RW Blend) and Table 2-3b (001B Effluent) of the quarterly monitoring reports. Compliance determination for these constituents is based on 4-quarter running averages. In accordance with MRP No. R8-2007-0039, the required monitoring frequency for constituents with primary MCLs is quarterly and constituents with secondary MCLs is annually. During 2022, the 4-quarter running average concentrations for constituents with primary MCLs, secondary MCLs, and action levels did not exceed compliance limits, with the exception of 1,2,3-Trichloropropane (see Section 2.5).

Non-regulated contaminants include the remaining priority pollutants, endocrine disrupting chemicals & pharmaceuticals, and unregulated chemicals. These constituents do not have associated limits; however, they require annual monitoring in accordance with MRP No. R8-2007-0039 (Table II. Recycled Water Monitoring). Several non-regulated contaminants are sampled and reported more frequently than the required annual frequency due to having the same analysis methods used to monitor compounds with primary MCLs. Additionally, in accordance with Title 22, Division 4, Chapter 3. Article 5.1 §60320.120(b) the monitoring frequency of recycled water for chemicals with State notification levels (NLs) increased from annually to quarterly. The non-regulated contaminants monitoring data for recycled water can be found in Table 2-4a (RW Blend) and Table 2-4b (001B Effluent) of the quarterly monitoring report.

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. Compliance for TTHMs and HAA5 were consistently met throughout 2022 at the selected compliance lysimeters.

2.2 Groundwater Quality Monitoring

Groundwater quality data is collected at designated monitoring wells, and at the nearest down gradient potable water supply well near recharge basins utilizing recycled water. Location maps for wells monitored for the recharge program are presented on Figures 2-1 through 2-7 for Hickory & Banana, Turner, 7th & 8th Street, Ely, Brooks, Declez & RP3, and San Sevaine & Victoria Basins, 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. At the monitoring wells specified in Condition No. 19 in the Phase I Findings of Fact (FOF) of Order No. R8-2005-0033 and Condition No. 25 in the Phase II FOF of Order No. R8-2007-0039, quarterly and annual groundwater sampling for specific constituents specified in Condition No. 27 of the Phase II FOF.

The 2014 GRRP regulations require two downgradient monitoring wells to be monitored quarterly for Priority 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.

All quarterly groundwater quality data collected at the monitoring wells is reported in Table 2-9a and 2-9b of the quarterly monitoring reports. Annual monitoring well data for 2022 can be found in Table 2-9b in the 4Q22 report.

Groundwater quality monitoring results can be used to assess background or baseline conditions, to estimate the time of arrival of recharge waters and the percentage of recycled water at a monitoring well, and to assess the impacts of recharged water on down-gradient groundwater supplies. Section 3.2 and Section 3.4 of this report describe how the groundwater quality monitoring results are used for these purposes in more detail. Section 2.5 of this report describes any exceedances of a primary or secondary MCL, or the presence of total coliform in groundwater samples during 2022, and the notification to the DDW.

2.3 Laboratory Certifications and Test Methods

Water quality samples collected for the recycled water recharge program are analyzed by either the IEUA or Eurofins Eaton Analytical (EEA) laboratories. Both laboratories are DDW Environmental Laboratory Accreditation Program (ELAP) certified, pursuant to the California Environmental Laboratory Improvement Act. The IEUA laboratory certification is valid through October 2024 and the EEA laboratory certification is valid through February 2024.

To ensure the quality and reliability of test measurements and results, specific programs and procedures have been developed by both the IEUA and EEA. The 2022 Annual Laboratory QA/QC Data Summary Report was also submitted to the Regional Board as an attachment in IEUA's 2022 Annual NPDES Report.

2.4 Calibration Summary

The field parameters of temperature, pH, conductivity, dissolved oxygen, oxidation/reduction potential were recorded during monitoring well sampling using an AquaTroll 500 Multiparameter Meter. This instrument utilizes a flow-cell to allow water to flow through the meter chamber without exposure to the atmosphere. Field analytical instruments used throughout this project were maintained and calibrated each day of use. Calibration was conducted according to instructions provided by the instrument manufacturer.

2.5 Violations, Suspensions, and Corrective Actions

There were no exceedances for the parameters analyzed during 2022 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 and grease. Exceedances of 1,2,3-TCP and PFOA are described below.

1,2,3-TCP in Recycled Water

In September 2019, 1,2,3-TCP was detected above the MCL of 0.005µg/L at both the RW Blend and 001B Effluent recycled water locations and accelerated weekly sampling for 1,2,3-TCP was continued until 1,2,3-TCP was not detected above the MCL in 2Q21. During 2Q22, 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 the following requirements of §60320.112(d)(2), weekly sampling began on 06/18/21.

- §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. The 1,2,3-TCP concentration in the recycled water continued to exceed the MCL after accelerated monitoring was implemented. A corrective action report to address these exceedances were submitted to the Regional Board on February 13, 2020. Following a meeting with DDW and Regional Board on July 15, 2021, DDW requested that a revised correction action report be prepared and submitted. On August 12, 2021, a revised corrective action report was submitted to DDW and Regional Board.

IEUA has been actively implementing the corrective actions, which includes: evaluations of monitoring wells, lysimeters, source control, and the analysis method; and an investigation of disinfection byproducts. IEUA has contracted with Trussell Technologies on October 5, 2021 to assist with the investigation of 1,2,3-TCP and possible mitigation measures. The objective of this study is to have 1,2,3-TCP designated as a disinfection byproduct specific to surface spreading activities. As of January 2022, the project team has identified the potential strategies to carry out the 1,2,3-TCP investigation. A 1,2,3-TCP method assessment plan was submitted to DDW and Regional Board for their review and comment on March 22, 2022 and the last set of comments were received on April 27, 2022. Trussell Technologies revised the plan, and the plan was re-submitted for review on June 13, 2022. At the time of reporting, some preliminary testing has taken place to evaluate the analytical methods and impact of preservative impacts on 1,2,3-TCP concentrations. Additionally, IEUA and Los Angeles County Sanitations Districts (LACSD) meet regularly to discuss 1,2,3-TCP, as both agencies utilize surface application for groundwater recharge and are regularly experiencing 1,2,3-TCP concentrations above the MCL.

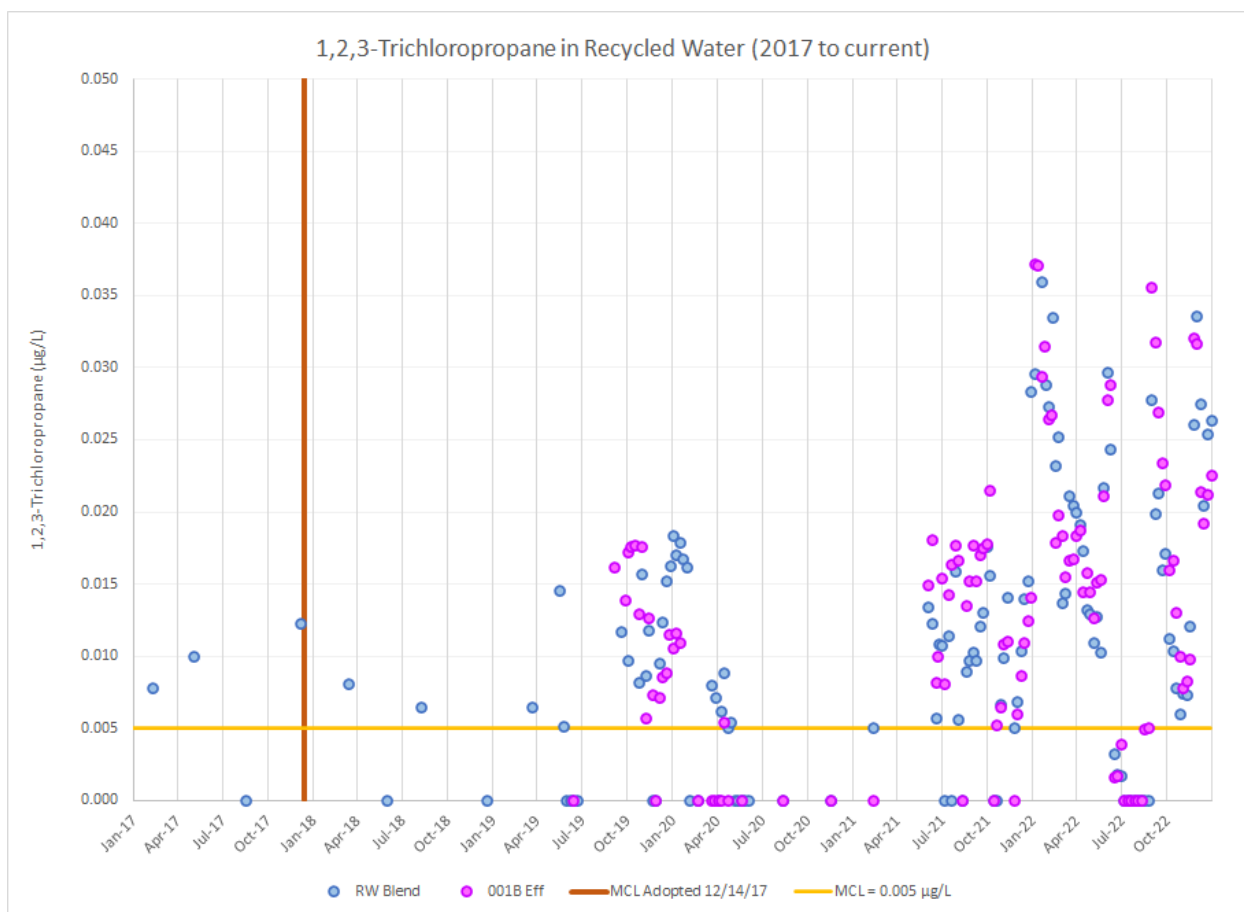
The weekly results of 1,2,3-TCP for 2022 and a chart of the results of 1,2,3-TCP from 2017 to 2022 are shown below:

Sample	Date	RW Blend (µg/L)	4-sample avg (µg/L)
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
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
Week 55	07/05/22	<0.005	<0.005
Week 56	07/12/22	<0.005	<0.005
Week 57	07/19/22	<0.005	<0.005
Week 58	07/26/22	<0.005	<0.005
Week 59	08/03/22	<0.005	<0.005
Week 60	08/09/22	<0.005	<0.005
Week 61	08/16/22	<0.005	<0.005
Week 62	08/23/22	<0.005	<0.005
Week 63	08/30/22	0.028	0.007
Week 64	09/06/22	0.020	0.012
Week 65	09/13/22	0.021	0.017
Week 66	09/20/22	0.016	0.021
Week 67	09/27/22	0.017	0.019

Sample	Date	001B Eff (µg/L)	4-sample avg (µg/L)
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
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
Week 55	07/05/22	<0.005	<0.005
Week 56	07/12/22	<0.005	<0.005
Week 57	07/19/22	<0.005	<0.005
Week 58	07/26/22	<0.005	<0.005
Week 59	08/03/22	<0.005	<0.005
Week 60	08/09/22	<0.005	<0.005
Week 61	08/16/22	0.005	0.001
Week 62	08/23/22	0.005	0.003
Week 63	08/30/22	0.036	0.011
Week 64	09/06/22	0.032	0.019
Week 65	09/13/22	0.027	0.025
Week 66	09/20/22	0.023	0.029
Week 67	09/27/22	0.022	0.026

Sample	Date	RW Blend (µg/L)	4-sample avg (µg/L)
Week 68	10/05/22	0.011	0.016
Week 69	10/12/22	0.010	0.014
Week 70	10/19/22	0.008	0.012
Week 71	10/26/22	0.006	0.009
Week 72	11/02/22	0.007	0.008
Week 73	11/09/22	0.007	0.007
Week 74	11/16/22	0.012	0.008
Week 75	11/23/22	0.026	0.013
Week 76	11/30/22	0.034	0.020
Week 77	12/07/22	0.028	0.025
Week 78	12/14/22	0.021	0.027
Week 79	12/21/22	0.025	0.027
Week 80	12/28/22	0.026	0.025

Sample	Date	001B Eff (µg/L)	4-sample avg (µg/L)
Week 68	10/05/22	0.016	0.022
Week 69	10/12/22	0.017	0.020
Week 70	10/19/22	0.013	0.017
Week 71	10/26/22	0.010	0.014
Week 72	11/02/22	0.008	0.012
Week 73	11/09/22	0.008	0.010
Week 74	11/16/22	0.010	0.009
Week 75	11/23/22	0.032	0.015
Week 76	11/30/22	0.032	0.020
Week 77	12/07/22	0.021	0.024
Week 78	12/14/22	0.019	0.026
Week 79	12/21/22	0.021	0.023
Week 80	12/28/22	0.023	0.021



PFOA in Recycled Water

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 implementing accelerated monitoring. The corrective actions report was submitted to the DDW and 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 action 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 Regional Board on May 2, 2022. At time of reporting, IEUA has not received a response from the DDW.

The weekly results of PFOA for 2022 and a chart of the results of PFOA from 2019 to 2022 are shown below:

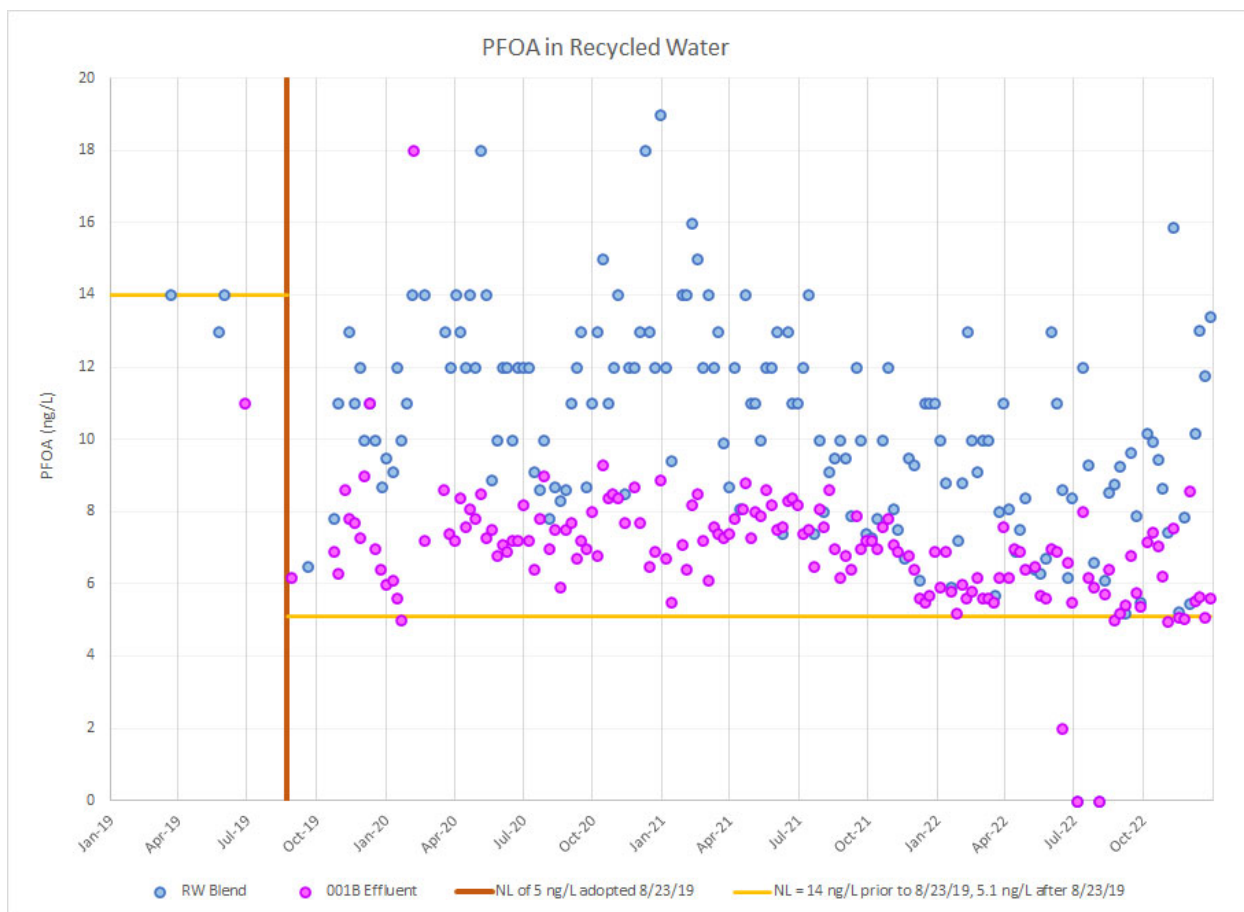
Sample	Date	RW Blend (ng/L)	4-sample avg (ng/L)	Sample	Date	001B Eff (ng/L)	4-sample avg (ng/L)
Continued	01/04/22	10	11	Continued	01/04/22	5.9	6.0
Continued	01/11/22	8.8	10	Continued	01/11/22	6.9	6.4
Continued	01/18/22	5.9	8.9	Continued	01/18/22	5.8	6.4
Continued	01/27/22	7.2	8.0	Continued	01/25/22	5.2	6.0
Continued	02/02/22	8.8	7.7	Continued	02/01/22	6.0	6.0
Continued	02/09/22	13	8.7	Continued	02/08/22	5.6	5.7
Continued	02/15/22	10	9.8	Continued	02/15/22	5.8	5.7

Sample	Date	RW Blend (ng/L)	4-sample 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	<2.0	4.9
Continued	06/21/22	6.6	5.1
Continued	06/28/22	5.5	4.8
Continued	07/05/22	12.0	8.8
Continued	07/12/22	9.3	9.0
Continued	07/19/22	6.6	9.1
Continued	07/26/22	6.1	8.5
Continued	08/02/22	8.5	7.1
Continued	08/09/22	8.8	7.8
Continued	08/16/22	9.3	8.2
Continued	08/23/22	5.2	7.9
Continued	08/30/22	9.7	8.2
Continued	09/06/22	7.9	8.0
Continued	09/13/22	5.5	7.1
Continued	09/20/22	6.1	8.5
Continued	09/27/22	8.5	7.1
Continued	10/05/22	10.2	8.3
Continued	10/12/22	9.9	8.4
Continued	10/19/22	9.5	8.8
Continued	10/26/22	8.7	9.6
Continued	11/02/22	7.4	8.9
Continued	11/09/22	15.9	10.4
Continued	11/16/22	5.3	9.3
Continued	11/23/22	7.8	9.1

Sample	Date	001B Eff (ng/L)	4-sample 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
Continued	07/05/22	8.0	5.0
Continued	07/12/22	6.2	6.6
Continued	07/19/22	5.9	6.4
Continued	07/26/22	5.7	6.5
Continued	08/02/22	6.4	6.0
Continued	08/09/22	5.0	5.7
Continued	08/16/22	5.2	5.6
Continued	08/23/22	5.4	5.5
Continued	08/30/22	6.8	5.6
Continued	09/06/22	5.8	5.8
Continued	09/13/22	5.4	5.8
Continued	09/20/22	5.7	6.5
Continued	09/27/22	6.4	6.0
Continued	10/05/22	7.2	6.3
Continued	10/12/22	7.5	6.4
Continued	10/19/22	7.1	6.8
Continued	10/26/22	6.2	7.0
Continued	11/02/22	5.0	6.4
Continued	11/09/22	7.6	6.5
Continued	11/16/22	5.1	6.0
Continued	11/23/22	5.1	5.7

Sample	Date	RW Blend (ng/L)	4-sample avg (ng/L)
Continued	11/30/22	5.5	8.6
Continued	12/07/22	10.2	7.2
Continued	12/14/22	13.0	9.1
Continued	12/21/22	11.8	10.1
Continued	12/28/22	13.4	12.1

Sample	Date	001B Eff (ng/L)	4-sample avg (ng/L)
Continued	11/30/22	8.6	6.6
Continued	12/07/22	5.5	6.1
Continued	12/14/22	5.6	6.2
Continued	12/21/22	5.1	6.2
Continued	12/28/22	5.6	5.5



During 2022, there were exceedances of limits for constituents sampled at groundwater monitoring wells adjacent to recharge basins receiving recycled water. These exceedances were primarily for secondary MCLs, and some for primary MCLs, and total coliform presence. 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 reported in the quarterly reports.

As required in MRP R8-2007-0039 Section V.2 the DDW were notified when necessary. The following describes the exceedances that were detected during 2022 quarterly groundwater sampling, and any DDW notifications (no DDW notifications were made during 2022):

Primary MCL Exceedances in Groundwater

- NO₃-N samples collected from monitoring wells at 7th & 8th Street, Banana & Hickory, Brooks, Ely, RP3, San Sevaine, and Victoria Basins were detected above the primary MCL of 10 mg/L. The NO₃-N concentrations at these wells range from 11 to 23 mg/L and are characteristic of groundwater quality in these areas of the Chino Basin. The distribution of NO₃-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 NO₃-N concentrations are comparable to the ambient NO₃-N concentration in groundwater for each monitoring well's respective groundwater management zone within the Chino Basin.
- The perchlorate concentration at BRK-1/2 was above the primary MCL of 6 µg/L. Perchlorate concentrations at BRK-1/2 have always been at levels slightly above the MCL since sampling at this well began in early 2007, prior to recycled water recharge. The perchlorate concentrations in BRK-1/2 are consistent with historical background groundwater concentration founds at nearby wells in the Pomona area. The perchlorate concentrations in these areas are reported in the Watermaster's State of the Basin reports.
- The 1,2,3-TCP concentration at BRK-2/2 was above the primary MCL of 0.005 µg/L. The 1,2,3-TCP concentration in BRK-2/2 are consistent with historical background groundwater concentration founds at nearby wells in the Pomona area.
- The nickel concentrations at these two monitoring wells have been consistently above the MCL since 2017 at 8TH-1/2 and since 2019 at 8TH-2/2. The nickel concentration of the recycled water and local runoff/stormwater recharge waters is well below the MCL.

Secondary MCL Exceedances in Groundwater

- Turbidity was higher than the secondary MCL of 5 NTU at 8TH-1/1, 8TH-1/2, 8TH-2/2, ALCOA MW1, BRK-1/1, BRK-2/1, DCZ-1/1, SSV-2, and T-1/2.
- Color was higher than the MCL of 15 units at Alcoa MW1 and 8TH-1/2.
- Iron was higher than the MCL of 300 µg/L at Alcoa MW1.
- Manganese was higher than the secondary MCL of 50 µg/L at DCZ-1/1 and RP3-1/1.
- Odor was higher than the secondary MCL of 3 TON at Alcoa MW1.
- TDS was higher than its secondary MCL of 500 mg/L at ALCOA MW3, Bishop of SB Corp. – DOM, and RP3-1/1, Southridge JHS. EC was higher than its secondary MCL of 900 µmhos/cm at ALCOA MW3 and Southridge JHS. The wells near the RP3 Basins are located in areas where the TDS and EC concentrations in groundwater are historically elevated. The distribution of TDS concentrations observed at wells in the Chino Basin is summarized in Watermaster's State of the Basin Reports.

2.6 Unit Process Changes and Anticipated Impact on Water Quality

No unit process changes occurred during the 2022 calendar year, therefore there was no impact on water quality.

2.7 Summary of Chemical Usage

A summary of treatment chemicals used on a monthly basis at RP-1 and RP-4 during the 2022 calendar year is presented in Table 2-1.

3 GROUNDWATER RECHARGE MONITORING

3.1 Summary of Recharge Operations

Groundwater recharge using recycled water has been initiated in 8th Street, Banana, Brooks, Declez, Ely, Hickory, RP3, Turner, San Sevaine, and Victoria Basins. During 2022, IEUA's recycled water recharge totaled 16,909.4 AF. The table below summarizes the volume of recycled water recharged during 2022 at each basin, and the percent of the total recycled water recharged in the year. The table shows the distribution of recharge amongst the recharge sites.

Basin	2022 Recycled Water Recharge (AF)	Percent of 2022 Recycled Water Recharge
8 TH	2,034.2	12%
Banana	778.1	5%
Brooks	612.7	4%
Declez	239.8	1%
Ely	543.0	3%
Hickory	599.8	4%
RP3	5,845.7	35%
San Sevaine	4,008.3	24%
Turner 1&2	36.3	0%
Turner 3&4	371.6	2%
Victoria	1,840.0	11%
Total	16,909.5	100%

The 2022 calendar year include annual program recharge of 24,142.8 acre-feet (AF), which includes 7,233.4 AF of storm water and dry weather flows (including well pump to waste recharge); 16,909.4 AF of recycled water; and 0 AF of imported water. Appendix A of this report contains the monthly groundwater recharge summaries for all sites in the recycled water groundwater recharge program. Monthly recharge volumes, including diluent and recycled water volumes are presented in the quarterly monitoring reports (IEUA, 2022a, 2022b, 2022c, and 2023), but are repeated in this section's discussion of RWC (recycled water contribution) management plans. Delivered recharge volumes have been reduced from the metered volume by an evaporation losses factor calculated by CBWM on all supplemental water recharge (imported water and recycled water).

3.2 In-Aquifer Blending of Recycled Water

Section VI.B.3.b of the MRP requires the annual report include:

[A mass balance to ensure that blending is occurring in the aquifer at each recharge basin.](#)

In-aquifer blending of recycled water recharge is shown two ways. The first is the mass balance of relative volumes of the recharge water sources - recycled water and diluent water, including storm water / local runoff, groundwater underflow, and imported water - presented in the RWC

Management Plans. The second is by comparison of relative concentrations of water quality parameters that have distinct concentrations in both the background (or baseline) groundwater and the recycled water used for recharge, such as EC, TDS, and chloride.

While both these methods are appropriate, they should be used together as evidence of in-aquifer blending. They are appropriate as the velocity of the horizontal groundwater flow away from the recharge site is slower than the velocity of the vertical recharge percolation. This velocity difference results in the development of the groundwater mound of recharged water beneath a recharge site. In-aquifer blending occurs as the accumulating water sources comprising the mound dissipate away from the basin. As discussed in section 3.2.2, blending is evidenced by water quality concentration changes in the monitoring wells located down gradient from the recharge sites. Location maps for wells monitored for the recharge program are presented on Figures 2-1 through 2-7. As discussed in section 3.2.1, the volume-based percentage of recycled water recharged expresses the reasonably anticipated blending as recharge moves towards distant monitoring wells. Actual blending, however, will likely be greater (expressed as a lower percentage of recycled water) as the recharged water blends with groundwater.

3.2.1 Evidence of Blending Based on Volume

Each basin's 120-month running average RWC (a volume-based percentage) expresses a reasonably expected long-term blend as all recharged waters sources move and mix towards distant monitoring wells. The 2022 monthly recharge volumes by water type are presented in Appendix A and in the historical recharge column of the RWC Management Plans (Appendix B). RWC management plans and calculation of a 120-month running average RWC are discussed in more detail in Section 3.3. The running average RWC calculation is equal to:

$$\text{Recycled Water 120-Month Total Volume} / (\text{Recycled Water} + \text{Diluent Water 120-Month Total Volume})$$

As documented in Appendix B, the (volume-based) running average RWC at the end of December 2022 for basins having initiated recycled water recharge are listed below:

Basin	RWC Limit	120-Mo. Running Avg. RWC
8 th Street	50%	24%
Banana	50%	33%
Brooks	50%	14%
Ely	50%	26%
Declez	20%	7%
Hickory	50%	19%
RP3	50%	25%
San Sevaïne	50%	18%
Turner 1&2	24%	24%
Turner 3&4	45%	25%
Victoria	50%	27%

Recycled water and diluent water are typically recharged in distinct batches. However, there can be blending of local runoff with recycled water as it is delivered to the basins, or as storm water enters a basin already containing some recycled water. Variations in the delivery period of diluent water and recycled water provide for level of blending. Dilution with groundwater is accounted for by the utilization of groundwater underflow in the calculation of running average RWC.

To be conservative, the start of including groundwater underflow as a diluent water source in the RWC calculation is either 1) October 2009 (the date the permit amendment was adopted allowing for its use) or 2) the first month of a basin's recycled water recharge (if after October 2009). The underflow estimation method was documented in Appendix G of the 2009 Annual Report for the Recycled Water Groundwater Recharge Program (IEUA and CBWM, 2010a). Underflow for each basin was calculated using the Darcy flow equation with input parameters originating from CBWM's calibrated groundwater flow model. For basins that share the flow path of groundwater underflow, the underflow volume is used for both basins as the travel time between these basins exceeds that required for drinking water wells, and thus any upstream blend has become groundwater again upon reaching the downstream basin. Conservatively, the underflow calculation was made using only the upper-most sediments (upper model layer), and thus does not include potential mixing of recycled water recharge with groundwater in the deeper sediments (lower model layer). Modeled Chino Basin groundwater flow vectors from 2014 were reviewed and support the underflow estimates made using 2009 flow vectors.

In a letter dated June 18, 2015, the DDW approved the request to increase the maximum average RWC limit to 50% at all the basins except for Turner Basins and San Sevaine Basin 5. The determination for Turner Basin was based upon EC and chloride data at the mound monitoring well that suggested only the recent arrival of recycled water at the mound monitoring well in the latter half of 2014 and would require additional data to confirm that evidence of blending has occurred. For San Sevaine Basin 5, recycled water arrival at the mound monitoring well (SS-1) based on EC and chloride data were inconclusive for determining its arrival during the 2011 to 2014 operational period. Recycled water recharge at San Sevaine 5 was suspended in 2014 due to poor infiltration rates and resulting maintenance issues. However, in August 2020, recycled water recharge resumed at the San Sevaine site at San Sevaine 2. Based on the 2020/21 Start-Up Period performance (IEUA and CBWM, 2022), an RWC limit of 50% was determined for San Sevaine 1, 2, and 3, and superseded the 29% limit initially determined for San Sevaine 5.

3.2.2 Evidence of Blending Based on Water Quality

Time-series graphs of EC, TDS, and chloride were prepared for monitoring wells adjacent to the recharge sites to help identify occurrence of blending within the aquifer. The graphs depicting trends in EC, TDS, and chloride are presented in Appendix C. The graphed data are tabulated in prior quarterly monitoring reports. The method is employed as a simple approximate mass balance method as an illustration that blending is occurring. It is not intended to provide a precise blend, but to show changes occurring. The method includes an assumption that the recharge of stormwater and the imported water are of similar EC and chloride as the groundwater. In general, background (or baseline) groundwater concentrations of EC, TDS, and chloride are much lower than recycled water used for recharge. That blending occurs can be gauged based on how these concentrations change with time and for how long the change persists. The degree of blending

can be estimated based on the proportional relationship of the recycled water EC (and chloride) and the background groundwater EC (and chloride).

In the following recharge site discussion, Table 3-1 provides the estimated 2022 ranges of peak percent blend of recycled water observed at wells showing EC and chloride increases associated with recycled water recharge. For these wells, the mass-balance blends in Table 3-1 are estimated by taking the concentration difference between the annual peak monitoring well groundwater concentration and the groundwater background (or baseline) then dividing by the difference between the recycled water concentration and the groundwater background (or baseline). The background groundwater EC data in Table 3-1 are the approximate well water concentration prior to recycled water recharge. The recycled water date in Table 3-1 is the current calendar year average concentration of the blended RP-1 and RP-4 recycled water. The ranges discussed in the paragraph come from Table 3-1 and are presented as the percent based on EC to the percent based on chloride, respectively.

8th Street Basin Area

For the 8th Street Basin Area, in the shallower monitoring well (8TH-1/1) there was an increase in chloride concentrations from mid 2009 to late 2015 supporting the arrival or recycled water recharged in 2007. This initial arrival represents an approximate 22-month travel time for recharge in the north portion of 8th Street Basin to percolate to the water table and travel to 8TH-1/1. In 2015, the 8TH-1/1 monitoring well groundwater EC, TDS, and chloride concentrations were the highest since the initiation of recycled water recharge at the 8th Street Basin. The highest historical percent blend of recycled water in the groundwater mound at 8TH-1/1 during 2015 was approximately 79% to 98% based on EC and chloride concentrations. In 2022, the highest recycled water blend at the well 8th-1/1 was between 50% and 79%.

In the deeper casing (8TH-1/2), there were slight increases in the EC, TDS, and chloride concentrations from mid-2011 to 2021 after trending downward from when the well was constructed in 2007 through 2011. The 2011 increases suggest recycled water recharge after the start up in 2007 and 2008 may have started to arrive in the deeper casing after a travel time of roughly 46 months. From 2011 through 2022, 8TH-1/2 groundwater EC, TDS, and chloride concentrations continued a gradual rise, suggesting that the movement of recycled water downward at this location may be blending with underflow at a generally steady rate. As the TDS and EC data are within historical, pre-recycled water recharge concentrations, continued monitoring of these two water quality parameters at the deeper casing is needed to identify with certainty the arrival and blending of recycled water at this depth. The highest chloride concentration in 2022 at 8TH-1/2 was 70 mg/L which was greater than the lowest background concentration of 13 mg/L. However, recycled water arrival would be confirmed should EC and TDS continue to rise significantly above the 2011 baseline concentrations (460 μ mhos/cm and 300 mg/L, respectively) at this location and depth. The highest percent blend of recycled water in the groundwater mound at 8TH-1/2 during 2022 if confirmed would be approximately 50% to 58%.

Between 2007 and 2018, the shallower casing of monitoring well 8TH-2 (8TH-2/1) shows cyclical seasonal variations and a trend of decreasing EC, TDS, and chloride concentrations that make the arrival of recycled water somewhat difficult to evaluate. 8TH-2 is located approximately 2,500 feet south and downgradient of 8TH-1. Arrival of recycled water at 8TH-2/1 would likely be observed as a longer-term increase in the cyclical annual peaks of EC, TDS, and chloride. EC

and TDS show slight increases in 2016-2017 but returned to within their background ranges in 2018. In 2020 through 2022, Chloride concentrations increased by 10 mg/L above background. Continued observation of these water quality trends is warranted prior for further assessment of recycled water arrival time at 8TH-2/1

Between 2007 and 2018, there was insufficient indication from 8TH-2/2 data to identify a recycled Monitoring of the deeper well casing of 8TH-2 was suspended in the third quarter of 2015 and resumed in the second quarter of 2017. In 2019, chloride concentrations trended upwards to a historical high (62 mg/L) but has since gradually decreased to 52 mg/L in 2021. The 2019-2021 increased chloride may suggest the arrival of recycled water after 123 months. The EC and TDS trends would also be expected to increase with the arrival of recycled water. EC concentrations illustrate an increasing trend in 2019-2022 timed with the upward chloride trend but has not exceed background levels. The highest percent blend of recycled water in the groundwater at 8TH-2/2 during 2022 if confirmed later by EC would be approximately 19% to 34%.

Banana & Hickory Basins Area

Beginning in early 2008 and plateauing in mid-2009, the deeper casing of monitoring well BH-1 (BH-1/2) located adjacent to Hickory Basin demonstrated significant changes in EC, TDS, and chloride (a 110-mg/L difference in TDS). These changes are attributed to the initiation and continued recharge of recycled water at Hickory and Banana Basins. In 2010 through 2014, generally consistent EC, TDS, and chloride concentrations of the groundwater at BH-1/2 were observed and suggest a stabilized RWC with historical operations at Hickory and Banana Basins. Through 2015 and into 2016, EC, TDS, and chloride data again increased to historically high levels (another 130 mg/L increase in TDS). In 2020, concentrations remained stable but slightly lower than the peak of 2016. In 2021, concentrations began a gradual decrease and continued to decrease in 2022. In 2022, the highest percent blend of recycled water the groundwater mound at BH-1/2 reached approximately 34% to 50%.

Since initiation of recycled water recharge in 2005, the California Speedway Infield Well, south of Banana Basin, showed gradual increases in EC, TDS, and chloride concentrations through 2018 (194-mg/L TDS and 48 mg/L chloride differences). The gradual increase is to be expected with gradual blending as groundwater moves away from the basin (compare with the slightly higher TDS variation at the basin area mound of BH-1). Minimum travel time from Banana Basin to the California Speedway Infield Well based on Infield Well data is approximately 29 months. In 2022, the highest percent blend of recycled water in the groundwater at the California Speedway Infield Well reached approximately 52 to 32%.

For downgradient well California Speedway No. 2, EC, TDS, and chloride concentrations generally remained the same from 2005 through mid-2012. In April 2012, a slight increasing trend in concentration trend began and continued through 2021. While small, the change supports a recycled water arrived at this well in April 2012, an approximately 6.5-year travel time. In 2021, the highest percent blend of recycled water in the groundwater at the California Speedway Well No. 2 reached approximately 48 to 19%. In 2022, EC, TDS, and chloride concentrations returned to background levels in 2006.

For downgradient well Reliant East, the EC, TDS, and chloride data do not suggest a definitive arrival of recycled water recharge despite slight increases in the monitored parameters observed in 2015 and 2016. Continued observation of the Reliant well would be needed to evaluate whether

it is being impacted by recycled water recharge. Unfortunately, in 2018 the NRG facility closed and the well is no longer operational. Should a new owner maintain the well, sampling would be continued. IEUA is developing a project to site and install a replacement monitoring in the 2022/23 fiscal year.

Ontario Well No. 20 was taken out of service in 2015 and is no longer monitored. Fontana Water Company 37A (located 2,240 feet up gradient of Banana Basin) was taken out of service in 2016 and in 2018 was replaced for monitoring with Fontana Water Company 7A. Due to its location up gradient of Banana Basin, neither well is not expected to show a recycled water component. However, EC and TDS concentrations had gradually increased in well 37A between 2005 and 2017. Well 7A has had stable chloride, EC, and TDS trends since monitoring began in 2018.

Brooks Basin Area

For the Brooks Basin area, monitoring wells are located at the basin (BRK-1) and down gradient of the basin (BRK-2). Water quality monitoring of the deeper casing (BRK-1/2 and BRK-2/2) was suspended in the second quarter of 2015 and resumed in second quarter 2017. Monitoring was resumed at these deeper wells to track a peak change in the parameters being sampled.

Brooks Basin recycled water recharge began in September 2008. EC, TDS, and chloride concentrations at BRK-1/1 show seasonal increases and decreases through its history, likely related to recharge activity. From 2013 to 2017, concentration increases of 150 mg/L for TDS and 60 mg/L for chloride were observed and attributed to the presence of recycled water at BRK-1/1. the highest percent blend of recycled water in the groundwater mound at the recharge basin during 2022 was approximately 49% to 65% at BRK-1/1. The historical data shows that blending occurs in the aquifer beneath Brooks Basin. In the deeper casing (BRK-1/2), a notable yet gradual increases in EC, TDS, and chloride began in January 2010 and continued through 2017 and have been stable from 2018-2021. Concentration increases of 108 mg/L for TDS and 10 mg/L for chloride have been observed and are attributed to the presence of recycled water at BRK-1/2. In 2022, the percent blend of recycled water at BRK-1/2 is approximately 50% to 11%.

The chloride concentrations at BRK-2/1 show a 35-mg/L stepped increase in 2011 that returned to background levels in 2013. In 2015, chloride concentrations in BRK-2/1 increased sharply to historical highs (approximately 20 mg/L higher than the prior high in 2012) and remained just above 80 mg/L through 2018. Chloride concentrations returned to background levels in 2019 before sharply increasing again in 2020, then remained stable though 2022. These chloride pulses mimic similar chloride increase at mound well BRK-1/1 but delayed. These pulses are interpreted to indicate the arrival of recycled water at BRK-2/1.

For downgradient well BRK-2/2, the EC, TDS, and chloride data are relatively stable from 2007 to 2018 and begin a slight increase in 2019, then became relatedly stable through 2022. While these trends do not definitively suggest an arrival of recycled water recharge, continued observation of the BRK-2/2 is needed to evaluate whether recycled water recharge is impacting it.

Ely Basin Area

Groundwater in the area directly south of Ely Basin (south of the 60 Freeway) is on the northern perimeter of a portion of the Chino Groundwater Basin with high TDS and nitrate concentrations. Groundwater in this area has TDS concentrations between 500 and 1,000 mg/L, as is typical of

the Chino Basin areas with a long irrigation history (CBWM & IEUA, 2003). Recycled water has been recharged at Ely Basin since 1999. Quarterly sampling of the Ely area monitoring wells began in 2007, when the site was incorporated in the program's recharge permit.

For Ely Basin, monitoring wells are located at the basin (Philadelphia well) and downgradient (Walnut well and Riverside well). Historical recycled water recharge is estimated to have traveled to and beyond the three monitoring wells directly downgradient of Ely Basin due to the basin's recharge history and the wells proximity to the basin (0.0 miles, 0.5 mile and 1.0 mile for the Philadelphia, Walnut, and Riverside wells, respectively).

The late 2014 sample results at the Philadelphia well show EC and chloride at historical high levels nearly equal to that of recycled water. Due to drought conditions in 2014, recycled water was the predominant recharge source water at Ely Basin, nearly 2,000 AF more than the volume recharged in 2013. From 2015 to 2018, the EC, TDS and chloride concentrations at the Philadelphia well decreased slightly but remained well above pre-2014 levels. During 2018, the highest percent blend of recycled water in the recharge mound groundwater at the Philadelphia well reached approximately 85% to 100%. In 2019, the Philadelphia well remained out of service. In 2020, an evaluation indicated the well casing is damaged, thus requiring a new well to be installed. IEUA has budgeted to install a new well in 2023.

At the downgradient Walnut and Riverside wells, the high background concentrations of EC, TDS, and chloride make it difficult to identify the arrival of lower concentration storm water and recycled water. The EC, TDS, and chloride concentrations at the Walnut well have historically been at 1.5 to 2 times the concentrations found in recycled water. It is thus difficult to attribute variations in concentration with recharge activity at Ely Basin. A more definitive indicator of the arrival of recycled water to the Walnut well that could help estimate travel time would be similar trends of EC, TDS, and chloride concentrations observed at the Philadelphia well in 2014 to 2018. As of 2021, such a trend has not been observed.

Further down gradient of the Walnut well, the EC, TDS, and chloride of groundwater at the Riverside well are relatively stable but exhibited a gradual increase in concentration between 2007 and 2014 followed by a slight decrease in 2015. These concentrations have been fairly stable from 2016 to 2022. The results do not indicate any direct seasonal changes from recycled water or diluent water recharge at Ely Basin.

Turner Basin Area

The Turner Basin area monitoring well T-1/2 (at Turner 1) has historical and temporal variations in EC, TDS, and chloride (100 to 200 mg/L for TDS) that can be attributed to cycles of recycled water recharge. For the 5 years after the Turner 1 recycled water start-up period (2006-2007), recycled water deliveries had been limited, and thus EC, TDS, and chloride concentrations decreased towards background levels. However, with the drought conditions of 2014-2018, a larger volume of recycled water was delivered in this period than prior years. The rapid fluctuations in TDS, EC, and chloride concentrations at T-1 indicate recharge water moves quickly away from the Turner 1 Basin. Recycled water recharge at Turner 1 has been insignificant in 2019 through 2022 as recharge is following the sites RWC management plan. During 2022, EC and chloride were declining towards background levels and the highest percent blend of recycled water in the groundwater mound at Turner 1 monitoring well T-1/2 was approximately 20% to 18%.

At monitoring well T-2/2 (at Turner 4), the EC, TDS, and chloride concentrations arrivals due to recharge are delayed several months. The slower and smaller relative concentration changes (compared to Turner 1's monitoring well T-1/2) suggests that recharge from Turner 4 is more laterally distributed when it reaches the groundwater table. This is consistent with the slower recharge rates observed at Turner 4. In 2019, concentrations of EC, TDS, and chloride concentration increased at the deeper well casing T-2/2 at Turner 4 following recharge in late-2018. During 2022 the highest percent blend of recycled water in the groundwater mound at the Turner 4 Basin was approximately 82% to 75%. The T-1/2 and T-2/2 EC, TDS, and chloride data periodically indicate blend ratios of near 100% when recharge is near 100% recycled water. At other times of less recycled water recharge, the data show recycled water beneath the Turner Basins is blending in the aquifer with groundwater and other recharge source waters.

Downgradient from the Turner Basins, Ontario Well No. 25 showed a slight increase in EC (75 μ mhos/cm), TDS (40 mg/L), and chloride (10 mg/L) above background levels that suggest recycled water arrival in July 2010. From mid-2010 through 2016, the EC, TDS and chloride concentrations in Ontario Well No. 25 have remained relatively constant. Declines towards background concentrations were observed by the end of 2017 and 2018. Estimated travel time based on these water quality data is approximately 48 months. As of 2019, Ontario Well No. 25 has been classified by DDW as inactive.

Downgradient Ontario Well No. 29 in January 2009 through 2010 showed a slight stepped increase in TDS and chloride concentration similar in magnitude to the gradual rise at Ontario Well No. 25. However, the increases at Ontario Well No. 29 are within the range of background data. These changes are not definitive changes that would correlate with groundwater recharge using recycled water. Ontario Well No. 29 was not sampled from October 2010 to October 2012 because the well was out of commission. The 2013 through 2022 Well No. 29's concentration data are lower than the wells' peak values in 2010 and are within background concentrations. Additional data from future monitoring are required to assess the arrival and occurrence of recycled water at Ontario Well No. 29.

RP3 Basin Area

For the RP3 Basins area, the initiation of recycled water recharge occurred in June 2009. The 2009 through 2012 variations in water quality concentrations from the RP3-1 monitoring wells were difficult to draw conclusions from regarding the percent recycled water. The variations were likely due to purging of higher TDS and chloride water from the soil and groundwater beneath the basin. Following a good storm season of diluent water and after taking the basin offline for cleaning, the summer-2012 EC, TDS, and chloride concentrations for RP3-1 reached historical lows. Use of the 2012 low concentrations as the baseline conditions has since been used to estimate the blend of recycled water beneath the RP3 Basins. During 2022, the percent blend of recycled water in the groundwater at well RP3-1/1 was 100% and 100% (EC and chloride based).

Downgradient well ALCOA MW-3 has higher EC, TDS, and chloride concentrations than ALCOA MW-1. ALCOA MW-3 and -1 are approximately 4,600 feet and 9,200 feet distant from RP3 Basins, respectively. In 2021, ALCOA MW-3 groundwater continued to show fluctuating EC, TDS, and chloride concentrations, though these fluctuations were generally smoother and of smaller magnitude than previous years. This behavior continues to suggest higher salt content water moving past the well site. From 2017 through 2021, the peaks of the EC, TDS, and chloride

appear to have stepped above the prior range of variation. These higher concentrations exceed that of recycled water and is thus not an indication of the arrival of recycled water at this location. More data is required to evaluate the arrival of recycled water at ALCOA MW-3.

Downgradient well ALCOA MW-1 shows seasonal (summer through early fall) spikes in EC, TDS, and chloride from 2011 through 2021. These spikes of high concentrations are greater in magnitude than their respective concentrations in recycled water, and thus are likely due to higher salt content water moving past the well. EC, TDS, and chloride concentrations show an acute increase to historical highs during the summer and early fall of 2020. Though concentrations fell during two subsequent samplings, levels remain well above historical background values. Determining the source of this spike will require further observation. The background concentrations at ALCOA MW-1 are similar to that of recycled water. More data is required to correlate the arrival of recycled water recharge at ALCOA MW-1.

The Southridge Junior JHS well is located approximately 5,200 feet down gradient of the RP3 Basins. The Southridge JHS well water quality data showed a slight but gradual decrease in EC, TDS, and chloride concentrations since quarterly sampling began in 2009 through 2013 and then relatively stable values through 2020. The TDS, EC, and chloride background concentrations (2009 through 2013 data) at the Southridge JHS well are slightly higher than that of recycled water. As such, recharge mixing of groundwater, recycled water, stormwater and imported water arriving at this well location would appear as a lowering of concentrations. Alternatively, it could increase as higher salinity upgradient groundwater moves southward. The slight variations in the water quality data do not suggest that a blend of recycled water recharge has reached the downgradient Southridge JHS well from the RP3 recharge site.

Declez Basin Area

Recycled water recharge at Declez Basin began in December 2015 and was voluntarily suspended in September 2016 after its Start-Up Period. Recycled water recharge resumed in April 2018 after completion of a downgradient monitoring well DCZ-2. The spiked nature of the DCZ-1/1 data appear to be similar to the fluctuations observed at the upstream ALCOA monitoring wells and not like the smooth data trends of the Southridge JHS well. Regardless, the DCZ-1/1 groundwater EC, TDS, and chloride concentrations are significantly lower than these upstream monitoring wells. In December 2017, increased TDS, EC, and chloride concentrations at DCZ-1/1 are preliminarily interpreted as arrival of recycled water at DCZ-1/1 (a 23-month travel time). The resumption of recycled water recharge in April 2018 allowed confirmation of the travel time based on a second correlation of increased EC and chloride in November 2019. The 2019 confirmation resulted in a 21-month travel time. The 21- and 23-months travel times are within the precision of quarterly sampling. To be conservative from a compliance perspective, 21 months will be considered the travel time. During 2022, the highest percent blend of recycled water in the groundwater at DCZ-1/1 was estimated at approximately 39% to 74%.

San Sevaine Basin Area

Monitoring of San Sevaine Basin area wells began in late 2009. Initiation of recycled water recharge began at San Sevaine 5 in July 2010 and was suspended voluntarily in September 2014 to develop plans to mitigate poor infiltration rates and midgefly control. The solution was to build a pipeline to the San Sevaine 1, 2, and 3 Basins, which facilitated the resumption of recycled

water delivery in August 2020. A pump station was also constructed to pump stormwater captured in Basin 5 through the recycled water pipeline to the Basins 1, 2, and 3.

A modified start-up protocol was prepared to repeat the San Sevaine Start-up Period testing using Basin 2 and representative of Basins 1, 2, and 3. The modified start-up period of recycled water recharge in San Sevaine 2 occurred from August 2020 through September 2021. A new monitoring well (SSV-2) was installed at Basin 2. Monitoring well SS-1 at Basin 5 and the well Unitex 91090 were used as the nearest down gradient monitoring wells.

Since the initiation and end of recycled water recharge in San Sevaine 5 (2010-2014), EC and chloride concentrations declined gradually through 2015, stabilized through 2019, gradually increased above background concentrations through 2020, and declined towards background concentrations in 2021. These increases occurred prior to resumed recycled water recharge at San Sevaine 2 in August 2021 and are therefore unrelated to 2021 recharge. It is possible that these increases may be related to the initial recharge of recycled water at Basin 5. If so, this would suggest an approximate 9-year travel time from Basin 5 to groundwater at monitoring well SS-1.

The San Sevaine Modified Recycled Water Recharge Start-Up Protocol used a new mound monitoring well (SSV-2) that was installed in mid-2018 at San Sevaine 2. For SSV-2, the initial EC, TDS, and chloride concentrations measured since Fall 2018 are generally stable and in line with baseline values measured at Unitex 91090, though exhibit minor fluctuation over the 2018-2020 sampling window. A sharp increase in EC, TDS, and chloride concentrations were observed in SSV-2 in January 2021 and indicates the arrival of recycled water at the monitoring well after 4.9 months of travel time (IEUA & CBWM, 2022). During 2022, the highest percent blend of recycled water in the groundwater at SSV-2 was estimated at approximately 100% to 100%.

In 2022, the Unitex 91090 monitoring well continues to show relatively stable concentrations of EC, TDS, and chloride, indicating that recycled water has yet to arrive at the Unitex monitoring well.

Victoria Basins Area

Monitoring of Victoria Basin area wells began in February 2010 and initiation of recycled water recharge began at Victoria Basin in September 2010. Victoria Basin mound monitoring well VCT-1/1 showed a steady increase in EC, TDS, and chloride concentrations beginning in May 2011 that continued into early 2016. These values stabilize in mid to late 2016 at values typical of recycled water. Parameters followed a declining trend through mid-2019 and then experienced a brief rebound in mid-2020 before continuing to decline to mid-2019 levels. Mound monitoring well VCT-1/1 water quality data support a travel time of approximately 7.5 months. During 2022, the percent blend of recycled water in the groundwater mound at Victoria Basin was approximately 43% to 53% at VCT-1/1. Downgradient wells VCT-2 and CVWD No. 39 have not shown any EC, TDS, or chloride variations that would indicate arrival of recycled water.

3.3 RWC Management Plan

The RWC Management Plan is a necessary tool to demonstrate how IEUA and CBWM will meet the maximum RWC limits established during the start-up period of a recharge site. A basin's volume based RWC must be in compliance with its RWC limit. Volume-based RWC is a calculation of the percent recycled water infiltrated compared to all recharge and is based on a

120-month rolling average. Appendix B contains the RWC Management Plans for 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaine, Turner Basin 1&2, Turner Basin 3&4, Victoria, and Declez Basins. While the plans contain calculations for up to 120 months of historical data, the tabulated and graphed RWC Management Plans (Appendix B) show only the previous 5 years (60 months) of historical recharge and 10 years (120 months) of forecast (planned) data. Historical data not contained in the current report appendices are contained in prior annual reports.

The RWC Management Plans include two parts. Part 1 displays the historical operation of the basin for the previous 5 years. Part 2 is the planned optimal operation for the next 10 years (120 months). The historical portion of a basin's RWC Management Plan shows actual diluent water (storm water and imported water) and actual recycled water recharge volumes. The planned section includes projections of average stormwater diluent water recharge and maximized recycled water recharge deliveries. Storm water projections are updated annually and represent a basin's historical monthly stormwater recharge average. For a conservative approach to the RWC forecast, future recharge of imported water is not used in the RWC Plan.

In 2009, IEUA and CBWM received a permit amendment from the Regional Board Order No. R8-2009-0057 that allowed a change from a 60-month to a 120-month RWC averaging period and for the inclusion of a fraction of groundwater underflow as a diluent water source in the RWC calculation. The RWC Management Plans included underflow beginning in October 2009 for basins that had already receiving recycled water at the time the permit amendment was issued allowing accounting of underflow. For basins that started recycled water recharge after the 2009 permit amendment, the use of underflow in the RWC calculation begins upon the month of recycled water recharge initiation. IEUA reviewed 2019 groundwater flow data, similar to that reviewed in 2009 when the underflow estimates were made and determined the underflow estimates are still valid. For basins that share the flow path of groundwater underflow, the underflow volume is used for both basins as the travel time between these basins exceeds that required for drinking water wells, and thus any upstream blend has become groundwater again upon reaching the downstream basin. Victoria and San Sevaine Basins share a common underflow as do RP3 and Declez Basins.

Forecasts for recycled water are made by determining a basins optimal monthly capacity and then subtracting the average monthly stormwater. Thus, the RWC Plan includes the maximum possible recharge and is thus a conservatively high estimate of future RWC. The conservative calculations do not include months of no recharge during future basin maintenance. Should the forecasted recycled water volume cause a basin RWC prediction to exceed its RWC limit, the basin capacity number is sequentially reduced until the RWC limit is no longer exceeded. Turner 1, Turner 4, Declez, and San Sevaine are basins whose RWC Plans include a recycled water recharge capacity less than the basin's maximum capacity. These basins each have an RWC limit of less than 50%. No basins are forecasted to exceed their RWC limit with the forecasted estimates of average diluent water.

Table 3-2 lists the most recent 10 years of annual end of year data for volume based RWC calculation for each recharge site. The recharge sites are all in compliance with their maximum RWC limits. Based on future projections of diluent recharge, the RWC Management Plans show that recycled water deliveries for each basin can continue to be made and remain in compliance with their RWC limits.

3.4 Buffer Zone/Travel Time Compliance

Section VI.B.3.e of the M&RP requires the annual report to include the following:

A summary discussion on whether domestic drinking water wells extracted water within the buffer zone defined by the area less than 500 feet and 6 months underground travel time from the recharge basins, including the actions/measures that were undertaken to prevent reoccurrence. If there were none, a statement to that effect shall be written.

As stated in the cover letters of the 2022 quarterly monitoring reports, CBWM has certified that there was no reported pumping of groundwater in 2022 for domestic or municipal use from the zones that extend 500 feet and 6 months underground travel time from the 8th Street, Banana, Brooks, Ely, Hickory, RP3, San Sevaïne, Turner, and Victoria Basins. In fact, there are no domestic or municipal production wells in the buffer zones of these recharge sites.

3.4.1 Recharge Water Arrival Times

As documented in prior annual reports and the basin start-up period reports, sufficient data exist to estimate arrival times of recycled water at monitoring wells: 8TH-1/1 and 8TH-1/2 for 8th Street Basin; BRK-1/1, BRK-1/2, and BRK-2/1 for Brooks Basin; BH-1/2 for Hickory Basin; California Speedway Infield Well for Banana Basin; T-1/2 and T-2/2 for Turner 1 and Turner 4 Basins, respectively; Ontario Well No. 25 for Turner 4 Basin; SSV-2 at San Sevaïne Basin, VCT-1/1 for Victoria Basin, RP3-1/1 and RP3-1/2 for RP3 Basins, and DCZ-1/1 for Declez Basin. The evaluations of arrival time are based on the water chemistry data presented in Appendix C and basin operations data. Arrival times can be determined from notable increases in EC, TDS, and/or chloride concentrations above background, excluding variations in these parameter concentrations unrelated to recharge.

8th Street Basin Area

Travel time from 8th Street Basin through the vadose zone and along groundwater flow paths to monitoring well 8TH-1/1 is estimated by steadily increasing concentrations of EC, TDS, and chloride beginning in July 2009 and continuing through 2016. Recharge of recycled water began at 8th Street Basin on September 7, 2007; thus, the travel-time estimate for 8TH-1/1 is approximately 660 days (22 months). Downgradient monitoring well 8TH-2 does not yet show conclusive indication of recycled water arrival. Water quality sampling of the deeper casing of 8TH-2 (8TH-2/2) was suspended in mid-2015 but added back into the program in second quarter of 2017. Sampling of 8TH-2/2 will continue until a long-term trend of influence from recharge activity is identified. From 2018 through 2019, chloride concentrations at 8TH-2/2 increased to greater than background concentrations before beginning a slight decline in late-2019. This increase in chloride coincided with a slight increase in EC levels, though there was no discernible increase in TDS. It is still too early to determine whether recycled water has arrived, but it is worth

highlighting that there is a minimum ten-year travel time to this well. Parameters at this well will continue to be monitored in 2022.

Banana & Hickory Basins Area

Travel time from Hickory Basin through the vadose zone and along groundwater flow paths to monitoring well BH-1/2 was documented in the 2008 Annual Report at approximately 59 days. (IEUA and CBWM, 2009). The California Speedway Infield Well began a gradual increase in EC, TDS, and chloride in late 2007. The travel time to the California Speedway Infield Well from Banana Basin is estimated as 890 days (29 months) based on a stepped increase in EC, TDS, and Chloride concentrations between October 9, 2007 and January 7, 2008. The modeled travel time to the California Speedway Infield Well estimated in the first Title 22 Engineering Report was 682 days (22 months) (CH2MHill, 2003).

Travel time from the Banana & Hickory Basins to California Speedway No. 2 is estimated at 83 months (6.9 years) based on a gradual increased trend in EC, TDS, and chloride concentrations that began in July 2012 and has continued through 2021. As presented in the 2015 Annual Report, these parameters were relatively stable from 2006 to 2012 (IEUA and CBWM, 2016). Speedway No. 2 is located about one half mile south of Hickory Basin. Based on the groundwater flow direction, the increased trend in EC, TDS, and chloride concentrations was due to the arrival of recharged recycled water from Banana Basin. A travel time estimate was not modeled for Speedway No. 2 in the Phase I Title 22 Engineering report (CH2MHill, 2003). The upgradient monitoring well FWC-37A (removed from service in 2017) showed a gradual increasing trend in chloride (10 mg/L), EC, and TDS (40 mg/L) from 2006 through mid-2014, which leveled off through mid-2017. As an upgradient well, these increases are a local trend not associated with recycled water recharge activities at Banana & Hickory Basins. The trend at Speedway No. 2 is however interpreted as a recycled water arrival due to its relatively stable concentrations during that period of 2006 to 2012. When taken out of service in 2017, the downgradient monitoring well, Reliant East, had not yet shown definitive variations in EC, TDS, and chloride that would signal arrival of recycled water. The Reliant East well owner closed their power generating station and the well is no longer available for sampling. The fate of the well will be evaluated by a future site owner. IEUA is currently planning to replace this downgradient monitoring well in FY2022/23.

Brooks Basin Area

Travel time from Brooks Basin through the vadose zone to the shallow casing of mound monitoring well BRK-1/1 located at the basin is approximately 150 days (5 months) based on trends in EC, TDS, and chloride data documented from 2009 data (IEUA and CBWM, 2010b) The chloride increased from background concentration to over 80 mg/L in January, February, and March 2009 are indicative of the arrival of recycled water. Evaluation of 2010 through 2015 EC, TDS, and chloride data indicate recycled water arrived at the deeper casing (BRK-1/2) in January 2010 for a travel time of approximately 526 days (17 months).

At the downgradient monitoring well BRK-2, an increase in chloride concentration at BRK-2/1 was observed from 2011 through 2012, again in 2015 through 2018, and once more in 2020 through 2021. Similar peak increases in chloride concentration were observed in BRK-1/1 are similar to increases in chloride concentration in BRK-2/1 18 months later. The BRK-1/1 chloride trend is

added to the BRK-2/1 trend for comparison (Appendix C). The initial peak increase in chloride concentration at BRK-2/2 suggested a recycled water travel time of 28 months (2.3 years), yet later arrivals are several months sooner. Chloride, EC, and TDS data at BRK-2/2 continue to be within the range of the background concentration.

Ely Basin Area

Groundwater in the Ely Basin area has high background TDS and nitrate concentrations from a history of irrigation. Due to lack of background monitoring prior to recharge of recycled water at Ely Basin and the variations observed in EC, TDS, and chloride concentrations at the Philadelphia, Walnut, and Riverside wells, the arrival times are difficult to determine. Recycled water recharge began in 1999 and thus it is estimated that recycled water has already arrived and traveled beyond these wells. For the Philadelphia Well, peak EC, TDS, and chloride concentrations observed in late 2014 correlate with peak recycled water deliveries to Ely Basin 13 months prior and thus indicated a 13-month travel time to the Philadelphia well. In 2019, the well pump became stuck in the well and was not operational. In 2020, an evaluation indicated the well casing is damaged, thus requiring a new well to be installed. IEUA is on schedule to have a new Ely mound monitoring well installed during the 2023 calendar year.

Turner Basin Area

Travel time from Turner Basins through the vadose zone to the groundwater is approximately 10 to 12 months for both the Turner 1 (T-1/2) and Turner 4 (T-2/2) well sites. The initial rise in EC, TDS, and chloride concentrations at T-1/2 suggested a 3-month travel time; however, the decline in EC, TDS, and chloride concentration during the summer of 2008 following a suspension in recycled water recharge in the Turner Basins suggested a longer travel time of approximately 10 months. At T-2/2, the EC, TDS, and chloride concentrations increased significantly from background concentrations in the summer of 2007 and indicated an (initial) 11-month travel time. Both monitoring wells have two casings, with the shallower being designated /1 and the deeper being designated /2. T-1/1 is not currently sampled as it was constructed above the water table for future mound sampling needs, T-2-1 sampling was suspended in 2015 due to sampling results similar to T-2-2. Original modeling (CH2MHill, 2003) for the Turner recharge site predicted a 109-day (9-month) travel time to each of these wells. Decrease in EC, TDS, and chloride concentrations at T-1/2 indicate that recycled water recharged during the start-up period migrated away from this location after the high-volume recharge start-up period ended in 2007.

The travel time from Turner Basins to downgradient Ontario Well No. 25 is approximately 1,475 days (48 months) (IEUA and CBWM, 2011). Downgradient monitoring well, Ontario Well No. 29, has not yet shown variations in EC, TDS, and chloride that could signal arrival of recycled water at these well sites. Data collected in 2022 from Well 29 are consistent with the prior data interpretations. No data was obtained from Well 25 due to it being inactive since mid-2019.

RP3 Basin Area

Travel time from RP3 Basin (cell 1) through the vadose zone to the shallower casing of mound monitoring well RP3-1/1 (located at on the west side of cell 1) was initially interpreted in the 2009 Annual Report (IEUA and CBWM, 2010a) to be approximately 14 days based on observation of EC changes. However, 2009 through 2010 data and RP3 Basin Start-Up Period Report (IEUA & CBWM, 2010d) findings indicate the earlier data did not represent the arrival of recycled water but was instead evidence of vadose zone flushing (IEUA and CBWM, 2010c). The EC and water level trends support a travel time estimate of approximately 99 days. While the background EC prior to recycled water recharge was 1,000 to 1,100 $\mu\text{mhos/cm}$, initiation of storm water recharge operations at cell 1 in February 2009 appears to have pushed the higher EC water from the vadose zone raising the well water EC to 1,400 $\mu\text{mhos/cm}$. Recycled water recharge began on June 2, 2009 and a 400- $\mu\text{mhos/cm}$ decrease in EC was observed in this mound monitoring well by August 25, 2009. The approximately 99-day travel time to the well is corroborated by the hydrograph of well casing RP3-1/1 (Appendix D), which shows an approximately +90-day delay between the mid-September 2010 recharge low and the mid-December 2010 water level low. Arrival of recycled water was also observed as chloride concentration increased in both the shallow (RP3-1/1) and the deep (RP3-1/2) casings in the summer of 2010, approximately 12 months after initiation of the recycled water recharge in the basin. The longer time to observe a chloride response is likely due to the purged of the vadose zone.

With the exception of ALCOA MW-1, data collected in 2021 are consistent with the prior data interpretations for the RP3 region monitoring wells. The water quality data from downgradient monitoring well ALCOA MW-1 (about 9,200 feet from RP3) illustrates a prominent increase in EC, TDS, and chloride concentrations from historical highs during the summer and early fall of 2020. Though concentrations fell during two subsequent samplings, levels remained above historical background values. As the chloride concentration peaked 260 mg/L greater than that of recycled water chloride, further observation and investigation may be required to better determine the source of this spike and arrival of recycled water. ALCOA MW-3 (about 4,600 feet from RP3) show gradual increasing trends in chloride concentrations. These increases in chloride concentrations are not indicators of recycled water arrival at both wells, as they are located at different distances and flow directions from RP3. The Southridge well water quality data have been on a downward trend throughout its entire sampling history from 2009 through 2021, and do not indicate arrival of recycled water recharge.

Declez Area

Travel time to the Declez Basin mound monitoring well is approximately 23 months as evidenced by a stepped increase in EC, TDS, and chloride above historical background levels beginning in approximately December 2017 following initial recycled water deliveries in January 2016. Downgradient monitoring well DCZ-2 shows a slight increase in EC, TDS, and chloride concentration beginning in February 2020, but remains similar to background concentrations. Continued monitoring and observation at DCZ-2 will help confirm the arrival of recycled water.

San Sevaine & Victoria Basins Area

San Sevaine Basins lie directly upgradient of Victoria Basin, and thus these two sites are considered together. Travel time from recharge at San Sevaine Basin 5 to the water table is complicated by recharge activities at the other San Sevaine Basins. San Sevaine Basins 1, 2,

and 3 are located upgradient from San Sevaine Basin 5. The hydrograph of SS-1 is complimented with recharge of both San Sevaine Basin 5 (storm water and previously recycled water) and the combined San Sevaine Basins 1, 2, and 3 (recycled water, stormwater, and imported water). The basins within the San Sevaine site appear to have different impacts on the timing on changes in SS-1 well water levels (varying from 2 to 4 months), making the timing of water quality impacts from San Sevaine recharge complicated and warranting further data collection.

The San Sevaine Basin 5 mound monitoring well showed a spike in chloride in the second half of 2019, which dropped in subsequent sampling in 2021 but remained above baseline levels. This spike coincided with a more sustained increase in EC and, to a lesser extent, TDS. These trends will continue to be monitored in 2023 to see if their duration matches the limited historical recycled water deliver to San Sevaine Basin 5. Due to operational and maintenance limitations, recharge of recycled water was discontinued in San Sevaine Basin 5 in 2014. San Sevaine Basin 5 remains an active basin for stormwater capture and recharge, however, the basin is used largely to store water prior to transferring to other basins.

A modified Start-Up Period for San Sevaine Basins began with recycled water deliveries in August 2020. A new mound monitoring well, SSV-2, was previously installed adjacent San Sevaine 2 Basin as part of the Modified Start-Up Protocol and has been sampled quarterly since September 2018 and monthly since August 2020. Background water quality data collected prior to and during the start-up period from SSV-2 were generally stable and similar to those observed at nearby well Unitex 91090. From December 2020 through October 2022, monthly sampling events detected notable increases in EC, TDS, and chloride concentrations at SSV-2. Though this rise represents the arrival of recycled water at the mound monitoring well, more observation is needed to identify the peak concentrations possible. To allow the modified San Sevaine Start-Up Period to occur, on June 1, 2019 the nearby cross-gradient well Unitex 91090 was removed temporarily from potable service pending results of monthly monitoring for arrival of recycled water indicators. Recycled water indicators were not detected at the well Unitex 91090 through 2022 indicting a minimal travel time greater than 16 months.

For Victoria Basin, mound monitoring well VCT-1/1 water quality data (EC, TDS, and chloride) support a travel time of approximately 7.5 months. The time is based on the initiation of recycled water recharge on September 2, 2010 and the beginning of a steady rise in EC, TDS, and chloride (starting with the May 19, 2011 sample) through 2016. As of 2022, there is no convincing observation of recycled water arrival at wells VCT-2 and CVWD-39.

3.4.2 *Leading Edge of Recycled Water in Aquifer*

The leading edges of groundwater containing a component of recycled water were evaluated for the various recharge sites using monitoring well data. Such data include groundwater elevations changes and changes in EC, TDS, and/or chloride concentrations. Water quality data were discussed in Section 3.2 and Section 3.4.1. Appendix D contains basin-specific water level hydrographs, with discussion in Section 3.5.2 of water level mounding due to recycled water recharge. Location maps for wells monitored for the recharge program are presented in Figures 2-1 through 2-7. Evaluation of basin-specific water chemistry and water level data indicate recycled water recharge has passed the first monitoring wells of 8th Street, Banana, Brooks, Ely, Hickory, Turner Basins, San Sevaine, Victoria, and RP3 Basins. Several production wells used for monitoring near the recharge basins show water quality changes from background

concentrations that would be associated with recycled water recharge, specifically, California Speedway Infield Well and Speedway 2 for Banana & Hickory Basins and Ontario Well No. 25 for Turner 4. CBWM certifies on a quarterly basis that no pumping for drinking water purposes took place in the buffer zones extending 500 feet laterally and 6 months of underground travel time from each of the recharge sites using recycled water and further specifies there are no domestic or municipal production wells in the buffer zones of these recharge sites.

3.4.3 Tracer Test Results

No tracer tests were conducted in 2022, nor are any planned for the current program.

3.5 Groundwater Elevations

Section VI.B.3.b of the M&RP requires the annual report to include a discussion of groundwater elevations and flow paths:

Recharge water groundwater flow paths shall be determined annually from groundwater elevation contours and compared to the flow and transport model's flow paths, travel of recharge waters, including leading edge of the recharged water plume, any anticipated changes. The flow and transport model shall be updated to match as closely as possible the actual flow patterns observed within the aquifer if the flow paths have significantly changed.

3.5.1 Current Groundwater Elevations

Groundwater elevations from the recharge program monitoring wells and many other wells are used by CBWM to periodically prepare groundwater elevation contours of the Chino groundwater basin. Groundwater contour maps were prepared for 1997, 2000, 2003, 2006, 2008, 2010, 2012, 2014, 2016, 2018, and 2020. These groundwater elevation maps from the CBWM's *Biennial State of the Basin Reports* are presented in Appendix E. The Spring 2018 elevation contour map will be used for discussion in this report. At the time of this report preparation, a spring 2020 map was not available from CBWM for discussion within this report.

A comparison of the pre-recharge elevation contour map (Fall 2003) with the most recent post program start-up groundwater contour map (Spring 2020) indicates several things. First, regional changes in groundwater elevation near the recharge basins are present, but trends from enhanced recharge (apart from 8th and Turner Basins) are not generally evident using the 25-foot contour interval of the maps, indicating that the recharge program has not significantly impacted regional groundwater flow directions. A significant difference in groundwater flow direction between the 2003 and 2020 maps are the mound at 8th Street, which between 2012 and 2020 had a more westward direction as opposed to a south-southwest direction in 2013. This difference may indicate the 8th Street Basin downgradient monitoring well location (8TH-2) is not appropriately located to characterize downgradient recharge water quality. Recharge mounds at basins (such as that around the Turner Basin) are evident on the regional map and by well hydrographs of monitoring wells (Appendix D). In general, these seasonal mounds are within the 25-foot contour interval of the maps. Since 2008, a deeper and larger area pumping depression has developed around the Chino Desalter (hydraulic control) well field as noted by the 550-foot elevation contour wrapping to the west to indicate recharge flow from the Santa Ana River. Also, during this time, the regional pumping depression in the Pomona area west of Brooks Basin has become smaller and narrower. There are some changes in the contouring style/methodology between the 2003 and 2020 maps. For example, the groundwater contours in the area north of

Victoria and San Sevaine Basins were interpreted for the 2003 map but were not interpreted for the 2010 through 2020 maps. At the time of this reporting, the Spring 2022 elevation contour map is still being prepared by CBWM. For this reason, the Spring 2020 elevation contour map is used for discussion in this report.

3.5.2 Water Level Trends in Monitoring Wells

Appendix D contains groundwater elevation hydrographs for wells constructed for the monitoring program. Location maps for wells monitored for the recharge program are presented on Figures 2-1 through 2-7. Plotted on each hydrograph is the daily volume of water captured at the nearest recharge site. These hydrographs can be used to identify local increases in groundwater elevations and their correlation with local recharge. Generally, the hydrographs are from mound monitoring wells at recharge basins or the closest monitoring well downgradient of the recharge basin.

8th Street Basin Area

The hydrographs of the 8th Street Basin mound monitoring well (8TH-1) show relatively stable long-term groundwater elevations from 2008 through 2020 that seasonally fluctuate between 635 to 680 feet above mean sea level (MSL). In 2021, 8TH-1/2 water levels declined about 7 feet and reached 635 feet MSL, the lowest elevation since 2009. There is an approximate 4-month delay and strong correlation between basin recharge and groundwater elevations in both 8TH-1/1 and 8TH-1/2, indicating relatively rapid recharge of surface water to the underlying aquifer. The hydrograph for downgradient well 8TH-2 shows about a 10-foot increasing water level trend between 2008 and 2013, which then stabilizes at approximately 635 feet MSL between 2014 and 2020. In 2021, 8TH-2 water levels also decline to near prior low levels of 2009. Short duration downward water level spikes of the 8TH-2 hydrograph are indicative of nearby groundwater pumping activities.

Brooks Basin Area

BRK-1/1 water levels have remained within a 30-foot range through their history, ranging from 607 and 632 feet MSL. The hydrographs for the Brooks Basin mound monitoring well (BRK-1/1) show relatively small (no more than 2-foot) seasonal water level fluctuations and broader more annual trends. Groundwater levels at the mound well generally decreased from 2008 through 2009, stabilized from 2010 through 2013, decreased from 2014 through mid-2016, stabilized from mid-2016 through 2021 and gradually decreased in 2022. The downward trends are perhaps due to brief drought conditions and a decrease in stormwater recharge or other nearby groundwater stresses.

At the deeper casing, BRK-1/2 groundwater elevations typically follow the long-term trend of BRK-1/1 but 20-feet lower and with increased seasonal fluctuations from nearby pumping. BRK-1/2 water levels range between 585 and 615 feet MSL.

The hydrographs of downgradient (intermediate) monitoring well BRK-2 show similar groundwater elevation trends as BRK-1/2, suggesting water levels of these two casings are influenced more by regional groundwater changes than by Brooks Basin recharge. BRK-2 casings have larger seasonal fluctuations and pumping influences than BRK-1/2, as BRK-2 is closer to the pumping centers in the City of Pomona.

Banana & Hickory Basins Area

The hydrograph for the Banana & Hickory Basins mound monitoring well (BH-1) shows seasonal water level fluctuations between approximately 680 and 690 feet MSL and generally stable through the 15 years of data shown. From 2008 through 2019, the BH-1/2 hydrograph shows relatively stable water levels with 5 to 10-foot seasonal fluctuations. However, from 2020 through 2022, the hydrograph shows a gradual decrease in water levels to 5 feet below its prior historic low. The peak and trough seasonal fluctuations appear delayed between 3 and 4 months from peak recharge activities. Impacts on water elevations due to recharge at Hickory and Banana Basins are muted and delayed due to the over 400-foot depth to the water table at this location.

Ely Basin Area

Ely Basin has received recycled water recharge since 1999, 6 years prior to the currently permitted regional recharge program. In 2011, IEUA installed a transducer in MW-1 (aka the Philadelphia well) and began recording water levels. Since 2011, the long-term water-level trend near Ely Basins is stable but fluctuates +/- 5 to 20 feet in response to recharge. In January 2015, the water level transducer malfunctioned and several months of water level data were lost. In late 2018, the well was discovered to be irreparably damaged and is permanently out of service. A new well is planned to be constructed at the base in fiscal year 2022/23 and will be equipped with a level sensor.

Turner Basin Area

The hydrographs for the two Turner Basin monitoring wells, T-1/2 and T-2/2, show general long term 40-foot increase in water levels between 2008 and 2017 followed by a long term 30-foot decline from 2018 to 2022. For these two sites, the annual winter highs and summer lows show 10 to 20-foot differences, suggesting recharge at Turner Basins has a positive local impact on regional water levels. The peak water levels are delayed about 1 to 2 months from periods of higher volume recharge.

RP3 Basin Area

The hydrographs of the RP3 Basin mound monitoring well, RP3-1, shows a good correlation with recharge activity at the basin. In 2008 and 2009, the water elevation varied by no more than 2 to 3 feet with recharge activity. However, recharge volume started to increase in June 2009 at RP3 Basins when recycled water and storm water were delivered from Jurupa Basin to RP3 Basins. From 2009 through 2011, water levels at RP3-1 rose approximately 20 feet. A similarly dramatic decrease in groundwater elevation occurred in late 2012 when the RP3 Basin was offline for maintenance. In 2013, water levels rebounded 5 to 10 feet upwards with renewed recharge. Water levels at RP3 fell about 12 feet through most of 2014 due in part to the low rainfall and stormwater recharge in that year. In mid-2015, IEUA completed the Wineville pipeline extension to RP3 and began delivering recycled water at an increased rate to all cells at the RP3 site. This resulted in water levels in both the shallow and deep RP3-1 casings rising and falling up to 15 feet as recharge activity increased and decreased. In 2018, water levels remained about 10 feet higher than pre-recycled water recharge. The groundwater level fluctuations in 2019 can be attributed to the suspension of basin recharge for basin maintenance purposes, and the dramatic rise in water levels through 2020 to 2022 correspond to the resumption of normal recharge operations at the basin.

Declez Basin Area

The long-term water level trend at the Declez recharge mound well site has been relatively stable between 2008 and 2020, fluctuating between 698 and 722 feet MSL. The data generally shows 10 to 15 feet seasonal variations, with the water level responding within days of stormwater recharge. Recycled water recharge was initiated at Declez Basin during its start-up period of December 2015 through September 2016. With that initiation, the seasonal water level highs increased by about 5 feet. Recycled water delivery to Declez Basin stopped in September 2016 and resumed in April 2018 upon completion of downgradient monitoring well DCZ-2. The DCZ-2 hydrograph does not yet have sufficient water level data to estimate the influence of Declez Basin recharge at that well site.

San Sevaine Basins Area

Monitoring well SS-1 was installed in spring 2010 for monitoring recycled water recharge at San Sevaine 5. The recharge history of San Sevaine 5 alone does not correlate well with SS-1 water levels. However, imported water recharge in San Sevaine Basins 1 and 2 during 2011 and 2017 does appear to correlate with SS-1 water level changes beneath San Sevaine 5. The hydrograph for San Sevaine 5 includes recharge for both San Sevaine 5 and the combined Basins San Sevaine 1, 2, and 3. For data between 2010 and April 2011, the hydrograph for the San Sevaine 5 Basin mound monitoring well (SS-1) shows a water level decrease of 5 feet, and a steep recovery in July 2011 approximately 2 months after the initiation of imported water recharge in San Sevaine 1 and 2 in May 2011. Thus, it appears to be an approximately 2-month delay to the well for recharge at San Sevaine 1 and 2 and an approximately 4-month delay for recharge at San Sevaine 5. Similarly, between 2013 and mid-2017, the SS-1 water levels showed a steady decline, due in part to the low rainfall and low stormwater recharge in the 2015 winter. A small upward change in water level began in June 2017 following imported water recharge in late 2016. A similar water level increase continued through mid-2018 following the 2017 imported water charge in San Sevaine 1 and 2. Recycled water recharge at San Sevaine 5 has not occurred since May 2014 due to low basin infiltration rates and operating constraints.

Recycled Water recharge resumed at the upper three San Sevaine Basins in August 2020 and appear to have sustained water levels in SS-1 between 2020 and 2021. The operation of the San Sevaine 5 pump station for delivery of stormwater to the upper most San Sevaine Basins should also have a positive influence on water levels at SS-1.

Monitoring well SSV-2 was installed in late 2018 at San Sevaine 2 Basin and its initial hydrography is included in this annual report. The level sensor for this well failed and data were lost from January 2019 through April 2022. The short water elevation history shows a downward trend during a pause in recharge activity. After April 2022, increase groundwater level can be attributed to an increase of basin recharge activities.

Victoria Basin Area

The hydrograph for the Victoria Basin mound monitoring well (VCT-1/1) shows seasonal variations of up to 30 feet between the summer low levels and the winter high levels. Longer-term (2014 through 2021) water level fluctuations trend upward when looking at the summer and winter extremes. The water level peaks are generally 6 to 9 months delayed from times of higher volume recharge. For most of 2022, water level trended upward but gradually declined towards the end of the year.

The hydrograph for the Victoria Basin downgradient (intermediate) monitoring well (VCT-2/2) shows relative stable water elevations from 2010 through 2019 within the elevations 750 to 765 feet MSL. From 2020 through 2022, the well's water elevations declined to historic lows in the low 740s. Seasonally, the hydrograph shows 5- to 8-foot water level fluctuations. The existing water level data set does not correlate definitively with recharge activities at the Victoria Basin. While water level and recharge volumes rise and fall annually, comparison of a longer duration data set is required to determine their correlation with certainty. Water level data for 2014 and early 2015 were not available due to Caltrans construction activities at the wellsite, which resulted in the ground and the well casing being lowered. Data collection resumed in November 2015. The transducer failed in mid-2016 and was replaced.

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TABLES

FIGURES

TABLES

Table 2-1
Summary of Treatment Chemical Usage at RP-1 and RP-4

	RP-1 (Flow)		RP-1 (Tertiary)		RP-4		
	Ferric Chloride	Sodium Hypochlorite	Aluminum Sulfate	Sodium Hypochlorite	Ferric Chloride	Aluminum Sulfate	Sodium Hypochlorite
	Gal.	Gal.	lbs.	Gal.	Gal.	Gal.	Gal.
Month							
Jan-22	20,500	0	7,140	123,767	0	1,280	28,368
Feb-22	19,000	0	4,321	106,157	0	1,222	26,747
Mar-22	20,600	0	4,600	118,181	1,446	1,367	29,700
Apr-22	20,500	0	7,700	103,959	1	1,427	29,713
May-22	22,400	0	7,100	106,914	0	27,902	1,338
Jun-22	21,400	2,141	6,100	100,836	191	1,124	23,437
Jul-22	24,200	2,420	6,900	103,453	0	1,168	26,173
Aug-22	24,200	2,305	8,500	114,899	0	1,171	26,692
Sep-22	22,900	1,932	5,700	106,351	3	1,195	26,122
Oct-22	23,900	1,426	6,650	104,978	1	1,222	25,431
Nov-22	23,100	735	4,350	100,937	0	1,264	23,219
Dec-22	22,200	479	8,150	113,343	0	1,316	24,034
Total	264,900	11,438	77,211	1,303,775	1,642	41,657	290,974

Table 3-1
Evidence of Recycled Water Blending Based on Water Quality at
Monitoring Wells Based on EC and Chloride in 2022

Basin	Well	2022 Recycled Water EC (µmhos/cm)	Groundwater Background EC (µmhos/cm)	Peak EC at Well (µmhos/cm)	Mass-Balance Blend (max) (% Recycled Water)	2022 Recycled Water Cl (mg/L)	Groundwater Background Cl (mg/L)	Peak Cl at Well (mg/L)	Mass-Balance Blend (max) (% Recycled Water)
8th Street	8TH-1/1	786	200	493	50%	112	9	90	79%
	8TH-1/2	786	255	523	50%	112	13	70	58%
	8TH-2/1	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	8TH-2/2	786	400	473	19%	112	20	51	34%
Banana & Hickory	BH-1/2	786	360	506	34%	112	10	61	50%
	California Speedway Infield	786	440	619	52%	112	10	43	32%
	California Speedway No. 2	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Reliant East Well	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Fontana Water Co. 37A and 7A	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Ontario No. 20	In 2015, Well went out of service and is no longer monitored.				In 2015, Well went out of service and is no longer monitored.			
Brooks	BRK-1/1	786	367	570	49%	112	11	77	65%
	BRK-1/2	786	535	661	50%	112	16	27	11%
	BRK-2/1	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	BRK-2/2	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Ely	Philadelphia Well	New well to be installed in 2023				New well to be installed in 2023			
	Walnut Well	Well impacted by regionally high TDS concentration				Well impacted by regionally high TDS concentration			
	Riverside Well	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Turner	T-1/2	786	390	469	20%	112	21	37	18%
	T-2/2	732	350	664	82%	112	9	86	75%
	Ontario No. 25	As of 2019, well permitted by DDW as inactive				As of 2019, well permitted by DDW as inactive			
	Ontario No. 29	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
RP-3	RP3-1/1	786	475	812	100%	112	20	127	100%
	Alcoa MW3	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Alcoa MW1	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	IEUA Southridge JHS	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
San Seavine & Victoria	SS-1	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	SSV-2	786	303	788	100%	112	38	115	100%
	Unitex 91090	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	VCT-1/1	786	330	525	43%	112	38	77	53%
	VCT-2/2	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	CVWD No. 39	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Declé	DCZ-1	786	400	550	39%	112	22	89	74%
	DCZ-2	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	JCSD Well No. 13	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	JCSD Well No. 19	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			

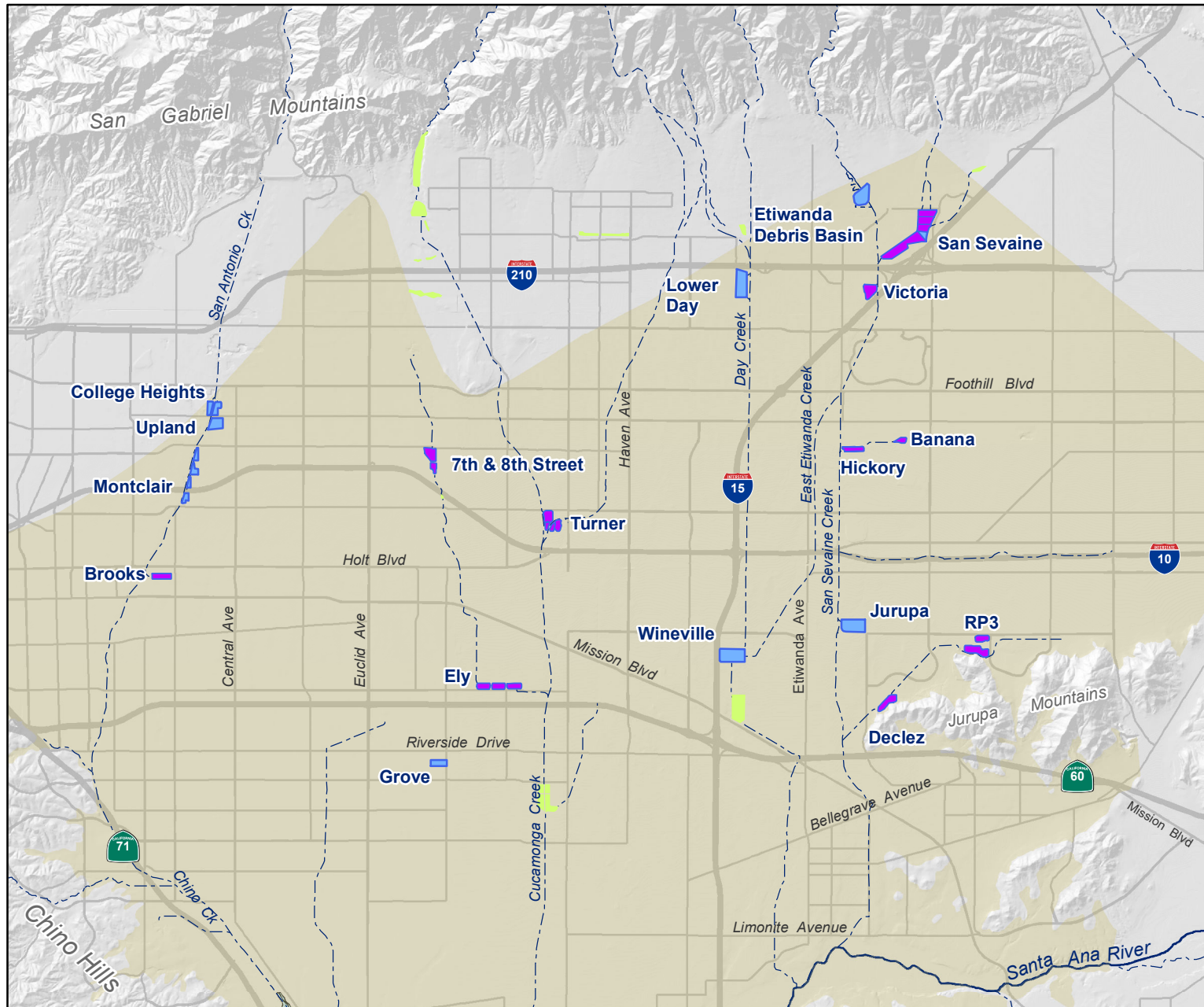
Table 3-2
Volume-Based RWC Actuals by Basin
(10-Year History)

Basin	Owner	RW Start Up	Start-Up Limit	Approved Limit ⁽¹⁾	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
8th Street	SBCFCD	2007-10	28%	50%	21%	24%	22%	21%	23%	22%	22%	23%	23%	24%	24%
Banana	SBCFCD	2005	36%	50%	34%	34%	34%	37%	36%	36%	36%	35%	35%	34%	33%
Brooks	CBWCD	2008-09	42%	50%	16%	18%	18%	17%	18%	18%	17%	15%	14%	14%	14%
Declez	SBCFCD	2015-16	20%	20%	1%	1%	1%	2%	10%	7%	7%	7%	8%	8%	7%
Ely	CBWCD	2006	29%	50%	11%	19%	21%	22%	22%	22%	23%	22%	25%	25%	26%
Hickory	SBCFCD	2005	36%	50%	22%	23%	26%	27%	24%	22%	22%	19%	19%	19%	19%
RP3	IEUA	2009-10	50%	50%	12%	14%	13%	14%	17%	17%	16%	17%	20%	22%	25%
San Sevaine	SBCFCD	2020-21 ⁽²⁾	50%	50%	4%	5%	5%	6%	8%	7%	6%	5%	7%	12%	18%
Turner 1&2	SBCFCD	2006-07	24%	24%	6%	7%	11%	15%	19%	22%	23%	23%	24%	23%	24%
Turner 3&4	SBCFCD	2006-07	45%	45%	22%	23%	25%	28%	24%	23%	25%	24%	25%	26%	25%
Victoria	SBCFCD	2010-11	50%	50%	24%	23%	28%	30%	29%	30%	28%	27%	28%	27%	27%

(1) In a letter dated June 18, 2015, the DDW approved IEUA's request to increase the maximum average RWC limit to 50% at all the basins except for Turner Basins and San Sevaine Basin which DDW stated required additional data for consideration of approval.

(2) A modified San Sevaine Start-up was completed in 2021 for the upper basins (San Sevaine 1, 2, an 3) resulting in an RWC limit of 50%. The limit replaces the initial 29% limit for San Sevaine 5 basin which is no longer used for recycled water recharge.

FIGURES



- Recharge Basins in the Recycled Water Groundwater Recharge Program
- Recharge Basins in the Recycled Water Groundwater Recharge Program (Active Recycled Water Recharge)
- Non-Program Basins
- Chino Groundwater Basin
- Rivers and Streams



Chino Basin Recycled Water Groundwater Recharge Program
Basin Locations

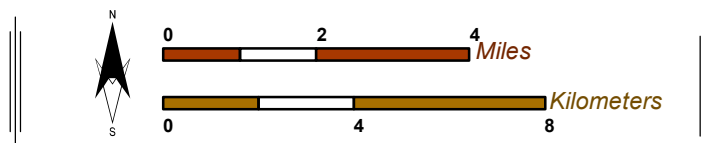
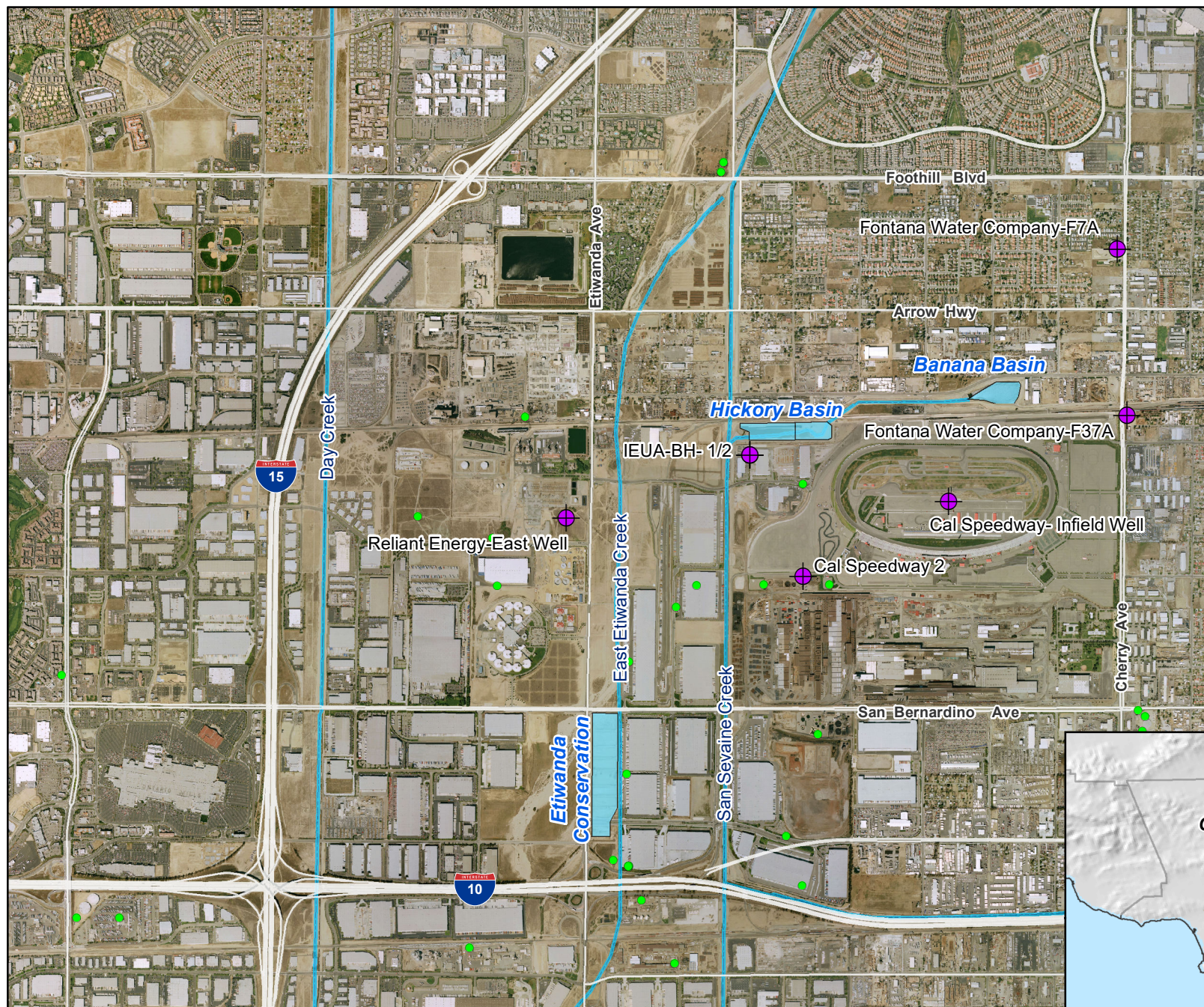






Figure 1-1



Main Map Features

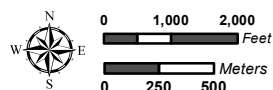
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-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

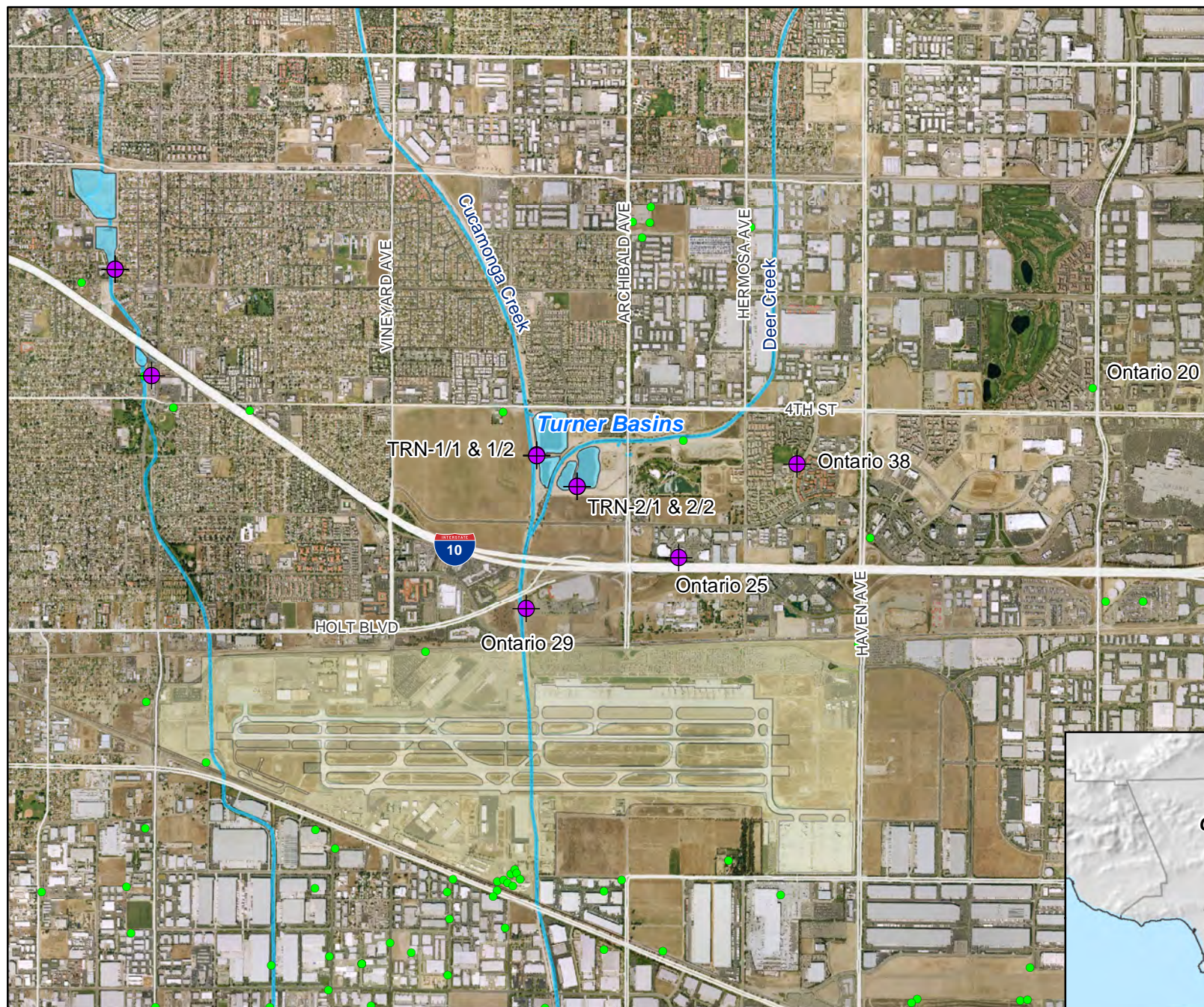


Monitoring Well Network Hickory and Banana Basins





Figure 2-1

Recycled Water Recharge Program





Main Map Features

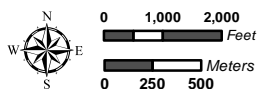
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-  Rivers/Streams/Creeks
-  Recharge Basins

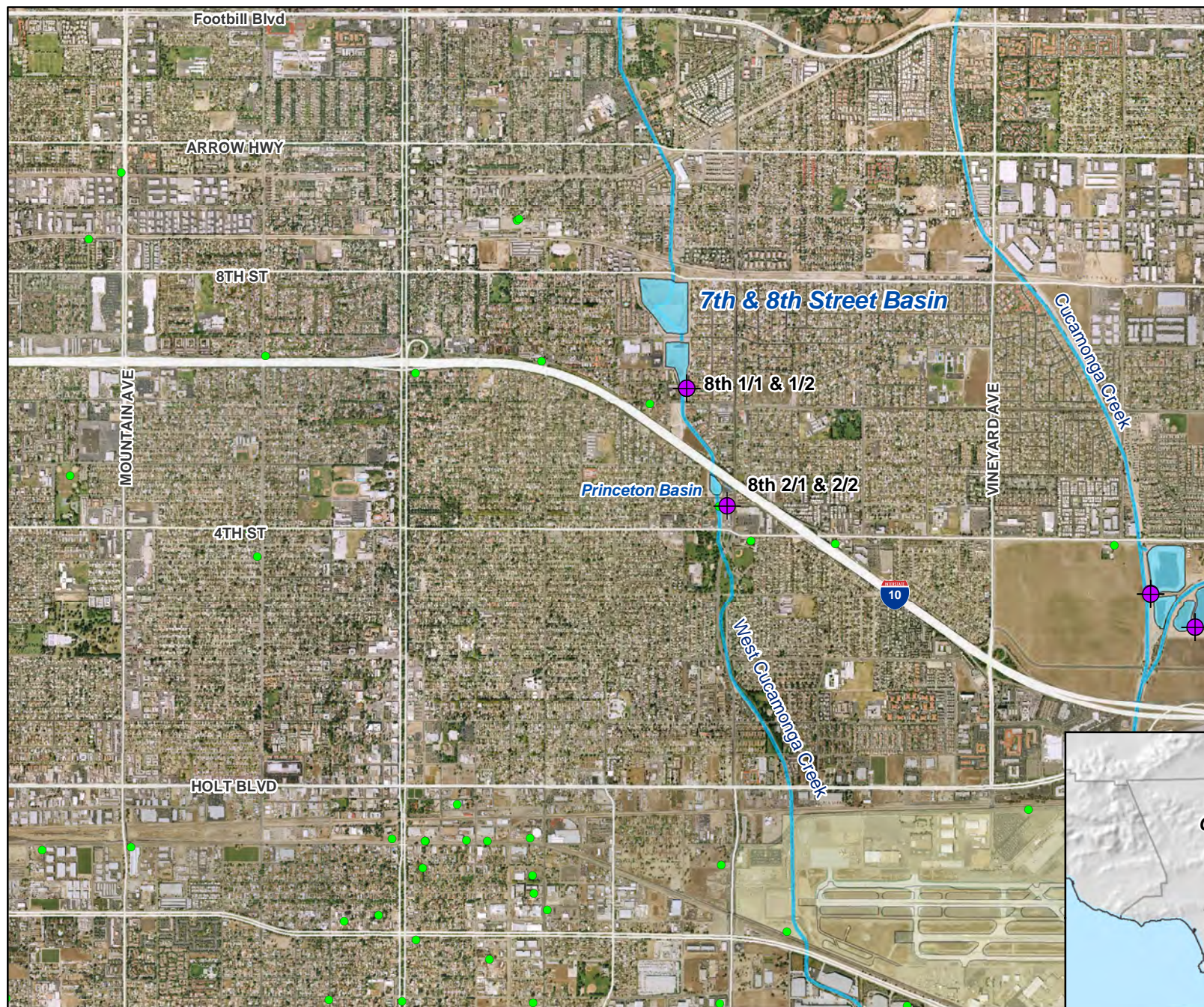


Monitoring Well Network
Turner Basins





Figure 2-2

Recycled Water Recharge Program





Main Map Features

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

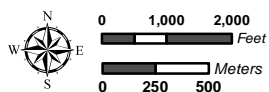


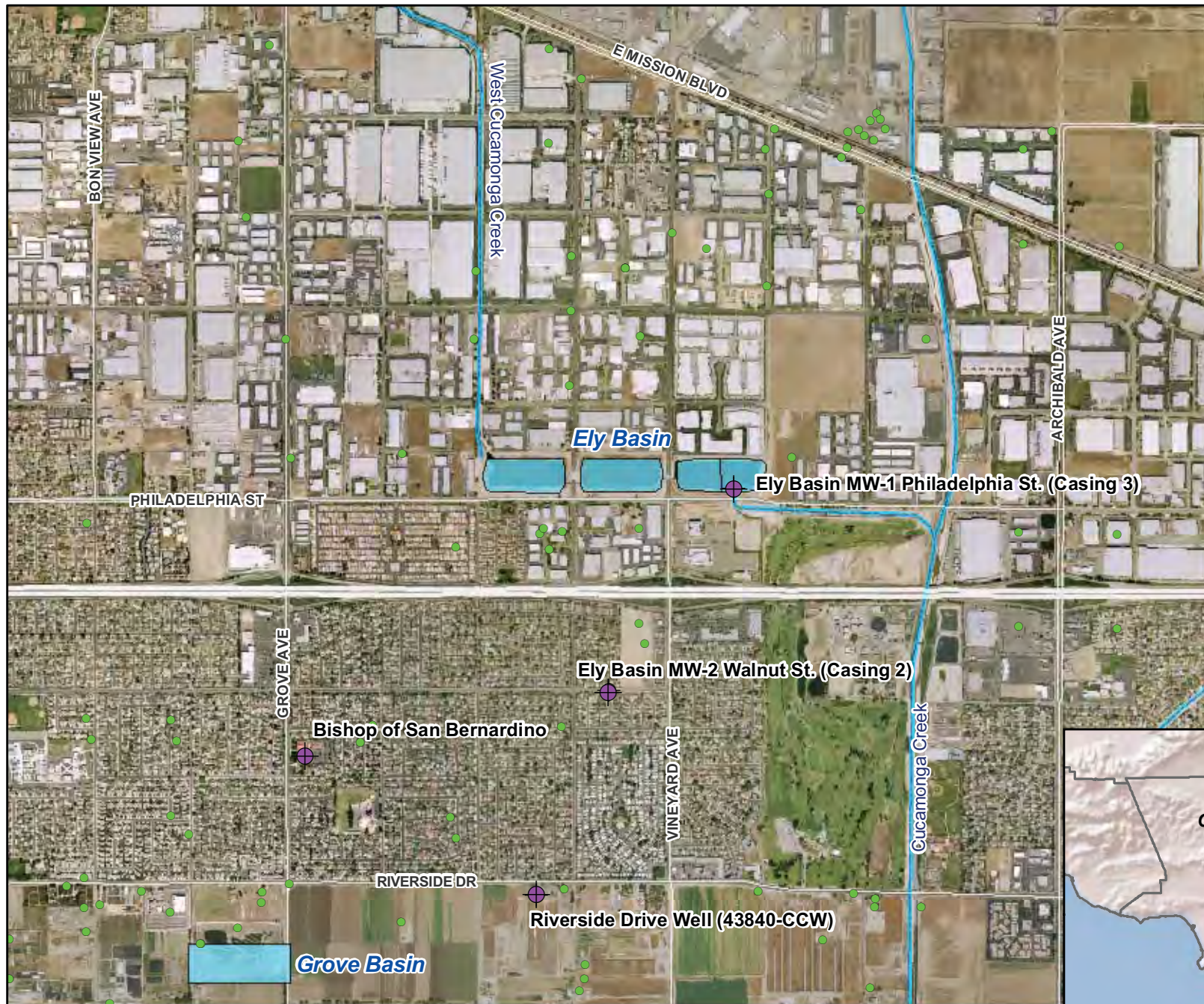
Monitoring Well Network

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

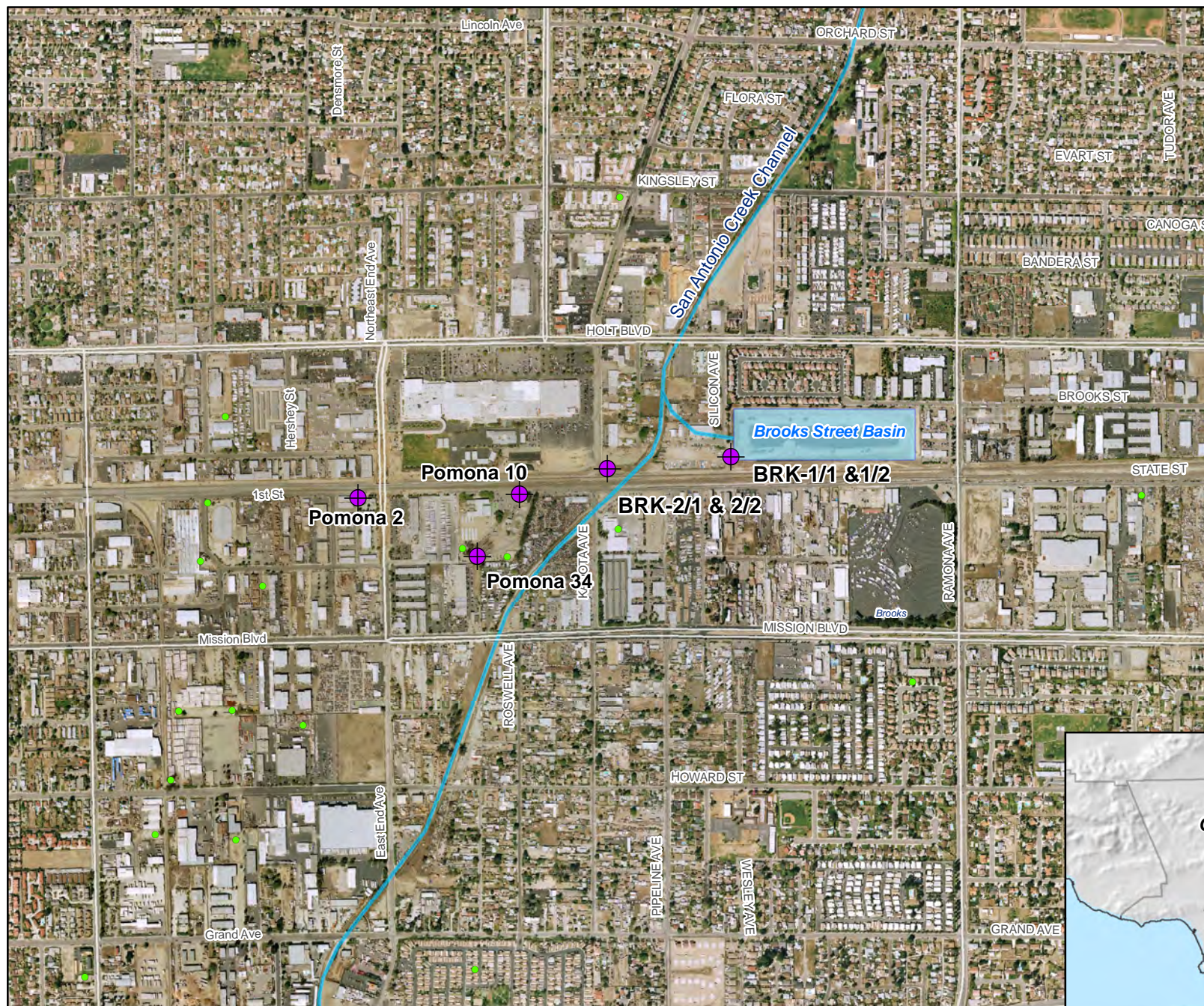


Monitoring Well Network
Ely Basins





Figure 2-4

Recycled Water Recharge Program





Main Map Features

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



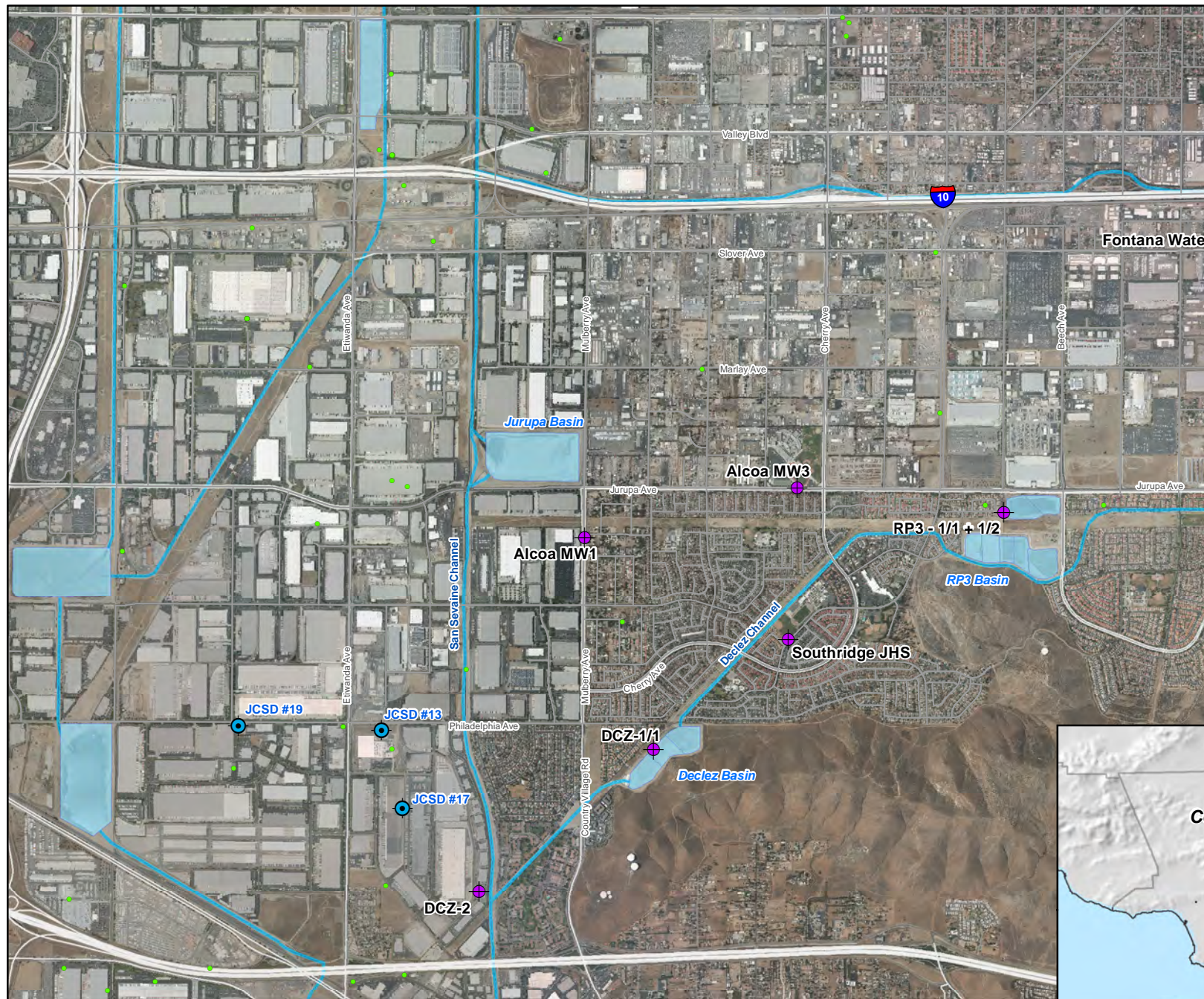
Monitoring Well Network

Brooks Street Basin






Figure 2-5

Recycled Water Recharge Program





Main Map Features

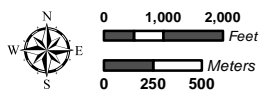
-  JCSD Wells
-  "Other Wells"
-  Existing Monitoring Well
-  Rivers/Streams/Creeks
-  Recharge Basins

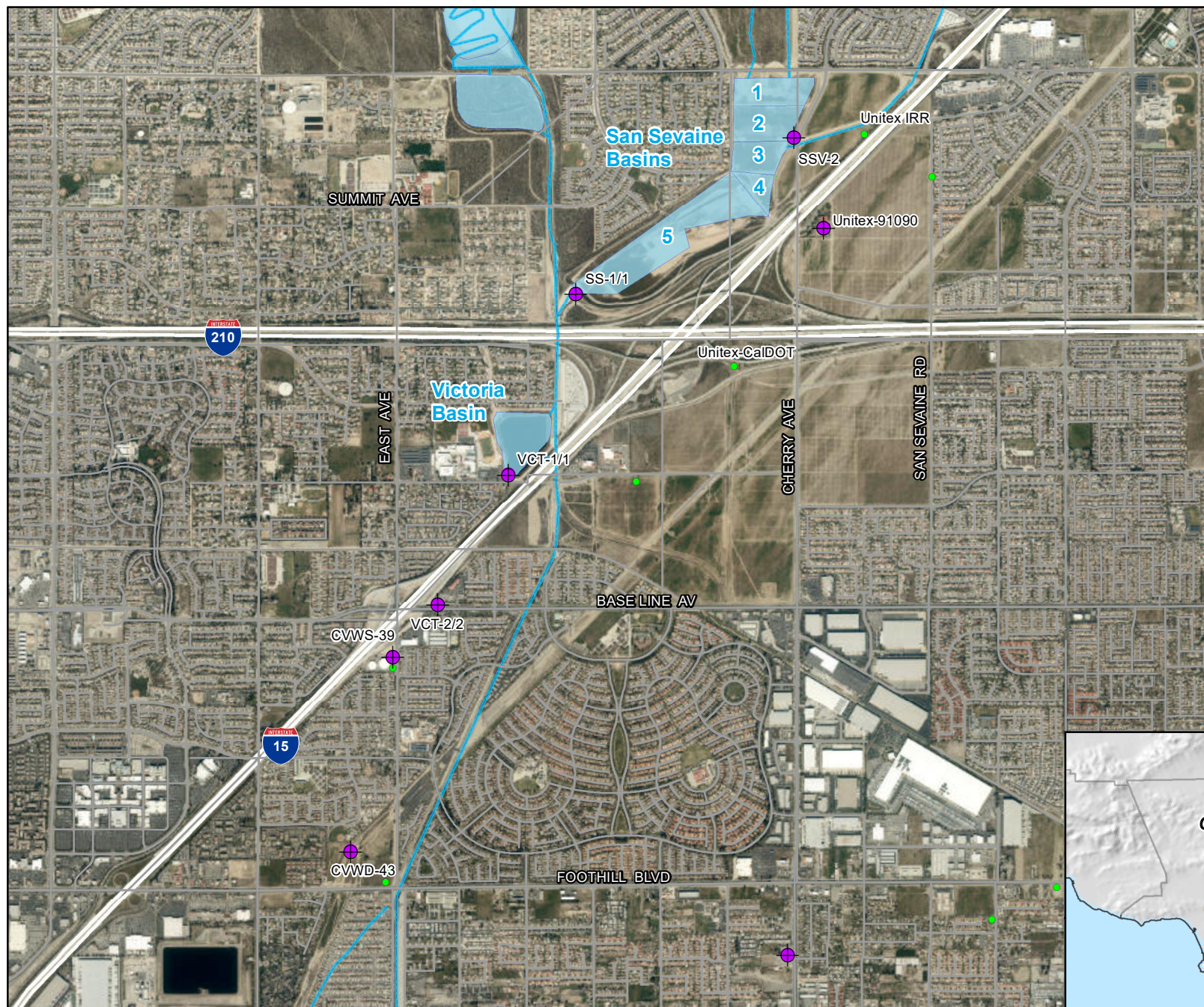


Monitoring Well Network
Declez and RP3 Basins

Figure 2-6

Recycled Water Recharge Program





Main Map Features

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



Monitoring Well Network
San Sevaive and Victoria Basin

Figure 2-7

Recycled Water Recharge Program



APPENDIX A

MONTHLY GROUNDWATER RECHARGE SUMMARIES

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - January 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 312.1 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	6.6	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	13.2	0.0	0.0	N	N	
Brooks	3.8	0.0	0.0	2.7	0.0	
West Cucamonga Channel Drainage System						MZ-2 846.9 AF***
8th Street	9.6	0.0	0.0	210.4	(3.2)	
7th Street	21.0	0.0	0.0	66.7	(1.0)	
Ely 1, 2, & 3	69.7	0.0	0.0	45.7	(0.7)	
Minor Drainage						
Grove	42.0	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	24.1	0.0	0.0	0.0	0.0	
Turner 3 & 4	25.2	0.0	0.0	65.3	(1.0)	
Day Creek Channel Drainage System						
Lower Day	1.6	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	19.0	0.0	0.0	X	0.0	
Victoria	0.0	0.0	0.0	175.0	(2.6)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	0.0	0.0	0.0	414.9	(6.2)	
San Sevaine 5	0.0	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	0.0	0.0	0.0	23.4	(0.4)	
Banana	1.7	0.0	0.0	25.4	(0.4)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	60.5	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	6.0	0.0	0.0	168.9	(2.5)	
RP3 Cell 2	4.8	0.0	0.0	223.6	(3.4)	
Declez	3.6	0.0	0.0	4.3	(0.1)	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(11.8)					
MZ1: Upland (Upland)	(5.9)					
MZ2: Ontario (Ely)	(48.1)					
MZ3: None						
Month Total = 1,651.4 AF	246.6	0.0	0.0	1,426.3	(21.5)	January
		0.0		1,404.8		
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	6,391.6	283.3	(10.7)	10,151.0	(324.3)	Fiscal Year to Date
Since July 1, 2021 = 16,490.9 AF		272.6		9,826.7		
Calendar Year Delivery (with evaporation)	246.6	0.0	0.0	1,426.3	(21.5)	Calendar Year to Date
Since January 1, 2022 = 1,651.4 AF		0.0		1,404.8		

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - February 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 425.5 AF***
College Heights	3.6	0.0	0.0	N	N	
Upland	30.8	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	15.0	0.0	0.0	N	N	
Brooks	7.4	0.0	0.0	68.3	(1.0)	
West Cucamonga Channel Drainage System						MZ-2 877.4 AF***
8th Street	36.2	0.0	0.0	248.9	(3.7)	
7th Street	0.0	0.0	0.0	25.5	(0.4)	
Ely 1, 2, & 3	73.1	0.0	0.0	95.8	(1.4)	
Minor Drainage						
Grove	0.7	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	31.2	0.0	0.0	0.0	0.0	
Turner 3 & 4	23.5	0.0	0.0	38.6	(0.6)	
Day Creek Channel Drainage System						
Lower Day	3.5	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	5.6	0.0	0.0	259.5	(3.9)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	7.1	0.0	0.0	273.7	(4.1)	
San Sevaine 5	3.4	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	0.0	0.0	0.0	79.2	(1.2)	
Banana	4.8	0.0	0.0	43.1	(0.6)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	28.3	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	3.8	0.0	0.0	148.9	(2.2)	
RP3 Cell 2	5.9	0.0	0.0	156.6	(2.3)	
Declez	9.7	0.0	0.0	53.6	(0.8)	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(5.1)					
MZ1: Upland (Upland)	(6.3)					
MZ2: Ontario (Ely)	(60.1)					
MZ3: None						

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - March 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 454.9 AF***
College Heights	0.4	0.0	0.0	N	N	
Upland	37.9	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	96.3	0.0	0.0	N	N	
Brooks	42.8	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						MZ-2 1,069.0 AF***
8th Street	130.6	0.0	0.0	158.2	(2.4)	
7th Street	3.5	0.0	0.0	0.0	0.0	
Ely 1, 2, & 3	393.7	0.0	0.0	16.4	(0.2)	
Minor Drainage						
Grove	27.1	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	96.7	0.0	0.0	0.0	0.0	
Turner 3 & 4	68.8	0.0	0.0	36.8	(0.6)	
Day Creek Channel Drainage System						
Lower Day	13.9	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	23.5	0.0	0.0	235.8	(3.5)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	48.7	0.0	0.0	285.7	(4.3)	
San Sevaine 5	17.1	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	40.4	0.0	0.0	74.1	(1.1)	
Banana	11.9	0.0	0.0	86.4	(1.3)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	27.3	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	12.1	0.0	0.0	215.5	(3.2)	
RP3 Cell 2	37.0	0.0	0.0	39.1	(0.6)	
Declez	204.8	0.0	0.0	83.6	(1.3)	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(6.7)					
MZ1: Upland (Upland)	(5.7)					
MZ2:Ontario (Ely)	(300.0)					
MZ3: None						
Month Total = 2,235.2 AF	1,022.1	0.0	0.0	1,231.6	(18.5)	March
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	7,635.8	283.3	(10.7)	12,874.3	(365.0)	Fiscal Year to Date
Since July 1, 2021 = 20,417.7 AF		272.6		12,509.3		
Calendar Year Delivery (with evaporation)	1,490.8	0.0	0.0	4,149.6	(62.2)	Calendar Year to Date
Since January 1, 2022 = 5,578.2 AF		0.0		4,087.4		

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - April 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 318.0 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	9.3	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	19.3	0.0	0.0	N	N	
Brooks	35.5	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						MZ-2 807.8 AF***
8th Street	40.8	0.0	0.0	233.4	(9.8)	
7th Street	1.2	0.0	0.0	0.0	0.0	
Ely 1, 2, & 3	28.0	0.0	0.0	0.0	0.0	
Minor Drainage						
Grove	4.4	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	31.2	0.0	0.0	0.0	0.0	
Turner 3 & 4	17.3	0.0	0.0	19.0	(0.8)	
Day Creek Channel Drainage System						
Lower Day	0.8	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	17.0	0.0	0.0	289.3	(12.2)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	13.5	0.0	0.0	317.6	(13.3)	
San Sevaine 5	12.9	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	11.4	0.0	0.0	81.3	(3.4)	
Banana	3.9	0.0	0.0	56.2	(2.4)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	11.7	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	5.5	0.0	0.0	313.6	(13.2)	
RP3 Cell 2	5.9	0.0	0.0	16.8	(0.7)	
Declez	21.0	0.0	0.0	0.0	0.0	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(6.4)					
MZ1: Upland (Upland)	(5.3)					
MZ2:Ontario (Ely)	(6.2)					
MZ3: None						
Month Total = 1,544.1 AF	272.7	0.0	0.0	1,327.2	(55.8)	April
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	7,908.5	283.3	(10.7)	14,201.5	(420.8)	Fiscal Year to Date
Since July 1, 2021 = 21,961.8 AF		272.6		13,780.7		
Calendar Year Delivery (with evaporation)	1,763.5	0.0	0.0	5,476.8	(118.0)	Calendar Year to Date
Since January 1, 2022 = 7,122.3 AF		0.0		5,358.8		

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - May 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 241.6 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	6.7	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	15.3	0.0	0.0	N	N	
Brooks	1.4	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						
8th Street	7.8	0.0	0.0	211.0	(8.9)	
7th Street	0.0	0.0	0.0	31.6	(1.3)	
Ely 1, 2, & 3	49.7	0.0	0.0	179.9	(7.6)	MZ-2 1,121.3 AF***
Minor Drainage						
Grove	0.0	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	5.5	0.0	0.0	0.0	0.0	
Turner 3 & 4	8.3	0.0	0.0	67.1	(2.8)	
Day Creek Channel Drainage System						
Lower Day	0.0	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	0.0	0.0	0.0	439.5	(18.5)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	0.0	0.0	0.0	340.5	(14.3)	
San Sevaine 5	0.0	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	0.0	0.0	0.0	102.4	(4.3)	
Banana	0.0	0.0	0.0	0.0	0.0	
San Sevaine Channel Drainage System (MZ-3)						MZ-3 390.8 AF***
Jurupa	3.2	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	0.0	0.0	0.0	245.5	(10.3)	
RP3 Cell 2	8.9	0.0	0.0	70.5	(3.0)	
Declez	5.4	0.0	0.0	73.7	(3.1)	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(5.5)					
MZ1: Montclair (MVWD)	(9.8)					
MZ1: Upland (Upland)	(6.7)					
MZ2:Ontario (Ely)	(24.1)					
Month Total = 1,753.7 AF	66.1	0.0	0.0	1,761.7	(74.1)	May
		0.0		1,687.6		
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	7,974.6	283.3	(10.7)	15,963.2	(494.9)	Fiscal Year to Date
Since July 1, 2021 = 23,715.5 AF		272.6		15,468.3		
Calendar Year Delivery (with evaporation)	1,829.6	0.0	0.0	7,238.5	(192.1)	Calendar Year to Date
Since January 1, 2022 = 8,876.0 AF		0.0		7,046.4		

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - June 2022

Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 166.9 AF***
College Heights	0.3	0.0	0.0	N	N	
Upland	14.4	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	73.5	0.0	0.0	N	N	
Brooks	2.4	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						MZ-2 867.1 AF***
8th Street	8.2	0.0	0.0	77.4	(3.3)	
7th Street	0.5	0.0	0.0	57.0	(2.4)	
Ely 1, 2, & 3	12.5	0.0	0.0	87.0	(3.7)	
Minor Drainage						
Grove	0.0	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	22.3	0.0	0.0	0.0	0.0	
Turner 3 & 4	14.9	0.0	0.0	45.8	(1.9)	
Day Creek Channel Drainage System						
Lower Day	0.0	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	0.0	0.0	0.0	134.8	(5.7)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	0.0	0.0	0.0	446.5	(18.8)	
San Sevaine 5	0.0	0.0	0.0	X	X	
West Fontana Channel System						MZ-3 156.8 AF***
Hickory	0.0	0.0	0.0	139.3	(5.9)	
Banana	0.0	0.0	0.0	0.1	0.0	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	9.5	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	0.0	0.0	0.0	0.0	0.0	
RP3 Cell 2	0.0	0.0	0.0	103.3	(4.3)	
Declez	48.2	0.0	0.0	0.0	0.0	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(4.9)					
MZ1: Montclair (MVWD)	(51.6)					
MZ1: Upland (Upland)	(4.6)					
MZ3: None						
Month Total = 1,190.8 AF	145.6	0.0	0.0	1,091.2	(46.0)	June
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	8,120.2	283.3	(10.7)	17,054.4	(540.9)	Fiscal Year to Date
Since July 1, 2021 = 24,906.3 AF		272.6		16,513.5		
Calendar Year Delivery (with evaporation)	1,975.2	0.0	0.0	8,329.7	(238.1)	Calendar Year to Date
Since January 1, 2022 = 10,066.8 AF		0.0		8,091.6		

SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water

X : Turnouts not available - to be installed during future projects.

N : No turnout planned for installation.

* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.

** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).

*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) - July 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 318.2 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	4.6	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	3.0	0.0	0.0	N	N	
Brooks	0.0	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						MZ-2 749.4 AF***
8th Street	9.3	0.0	0.0	185.0	(7.8)	
7th Street	0.0	0.0	0.0	137.5	(5.8)	
Ely 1, 2, & 3	125.2	0.0	0.0	110.0	(4.6)	
Minor Drainage						
Grove	1.1	N	N	N	N	MZ-2 749.4 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	9.3	0.0	0.0	20.2	(0.8)	
Turner 3 & 4	16.4	0.0	0.0	49.3	(2.1)	
Day Creek Channel Drainage System						
Lower Day	0.0	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	0.0	0.0	0.0	64.4	(2.7)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	0.0	0.0	0.0	469.8	(19.7)	MZ-3 302.9 AF***
San Sevaine 5	0.0	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	0.0	0.0	0.0	32.3	(1.4)	
Banana	0.0	0.0	0.0	0.0	0.0	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	0.0	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	0.0	0.0	0.0	226.0	(9.5)	
RP3 Cell 2	0.9	0.0	0.0	85.3	(3.6)	
Declez	3.8	0.0	0.0	0.0	0.0	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(4.6)					
MZ1: Upland (Upland)	(3.0)					
MZ2: Ely (Ontario)	(117.3)					
MZ3: None						July
		0.0	0.0	1,379.8	(58.0)	
Month Total = 1,370.5 AF	48.70	0.0		1,321.8		
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)		0.0	0.0	1,379.8	(58.0)	Fiscal Year
Since July 1, 2022 = 1,370.5 AF	48.7	0.0		1,321.8		to Date
Calendar Year Delivery (with evaporation)		0.0	0.0	9,709.5	(296.1)	Calendar Year
Since January 1, 2022 = 11,437.3 AF	2,023.9	0.0		9,413.4		to Date
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) - August 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 175.1 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	4.7	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	46.5	0.0	0.0	N	N	
Brooks	0.0	0.0	0.0	0.0	0.0	
West Cucamonga Channel Drainage System						
8th Street	6.2	0.0	0.0	145.1	(6.1)	
7th Street	0.0	0.0	0.0	31.2	(1.3)	
Ely 1, 2, & 3	23.6	0.0	0.0	0.2	0.0	
Minor Drainage						
Grove	1.7	N	N	N	N	MZ-2 563.6 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	11.3	0.0	0.0	0.5	0.0	
Turner 3 & 4	17.3	0.0	0.0	62.1	(2.6)	
Day Creek Channel Drainage System						
Lower Day	1.6	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	2.1	0.0	0.0	0.0	0.0	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	2.7	0.0	0.0	425.4	(17.9)	
San Sevaine 5	0.1	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	0.0	0.0	0.0	58.3	(2.4)	
Banana	0.0	0.0	0.0	98.8	(4.1)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	0.4	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,3, & 4	0.0	0.0	0.0	554.6	(23.3)	
RP3 Cell 2	0.0	0.0	0.0	72.1	(3.0)	
Declez	4.7	0.0	0.0	0.0	0.0	MZ-3 700.2 AF***
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(3.4)					
MZ1: Upland (Upland)	(4.7)					
MZ1: Montclair (MVWD)	(43.1)					
MZ2: Ely (Ontario)	(20.4)					
		0.0	0.0	1,448.3	(60.8)	August
Month Total = 1,438.8 AF	51.3	0.0		1,387.5		
All Sources	SW/LR	Imported		Recycled Water		Fiscal Year to Date
Fiscal Year Delivery (with evaporation)	100.0	0.0	0.0	2,828.1	(118.8)	
Since July 1, 2022 = 2,809.3 AF		0.0		2,709.3		
Calendar Year Delivery (with evaporation)	2,075.2	0.0	0.0	11,157.8	(356.9)	Calendar Year to Date
Since January 1, 2022 = 12,876.1 AF		0.0		10,800.9		
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) September 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 343.8 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	22.1	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	65.2	0.0	0.0	N	N	
Brooks	6.4	0.0	0.0	196.9	(8.3)	
West Cucamonga Channel Drainage System						MZ-2 637.0 AF***
8th Street	49.1	0.0	0.0	16.1	(0.7)	
7th Street	26.5	0.0	0.0	2.2	(0.1)	
Ely 1, 2, & 3	33.9	0.0	0.0	0.0	0.0	
Minor Drainage						
Grove	0.6	N	N	N	N	MZ-2 637.0 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	22.0	0.0	0.0	0.0	0.0	
Turner 3 & 4	59.8	0.0	0.0	0.0	0.0	
Day Creek Channel Drainage System						
Lower Day	31.8	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	27.5	0.0	0.0	0.0	0.0	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	41.2	0.0	0.0	400.8	(16.8)	MZ-3 1,034.2 AF***
San Sevaine 5	2.0	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	28.5	0.0	0.0	6.0	(0.3)	
Banana	1.0	0.0	0.0	295.1	(12.4)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	0.2	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1, 2R, 3, & 4	0.0	0.0	0.0	695.0	(29.2)	
RP3 Cell 2M	2.0	0.0	0.0	68.6	(2.9)	
Declez	16.8	0.0	0.0	0.0	0.0	September
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(3.3)					
MZ1: Upland (Upland)	(4.3)					
MZ1: Montclair (MVWD)	(24.0)					
MZ2 & MZ3: None						September
		0.0	0.0	1,680.7	(70.7)	
Month Total = 2,015.0 AF	405.0	0.0		1,610.0		
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)		0.0	0.0	4,508.8	(189.5)	
Since July 1, 2022 = 4,824.3 AF	505.0	0.0		4,319.3		
Calendar Year Delivery (with evaporation)		0.0	0.0	12,838.5	(427.6)	Calendar Year to Date
Since January 1, 2022 = 14,891.1 AF	2,480.2	0.0		12,410.9		
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) - October 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 460.1 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	11.4	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	29.2	0.0	0.0	N	N	
Brooks	21.3	0.0	0.0	169.4	(7.1)	
West Cucamonga Channel Drainage System						MZ-2 616.3 AF***
8th Street	47.9	0.0	0.0	129.2	(5.4)	
7th Street	2.2	0.0	0.0	73.8	(3.1)	
Ely 1, 2, & 3	24.8	0.0	0.0	0.0	0.0	
Minor Drainage						
Grove	5.1	N	N	N	N	MZ-2 616.3 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	78.4	0.0	0.0	17.1	(0.7)	
Turner 3 & 4	5.6	0.0	0.0	0.0	0.0	
Day Creek Channel Drainage System						
Lower Day	6.7	0.0	0.0	X	0.0	MZ-3 1,033.5 AF***
Etiwanda Channel Drainage System						
Etiwanda Debris	0.0	0.0	0.0	X	0.0	
Victoria	8.3	0.0	0.0	55.4	(2.3)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	4.9	0.0	0.0	426.3	(17.9)	MZ-3 1,033.5 AF***
San Sevaine 5	3.1	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	1.5	0.0	0.0	0.0	0.0	
Banana	1.3	0.0	0.0	150.6	(6.3)	
San Sevaine Channel Drainage System (MZ-3)						MZ-3 1,033.5 AF***
Jurupa	8.8	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,2R,3, & 4	0.0	0.0	0.0	763.4	(32.1)	
RP3 Cell 2M	16.1	0.0	0.0	50.7	(2.1)	
Declez	57.5	0.0	0.0	26.7	(1.1)	October
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(3.9)					
MZ1: Upland (Upland)	(4.8)					
MZ2: None						
MZ3: None						
Month Total = 2,109.9 AF	325.4	0.0	0.0	1,862.6	(78.1)	
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	830.4	0.0	0.0	6,371.4	(267.6)	Fiscal Year to Date
Since July 1, 2022 = 6,934.2 AF		0.0		6,103.8		
Calendar Year Delivery (with evaporation)	2,805.6	0.0	0.0	14,701.1	(505.7)	Calendar Year to Date
Since January 1, 2022 = 17,001.0 AF		0.0		14,195.4		
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) - November 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 838.7 AF***
College Heights	1.8	0.0	0.0	N	N	
Upland	111.8	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	318.3	0.0	0.0	N	N	
Brooks	66.7	0.0	0.0	81.9	(1.2)	
West Cucamonga Channel Drainage System						
8th Street	177.4	0.0	0.0	32.5	(0.5)	
7th Street	34.5	0.0	0.0	25.4	(0.4)	
Ely 1, 2, & 3	122.7	0.0	0.0	26.6	(0.4)	
Minor Drainage						
Grove	70.1	N	N	N	N	MZ-2 1,370.5 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	130.4	0.0	0.0	0.0	0.0	
Turner 3 & 4	101.9	0.0	0.0	0.0	0.0	
Day Creek Channel Drainage System						
Lower Day	101.2	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	36.5	0.0	0.0	X	0.0	
Victoria	88.5	0.0	0.0	155.0	(2.3)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	195.8	0.0	0.0	232.2	(3.5)	
San Sevaine 5	26.6	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	65.3	0.0	0.0	24.3	(0.4)	
Banana	64.1	0.0	0.0	50.7	(0.8)	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	56.4	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,2R,3, & 4	12.7	0.0	0.0	696.8	(10.5)	
RP3 Cell 2M	25.4	0.0	0.0	39.0	(0.6)	
Declez	143.2	0.0	0.0	1.7	0.0	MZ-3 1,078.1 AF***
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(4.8)					
MZ1: Upland (Upland)	(4.7)					
MZ2: None						
MZ3: None						
		0.0	0.0	1,366.1	(20.6)	November
Month Total = 3,287.3 AF	1,941.8	0.0		1,345.5		
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	2,772.2	0.0	0.0	7,737.5	(288.2)	Fiscal Year to Date
Since July 1, 2022 = 10,221.5 AF		0.0		7,449.3		
Calendar Year Delivery (with evaporation)	4,747.4	0.0	0.0	16,067.2	(526.3)	Calendar Year to Date
Since January 1, 2022 = 20,288.3 AF		0.0		15,540.9		
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS						
Water Delivered* and Evaporation** (AF) - December 2022						
Drainage System	SW/LR	Imported		Recycled Water		Management
Basin	Delivered	Delivered	Evaporation	Delivered	Evaporation	Zone Subtotals
San Antonio Channel Drainage System						MZ-1 817.3 AF***
College Heights	0.0	0.0	0.0	N	N	
Upland	100.6	0.0	0.0	N	N	
Montclair 1, 2, 3 & 4	255.7	0.0	0.0	N	N	
Brooks	69.2	0.0	0.0	112.8	(1.7)	
West Cucamonga Channel Drainage System						MZ-2 1,480.4 AF***
8th Street	229.2	0.0	0.0	3.8	(0.1)	
7th Street	55.4	0.0	0.0	0.0	0.0	
Ely 1, 2, & 3	286.0	0.0	0.0	0.0	0.0	
Minor Drainage						
Grove	76.0	N	N	N	N	MZ-2 1,480.4 AF***
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	191.3	0.0	0.0	0.0	0.0	
Turner 3&4, 5&8	98.0	0.0	0.0	0.0	0.0	
Day Creek Channel Drainage System						
Lower Day	72.7	0.0	0.0	X	0.0	
Etiwanda Channel Drainage System						
Etiwanda Debris	76.2	0.0	0.0	X	0.0	
Victoria	106.4	0.0	0.0	86.3	(1.3)	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	213.5	0.0	0.0	113.4	(1.7)	MZ-3 1,556.8 AF***
San Sevaine 5	153.4	0.0	0.0	X	X	
West Fontana Channel System						
Hickory	10.2	0.0	0.0	0.0	0.0	
Banana	95.9	0.0	0.0	0.0	0.0	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	94.9	0.0	0.0	0.0	0.0	
Declez Channel Drainage System						
RP3 Cells 1,2R,3, & 4	58.6	0.0	0.0	1,049.8	(15.7)	
RP3 Cell 2M	44.1	0.0	0.0	20.6	(0.3)	
Declez	206.3	0.0	0.0	2.6	0.0	December
Non-Replenishment Recharge**						
MZ1: Montclair (Upland)	(3.9)					
MZ1: Upland (Upland)	(3.7)					
MZ2: None						
MZ3: None						
Month Total = 3,854.5 AF	2,486.0	0.0	0.0	1,389.3	(20.8)	
All Sources	SW/LR	Imported		Recycled Water		
Fiscal Year Delivery (with evaporation)	5,258.2	0.0	0.0	9,126.8	(309.0)	Fiscal Year to Date
Since July 1, 2022 = 14,076.0 AF		0.0		8,817.8		
Calendar Year Delivery (with evaporation)	7,233.4	0.0	0.0	17,456.5	(547.1)	Calendar Year to Date
Since January 1, 2022 = 24,142.8 AF		0.0		16,909.4		
SW : Storm Water, LR : Local Runoff (& reported Pump-to-Waste**), IW : Imported Water (MWD or other), RW : Recycled Water						
X : Turnouts not available - to be installed during future projects.						
N : No turnout planned for installation.						
* : Water volume delivered to a recharge basin. Data are preliminary based on the data available at the time of this report preparation.						
** : Evaporation losses applied per Watermaster (4.2% April through October and 1.5% November through March).						
*** : Management Zone Subtotals have deducted from them evaporation and any Non-Replenishment Recharge (recharge originating from well water pumped to waste discharges and water recharged for storage agreements.						
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APPENDIX B

RWC MANAGEMENT PLANS

RWC Management Plan for 8th Street Basins											
(120-month averaging period)											
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries											
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	106	4	0	310	314	36,599	259	10,446	47,045	22%
	Aug '16	107	8	0	310	318	36,911	268	10,714	47,625	22%
	Sep '16	108	5	0	310	315	37,204	248	10,962	48,166	23%
	Oct '16	109	35	0	310	345	37,509	285	11,247	48,756	23%
	Nov '16	110	82	0	310	392	37,859	228	11,475	49,334	23%
	Dec '16	111	363	0	310	673	38,453	121	11,596	50,049	23%
	Jan '17	112	323	0	310	633	39,027	0	11,596	50,623	23%
	Feb '17	113	100	0	310	410	39,270	34	11,630	50,900	23%
	Mar '17	114	22	0	310	332	39,564	176	11,806	51,370	23%
	Apr '17	115	57	0	310	367	39,842	280	12,086	51,928	23%
	May '17	116	16	0	310	326	40,126	184	12,270	52,396	23%
	Jun '17	117	19	18	310	347	40,431	198	12,468	52,900	24%
2017/18	Jul '17	118	105	0	310	415	40,831	1	12,469	53,300	23%
	Aug '17	119	20	584	310	914	41,729	196	12,665	54,394	23%
	Sep '17	120	3	287	310	600	42,312	131	12,668	54,980	23%
	Oct '17	121	51	200	310	561	42,831	204	12,763	55,594	23%
	Nov '17	122	3	0	310	313	43,063	100	12,702	55,765	23%
	Dec '17	123	3	0	310	313	43,153	212	12,913	56,066	23%
	Jan '18	124	121	0	310	432	43,249	99	13,011	56,260	23%
	Feb '18	125	85	0	310	395	43,546	81	12,935	56,481	23%
	Mar '18	126	142	0	310	453	43,978	9	12,779	56,757	23%
	Apr '18	127	12	0	310	322	44,289	0	12,689	56,978	22%
	May '18	128	7	0	310	317	44,516	6	12,538	57,054	22%
	Jun '18	129	6	59	310	375	44,876	0	12,452	57,328	22%
2018/2019	Jul '18	130	6	58	310	374	45,222	93	12,321	57,543	21%
	Aug '18	131	6	0	310	316	45,523	147	12,340	57,863	21%
	Sep '18	132	6	0	310	316	45,824	249	12,589	58,413	22%
	Oct '18	133	68	0	310	378	46,187	188	12,777	58,963	22%
	Nov '18	134	115	0	310	426	46,475	283	13,060	59,535	22%
	Dec '18	135	164	0	310	474	46,597	251	13,311	59,908	22%
	Jan '19	136	280	0	310	590	47,152	245	13,556	60,708	22%
	Feb '19	137	319	0	310	629	47,324	0	13,556	60,879	22%
	Mar '19	138	275	0	310	585	47,888	277	13,833	61,721	22%
	Apr '19	139	11	0	310	321	48,194	364	14,197	62,391	23%
	May '19	140	135	0	310	445	48,623	333	14,530	63,153	23%
	Jun '19	141	6	0	310	316	48,940	434	14,963	63,903	23%
2019/20	Jul '19	142	6	0	310	316	49,237	280	15,243	64,480	24%
	Aug '19	143	4	0	310	314	49,518	71	15,290	64,808	24%
	Sep '19	144	3	572	310	886	50,386	128	15,418	65,803	23%
	Oct '19	145	3	250	310	563	50,565	58	15,476	66,040	23%
	Nov '19	146	111	126	310	547	50,709	54	15,396	66,105	23%
	Dec '19	147	180	0	310	490	50,586	0	15,303	65,889	23%
	Jan '20	148	5	0	310	315	50,204	68	15,269	65,472	23%
	Feb '20	149	19	0	310	329	49,745	64	15,333	65,078	24%
	Mar '20	150	160	0	310	470	49,833	0	15,219	65,051	23%
	Apr '20	151	120	0	310	430	49,746	11	15,129	64,876	23%
	May '20	152	9	0	310	320	49,722	84	15,014	64,736	23%
	Jun '20	153	3	0	310	313	49,692	162	14,874	64,565	23%
2020/21	Jul '20	154	3	0	310	313	49,665	186	14,841	64,506	23%
	Aug '20	155	3	0	310	313	49,640	113	14,849	64,488	23%
	Sep '20	156	3	0	310	313	49,607	135	14,806	64,413	23%
	Oct '20	157	8	0	310	318	49,526	114	14,632	64,158	23%
	Nov '20	158	45	0	310	355	49,383	70	14,539	63,922	23%
	Dec '20	159	58	0	310	368	48,942	0	14,519	63,461	23%
	Jan '21	160	137	0	310	448	48,970	0	14,352	63,321	23%
	Feb '21	161	30	0.0	310	340	48,723	0	14,269	62,992	23%
	Mar '21	162	94	0.0	310	404	48,568	25	14,271	62,838	23%
	Apr '21	163	11	0.0	310	321	48,555	96	14,185	62,740	23%
	May '21	164	10	0.0	310	320	48,313	0	13,942	62,256	22%
	Jun '21	165	6	0	310	316	47,973	0	13,740	61,713	22%
	Jul '21	166	9	0	310	320	47,782	0	13,652	61,434	22%
2021/2022	Aug '21	167	6	0	310	316	47,555	1	13,607	61,163	22%
	Sep '21	168	18	0	310	329	47,406	287	13,893	61,298	23%
	Oct '21	169	31	0	310	342	47,394	286	14,179	61,573	23%
	Nov '21	170	6	0	310	316	47,262	394	14,572	61,834	24%
	Dec '21	171	458	0	310	768	47,644	101	14,674	62,318	24%
	Jan '22	172	31	0	310	341	47,618	273	14,920	62,537	24%
	Feb '22	173	36	0	310	346	47,500	270	15,190	62,690	24%
	Mar '22	174	134	0	310	444	47,353	156	15,346	62,699	24%
	Apr '22	175	42	0	310	352	47,172	224	15,535	62,707	25%
	May '22	176	8	0	310	318	47,155	232	15,512	62,667	25%
	Jun '22	177	9	0	310	319	47,143	129	15,453	62,595	25%

HISTORICAL

ACTUAL



RWC Management Plan for 8th Street Basins												
(120-month averaging period)												
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries												
Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/2023	Jul '22	178	9	0	310	320	47,132	309	15,624	62,756	25%	A C T U A L
	Aug '22	179	6	0	310	316	47,117	169	15,793	62,910	25%	
	Sep '22	180	76	0	310	386	47,160	18	15,687	62,846	25%	
	Oct '22	181	50	0	310	360	47,181	195	15,572	62,753	25%	
	Nov '22	182	212	0	310	522	47,327	57	15,381	62,708	25%	
	Dec '22	183	285	0	310	595	47,333	4	15,282	62,615	24%	
	Jan '23	184	174	0	310	484	47,437	3	15,055	62,492	24%	
	Feb '23	185	1	0	310	312	47,348	56	14,885	62,233	24%	P L A N N E D
	Mar '23	186	129		310	439	47,412	120	14,765	62,177	24%	
	Apr '23	187	71		310	381	47,459	180	14,793	62,252	24%	
	May '23	188	40		310	350	47,456	210	14,782	62,238	24%	
	Jun '23	189	15		310	325	47,459	240	14,751	62,210	24%	
2023/2024	Jul '23	190	20		310	330	47,466	230	14,795	62,261	24%	
	Aug '23	191	12		310	322	47,465	240	14,917	62,382	24%	
	Sep '23	192	24		310	334	47,478	230	14,997	62,475	24%	
	Oct '23	193	44		310	354	47,474	210	14,968	62,442	24%	
	Nov '23	194	88		310	398	47,513	160	14,879	62,392	24%	
	Dec '23	195	215		310	525	47,682	40	14,798	62,480	24%	
	Jan '24	196	146		310	456	47,801	100	14,790	62,591	24%	
	Feb '24	197	152		310	462	47,894	100	14,802	62,696	24%	
	Mar '24	198	129		310	439	47,972	120	14,896	62,868	24%	
	Apr '24	199	71		310	381	47,964	180	15,055	63,019	24%	
	May '24	200	40		310	350	47,978	210	15,200	63,178	24%	
	Jun '24	201	15		310	325	47,969	240	15,388	63,357	24%	
2024/2025	Jul '24	202	20		310	330	47,964	230	15,610	63,574	25%	
	Aug '24	203	12		310	322	47,961	240	15,842	63,803	25%	
	Sep '24	204	24		310	334	47,971	230	16,040	64,011	25%	
	Oct '24	205	44		310	354	48,015	210	16,250	64,265	25%	
	Nov '24	206	88		310	398	47,957	160	16,410	64,367	25%	
	Dec '24	207	215		310	525	47,819	40	16,450	64,269	26%	
	Jan '25	208	146		310	456	47,855	100	16,550	64,405	26%	
	Feb '25	209	152		310	462	47,965	100	16,650	64,615	26%	
	Mar '25	210	129		310	439	48,052	120	16,770	64,822	26%	
	Apr '25	211	71		310	381	48,098	180	16,950	65,048	26%	
	May '25	212	40		310	350	48,081	210	17,160	65,241	26%	
	Jun '25	213	15		310	325	48,084	240	17,400	65,484	27%	
2025/26	Jul '25	214	20		310	330	48,060	230	17,630	65,690	27%	
	Aug '25	215	12		310	322	48,068	240	17,847	65,915	27%	
	Sep '25	216	24		310	334	48,016	230	18,017	66,033	27%	
	Oct '25	217	44		310	354	48,021	210	18,214	66,235	27%	
	Nov '25	218	88		310	398	48,090	160	18,279	66,369	28%	
	Dec '25	219	215		310	525	48,219	40	18,160	66,379	27%	
	Jan '26	220	146		310	456	48,116	100	18,201	66,317	27%	
	Feb '26	221	152		310	462	48,175	100	18,095	66,270	27%	
	Mar '26	222	129		310	439	48,104	120	18,055	66,159	27%	
	Apr '26	223	71		310	381	48,141	180	18,040	66,181	27%	
	May '26	224	40		310	350	48,109	210	18,046	66,155	27%	
	Jun '26	225	15		310	325	48,119	240	17,990	66,109	27%	



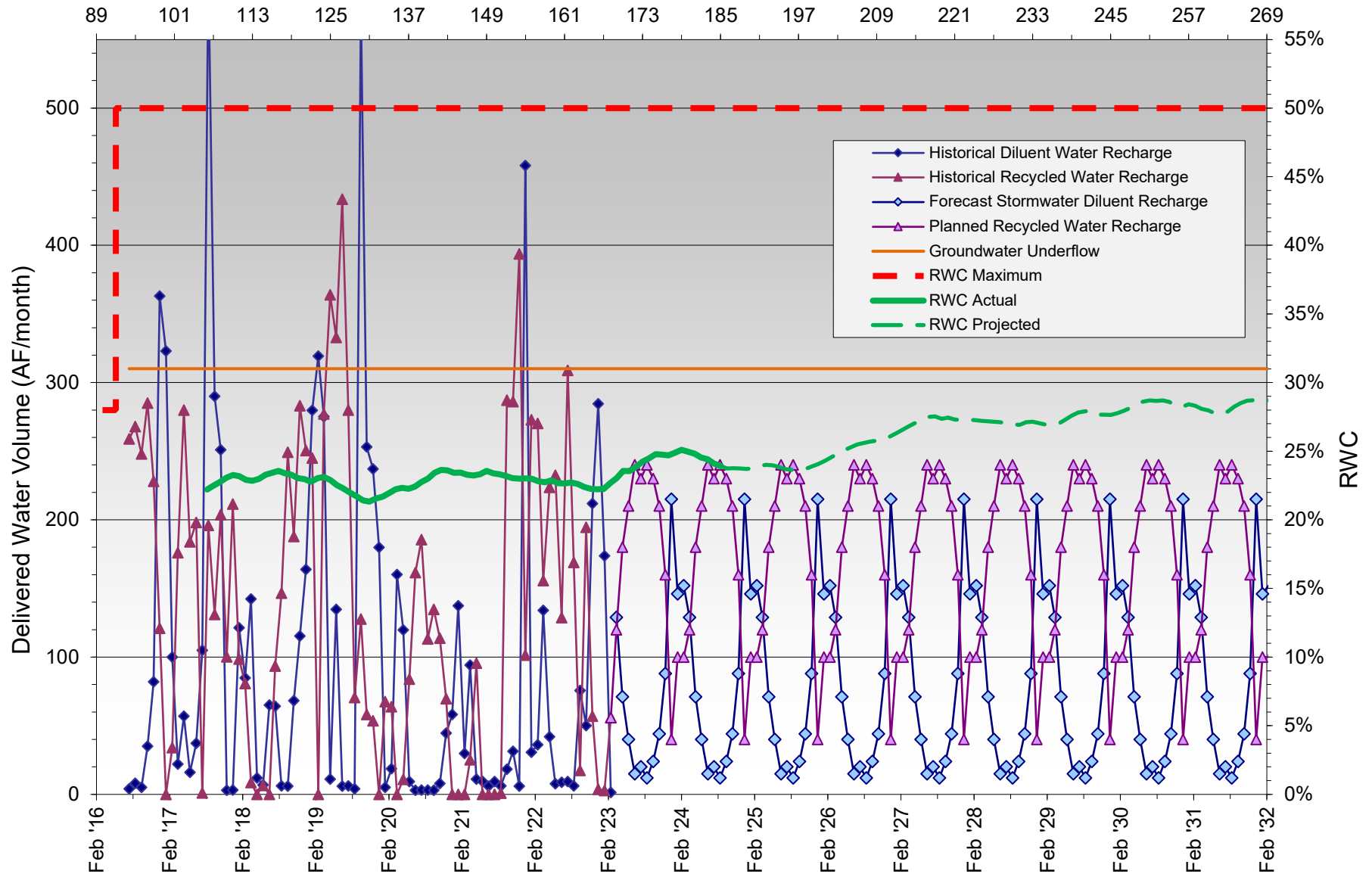
RWC Management Plan for 8th Street Basins											
(120-month averaging period)											
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries											
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	226	20		310	330	48,135	230	17,961	66,096	27%
	Aug '26	227	12		310	322	48,139	240	17,933	66,072	27%
	Sep '26	228	24		310	334	48,158	230	17,915	66,073	27%
	Oct '26	229	44		310	354	48,167	210	17,840	66,007	27%
	Nov '26	230	88		310	398	48,173	160	17,772	65,945	27%
	Dec '26	231	215		310	525	48,025	40	17,691	65,716	27%
	Jan '27	232	146		310	456	47,848	100	17,791	65,639	27%
	Feb '27	233	152		310	462	47,900	100	17,857	65,757	27%
	Mar '27	234	129		310	439	48,007	120	17,801	65,808	27%
	Apr '27	235	71		310	381	48,021	180	17,701	65,722	27%
	May '27	236	40		310	350	48,045	210	17,727	65,772	27%
	Jun '27	237	15		310	325	48,023	240	17,769	65,791	27%
2027/28	Jul '27	238	20		310	330	47,938	230	17,998	65,935	27%
	Aug '27	239	12		310	322	47,346	240	18,042	65,388	28%
	Sep '27	240	24		310	334	47,080	230	18,141	65,221	28%
	Oct '27	241	44		310	354	46,873	210	18,147	65,020	28%
	Nov '27	242	88		310	398	46,958	160	18,207	65,165	28%
	Dec '27	243	215		310	525	47,170	40	18,035	65,205	28%
	Jan '28	244	146		310	456	47,195	100	18,037	65,231	28%
	Feb '28	245	152		310	462	47,262	100	18,056	65,318	28%
	Mar '28	246	129		310	439	47,249	120	18,167	65,416	28%
	Apr '28	247	71		310	381	47,308	180	18,347	65,655	28%
	May '28	248	40		310	350	47,341	210	18,551	65,892	28%
	Jun '28	249	15		310	325	47,291	240	18,791	66,081	28%
2028/29	Jul '28	250	20		310	330	47,246	230	18,928	66,174	29%
	Aug '28	251	12		310	322	47,252	240	19,021	66,273	29%
	Sep '28	252	24		310	334	47,270	230	19,002	66,272	29%
	Oct '28	253	44		310	354	47,246	210	19,024	66,270	29%
	Nov '28	254	88		310	398	47,219	160	18,901	66,119	29%
	Dec '28	255	215		310	525	47,270	40	18,690	65,960	28%
	Jan '29	256	146		310	456	47,136	100	18,545	65,681	28%
	Feb '29	257	152		310	462	46,969	100	18,645	65,614	28%
	Mar '29	258	129		310	439	46,823	120	18,488	65,310	28%
	Apr '29	259	71		310	381	46,883	180	18,304	65,186	28%
	May '29	260	40		310	350	46,788	210	18,181	64,969	28%
	Jun '29	261	15		310	325	46,797	240	17,987	64,784	28%
2029/30	Jul '29	262	20		310	330	46,811	230	17,937	64,748	28%
	Aug '29	263	12		310	322	46,819	240	18,107	64,925	28%
	Sep '29	264	24		310	334	46,267	230	18,209	64,476	28%
	Oct '29	265	44		310	354	46,058	210	18,361	64,419	29%
	Nov '29	266	88		310	398	45,909	160	18,467	64,377	29%
	Dec '29	267	215		310	525	45,944	40	18,507	64,452	29%
	Jan '30	268	146		310	456	46,085	100	18,540	64,625	29%
	Feb '30	269	152		310	462	46,219	100	18,576	64,795	29%
	Mar '30	270	129		310	439	46,187	120	18,696	64,883	29%
	Apr '30	271	71		310	381	46,139	180	18,865	65,004	29%
	May '30	272	40		310	350	46,169	210	18,991	65,161	29%
	Jun '30	273	15		310	325	47,900	240	19,070	66,970	28%
2030/31	Jul '30	274	20		310	330	46,198	230	19,114	65,312	29%
	Aug '30	275	12		310	322	46,207	240	19,241	65,448	29%
	Sep '30	276	24		310	334	46,228	230	19,336	65,564	29%
	Oct '30	277	44		310	354	46,264	210	19,433	65,697	30%
	Nov '30	278	88		310	398	46,308	160	19,523	65,831	30%
	Dec '30	279	215		310	525	46,464	40	19,563	66,027	30%
	Jan '31	280	146		310	456	46,473	100	19,663	66,136	30%
	Feb '31	281	152		310	462	46,595	100	19,763	66,358	30%
	Mar '31	282	129		310	439	46,630	120	19,858	66,488	30%
	Apr '31	283	71		310	381	46,690	180	19,942	66,632	30%
	May '31	284	40		310	350	46,721	210	20,152	66,873	30%
	Jun '31	285	15		310	325	47,262	240	20,392	67,654	30%
2031/32	Jul '31	286	20		310	330	47,249	230	20,622	67,871	30%
	Aug '31	287	12		310	322	47,308	240	20,861	68,169	31%
	Sep '31	288	24		310	334	47,341	230	20,804	68,145	31%
	Oct '31	289	44		310	354	47,291	210	20,728	68,018	30%
	Nov '31	290	88		310	398	47,246	160	20,494	67,741	30%
	Dec '31	291	215		310	525	47,252	40	20,433	67,685	30%
	Jan '32	292	146		310	456	47,270	100	20,260	67,530	30%
	Feb '32	293	152		310	462	47,246	100	20,090	67,336	30%
	Mar '32	294	129		310	439	47,219	120	20,054	67,272	30%
	Apr '32	295	71		310	381	47,270	180	20,010	67,280	30%
	May '32	296	40		310	350	47,136	210	19,988	67,124	30%
	Jun '32	297	15		310	325	46,969	240	20,099	67,068	30%
Notes: DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow. RW = Recycled Water RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water. While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations. RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period											

P L A N N E D



RWC Management Plan - 8th Street Basins

Months Since Initial Recycled Water Delivery



RWC Management Plan for Banana Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/2017	Jul '16	132	0	0	151	151	15,661	183	9,034	24,695	37%
	Aug '16	133	0	0	151	151	15,812	49	8,998	24,810	36%
	Sep '16	134	0	0	151	151	15,963	97	8,717	24,681	35%
	Oct '16	135	6	0	151	157	16,046	115	8,783	24,829	35%
	Nov '16	136	21	0	151	172	15,984	55	8,831	24,815	36%
	Dec '16	137	71	0	151	222	16,005	1	8,782	24,787	35%
	Jan '17	138	50	0	151	201	15,875	0	8,782	24,657	36%
	Feb '17	139	18	0	151	169	15,971	0	8,782	24,753	35%
	Mar '17	140	0	0	151	151	16,069	0	8,782	24,851	35%
	Apr '17	141	0	0	151	151	16,191	0	8,778	24,969	35%
	May '17	142	0	0	151	151	16,306	0	8,772	25,078	35%
	Jun '17	143	0	0	151	151	16,457	0	8,772	25,229	35%
2017/2018	Jul '17	144	0	0	151	151	16,608	0	8,772	25,380	35%
	Aug '17	145	2	0	151	153	16,761	131	8,903	25,664	35%
	Sep '17	146	2	134	151	287	17,045	161	9,064	26,109	35%
	Oct '17	147	3	121	151	274	17,318	241	9,305	26,623	35%
	Nov '17	148	0	0	151	151	17,434	463	9,768	27,202	36%
	Dec '17	149	2	138	151	291	17,703	252	10,020	27,723	36%
	Jan '18	150	115	93	151	359	17,932	126	10,146	28,079	36%
	Feb '18	151	11	0	151	163	18,020	206	10,352	28,372	36%
	Mar '18	152	60	0	151	212	18,232	88	10,440	28,671	36%
	Apr '18	153	0	0	151	151	18,383	172	10,565	28,948	36%
	May '18	154	0	0	151	152	18,532	161	10,688	29,220	37%
	Jun '18	155	0	0	151	151	18,675	129	10,746	29,420	37%
2018/2019	Jul '18	156	2	0	151	154	18,798	147	10,892	29,690	37%
	Aug '18	157	0	0	151	151	18,904	16	10,908	29,812	37%
	Sep '18	158	0	0	151	151	19,021	91	10,999	30,020	37%
	Oct '18	159	12	0	151	163	19,148	0	10,999	30,147	36%
	Nov '18	160	23	0	151	174	19,272	30	11,029	30,302	36%
	Dec '18	161	12	0	151	164	19,349	0	11,029	30,378	36%
	Jan '19	162	27	0	151	179	19,523	13	11,003	30,525	36%
	Feb '19	163	42	0	151	194	19,621	0	11,003	30,624	36%
	Mar '19	164	14	0	151	165	19,786	0	11,003	30,789	36%
	Apr '19	165	0	0	151	151	19,937	0	11,003	30,940	36%
	May '19	166	0	0	151	151	20,089	1	11,003	31,092	35%
	Jun '19	167	0	0	151	151	20,240	0	11,003	31,243	35%
2019/2020	Jul '19	168	0	0	151	151	20,391	33	11,036	31,428	35%
	Aug '19	169	0	0	151	151	20,543	100	11,137	31,679	35%
	Sep '19	170	0	0	151	151	20,694	227	11,364	32,057	35%
	Oct '19	171	0	0	151	151	20,679	242	11,476	32,155	36%
	Nov '19	172	53	0	151	204	20,732	92	11,387	32,119	35%
	Dec '19	173	57	0	151	208	20,713	24	11,344	32,057	35%
	Jan '20	174	0	0	151	151	20,613	45	11,314	31,927	35%
	Feb '20	175	0	0	151	151	20,470	24	11,338	31,808	36%
	Mar '20	176	81	0	151	232	20,534	38	11,376	31,910	36%
	Apr '20	177	57	0	151	209	20,525	17	11,253	31,779	35%
	May '20	178	0	0	151	151	20,525	35	11,111	31,637	35%
	Jun '20	179	0	0	151	151	20,525	0	10,982	31,508	35%
2020/2021	Jul '20	180	0	0	151	151	20,525	0	10,905	31,431	35%
	Aug '20	181	0	0	151	151	20,525	0	10,851	31,377	35%
	Sep '20	182	0	0	151	151	20,525	0	10,792	31,318	34%
	Oct '20	183	0	0	151	151	20,520	166	10,910	31,431	35%
	Nov '20	184	12	0	151	163	20,516	137	11,019	31,535	35%
	Dec '20	185	63	0	151	214	20,528	115	11,134	31,661	35%
	Jan '21	186	88	0	151	239	20,605	38	11,171	31,777	35%
	Feb '21	187	1	0	151	152	20,580	37	11,209	31,789	35%
	Mar '21	188	52	0	151	204	20,633	37	11,246	31,878	35%
	Apr '21	189	2	0	151	154	20,635	121	11,367	32,002	36%
	May '21	190	0	0	151	151	20,635	97	11,464	32,099	36%
	Jun '21	191	0	0	151	151	20,635	94	11,558	32,193	36%
2021/2022	Jul '21	192	9	0	151	161	20,613	86	11,644	32,257	36%
	Aug '21	193	0	0	151	151	20,613	76	11,584	32,198	36%
	Sep '21	194	0	0	151	151	20,613	93	11,282	31,895	35%
	Oct '21	195	5	0	151	156	20,598	49	10,927	31,525	35%
	Nov '21	196	0	0	151	151	20,568	48	10,814	31,382	34%
	Dec '21	197	109	0	151	260	20,659	2	10,571	31,230	34%
	Jan '22	198	2	0	151	153	20,613	25	10,435	31,047	34%
	Feb '22	199	5	0	151	156	20,597	43	10,310	30,907	33%
	Mar '22	200	12	0	151	163	20,565	85	10,323	30,888	33%
	Apr '22	201	4	0	151	155	20,533	54	10,326	30,859	33%
	May '22	202	0	0	151	151	20,533	0	10,281	30,814	33%
	Jun '22	203	0	0	151	151	20,533	0	10,202	30,736	33%

HISTORICAL

ACTUAL



RWC Management Plan for Banana Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/2023	Jul '22	204	0	0	151	151	20,533	0	10,161	30,695	33%
	Aug '22	205	0	0	151	151	20,533	95	10,254	30,787	33%
	Sep '22	206	1	0	151	152	20,534	283	10,349	30,883	34%
	Oct '22	207	1	0	151	153	20,525	144	10,390	30,915	34%
	Nov '22	208	64	0	151	215	20,584	50	10,320	30,904	33%
	Dec '22	209	96	0	151	247	20,631	0	10,305	30,935	33%
	Jan '23	210	66	0	151	217	20,679	0	10,277	30,956	33%
	Feb '23	211	0	0	151	151	20,659	30	10,305	30,963	33%
	Mar '23	212	24		151	175	20,675	100	10,363	31,037	33%
	Apr '23	213	14		151	165	20,689	110	10,418	31,106	33%
	May '23	214	7		151	158	20,693	120	10,499	31,191	34%
2023/2024	Jun '23	215	0		151	151	20,693	130	10,594	31,286	34%
	Jul '23	216	4		151	155	20,697	120	10,699	31,395	34%
	Aug '23	217	3		151	154	20,700	120	10,807	31,506	34%
	Sep '23	218	4		151	155	20,704	120	10,927	31,630	35%
	Oct '23	219	14		151	165	20,718	110	10,652	31,369	34%
	Nov '23	220	20		151	171	20,716	110	10,660	31,375	34%
	Dec '23	221	54		151	205	20,764	70	10,730	31,493	34%
	Jan '24	222	45		151	196	20,792	80	10,810	31,601	34%
	Feb '24	223	34		151	185	20,771	90	10,900	31,670	34%
	Mar '24	224	24		151	175	20,786	100	10,915	31,700	34%
	Apr '24	225	14		151	165	20,798	110	10,937	31,734	34%
	May '24	226	7		151	158	20,805	120	10,863	31,667	34%
	Jun '24	227	0		151	151	20,805	130	10,803	31,607	34%
2024/2025	Jul '24	228	4		151	155	20,809	120	10,923	31,731	34%
	Aug '24	229	3		151	154	20,812	120	10,961	31,772	34%
	Sep '24	230	4		151	155	20,816	120	11,009	31,824	35%
	Oct '24	231	14		151	165	20,830	110	10,913	31,742	34%
	Nov '24	232	20		151	171	20,843	110	10,850	31,692	34%
	Dec '24	233	54		151	205	20,752	70	10,853	31,604	34%
	Jan '25	234	45		151	196	20,773	80	10,789	31,561	34%
	Feb '25	235	34		151	185	20,791	90	10,832	31,622	34%
	Mar '25	236	24		151	175	20,813	100	10,852	31,664	34%
	Apr '25	237	14		151	165	20,824	110	10,872	31,695	34%
	May '25	238	7		151	158	20,831	120	10,831	31,661	34%
	Jun '25	239	0		151	151	20,831	130	10,935	31,765	34%
2025/2026	Jul '25	240	4		151	155	20,835	120	11,001	31,835	35%
	Aug '25	241	3		151	154	20,838	120	10,965	31,802	34%
	Sep '25	242	4		151	155	20,802	120	10,709	31,510	34%
	Oct '25	243	14		151	165	20,711	110	10,470	31,180	34%
	Nov '25	244	20		151	171	20,701	110	10,318	31,018	33%
	Dec '25	245	54		151	205	20,696	70	10,105	30,800	33%
	Jan '26	246	45		151	196	20,670	80	10,110	30,779	33%
	Feb '26	247	34		151	185	20,697	90	10,090	30,786	33%
	Mar '26	248	24		151	175	20,683	100	10,116	30,798	33%
	Apr '26	249	14		151	165	20,697	110	10,129	30,825	33%
	May '26	250	7		151	158	20,689	120	10,136	30,824	33%
	Jun '26	251	0		151	151	20,689	130	10,109	30,797	33%

A C T U A L

P L A N N E D



RWC Management Plan for Banana Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/2027	Jul '26	252	4		151	155	20,693	120	10,046	30,738	33%
	Aug '26	253	3		151	154	20,696	120	10,117	30,812	33%
	Sep '26	254	4		151	155	20,700	120	10,140	30,839	33%
	Oct '26	255	14		151	165	20,708	110	10,135	30,842	33%
	Nov '26	256	20		151	171	20,707	110	10,190	30,896	33%
	Dec '26	257	54		151	205	20,690	70	10,259	30,948	33%
	Jan '27	258	45		151	196	20,685	80	10,339	31,023	33%
	Feb '27	259	34		151	185	20,701	90	10,429	31,129	34%
	Mar '27	260	24		151	175	20,725	100	10,529	31,253	34%
	Apr '27	261	14		151	165	20,739	110	10,639	31,377	34%
	May '27	262	7		151	158	20,746	120	10,759	31,504	34%
	Jun '27	263	0		151	151	20,746	130	10,889	31,634	34%
2027/28	Jul '27	264	3		151	154	20,749	120	11,009	31,757	35%
	Aug '27	265	4		151	155	20,751	120	10,998	31,748	35%
	Sep '27	266	14		151	165	20,629	120	10,957	31,586	35%
	Oct '27	267	20		151	171	20,526	110	10,826	31,352	35%
	Nov '27	268	54		151	205	20,580	110	10,473	31,053	34%
	Dec '27	269	45		151	196	20,485	70	10,291	30,776	33%
	Jan '28	270	34		151	185	20,311	80	10,244	30,556	34%
	Feb '28	271	24		151	175	20,324	90	10,129	30,453	33%
	Mar '28	272	14		151	165	20,278	100	10,141	30,419	33%
	Apr '28	273	7		151	158	20,285	110	10,079	30,363	33%
	May '28	274	0		151	151	20,284	120	10,037	30,321	33%
	Jun '28	275	3		151	154	20,287	130	10,038	30,325	33%
2028/29	Jul '28	276	3		151	154	20,288	120	10,012	30,299	33%
	Aug '28	277	4		151	155	20,292	120	10,115	30,407	33%
	Sep '28	278	14		151	165	20,306	120	10,145	30,450	33%
	Oct '28	279	20		151	171	20,314	110	10,255	30,569	34%
	Nov '28	280	54		151	205	20,345	110	10,334	30,680	34%
	Dec '28	281	45		151	196	20,378	70	10,404	30,782	34%
	Jan '29	282	34		151	185	20,384	80	10,471	30,855	34%
	Feb '29	283	24		151	175	20,366	90	10,561	30,927	34%
	Mar '29	284	14		151	165	20,367	100	10,661	31,028	34%
	Apr '29	285	7		151	158	20,374	110	10,771	31,145	35%
	May '29	286	0		151	151	20,374	120	10,890	31,264	35%
	Jun '29	287	3		151	154	20,377	130	11,020	31,397	35%
2029/30	Jul '29	288	3		151	154	20,380	120	11,107	31,487	35%
	Aug '29	289	4		151	155	20,384	120	11,127	31,511	35%
	Sep '29	290	14		151	165	20,398	120	11,020	31,418	35%
	Oct '29	291	20		151	171	20,418	110	10,888	31,306	35%
	Nov '29	292	54		151	205	20,419	110	10,906	31,325	35%
	Dec '29	293	45		151	196	20,407	70	10,953	31,360	35%
	Jan '30	294	34		151	185	20,441	80	10,988	31,429	35%
	Feb '30	295	24		151	175	20,465	90	11,054	31,519	35%
	Mar '30	296	14		151	165	20,399	100	11,116	31,514	35%
	Apr '30	297	7		151	158	20,348	110	11,208	31,557	36%
	May '30	298	0		151	151	20,348	120	11,293	31,641	36%
	Jun '30	299	3		151	154	20,351	130	11,423	31,774	36%
2030/31	Jul '30	300	3		151	154	20,354	120	11,543	31,897	36%
	Aug '30	301	4		151	155	20,358	120	11,663	32,021	36%
	Sep '30	302	14		151	165	20,372	120	11,783	32,155	37%
	Oct '30	303	20		151	171	20,392	110	11,727	32,120	37%
	Nov '30	304	54		151	205	20,434	110	11,700	32,134	36%
	Dec '30	305	45		151	196	20,417	70	11,655	32,072	36%
	Jan '31	306	34		151	185	20,363	80	11,697	32,061	36%
	Feb '31	307	24		151	175	20,386	90	11,750	32,136	37%
	Mar '31	308	14		151	165	20,348	100	11,813	32,161	37%
	Apr '31	309	7		151	158	20,352	110	11,802	32,154	37%
	May '31	310	0		151	151	20,352	120	11,825	32,177	37%
	Jun '31	311	3		151	154	20,355	130	11,861	32,216	37%
2031/32	Jul '31	312	3		151	154	20,349	120	11,895	32,244	37%
	Aug '31	313	4		151	155	20,353	120	11,939	32,293	37%
	Sep '31	314	14		151	165	20,367	120	11,967	32,334	37%
	Oct '31	315	20		151	171	20,382	110	12,028	32,410	37%
	Nov '31	316	54		151	205	20,436	110	12,090	32,526	37%
	Dec '31	317	45		151	196	20,372	70	12,158	32,530	37%
	Jan '32	318	34		151	185	20,405	80	12,213	32,618	37%
	Feb '32	319	24		151	175	20,424	90	12,261	32,684	38%
	Mar '32	320	14		151	165	20,426	100	12,275	32,701	38%
	Apr '32	321	7		151	158	20,429	110	12,332	32,761	38%
	May '32	322	0		151	151	20,429	120	12,452	32,881	38%
	Jun '32	323	3		151	154	20,432	130	12,582	33,014	38%

P L A N N E D

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

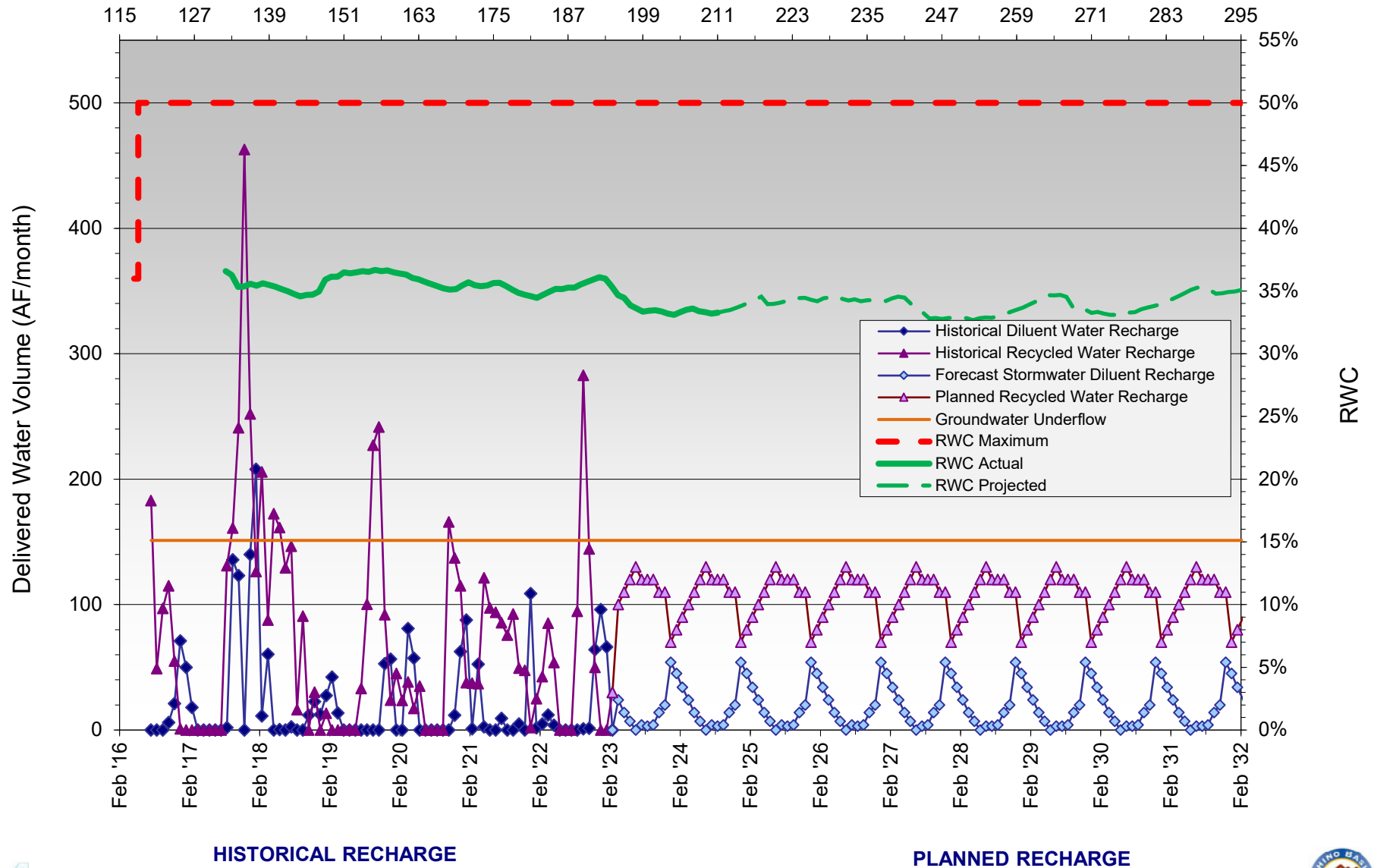
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan for Banana Basin

Months Since Initial Recycled Water Delivery



RWC Management Plan for Brooks Street Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	95	0	0	509	509	47,607	0	10,548	58,155	18%
	Aug '16	96	0	0	509	509	47,965	0	10,548	58,513	18%
	Sep '16	97	31	0	509	540	48,163	145	10,693	58,856	18%
	Oct '16	98	17	170	509	696	48,552	19	10,712	59,264	18%
	Nov '16	99	39	0	509	548	48,813	116	10,828	59,641	18%
	Dec '16	100	196	0	509	705	49,256	13	10,841	60,097	18%
	Jan '17	101	254	0	509	763	49,907	0	10,841	60,748	18%
	Feb '17	102	142	0	509	651	50,429	0	10,841	61,270	18%
	Mar '17	103	1	0	509	510	50,936	16	10,857	61,793	18%
	Apr '17	104	0	16	509	525	51,359	8	10,865	62,224	17%
	May '17	105	1	0	509	510	51,865	38	10,903	62,768	17%
	Jun '17	106	0	2	509	511	52,374	30	10,933	63,307	17%
2017/18	Jul '17	107	0	94	509	603	52,977	228	11,161	64,138	17%
	Aug '17	108	0	96	509	605	53,582	55	11,216	64,798	17%
	Sep '17	109	1	3	509	513	54,070	169	11,385	65,455	17%
	Oct '17	110	1	0	509	510	54,546	99	11,484	66,030	17%
	Nov '17	111	3	0	509	512	55,034	151	11,636	66,670	17%
	Dec '17	112	1	0	509	510	55,502	122	11,758	67,260	17%
	Jan '18	113	28	5	509	542	55,762	95	11,852	67,614	18%
	Feb '18	114	9	0	509	518	56,230	106	11,958	68,188	18%
	Mar '18	115	43	0	509	552	56,774	13	11,971	68,744	17%
	Apr '18	116	2	0	509	511	57,281	36	12,007	69,288	17%
	May '18	117	3	0	509	513	57,751	85	12,092	69,843	17%
	Jun '18	118	2	0	509	511	58,259	109	12,201	70,459	17%
2018/19	Jul '18	119	0	0	509	509	58,765	45	12,246	71,011	17%
	Aug '18	120	0	0	509	509	59,258	18	12,147	71,405	17%
	Sep '18	121	0	0	509	509	59,767	0	12,061	71,828	17%
	Oct '18	122	3	0	509	512	60,280	0	11,895	72,175	16%
	Nov '18	123	22	0	509	531	60,788	183	11,975	72,763	16%
	Dec '18	124	43	0	509	552	61,178	257	12,144	73,322	17%
	Jan '19	125	260	0	509	769	61,922	66	11,933	73,855	16%
	Feb '19	126	283	0	509	792	62,506	0	11,913	74,419	16%
	Mar '19	127	149	0	509	658	63,134	77	11,831	74,965	16%
	Apr '19	128	3	0	509	512	63,645	254	11,789	75,434	16%
	May '19	129	61	0	509	571	64,199	189	11,864	76,062	16%
	Jun '19	130	0	0	509	509	64,708	291	11,976	76,684	16%
2019/20	Jul '19	131	0	111	509	621	65,328	177	12,147	77,474	16%
	Aug '19	132	0	39	509	548	65,876	56	12,195	78,071	16%
	Sep '19	133	1	0	509	510	66,386	36	12,231	78,617	16%
	Oct '19	134	0	0	509	509	66,373	176	12,223	78,596	16%
	Nov '19	135	70	0	509	579	66,439	64	12,042	78,481	15%
	Dec '19	136	160	0	509	669	66,470	31	11,928	78,398	15%
	Jan '20	137	4	0	509	513	66,222	5	11,860	78,082	15%
	Feb '20	138	0	0	509	509	66,007	53	11,859	77,867	15%
	Mar '20	139	159	0	509	668	66,139	68	11,747	77,887	15%
	Apr '20	140	167	0	509	676	66,283	15	11,527	77,810	15%
	May '20	141	8	0	509	517	66,289	114	11,285	77,574	15%
	Jun '20	142	0	0	509	509	66,288	102	11,179	77,468	14%
2020/21	Jul '20	143	0	0	509	509	66,287	150	11,182	77,469	14%
	Aug '20	144	0	0	509	509	66,269	121	11,028	77,297	14%
	Sep '20	145	2	0	509	512	66,271	126	11,013	77,283	14%
	Oct '20	146	2	0	509	512	66,249	85	10,968	77,217	14%
	Nov '20	147	11	0	509	520	66,216	0	10,881	77,097	14%
	Dec '20	148	43	0	509	552	65,977	0	10,847	76,824	14%
	Jan '21	149	57	0	509	566	65,921	82	10,929	76,850	14%
	Feb '21	150	5	0	509	514	65,762	75	11,004	76,766	14%
	Mar '21	151	41	0	509	550	65,661	24	11,028	76,689	14%
	Apr '21	152	0	0	509	509	65,660	164	11,018	76,677	14%
	May '21	153	0	0	509	509	65,650	53	10,909	76,559	14%
	Jun '21	154	0	0	509	509	65,649	53	10,739	76,388	14%
2021/22	Jul '21	155	5	0	509	514	65,416	121	10,860	76,276	14%
	Aug '21	156	0	0	509	509	65,231	100	10,960	76,191	14%
	Sep '21	157	0	0	509	509	65,077	97	11,057	76,135	15%
	Oct '21	158	14	0	509	523	65,073	72	11,049	76,123	15%
	Nov '21	159	5	0	509	514	65,028	44	11,057	76,085	15%
	Dec '21	160	134	0	509	643	65,146	27	10,986	76,132	14%
	Jan '22	161	4	0	509	513	65,105	3	10,846	75,951	14%
	Feb '22	162	7	0	509	517	65,062	67	10,837	75,899	14%
	Mar '22	163	43	0	509	552	65,002	0	10,752	75,754	14%
	Apr '22	164	36	0	509	545	64,974	0	10,720	75,693	14%
	May '22	165	1	0	509	511	64,974	0	10,595	75,568	14%
	Jun '22	166	2	0	509	512	64,976	0	10,434	75,410	14%

HISTORICAL

ACTUAL



RWC Management Plan for Brooks Street Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period	
2022/23	Jul '22	167	0	0	509	509	64,975	0	10,401	75,376	14%	A C T U A L	
	Aug '22	168	0	0	509	509	64,973	0	10,362	75,335	14%		
	Sep '22	169	6	0	509	516	64,978	189	10,499	75,477	14%		
	Oct '22	170	21	0	509	531	64,999	162	10,661	75,660	14%		
	Nov '22	171	67	0	509	576	65,066	81	10,742	75,808	14%		
	Dec '22	172	69	0	509	578	65,135	111	10,853	75,988	14%		
	Jan '23	173	311	0	509	820	65,411	45	10,556	75,967	14%		
	Feb '23	174	1	0	509	510	65,386	64	10,321	75,707	14%	P L A N N E D	
	Mar '23	175	65		509	574	65,419	90	10,173	75,592	13%		
	Apr '23	176	35		509	544	65,454	120	10,062	75,516	13%		
	May '23	177	12		509	521	65,449	140	10,050	75,499	13%		
	Jun '23	178	2		509	511	65,450	150	10,080	75,530	13%		
	Jul '23	179	3		509	512	65,452	150	10,061	75,513	13%		
	Aug '23	180	3		509	512	65,454	150	10,014	75,468	13%		
Sep '23	181	7		509	516	65,433	140	9,972	75,405	13%			
Oct '23	182	11		509	520	65,421	140	10,004	75,425	13%			
Nov '23	183	27		509	536	65,444	120	10,030	75,474	13%			
Dec '23	184	80		509	589	65,516	70	9,996	75,512	13%			
Jan '24	185	99		509	608	65,612	50	9,937	75,549	13%			
Feb '24	186	86		509	595	65,651	60	9,895	75,546	13%			
Mar '24	187	65		509	574	65,704	90	9,855	75,559	13%			
Apr '24	188	35		509	544	65,725	120	9,910	75,635	13%			
May '24	189	12		509	521	65,737	140	10,050	75,787	13%			
Jun '24	190	2		509	511	65,720	150	10,152	75,872	13%			
2024/25	Jul '24	191	3		509	512	65,716	150	10,230	75,946	13%		
	Aug '24	192	3		509	512	65,718	150	10,239	75,957	13%		
	Sep '24	193	7		509	516	65,724	140	10,222	75,946	13%		
	Oct '24	194	11		509	520	65,729	140	10,306	76,035	14%		
	Nov '24	195	27		509	536	65,728	120	10,389	76,117	14%		
	Dec '24	196	80		509	589	65,713	70	10,459	76,172	14%		
	Jan '25	197	99		509	608	65,793	50	10,499	76,292	14%		
	Feb '25	198	86		509	595	65,852	60	10,467	76,319	14%		
	Mar '25	199	65		509	574	65,904	90	10,488	76,392	14%		
2025/26	Apr '25	200	35		509	544	65,929	120	10,507	76,436	14%		
	May '25	201	12		509	521	65,920	140	10,527	76,447	14%		
	Jun '25	202	2		509	511	65,922	150	10,521	76,443	14%		
	Jul '25	203	3		509	512	65,925	150	10,608	76,533	14%		
	Aug '25	204	3		509	512	65,928	150	10,758	76,686	14%		
	Sep '25	205	7		509	516	65,934	140	10,898	76,832	14%		
	Oct '25	206	11		509	520	65,945	140	11,038	76,983	14%		
	Nov '25	207	27		509	536	65,971	120	11,158	77,129	14%		
	Dec '25	208	80		509	589	66,051	70	11,127	77,178	14%		
	Jan '26	209	99		509	608	66,096	50	10,923	77,019	14%		
	Feb '26	210	86		509	595	66,091	60	10,867	76,958	14%		
	Mar '26	211	65		509	574	66,065	90	10,746	76,811	14%		
	Apr '26	212	35		509	544	66,087	120	10,674	76,761	14%		
	May '26	213	12		509	521	66,098	140	10,536	76,634	14%		
	Jun '26	214	2		509	511	66,100	150	10,686	76,786	14%		



RWC Management Plan for Brooks Street Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	215	3		509	512	66,103	150	10,836	76,939	14%
	Aug '26	216	3		509	512	66,106	150	10,986	77,092	14%
	Sep '26	217	7		509	516	66,082	140	10,981	77,063	14%
	Oct '26	218	11		509	520	65,906	140	11,102	77,008	14%
	Nov '26	219	27		509	536	65,894	120	11,106	77,000	14%
	Dec '26	220	80		509	589	65,778	70	11,163	76,941	15%
	Jan '27	221	99		509	608	65,623	50	11,213	76,836	15%
	Feb '27	222	86		509	595	65,567	60	11,273	76,840	15%
	Mar '27	223	65		509	574	65,631	90	11,347	76,978	15%
	Apr '27	224	35		509	544	65,650	120	11,459	77,109	15%
	May '27	225	12		509	521	65,661	140	11,561	77,222	15%
	Jun '27	226	2		509	511	65,661	150	11,681	77,342	15%
2027/28	Jul '27	227	3		509	512	65,570	150	11,603	77,174	15%
	Aug '27	228	3		509	512	65,478	150	11,698	77,176	15%
	Sep '27	229	7		509	516	65,481	140	11,669	77,150	15%
	Oct '27	230	11		509	520	65,491	140	11,710	77,200	15%
	Nov '27	231	27		509	536	65,514	120	11,679	77,193	15%
	Dec '27	232	80		509	589	65,594	70	11,627	77,220	15%
	Jan '28	233	99		509	608	65,660	50	11,582	77,242	15%
	Feb '28	234	86		509	595	65,737	60	11,536	77,273	15%
	Mar '28	235	65		509	574	65,759	90	11,614	77,372	15%
	Apr '28	236	35		509	544	65,791	120	11,697	77,489	15%
	May '28	237	12		509	521	65,800	140	11,752	77,552	15%
	Jun '28	238	2		509	511	65,800	150	11,794	77,594	15%
2028/29	Jul '28	239	3		509	512	65,803	150	11,898	77,702	15%
	Aug '28	240	3		509	512	65,806	150	12,030	77,836	15%
	Sep '28	241	7		509	516	65,813	140	12,170	77,983	16%
	Oct '28	242	11		509	520	65,821	140	12,310	78,131	16%
	Nov '28	243	27		509	536	65,826	120	12,247	78,073	16%
	Dec '28	244	80		509	589	65,864	70	12,060	77,923	15%
	Jan '29	245	99		509	608	65,703	50	12,044	77,747	15%
	Feb '29	246	86		509	595	65,506	60	12,104	77,610	16%
	Mar '29	247	65		509	574	65,422	90	12,117	77,539	16%
	Apr '29	248	35		509	544	65,454	120	11,983	77,437	15%
	May '29	249	12		509	521	65,405	140	11,934	77,338	15%
	Jun '29	250	2		509	511	65,407	150	11,793	77,200	15%
2029/30	Jul '29	251	3		509	512	65,298	150	11,767	77,065	15%
	Aug '29	252	3		509	512	65,262	150	11,860	77,122	15%
	Sep '29	253	7		509	516	65,269	140	11,964	77,232	15%
	Oct '29	254	11		509	520	65,280	140	11,928	77,207	15%
	Nov '29	255	27		509	536	65,236	120	11,984	77,220	16%
	Dec '29	256	80		509	589	65,157	70	12,023	77,179	16%
	Jan '30	257	99		509	608	65,252	50	12,068	77,319	16%
	Feb '30	258	86		509	595	65,338	60	12,074	77,412	16%
	Mar '30	259	65		509	574	65,244	90	12,096	77,340	16%
	Apr '30	260	35		509	544	65,112	120	12,201	77,313	16%
	May '30	261	12		509	521	65,116	140	12,227	77,343	16%
	Jun '30	262	2		509	511	65,118	150	12,275	77,393	16%
2030/31	Jul '30	263	3		509	512	65,121	150	12,275	77,396	16%
	Aug '30	264	3		509	512	65,124	150	12,304	77,428	16%
	Sep '30	265	7		509	516	65,129	140	12,319	77,447	16%
	Oct '30	266	11		509	520	65,137	140	12,373	77,511	16%
	Nov '30	267	27		509	536	65,153	120	12,493	77,647	16%
	Dec '30	268	80		509	589	65,191	70	12,563	77,754	16%
	Jan '31	269	99		509	608	65,233	50	12,531	77,764	16%
	Feb '31	270	86		509	595	65,314	60	12,517	77,831	16%
	Mar '31	271	65		509	574	65,339	90	12,582	77,921	16%
	Apr '31	272	35		509	544	65,374	120	12,539	77,912	16%
	May '31	273	12		509	521	65,386	140	12,625	78,011	16%
	Jun '31	274	2		509	511	65,388	150	12,722	78,110	16%
2031/32	Jul '31	275	3		509	512	65,386	150	12,751	78,137	16%
	Aug '31	276	3		509	512	65,389	150	12,801	78,189	16%
	Sep '31	277	7		509	516	65,396	140	12,844	78,240	16%
	Oct '31	278	11		509	520	65,393	140	12,912	78,305	16%
	Nov '31	279	27		509	536	65,415	120	12,988	78,403	17%
	Dec '31	280	80		509	589	65,361	70	13,032	78,393	17%
	Jan '32	281	99		509	608	65,456	50	13,079	78,535	17%
	Feb '32	282	86		509	595	65,535	60	13,072	78,606	17%
	Mar '32	283	65		509	574	65,557	90	13,162	78,719	17%
	Apr '32	284	35		509	544	65,556	120	13,282	78,838	17%
	May '32	285	12		509	521	65,567	140	13,422	78,989	17%
	Jun '32	286	2		509	511	65,567	150	13,572	79,138	17%

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

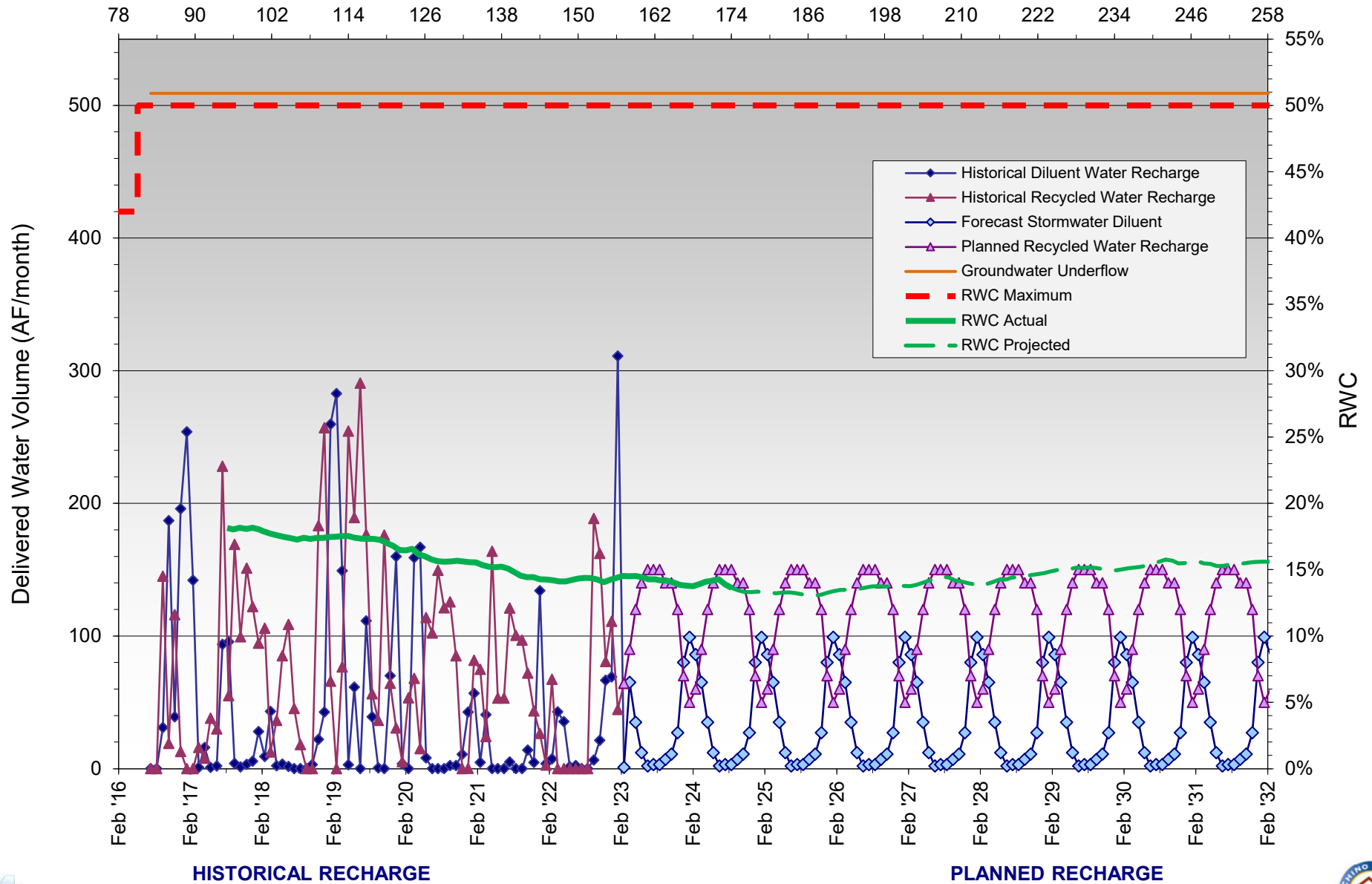
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan - Brooks Street Basin

Months Since Initial Recycled Water Delivery



RWC Management Plan for Ely Basin
(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	202	2	0	286	288	36,157	113	10,299	46,456	22%
	Aug '16	203	0	0	286	286	36,433	89	10,382	46,815	22%
	Sep '16	204	3	0	286	289	36,682	232	10,531	47,213	22%
	Oct '16	205	47	0	286	333	36,961	233	10,733	47,694	23%
	Nov '16	206	86	0	286	372	37,270	112	10,795	48,065	22%
	Dec '16	207	523	0	286	809	37,994	0	10,753	48,747	22%
	Jan '17	208	317	0	286	603	38,502	0	10,696	49,197	22%
	Feb '17	209	338	0	286	624	38,976	0	10,673	49,649	21%
	Mar '17	210	16	0	286	302	39,261	123	10,751	50,012	21%
	Apr '17	211	9	0	286	295	39,498	190	10,900	50,398	22%
	May '17	212	37	0	286	323	39,807	250	11,110	50,917	22%
	Jun '17	213	0	0	286	286	40,075	149	11,252	51,327	22%
2017/18	Jul '17	214	37	0	286	323	40,372	34	11,286	51,658	22%
	Aug '17	215	126	0	286	412	40,755	27	11,313	52,068	22%
	Sep '17	216	0	0	286	286	41,007	216	11,529	52,536	22%
	Oct '17	217	48	9	286	343	41,316	87	11,616	52,932	22%
	Nov '17	218	0	0	286	286	41,436	36	11,566	53,002	22%
	Dec '17	219	0	0	286	286	41,465	218	11,731	53,197	22%
	Jan '18	220	255	0	286	541	41,214	30	11,762	52,975	22%
	Feb '18	221	91	0	286	377	41,357	181	11,943	53,300	22%
	Mar '18	222	266	0	286	552	41,889	0	11,827	53,716	22%
	Apr '18	223	19	0	286	305	42,164	154	11,865	54,029	22%
	May '18	224	0	0	286	286	42,420	300	12,078	54,498	22%
	Jun '18	225	0	0	286	286	42,688	226	12,201	54,889	22%
2018/19	Jul '18	226	0	0	286	286	42,958	209	12,343	55,301	22%
	Aug '18	227	0	0	286	286	43,236	253	12,596	55,832	23%
	Sep '18	228	0	0	286	286	43,517	336	12,932	56,449	23%
	Oct '18	229	35	0	286	322	43,821	156	12,952	56,774	23%
	Nov '18	230	202	0	286	488	44,196	256	13,121	57,316	23%
	Dec '18	231	222	0	286	508	44,417	26	13,146	57,563	23%
	Jan '19	232	295	0	286	582	44,961	109	13,216	58,177	23%
	Feb '19	233	288	0	286	574	45,125	0	13,207	58,332	23%
	Mar '19	234	68	0	286	354	45,432	0	13,207	58,639	23%
	Apr '19	235	74	0	286	360	45,657	0	13,192	58,849	22%
	May '19	236	70	0	286	356	45,945	44	13,225	59,170	22%
	Jun '19	237	1	0	286	287	46,208	0	13,225	59,433	22%
2019/20	Jul '19	238	0	0	286	286	46,494	0	13,225	59,719	22%
	Aug '19	239	22	0	286	308	46,781	0	13,225	60,006	22%
	Sep '19	240	0	88	286	375	46,954	127	13,328	60,282	22%
	Oct '19	241	3	11	286	300	46,781	242	13,468	60,249	22%
	Nov '19	242	268	0	286	554	46,766	183	13,532	60,298	22%
	Dec '19	243	443	0	286	729	46,967	0	13,532	60,499	22%
	Jan '20	244	5	0	286	291	46,654	113	13,644	60,298	23%
	Feb '20	245	3	0	286	289	46,436	272	13,917	60,352	23%
	Mar '20	246	582	0	286	868	46,914	106	14,022	60,936	23%
	Apr '20	247	395	0	286	681	46,914	135	14,157	61,071	23%
	May '20	248	38	0	286	324	46,854	469	14,626	61,480	24%
	Jun '20	249	0	0	286	286	46,854	415	15,041	61,895	24%
2020/21	Jul '20	250	0	0	286	286	46,854	227	15,268	62,122	25%
	Aug '20	251	65	0	286	351	46,919	23	15,290	62,209	25%
	Sep '20	252	3	0	286	289	46,922	1	15,291	62,213	25%
	Oct '20	253	59	0	286	345	46,952	154	15,331	62,283	25%
	Nov '20	254	87	0	286	373	46,912	58	15,269	62,180	25%
	Dec '20	255	69	0	286	355	46,408	159	15,416	61,824	25%
	Jan '21	256	301	0	286	587	46,605	44	15,459	62,065	25%
	Feb '21	257	38	0	286	324	46,320	0	15,416	61,737	25%
	Mar '21	258	114	0	286	401	46,199	104	15,521	61,719	25%
	Apr '21	259	51	0	286	338	46,247	107	15,521	61,768	25%
	May '21	260	127	0	286	413	46,361	131	15,497	61,858	25%
	Jun '21	261	153	0	286	439	46,424	182	15,473	61,896	25%
2021/22	Jul '21	262	23	0	286	309	46,143	187	15,483	61,627	25%
	Aug '21	263	51	0	286	337	45,903	6	15,348	61,251	25%
	Sep '21	264	9	0	286	295	45,568	42	15,384	60,952	25%
	Oct '21	265	10	0	286	297	45,363	102	15,486	60,849	25%
	Nov '21	266	2	0	286	288	45,154	4	15,490	60,644	26%
	Dec '21	267	1,073	0	286	1,359	46,190	0	15,490	61,680	25%
	Jan '22	268	70	0	286	356	46,171	45	15,471	61,642	25%
	Feb '22	269	73	0	286	359	46,149	94	15,559	61,708	25%
	Mar '22	270	394	0	286	680	46,296	16	15,576	61,871	25%
	Apr '22	271	28	0	286	314	46,189	0	15,576	61,764	25%
	May '22	272	50	0	286	336	46,236	172	15,748	61,983	25%
	Jun '22	273	13	0	286	299	46,236	83	15,831	62,067	26%

HISTORICAL

ACTUAL



RWC Management Plan for Ely Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/23	Jul '22	274	125	0	286	411	46,354	105	15,937	62,291	26%	A C T U A L
	Aug '22	275	24	0	286	310	46,371	0	15,937	62,308	26%	
	Sep '22	276	34	0	286	320	46,400	0	15,937	62,336	26%	
	Oct '22	277	25	0	286	311	46,420	0	15,937	62,356	26%	
	Nov '22	278	123	0	286	409	46,533	26	15,883	62,416	25%	
	Dec '22	279	286	0	286	572	46,484	0	15,816	62,300	25%	
	Jan '23	280	711	0	286	997	47,123	0	15,671	62,794	25%	
	Feb '23	281	2	0	286	289	47,089	0	15,446	62,535	25%	P L A N N E D
	Mar '23	282	186		286	472	47,212	30	15,162	62,374	24%	
	Apr '23	283	152		286	438	47,363	70	15,153	62,516	24%	
	May '23	284	91		286	377	47,431	130	15,024	62,455	24%	
	Jun '23	285	31		286	317	47,458	190	15,005	62,463	24%	
2023/24	Jul '23	286	41		286	327	47,493	180	15,028	62,521	24%	
	Aug '23	287	34		286	320	47,523	180	14,874	62,397	24%	
	Sep '23	288	48		286	334	47,565	170	14,587	62,152	23%	
	Oct '23	289	78		286	364	47,643	140	14,369	62,012	23%	
	Nov '23	290	138		286	424	47,760	80	14,028	61,788	23%	
	Dec '23	291	254		286	540	47,990	0	13,615	61,605	22%	
	Jan '24	292	221		286	507	48,203	0	13,404	61,607	22%	
	Feb '24	293	201		286	487	48,110	20	13,230	61,340	22%	
	Mar '24	294	186		286	472	48,233	30	13,152	61,385	21%	
	Apr '24	295	152		286	438	48,302	70	13,004	61,306	21%	
	May '24	296	91		286	377	48,384	130	12,893	61,277	21%	
	Jun '24	297	31		286	317	48,400	190	12,897	61,297	21%	
2024/25	Jul '24	298	41		286	327	48,425	180	12,976	61,401	21%	
	Aug '24	299	34		286	320	48,443	180	13,148	61,591	21%	
	Sep '24	300	48		286	334	48,476	170	13,197	61,673	21%	
	Oct '24	301	78		286	364	48,538	140	13,051	61,589	21%	
	Nov '24	302	138		286	424	48,506	80	13,061	61,567	21%	
	Dec '24	303	254		286	540	48,368	0	13,056	61,424	21%	
	Jan '25	304	221		286	507	48,545	0	12,873	61,418	21%	
	Feb '25	305	201		286	487	48,674	20	12,671	61,345	21%	
	Mar '25	306	186		286	472	48,845	30	12,544	61,389	20%	
	Apr '25	307	152		286	438	48,897	70	12,449	61,346	20%	
	May '25	308	91		286	377	48,757	130	12,419	61,176	20%	
	Jun '25	309	31		286	317	48,788	190	12,336	61,124	20%	
2025/26	Jul '25	310	41		286	327	48,544	180	12,414	60,958	20%	
	Aug '25	311	34		286	320	48,575	180	12,593	61,168	21%	
	Sep '25	312	48		286	334	48,408	170	12,732	61,140	21%	
	Oct '25	313	78		286	364	48,411	140	12,796	61,207	21%	
	Nov '25	314	138		286	424	48,508	80	12,855	61,363	21%	
	Dec '25	315	254		286	540	48,670	0	12,727	61,397	21%	
	Jan '26	316	221		286	507	48,554	0	12,666	61,220	21%	
	Feb '26	317	201		286	487	48,696	20	12,597	61,293	21%	
	Mar '26	318	186		286	472	48,705	30	12,580	61,285	21%	
	Apr '26	319	152		286	438	48,833	70	12,523	61,356	20%	
	May '26	320	91		286	377	48,727	130	12,534	61,261	20%	
	Jun '26	321	31		286	317	48,757	190	12,514	61,271	20%	



RWC Management Plan for Ely Basin (120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	322	41		286	327	48,796	180	12,581	61,377	20%
	Aug '26	323	34		286	320	48,830	180	12,672	61,502	21%
	Sep '26	324	48		286	334	48,875	170	12,610	61,485	21%
	Oct '26	325	78		286	364	48,906	140	12,517	61,423	20%
	Nov '26	326	138		286	424	48,958	80	12,485	61,443	20%
	Dec '26	327	254		286	540	48,689	0	12,485	61,174	20%
	Jan '27	328	221		286	507	48,593	0	12,485	61,078	20%
	Feb '27	329	201		286	487	48,456	20	12,505	60,961	21%
	Mar '27	330	186		286	472	48,626	30	12,412	61,038	20%
	Apr '27	331	152		286	438	48,769	70	12,292	61,061	20%
	May '27	332	91		286	377	48,823	130	12,172	60,995	20%
	Jun '27	333	31		286	317	48,854	190	12,213	61,067	20%
2027/28	Jul '27	334	41		286	327	48,705	180	12,580	61,285	21%
	Aug '27	335	34		286	320	48,833	180	12,523	61,356	20%
	Sep '27	336	48		286	334	48,727	170	12,534	61,261	20%
	Oct '27	337	78		286	364	48,757	140	12,514	61,271	20%
	Nov '27	338	138		286	424	48,796	80	12,581	61,377	20%
	Dec '27	339	254		286	540	48,830	0	12,672	61,502	21%
	Jan '28	340	221		286	507	48,875	0	12,610	61,485	21%
	Feb '28	341	201		286	487	48,906	20	12,517	61,423	20%
	Mar '28	342	186		286	472	48,958	30	12,485	61,443	20%
	Apr '28	343	152		286	438	48,689	70	12,485	61,174	20%
	May '28	344	91		286	377	48,593	130	12,485	61,078	20%
	Jun '28	345	31		286	317	48,456	190	12,505	60,961	21%
2028/29	Jul '28	346	41		286	327	48,626	180	12,412	61,038	20%
	Aug '28	347	34		286	320	48,769	180	12,292	61,061	20%
	Sep '28	348	48		286	334	48,823	170	12,172	60,995	20%
	Oct '28	349	78		286	364	48,854	140	12,213	61,067	20%
	Nov '28	350	138		286	424	48,858	80	12,359	61,285	20%
	Dec '28	351	254		286	540	48,766	0	12,512	61,356	20%
	Jan '29	352	221		286	507	48,814	0	12,466	61,261	20%
	Feb '29	353	201		286	487	48,835	20	12,519	61,271	20%
	Mar '29	354	186		286	472	48,973	30	12,562	61,377	20%
	Apr '29	355	152		286	438	49,227	70	12,344	61,502	20%
	May '29	356	91		286	377	49,193	130	12,313	61,485	20%
	Jun '29	357	31		286	317	49,304	190	12,152	61,423	20%
2029/30	Jul '29	358	41		286	327	49,224	180	12,182	61,443	20%
	Aug '29	359	34		286	320	49,357	180	12,098	61,174	20%
	Sep '29	360	48		286	334	49,448	170	11,928	61,078	20%
	Oct '29	361	78		286	364	49,479	140	11,892	60,961	20%
	Nov '29	362	138		286	424	49,520	80	11,863	61,038	19%
	Dec '29	363	254		286	540	49,554	0	11,790	61,061	19%
	Jan '30	364	221		286	507	49,602	0	11,624	60,995	19%
	Feb '30	365	201		286	487	49,645	20	11,609	61,067	19%
	Mar '30	366	186		286	472	49,581	30	11,432	61,217	19%
	Apr '30	367	152		286	438	49,613	70	11,407	61,278	19%
	May '30	368	91		286	377	49,538	130	11,298	61,280	18%
	Jun '30	369	31		286	317	49,452	190	11,318	61,354	18%
2030/31	Jul '30	370	41		286	327	49,570	180	11,348	61,535	18%
	Aug '30	371	34		286	320	49,648	180	11,418	61,571	19%
	Sep '30	372	48		286	334	49,669	170	11,504	61,507	19%
	Oct '30	373	78		286	364	49,699	140	11,694	61,456	19%
	Nov '30	374	138		286	424	49,740	80	11,874	61,406	19%
	Dec '30	375	254		286	540	49,752	0	12,054	61,455	20%
	Jan '31	376	221		286	507	49,712	0	12,097	61,376	20%
	Feb '31	377	201		286	487	49,775	20	11,995	61,371	20%
	Mar '31	378	186		286	472	49,646	30	11,891	61,383	19%
	Apr '31	379	152		286	438	49,457	70	11,891	61,344	19%
	May '31	380	91		286	377	49,673	130	11,779	61,227	19%
	Jun '31	381	31		286	317	49,871	190	11,526	61,254	19%
2031/32	Jul '31	382	41		286	327	49,475	180	11,451	61,013	19%
	Aug '31	383	34		286	320	49,232	180	11,386	61,020	19%
	Sep '31	384	48		286	334	49,285	170	11,047	60,836	18%
	Oct '31	385	78		286	364	49,316	140	10,822	60,770	18%
	Nov '31	386	138		286	424	49,357	80	10,775	60,917	18%
	Dec '31	387	254		286	540	49,326	0	10,933	61,066	18%
	Jan '32	388	221		286	507	49,371	0	11,102	61,173	18%
	Feb '32	389	201		286	487	49,391	20	11,088	61,393	18%
	Mar '32	390	186		286	472	49,442	30	11,110	61,614	18%
	Apr '32	391	152		286	438	49,627	70	10,951	61,806	18%
	May '32	392	91		286	377	49,547	130	10,908	61,808	18%
	Jun '32	393	31		286	317	49,710	190	10,928	61,770	18%

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

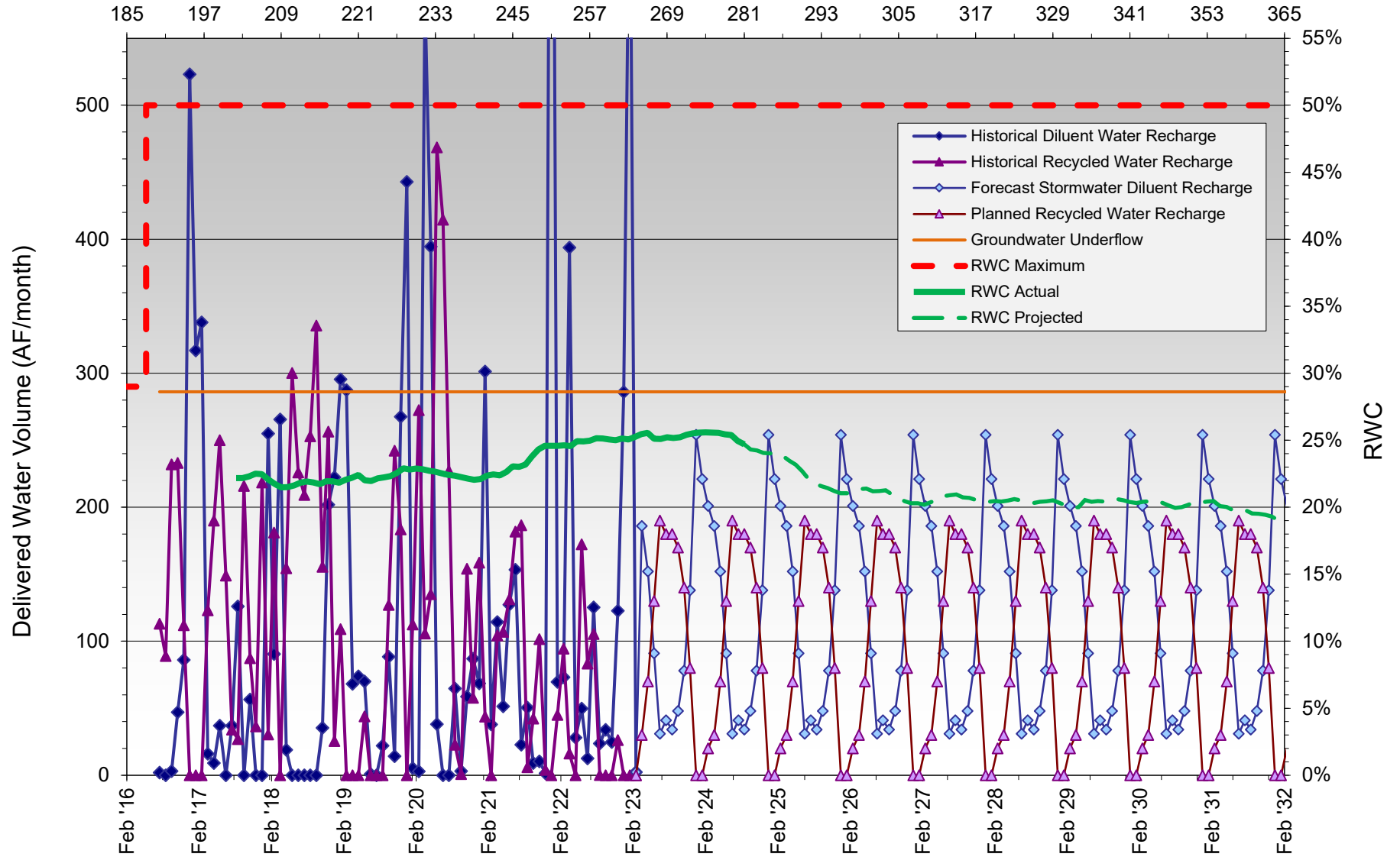
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan for Ely Basin

Months Since Initial Recycled Water Delivery



HISTORICAL RECHARGE

PLANNED RECHARGE



RWC Management Plan for Hickory Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/2017	Jul '16	130	0	0	267	267	26,284	0	8,895	35,179	25%
	Aug '16	131	0	0	267	267	26,504	49	8,764	35,268	25%
	Sep '16	132	0	0	267	267	26,681	29	8,793	35,474	25%
	Oct '16	133	25	0	267	292	26,930	55	8,704	35,634	24%
	Nov '16	134	9	0	267	276	27,147	3	8,672	35,819	24%
	Dec '16	135	85	0	267	352	27,414	0	8,672	36,086	24%
	Jan '17	136	19	0	267	286	27,683	0	8,672	36,355	24%
	Feb '17	137	4	0	267	271	27,914	0	8,630	36,544	24%
	Mar '17	138	0	0	267	267	28,146	0	8,630	36,776	23%
	Apr '17	139	0	0	267	267	28,362	0	8,567	36,929	23%
	May '17	140	0	0	267	267	28,571	0	8,567	37,138	23%
	Jun '17	141	0	0	267	267	28,748	0	8,567	37,314	23%
2017/2018	Jul '17	142	0	527	267	794	29,448	168	8,594	38,042	23%
	Aug '17	143	0	420	267	687	30,042	20	8,536	38,578	22%
	Sep '17	144	10	263	267	540	30,490	119	8,640	39,130	22%
	Oct '17	145	10	154	267	430	30,847	171	8,788	39,635	22%
	Nov '17	146	15	0	267	282	31,026	170	8,860	39,886	22%
	Dec '17	147	8	68	267	343	31,267	106	8,965	40,232	22%
	Jan '18	148	85	40	267	391	31,533	85	9,050	40,583	22%
	Feb '18	149	16	0	267	283	31,718	134	9,145	40,863	22%
	Mar '18	150	59	0	267	326	32,000	16	9,081	41,081	22%
	Apr '18	151	10	0	267	277	32,212	185	9,260	41,472	22%
	May '18	152	0	0	267	267	32,440	133	9,306	41,746	22%
	Jun '18	153	2	0	267	269	32,685	92	9,399	42,083	22%
2018/2019	Jul '18	154	3	0	267	270	32,936	18	9,416	42,353	22%
	Aug '18	155	2	0	267	268	33,199	122	9,538	42,737	22%
	Sep '18	156	3	0	267	270	33,465	15	9,553	43,018	22%
	Oct '18	157	4	0	267	271	33,733	0	9,553	43,286	22%
	Nov '18	158	37	0	267	303	34,034	10	9,564	43,597	22%
	Dec '18	159	60	0	267	326	34,325	8	9,571	43,896	22%
	Jan '19	160	44	0	267	310	34,635	8	9,579	44,214	22%
	Feb '19	161	91	0	267	357	34,929	0	9,556	44,485	21%
	Mar '19	162	28	0	267	295	35,193	0	9,533	44,726	21%
	Apr '19	163	0	0	267	267	35,451	0	9,533	44,984	21%
	May '19	164	0	0	267	267	35,700	0	9,533	45,233	21%
	Jun '19	165	0	0	267	267	35,964	0	9,533	45,497	21%
2019/2020	Jul '19	166	1	60	267	328	36,283	0	9,533	45,816	21%
	Aug '19	167	6	350	267	623	36,902	64	9,597	46,499	21%
	Sep '19	168	6	344	267	617	37,516	20	9,583	47,099	20%
	Oct '19	169	2	194	267	462	37,681	23	9,417	47,097	20%
	Nov '19	170	14	102	267	383	37,771	11	9,184	46,955	20%
	Dec '19	171	52	3	267	321	37,667	30	9,121	46,788	19%
	Jan '20	172	1	3	267	271	37,457	36	9,137	46,595	20%
	Feb '20	173	1	0	267	268	37,258	15	9,152	46,411	20%
	Mar '20	174	40	0	267	307	37,283	73	9,164	46,447	20%
	Apr '20	175	61	0	267	328	37,298	19	9,127	46,424	20%
	May '20	176	1	0	267	268	37,299	72	9,088	46,386	20%
	Jun '20	177	0	0	267	267	37,299	122	9,160	46,459	20%
2020/2021	Jul '20	178	1	0	267	267	37,299	54	9,193	46,493	20%
	Aug '20	179	2	0	267	268	37,301	74	9,239	46,540	20%
	Sep '20	180	0	0	267	267	37,289	81	9,035	46,324	20%
	Oct '20	181	0	0	267	267	37,276	26	8,967	46,243	19%
	Nov '20	182	1	0	267	268	37,241	0	8,916	46,157	19%
	Dec '20	183	55	0	267	322	37,148	0	8,916	46,064	19%
	Jan '21	184	35	0	267	301	37,171	0	8,866	46,036	19%
	Feb '21	185	0	0	267	267	37,092	0	8,829	45,920	19%
	Mar '21	186	56	0	267	323	37,078	0	8,829	45,907	19%
	Apr '21	187	0	0	267	267	37,078	0	8,777	45,855	19%
	May '21	188	0	0	267	267	37,076	0	8,693	45,769	19%
	Jun '21	189	0	0	267	267	37,068	0	8,619	45,687	19%
2021/2022	Jul '21	190	0	0	267	267	37,068	0	8,605	45,673	19%
	Aug '21	191	17	0	267	284	37,013	209	8,814	45,827	19%
	Sep '21	192	13	0	267	280	36,547	286	9,079	45,626	20%
	Oct '21	193	11	0	267	277	36,541	49	9,093	45,634	20%
	Nov '21	194	6	0	267	272	36,535	36	8,927	45,462	20%
	Dec '21	195	147	0	267	414	36,682	8	8,708	45,390	19%
	Jan '22	196	0	0	267	267	36,633	23	8,715	45,348	19%
	Feb '22	197	0	0	267	267	36,574	78	8,710	45,284	19%
	Mar '22	198	40	0	267	307	36,561	73	8,704	45,266	19%
	Apr '22	199	11	0	267	278	36,543	78	8,716	45,259	19%
	May '22	200	0	0	267	267	36,543	98	8,774	45,317	19%
	Jun '22	201	0	0	267	267	36,541	133	8,906	45,446	20%

HISTORICAL

ACTUAL



RWC Management Plan for Hickory Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/2023	Jul '22	202	0	0	267	267	36,519	31	8,880	45,398	20%	A C T U A L
	Aug '22	203	0	0	267	267	36,469	56	8,892	45,360	20%	
	Sep '22	204	29	0	267	295	36,468	6	8,897	45,365	20%	
	Oct '22	205	2	0	267	268	36,419	0	8,897	45,316	20%	
	Nov '22	206	65	0	267	332	36,471	24	8,744	45,215	19%	
	Dec '22	207	10	0	267	277	36,475	0	8,600	45,075	19%	
	Jan '23	208	65	0	267	331	36,540	0	8,485	45,025	19%	
	Feb '23	209	0	0	267	267	36,532	0	8,482	45,014	19%	
	Mar '23	210	32		267	299	36,551	120	8,455	45,006	19%	
	Apr '23	211	22		267	289	36,573	130	8,514	45,087	19%	
2023/2024	May '23	212	14		267	281	36,581	140	8,654	45,235	19%	
	Jun '23	213	9		267	276	36,589	140	8,678	45,267	19%	
	Jul '23	214	17		267	284	36,602	130	8,607	45,209	19%	
	Aug '23	215	17		267	284	36,619	130	8,726	45,345	19%	
	Sep '23	216	22		267	289	36,641	130	8,856	45,497	19%	
	Oct '23	217	17		267	284	36,657	130	8,985	45,642	20%	
	Nov '23	218	25		267	292	36,623	130	8,776	45,399	19%	
	Dec '23	219	65		267	332	36,680	90	8,758	45,438	19%	
	Jan '24	220	41		267	308	36,709	110	8,782	45,491	19%	
	Feb '24	221	42		267	309	36,731	110	8,825	45,556	19%	
2024/2025	Mar '24	222	32		267	299	36,750	120	8,721	45,471	19%	
	Apr '24	223	22		267	289	36,740	130	8,472	45,212	19%	
	May '24	224	14		267	281	36,721	140	8,320	45,041	18%	
	Jun '24	225	9		267	276	36,728	140	8,248	44,976	18%	
	Jul '24	226	17		267	284	36,745	130	8,260	45,005	18%	
	Aug '24	227	17		267	284	36,762	130	8,308	45,070	18%	
	Sep '24	228	22		267	289	36,784	130	8,202	44,986	18%	
	Oct '24	229	17		267	284	36,801	130	8,106	44,907	18%	
	Nov '24	230	25		267	292	36,826	130	7,964	44,790	18%	
	Dec '24	231	65		267	332	36,706	90	8,008	44,714	18%	
2025/26	Jan '25	232	41		267	308	36,739	110	7,924	44,663	18%	
	Feb '25	233	42		267	309	36,734	110	7,854	44,588	18%	
	Mar '25	234	32		267	299	36,766	120	7,859	44,625	18%	
	Apr '25	235	22		267	289	36,788	130	7,760	44,548	17%	
	May '25	236	14		267	281	36,799	140	7,761	44,560	17%	
	Jun '25	237	9		267	276	36,808	140	7,704	44,512	17%	
	Jul '25	238	17		267	284	36,825	130	7,795	44,620	17%	
	Aug '25	239	17		267	284	36,842	130	7,869	44,711	18%	
	Sep '25	240	22		267	289	36,855	130	7,892	44,747	18%	
	Oct '25	241	17		267	284	36,858	130	7,949	44,807	18%	
	Nov '25	242	25		267	292	36,869	130	7,995	44,864	18%	
	Dec '25	243	65		267	332	36,870	90	8,032	44,902	18%	
	Jan '26	244	41		267	308	36,876	110	8,119	44,995	18%	
	Feb '26	245	42		267	309	36,913	110	8,202	45,115	18%	
	Mar '26	246	32		267	299	36,923	120	8,322	45,245	18%	
	Apr '26	247	22		267	289	36,924	130	8,409	45,333	19%	
	May '26	248	14		267	281	36,938	140	8,497	45,435	19%	
	Jun '26	249	9		267	276	36,947	140	8,619	45,566	19%	



RWC Management Plan for Hickory Basin

(120-month averaging period)

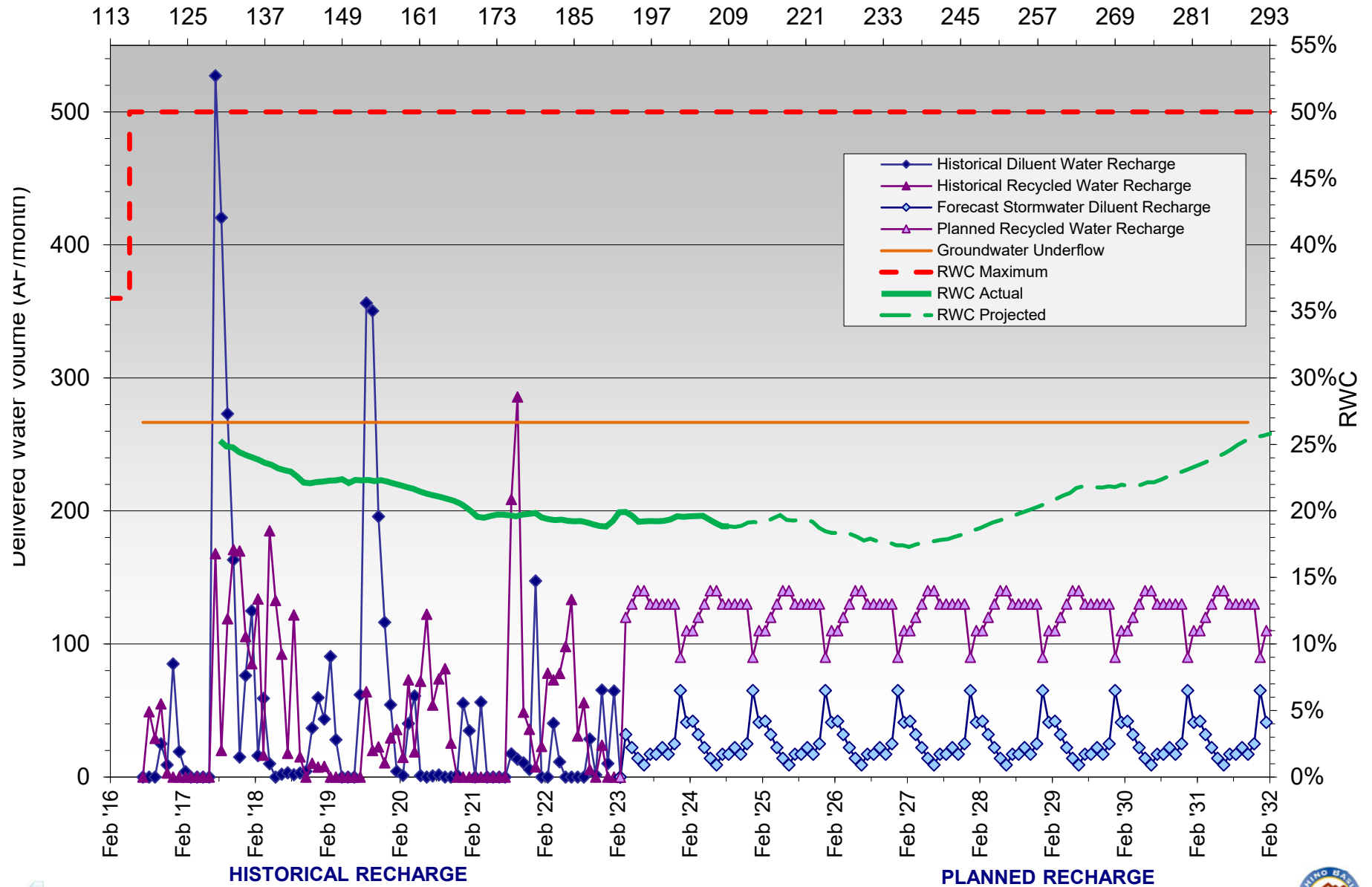
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	250	17		267	284	36,964	130	8,749	45,713	19%	D I S S E M I N A T I O N
	Aug '26	251	17		267	284	36,981	130	8,830	45,811	19%	
	Sep '26	252	22		267	289	37,003	130	8,931	45,934	19%	
	Oct '26	253	17		267	284	36,995	130	9,006	46,001	20%	
	Nov '26	254	25		267	292	37,011	130	9,133	46,144	20%	
	Dec '26	255	65		267	332	36,991	90	9,223	46,214	20%	
	Jan '27	256	41		267	308	37,013	110	9,333	46,346	20%	
	Feb '27	257	42		267	309	37,051	110	9,443	46,494	20%	
	Mar '27	258	32		267	299	37,083	120	9,563	46,646	21%	
	Apr '27	259	22		267	289	37,105	130	9,693	46,798	21%	
	May '27	260	14		267	281	37,119	140	9,833	46,952	21%	
	Jun '27	261	9		267	276	37,128	140	9,973	47,101	21%	
2027/28	Jul '27	262	17		267	284	36,617	130	9,935	46,553	21%	
	Aug '27	263	17		267	284	36,214	130	10,045	46,259	22%	
	Sep '27	264	22		267	289	35,963	130	10,056	46,019	22%	
	Oct '27	265	17		267	284	35,817	130	10,015	45,832	22%	
	Nov '27	266	25		267	292	35,827	130	9,976	45,802	22%	
	Dec '27	267	65		267	332	35,816	90	9,960	45,776	22%	
	Jan '28	268	41		267	308	35,732	110	9,985	45,717	22%	
	Feb '28	269	42		267	309	35,758	110	9,961	45,719	22%	
	Mar '28	270	32		267	299	35,731	120	10,065	45,796	22%	
	Apr '28	271	22		267	289	35,743	130	10,010	45,753	22%	
	May '28	272	14		267	281	35,757	140	10,017	45,774	22%	
	Jun '28	273	9		267	276	35,764	140	10,065	45,829	22%	
2028/29	Jul '28	274	17		267	284	35,778	130	10,177	45,955	22%	
	Aug '28	275	17		267	284	35,793	130	10,185	45,978	22%	
	Sep '28	276	22		267	289	35,812	130	10,300	46,112	22%	
	Oct '28	277	17		267	284	35,825	130	10,430	46,255	23%	
	Nov '28	278	25		267	292	35,813	130	10,550	46,363	23%	
	Dec '28	279	65		267	332	35,818	90	10,632	46,450	23%	
	Jan '29	280	41		267	308	35,816	110	10,734	46,550	23%	
	Feb '29	281	42		267	309	35,767	110	10,844	46,611	23%	
	Mar '29	282	32		267	299	35,771	120	10,964	46,735	23%	
	Apr '29	283	22		267	289	35,793	130	11,094	46,887	24%	
	May '29	284	14		267	281	35,807	140	11,234	47,041	24%	
	Jun '29	285	9		267	276	35,816	140	11,374	47,190	24%	
2029/30	Jul '29	286	17		267	284	35,771	130	11,504	47,276	24%	
	Aug '29	287	17		267	284	35,432	130	11,570	47,002	25%	
	Sep '29	288	22		267	289	35,104	130	11,680	46,784	25%	
	Oct '29	289	17		267	284	34,925	130	11,788	46,713	25%	
	Nov '29	290	25		267	292	34,834	130	11,907	46,741	25%	
	Dec '29	291	65		267	332	34,845	90	11,967	46,812	26%	
	Jan '30	292	41		267	308	34,881	110	12,042	46,923	26%	
	Feb '30	293	42		267	309	34,922	110	12,137	47,059	26%	
	Mar '30	294	32		267	299	34,914	120	12,184	47,098	26%	
	Apr '30	295	22		267	289	34,875	130	12,295	47,170	26%	
	May '30	296	14		267	281	34,888	140	12,363	47,251	26%	
	Jun '30	297	9		267	276	34,897	140	12,381	47,278	26%	
2030/31	Jul '30	298	17		267	284	34,913	130	12,457	47,370	26%	
	Aug '30	299	17		267	284	34,929	130	12,513	47,442	26%	
	Sep '30	300	22		267	289	34,951	130	12,562	47,512	26%	
	Oct '30	301	17		267	284	34,968	130	12,666	47,634	27%	
	Nov '30	302	25		267	292	34,991	130	12,796	47,787	27%	
	Dec '30	303	65		267	332	35,001	90	12,886	47,887	27%	
	Jan '31	304	41		267	308	35,007	110	12,996	48,003	27%	
	Feb '31	305	42		267	309	35,049	110	13,106	48,155	27%	
	Mar '31	306	32		267	299	35,025	120	13,226	48,251	27%	
	Apr '31	307	22		267	289	35,047	130	13,356	48,403	28%	
	May '31	308	14		267	281	35,061	140	13,496	48,557	28%	
	Jun '31	309	9		267	276	35,070	140	13,636	48,706	28%	
2031/32	Jul '31	310	17		267	284	35,087	130	13,766	48,853	28%	
	Aug '31	311	17		267	284	35,086	130	13,688	48,774	28%	
	Sep '31	312	22		267	289	35,095	130	13,532	48,627	28%	
	Oct '31	313	17		267	284	35,101	130	13,613	48,715	28%	
	Nov '31	314	25		267	292	35,121	130	13,708	48,828	28%	
	Dec '31	315	65		267	332	35,038	90	13,790	48,828	28%	
	Jan '32	316	41		267	308	35,079	110	13,877	48,956	28%	
	Feb '32	317	42		267	309	35,121	110	13,909	49,030	28%	
	Mar '32	318	32		267	299	35,113	120	13,956	49,069	28%	
	Apr '32	319	22		267	289	35,124	130	14,008	49,132	29%	
	May '32	320	14		267	281	35,138	140	14,050	49,187	29%	
	Jun '32	321	9		267	276	35,147	140	14,056	49,203	29%	
Notes:												
DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.												
RW = Recycled Water												
RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.												
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.												
RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period												



RWC Management Plan for Hickory Basin

Months Since Initial Recycled Water Delivery



RWC Management Plan for RP3 Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries												Period
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC		
2016/17	Jul '16	85	18	0	904	922	87,904	99	15,647	103,551	15%	
	Aug '16	86	32	0	904	936	88,804	289	15,936	104,740	15%	
	Sep '16	87	9	0	904	913	89,682	551	16,487	106,169	16%	
	Oct '16	88	105	0	904	1,009	90,657	392	16,879	107,536	16%	
	Nov '16	89	65	0	904	969	91,590	688	17,567	109,157	16%	
	Dec '16	90	336	0	904	1,240	92,804	548	18,115	110,919	16%	
	Jan '17	91	588	0	904	1,492	94,274	431	18,546	112,820	16%	
	Feb '17	92	235	0	904	1,139	95,394	381	18,927	114,321	17%	
	Mar '17	93	11	0	904	915	96,301	760	19,687	115,988	17%	
	Apr '17	94	24	0	904	928	97,225	513	20,200	117,425	17%	
	May '17	95	5	0	904	909	98,132	655	20,855	118,987	18%	
	Jun '17	96	9	386	904	1,299	99,428	463	21,318	120,746	18%	
2017/18	Jul '17	97	5	246	904	1,154	100,583	225	21,543	122,126	18%	
	Aug '17	98	15	418	904	1,337	101,917	208	21,751	123,668	18%	
	Sep '17	99	15	201	904	1,119	103,033	223	21,974	125,007	18%	
	Oct '17	100	4	31	904	938	103,962	54	22,028	125,990	17%	
	Nov '17	101	0	0	904	904	104,819	31	22,058	126,877	17%	
	Dec '17	102	1	0	904	905	105,616	67	22,125	127,741	17%	
	Jan '18	103	92	0	904	995	106,446	67	22,192	128,638	17%	
	Feb '18	104	19	0	904	923	107,239	12	22,204	129,443	17%	
	Mar '18	105	104	0	904	1,007	108,242	10	22,214	130,455	17%	
	Apr '18	106	30	0	904	933	109,172	72	22,286	131,458	17%	
	May '18	107	15	0	904	919	110,057	70	22,356	132,413	17%	
	Jun '18	108	1	0	904	904	110,957	49	22,405	133,362	17%	
2018/19	Jul '18	109	41	0	904	944	111,901	155	22,560	134,461	17%	
	Aug '18	110	9	0	904	913	112,798	158	22,718	135,516	17%	
	Sep '18	111	7	0	904	911	113,693	198	22,916	136,609	17%	
	Oct '18	112	12	0	904	916	114,596	158	23,075	137,670	17%	
	Nov '18	113	4	0	904	908	115,477	188	23,262	138,739	17%	
	Dec '18	114	44	0	904	948	116,269	169	23,431	139,700	17%	
	Jan '19	115	97	0	904	1,001	117,258	69	23,499	140,757	17%	
	Feb '19	116	125	0	904	1,029	118,013	0	23,499	141,513	17%	
	Mar '19	117	37	0	904	941	118,907	0	23,499	142,406	17%	
	Apr '19	118	2	0	904	906	119,795	17	23,516	143,311	16%	
	May '19	119	21	0	904	924	120,713	0	23,516	144,229	16%	
	Jun '19	120	0	0	904	904	121,617	0	23,410	145,027	16%	
2019/20	Jul '19	121	3	0	904	907	122,501	330	23,656	146,157	16%	
	Aug '19	122	6	0	904	910	123,381	384	23,892	147,273	16%	
	Sep '19	123	6	0	904	910	124,255	426	24,098	148,353	16%	
	Oct '19	124	13	78	904	995	124,223	532	24,427	148,650	16%	
	Nov '19	125	69	148	904	1,120	124,340	671	24,811	149,151	17%	
	Dec '19	126	123	107	904	1,133	124,196	793	25,501	149,697	17%	
	Jan '20	127	7	46	904	957	123,723	365	25,790	149,513	17%	
	Feb '20	128	0	0	904	904	123,353	449	26,126	149,479	17%	
	Mar '20	129	193	0	904	1,096	123,442	613	26,527	149,968	18%	
	Apr '20	130	201	0	904	1,104	123,514	459	26,915	150,429	18%	
	May '20	131	1	0	904	905	123,466	298	26,941	150,407	18%	
	Jun '20	132	1	0	904	905	123,425	328	27,008	150,434	18%	
2020/21	Jul '20	133	3	0	904	906	123,421	354	27,133	150,554	18%	
	Aug '20	134	4	0	904	908	123,419	530	27,482	150,901	18%	
	Sep '20	135	7	0	904	910	123,401	732	28,166	151,566	19%	
	Oct '20	136	6	0	904	909	123,335	803	28,946	152,281	19%	
	Nov '20	137	8	0	904	911	123,197	801	29,554	152,751	19%	
	Dec '20	138	41	0	904	945	122,494	815	30,247	152,741	20%	
	Jan '21	139	171	0	904	1,075	122,430	481	30,625	153,055	20%	
	Feb '21	140	10	0	904	913	122,125	374	30,822	152,947	20%	
	Mar '21	141	103	0	904	1,007	121,814	352	31,048	152,862	20%	
	Apr '21	142	17	0	904	921	121,689	471	31,283	152,971	20%	
	May '21	143	23	0	904	927	121,351	499	31,605	152,956	21%	
	Jun '21	144	9	0	904	913	120,743	452	31,874	152,617	21%	
2021/22	Jul '21	145	40	0	904	944	119,916	379	31,999	151,915	21%	
	Aug '21	146	8	0	904	911	119,606	499	32,483	152,089	21%	
	Sep '21	147	4	0	904	907	118,995	589	33,042	152,037	22%	
	Oct '21	148	9	0	904	913	118,783	541	33,401	152,184	22%	
	Nov '21	149	5	0	904	908	118,666	558	33,862	152,528	22%	
	Dec '21	150	155	0	904	1,058	118,742	279	33,977	152,720	22%	
	Jan '22	151	11	0	904	915	118,649	387	34,273	152,922	22%	
	Feb '22	152	10	0	904	913	118,483	301	34,414	152,897	23%	
	Mar '22	153	49	0	904	953	118,310	251	34,571	152,881	23%	
	Apr '22	154	11	0	904	915	118,101	317	34,740	152,841	23%	
	May '22	155	9	0	904	913	118,049	303	34,668	152,717	23%	
	Jun '22	156	0	0	904	904	117,989	99	34,586	152,575	23%	



RWC Management Plan for RP3 Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/23	Jul '22	157	1	0	904	905	117,940	298	34,872	152,812	23%	A C T U A L
	Aug '22	158	0	0	904	904	117,928	600	35,473	153,401	23%	
	Sep '22	159	2	0	904	906	117,926	732	36,204	154,130	23%	
	Oct '22	160	16	0	904	920	117,924	780	36,984	154,908	24%	
	Nov '22	161	38	0	904	942	117,861	725	37,555	155,416	24%	
	Dec '22	162	103	0	904	1,006	117,603	1,054	38,389	155,992	25%	
	Jan '23	163	450	0	904	1,354	117,906	505	38,541	156,447	25%	
Feb '23	164	0	0	904	904	117,793	804	39,048	156,841	25%	P L A N N E D	
Mar '23	165	113		904	1,017	117,828	460	39,233	157,061	25%		
Apr '23	166	65		904	969	117,853	500	39,347	157,200	25%		
May '23	167	32		904	936	117,831	540	39,625	157,456	25%		
Jun '23	168	15		904	919	117,803	550	39,936	157,739	25%		
Jul '23	169	29		904	933	117,760	540	40,402	158,162	26%		
Aug '23	170	20		904	924	117,712	550	40,736	158,448	26%		
Sep '23	171	28		904	932	117,682	540	40,923	158,605	26%		
Oct '23	172	45		904	949	117,674	520	41,279	158,953	26%		
Nov '23	173	59		904	963	117,673	510	41,785	159,458	26%		
Dec '23	174	188		904	1,092	117,789	380	41,914	159,703	26%		
Jan '24	175	171		904	1,075	117,831	400	42,242	160,073	26%		
Feb '24	176	119		904	1,023	117,753	450	42,692	160,445	27%		
Mar '24	177	113		904	1,017	117,603	460	43,152	160,755	27%		
Apr '24	178	65		904	969	117,582	500	43,603	161,185	27%		
May '24	179	32		904	936	117,611	540	44,143	161,754	27%		
Jun '24	180	15		904	919	117,620	550	44,521	162,141	27%		
Jul '24	181	29		904	933	117,640	540	44,877	162,517	28%		
Aug '24	182	20		904	924	117,637	550	45,235	162,872	28%		
Sep '24	183	28		904	932	117,625	540	45,532	163,157	28%		
Oct '24	184	45		904	949	117,645	520	45,717	163,362	28%		
Nov '24	185	59		904	963	117,592	510	45,977	163,569	28%		
Dec '24	186	188		904	1,092	117,361	380	46,351	163,712	28%		
Jan '25	187	171		904	1,075	117,400	400	46,722	164,122	28%		
Feb '25	188	119		904	1,023	117,424	450	46,929	164,353	29%		
Mar '25	189	113		904	1,017	117,468	460	47,064	164,532	29%		
Apr '25	190	65		904	969	117,492	500	47,282	164,774	29%		
May '25	191	32		904	936	117,403	540	47,474	164,877	29%		
Jun '25	192	15		904	919	117,406	550	47,493	164,899	29%		
Jul '25	193	29		904	933	117,301	540	47,765	165,066	29%		
Aug '25	194	20		904	924	117,290	550	48,174	165,464	29%		
Sep '25	195	28		904	932	117,195	540	48,495	165,690	29%		
Oct '25	196	45		904	949	117,154	520	48,652	165,806	29%		
Nov '25	197	59		904	963	117,159	510	48,934	166,093	29%		
Dec '25	198	188		904	1,092	117,159	380	49,040	166,199	30%		
Jan '26	199	171		904	1,075	117,091	400	49,050	166,141	30%		
Feb '26	200	119		904	1,023	117,156	450	49,142	166,298	30%		
Mar '26	201	113		904	1,017	117,061	460	49,428	166,489	30%		
Apr '26	202	65		904	969	117,076	500	49,681	166,757	30%		
May '26	203	32		904	936	117,060	540	49,846	166,906	30%		
Jun '26	204	15		904	919	117,064	550	50,151	167,215	30%		



RWC Management Plan for RP3 Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	205	29		904	933	117,075	540	50,592	167,667	30%
	Aug '26	206	20		904	924	117,063	550	50,853	167,916	30%
	Sep '26	207	28		904	932	117,082	540	50,842	167,924	30%
	Oct '26	208	45		904	949	117,022	520	50,970	167,992	30%
	Nov '26	209	59		904	963	117,016	510	50,792	167,808	30%
	Dec '26	210	188		904	1,092	116,868	380	50,624	167,492	30%
	Jan '27	211	171		904	1,075	116,451	400	50,593	167,044	30%
	Feb '27	212	119		904	1,023	116,335	450	50,662	166,997	30%
	Mar '27	213	113		904	1,017	116,437	460	50,362	166,799	30%
	Apr '27	214	65		904	969	116,478	500	50,349	166,827	30%
	May '27	215	32		904	936	116,505	540	50,234	166,739	30%
	Jun '27	216	15		904	919	116,125	550	50,321	166,446	30%
2027/28	Jul '27	217	29		904	933	115,903	540	50,636	166,539	30%
	Aug '27	218	20		904	924	115,490	550	50,978	166,468	31%
	Sep '27	219	28		904	932	115,303	540	51,295	166,598	31%
	Oct '27	220	45		904	949	115,313	520	51,762	167,075	31%
	Nov '27	221	59		904	963	115,372	510	52,241	167,613	31%
	Dec '27	222	188		904	1,092	115,559	380	52,554	168,113	31%
	Jan '28	223	171		904	1,075	115,638	400	52,887	168,525	31%
	Feb '28	224	119		904	1,023	115,738	450	53,325	169,063	32%
	Mar '28	225	113		904	1,017	115,748	460	53,775	169,523	32%
	Apr '28	226	65		904	969	115,783	500	54,203	169,986	32%
	May '28	227	32		904	936	115,800	540	54,673	170,473	32%
	Jun '28	228	15		904	919	115,814	550	55,174	170,989	32%
2028/29	Jul '28	229	29		904	933	115,803	540	55,559	171,362	32%
	Aug '28	230	20		904	924	115,814	550	55,951	171,765	33%
	Sep '28	231	28		904	932	115,835	540	56,293	172,128	33%
	Oct '28	232	45		904	949	115,868	520	56,655	172,522	33%
	Nov '28	233	59		904	963	115,922	510	56,977	172,899	33%
	Dec '28	234	188		904	1,092	116,066	380	57,188	173,254	33%
	Jan '29	235	171		904	1,075	116,140	400	57,520	173,660	33%
	Feb '29	236	119		904	1,023	116,134	450	57,970	174,104	33%
	Mar '29	237	113		904	1,017	116,210	460	58,430	174,640	33%
	Apr '29	238	65		904	969	116,273	500	58,913	175,186	34%
	May '29	239	32		904	936	116,285	540	59,453	175,738	34%
	Jun '29	240	15		904	919	116,300	550	60,003	176,303	34%
2029/30	Jul '29	241	29		904	933	116,326	540	60,213	176,539	34%
	Aug '29	242	20		904	924	116,340	550	60,379	176,719	34%
	Sep '29	243	28		904	932	116,362	540	60,493	176,855	34%
	Oct '29	244	45		904	949	116,316	520	60,481	176,797	34%
	Nov '29	245	59		904	963	116,158	510	60,320	176,478	34%
	Dec '29	246	188		904	1,092	116,117	380	59,907	176,023	34%
	Jan '30	247	171		904	1,075	116,235	400	59,942	176,176	34%
	Feb '30	248	119		904	1,023	116,354	450	59,943	176,296	34%
	Mar '30	249	113		904	1,017	116,274	460	59,789	176,063	34%
	Apr '30	250	65		904	969	116,138	500	59,830	175,969	34%
	May '30	251	32		904	936	116,170	540	60,072	176,242	34%
	Jun '30	252	15		904	919	116,184	550	60,294	176,477	34%
2030/31	Jul '30	253	29		904	933	116,210	540	60,480	176,690	34%
	Aug '30	254	20		904	924	116,226	550	60,500	176,726	34%
	Sep '30	255	28		904	932	116,247	540	60,308	176,555	34%
	Oct '30	256	45		904	949	116,286	520	60,025	176,311	34%
	Nov '30	257	59		904	963	116,338	510	59,734	176,072	34%
	Dec '30	258	188		904	1,092	116,485	380	59,299	175,784	34%
	Jan '31	259	171		904	1,075	116,485	400	59,218	175,703	34%
	Feb '31	260	119		904	1,023	116,594	450	59,294	175,888	34%
	Mar '31	261	113		904	1,017	116,604	460	59,402	176,006	34%
	Apr '31	262	65		904	969	116,652	500	59,431	176,082	34%
	May '31	263	32		904	936	116,661	540	59,472	176,133	34%
	Jun '31	264	15		904	919	116,667	550	59,569	176,236	34%
2031/32	Jul '31	265	29		904	933	116,656	540	59,731	176,386	34%
	Aug '31	266	20		904	924	116,668	550	59,782	176,450	34%
	Sep '31	267	28		904	932	116,693	540	59,733	176,426	34%
	Oct '31	268	45		904	949	116,729	520	59,712	176,440	34%
	Nov '31	269	59		904	963	116,783	510	59,664	176,447	34%
	Dec '31	270	188		904	1,092	116,816	380	59,765	176,581	34%
	Jan '32	271	171		904	1,075	116,977	400	59,778	176,755	34%
	Feb '32	272	119		904	1,023	117,086	450	59,927	177,013	34%
	Mar '32	273	113		904	1,017	117,150	460	60,136	177,286	34%
	Apr '32	274	65		904	969	117,203	500	60,320	177,523	34%
	May '32	275	32		904	936	117,227	540	60,557	177,784	34%
	Jun '32	276	15		904	919	117,242	550	61,008	178,250	34%

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

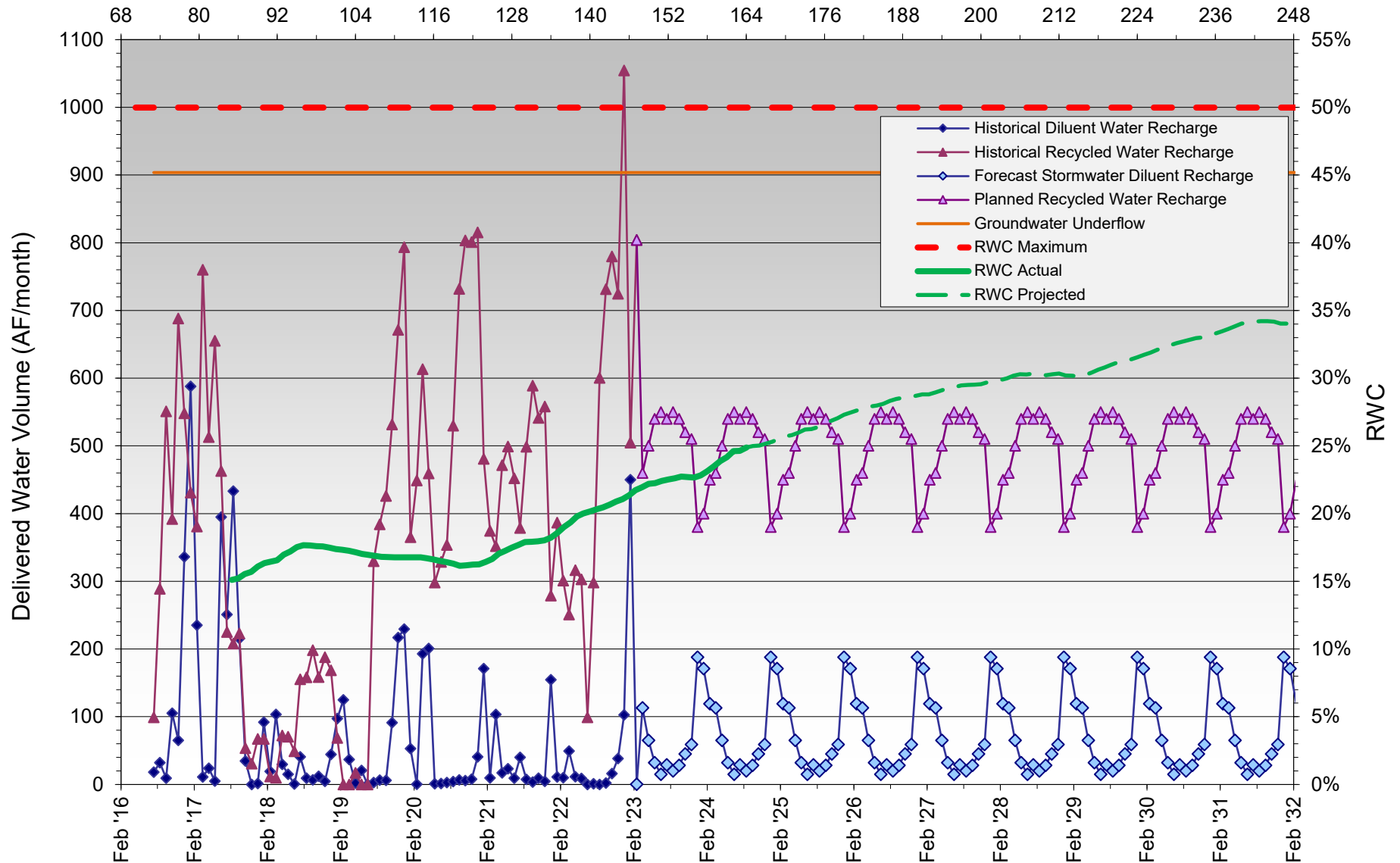
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan - RP3 Basin

Months Since Initial Recycled Water Delivery



HISTORICAL RECHARGE

PLANNED RECHARGE



RWC Management Plan for Declez Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	7	0	0	904	904	14,300	201	1,235	15,535	8%
	Aug '16	8	0	0	904	904	15,184	261	1,496	16,680	9%
	Sep '16	9	1	0	904	905	16,071	52	1,548	17,619	9%
	Oct '16	10	47	0	904	951	16,988	0	1,548	18,536	8%
	Nov '16	11	55	0	904	959	17,915	0	1,548	19,463	8%
	Dec '16	12	217	0	904	1,121	18,946	0	1,548	20,494	8%
	Jan '17	13	167	0	904	1,071	19,934	0	1,548	21,482	7%
	Feb '17	14	70	0	904	974	20,761	0	1,548	22,309	7%
	Mar '17	15	20	0	904	924	21,663	0	1,548	23,211	7%
	Apr '17	16	3	0	904	907	22,482	0	1,548	24,030	6%
2017/18	May '17	17	24	0	904	928	23,392	0	1,548	24,940	6%
	Jun '17	18	3	99	904	1,006	24,398	0	1,548	25,946	6%
	Jul '17	19	7	45	904	956	25,353	0	1,548	26,901	6%
	Aug '17	20	70	0	904	974	26,321	0	1,548	27,869	6%
	Sep '17	21	6	20	904	930	27,218	0	1,548	28,766	5%
	Oct '17	22	6	66	904	976	28,180	0	1,548	29,728	5%
	Nov '17	23	6	0	904	910	28,982	0	1,548	30,530	5%
	Dec '17	24	6	0	904	910	29,815	0	1,548	31,363	5%
	Jan '18	25	136	0	904	1,040	30,599	0	1,548	32,147	5%
	Feb '18	26	49	0	904	952	31,405	0	1,548	32,953	5%
2018/19	Mar '18	27	223	0	904	1,127	32,505	0	1,548	34,053	5%
	Apr '18	28	18	0	904	922	33,414	56	1,604	35,018	5%
	May '18	29	30	0	904	933	34,311	294	1,898	36,209	5%
	Jun '18	30	17	0	904	921	35,218	238	2,136	37,354	6%
	Jul '18	31	11	0	904	915	36,114	266	2,402	38,516	6%
	Aug '18	32	9	0	904	913	37,023	275	2,677	39,700	7%
	Sep '18	33	11	0	904	915	37,931	258	2,935	40,866	7%
	Oct '18	34	61	0	904	964	38,881	167	3,102	41,983	7%
	Nov '18	35	170	0	904	1,074	39,882	57	3,160	43,042	7%
	Dec '18	36	61	0	904	965	40,640	104	3,263	43,903	7%
2019/20	Jan '19	37	113	0	904	1,016	41,630	46	3,309	44,939	7%
	Feb '19	38	131	0	904	1,035	42,441	0	3,309	45,750	7%
	Mar '19	39	75	0	904	978	43,368	74	3,383	46,751	7%
	Apr '19	40	22	0	904	925	44,288	101	3,484	47,773	7%
	May '19	41	63	0	904	967	45,249	97	3,581	48,831	7%
	Jun '19	42	18	0	904	922	46,151	174	3,755	49,906	8%
	Jul '19	43	16	0	904	920	47,050	97	3,852	50,901	8%
	Aug '19	44	11	0	904	915	47,947	28	3,880	51,827	7%
	Sep '19	45	12	0	904	916	48,857	25	3,905	52,762	7%
	Oct '19	46	9	0	904	913	49,755	157	4,062	53,817	8%
2020/21	Nov '19	47	136	0	904	1,040	50,757	86	4,147	54,904	8%
	Dec '19	48	151	0	904	1,055	51,638	0	4,147	55,786	7%
	Jan '20	49	9	0	904	913	52,478	71	4,218	56,696	7%
	Feb '20	50	19	0	904	922	53,159	48	4,266	57,426	7%
	Mar '20	51	163	0	904	1,067	54,172	26	4,293	58,464	7%
	Apr '20	52	95	0	904	999	55,048	37	4,330	59,378	7%
	May '20	53	12	0	904	915	55,958	76	4,405	60,363	7%
	Jun '20	54	11	0	904	915	56,866	115	4,520	61,387	7%
	Jul '20	55	4	0	904	908	57,771	116	4,636	62,407	7%
	Aug '20	56	4	0	904	908	58,671	85	4,721	63,392	7%
2021/22	Sep '20	57	3	0	904	907	59,575	114	4,835	64,411	8%
	Oct '20	58	3	0	904	907	60,437	143	4,979	65,416	8%
	Nov '20	59	47	0	904	951	61,293	100	5,079	66,372	8%
	Dec '20	60	155	0	904	1,059	62,039	38	5,117	67,156	8%
	Jan '21	61	152	0	904	1,056	63,043	1	5,118	68,161	8%
	Feb '21	62	3	0	904	907	63,753	0	5,118	68,871	7%
	Mar '21	63	137	0	904	1,041	64,656	3	5,121	69,777	7%
	Apr '21	64	7	0	904	911	65,565	31	5,152	70,717	7%
	May '21	65	5	0	904	909	66,460	146	5,298	71,758	7%
	Jun '21	66	6	0	904	910	67,360	146	5,445	72,805	7%
2022/23	Jul '21	67	52	0	904	956	68,235	71	5,516	73,751	7%
	Aug '21	68	2	0	904	906	69,138	109	5,625	74,763	8%
	Sep '21	69	3	0	904	906	70,038	138	5,762	75,800	8%
	Oct '21	70	24	0	904	928	70,892	100	5,862	76,754	8%
	Nov '21	71	7	0	904	911	71,683	50	5,913	77,596	8%
	Dec '21	72	207	0	904	1,111	72,738	0	5,913	78,651	8%
	Jan '22	73	4	0	904	907	73,559	4	5,852	79,411	7%
	Feb '22	74	10	0	904	913	74,426	53	5,905	80,331	7%
	Mar '22	75	205	0	904	1,109	75,351	82	5,987	81,338	7%
	Apr '22	76	21	0	904	925	76,142	0	5,987	82,129	7%
2023/24	May '22	77	5	0	904	909	77,044	71	6,058	83,102	7%
	Jun '22	78	48	0	904	952	77,995	0	6,058	84,053	7%

HISTORICAL

ACTUAL



RWC Management Plan for Declez Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/23	Jul '22	79	4	0	904	908	78,902	0	6,058	84,960	7%	A C T U A L
	Aug '22	80	5	0	904	908	79,800	0	6,058	85,858	7%	
	Sep '22	81	17	0	904	921	80,706	0	6,058	86,764	7%	
	Oct '22	82	58	0	904	961	81,533	26	6,083	87,617	7%	
	Nov '22	83	143	0	904	1,047	82,559	2	6,085	88,644	7%	
	Dec '22	84	206	0	904	1,110	83,501	3	6,088	89,589	7%	
	Jan '23	85	86	0	904	990	84,443	0	6,088	90,531	7%	
	Feb '23	86	5	0	904	909	85,294	0	6,088	91,382	7%	
	Mar '23	87	81		904	985	86,218	110	6,198	92,416	7%	
	Apr '23	88	58		904	962	87,176	120	6,318	93,494	7%	
	May '23	89	24		904	928	88,098	170	6,488	94,585	7%	
	Jun '23	90	7		904	911	89,004	180	6,668	95,672	7%	
2023/24	Jul '23	91	17		904	921	89,919	170	6,838	96,757	7%	P L A N N E D
	Aug '23	92	13		904	917	90,833	170	7,008	97,841	7%	
	Sep '23	93	25		904	929	91,760	170	7,178	98,937	7%	
	Oct '23	94	46		904	949	92,691	150	7,328	100,019	7%	
	Nov '23	95	61		904	964	93,604	130	7,458	101,061	7%	
	Dec '23	96	147		904	1,050	94,588	70	7,528	102,116	7%	
	Jan '24	97	86		904	990	95,476	90	7,618	103,094	7%	
	Feb '24	98	117		904	1,021	96,321	90	7,708	104,029	7%	
	Mar '24	99	81		904	985	97,133	110	7,818	104,951	7%	
	Apr '24	100	58		904	962	97,980	120	7,938	105,917	7%	
	May '24	101	24		904	928	98,906	170	8,108	107,014	8%	
	Jun '24	102	7		904	911	99,815	180	8,288	108,103	8%	
2024/25	Jul '24	103	17		904	921	100,734	170	8,458	109,192	8%	
	Aug '24	104	13		904	917	101,579	170	8,628	110,207	8%	
	Sep '24	105	25		904	929	102,477	170	8,798	111,275	8%	
	Oct '24	106	46		904	949	103,424	150	8,948	112,372	8%	
	Nov '24	107	61		904	964	104,288	130	9,078	113,366	8%	
	Dec '24	108	147		904	1,050	105,024	70	9,148	114,171	8%	
	Jan '25	109	86		904	990	105,967	90	9,238	115,204	8%	
	Feb '25	110	117		904	1,021	106,881	90	9,328	116,209	8%	
	Mar '25	111	81		904	985	107,851	110	9,438	117,289	8%	
	Apr '25	112	58		904	962	108,772	120	9,558	118,329	8%	
	May '25	113	24		904	928	109,600	170	9,728	119,328	8%	
	Jun '25	114	7		904	911	110,508	180	9,908	120,416	8%	
2025/26	Jul '25	115	17		904	921	111,380	170	10,078	121,458	8%	
	Aug '25	116	13		904	917	112,294	170	10,248	122,542	8%	
	Sep '25	117	25		904	929	113,076	170	10,418	123,493	8%	
	Oct '25	118	46		904	949	113,989	150	10,568	124,557	8%	
	Nov '25	119	61		904	964	114,949	130	10,698	125,647	9%	
	Dec '25	120	147		904	1,050	115,047	70	10,718	125,765	9%	
	Jan '26	121	86		904	990	114,976	90	10,730	125,705	9%	
	Feb '26	122	117		904	1,021	115,058	90	10,667	125,725	8%	
	Mar '26	123	81		904	985	115,047	110	10,651	125,698	8%	
	Apr '26	124	58		904	962	115,085	120	10,638	125,723	8%	
	May '26	125	24		904	928	115,097	170	10,580	125,677	8%	
	Jun '26	126	7		904	911	115,101	180	10,559	125,660	8%	



RWC Management Plan for Declez Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	127	17	904	921	115,118	170	10,528	125,646	8%	P L A N N E D
	Aug '26	128	13	904	917	115,132	170	10,437	125,568	8%	
	Sep '26	129	25	904	929	115,155	170	10,555	125,710	8%	
	Oct '26	130	46	904	949	115,154	150	10,705	125,859	9%	
	Nov '26	131	61	904	964	115,160	130	10,835	125,994	9%	
	Dec '26	132	147	904	1,050	115,089	70	10,905	125,994	9%	
	Jan '27	133	86	904	990	115,009	90	10,995	126,003	9%	
	Feb '27	134	117	904	1,021	115,055	90	11,085	126,140	9%	
	Mar '27	135	81	904	985	115,116	110	11,195	126,311	9%	
	Apr '27	136	58	904	962	115,171	120	11,315	126,486	9%	
2027/28	May '27	137	24	904	928	115,171	170	11,485	126,656	9%	
	Jun '27	138	7	904	911	115,076	180	11,665	126,741	9%	
	Jul '27	139	17	904	921	115,042	170	11,835	126,876	9%	
	Aug '27	140	13	904	917	114,985	170	12,005	126,989	9%	
	Sep '27	141	25	904	929	114,983	170	12,175	127,158	10%	
	Oct '27	142	46	904	949	114,957	150	12,325	127,281	10%	
	Nov '27	143	61	904	964	115,011	130	12,455	127,466	10%	
	Dec '27	144	147	904	1,050	115,152	70	12,525	127,676	10%	
	Jan '28	145	86	904	990	115,102	90	12,615	127,716	10%	
	Feb '28	146	117	904	1,021	115,170	90	12,705	127,875	10%	
2028/29	Mar '28	147	81	904	985	115,028	110	12,815	127,842	10%	
	Apr '28	148	58	904	962	115,068	120	12,879	127,947	10%	
	May '28	149	24	904	928	115,062	170	12,755	127,817	10%	
	Jun '28	150	7	904	911	115,052	180	12,696	127,748	10%	
	Jul '28	151	17	904	921	115,058	170	12,600	127,659	10%	
	Aug '28	152	13	904	917	115,062	170	12,495	127,557	10%	
	Sep '28	153	25	904	929	115,076	170	12,408	127,483	10%	
	Oct '28	154	46	904	949	115,061	150	12,390	127,451	10%	
	Nov '28	155	61	904	964	114,951	130	12,463	127,414	10%	
	Dec '28	156	147	904	1,050	115,037	70	12,429	127,467	10%	
2029/30	Jan '29	157	86	904	990	115,011	90	12,473	127,484	10%	
	Feb '29	158	117	904	1,021	114,997	90	12,563	127,560	10%	
	Mar '29	159	81	904	985	115,003	110	12,599	127,603	10%	
	Apr '29	160	58	904	962	115,039	120	12,618	127,658	10%	
	May '29	161	24	904	928	115,000	170	12,691	127,692	10%	
	Jun '29	162	7	904	911	114,989	180	12,698	127,687	10%	
	Jul '29	163	17	904	921	114,991	170	12,771	127,762	10%	
	Aug '29	164	13	904	917	114,993	170	12,913	127,906	10%	
	Sep '29	165	25	904	929	115,005	170	13,058	128,063	10%	
	Oct '29	166	46	904	949	115,042	150	13,051	128,093	10%	
2030/31	Nov '29	167	61	904	964	114,966	130	13,096	128,062	10%	
	Dec '29	168	147	904	1,050	114,962	70	13,166	128,127	10%	
	Jan '30	169	86	904	990	115,039	90	13,185	128,224	10%	
	Feb '30	170	117	904	1,021	115,137	90	13,227	128,364	10%	
	Mar '30	171	81	904	985	115,055	110	13,310	128,365	10%	
	Apr '30	172	58	904	962	115,018	120	13,393	128,411	10%	
	May '30	173	24	904	928	115,030	170	13,488	128,518	10%	
	Jun '30	174	7	904	911	115,026	180	13,552	128,579	11%	
	Jul '30	175	17	904	921	115,040	170	13,607	128,646	11%	
	Aug '30	176	13	904	917	115,049	170	13,691	128,740	11%	
2031/32	Sep '30	177	25	904	929	115,071	170	13,747	128,818	11%	
	Oct '30	178	46	904	949	115,113	150	13,754	128,867	11%	
	Nov '30	179	61	904	964	115,127	130	13,784	128,910	11%	
	Dec '30	180	147	904	1,050	115,118	70	13,816	128,934	11%	
	Jan '31	181	86	904	990	115,052	90	13,905	128,957	11%	
	Feb '31	182	117	904	1,021	115,167	90	13,995	129,161	11%	
	Mar '31	183	81	904	985	115,110	110	14,102	129,212	11%	
	Apr '31	184	58	904	962	115,161	120	14,191	129,352	11%	
	May '31	185	24	904	928	115,180	170	14,214	129,394	11%	
	Jun '31	186	7	904	911	115,181	180	14,248	129,429	11%	
2031/32	Jul '31	187	17	904	921	115,146	170	14,347	129,493	11%	
	Aug '31	188	13	904	917	115,158	170	14,408	129,566	11%	
	Sep '31	189	25	904	929	115,180	170	14,441	129,620	11%	
	Oct '31	190	46	904	949	115,201	150	14,490	129,692	11%	
	Nov '31	191	61	904	964	115,255	130	14,570	129,825	11%	
	Dec '31	192	147	904	1,050	115,194	70	14,640	129,834	11%	
	Jan '32	193	86	904	990	115,277	90	14,726	130,002	11%	
	Feb '32	194	117	904	1,021	115,384	90	14,763	130,147	11%	
	Mar '32	195	81	904	985	115,260	110	14,791	130,051	11%	
	Apr '32	196	58	904	962	115,297	120	14,911	130,208	11%	
2031/32	May '32	197	24	904	928	115,316	170	15,010	130,325	12%	
	Jun '32	198	7	904	911	115,274	180	15,190	130,464	12%	

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

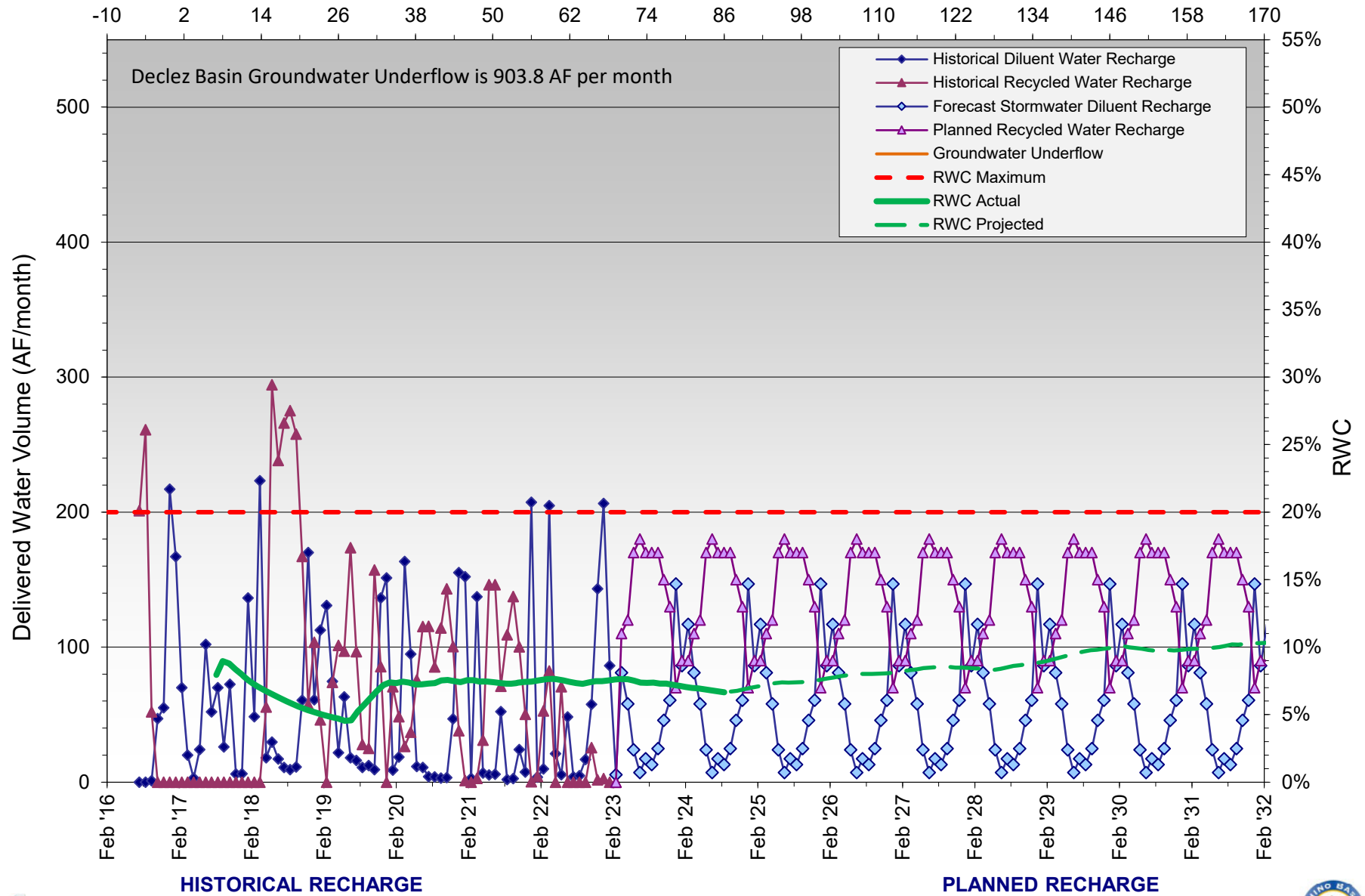
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan - Declez Basin

Months Since Initial Recycled Water Delivery



RWC Management Plan for Turner Basin Cells 1 & 2

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	120	4	0	67	71	15,926	89	3,895	19,821	20%
	Aug '16	121	22	0	67	89	15,995	52	3,834	19,829	19%
	Sep '16	122	18	0	67	85	15,974	40	3,760	19,733	19%
	Oct '16	123	38	0	67	105	15,915	104	3,864	19,778	20%
	Nov '16	124	68	16	67	152	16,037	12	3,876	19,913	19%
	Dec '16	125	239	0	67	306	16,313	71	3,843	20,157	19%
	Jan '17	126	233	0	67	300	16,586	0	3,773	20,359	19%
	Feb '17	127	130	0	67	197	16,769	66	3,795	20,563	18%
	Mar '17	128	14	0	67	81	16,824	139	3,877	20,701	19%
	Apr '17	129	9	0	67	76	16,895	110	3,973	20,868	19%
	May '17	130	6	0	67	73	16,957	56	3,950	20,907	19%
	Jun '17	131	3	0	67	70	17,026	90	4,037	21,063	19%
2017/18	Jul '17	132	3	0	67	70	17,092	156	4,193	21,285	20%
	Aug '17	133	3	0	67	70	17,125	43	4,236	21,361	20%
	Sep '17	134	2	0	67	69	17,190	70	4,306	21,496	20%
	Oct '17	135	3	0	67	70	17,198	234	4,540	21,738	21%
	Nov '17	136	3	0	67	70	17,172	147	4,687	21,859	21%
	Dec '17	137	1	0	67	68	17,025	156	4,843	21,868	22%
	Jan '18	138	37	0	67	104	16,819	26	4,869	21,688	22%
	Feb '18	139	19	0	67	87	16,654	0	4,869	21,523	23%
	Mar '18	140	208	0	67	275	16,912	15	4,884	21,796	22%
	Apr '18	141	6	0	67	73	16,972	33	4,917	21,889	22%
	May '18	142	6	0	67	73	16,901	0	4,917	21,819	23%
	Jun '18	143	2	0	67	69	16,960	83	5,001	21,960	23%
2018/19	Jul '18	144	3	0	67	70	17,023	68	5,069	22,091	23%
	Aug '18	145	3	0	67	70	17,090	94	5,162	22,252	23%
	Sep '18	146	7	0	67	74	17,038	20	5,183	22,220	23%
	Oct '18	147	15	0	67	82	17,039	0	5,155	22,194	23%
	Nov '18	148	59	0	67	126	17,084	0	5,125	22,209	23%
	Dec '18	149	55	0	67	122	16,862	0	5,125	21,987	23%
	Jan '19	150	179	0	67	246	17,080	0	5,125	22,204	23%
	Feb '19	151	190	0	67	257	16,992	0	5,125	22,116	23%
	Mar '19	152	114	0	67	181	17,126	0	5,125	22,251	23%
	Apr '19	153	12	0	67	79	17,195	0	5,125	22,319	23%
	May '19	154	134	0	67	201	17,378	0	5,095	22,472	23%
	Jun '19	155	3	0	67	70	17,371	0	5,086	22,456	23%
2019/20	Jul '19	156	4	0	67	72	17,410	0	5,086	22,496	23%
	Aug '19	157	5	0	67	72	17,464	75	5,141	22,605	23%
	Sep '19	158	5	0	67	72	17,508	16	5,139	22,647	23%
	Oct '19	159	5	0	67	72	17,433	0	5,139	22,572	23%
	Nov '19	160	91	0	67	159	17,475	0	5,139	22,614	23%
	Dec '19	161	259	0	67	327	17,333	0	5,139	22,473	23%
	Jan '20	162	17	0	67	85	17,057	0	5,139	22,196	23%
	Feb '20	163	220	0	67	288	16,947	0	5,139	22,086	23%
	Mar '20	164	192	0	67	259	17,105	0	5,139	22,244	23%
	Apr '20	165	159	0	67	226	17,106	0	5,139	22,245	23%
	May '20	166	9	0	67	77	17,077	0	5,139	22,216	23%
	Jun '20	167	2	0	67	69	17,079	0	5,139	22,218	23%
2020/21	Jul '20	168	0	0	67	67	17,056	0	5,139	22,195	23%
	Aug '20	169	0	0	67	67	17,003	0	5,131	22,134	23%
	Sep '20	170	0	0	67	67	16,946	0	5,131	22,077	23%
	Oct '20	171	1	12	67	80	16,868	5	5,136	22,004	23%
	Nov '20	172	5	118	67	191	16,826	0	5,136	21,963	23%
	Dec '20	173	72	7	67	146	16,540	0	5,136	21,676	24%
	Jan '21	174	189	25	67	281	16,563	0	5,136	21,700	24%
	Feb '21	175	12	75	67	155	16,418	0	5,136	21,554	24%
	Mar '21	176	103	0.0	67	170	16,257	0	5,136	21,393	24%
	Apr '21	177	24	0.0	67	91	15,948	0	5,136	21,084	24%
	May '21	178	62	0.0	67	129	15,828	0	5,136	20,965	24%
	Jun '21	179	136	2	67	205	15,876	0	5,136	21,013	24%
2021/22	Jul '21	180	38	104	67	208	16,002	0	5,136	21,138	24%
	Aug '21	181	20	66	67	154	16,066	0	5,136	21,202	24%
	Sep '21	182	51	32	67	149	16,146	1	5,137	21,283	24%
	Oct '21	183	30	26	67	124	16,203	0	5,137	21,340	24%
	Nov '21	184	28	33	67	128	16,182	0	5,096	21,279	24%
	Dec '21	185	383	13	67	463	16,490	0	5,036	21,526	23%
	Jan '22	186	24	0	67	91	16,368	0	5,007	21,375	23%
	Feb '22	187	31	0	67	98	16,178	0	5,007	21,185	24%
	Mar '22	188	97	0	67	164	15,980	0	5,007	20,987	24%
	Apr '22	189	31	0	67	98	15,753	0	5,007	20,760	24%
	May '22	190	6	0	67	73	15,744	0	5,007	20,752	24%
	Jun '22	191	22	0	67	90	15,747	0	5,007	20,754	24%

HISTORICAL

ACTUAL



RWC Management Plan for Turner Basin Cells 1 & 2

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/23	Jul '22	192	9	0	67	77	15,673	19	5,027	20,700	24%
	Aug '22	193	11	0	67	79	15,648	1	5,027	20,675	24%
	Sep '22	194	22	0	67	89	15,639	0	5,027	20,666	24%
	Oct '22	195	78	0	67	146	15,657	16	5,044	20,700	24%
	Nov '22	196	130	0	67	198	15,726	0	5,044	20,770	24%
	Dec '22	197	191	0	67	259	15,627	0	5,044	20,671	24%
	Jan '23	198	205	0	67	272	15,683	0	5,044	20,727	24%
	Feb '23	199	6	82	67	155	15,655	0	5,018	20,673	24%
	Mar '23	200	127		67	194	15,734	100	5,097	20,831	24%
	Apr '23	201	88		67	155	15,822	100	5,197	21,019	25%
	May '23	202	46		67	113	15,868	100	5,297	21,165	25%
	Jun '23	203	24		67	91	15,892	90	5,387	21,279	25%
	Jul '23	204	13		67	80	15,905	50	5,437	21,342	25%
	Aug '23	205	19		67	86	15,924	30	5,467	21,391	26%
	Sep '23	206	37		67	104	15,961	10	5,477	21,438	26%
	Oct '23	207	45		67	112	16,006	0	5,477	21,483	25%
	Nov '23	208	71		67	138	16,077	0	5,477	21,554	25%
	Dec '23	209	200		67	267	16,205	100	5,403	21,608	25%
	Jan '24	210	147		67	214	16,307	100	5,401	21,708	25%
	Feb '24	211	139		67	206	16,352	100	5,431	21,783	25%
	Mar '24	212	127		67	194	16,416	100	5,511	21,927	25%
	Apr '24	213	88		67	155	16,443	100	5,506	21,949	25%
	May '24	214	46		67	113	16,468	100	5,470	21,938	25%
	Jun '24	215	24		67	91	16,469	90	5,528	21,997	25%
	Jul '24	216	13		67	80	16,482	50	5,578	22,060	25%
	Aug '24	217	19		67	86	16,425	30	5,403	21,828	25%
	Sep '24	218	37		67	104	16,408	10	5,285	21,693	24%
	Oct '24	219	45		67	112	16,414	0	5,222	21,636	24%
	Nov '24	220	71		67	138	16,377	0	5,164	21,541	24%
	Dec '24	221	200		67	267	16,322	100	5,262	21,584	24%
	Jan '25	222	147		67	214	16,352	100	5,362	21,714	25%
	Feb '25	223	139		67	206	16,398	100	5,402	21,800	25%
	Mar '25	224	127		67	194	16,473	100	5,359	21,832	25%
	Apr '25	225	88		67	155	16,561	100	5,459	22,020	25%
	May '25	226	46		67	113	16,607	100	5,559	22,166	25%
	Jun '25	227	24		67	91	16,631	90	5,649	22,280	25%
	Jul '25	228	13		67	80	16,644	50	5,699	22,343	26%
	Aug '25	229	19		67	86	16,662	30	5,729	22,391	26%
	Sep '25	230	37		67	104	16,579	10	5,594	22,173	25%
	Oct '25	231	45		67	112	16,526	0	5,356	21,882	24%
	Nov '25	232	71		67	138	16,552	0	5,277	21,829	24%
	Dec '25	233	200		67	267	16,647	100	5,153	21,800	24%
	Jan '26	234	147		67	214	16,525	100	5,151	21,676	24%
	Feb '26	235	139		67	206	16,613	100	5,053	21,666	23%
	Mar '26	236	127		67	194	16,575	100	4,992	21,567	23%
	Apr '26	237	88		67	155	16,644	100	4,964	21,608	23%
	May '26	238	46		67	113	16,652	100	4,908	21,560	23%
	Jun '26	239	24		67	91	16,671	90	4,839	21,510	22%

A C T U A L

P L A N N E D



RWC Management Plan for Turner Basin Cells 1 & 2

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	240	13		67	80	16,680	50	4,800	21,480	22%
	Aug '26	241	19		67	86	16,677	30	4,778	21,455	22%
	Sep '26	242	37		67	104	16,696	10	4,748	21,444	22%
	Oct '26	243	45		67	112	16,703	0	4,644	21,347	22%
	Nov '26	244	71		67	138	16,690	0	4,632	21,321	22%
	Dec '26	245	200		67	267	16,651	100	4,661	21,311	22%
	Jan '27	246	147		67	214	16,565	100	4,761	21,325	22%
	Feb '27	247	139		67	206	16,574	100	4,795	21,368	22%
	Mar '27	248	127		67	194	16,687	100	4,756	21,442	22%
	Apr '27	249	88		67	155	16,766	100	4,746	21,511	22%
	May '27	250	46		67	113	16,806	100	4,790	21,595	22%
	Jun '27	251	24		67	91	16,827	90	4,790	21,616	22%
2027/28	Jul '27	252	13		67	80	16,837	50	4,684	21,520	22%
	Aug '27	253	19		67	86	16,853	30	4,671	21,523	22%
	Sep '27	254	37		67	104	16,888	10	4,611	21,498	21%
	Oct '27	255	45		67	112	16,930	0	4,377	21,307	21%
	Nov '27	256	71		67	138	16,998	0	4,230	21,227	20%
	Dec '27	257	200		67	267	17,197	100	4,174	21,371	20%
	Jan '28	258	147		67	214	17,307	100	4,248	21,555	20%
	Feb '28	259	139		67	206	17,427	100	4,348	21,774	20%
	Mar '28	260	127		67	194	17,346	100	4,433	21,779	20%
	Apr '28	261	88		67	155	17,428	100	4,500	21,927	21%
	May '28	262	46		67	113	17,468	100	4,600	22,068	21%
	Jun '28	263	24		67	91	17,490	90	4,606	22,097	21%
2028/29	Jul '28	264	13		67	80	17,500	50	4,588	22,089	21%
	Aug '28	265	19		67	86	17,516	30	4,525	22,041	21%
	Sep '28	266	37		67	104	17,546	10	4,514	22,061	20%
	Oct '28	267	45		67	112	17,577	0	4,514	22,091	20%
	Nov '28	268	71		67	138	17,589	0	4,514	22,103	20%
	Dec '28	269	200		67	267	17,734	100	4,614	22,349	21%
	Jan '29	270	147		67	214	17,702	100	4,714	22,416	21%
	Feb '29	271	139		67	206	17,651	100	4,814	22,465	21%
	Mar '29	272	127		67	194	17,664	100	4,914	22,579	22%
	Apr '29	273	88		67	155	17,740	100	5,014	22,754	22%
	May '29	274	46		67	113	17,653	100	5,114	22,767	22%
	Jun '29	275	24		67	91	17,674	90	5,204	22,878	23%
2029/30	Jul '29	276	13		67	80	17,682	50	5,254	22,936	23%
	Aug '29	277	19		67	86	17,696	30	5,209	22,905	23%
	Sep '29	278	37		67	104	17,728	10	5,203	22,931	23%
	Oct '29	279	45		67	112	17,768	0	5,203	22,971	23%
	Nov '29	280	71		67	138	17,748	0	5,203	22,951	23%
	Dec '29	281	200		67	267	17,689	100	5,303	22,991	23%
	Jan '30	282	147		67	214	17,818	100	5,403	23,221	23%
	Feb '30	283	139		67	206	17,737	100	5,503	23,239	24%
	Mar '30	284	127		67	194	17,672	100	5,603	23,275	24%
	Apr '30	285	88		67	155	17,601	100	5,703	23,304	24%
	May '30	286	46		67	113	17,638	100	5,803	23,441	25%
	Jun '30	287	24		67	91	17,661	90	5,893	23,553	25%
2030/31	Jul '30	288	13		67	80	17,674	50	5,943	23,616	25%
	Aug '30	289	19		67	86	17,693	30	5,973	23,665	25%
	Sep '30	290	37		67	104	17,730	10	5,983	23,712	25%
	Oct '30	291	45		67	112	17,762	0	5,978	23,740	25%
	Nov '30	292	71		67	138	17,710	0	5,978	23,687	25%
	Dec '30	293	200		67	267	17,831	100	6,078	23,909	25%
	Jan '31	294	147		67	214	17,765	100	6,178	23,942	26%
	Feb '31	295	139		67	206	17,816	100	6,278	24,094	26%
	Mar '31	296	127		67	194	17,840	100	6,378	24,218	26%
	Apr '31	297	88		67	155	17,905	100	6,478	24,382	27%
	May '31	298	46		67	113	17,889	100	6,578	24,466	27%
	Jun '31	299	24		67	91	17,775	90	6,668	24,442	27%
2031/32	Jul '31	300	13		67	80	17,647	50	6,718	24,364	28%
	Aug '31	301	19		67	86	17,579	30	6,748	24,327	28%
	Sep '31	302	37		67	104	17,534	10	6,757	24,291	28%
	Oct '31	303	45		67	112	17,523	0	6,757	24,279	28%
	Nov '31	304	71		67	138	17,533	0	6,757	24,289	28%
	Dec '31	305	200		67	267	17,338	100	6,857	24,194	28%
	Jan '32	306	147		67	214	17,460	100	6,957	24,417	28%
	Feb '32	307	139		67	206	17,568	100	7,057	24,625	29%
	Mar '32	308	127		67	194	17,599	100	7,157	24,755	29%
	Apr '32	309	88		67	155	17,655	100	7,257	24,912	29%
	May '32	310	46		67	113	17,696	100	7,357	25,052	29%
	Jun '32	311	24		67	91	17,698	90	7,447	25,144	30%

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

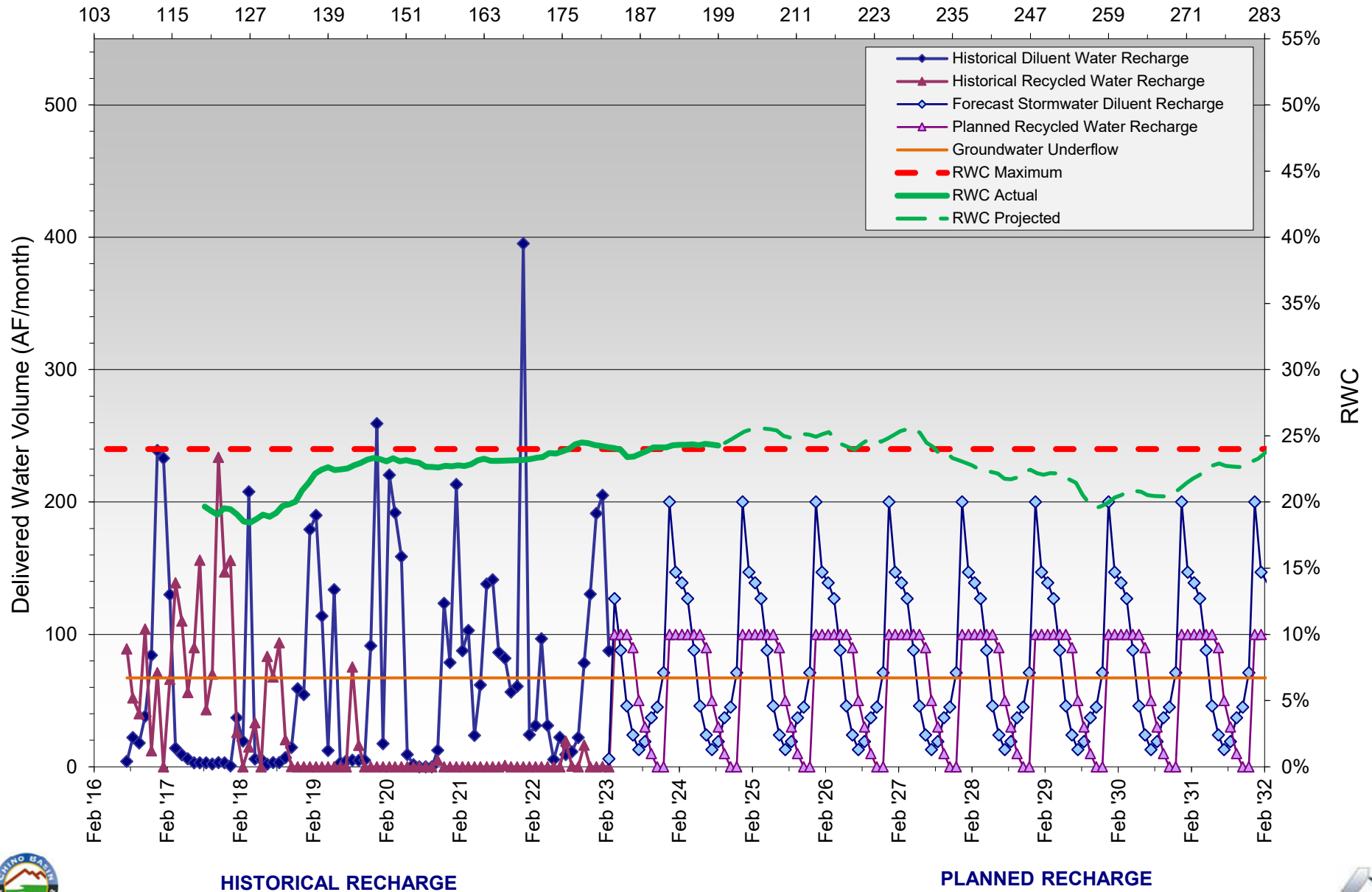
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan for Turner Basin Cells 1 & 2

Months Since Initial Recycled Water Delivery



RWC Management Plan for Turner Basin Cells 3 & 4

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Calculation of Recycled Water Contribution (RWC) from Historical Discharge Water (DW) and Recycled Water (RW) Deliveries												Period
Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	
2016/17	Jul '16	120	15	0	60	75	9,699	0	3,568	13,266	27%	
	Aug '16	121	1	0	60	61	9,726	0	3,333	13,058	26%	
	Sep '16	122	0	0	60	60	9,763	0	3,293	13,056	25%	
	Oct '16	123	1	0	60	61	9,759	0	3,293	13,052	25%	
	Nov '16	124	0	0	60	60	9,803	0	3,293	13,096	25%	
	Dec '16	125	316	0	60	376	10,165	0	3,227	13,392	24%	
	Jan '17	126	298	0	60	358	10,513	0	3,196	13,709	23%	
	Feb '17	127	171	0	60	231	10,735	8	3,183	13,918	23%	
	Mar '17	128	34	0	60	94	10,824	165	3,332	14,156	24%	
	Apr '17	129	23	0	60	83	10,904	99	3,423	14,327	24%	
	May '17	130	16	0	60	76	10,972	125	3,491	14,463	24%	
	Jun '17	131	8	274	60	341	11,303	10	3,501	14,804	24%	
2017/18	Jul '17	132	10	220	60	290	11,592	0	3,501	15,093	23%	
	Aug '17	133	21	79	60	160	11,742	13	3,514	15,256	23%	
	Sep '17	134	16	0	60	76	11,806	51	3,565	15,371	23%	
	Oct '17	135	1	0	60	60	11,863	4	3,569	15,432	23%	
	Nov '17	136	4	0	60	64	11,861	0	3,569	15,430	23%	
	Dec '17	137	2	0	60	61	11,860	0	3,569	15,429	23%	
	Jan '18	138	116	0	60	175	11,893	0	3,569	15,462	23%	
	Feb '18	139	75	0	60	134	12,018	13	3,582	15,600	23%	
	Mar '18	140	107	0	60	167	12,185	38	3,621	15,806	23%	
	Apr '18	141	4	0	60	63	12,244	139	3,760	16,004	23%	
	May '18	142	35	0	60	95	12,301	164	3,924	16,225	24%	
	Jun '18	143	14	0	60	74	12,347	138	4,062	16,409	25%	
2018/19	Jul '18	144	13	0	60	73	12,415	25	4,087	16,503	25%	
	Aug '18	145	6	0	60	66	12,476	65	4,152	16,628	25%	
	Sep '18	146	9	0	60	69	12,531	88	4,240	16,771	25%	
	Oct '18	147	28	0	60	88	12,582	87	4,261	16,843	25%	
	Nov '18	148	31	0	60	91	12,637	59	4,312	16,949	25%	
	Dec '18	149	90	0	60	150	12,737	20	4,332	17,069	25%	
	Jan '19	150	154	0	60	214	12,941	0	4,332	17,273	25%	
	Feb '19	151	189	0	60	249	13,121	0	4,332	17,454	25%	
	Mar '19	152	51	0	60	111	13,222	0	4,332	17,555	25%	
	Apr '19	153	5	0	60	65	13,285	0	4,332	17,618	25%	
	May '19	154	12	0	60	71	13,355	0	4,332	17,688	24%	
	Jun '19	155	3	0	60	63	13,418	0	4,332	17,751	24%	
2019/2020	Jul '19	156	0	0	60	60	13,478	0	4,332	17,810	24%	
	Aug '19	157	0	0	60	60	13,538	32	4,364	17,902	24%	
	Sep '19	158	0	0	60	60	13,597	32	4,397	17,994	24%	
	Oct '19	159	0	0	60	60	13,597	0	4,397	17,994	24%	
	Nov '19	160	161	0	60	221	13,756	35	4,432	18,188	24%	
	Dec '19	161	63	0	60	122	13,720	0	4,369	18,089	24%	
	Jan '20	162	22	0	60	82	13,557	0	4,242	17,799	24%	
	Feb '20	163	32	0	60	92	13,414	0	4,242	17,656	24%	
	Mar '20	164	104	0	60	163	13,404	0	4,198	17,602	24%	
	Apr '20	165	85	0	60	145	13,406	0	4,183	17,589	24%	
	May '20	166	13	0	60	73	13,393	0	4,113	17,506	23%	
	Jun '20	167	0	0	60	60	13,318	0	4,073	17,391	23%	
2020/21	Jul '20	168	0	0	60	60	13,223	0	4,067	17,290	24%	
	Aug '20	169	0	0	60	60	13,139	0	4,045	17,184	24%	
	Sep '20	170	0	0	60	60	13,085	0	4,028	17,113	24%	
	Oct '20	171	1	0	60	60	13,030	6	4,034	17,064	24%	
	Nov '20	172	7	0	60	67	12,998	162	4,195	17,193	24%	
	Dec '20	173	35	0	60	95	12,872	129	4,324	17,196	25%	
	Jan '21	174	107	0	60	166	12,978	45	4,368	17,346	25%	
	Feb '21	175	12	0	60	72	12,940	87	4,455	17,395	26%	
	Mar '21	176	103	0	60	163	12,994	54	4,509	17,502	26%	
	Apr '21	177	4	0	60	63	12,997	28	4,537	17,534	26%	
	May '21	178	5	0	60	65	13,003	47	4,584	17,587	26%	
	Jun '21	179	0	0	60	60	13,003	3	4,587	17,590	26%	
2021/22	Jul '21	180	3	0	60	63	13,005	0	4,587	17,593	26%	
	Aug '21	181	0	0	60	60	12,948	0	4,580	17,528	26%	
	Sep '21	182	3	0	60	62	12,765	18	4,413	17,178	26%	
	Oct '21	183	9	0	60	68	12,711	202	4,392	17,102	26%	
	Nov '21	184	17	0	60	76	12,661	135	4,430	17,092	26%	
	Dec '21	185	242	0	60	302	12,835	33	4,411	17,246	26%	
	Jan '22	186	25	0	60	85	12,774	64	4,403	17,177	26%	
	Feb '22	187	24	0	60	83	12,688	38	4,344	17,033	26%	
	Mar '22	188	69	0	60	129	12,631	36	4,345	16,977	26%	
	Apr '22	189	17	0	60	77	12,560	18	4,349	16,909	26%	
	May '22	190	8	0	60	68	12,529	64	4,357	16,886	26%	
	Jun '22	191	15	0	60	75	12,519	44	4,336	16,854	26%	



RWC Management Plan for Turner Basin Cells 3 & 4

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Calculation of Recycled Water Contribution (RWC) from Historical Inflow Water (DW) and Recycled Water (RW) Deliveries												Period
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC		
2022/23	Jul '22	192	16	0	60	76	12,510	47	4,332	16,842	26%	
	Aug '22	193	17	0	60	77	12,491	60	4,357	16,848	26%	
	Sep '22	194	60	0	60	120	12,520	0	4,333	16,853	26%	
	Oct '22	195	6	0	60	65	12,504	0	4,324	16,827	26%	
	Nov '22	196	102	0	60	162	12,576	0	4,319	16,894	26%	
	Dec '22	197	98	0	60	158	12,627	0	4,314	16,940	25%	
	Jan '23	198	155	0	60	215	12,767	0	4,314	17,080	25%	
	Feb '23	199	0	0	60	60	12,742	0	4,314	17,055	25%	
	Mar '23	200	72		60	132	12,800	50	4,364	17,163	25%	
	Apr '23	201	37		60	97	12,837	80	4,444	17,280	26%	
	May '23	202	18		60	78	12,855	100	4,544	17,398	26%	
	Jun '23	203	15		60	75	12,870	110	4,654	17,523	27%	
2023/24	Jul '23	204	16		60	76	12,886	100	4,754	17,639	27%	
	Aug '23	205	12		60	72	12,898	110	4,864	17,761	27%	
	Sep '23	206	18		60	78	12,892	100	4,857	17,748	27%	
	Oct '23	207	23		60	83	12,895	100	4,840	17,734	27%	
	Nov '23	208	40		60	100	12,918	80	4,831	17,748	27%	
	Dec '23	209	110		60	170	13,023	10	4,756	17,778	27%	
	Jan '24	210	91		60	151	13,098	30	4,647	17,744	26%	
	Feb '24	211	75		60	135	13,111	50	4,577	17,687	26%	
	Mar '24	212	72		60	132	13,133	50	4,580	17,712	26%	
	Apr '24	213	37		60	97	13,170	80	4,660	17,829	26%	
	May '24	214	18		60	78	13,165	100	4,592	17,756	26%	
	Jun '24	215	15		60	75	13,168	110	4,648	17,815	26%	
2024/25	Jul '24	216	16		60	76	13,173	100	4,748	17,920	26%	
	Aug '24	217	12		60	72	13,185	110	4,858	18,042	27%	
	Sep '24	218	18		60	78	13,203	100	4,958	18,160	27%	
	Oct '24	219	23		60	83	13,226	100	5,058	18,283	28%	
	Nov '24	220	40		60	100	13,266	80	5,138	18,403	28%	
	Dec '24	221	110		60	170	13,028	10	5,148	18,175	28%	
	Jan '25	222	91		60	151	13,115	30	5,178	18,292	28%	
	Feb '25	223	75		60	135	13,125	50	5,175	18,299	28%	
	Mar '25	224	72		60	132	13,126	50	5,070	18,195	28%	
	Apr '25	225	37		60	97	13,124	80	5,150	18,273	28%	
	May '25	226	18		60	78	13,142	100	5,250	18,391	29%	
	Jun '25	227	15		60	75	13,155	110	5,279	18,433	29%	
2025/26	Jul '25	228	16		60	76	13,084	100	5,294	18,377	29%	
	Aug '25	229	12		60	72	13,081	110	5,241	18,321	29%	
	Sep '25	230	18		60	78	13,025	100	5,290	18,314	29%	
	Oct '25	231	23		60	83	12,984	100	5,325	18,308	29%	
	Nov '25	232	40		60	100	12,980	80	5,402	18,381	29%	
	Dec '25	233	110		60	170	12,946	10	5,411	18,356	29%	
	Jan '26	234	91		60	151	12,955	30	5,441	18,395	30%	
	Feb '26	235	75		60	135	12,989	50	5,491	18,479	30%	
	Mar '26	236	72		60	132	13,014	50	5,541	18,554	30%	
	Apr '26	237	37		60	97	13,002	80	5,621	18,622	30%	
	May '26	238	18		60	78	12,987	100	5,721	18,707	31%	
	Jun '26	239	15		60	75	12,982	110	5,831	18,812	31%	



RWC Management Plan for Turner Basin Cells 3 & 4

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	240	16	60	76	12,983	100	5,931	18,913	31%	P L A N N E D
	Aug '26	241	12	60	72	12,994	110	6,041	19,034	32%	
	Sep '26	242	18	60	78	13,012	100	6,141	19,152	32%	
	Oct '26	243	23	60	83	13,034	100	6,241	19,274	32%	
	Nov '26	244	40	60	100	13,074	80	6,321	19,394	33%	
	Dec '26	245	110	60	170	12,868	10	6,331	19,198	33%	
	Jan '27	246	91	60	151	12,661	30	6,361	19,021	33%	
	Feb '27	247	75	60	135	12,565	50	6,403	18,967	34%	
	Mar '27	248	72	60	132	12,603	50	6,288	18,890	33%	
	Apr '27	249	37	60	97	12,617	80	6,269	18,885	33%	
	May '27	250	18	60	78	12,619	100	6,244	18,862	33%	
	Jun '27	251	15	60	75	12,352	110	6,344	18,695	34%	
2027/28	Jul '27	252	16	60	76	12,138	100	6,444	18,582	35%	
	Aug '27	253	12	60	72	12,050	110	6,541	18,590	35%	
	Sep '27	254	18	60	78	12,052	100	6,590	18,641	35%	
	Oct '27	255	23	60	83	12,074	100	6,685	18,759	36%	
	Nov '27	256	40	60	100	12,110	80	6,765	18,876	36%	
	Dec '27	257	110	60	170	12,219	10	6,775	18,994	36%	
	Jan '28	258	91	60	151	12,194	30	6,805	18,999	36%	
	Feb '28	259	75	60	135	12,194	50	6,842	19,036	36%	
	Mar '28	260	72	60	132	12,159	50	6,854	19,013	36%	
	Apr '28	261	37	60	97	12,192	80	6,795	18,987	36%	
	May '28	262	18	60	78	12,175	100	6,730	18,906	36%	
	Jun '28	263	15	60	75	12,176	110	6,702	18,879	36%	
2028/29	Jul '28	264	16	60	76	12,180	100	6,777	18,957	36%	
	Aug '28	265	12	60	72	12,185	110	6,823	19,008	36%	
	Sep '28	266	18	60	78	12,194	100	6,834	19,029	36%	
	Oct '28	267	23	60	83	12,189	100	6,848	19,037	36%	
	Nov '28	268	40	60	100	12,198	80	6,869	19,066	36%	
	Dec '28	269	110	60	170	12,218	10	6,858	19,076	36%	
	Jan '29	270	91	60	151	12,155	30	6,888	19,043	36%	
	Feb '29	271	75	60	135	12,041	50	6,938	18,979	37%	
	Mar '29	272	72	60	132	12,062	50	6,988	19,050	37%	
	Apr '29	273	37	60	97	12,094	80	7,068	19,162	37%	
	May '29	274	18	60	78	12,100	100	7,168	19,268	37%	
	Jun '29	275	15	60	75	12,112	110	7,278	19,390	38%	
2029/30	Jul '29	276	16	60	76	12,128	100	7,378	19,506	38%	
	Aug '29	277	12	60	72	12,140	110	7,456	19,596	38%	
	Sep '29	278	18	60	78	12,158	100	7,524	19,682	38%	
	Oct '29	279	23	60	83	12,181	100	7,624	19,805	38%	
	Nov '29	280	40	60	100	12,060	80	7,669	19,728	39%	
	Dec '29	281	110	60	170	12,107	10	7,679	19,786	39%	
	Jan '30	282	91	60	151	12,176	30	7,709	19,885	39%	
	Feb '30	283	75	60	135	12,219	50	7,759	19,978	39%	
	Mar '30	284	72	60	132	12,188	50	7,809	19,996	39%	
	Apr '30	285	37	60	97	12,139	80	7,889	20,028	39%	
	May '30	286	18	60	78	12,144	100	7,989	20,132	40%	
	Jun '30	287	15	60	75	12,159	110	8,099	20,257	40%	
2030/31	Jul '30	288	16	60	76	12,175	100	8,199	20,373	40%	
	Aug '30	289	12	60	72	12,187	110	8,309	20,495	41%	
	Sep '30	290	18	60	78	12,205	100	8,409	20,613	41%	
	Oct '30	291	23	60	83	12,227	100	8,503	20,730	41%	
	Nov '30	292	40	60	100	12,260	80	8,421	20,682	41%	
	Dec '30	293	110	60	170	12,335	10	8,303	20,638	40%	
	Jan '31	294	91	60	151	12,320	30	8,288	20,608	40%	
	Feb '31	295	75	60	135	12,383	50	8,252	20,634	40%	
	Mar '31	296	72	60	132	12,352	50	8,248	20,600	40%	
	Apr '31	297	37	60	97	12,385	80	8,300	20,685	40%	
	May '31	298	18	60	78	12,398	100	8,353	20,750	40%	
	Jun '31	299	15	60	75	12,413	110	8,459	20,872	41%	
2031/32	Jul '31	300	16	60	76	12,426	100	8,559	20,985	41%	
	Aug '31	301	12	60	72	12,438	110	8,669	21,107	41%	
	Sep '31	302	18	60	78	12,453	100	8,751	21,204	41%	
	Oct '31	303	23	60	83	12,468	100	8,649	21,117	41%	
	Nov '31	304	40	60	100	12,491	80	8,594	21,085	41%	
	Dec '31	305	110	60	170	12,359	10	8,572	20,930	41%	
	Jan '32	306	91	60	151	12,425	30	8,537	20,962	41%	
	Feb '32	307	75	60	135	12,476	50	8,549	21,025	41%	
	Mar '32	308	72	60	132	12,479	50	8,563	21,042	41%	
	Apr '32	309	37	60	97	12,499	80	8,625	21,124	41%	
	May '32	310	18	60	78	12,509	100	8,661	21,169	41%	
	Jun '32	311	15	60	75	12,509	110	8,727	21,235	41%	

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

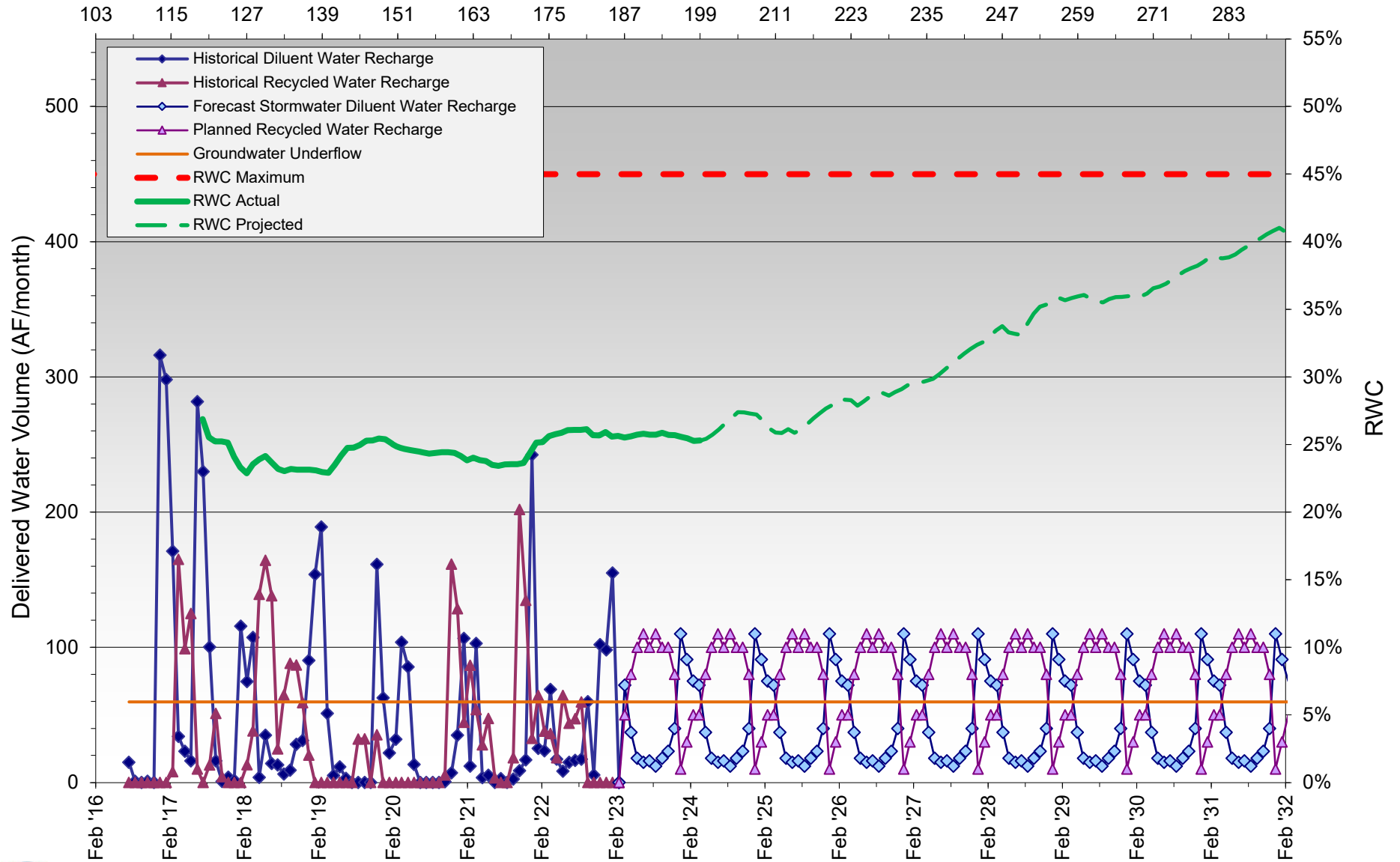
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RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan - Turner Basin Cells 3 & 4

Months Since Initial Recycled Water Delivery



HISTORICAL RECHARGE

PLANNED RECHARGE



RWC Management Plan for Victoria Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	70	0	0	139	139	13,119	0	5,225	18,344	28%
	Aug '16	71	0	0	139	139	13,255	0	5,225	18,480	28%
	Sep '16	72	0	0	139	139	13,391	53	5,278	18,669	28%
	Oct '16	73	10	0	139	149	13,532	142	5,420	18,952	29%
	Nov '16	74	24	7	139	170	13,698	218	5,638	19,336	29%
	Dec '16	75	185	0	139	324	13,933	106	5,744	19,677	29%
	Jan '17	76	327	0	278	605	14,523	0	5,744	20,267	28%
	Feb '17	77	65	0	278	343	14,796	53	5,797	20,593	28%
	Mar '17	78	18	0	278	296	15,084	219	6,016	21,100	29%
	Apr '17	79	0	0	278	278	15,327	317	6,333	21,660	29%
	May '17	80	13	0	278	291	15,611	312	6,645	22,256	30%
	Jun '17	81	0	121	278	399	16,001	201	6,846	22,847	30%
2017/18	Jul '17	82	0	235	278	513	16,515	140	6,986	23,501	30%
	Aug '17	83	4	20	278	302	16,817	239	7,225	24,042	30%
	Sep '17	84	0	130	278	408	17,220	167	7,392	24,612	30%
	Oct '17	85	0	150	278	428	17,639	44	7,436	25,075	30%
	Nov '17	86	0	0	278	278	17,868	40	7,476	25,344	29%
	Dec '17	87	0	4	278	282	18,084	99	7,575	25,659	30%
	Jan '18	88	57	36	278	370	18,275	7	7,581	25,856	29%
	Feb '18	89	9	0	278	287	18,500	33	7,614	26,115	29%
	Mar '18	90	9	0	278	287	18,785	25	7,639	26,424	29%
	Apr '18	91	40	0	278	318	19,096	0	7,639	26,735	29%
	May '18	92	3	0	278	281	19,331	0	7,639	26,970	28%
	Jun '18	93	0	0	278	278	19,606	0	7,639	27,245	28%
2018/19	Jul '18	94	0	0	278	278	19,881	159	7,799	27,679	28%
	Aug '18	95	0	0	278	278	20,156	191	7,989	28,145	28%
	Sep '18	96	0	0	278	278	20,432	159	8,149	28,580	29%
	Oct '18	97	44	0	278	322	20,749	104	8,253	29,003	28%
	Nov '18	98	33	0	278	311	21,025	83	8,336	29,361	28%
	Dec '18	99	46	0	278	324	21,275	98	8,435	29,709	28%
	Jan '19	100	252	0	278	530	21,790	91	8,525	30,315	28%
	Feb '19	101	372	0	278	650	22,345	9	8,534	30,879	28%
	Mar '19	102	223	0	278	501	22,833	76	8,610	31,444	27%
	Apr '19	103	1	0	278	279	23,109	298	8,908	32,017	28%
	May '19	104	46	0	278	324	23,430	251	9,159	32,589	28%
	Jun '19	105	0	0	278	278	23,708	319	9,478	33,186	29%
2019/20	Jul '19	106	0	0	278	278	23,985	160	9,638	33,623	29%
	Aug '19	107	0	344	278	622	24,607	142	9,780	34,387	28%
	Sep '19	108	0	501	278	779	25,386	49	9,829	35,215	28%
	Oct '19	109	0	177	278	455	25,802	116	9,946	35,748	28%
	Nov '19	110	63	63	278	403	26,187	75	10,020	36,207	28%
	Dec '19	111	117	0	278	395	26,492	27	10,047	36,539	27%
	Jan '20	112	0	0	278	278	26,617	35	10,082	36,699	27%
	Feb '20	113	0	0	278	278	26,721	68	10,150	36,871	28%
	Mar '20	114	78	0	278	356	27,077	85	10,235	37,313	27%
	Apr '20	115	91	0	278	369	27,426	92	10,327	37,753	27%
	May '20	116	3	0	278	281	27,708	66	10,393	38,100	27%
	Jun '20	117	0	0	278	278	27,985	136	10,528	38,513	27%
2020/21	Jul '20	118	0	0	278	278	28,260	188	10,716	38,976	27%
	Aug '20	119	0	0	278	278	28,536	169	10,885	39,421	28%
	Sep '20	120	0	0	278	278	28,812	176	10,994	39,806	28%
	Oct '20	121	0	0	278	278	28,936	183	11,024	39,960	28%
	Nov '20	122	32	0	278	310	29,073	105	11,012	40,085	27%
	Dec '20	123	44	0	278	322	29,014	37	11,007	40,021	28%
	Jan '21	124	59	0	278	337	29,193	32	10,953	40,146	27%
	Feb '21	125	6	0	278	284	29,266	83	10,969	40,235	27%
	Mar '21	126	7	0.0	278	285	29,354	35	10,965	40,319	27%
	Apr '21	127	0	0.0	278	278	29,488	0	10,965	40,453	27%
	May '21	128	0	0.0	278	278	29,552	0	10,824	40,376	27%
	Jun '21	129	0	0	278	278	29,688	0	10,763	40,451	27%
2021/22	Jul '21	130	2	0	278	280	29,825	0	10,701	40,527	26%
	Aug '21	131	1	0	278	279	29,842	0	10,649	40,491	26%
	Sep '21	132	2	0	278	280	29,825	25	10,674	40,499	26%
	Oct '21	133	2	0	278	280	29,935	244	10,918	40,854	27%
	Nov '21	134	0	0	278	278	30,050	98	11,002	41,051	27%
	Dec '21	135	314	0	278	592	30,493	95	11,071	41,565	27%
	Jan '22	136	0	0	278	278	30,621	172	11,244	41,865	27%
	Feb '22	137	6	0	278	284	30,762	256	11,499	42,261	27%
	Mar '22	138	24	0	278	302	30,906	232	11,732	42,638	28%
	Apr '22	139	17	0	278	295	30,966	277	11,991	42,957	28%
	May '22	140	0	0	278	278	31,086	421	12,141	43,226	28%
	Jun '22	141	0	0	278	278	31,222	129	12,048	43,269	28%

HISTORICAL

ACTUAL



RWC Management Plan for Victoria Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Calculation of Recycled Water Contribution (RW) from Historical Effluent Water (DW) and Recycled Water (RW) Deliveries												Period
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC		
2022/23	Jul '22	142	0	0	278	278	31,358	62	12,016	43,373	28%	
	Aug '22	143	2	0	278	280	31,494	0	11,898	43,391	27%	
	Sep '22	144	28	0	278	306	31,659	0	11,843	43,502	27%	
	Oct '22	145	8	0	278	286	31,806	53	11,765	43,570	27%	
	Nov '22	146	89	0	278	367	32,027	153	11,846	43,874	27%	
	Dec '22	147	106	0	278	384	32,254	85	11,910	44,164	27%	
	Jan '23	148	375	0	278	653	32,732	22	11,920	44,652	27%	
	Feb '23	149	1	0	278	279	32,862	120	12,030	44,892	27%	
	Mar '23	150	45		278	323	33,039	210	12,183	45,223	27%	
	Apr '23	151	23		278	301	33,200	230	12,315	45,516	27%	
	May '23	152	12		278	290	33,346	240	12,462	45,809	27%	
	Jun '23	153	2		278	280	33,486	250	12,630	46,117	27%	
	Jul '23	154	2		278	280	33,626	250	12,806	46,432	28%	
	Aug '23	155	2		278	280	33,765	250	13,014	46,779	28%	
	Sep '23	156	5		278	283	33,907	250	13,218	47,125	28%	
	Oct '23	157	15		278	293	34,054	240	13,458	47,512	28%	
	Nov '23	158	27		278	305	34,208	230	13,688	47,896	29%	
	Dec '23	159	92		278	370	34,429	160	13,730	48,159	29%	
	Jan '24	160	90		278	368	34,656	170	13,742	48,398	28%	
	Feb '24	161	60		278	338	34,818	200	13,751	48,569	28%	
	Mar '24	162	45		278	323	34,903	210	13,819	48,722	28%	
	Apr '24	163	23		278	301	35,050	230	13,799	48,849	28%	
	May '24	164	12		278	290	35,199	240	13,825	49,024	28%	
	Jun '24	165	2		278	280	35,338	250	13,931	49,269	28%	
	Jul '24	166	2		278	280	35,477	250	14,090	49,567	28%	
	Aug '24	167	2		278	280	35,613	250	14,233	49,846	29%	
	Sep '24	168	5		278	283	35,755	250	14,328	50,083	29%	
	Oct '24	169	15		278	293	35,906	240	14,493	50,399	29%	
	Nov '24	170	27		278	305	36,015	230	14,719	50,734	29%	
	Dec '24	171	92		278	370	36,093	160	14,879	50,973	29%	
	Jan '25	172	90		278	368	36,304	170	14,986	51,291	29%	
	Feb '25	173	60		278	338	36,463	200	15,129	51,593	29%	
	Mar '25	174	45		278	323	36,635	210	15,260	51,896	29%	
	Apr '25	175	23		278	301	36,798	230	15,363	52,161	29%	
	May '25	176	12		278	290	36,936	240	15,462	52,398	30%	
	Jun '25	177	2		278	280	37,076	250	15,680	52,756	30%	
	Jul '25	178	2		278	280	37,213	250	15,791	53,004	30%	
	Aug '25	179	2		278	280	37,353	250	15,876	53,229	30%	
	Sep '25	180	5		278	283	37,460	250	15,990	53,450	30%	
	Oct '25	181	15		278	293	37,579	240	16,129	53,708	30%	
	Nov '25	182	27		278	305	37,745	230	16,325	54,070	30%	
	Dec '25	183	92		278	370	37,890	160	16,425	54,315	30%	
	Jan '26	184	90		278	368	38,032	170	16,595	54,627	30%	
	Feb '26	185	60		278	338	38,221	200	16,795	55,016	31%	
	Mar '26	186	45		278	323	38,326	210	17,005	55,331	31%	
	Apr '26	187	23		278	301	38,487	230	17,235	55,722	31%	
	May '26	188	12		278	290	38,636	240	17,475	56,111	31%	
	Jun '26	189	2		278	280	38,774	250	17,725	56,499	31%	



RWC Management Plan for Victoria Basin

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	190	2	278	280	38,915	250	17,975	56,890	32%	P L A N N E D
	Aug '26	191	2	278	280	39,056	250	18,225	57,282	32%	
	Sep '26	192	5	278	283	39,200	250	18,422	57,623	32%	
	Oct '26	193	15	278	293	39,344	240	18,520	57,865	32%	
	Nov '26	194	27	278	305	39,479	230	18,532	58,012	32%	
	Dec '26	195	92	278	370	39,526	160	18,586	58,112	32%	
	Jan '27	196	90	278	368	39,289	170	18,756	58,045	32%	
	Feb '27	197	60	278	338	39,284	200	18,903	58,187	32%	
	Mar '27	198	45	278	323	39,311	210	18,894	58,205	32%	
	Apr '27	199	23	278	301	39,334	230	18,807	58,141	32%	
	May '27	200	12	278	290	39,333	240	18,735	58,068	32%	
	Jun '27	201	2	278	280	39,214	250	18,784	57,998	32%	
2027/28	Jul '27	202	2	278	280	38,980	250	18,894	57,874	33%	
	Aug '27	203	2	278	280	38,958	250	18,905	57,863	33%	
	Sep '27	204	5	278	283	38,833	250	18,988	57,821	33%	
	Oct '27	205	15	278	293	38,698	240	19,185	57,883	33%	
	Nov '27	206	27	278	305	38,725	230	19,374	58,100	33%	
	Dec '27	207	92	278	370	38,813	160	19,436	58,249	33%	
	Jan '28	208	90	278	368	38,811	170	19,599	58,410	34%	
	Feb '28	209	60	278	338	38,862	200	19,766	58,628	34%	
	Mar '28	210	45	278	323	38,899	210	19,951	58,850	34%	
	Apr '28	211	23	278	301	38,882	230	20,181	59,063	34%	
	May '28	212	12	278	290	38,891	240	20,421	59,312	34%	
	Jun '28	213	2	278	280	38,893	250	20,671	59,564	35%	
2028/29	Jul '28	214	2	278	280	38,895	250	20,762	59,657	35%	
	Aug '28	215	2	278	280	38,897	250	20,821	59,718	35%	
	Sep '28	216	5	278	283	38,902	250	20,911	59,813	35%	
	Oct '28	217	15	278	293	38,873	240	21,047	59,920	35%	
	Nov '28	218	27	278	305	38,868	230	21,194	60,062	35%	
	Dec '28	219	92	278	370	38,914	160	21,256	60,169	35%	
	Jan '29	220	90	278	368	38,752	170	21,335	60,087	36%	
	Feb '29	221	60	278	338	38,440	200	21,526	59,966	36%	
	Mar '29	222	45	278	323	38,262	210	21,660	59,921	36%	
	Apr '29	223	23	278	301	38,284	230	21,592	59,876	36%	
	May '29	224	12	278	290	38,250	240	21,581	59,831	36%	
	Jun '29	225	2	278	280	38,252	250	21,512	59,764	36%	
2029/30	Jul '29	226	2	278	280	38,254	250	21,602	59,856	36%	
	Aug '29	227	2	278	280	37,912	250	21,710	59,622	36%	
	Sep '29	228	5	278	283	37,416	250	21,911	59,327	37%	
	Oct '29	229	15	278	293	37,254	240	22,035	59,288	37%	
	Nov '29	230	27	278	305	37,155	230	22,190	59,345	37%	
	Dec '29	231	92	278	370	37,131	160	22,323	59,454	38%	
	Jan '30	232	90	278	368	37,221	170	22,458	59,679	38%	
	Feb '30	233	60	278	338	37,281	200	22,590	59,871	38%	
	Mar '30	234	45	278	323	37,247	210	22,715	59,962	38%	
	Apr '30	235	23	278	301	37,179	230	22,854	60,033	38%	
	May '30	236	12	278	290	37,188	240	23,028	60,215	38%	
	Jun '30	237	2	278	280	37,190	250	23,142	60,332	38%	
2030/31	Jul '30	238	2	278	280	37,192	250	23,204	60,396	38%	
	Aug '30	239	2	278	280	37,194	250	23,285	60,479	39%	
	Sep '30	240	5	278	283	37,199	250	23,359	60,558	39%	
	Oct '30	241	15	278	293	37,214	240	23,417	60,630	39%	
	Nov '30	242	27	278	305	37,209	230	23,541	60,750	39%	
	Dec '30	243	92	278	370	37,257	160	23,664	60,921	39%	
	Jan '31	244	90	278	368	37,289	170	23,802	61,091	39%	
	Feb '31	245	60	278	338	37,343	200	23,919	61,262	39%	
	Mar '31	246	45	278	323	37,380	210	24,094	61,474	39%	
	Apr '31	247	23	278	301	37,403	230	24,324	61,727	39%	
	May '31	248	12	278	290	37,415	240	24,564	61,979	40%	
	Jun '31	249	2	278	280	37,417	250	24,814	62,231	40%	
2031/32	Jul '31	250	2	278	280	37,417	250	25,064	62,481	40%	
	Aug '31	251	2	278	280	37,418	250	25,314	62,732	40%	
	Sep '31	252	5	278	283	37,421	250	25,539	62,960	41%	
	Oct '31	253	15	278	293	37,434	240	25,535	62,969	41%	
	Nov '31	254	27	278	305	37,461	230	25,667	63,128	41%	
	Dec '31	255	92	278	370	37,239	160	25,732	62,971	41%	
	Jan '32	256	90	278	368	37,329	170	25,729	63,059	41%	
	Feb '32	257	60	278	338	37,384	200	25,674	63,058	41%	
	Mar '32	258	45	278	323	37,405	210	25,652	63,057	41%	
	Apr '32	259	23	278	301	37,411	230	25,604	63,016	41%	
	May '32	260	12	278	290	37,423	240	25,423	62,847	40%	
	Jun '32	261	2	278	280	37,425	250	25,544	62,970	41%	

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.

RW = Recycled Water

RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.

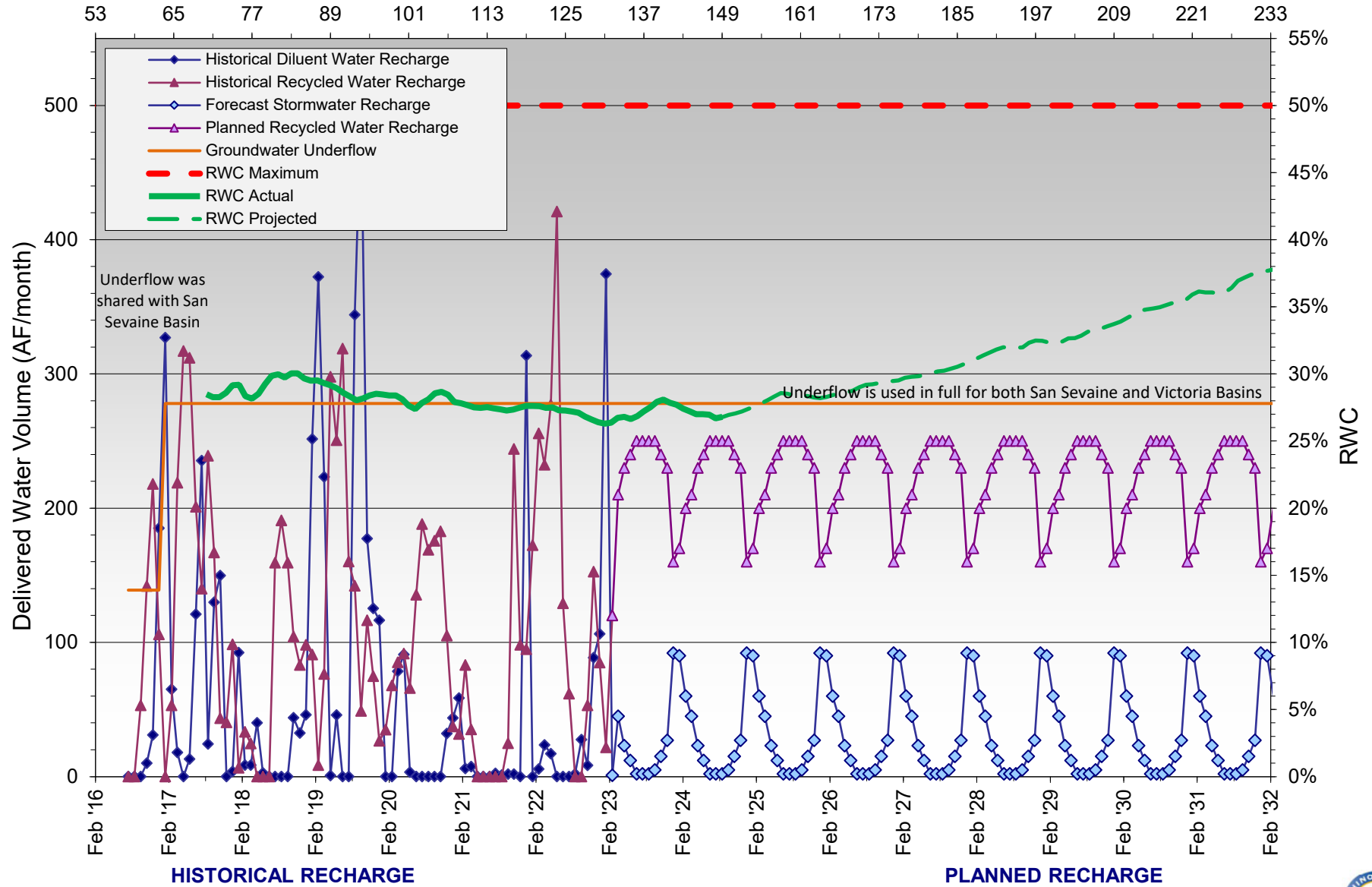
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period



RWC Management Plan - Victoria Basin

Months Since Initial Recycled Water Delivery



RWC Management Plan for San Sevaine Basin 1 through 5

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2016/17	Jul '16	72	0	0	139	139	23,171	0	1,759	24,930	7%	HISTORICAL
	Aug '16	73	0	0	139	139	22,280	0	1,759	24,039	7%	
	Sep '16	74	0	0	139	139	21,413	0	1,759	23,172	8%	
	Oct '16	75	16	0	139	155	20,557	0	1,759	22,316	8%	
	Nov '16	76	12	14	139	165	20,157	0	1,759	21,916	8%	
	Dec '16	77	156	0	139	295	19,433	0	1,759	21,192	8%	
	Jan '17	78	488	0	139	627	19,123	0	1,759	20,882	8%	
	Feb '17	79	93	0	278	371	19,152	0	1,759	20,911	8%	
	Mar '17	80	3	0	278	281	19,428	0	1,759	21,187	8%	
	Apr '17	81	1	0	278	279	19,704	0	1,759	21,463	8%	
	May '17	82	16	0	278	294	19,967	0	1,759	21,726	8%	
	Jun '17	83	0	526	278	804	20,741	0	1,759	22,500	8%	
2017/18	Jul '17	84	0	567	278	845	21,585	0	1,759	23,344	8%	
	Aug '17	85	48	117	278	443	22,028	0	1,759	23,787	7%	
	Sep '17	86	0	151	278	429	22,454	0	1,759	24,213	7%	
	Oct '17	87	0	503	278	781	23,229	0	1,759	24,988	7%	
	Nov '17	88	0	54	278	332	23,524	0	1,759	25,283	7%	
	Dec '17	89	0	1,104	278	1,382	24,831	0	1,759	26,590	7%	
	Jan '18	90	104	893	278	1,275	25,553	0	1,759	27,312	6%	
	Feb '18	91	21	0	278	299	25,823	0	1,759	27,582	6%	
	Mar '18	92	128	0	278	405	26,228	0	1,759	27,987	6%	
	Apr '18	93	0	0	278	278	26,506	0	1,759	28,265	6%	
	May '18	94	4	0	278	282	26,741	0	1,759	28,500	6%	
	Jun '18	95	0	0	278	278	27,019	0	1,759	28,778	6%	
2018/19	Jul '18	96	2	0	278	280	27,299	0	1,759	29,058	6%	
	Aug '18	97	0	0	278	278	27,577	0	1,759	29,336	6%	
	Sep '18	98	0	0	278	278	27,855	0	1,759	29,614	6%	
	Oct '18	99	7	0	278	285	28,140	0	1,759	29,899	6%	
	Nov '18	100	31	0	278	309	28,441	0	1,759	30,200	6%	
	Dec '18	101	45	0	278	323	28,678	0	1,759	30,437	6%	
	Jan '19	102	318	0	278	596	29,258	0	1,759	31,017	6%	
	Feb '19	103	429	0	278	706	29,858	0	1,759	31,617	6%	
	Mar '19	104	313	0	278	591	30,440	0	1,759	32,199	5%	
	Apr '19	105	0	0	278	278	30,718	0	1,759	32,477	5%	
	May '19	106	25	0	278	303	31,021	0	1,759	32,780	5%	
	Jun '19	107	0	857	278	1,134	32,156	0	1,759	33,915	5%	
2019/20	Jul '19	108	0	766	278	1,044	33,200	0	1,759	34,959	5%	
	Aug '19	109	0	597	278	875	34,075	0	1,759	35,834	5%	
	Sep '19	110	0	117	278	395	34,469	0	1,759	36,228	5%	
	Oct '19	111	0	0	278	278	34,691	0	1,759	36,450	5%	
	Nov '19	112	155	113	278	546	35,216	0	1,759	36,975	5%	
	Dec '19	113	211	32	278	520	35,403	0	1,759	37,162	5%	
	Jan '20	114	31	52	278	361	35,474	0	1,759	37,233	5%	
	Feb '20	115	8	0	278	286	35,537	0	1,759	37,296	5%	
	Mar '20	116	254	0	278	532	36,053	0	1,759	37,812	5%	
	Apr '20	117	363	0	278	640	36,640	0	1,759	38,399	5%	
	May '20	118	3	0	278	281	36,921	0	1,759	38,680	5%	
	Jun '20	119	0	0	278	278	37,199	0	1,759	38,958	5%	
2020/21	Jul '20	120	0	0	278	278	37,477	0	1,709	39,186	4%	
	Aug '20	121	0	0	278	278	37,755	267	1,932	39,687	5%	
	Sep '20	122	0	0	278	278	38,033	201	2,091	40,123	5%	
	Oct '20	123	0	0	278	278	38,216	260	2,278	40,494	6%	
	Nov '20	124	55	0	278	333	38,329	290	2,555	40,883	6%	
	Dec '20	125	161	0	278	439	38,052	211	2,734	40,786	7%	
	Jan '21	126	143	0	278	421	38,320	133	2,795	41,116	7%	
	Feb '21	127	24	0	278	302	38,341	221	3,016	41,357	7%	
	Mar '21	128	61	0	278	339	38,408	202	3,218	41,626	8%	
	Apr '21	129	0	0	278	278	38,547	275	3,493	42,040	8%	
	May '21	130	0	0	278	278	38,141	247	3,704	41,845	9%	
	Jun '21	131	0	0	278	278	37,111	325	3,995	41,105	10%	
2021/22	Jul '21	132	6	0	278	283	36,244	316	4,197	40,442	10%	
	Aug '21	133	0	0	278	278	36,372	329	4,436	40,808	11%	
	Sep '21	134	0	0	278	278	36,306	141	4,577	40,883	11%	
	Oct '21	135	7	0	278	285	36,412	250	4,827	41,240	12%	
	Nov '21	136	0	0	278	278	36,519	282	5,109	41,628	12%	
	Dec '21	137	732	0	278	1,010	37,370	131	5,240	42,610	12%	
	Jan '22	138	0	0	278	278	37,454	409	5,490	42,944	13%	
	Feb '22	139	11	0	278	288	37,549	270	5,686	43,235	13%	
	Mar '22	140	66	0	278	344	37,594	281	5,951	43,545	14%	
	Apr '22	141	26	0	278	304	37,683	304	6,251	43,935	14%	
	May '22	142	0	0	278	278	37,822	326	6,575	44,397	15%	
	Jun '22	143	0	0	278	278	37,961	428	6,948	44,910	15%	



RWC Management Plan for San Sevaine Basin 1 through 5

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120- Month Total (AF)	RW (AF)	RW 120- Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2022/23	Jul '22	144	0	0	278	278	38,100	450	7,276	45,377	16%	A C T U A L
	Aug '22	145	3	0	278	281	38,241	408	7,600	45,841	17%	
	Sep '22	146	43	0	278	321	38,423	384	7,945	46,368	17%	
	Oct '22	147	8	0	278	286	38,569	408	8,290	46,859	18%	
	Nov '22	148	222	0	278	500	38,916	229	8,453	47,369	18%	
	Dec '22	149	367	0	278	645	39,343	112	8,564	47,907	18%	
	Jan '23	150	426	0	278	704	39,887	2	8,507	48,394	18%	
	Feb '23	151	100	0	278	378	40,117	82	8,571	48,688	18%	
	Mar '23	152	107		278	385	40,350	140	8,658	49,008	18%	
	Apr '23	153	104		278	382	40,588	150	8,767	49,355	18%	
May '23	154	17		278	295	40,740	230	8,971	49,710	18%		
Jun '23	155	2		278	280	40,881	250	9,219	50,099	18%		
2023/24	Jul '23	156	1		278	279	41,021	250	9,469	50,489	19%	P L A N N E D
	Aug '23	157	3		278	281	41,163	250	9,719	50,881	19%	
	Sep '23	158	6		278	284	41,308	240	9,805	51,112	19%	
	Oct '23	159	17		278	295	41,453	230	9,966	51,418	19%	
	Nov '23	160	41		278	319	41,594	210	10,167	51,760	20%	
	Dec '23	161	181		278	459	41,908	70	10,237	52,144	20%	
	Jan '24	162	153		278	431	42,200	100	10,325	52,524	20%	
	Feb '24	163	89		278	367	42,359	160	10,469	52,827	20%	
	Mar '24	164	107		278	385	42,585	140	10,609	53,193	20%	
	Apr '24	165	104		278	382	42,810	150	10,757	53,567	20%	
	May '24	166	17		278	295	42,966	230	10,975	53,941	20%	
	Jun '24	167	2		278	280	43,107	250	11,225	54,332	21%	
	2024/25	Jul '24	168	1		278	279	43,247	250	11,475	54,722	
Aug '24		169	3		278	281	43,383	250	11,725	55,108	21%	
Sep '24		170	6		278	284	43,527	240	11,964	55,491	22%	
Oct '24		171	17		278	295	43,683	230	12,194	55,877	22%	
Nov '24		172	41		278	319	43,845	210	12,404	56,249	22%	
Dec '24		173	181		278	459	43,918	70	12,474	56,392	22%	
Jan '25		174	153		278	431	44,216	100	12,574	56,790	22%	
Feb '25		175	89		278	367	44,405	160	12,734	57,138	22%	
Mar '25		176	107		278	385	44,649	140	12,874	57,522	22%	
Apr '25		177	104		278	382	44,892	150	13,024	57,915	22%	
May '25		178	17		278	295	45,031	230	13,254	58,284	23%	
Jun '25		179	2		278	280	45,172	250	13,504	58,675	23%	
2025/26	Jul '25	180	1		278	279	45,303	250	13,754	59,056	23%	
	Aug '25	181	3		278	281	45,445	250	14,004	59,448	24%	
	Sep '25	182	6		278	284	45,537	240	14,244	59,780	24%	
	Oct '25	183	17		278	295	45,646	230	14,474	60,119	24%	
	Nov '25	184	41		278	319	45,825	210	14,684	60,508	24%	
	Dec '25	185	181		278	459	46,064	70	14,754	60,818	24%	
	Jan '26	186	153		278	431	46,112	100	14,854	60,966	24%	
	Feb '26	187	89		278	367	46,307	160	15,014	61,321	24%	
	Mar '26	188	107		278	385	46,465	140	15,154	61,619	25%	
	Apr '26	189	104		278	382	46,679	150	15,304	61,983	25%	
	May '26	190	17		278	295	46,834	230	15,534	62,368	25%	
	Jun '26	191	2		278	280	46,975	250	15,784	62,759	25%	



RWC Management Plan for San Sevaine Basin 1 through 5

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

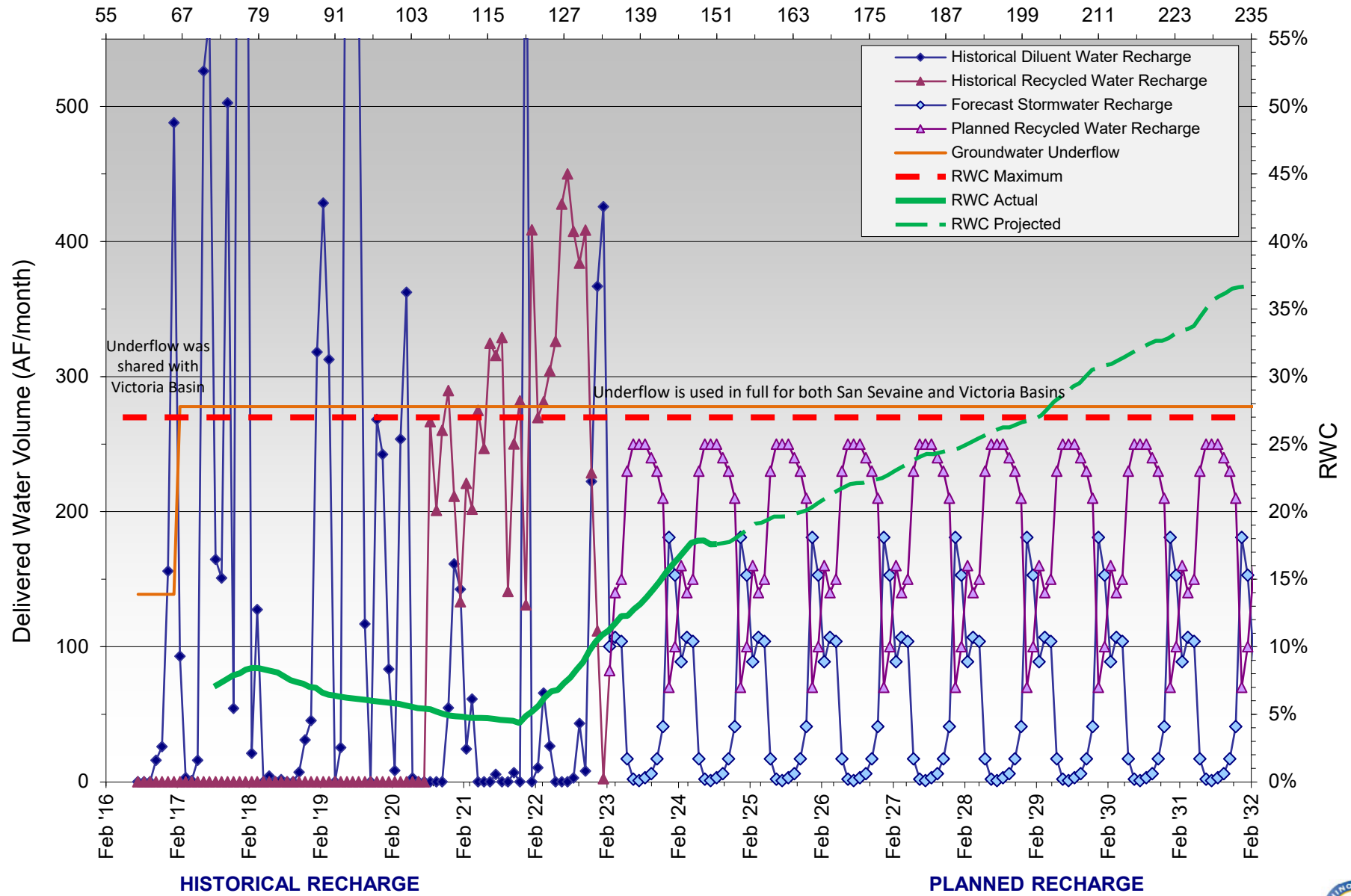
Date	No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2026/27	Jul '26	192	1		278	279	47,115	250	16,034	63,149	25%
	Aug '26	193	3		278	281	47,257	250	16,284	63,541	26%
	Sep '26	194	6		278	284	47,402	240	16,524	63,926	26%
	Oct '26	195	17		278	295	47,542	230	16,754	64,296	26%
	Nov '26	196	41		278	319	47,696	210	16,964	64,659	26%
	Dec '26	197	181		278	459	47,860	70	17,034	64,893	26%
	Jan '27	198	153		278	431	47,664	100	17,134	64,797	26%
	Feb '27	199	89		278	367	47,660	160	17,294	64,953	27%
	Mar '27	200	107		278	385	47,764	140	17,434	65,197	27%
	Apr '27	201	104		278	382	47,867	150	17,584	65,450	27%
	May '27	202	17		278	295	47,868	230	17,814	65,681	27%
	Jun '27	203	2		278	280	47,344	250	18,064	65,407	28%
2027/28	Jul '27	204	1		278	279	46,778	250	18,314	65,091	28%
	Aug '27	205	3		278	281	46,616	250	18,564	65,180	28%
	Sep '27	206	6		278	284	46,472	240	18,804	65,275	29%
	Oct '27	207	17		278	295	45,986	230	19,034	65,019	29%
	Nov '27	208	41		278	319	45,973	210	19,244	65,216	30%
	Dec '27	209	181		278	459	45,050	70	19,314	64,363	30%
	Jan '28	210	153		278	431	44,206	100	19,414	63,619	31%
	Feb '28	211	89		278	367	44,274	160	19,574	63,847	31%
	Mar '28	212	107		278	385	44,253	140	19,714	63,967	31%
	Apr '28	213	104		278	382	44,357	150	19,864	64,221	31%
	May '28	214	17		278	295	44,370	230	20,094	64,463	31%
	Jun '28	215	2		278	280	44,372	250	20,344	64,715	31%
2028/29	Jul '28	216	1		278	279	44,371	250	20,594	64,965	32%
	Aug '28	217	3		278	281	44,374	250	20,844	65,218	32%
	Sep '28	218	6		278	284	44,380	240	21,084	65,464	32%
	Oct '28	219	17		278	295	44,390	230	21,314	65,703	32%
	Nov '28	220	41		278	319	44,400	210	21,524	65,923	33%
	Dec '28	221	181		278	459	44,536	70	21,594	66,129	33%
	Jan '29	222	153		278	431	44,370	100	21,694	66,064	33%
	Feb '29	223	89		278	367	44,031	160	21,854	65,884	33%
	Mar '29	224	107		278	385	43,825	140	21,994	65,819	33%
	Apr '29	225	104		278	382	43,929	150	22,144	66,073	34%
	May '29	226	17		278	295	43,921	230	22,374	66,294	34%
	Jun '29	227	2		278	280	43,066	250	22,624	65,690	34%
2029/30	Jul '29	228	1		278	279	42,301	250	22,874	65,175	35%
	Aug '29	229	3		278	281	41,707	250	23,124	64,831	36%
	Sep '29	230	6		278	284	41,596	240	23,364	64,960	36%
	Oct '29	231	17		278	295	41,613	230	23,594	65,207	36%
	Nov '29	232	41		278	319	41,386	210	23,804	65,190	37%
	Dec '29	233	181		278	459	41,325	70	23,874	65,198	37%
	Jan '30	234	153		278	431	41,394	100	23,974	65,368	37%
	Feb '30	235	89		278	367	41,475	160	24,134	65,608	37%
	Mar '30	236	107		278	385	41,328	140	24,274	65,602	37%
	Apr '30	237	104		278	382	41,070	150	24,424	65,493	37%
	May '30	238	17		278	295	41,084	230	24,654	65,737	38%
	Jun '30	239	2		278	280	41,086	250	24,904	65,989	38%
2030/31	Jul '30	240	1		278	279	41,087	250	25,154	66,240	38%
	Aug '30	241	3		278	281	41,090	250	25,137	66,227	38%
	Sep '30	242	6		278	284	41,096	240	25,176	66,272	38%
	Oct '30	243	17		278	295	41,113	230	25,146	66,258	38%
	Nov '30	244	41		278	319	41,099	210	25,066	66,165	38%
	Dec '30	245	181		278	459	41,118	70	24,925	66,043	38%
	Jan '31	246	153		278	431	41,129	100	24,891	66,020	38%
	Feb '31	247	89		278	367	41,194	160	24,830	66,024	38%
	Mar '31	248	107		278	385	41,239	140	24,769	66,008	38%
	Apr '31	249	104		278	382	41,343	150	24,644	65,987	37%
	May '31	250	17		278	295	41,360	230	24,627	65,987	37%
	Jun '31	251	2		278	280	41,362	250	24,552	65,914	37%
2031/32	Jul '31	252	1		278	279	41,358	250	24,486	65,844	37%
	Aug '31	253	3		278	281	41,361	250	24,407	65,768	37%
	Sep '31	254	6		278	284	41,367	240	24,506	65,873	37%
	Oct '31	255	17		278	295	41,377	230	24,486	65,863	37%
	Nov '31	256	41		278	319	41,418	210	24,414	65,832	37%
	Dec '31	257	181		278	459	40,867	70	24,353	65,220	37%
	Jan '32	258	153		278	431	41,020	100	24,044	65,065	37%
	Feb '32	259	89		278	367	41,099	160	23,935	65,034	37%
	Mar '32	260	107		278	385	41,140	140	23,793	64,933	37%
	Apr '32	261	104		278	382	41,218	150	23,639	64,857	36%
	May '32	262	17		278	295	41,235	230	23,543	64,778	36%
	Jun '32	263	2		278	280	41,237	250	23,365	64,602	36%
Notes: DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow. RW = Recycled Water RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water. While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations. RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period											

P L A N N E D



RWC Management Plan - San Sevaine Basins 1 through 5

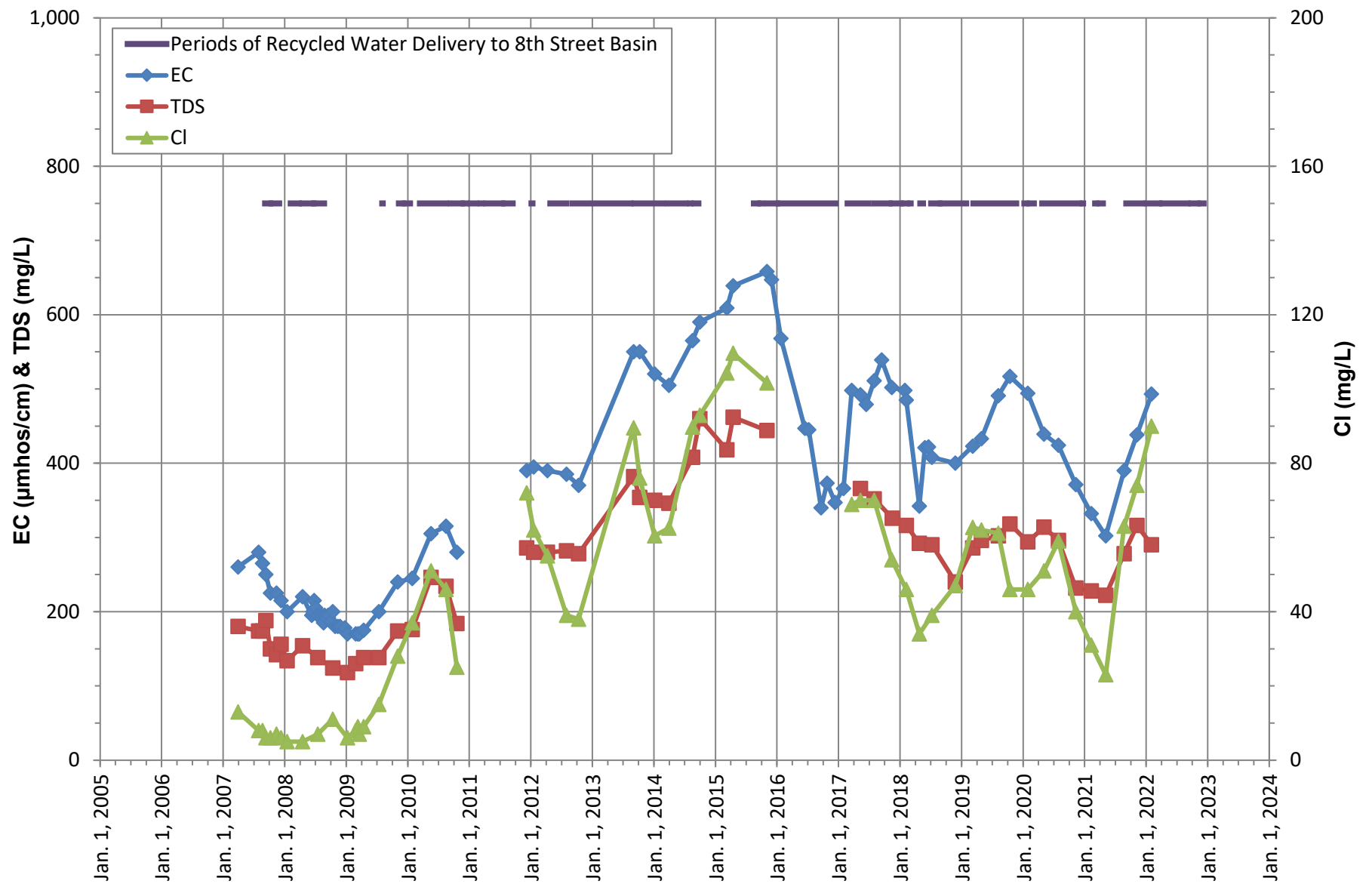
Months Since Initial Recycled Water Delivery



APPENDIX C

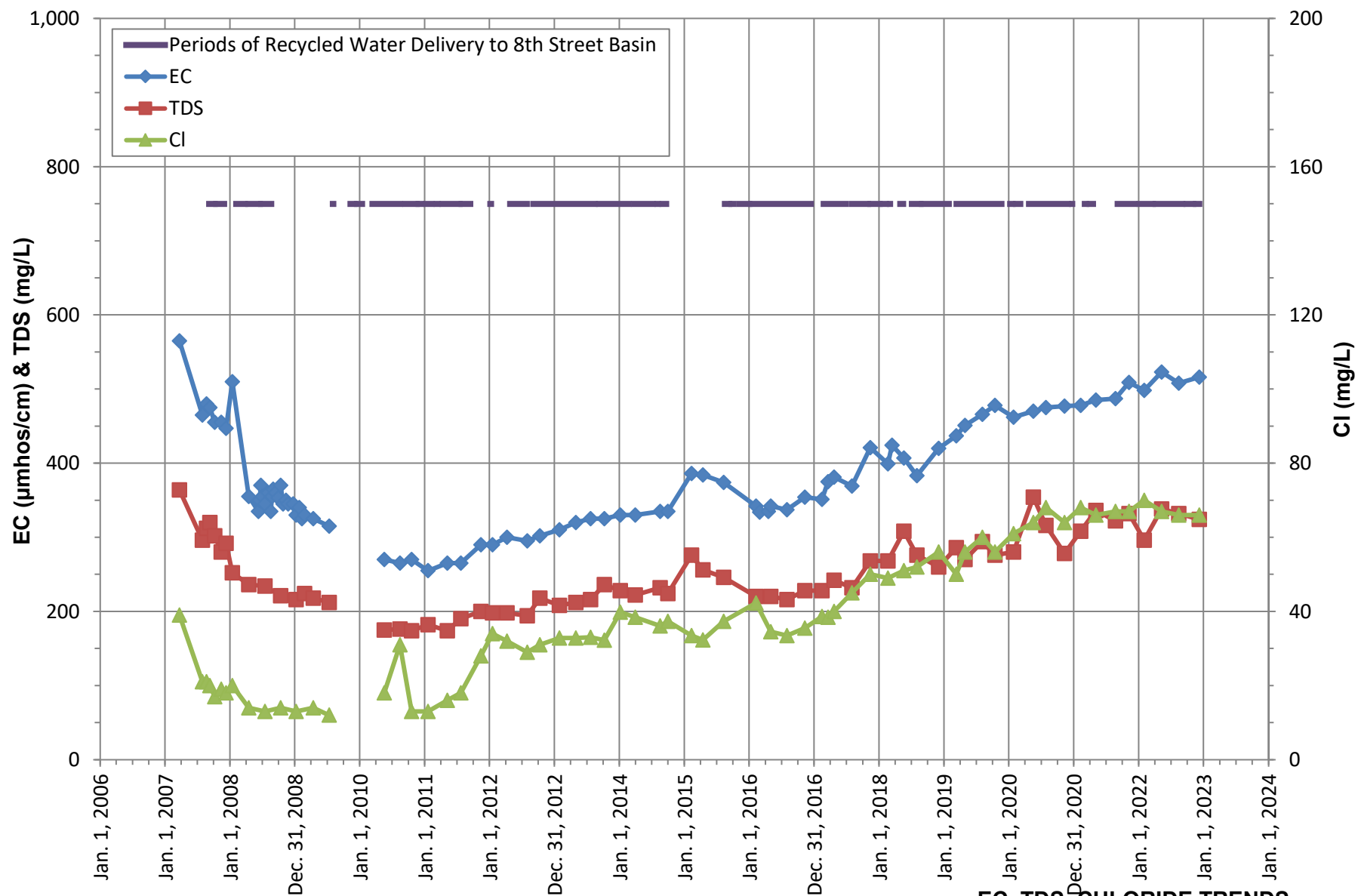
EVIDENCE FOR BLENDING:

EC, TDS, CHLORIDE TIME-SERIES GRAPHS



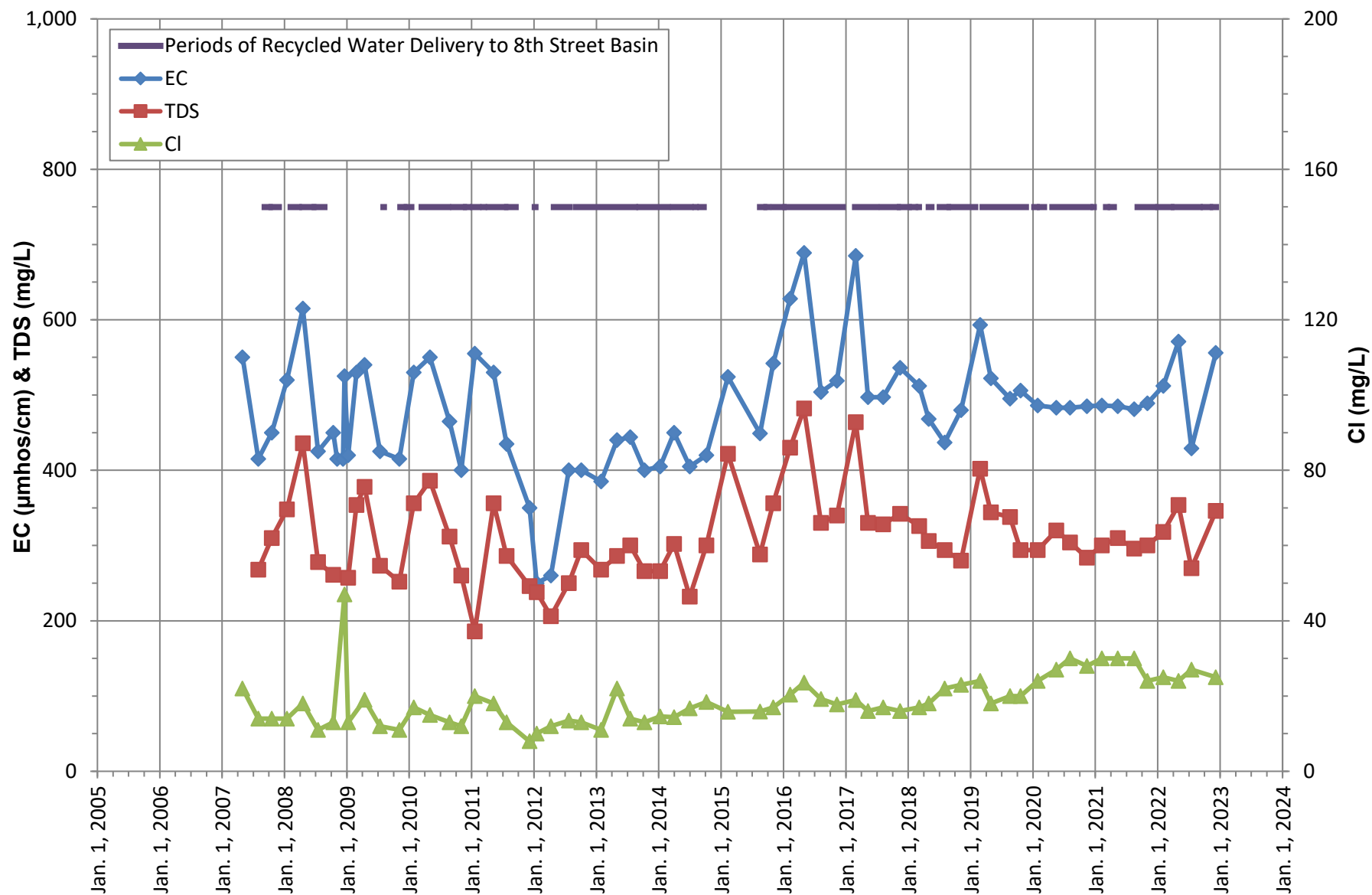
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/1**





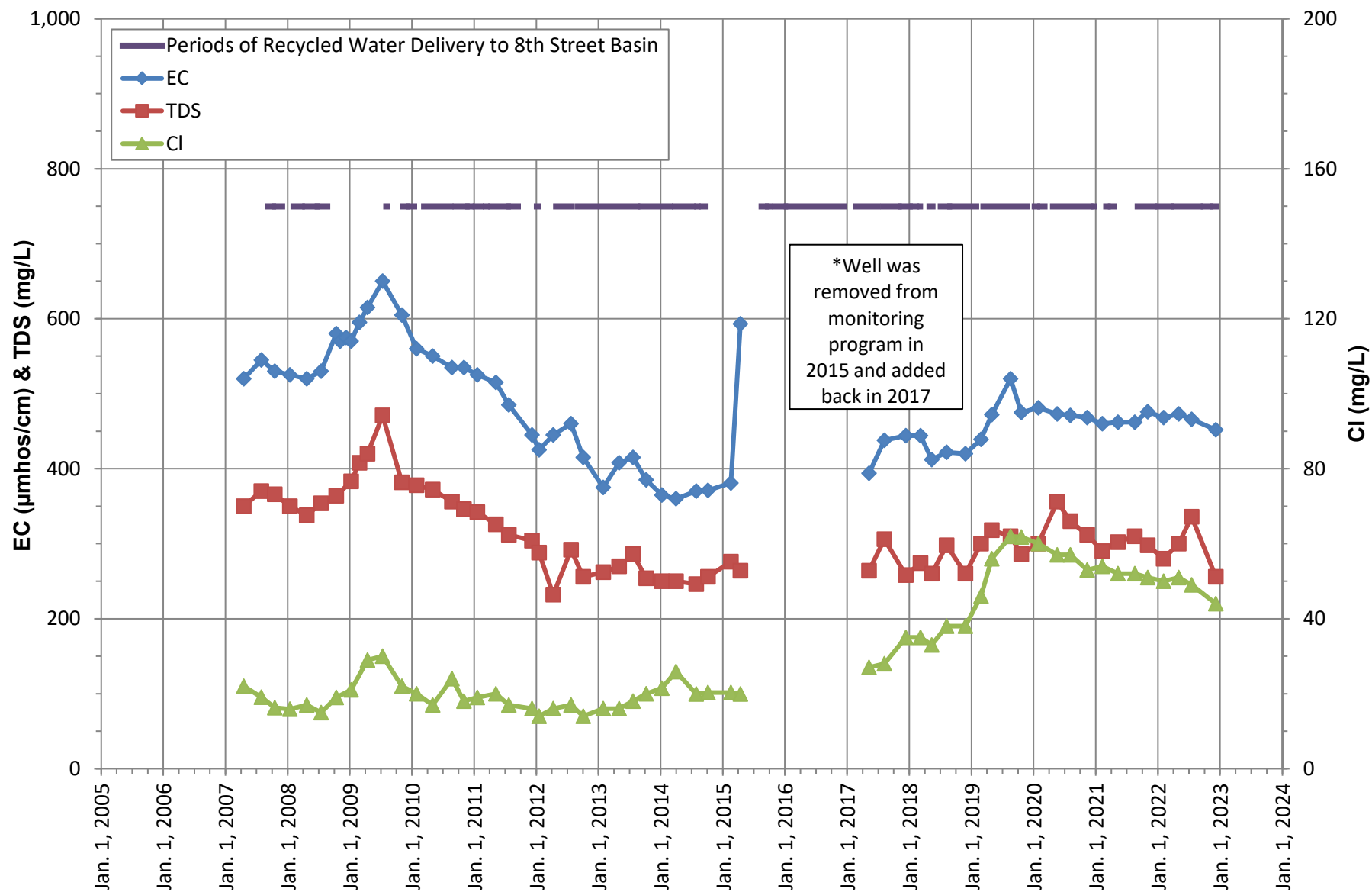
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/2**





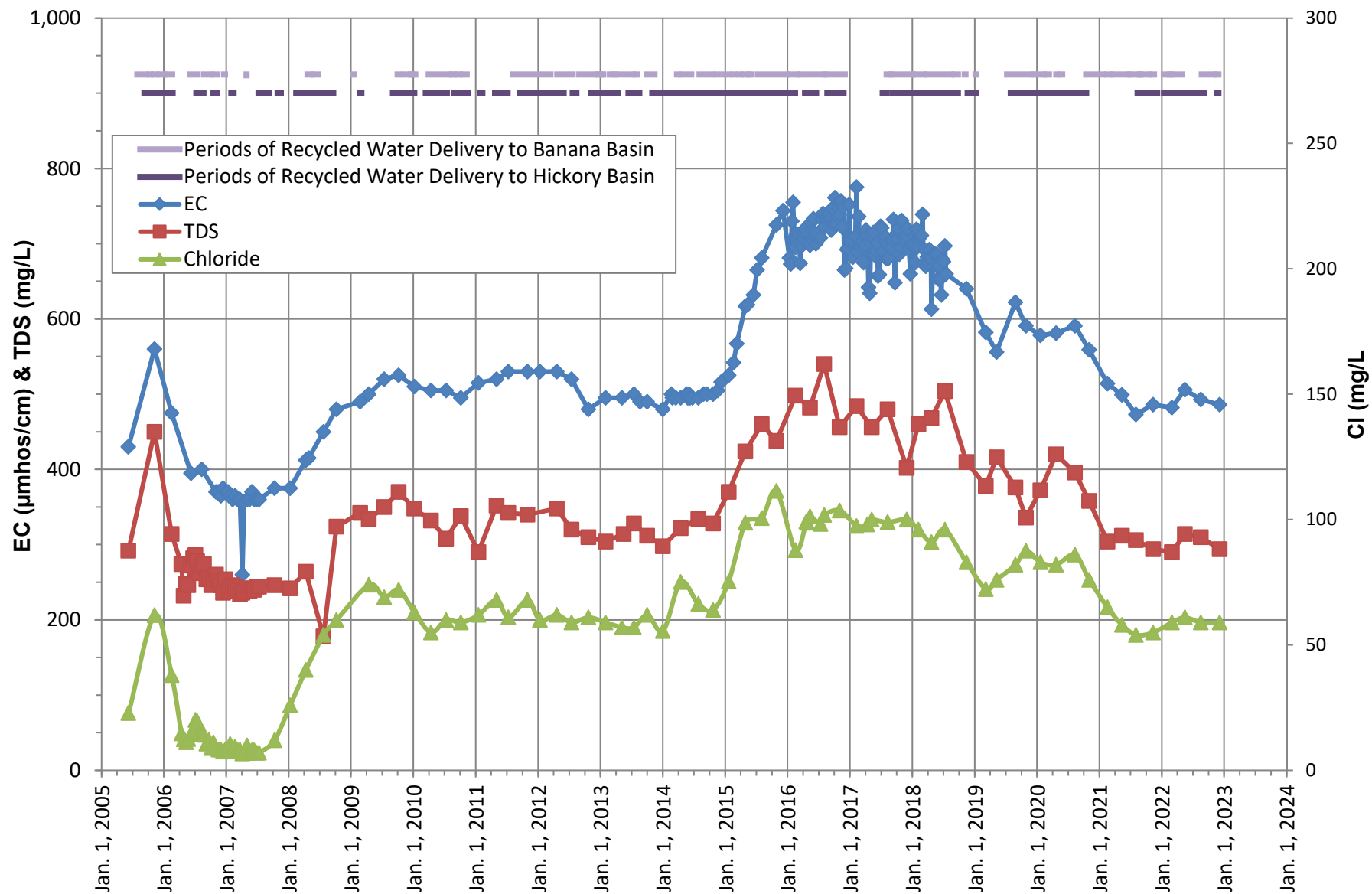
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/1**





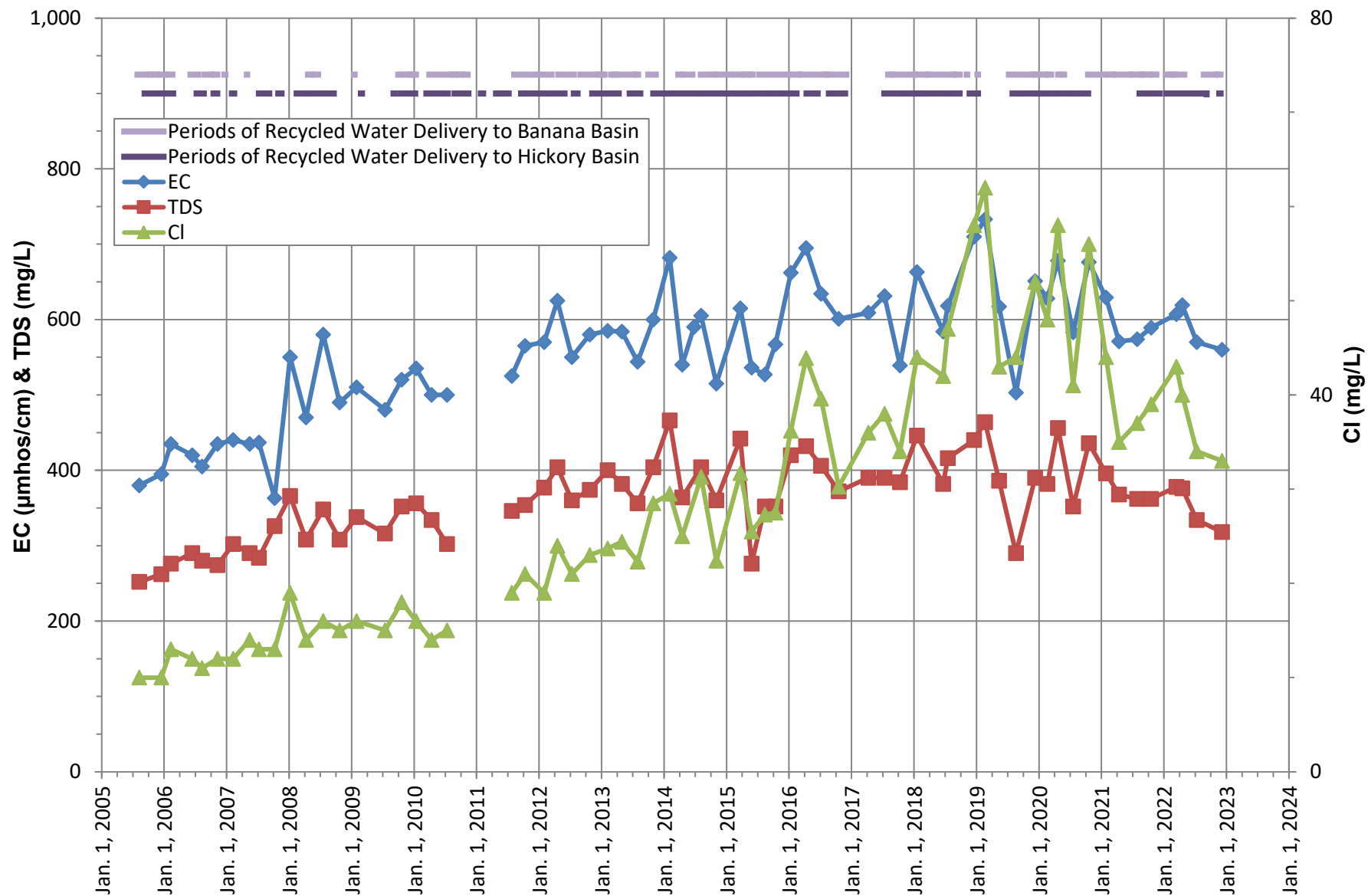
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/2**





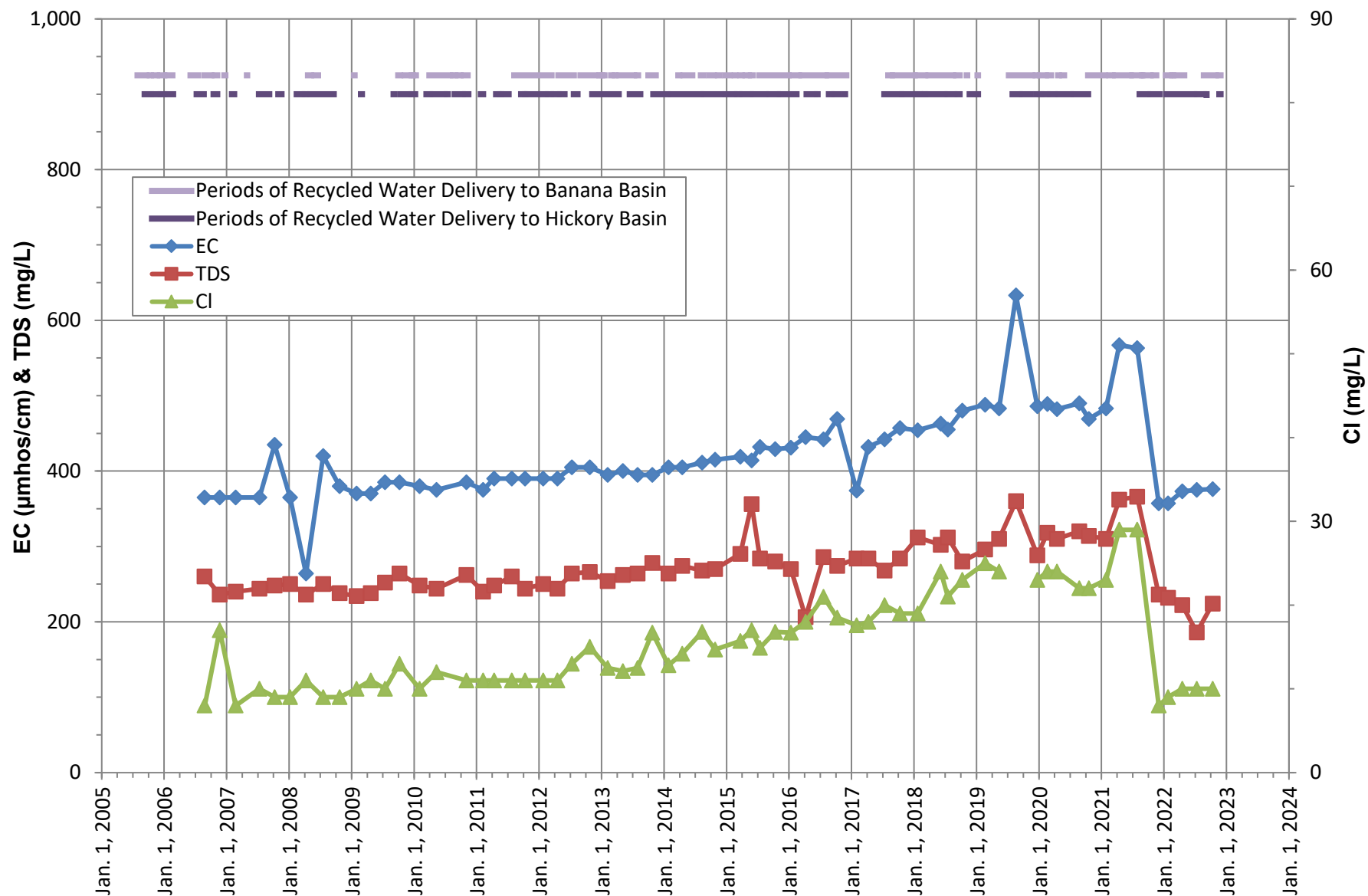
**EC, TDS, CHLORIDE TRENDS
HICKORY BANANA BASINS
MW BH-1/2**





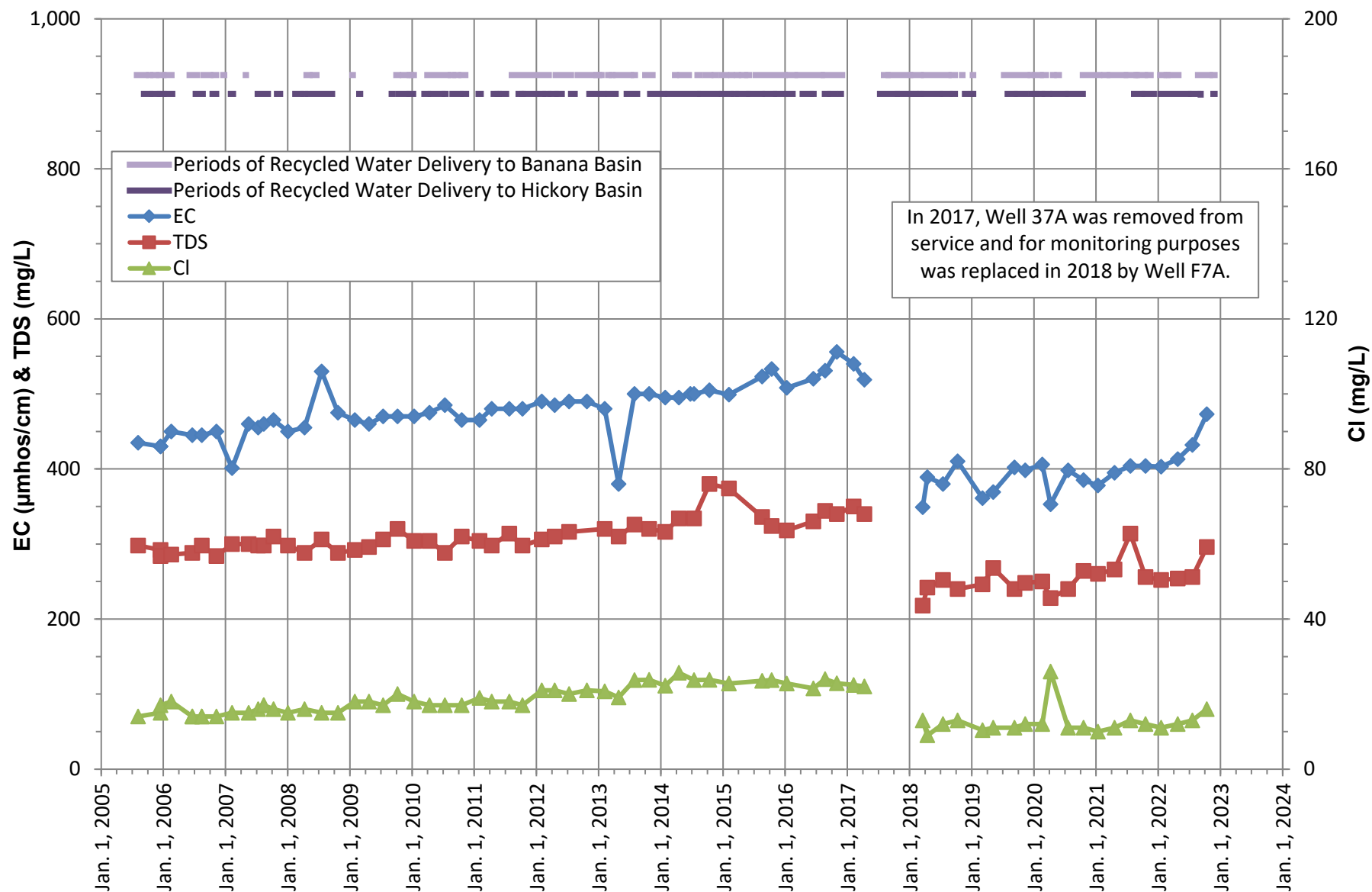
**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY INFIELD WELL**





**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY NO. 2**

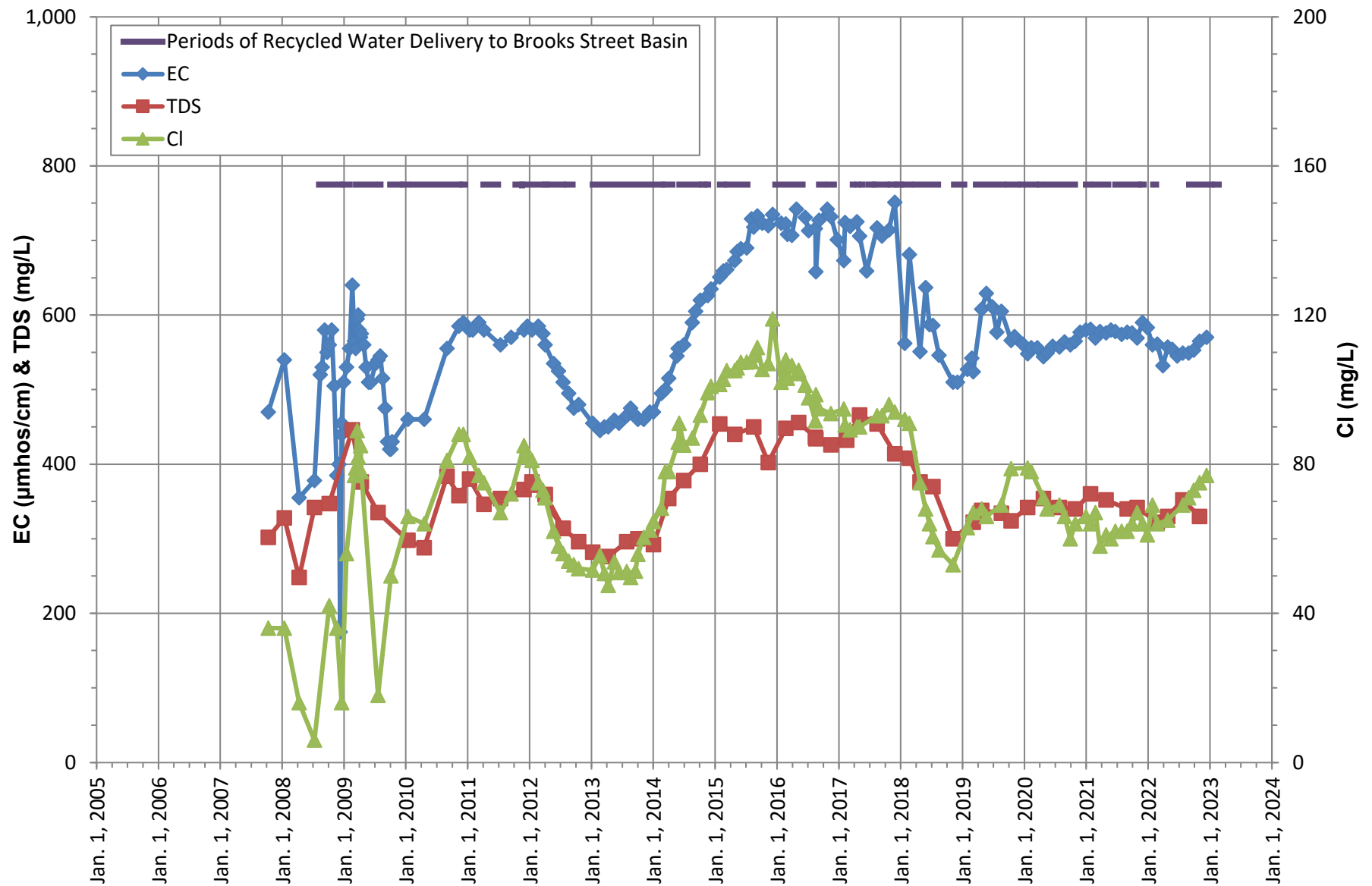




In 2017, Well 37A was removed from service and for monitoring purposes was replaced in 2018 by Well F7A.

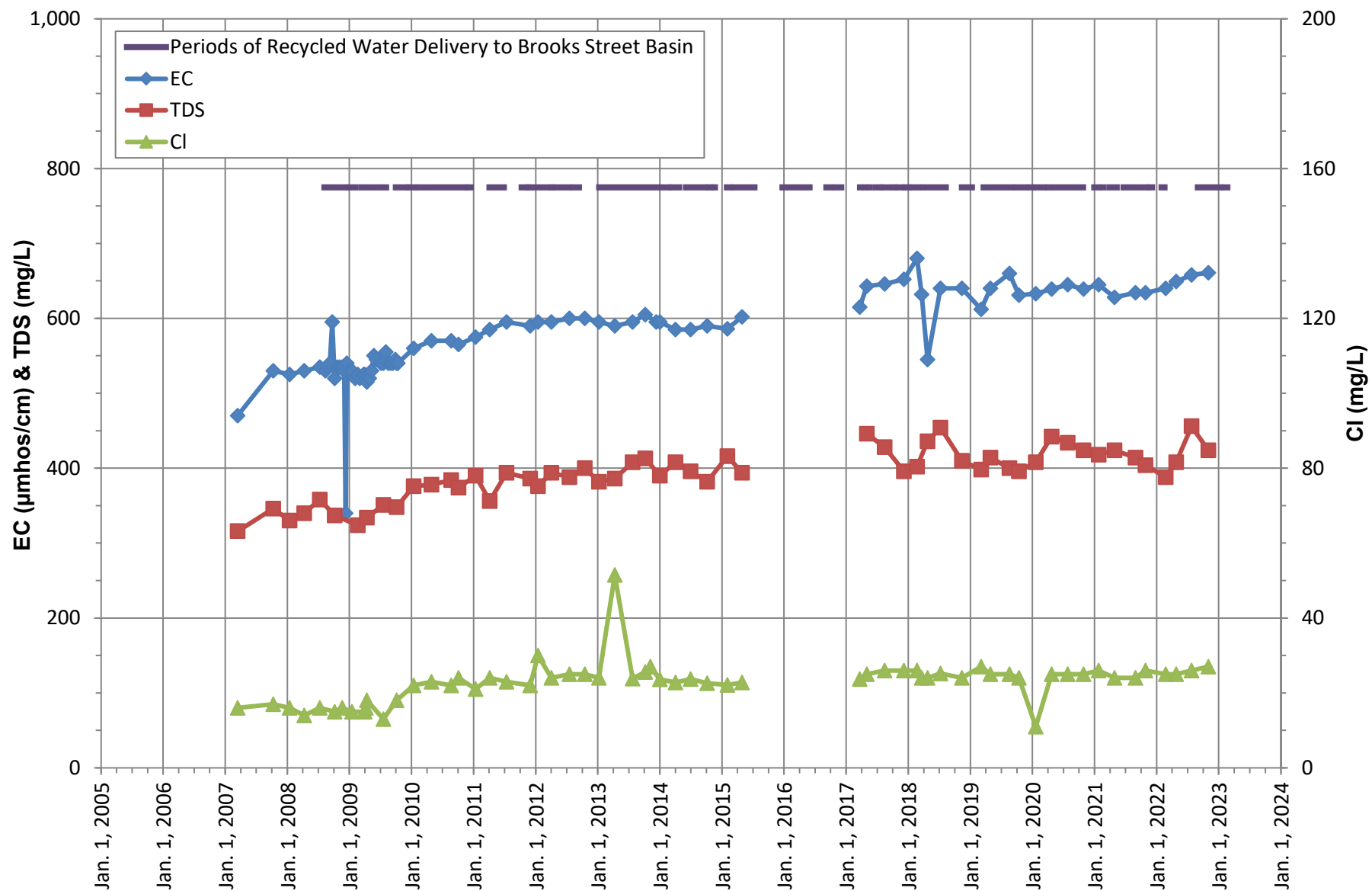
**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
FONTANA WATER CO. WELLS 7A AND 37A**





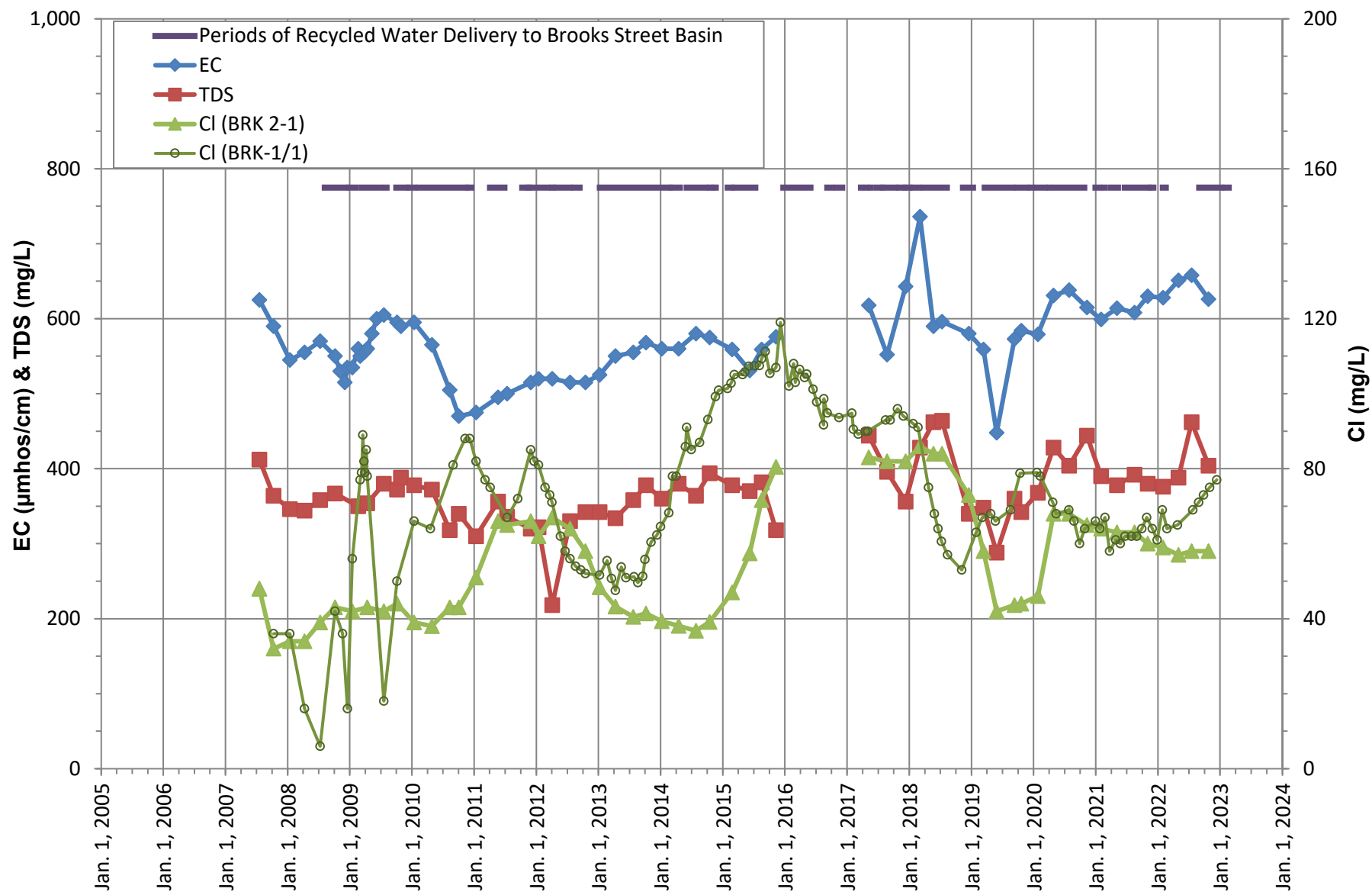
**EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-1/1**





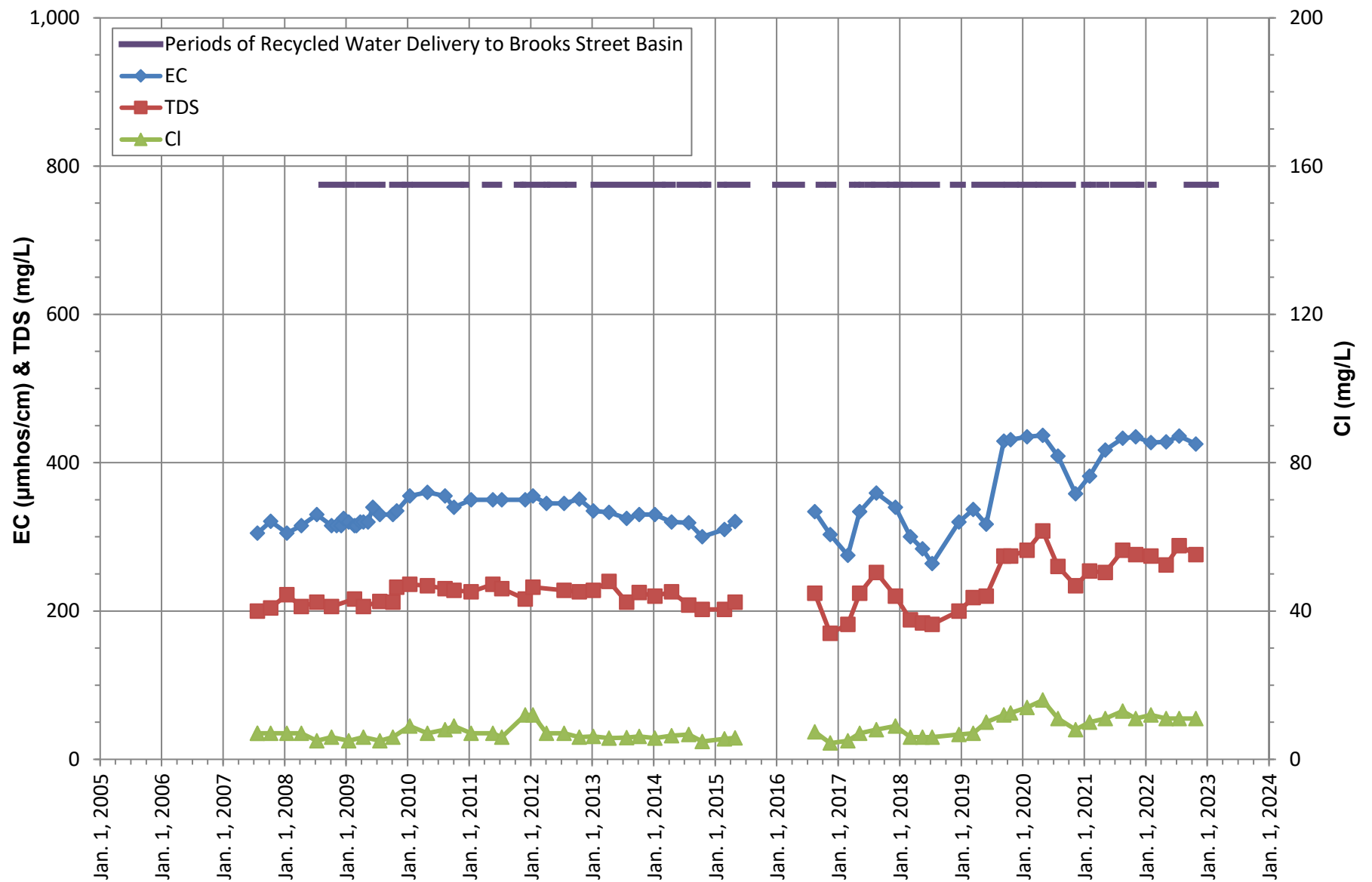
**EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-1/2**





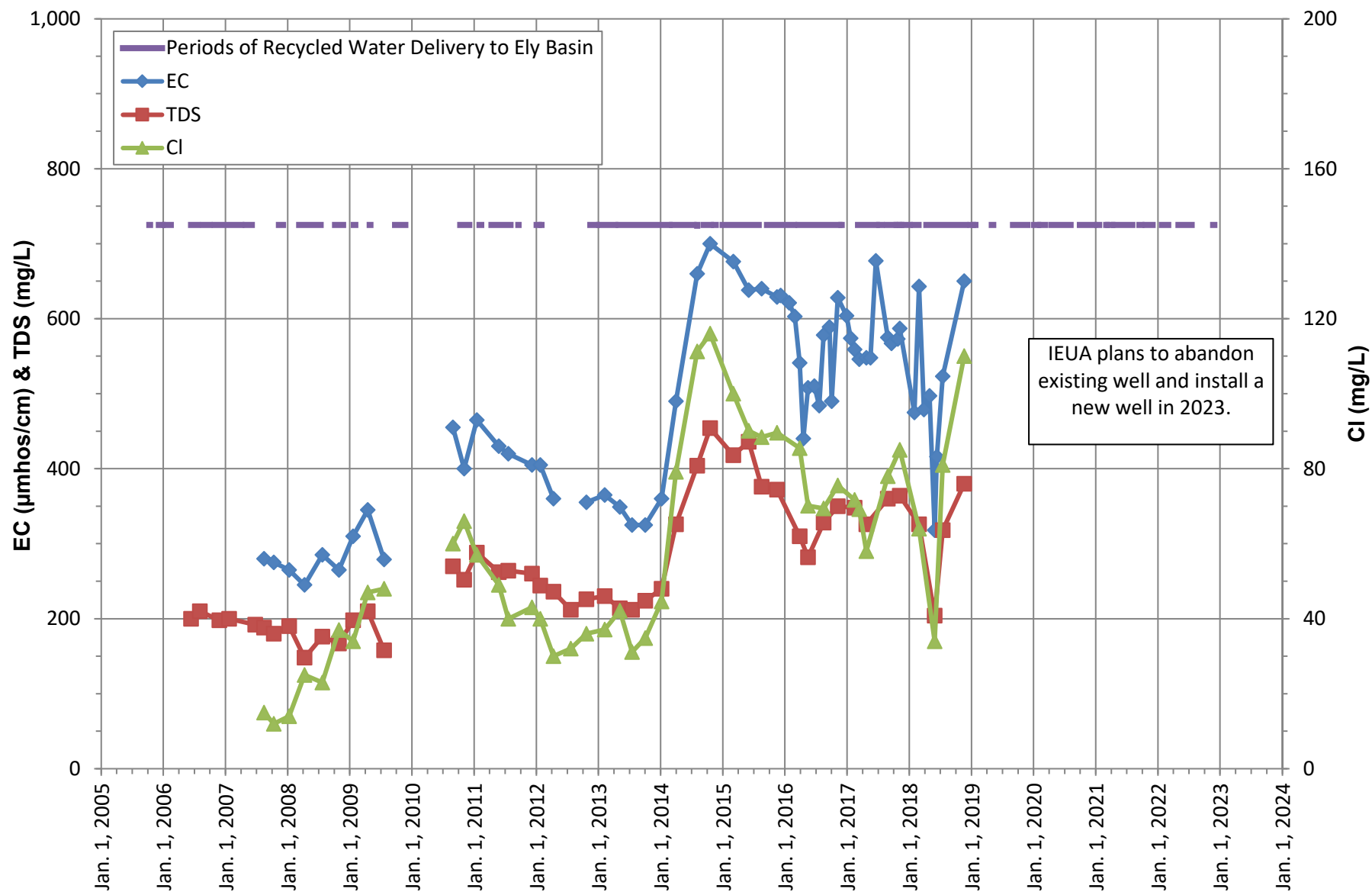
**EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-2/1**





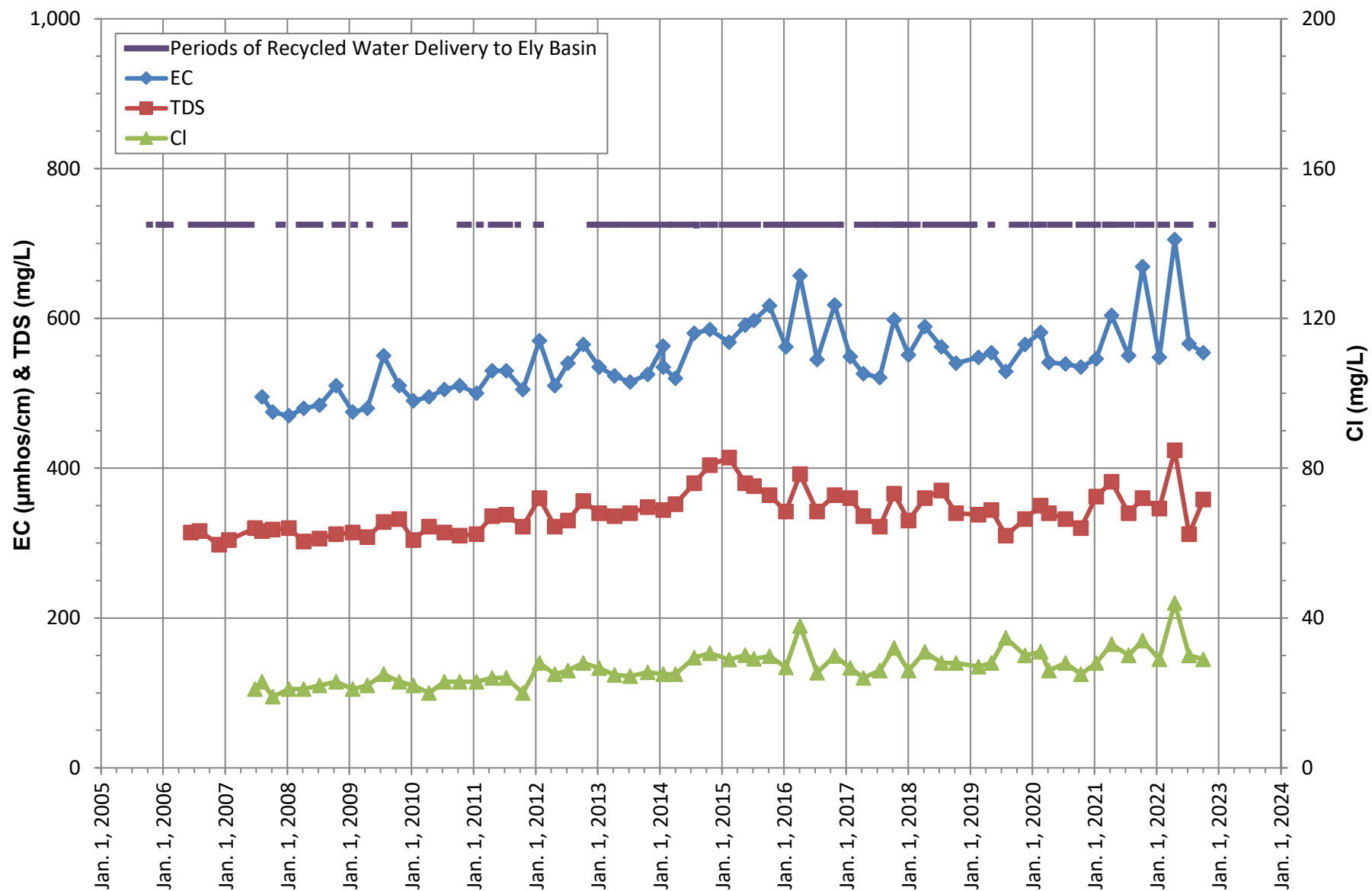
**EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-2/2**





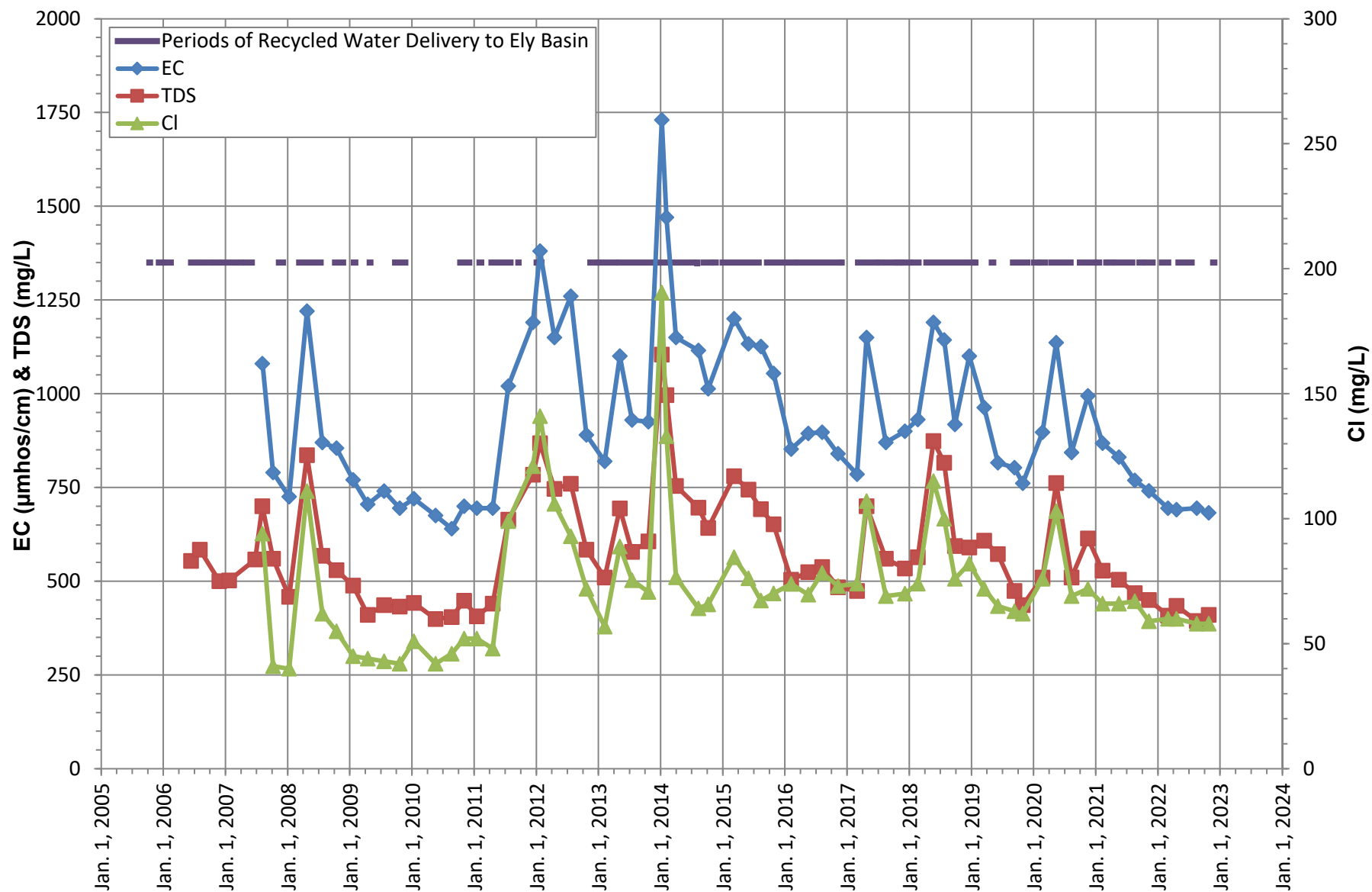
**EC, TDS, CHLORIDE TRENDS
ELY BASIN
PHILADELPHIA WELL**





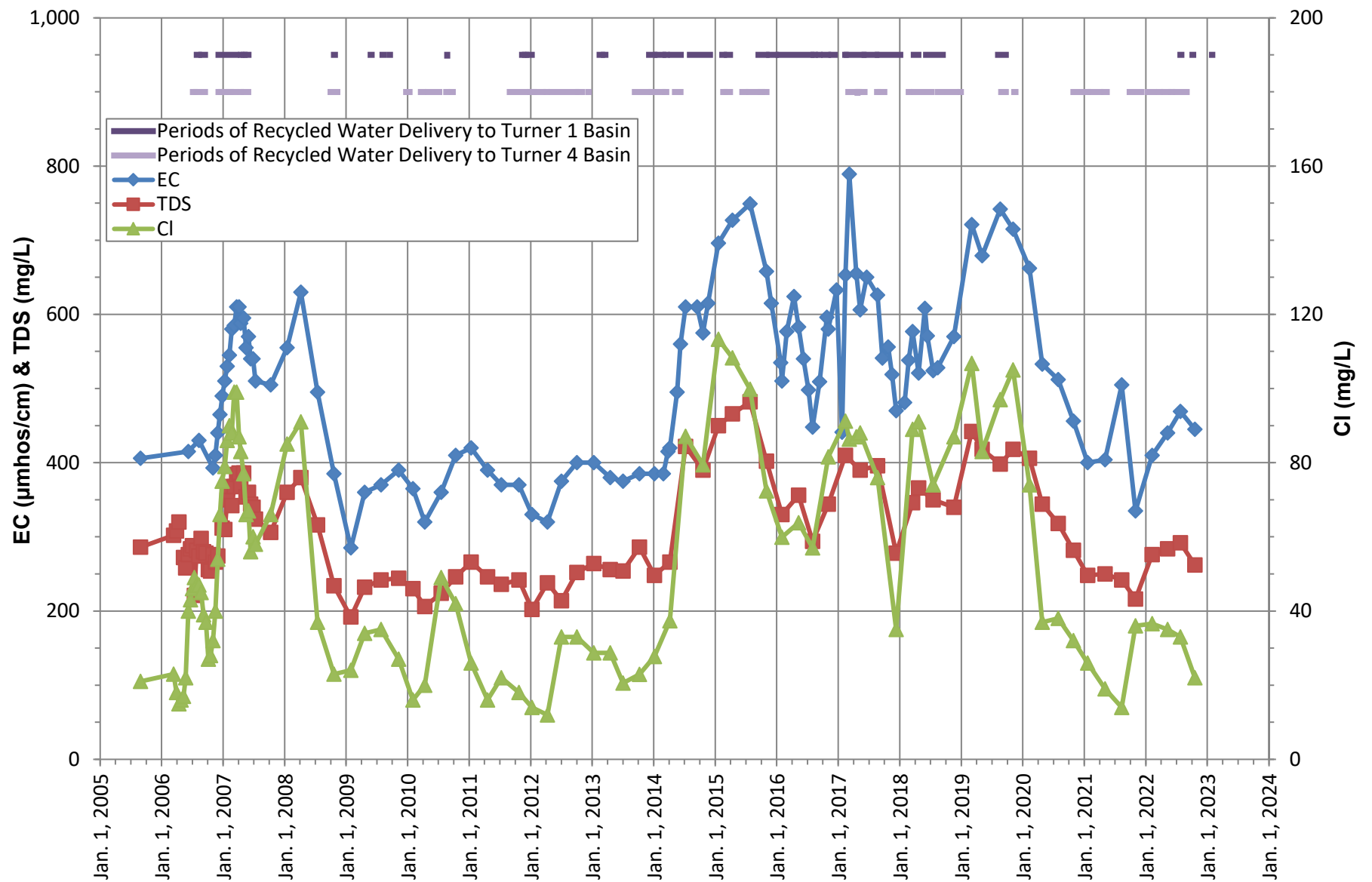
**EC, TDS, CHLORIDE TRENDS
ELY BASIN
RIVERSIDE WELL**





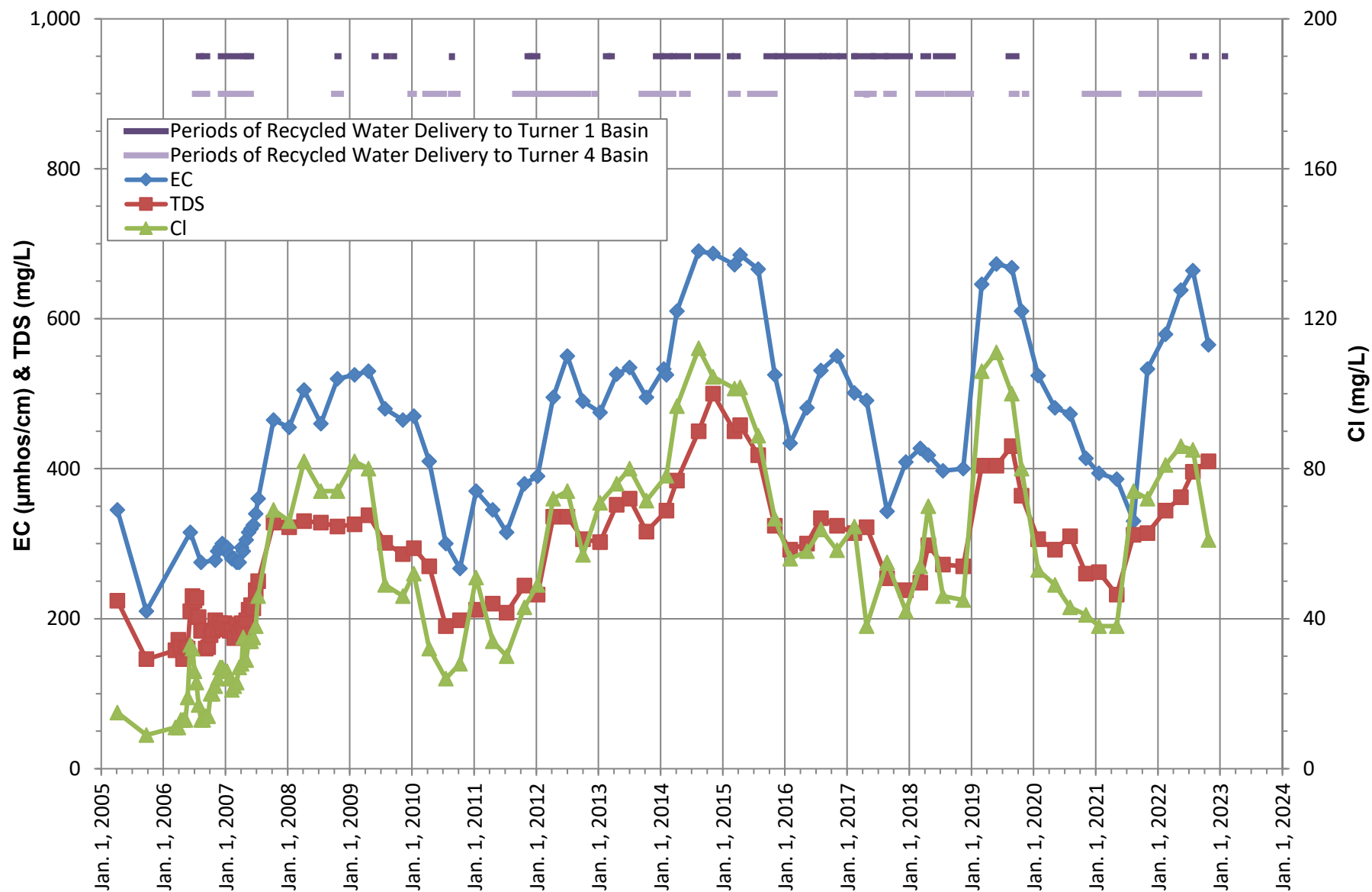
**EC, TDS, CHLORIDE TRENDS
ELY BASIN
WALNUT WELL**





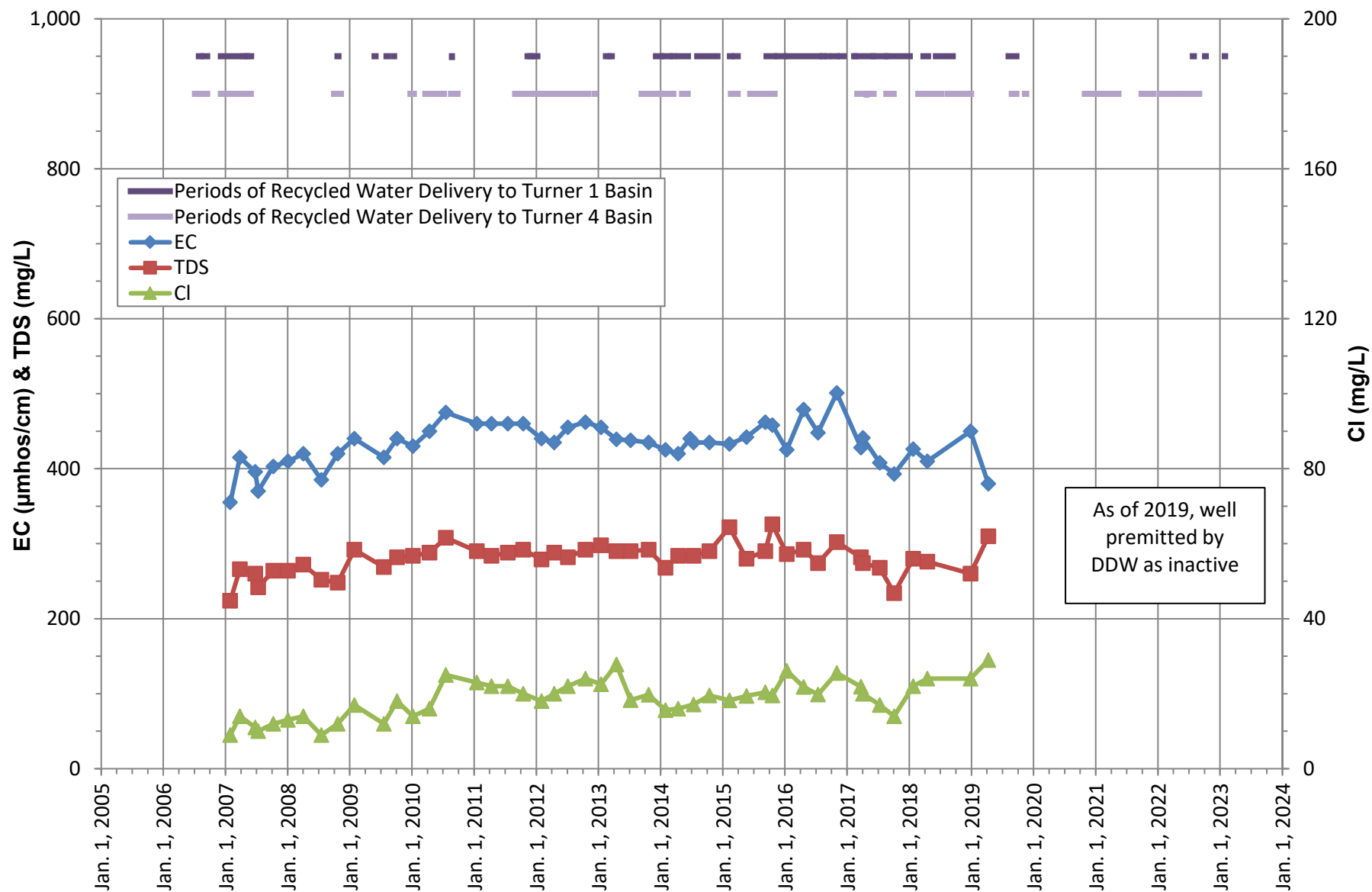
**EC, TDS, CHLORIDE TRENDS
TURNER BASINS
MW T-1/2**





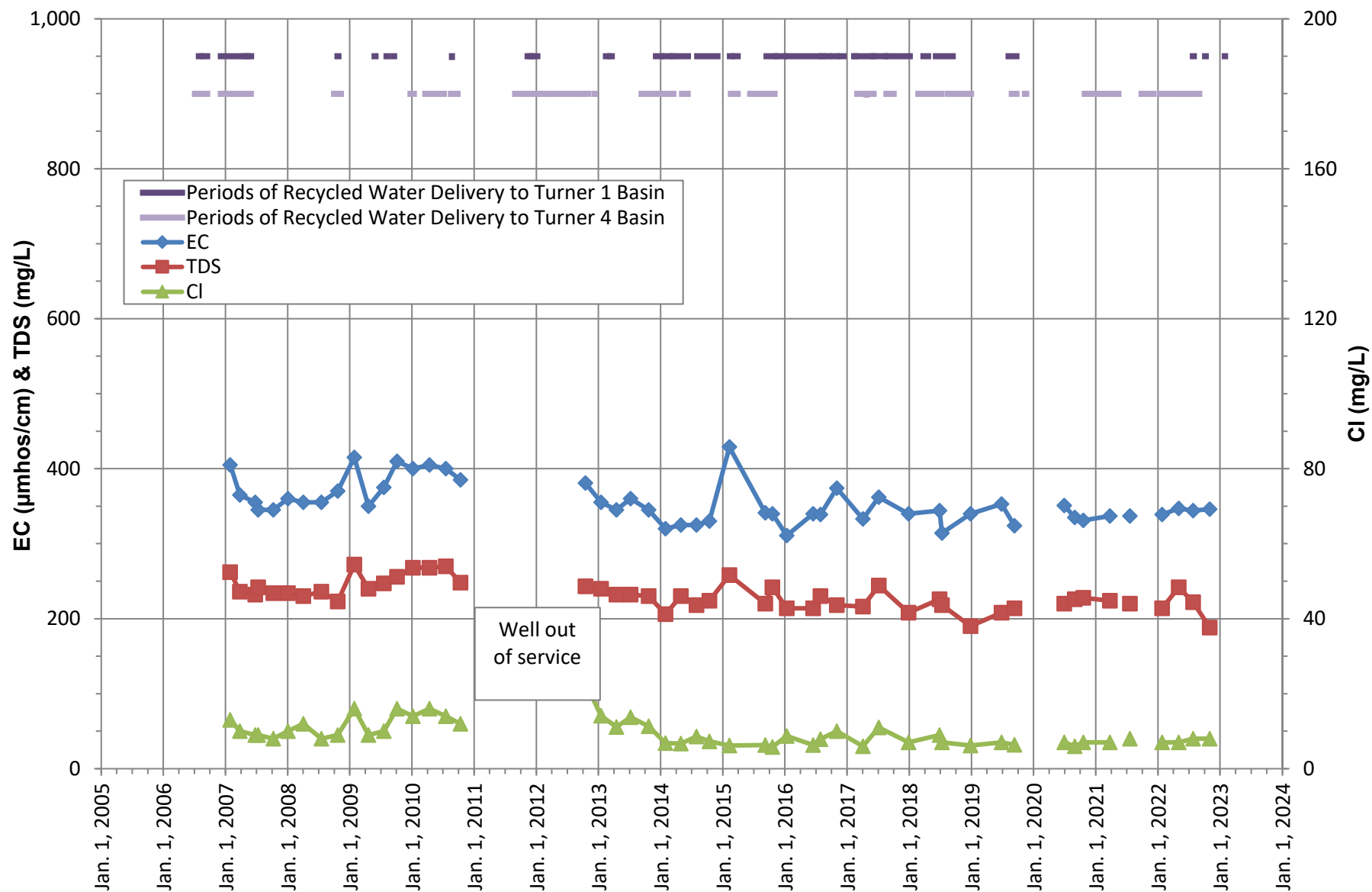
**EC, TDS, CHLORIDE TRENDS
TURNER BASINS
MW T-2/2**





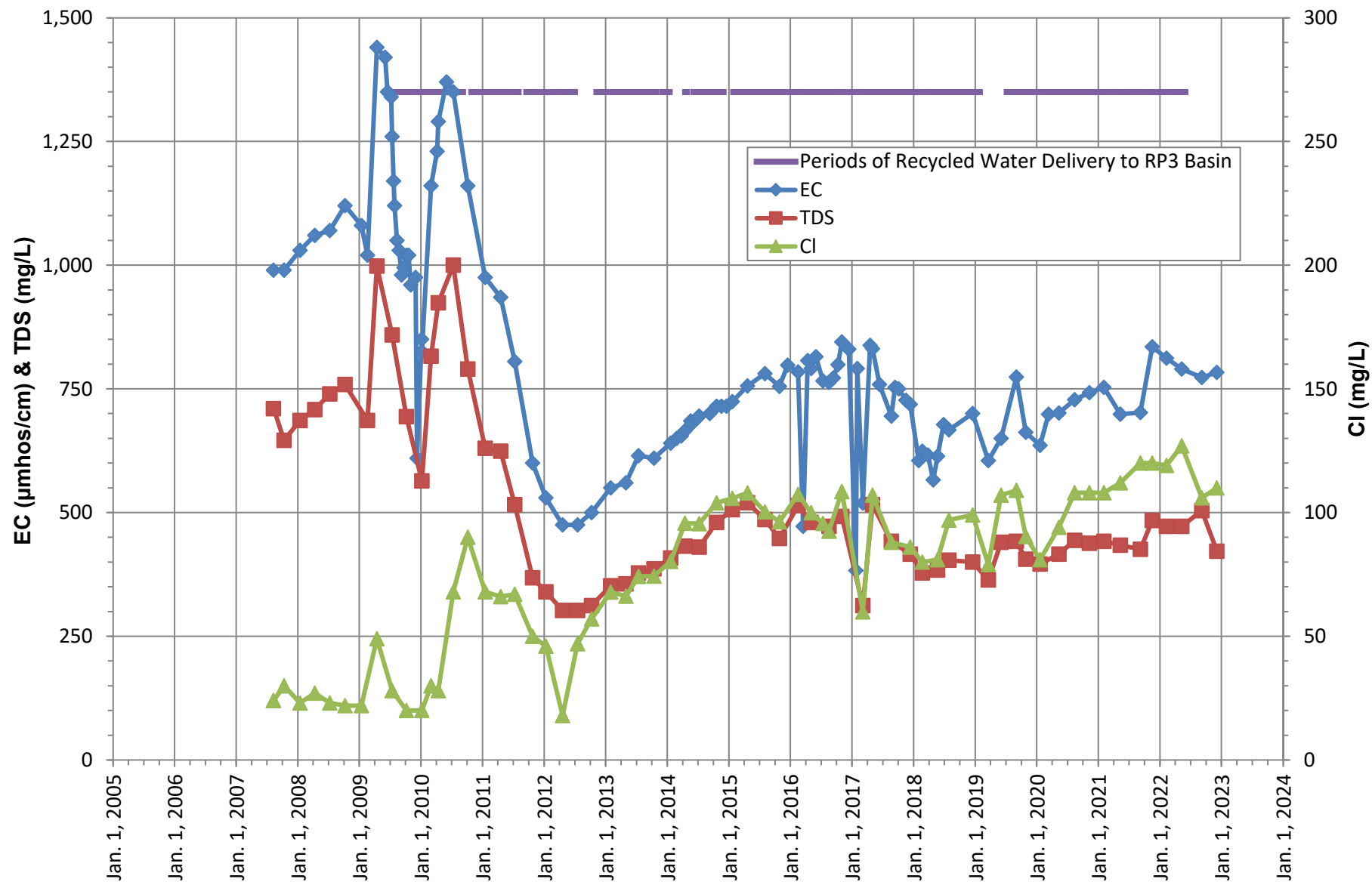
**EC, TDS, CHLORIDE TRENDS
TURNER BASINS
ONTARIO NO. 25**





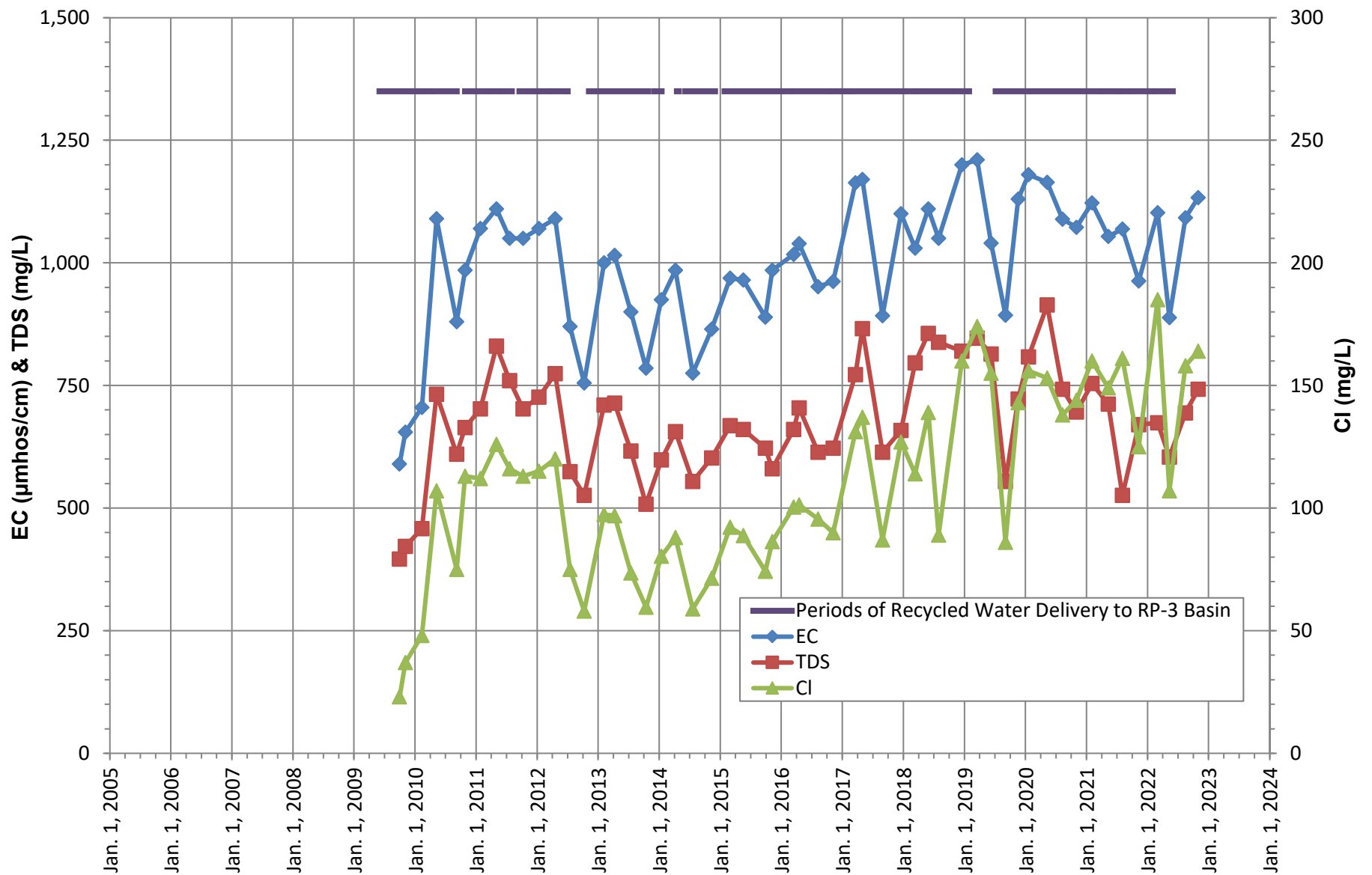
**EC, TDS, CHLORIDE TRENDS
TURNER BASINS
ONTARIO NO. 29**





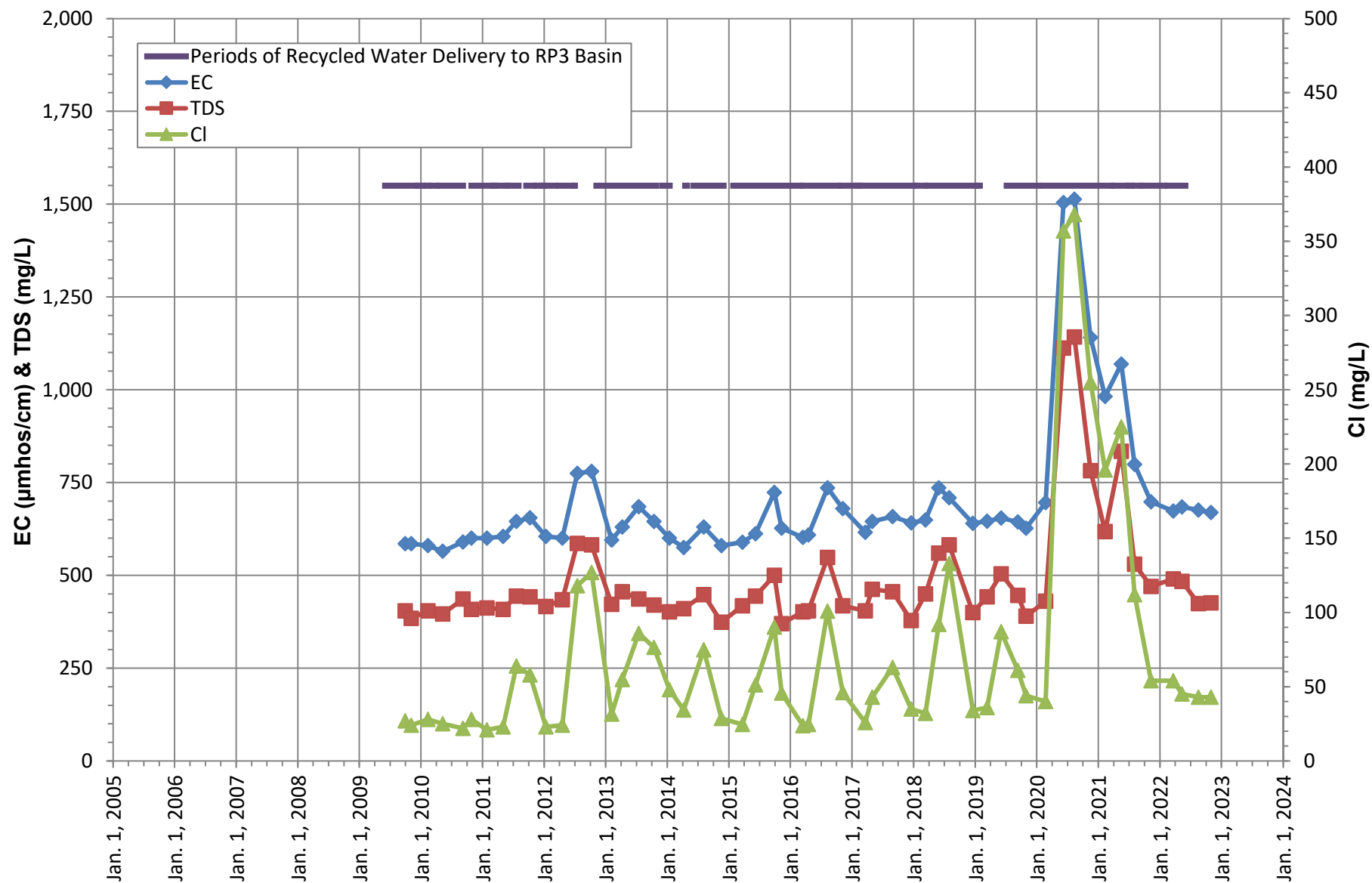
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RP3 BASINS
RP3-1/1**





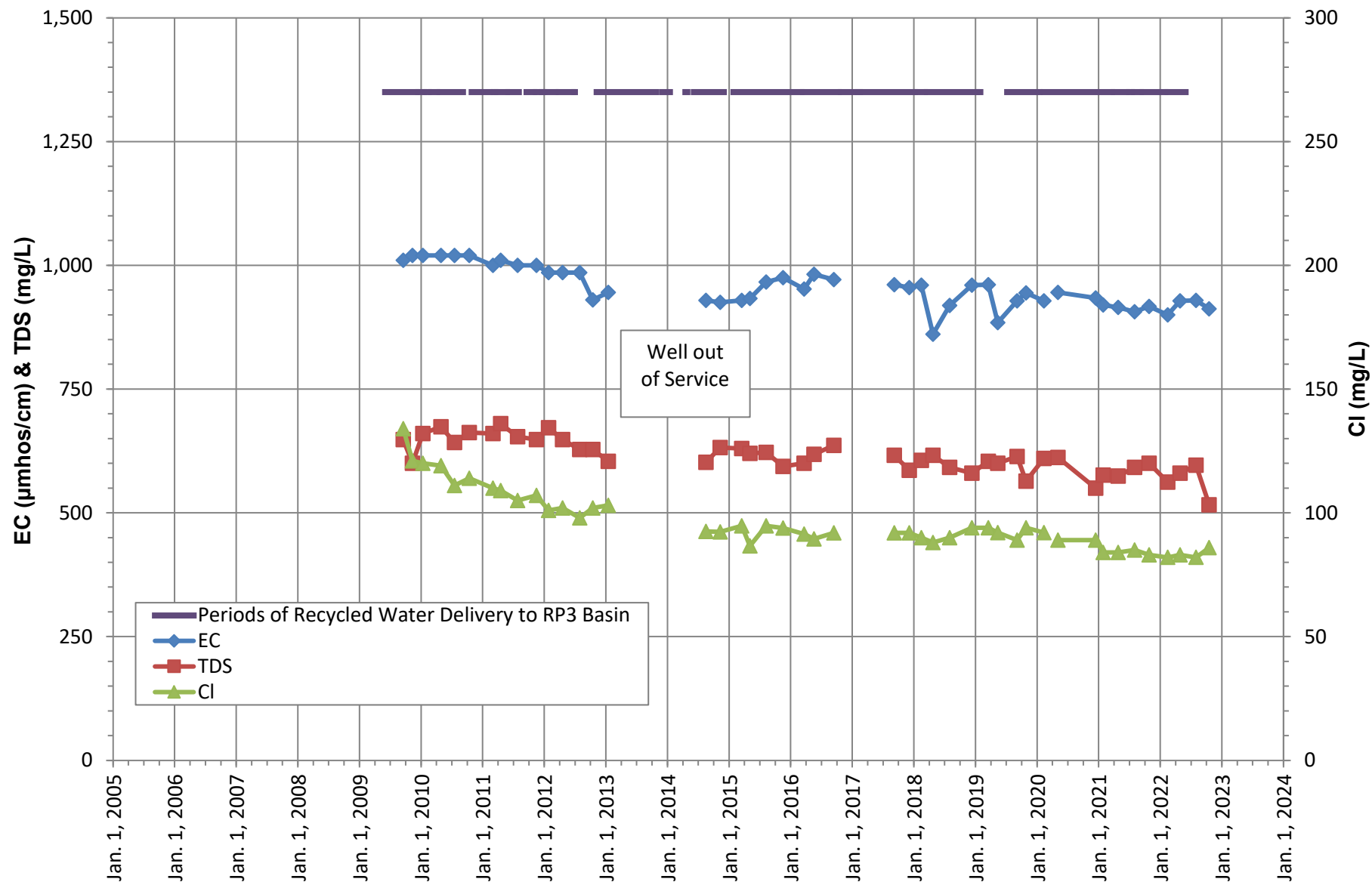
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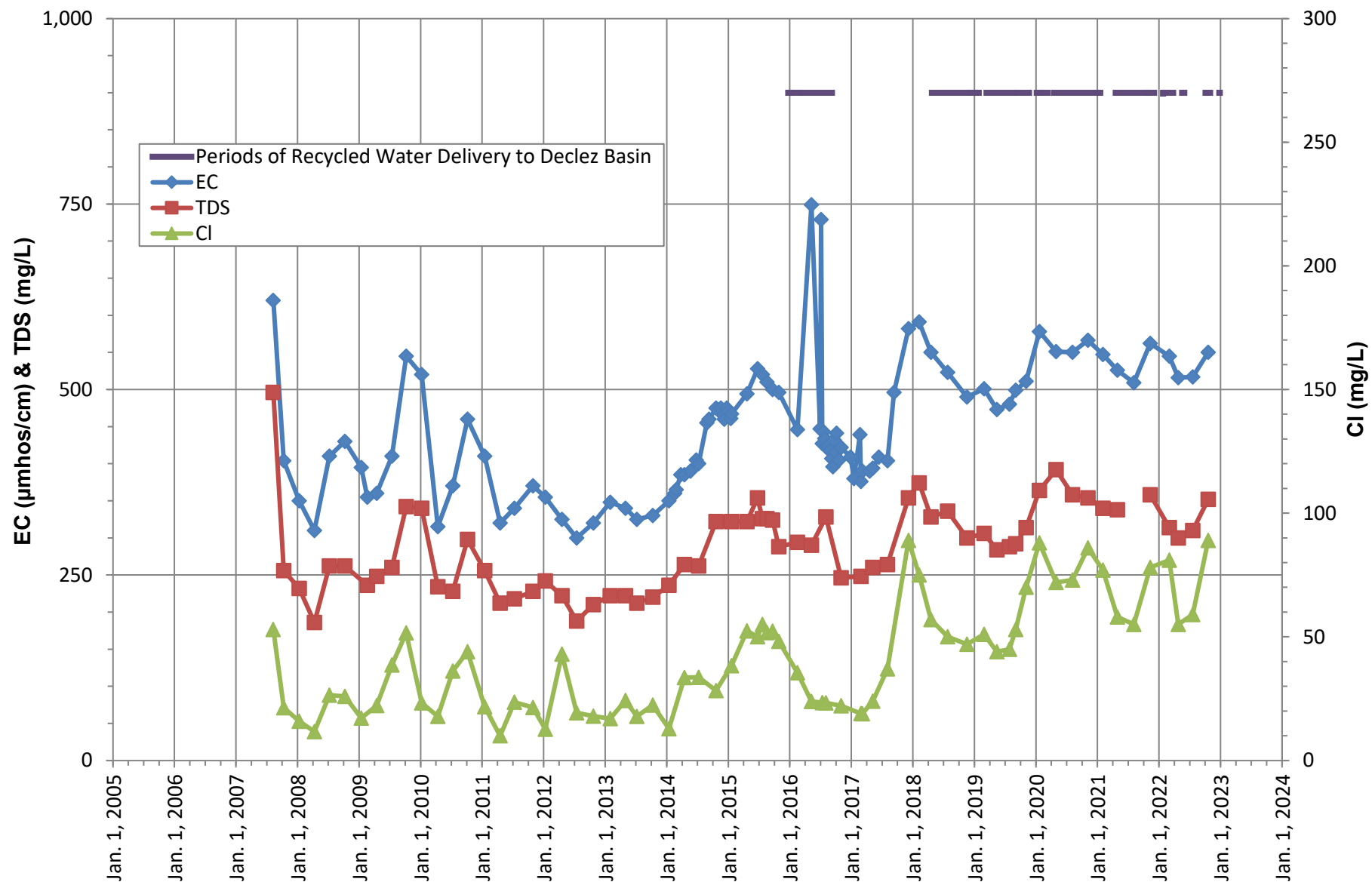
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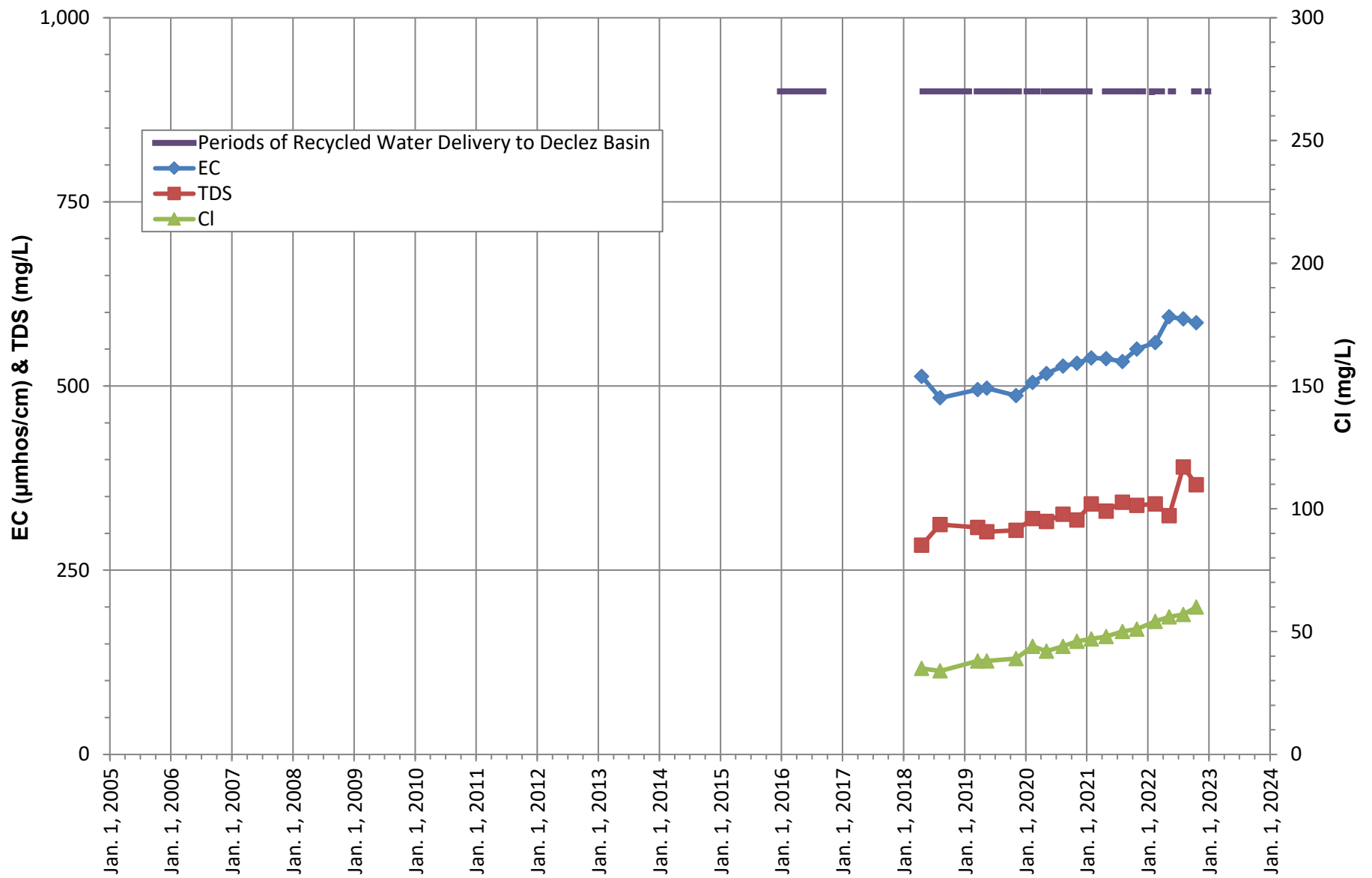
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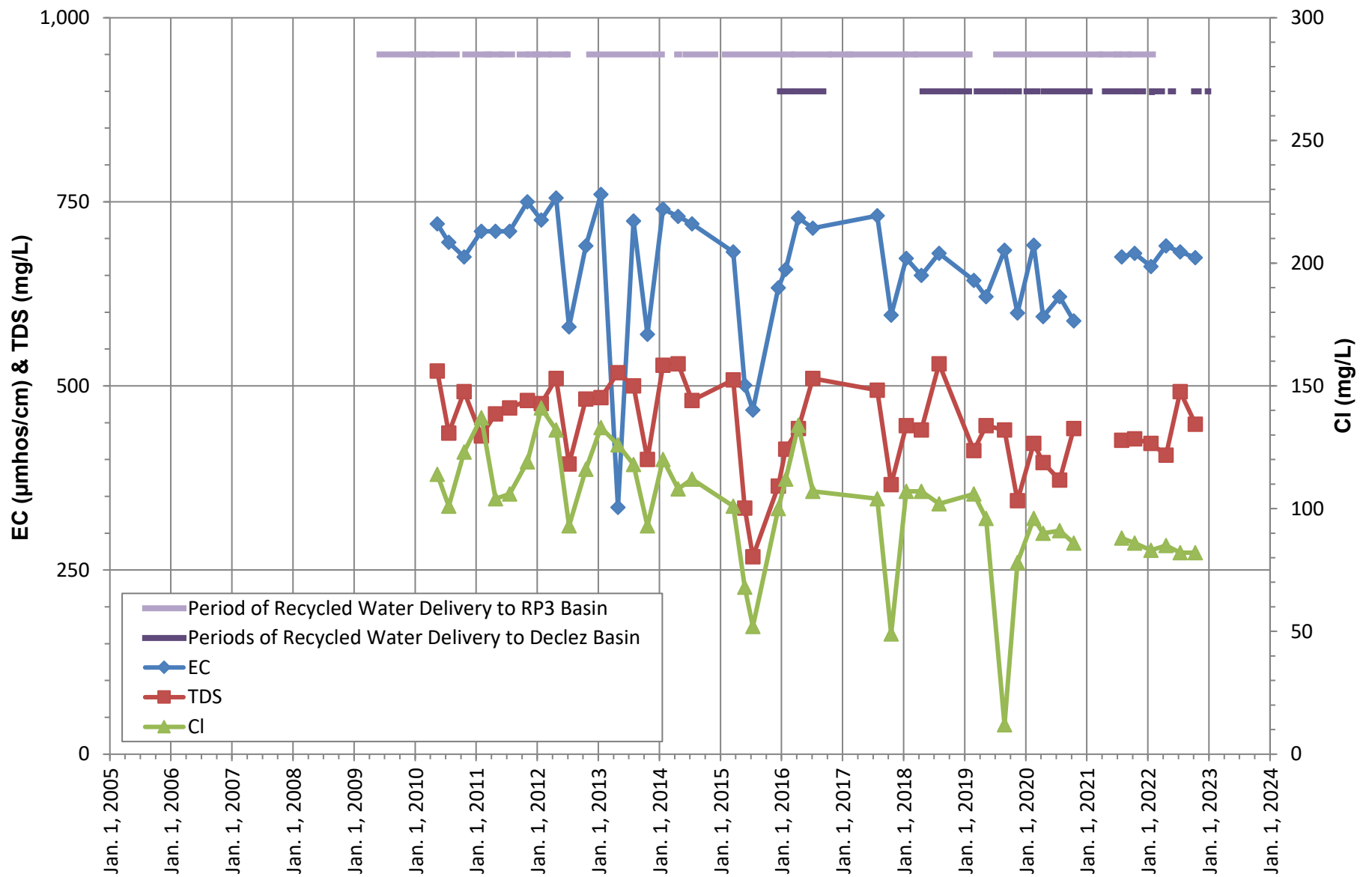
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DCZ-1/1**





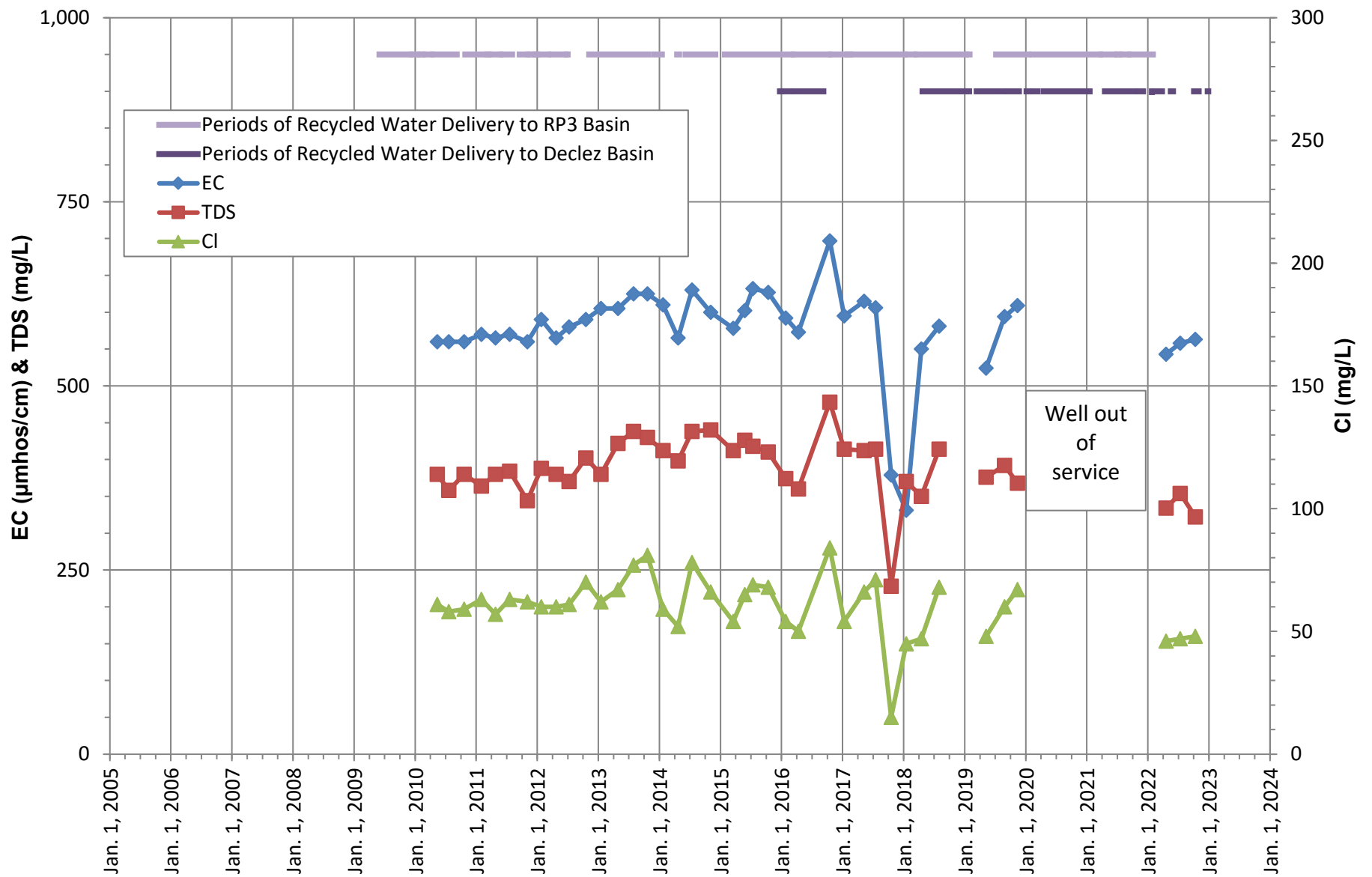
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DECLEZ BASIN
DCZ-2**





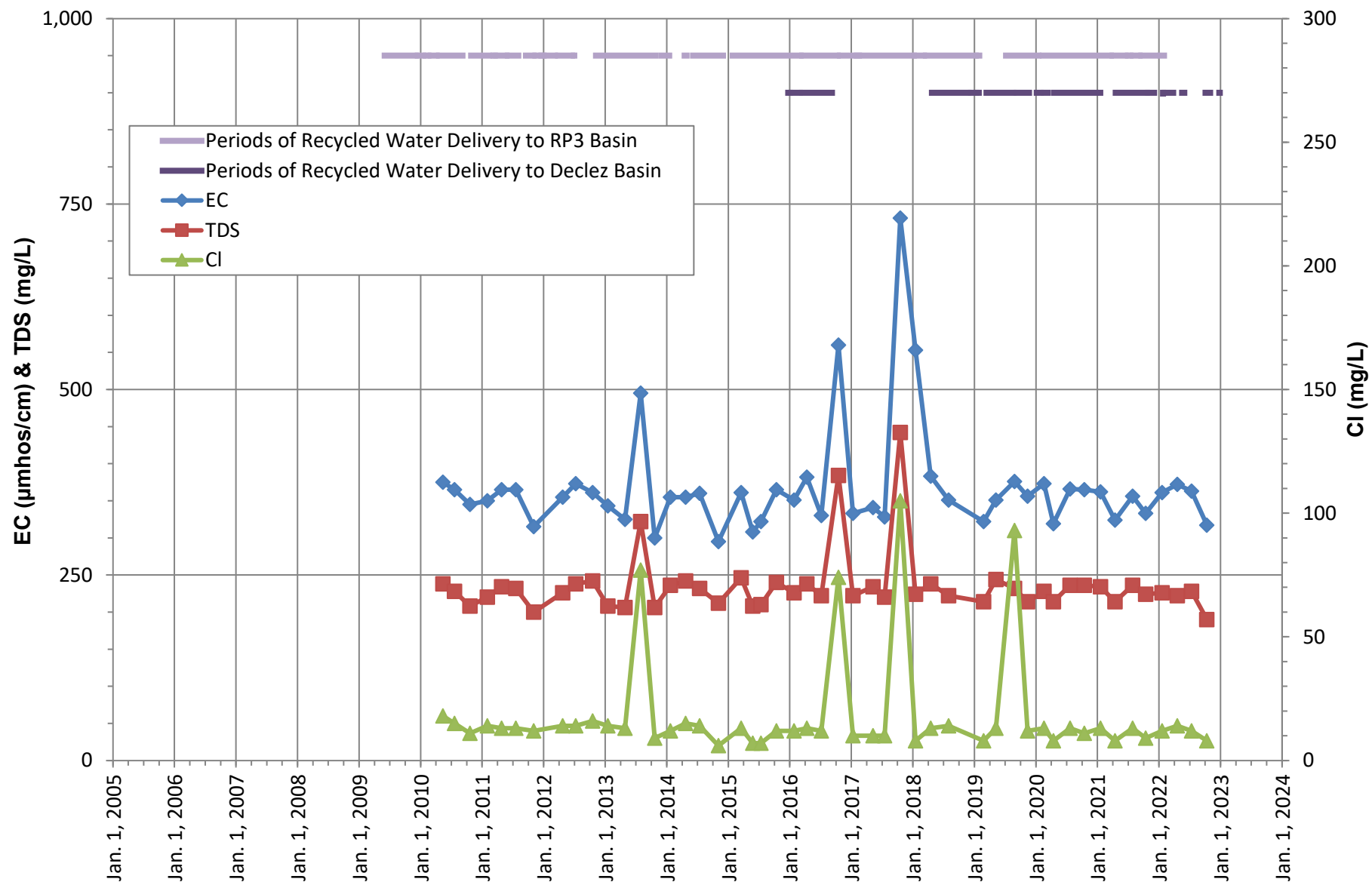
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RP3 AND DECLEZ BASINS
JCSD Well No. 13**





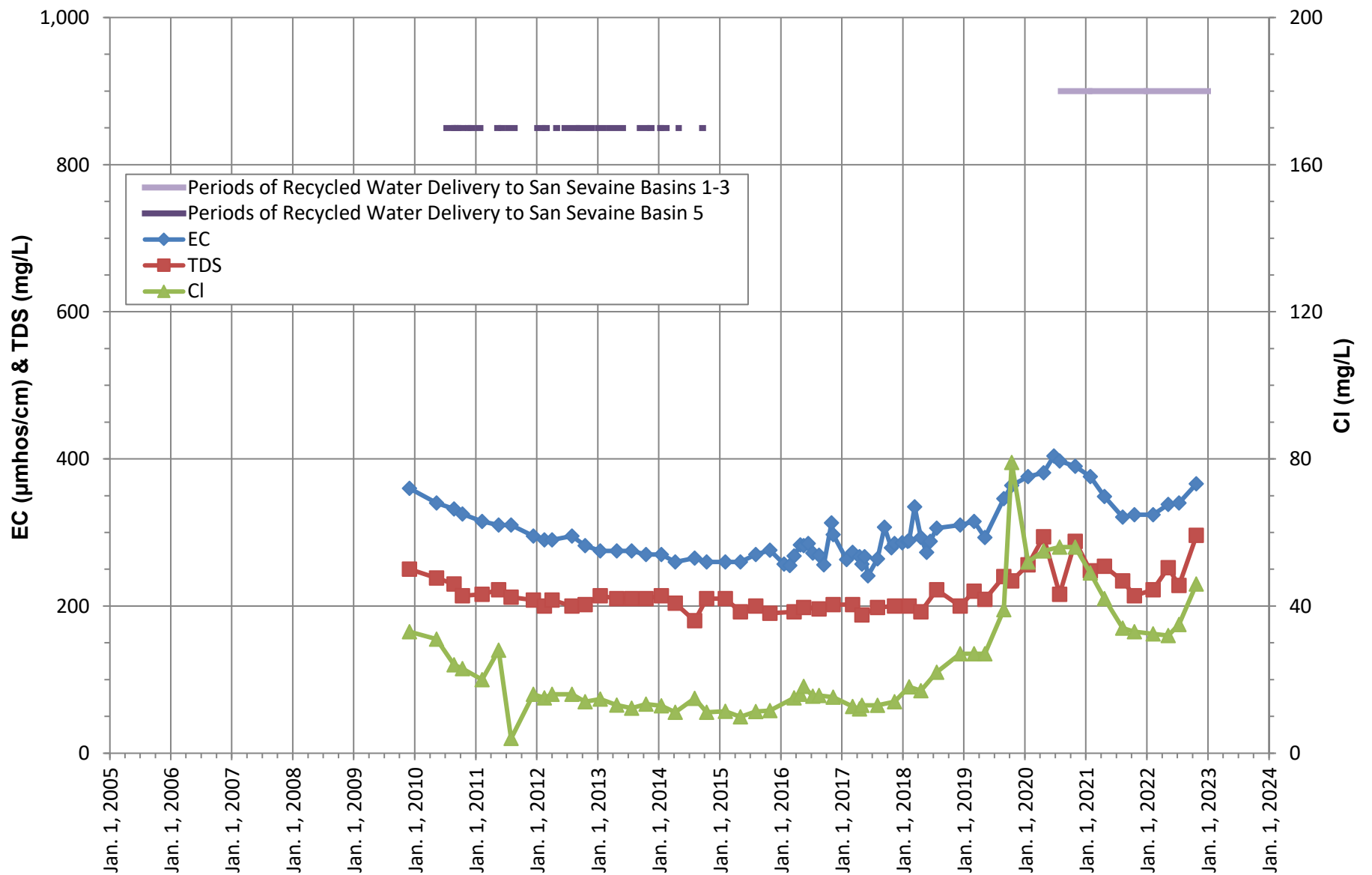
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RP3 AND DECLEZ BASINS
JCSO Well No. 17**





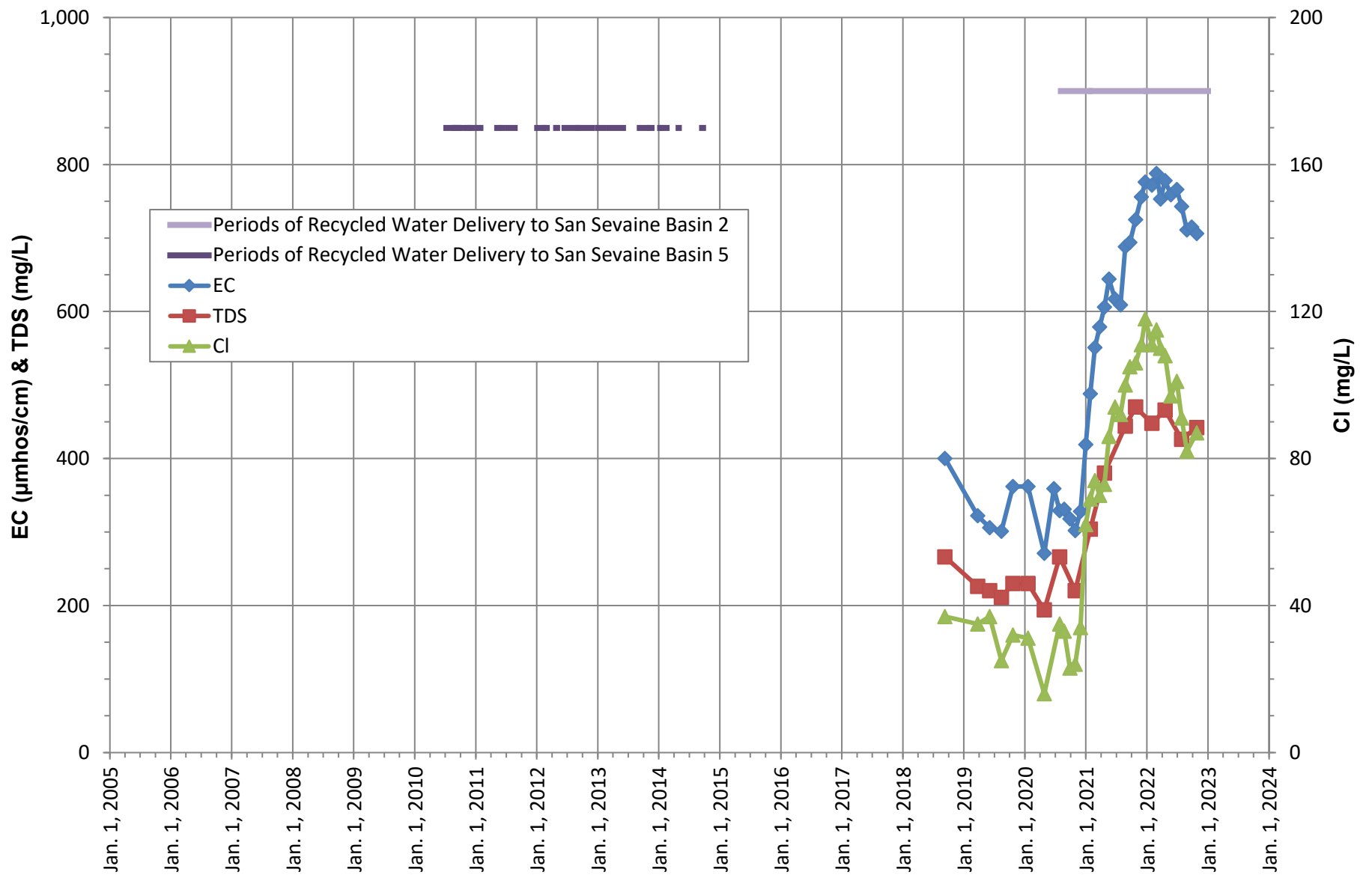
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RP3 AND DECLEZ BASINS
JCSD Well No. 19**





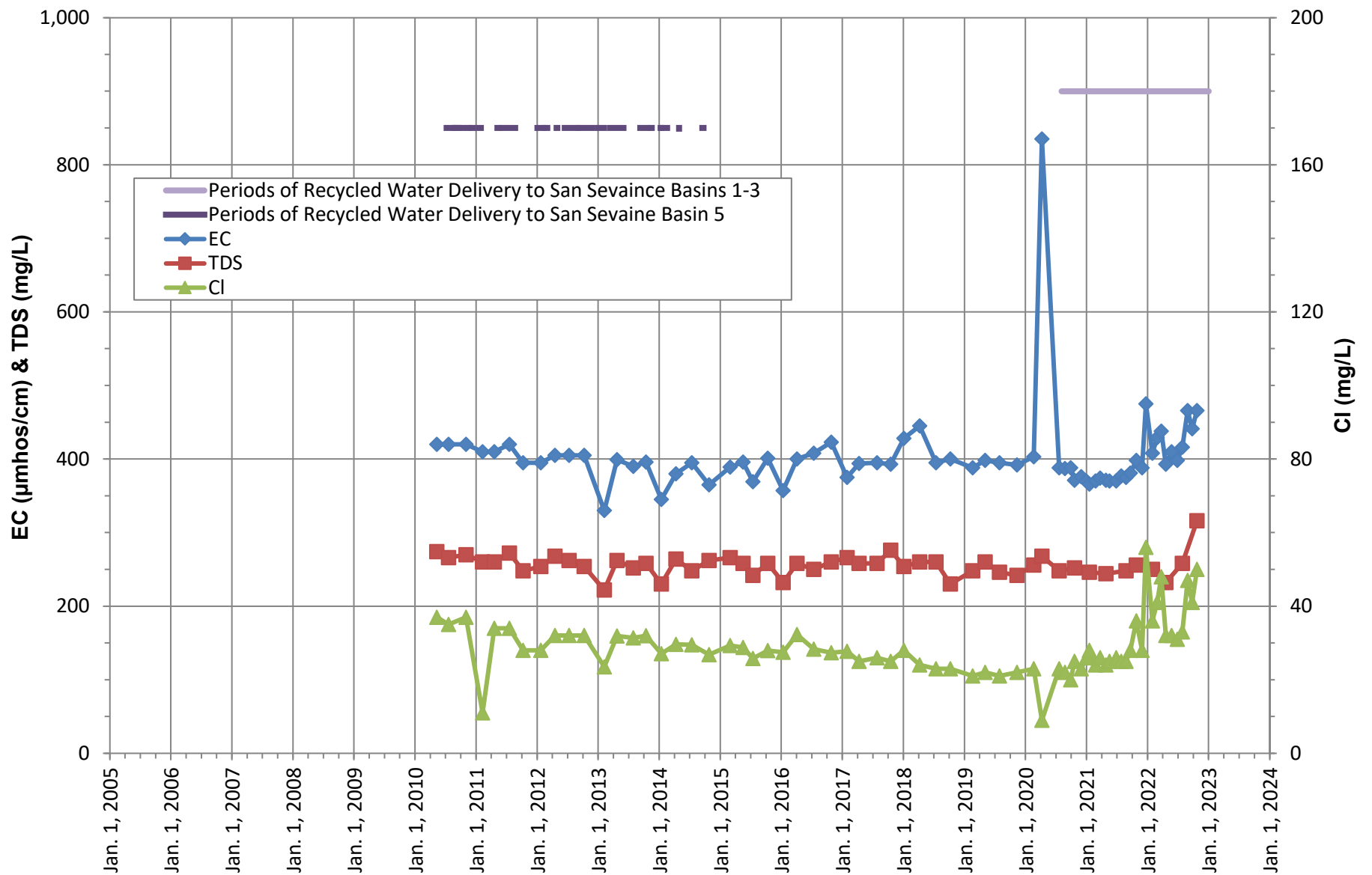
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SAN SEVAINE BASINS
SS-1/1**





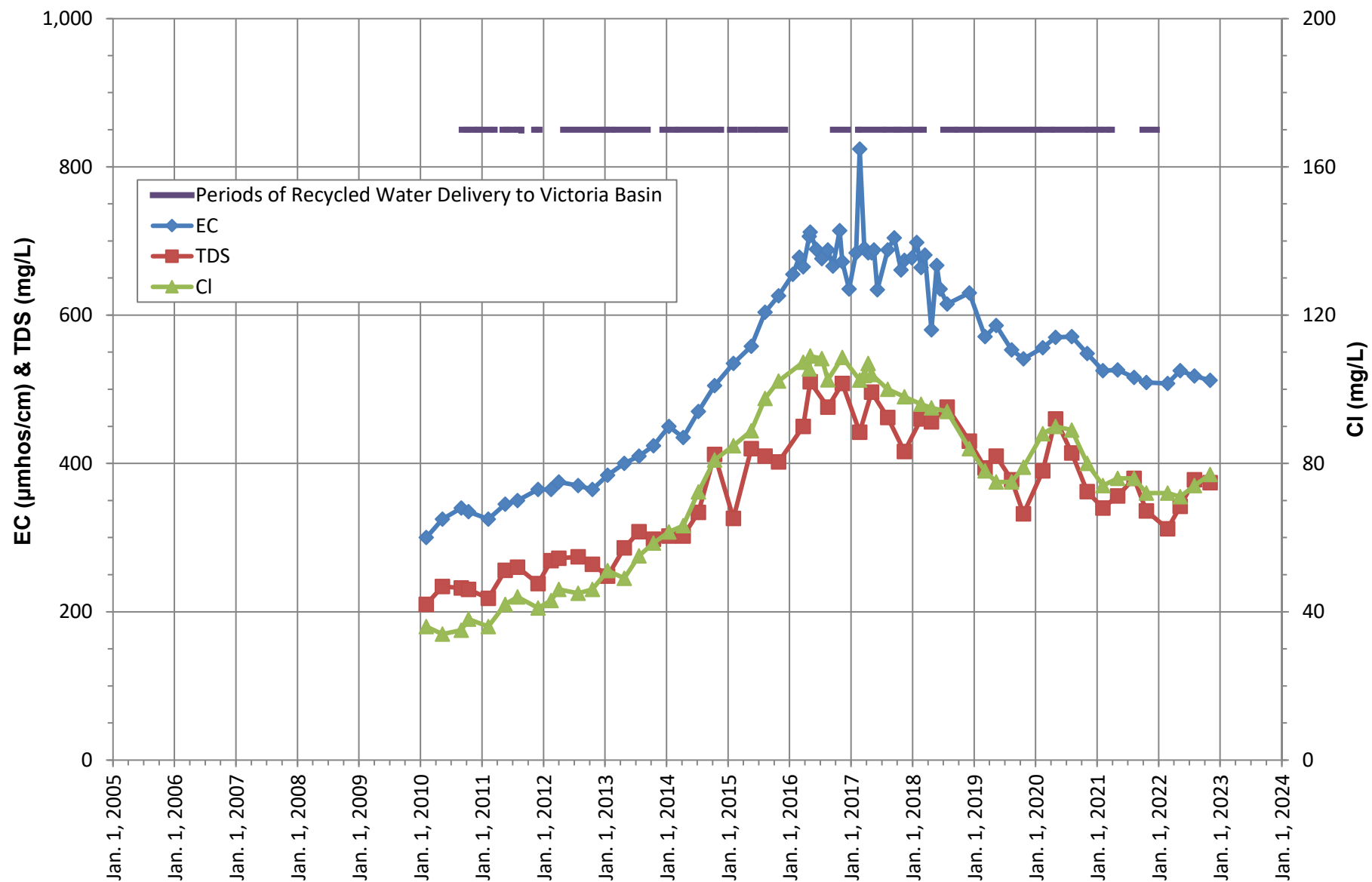
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SAN SEVAINE BASINS
SSV-2**





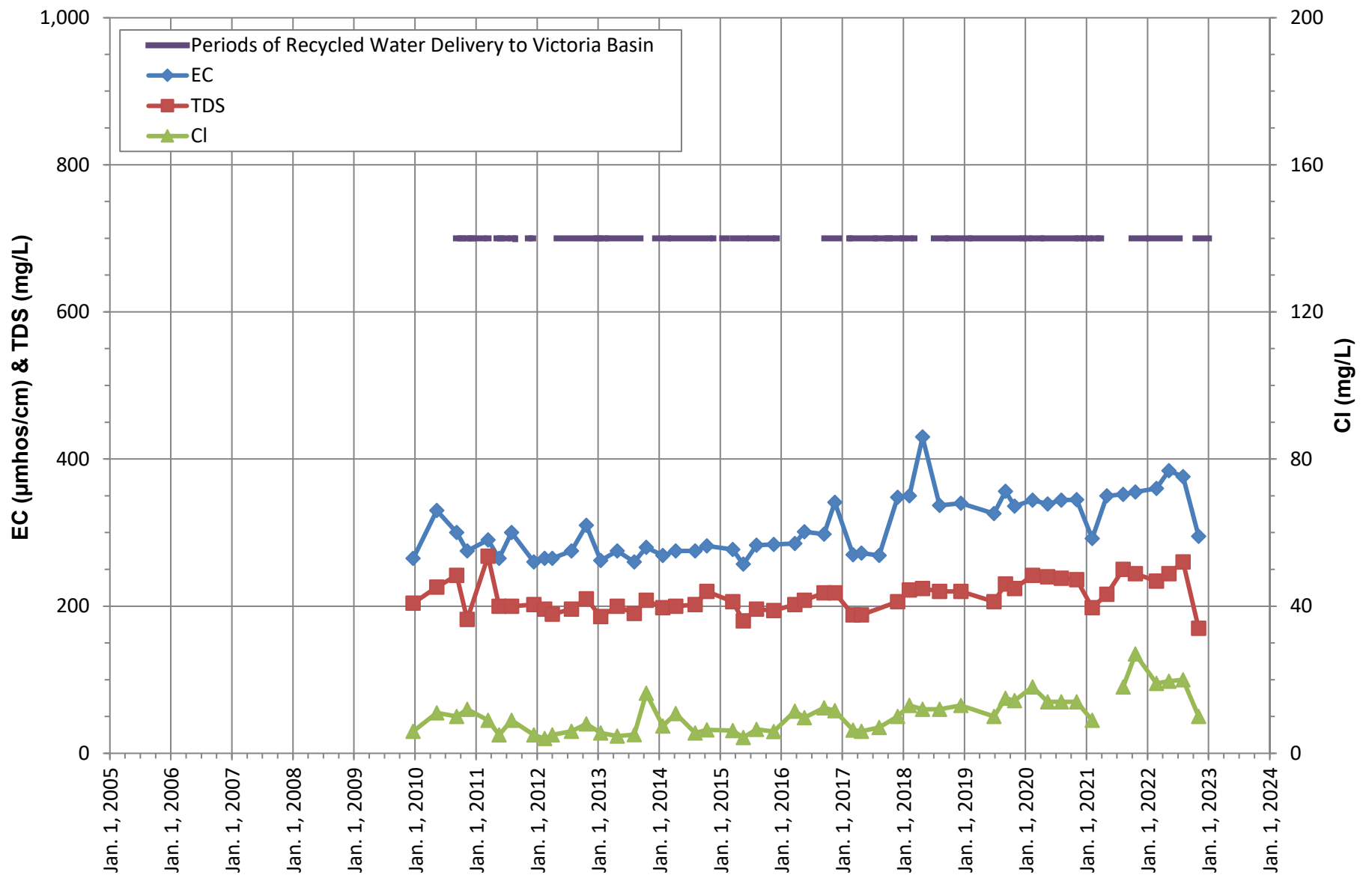
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SAN SEVAINE BASINS
Unitex 91090**





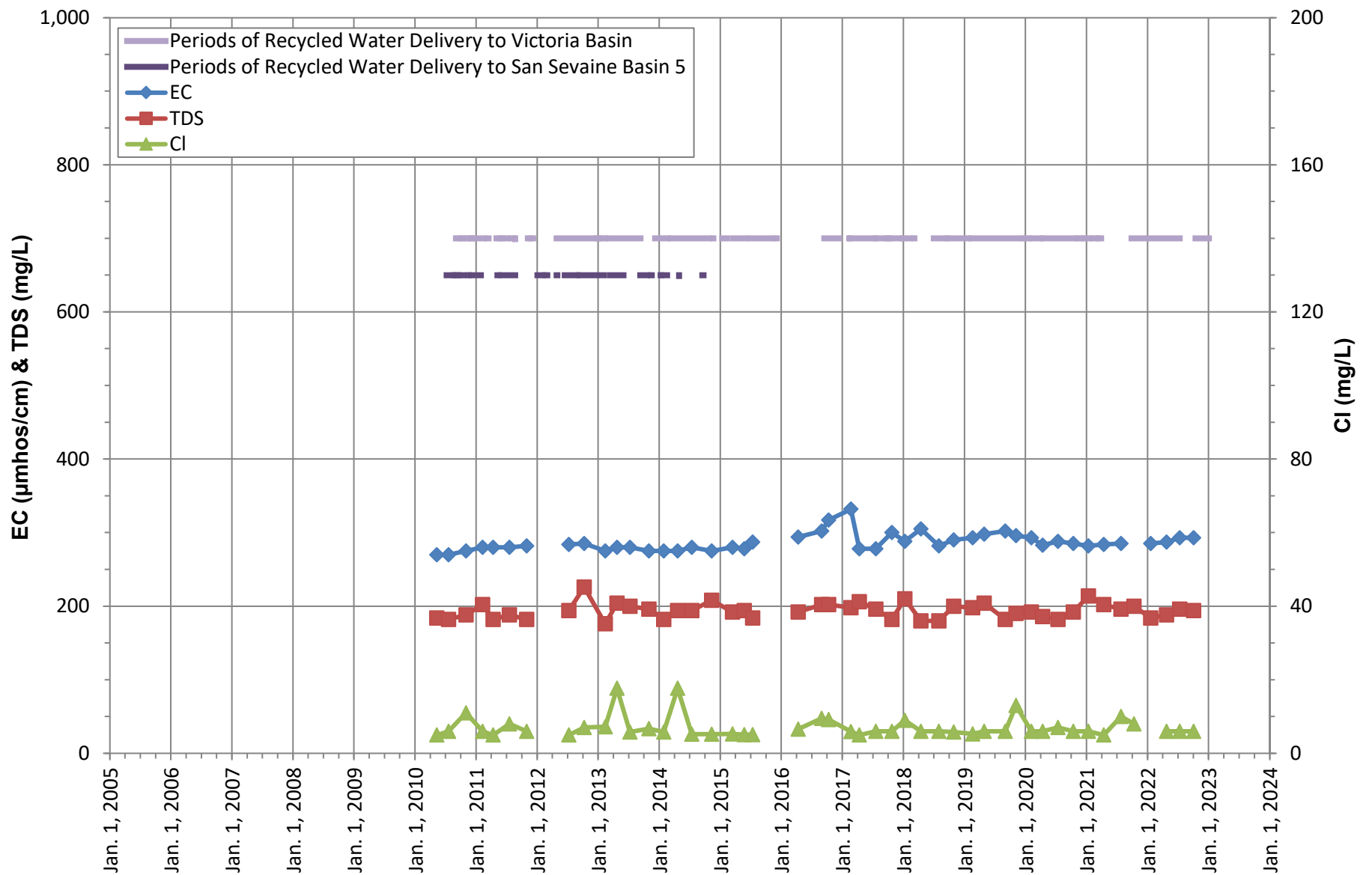
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VICTORIA BASIN
VCT-1/1**





**EC, TDS, CHLORIDE TRENDS
VICTORIA BASIN
VCT-2/2**



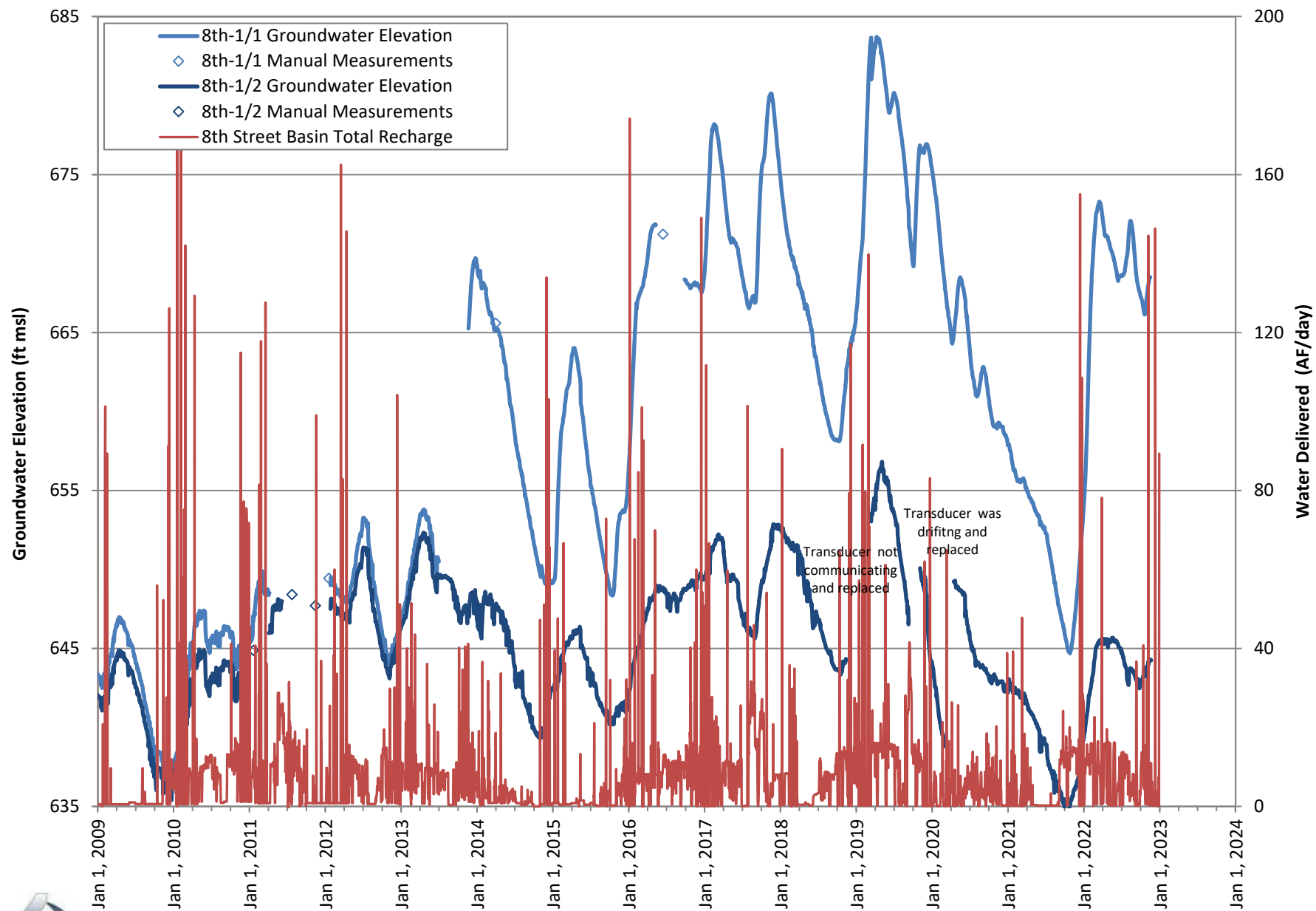


**EC, TDS, CHLORIDE TRENDS
SAN SEVAIRE & VICTORIA BASINS
CVWD Well No. 39**

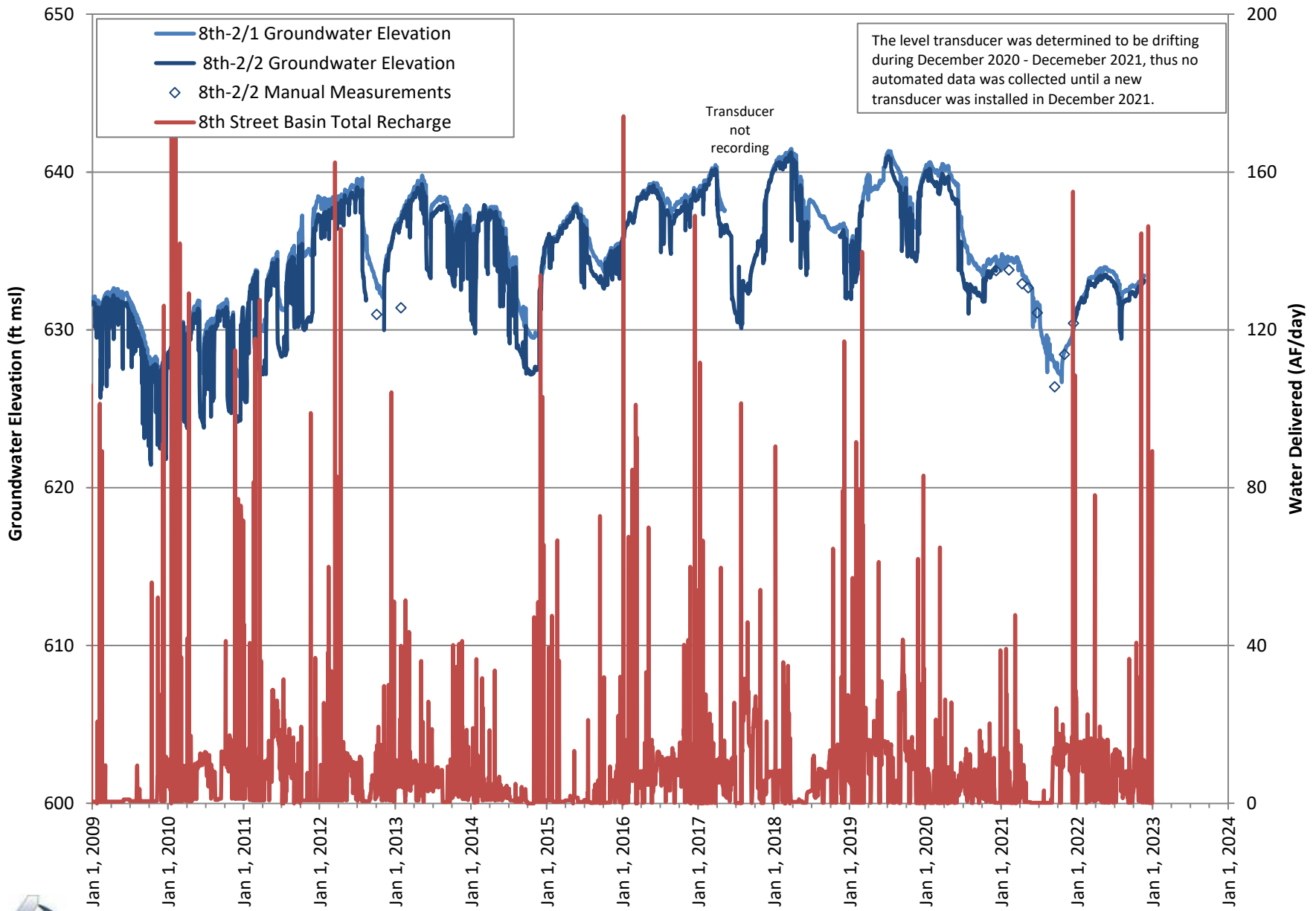


APPENDIX D

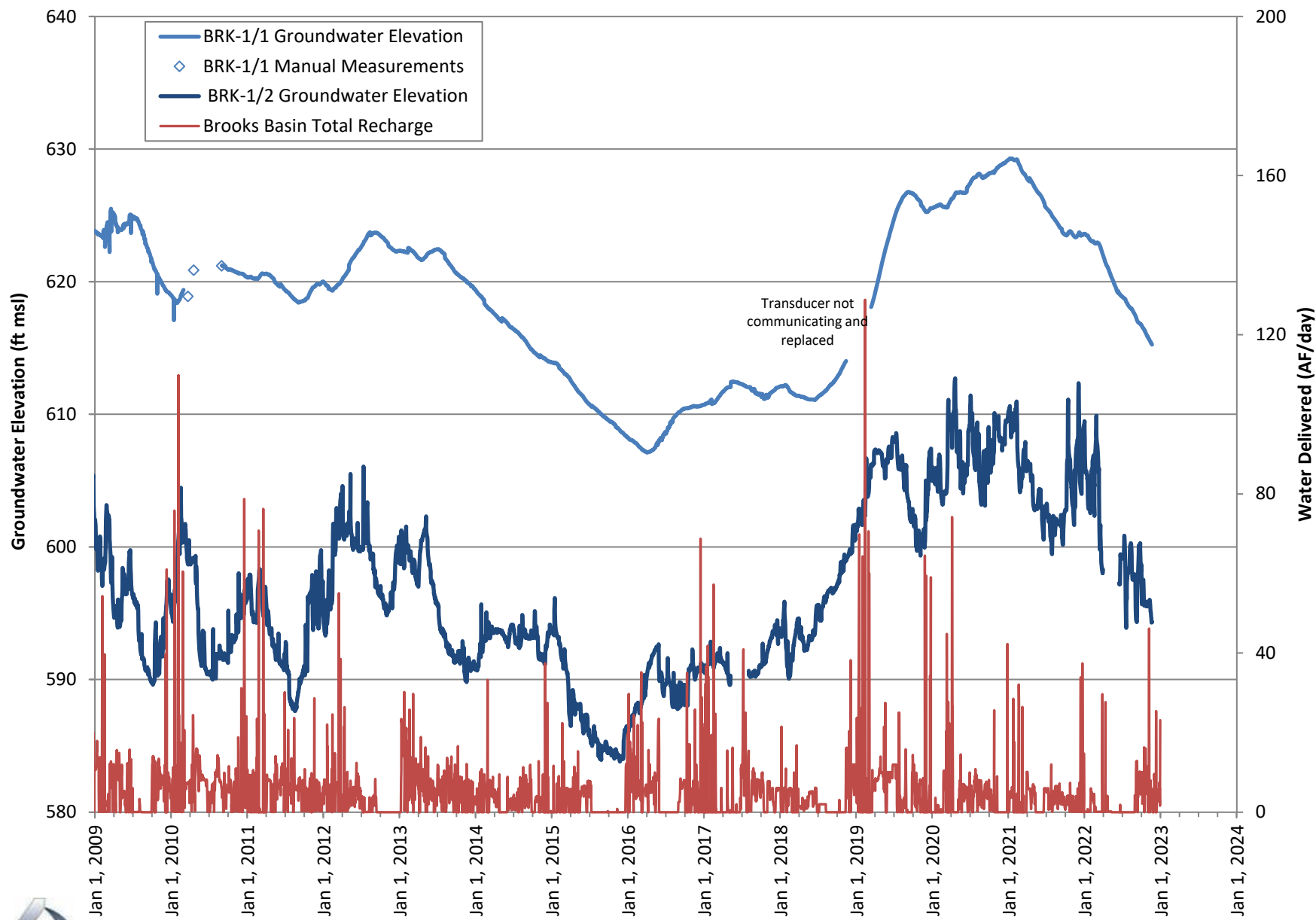
MONITORING WELL HYDROGRAPHS



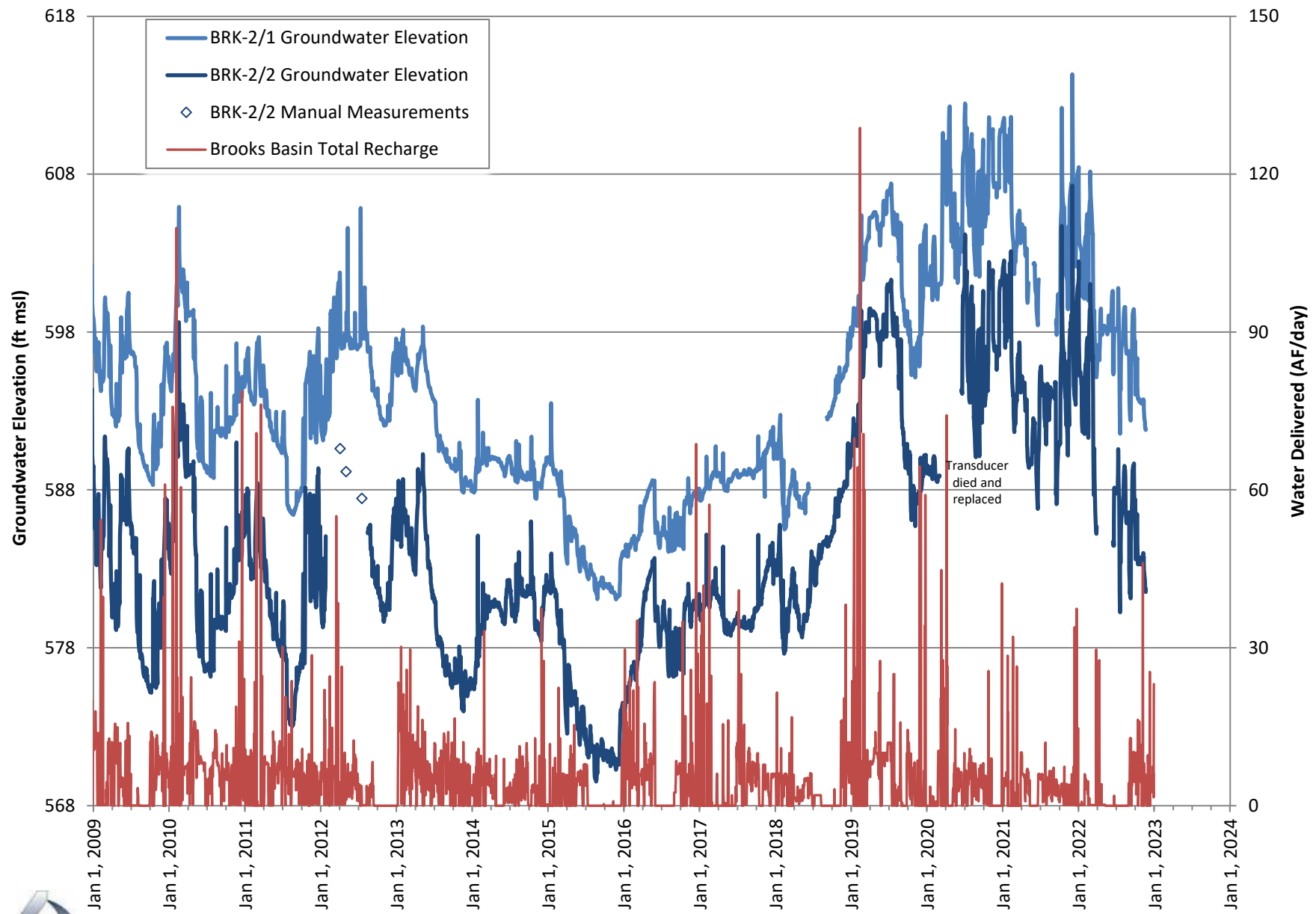
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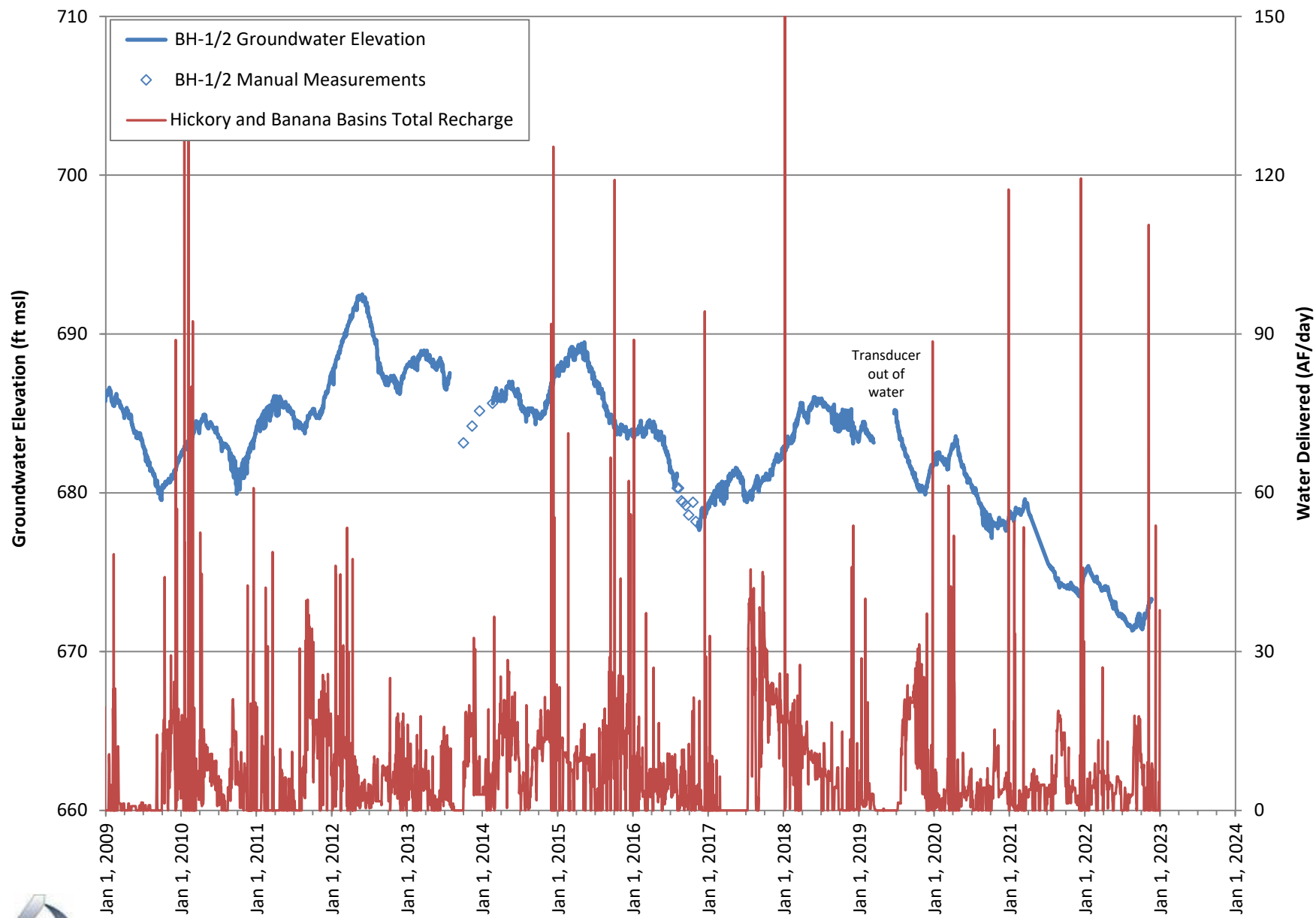
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MW 8TH-2/1 & 8TH-2/2



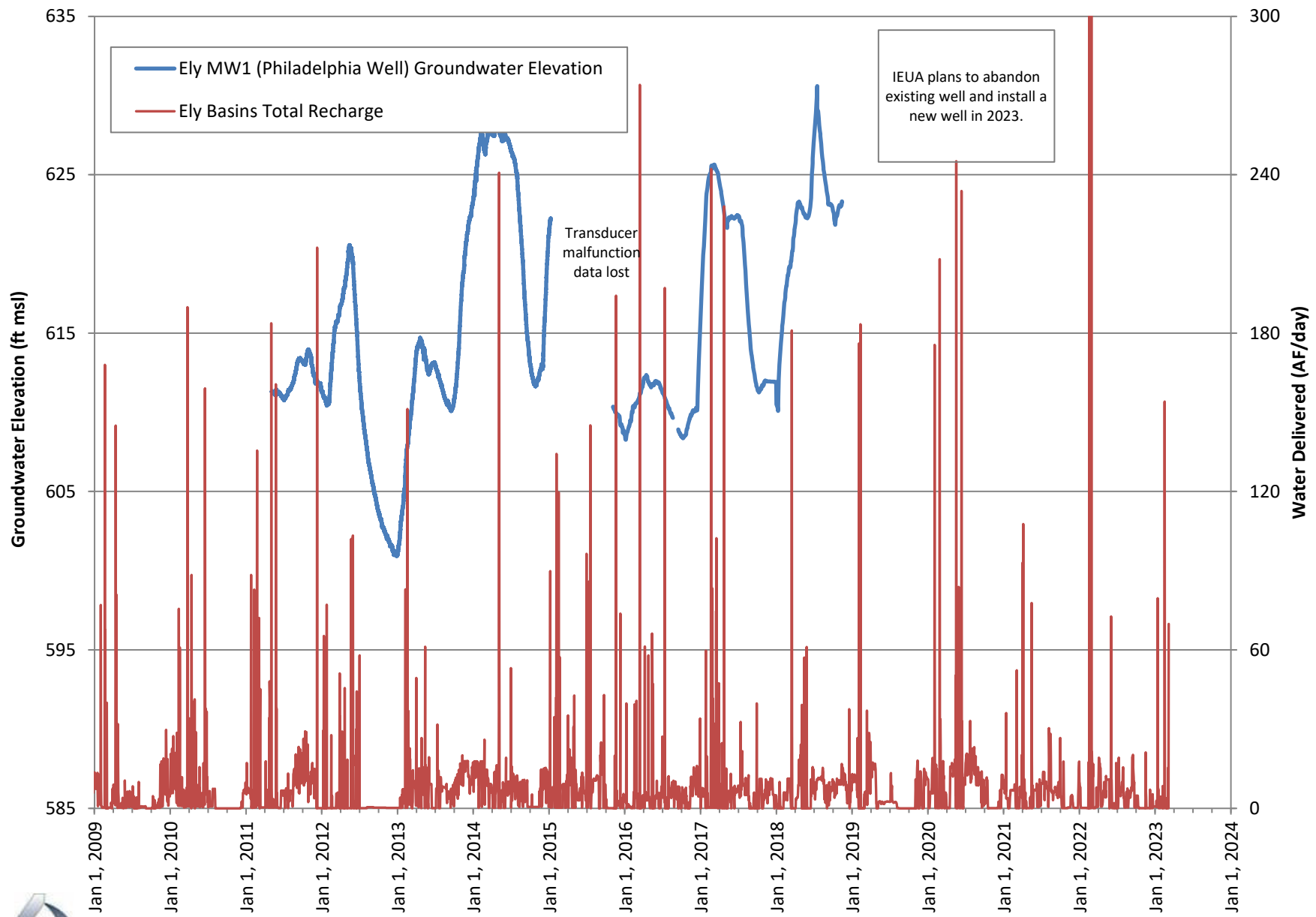
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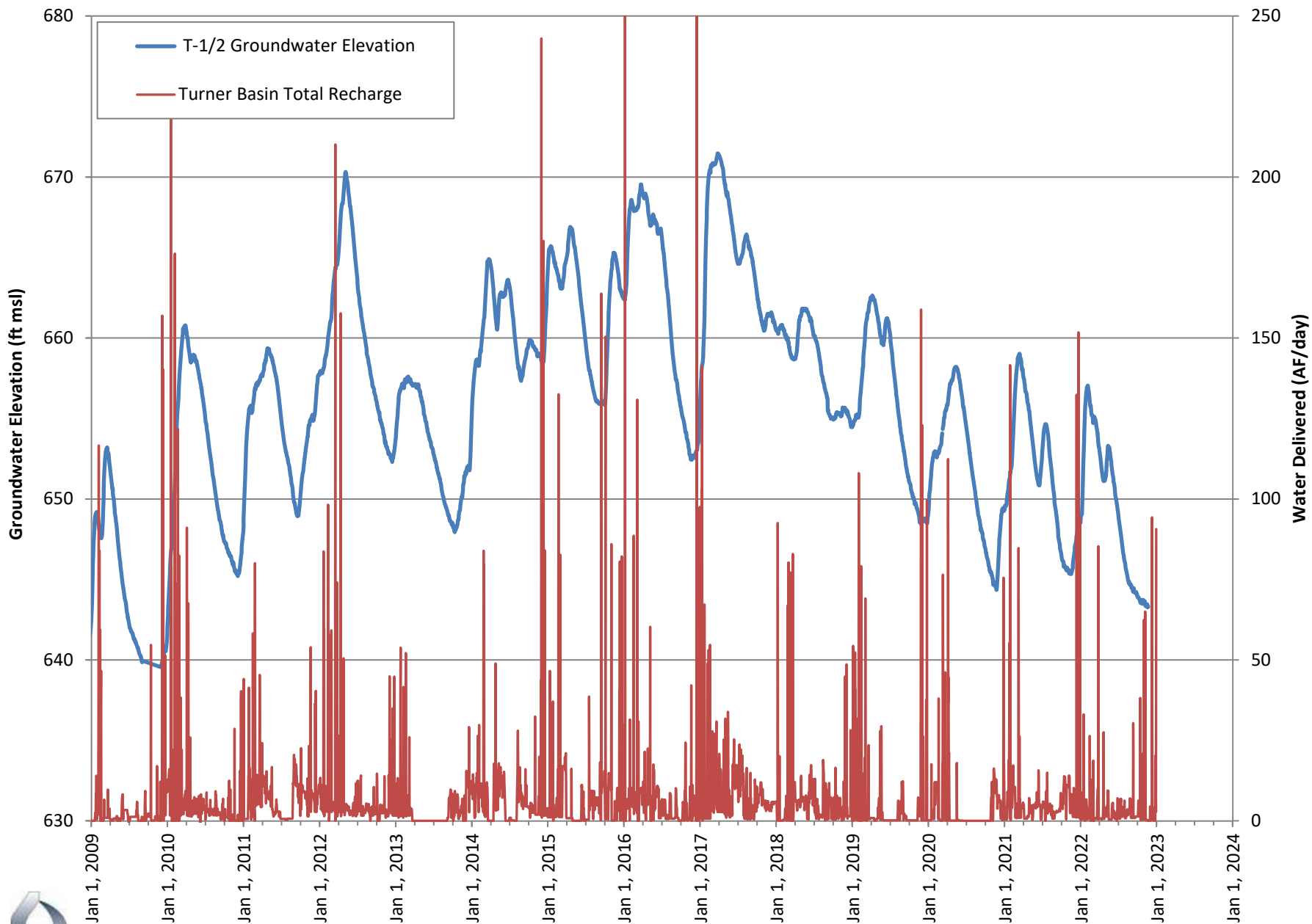
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MW BRK-2/1 & BRK-2/2



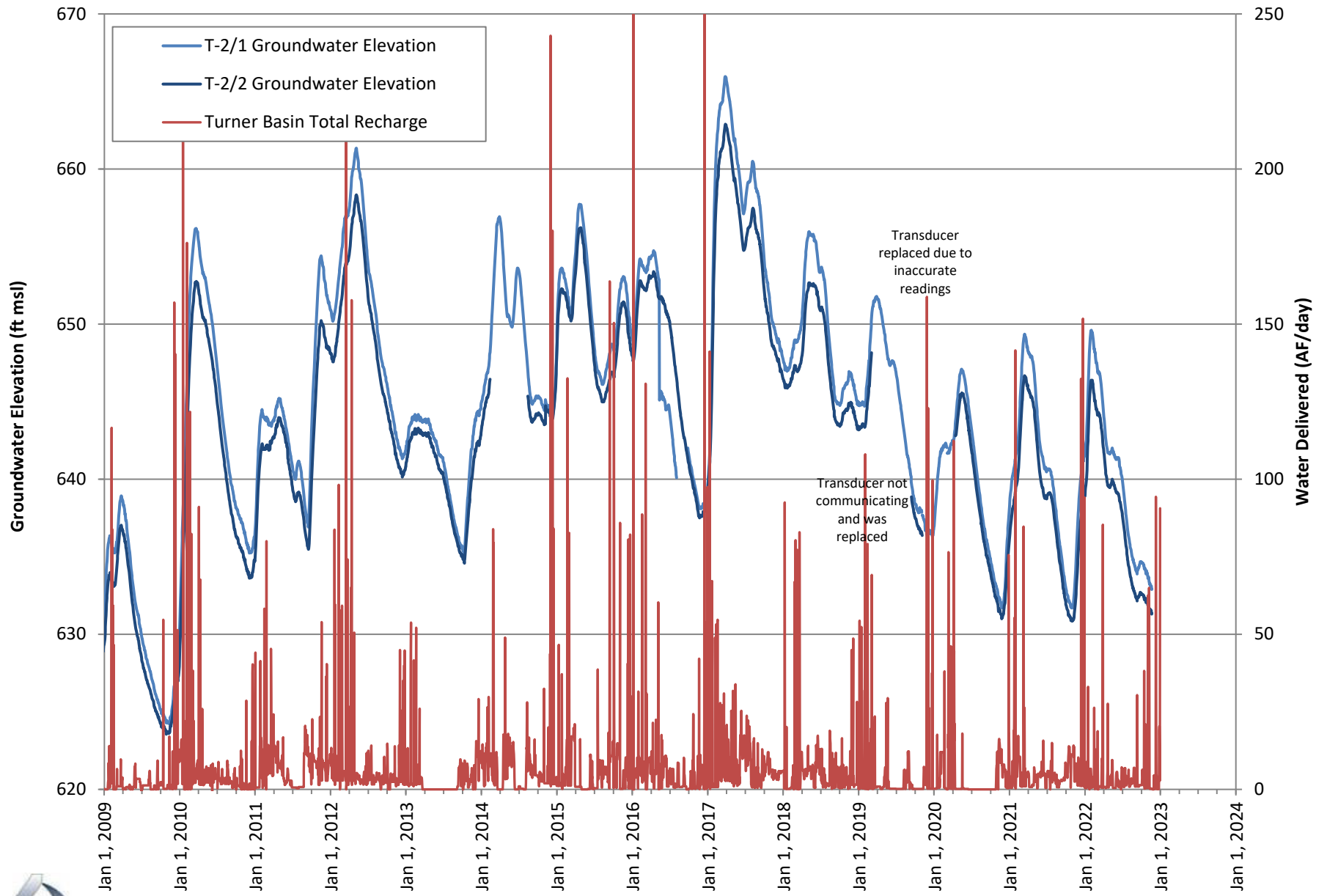
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MW BH-1/2**



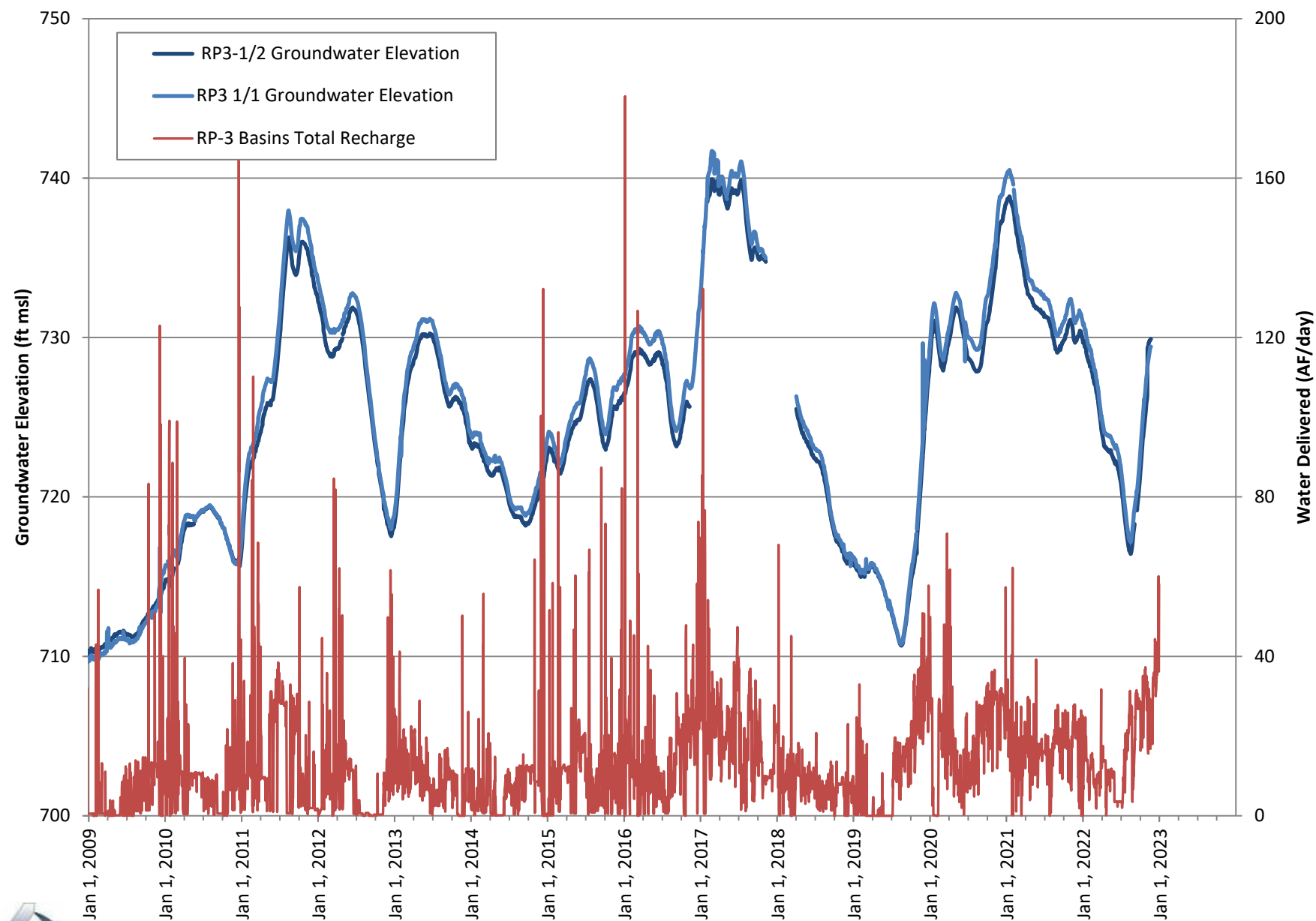
HYDROGRAPH
Ely MW1 (Philadelphia Well)



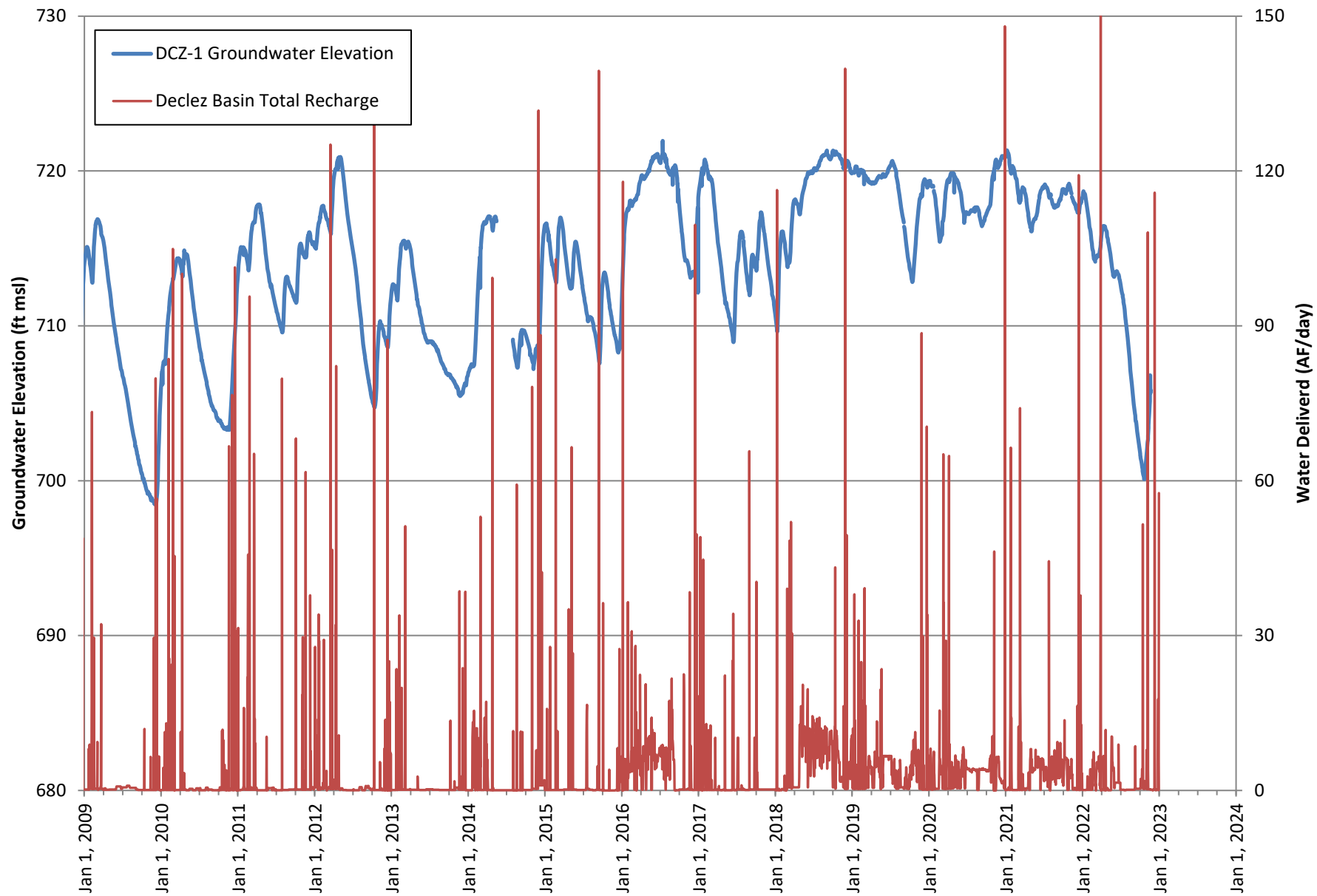
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MW T-1/2



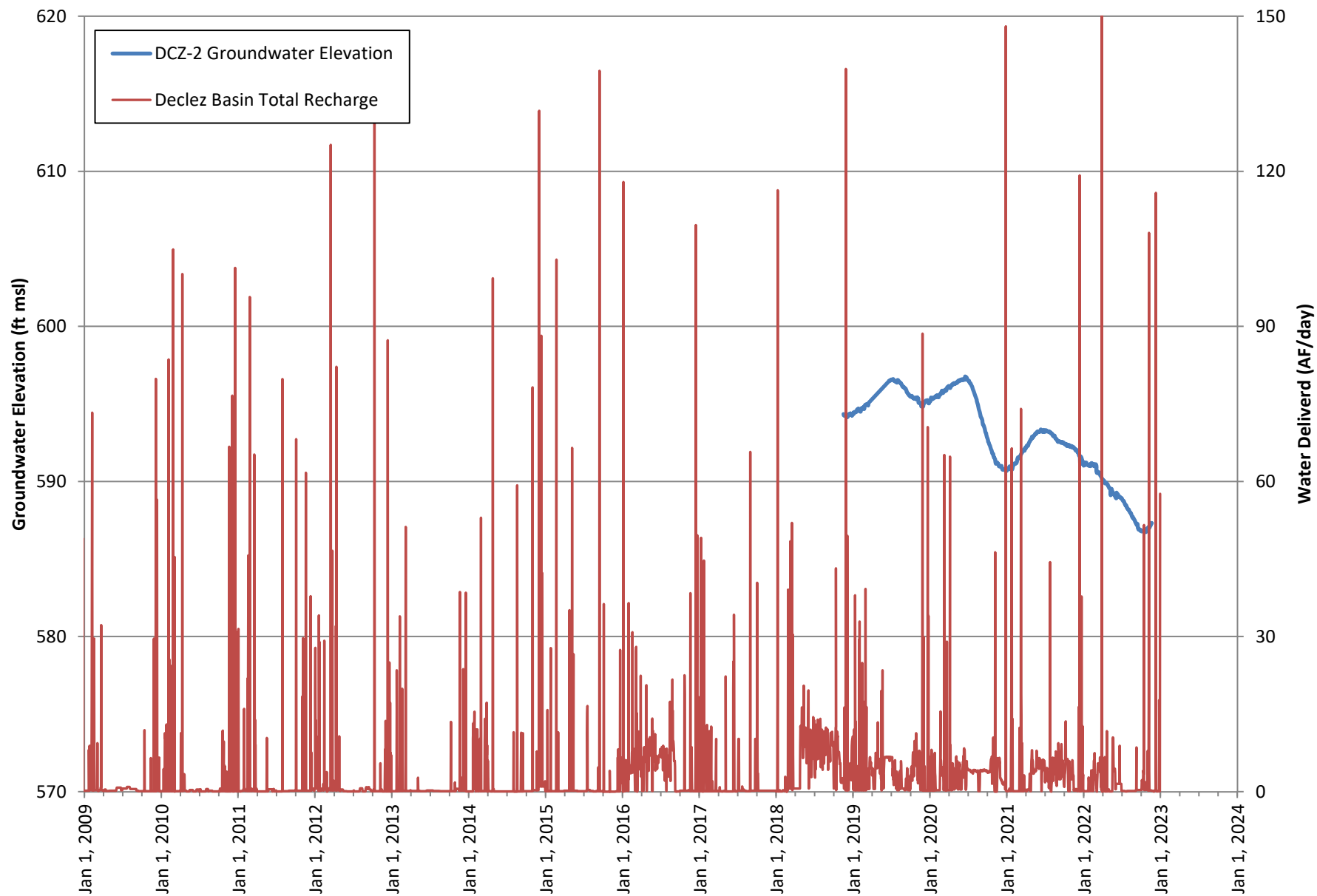
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MW T-2/1 & T-2/2



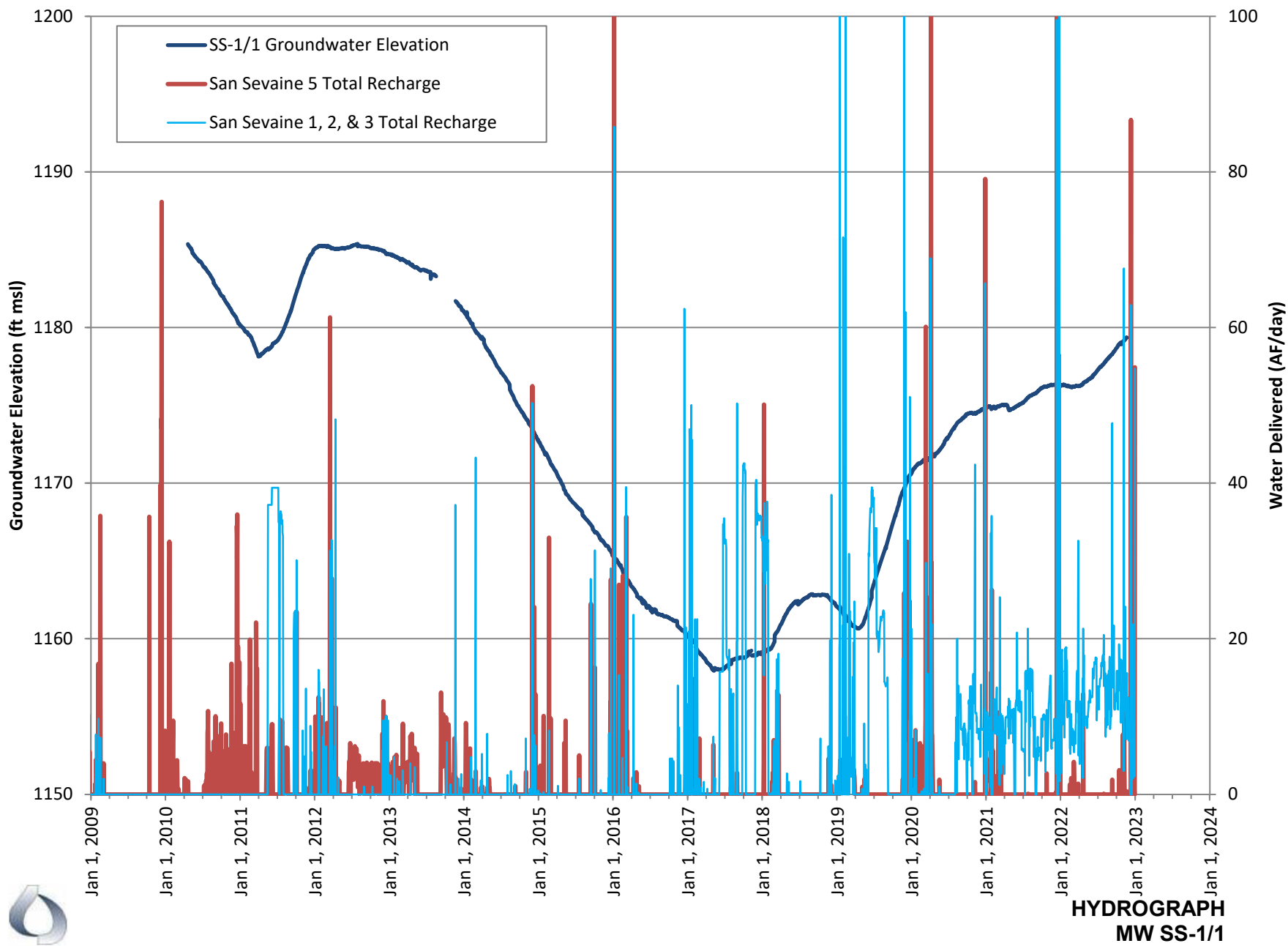
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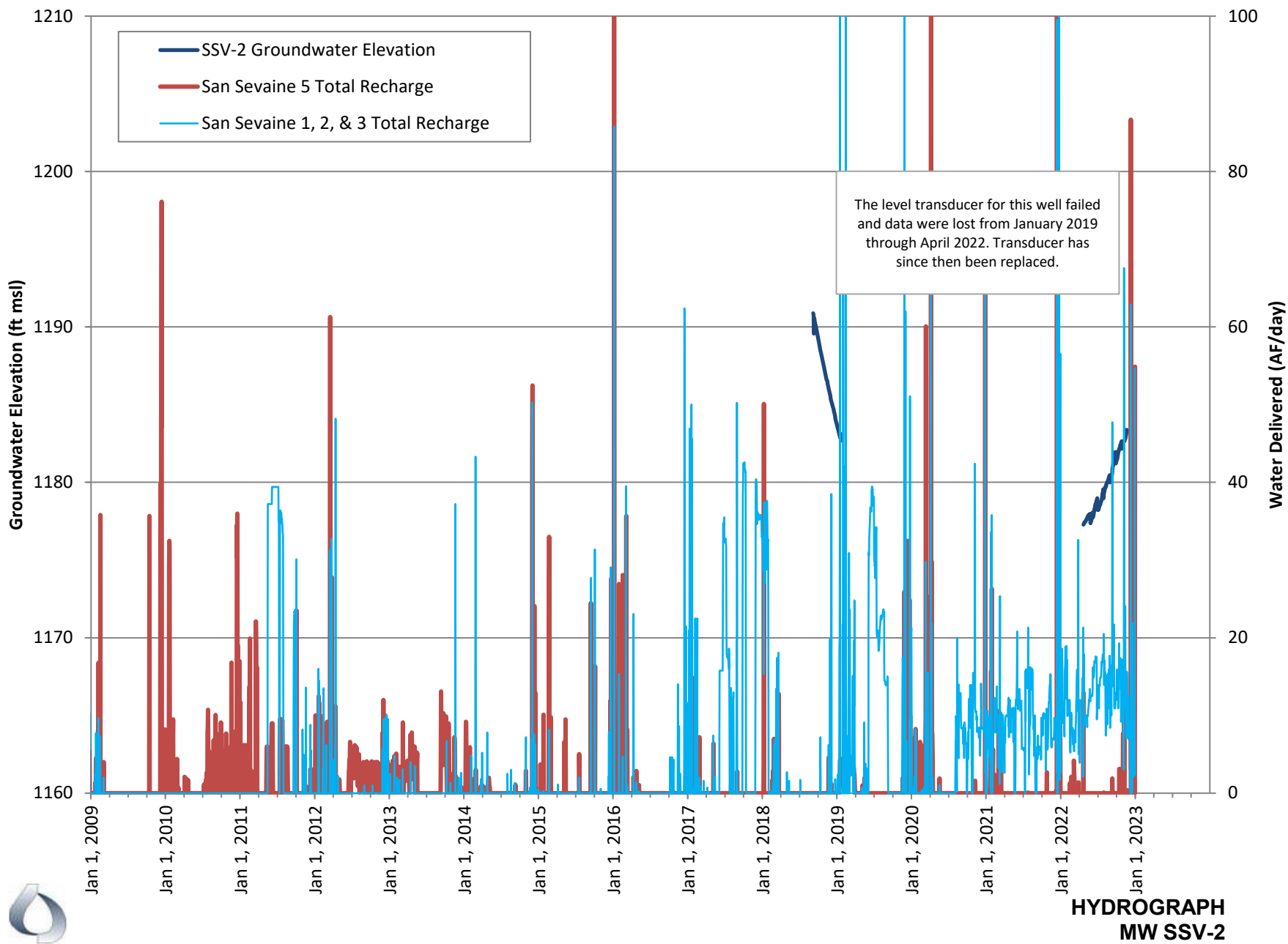


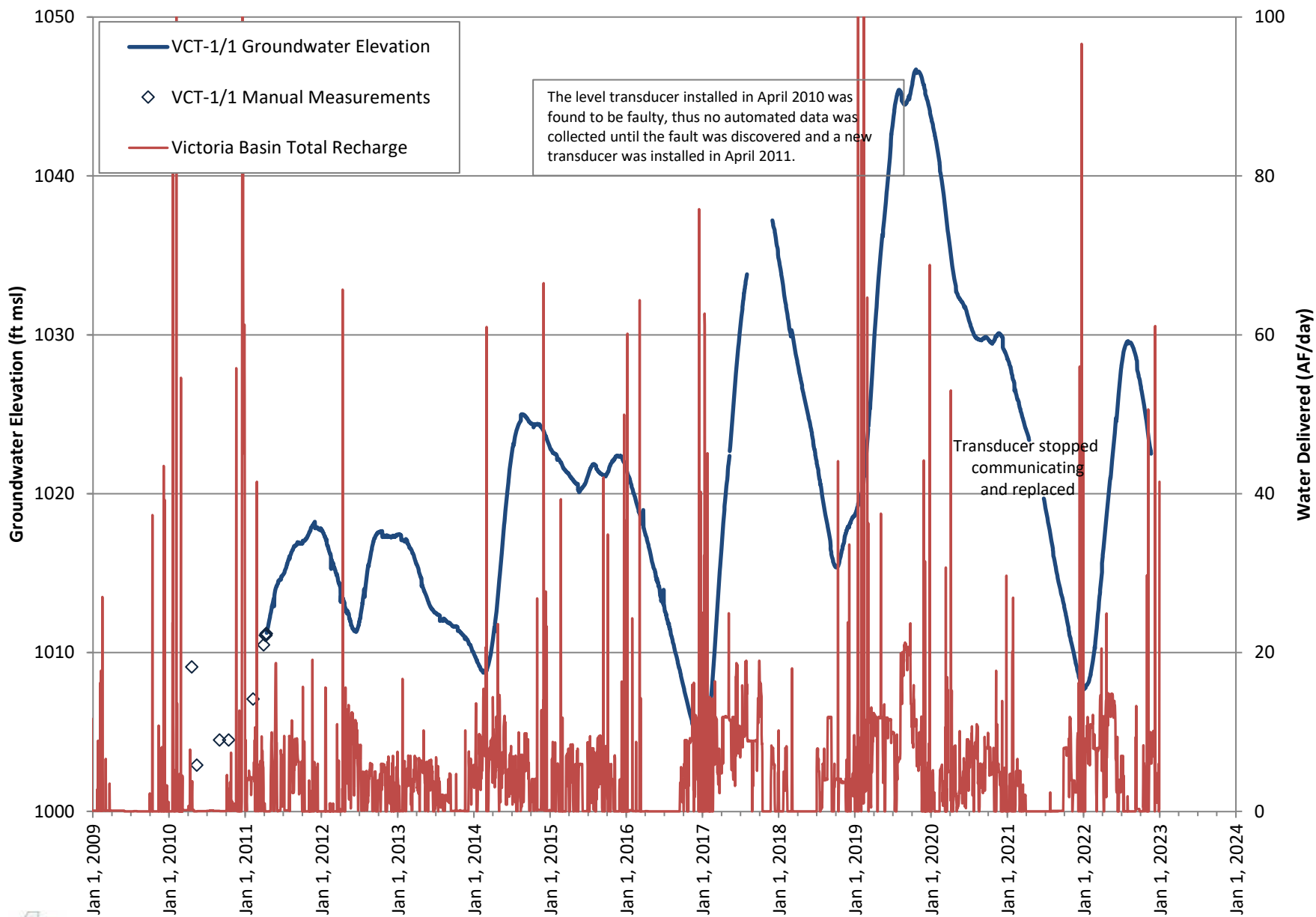
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MW DCZ-1**



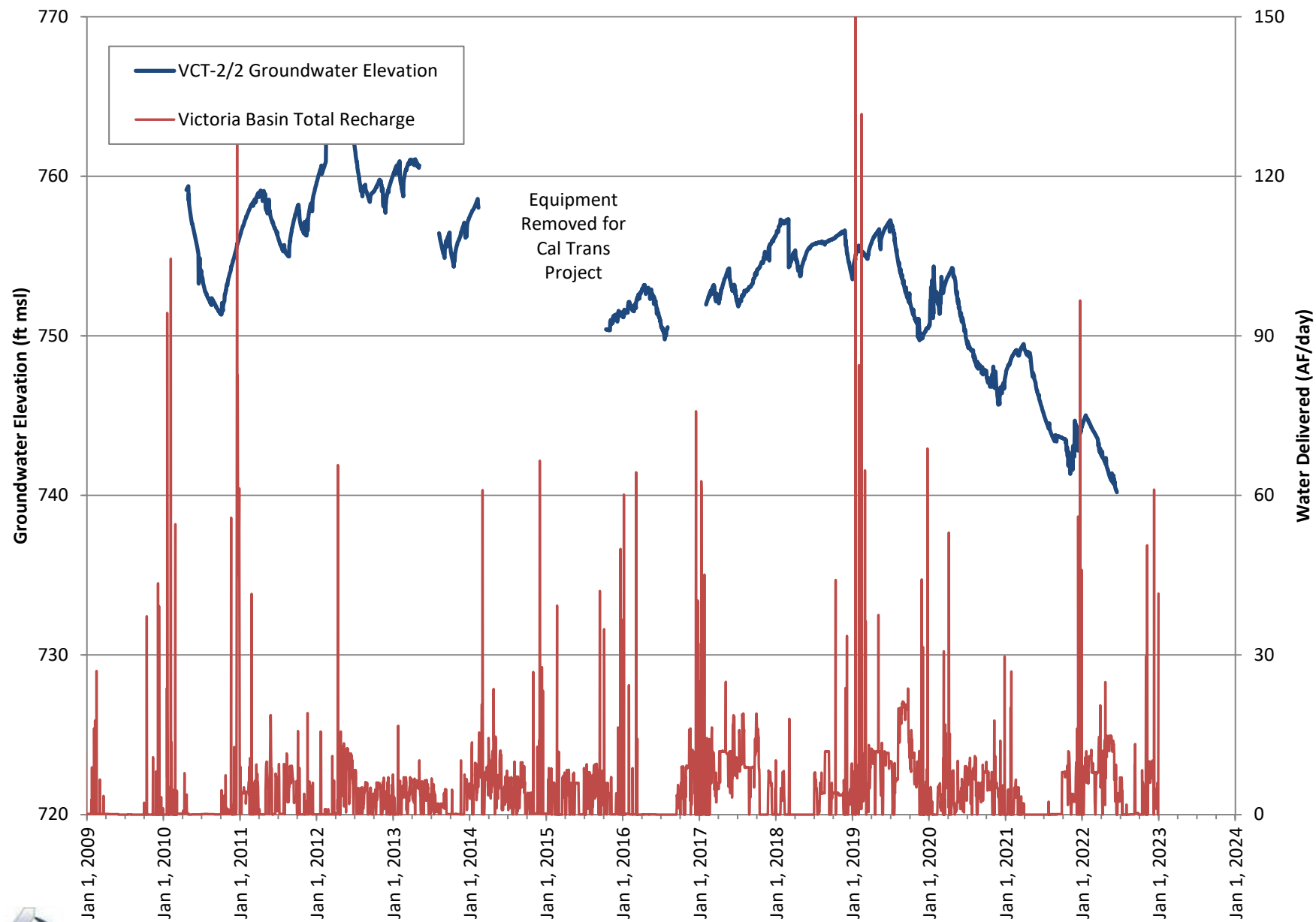
**HYDROGRAPH
MW DCZ-2**







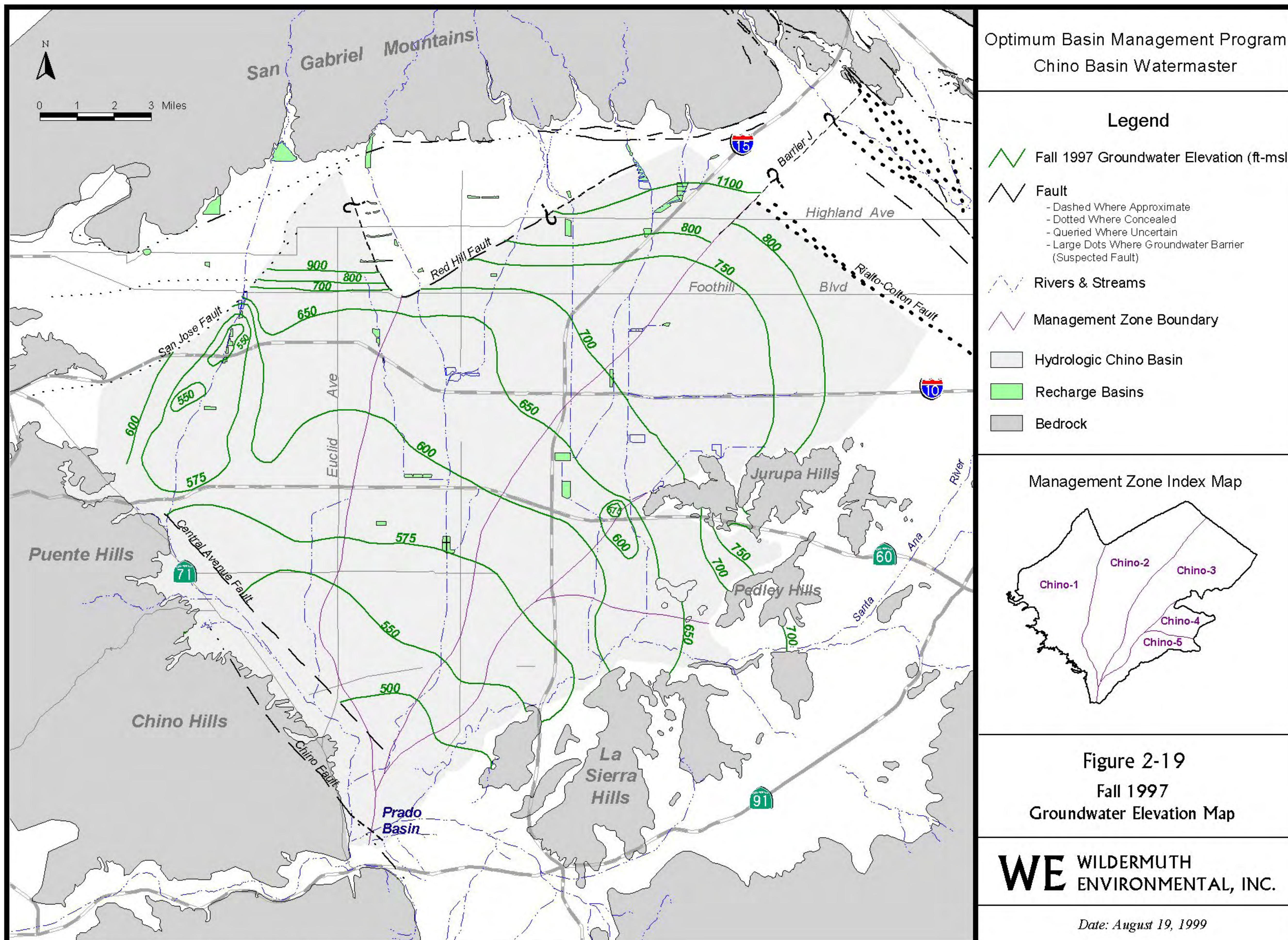
**HYDROGRAPH
MW VCT-1/1**

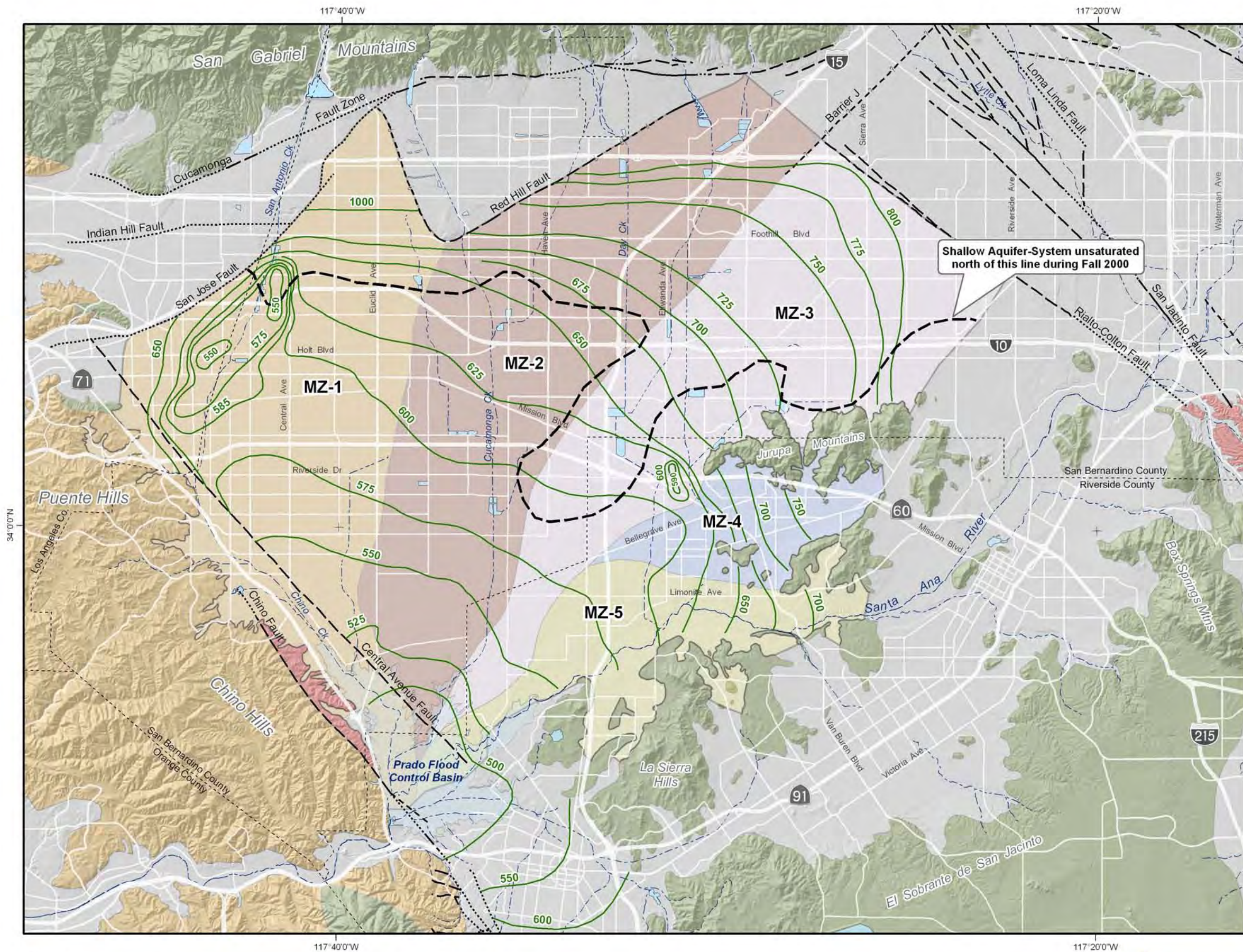


**HYDROGRAPH
MW VCT-2/2**

APPENDIX E

GROUNDWATER ELEVATION CONTOUR MAPS





Main Features

800 Groundwater Elevation Contours -- Fall 2000
 775 (feet above mean sea level)

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Plio-Pleistocene Sedimentary Rocks

Cretaceous to Miocene Sedimentary Rocks

Pre-Tertiary Igneous and Metamorphic Rocks

Faults

Location Certain

Location Approximate

Location Concealed

Location Uncertain

Other Features

Flood Control and Conservation Basins



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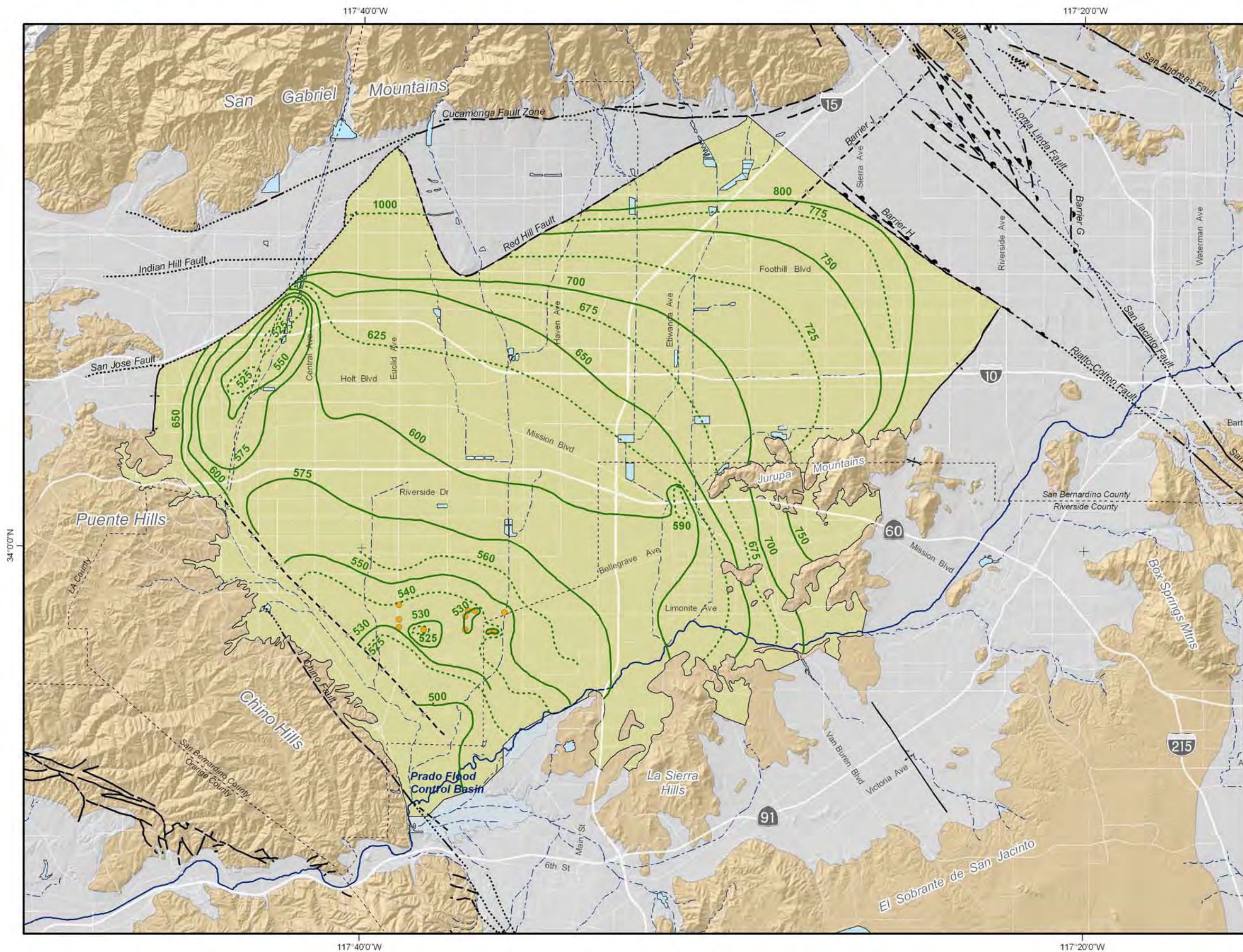
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 Date: 20050714
 File: Figure 8-03.mxd



Inland Empire
 UTILITIES AGENCY
 Phase II Recycled Water
 Groundwater Recharge Project

**Groundwater Elevation Map
 Fall 2000**

Figure 8-3

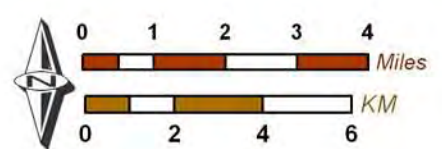


- ### Main Features
- 800
775
Groundwater Elevation Contours (feet above mean sea-level)
 - Chino-I Desalter Well
 - Chino Basin Hydrologic Boundary
- ### Geology
- Water-Bearing Sediments**
- Quaternary Alluvium
- Consolidated Bedrock**
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults & Groundwater Divides**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Groundwater Divide



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Author: KD
 Date: 20050627
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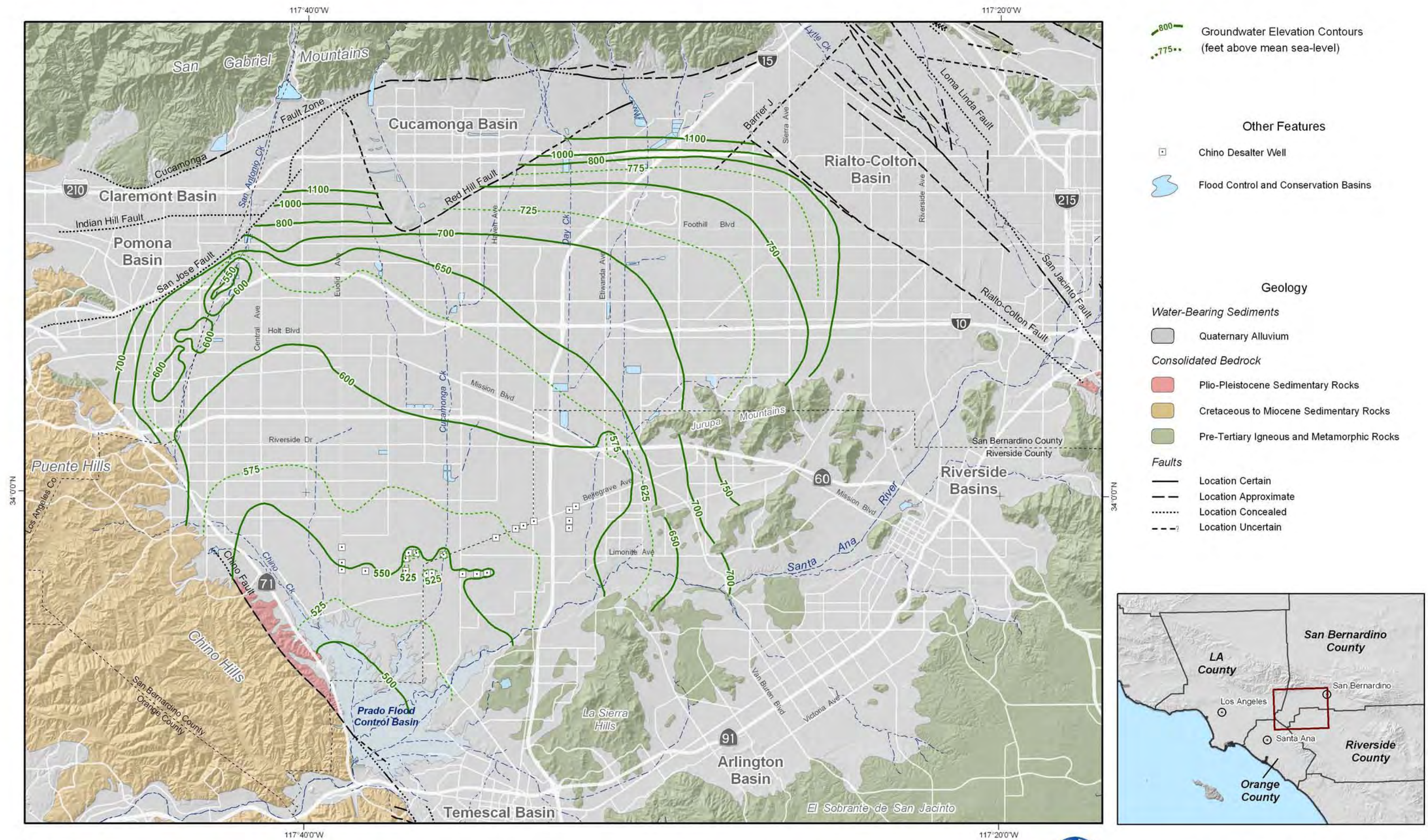


State of the Basin Report -- 2004
 Groundwater Basin Operation and Response



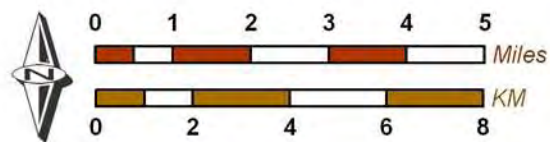
Groundwater Elevation Contours
 Fall 2003 -- Chino Basin

Figure 3-6



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Author: ETL
 Date: 20070511
 File: Figure_3-18.mxd

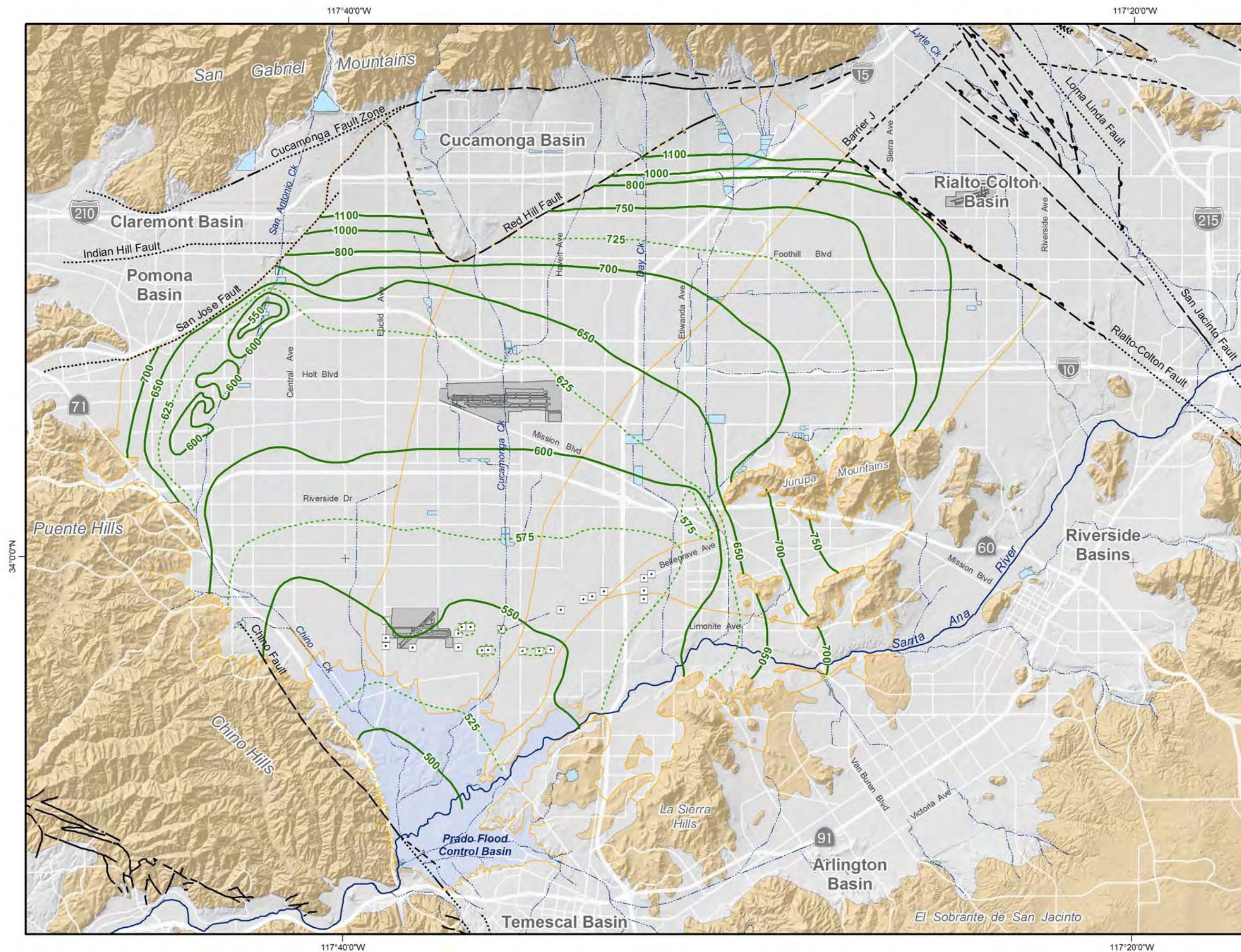


DRAFT - 2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description
 Hydrogeologic Setting



Groundwater Elevation Contours
 Fall 2006 -- Chino Basin

Figure 2-7a

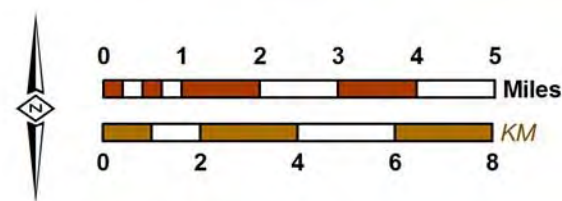


- 800 Groundwater Elevation Contours (feet above mean sea-level)
775
- Other Features**
- Management Zone Boundary
 - Chino Desalter Well
 - Streams & Flood Control Channels
 - Flood Control & Conservation Basins
- Geology**
- Water-Bearing Sediments**
- Quaternary Alluvium
- Consolidated Bedrock**
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain



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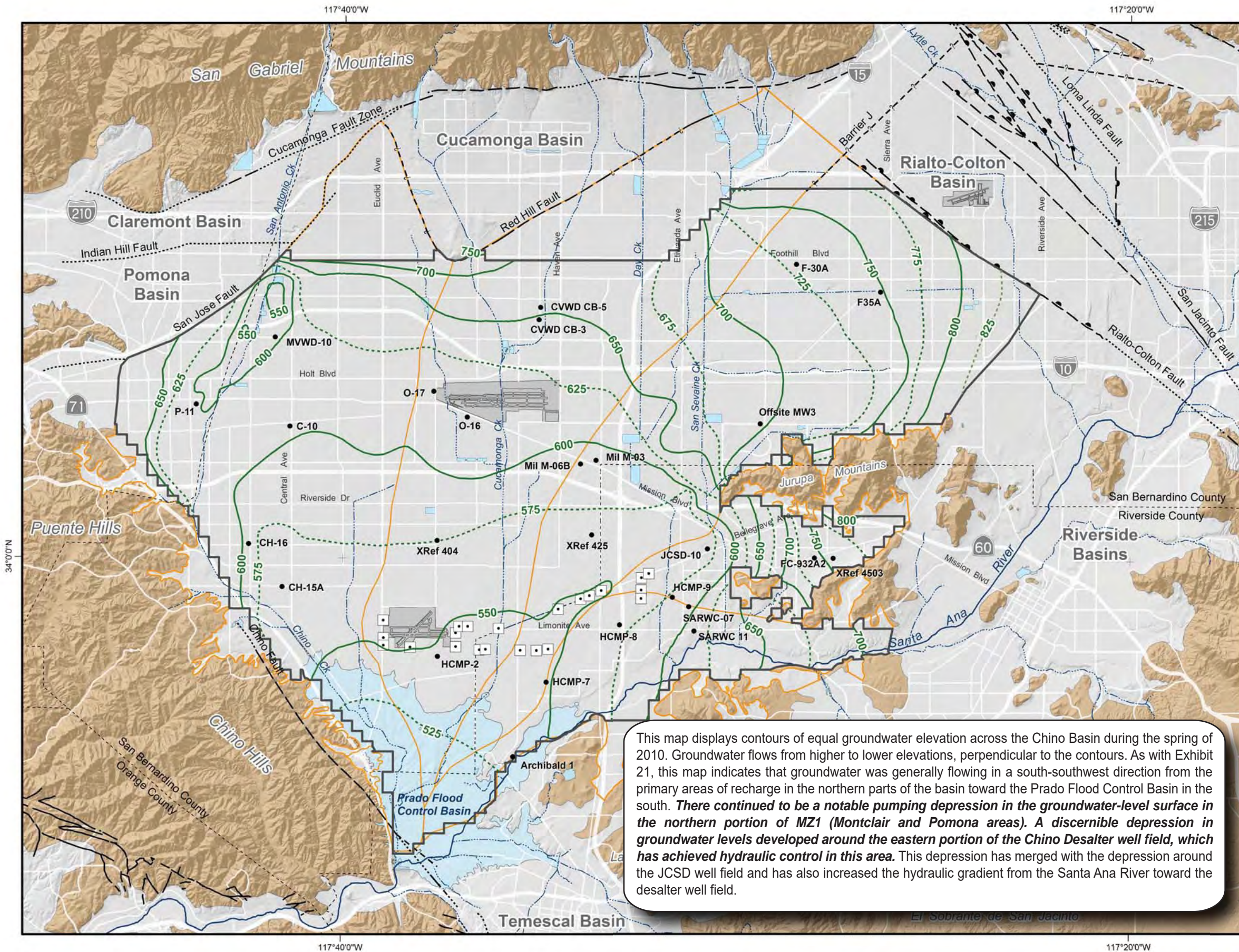
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Date: 20090401
File: Figure_3-19.mxd



2008 State of the Basin Report
Groundwater Levels

Groundwater Elevation Contours
Fall 2008 -- Chino Basin

Figure 3-19



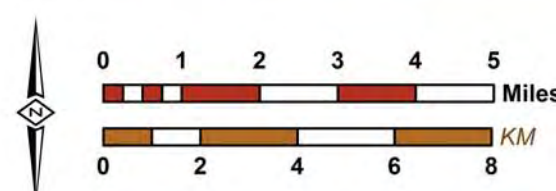
- 800 775 Groundwater Elevation Contours (feet above mean sea-level)
- Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)
- Well used for Time History Analysis (Exhibits 16 through 20)
- OBMP Management Zones
- Chino Desalter Wells
- Streams & Flood Control Channels
- Flood Control & Conservation Basins
- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
- Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults
 - Location Certain
 - Location Approximate
 - Approximate Location of Groundwater Barrier
 - Location Concealed
 - Location Uncertain

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 2010. Groundwater flows from higher to lower elevations, perpendicular to the contours. As with Exhibit 21, this map indicates that groundwater was generally flowing in a south-southwest direction from the primary areas of recharge in the northern parts of the basin toward the Prado Flood Control Basin in the south. ***There continued to be a notable pumping depression in the groundwater-level surface in the northern portion of MZ1 (Montclair and Pomona areas). A discernible depression in groundwater levels developed around the eastern portion of the Chino Desalter well field, which has achieved hydraulic control in this area.*** This depression has merged with the depression around the JCSD well field and has also increased the hydraulic gradient from the Santa Ana River toward the desalter well field.

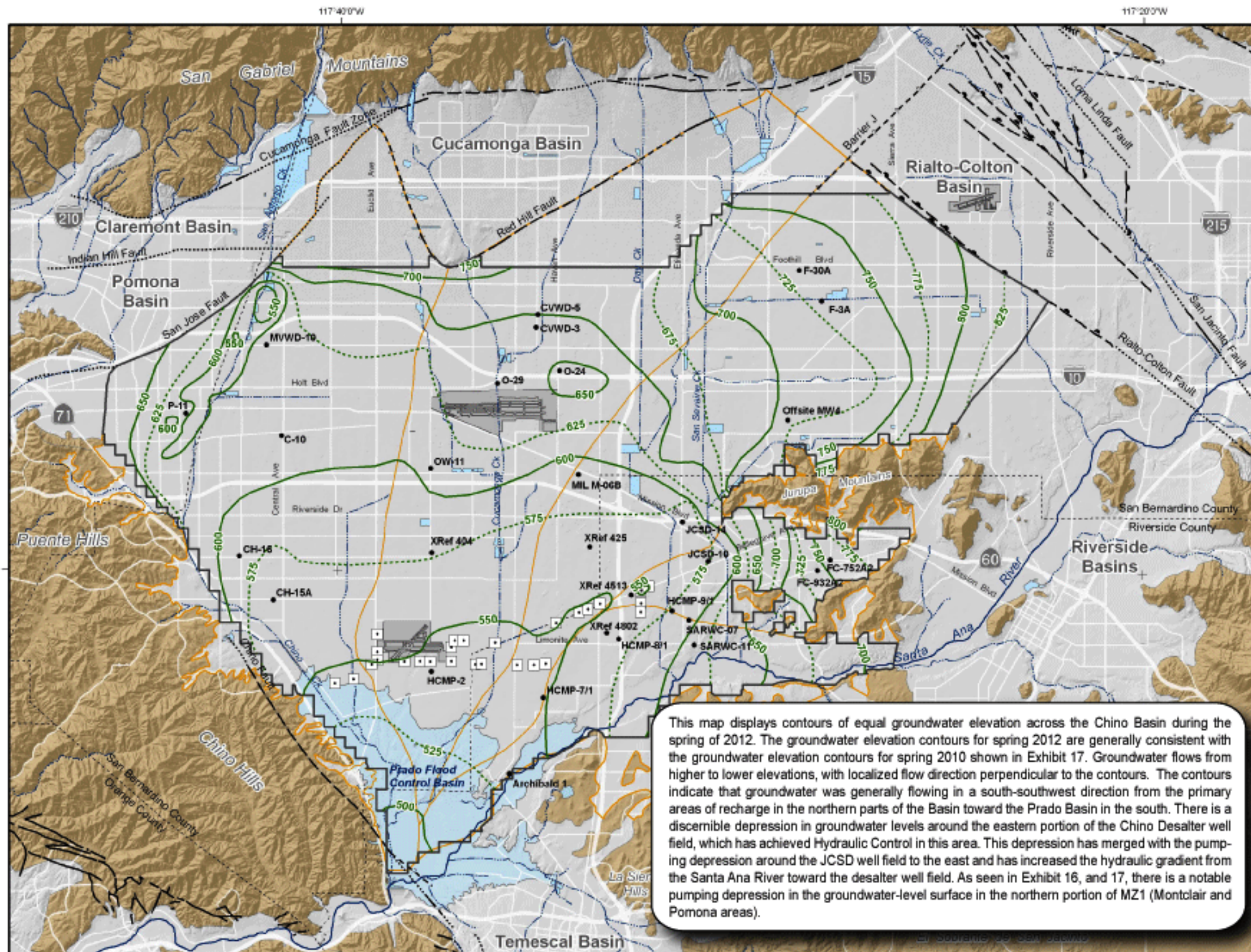


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Author: TCR
 Date: 20111027
 File: Exhibit_22.mxd



2010 State of the Basin
 Groundwater Levels



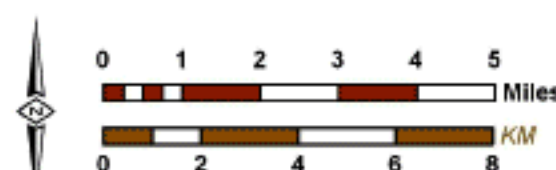
- Groundwater Elevation Contours (feet above mean sea-level)
- Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)
- Well With a Water-Level Time History Plotted on Exhibits 24 through 28.
- OBMP Management Zones
- Chino Desalter Wells
- Streams & Flood Control Channels
- Flood Control & Conservation Basins
- Geology**
- Water-Bearing Sediments**
- Quaternary Alluvium
- Consolidated Bedrock**
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
- Location Concealed
- Location Approximate
- Location Uncertain
- Approximate Location of Groundwater Barrier



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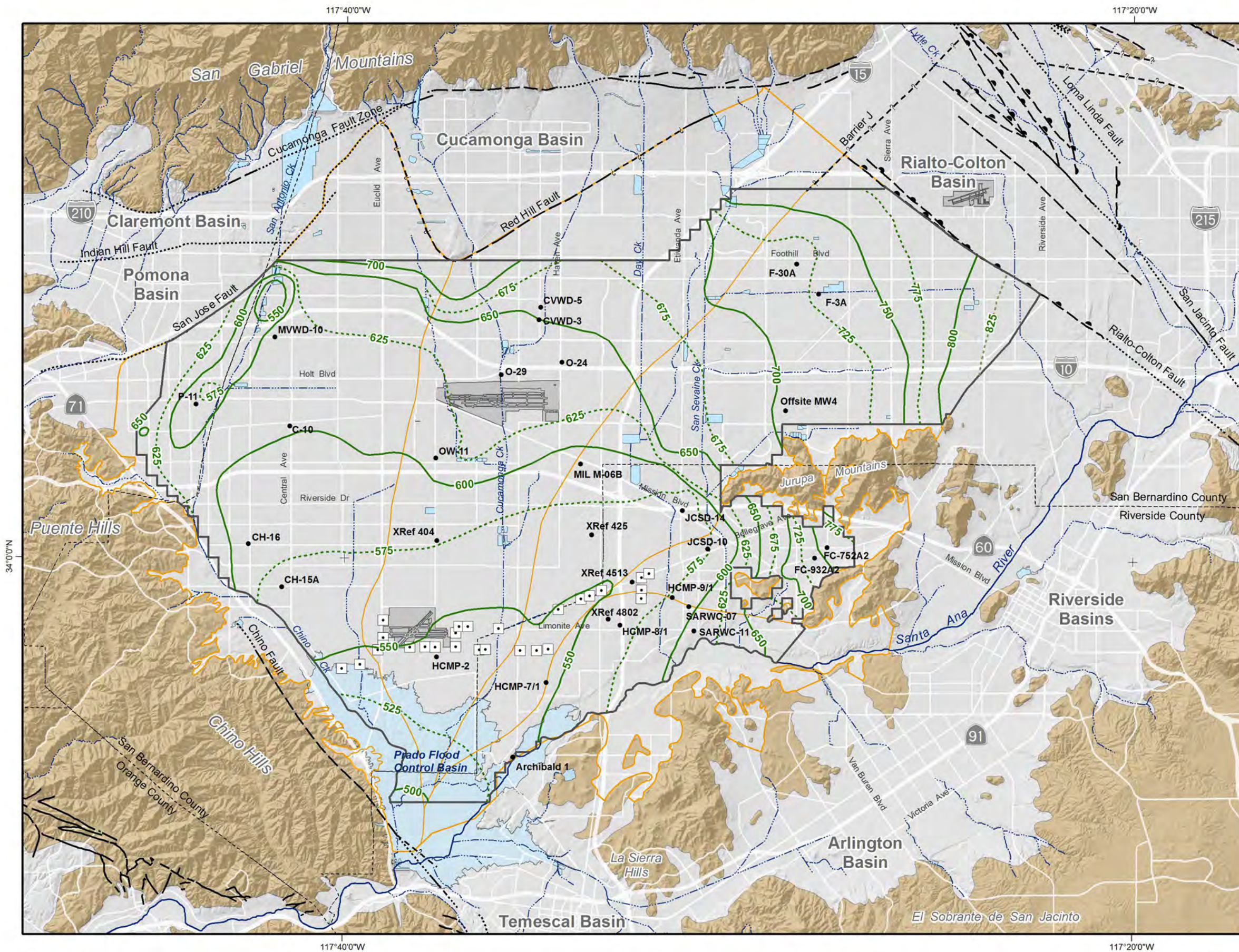
Author: TCR
 Date: 20121130
 File: Exhibit_18.mxd



2012 State of the Basin
 Groundwater Levels

Groundwater Elevation Contours in Spring 2012

Shallow Aquifer System



- Groundwater Elevation Contours (feet above mean sea-level)
- Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater level data)
- Well With a Water-Level Time History Plotted on Exhibits 24 through 28
- OBMP Management Zones
- Chino Desalter Wells
- Streams & Flood Control Channels
- Flood Control & Conservation Basins
- Geology**
- Water-Bearing Sediments**
- Quaternary Alluvium
- Consolidated Bedrock**
- Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
- Faults**
- Location Certain
- Location Concealed
- Location Approximate
- Location Uncertain
- Approximate Location of Groundwater Barrier



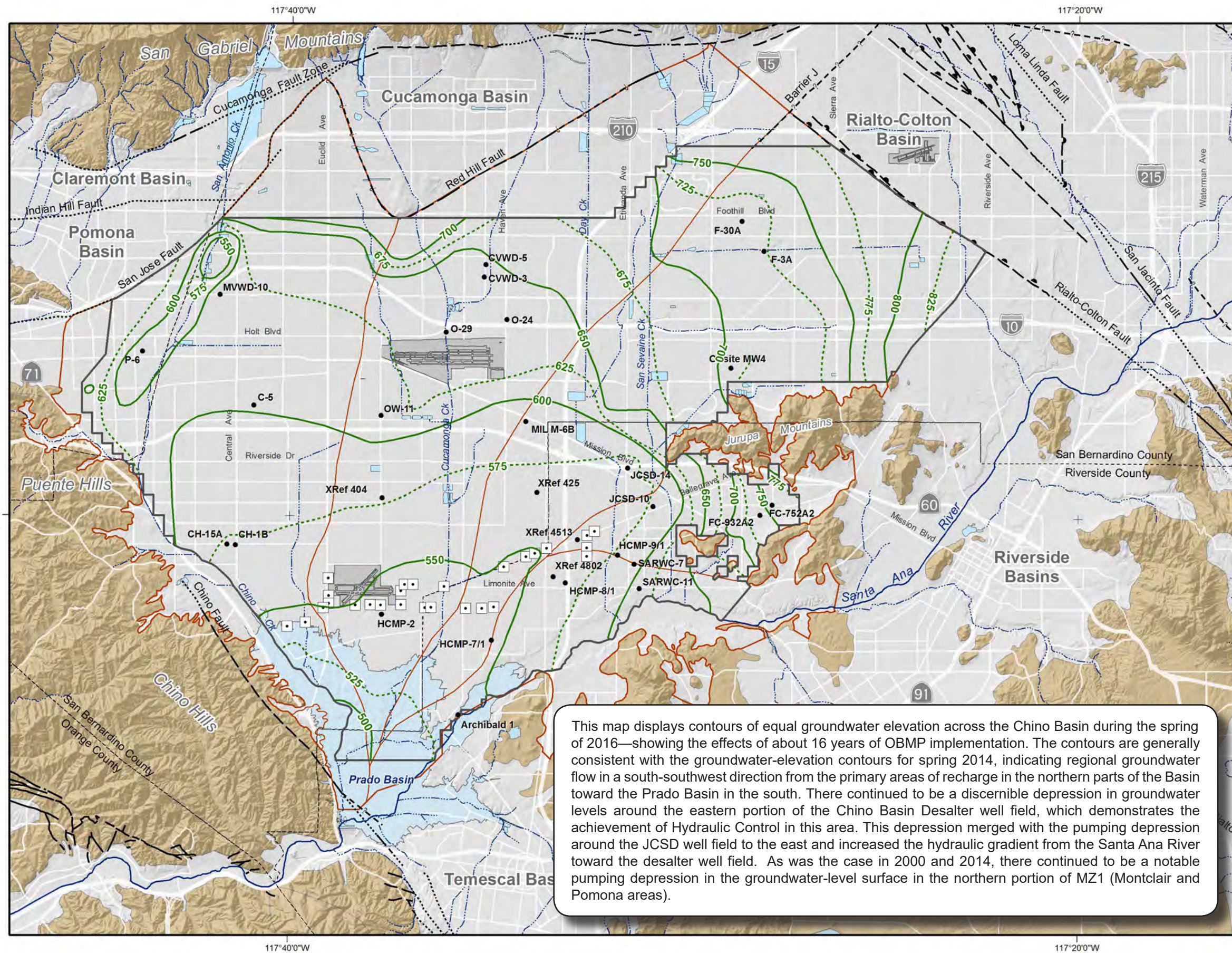
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Author: amalone
 Date: 4/3/2015
 Document Name: 20150403_Exhibit_18_sp2014_copyfor IEUA_Draft



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2014 State of the Basin DRAFT
 Groundwater Levels

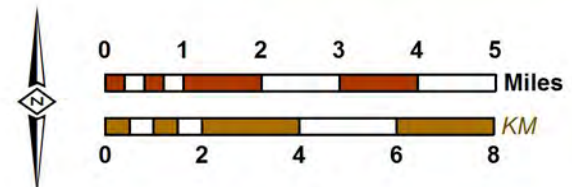


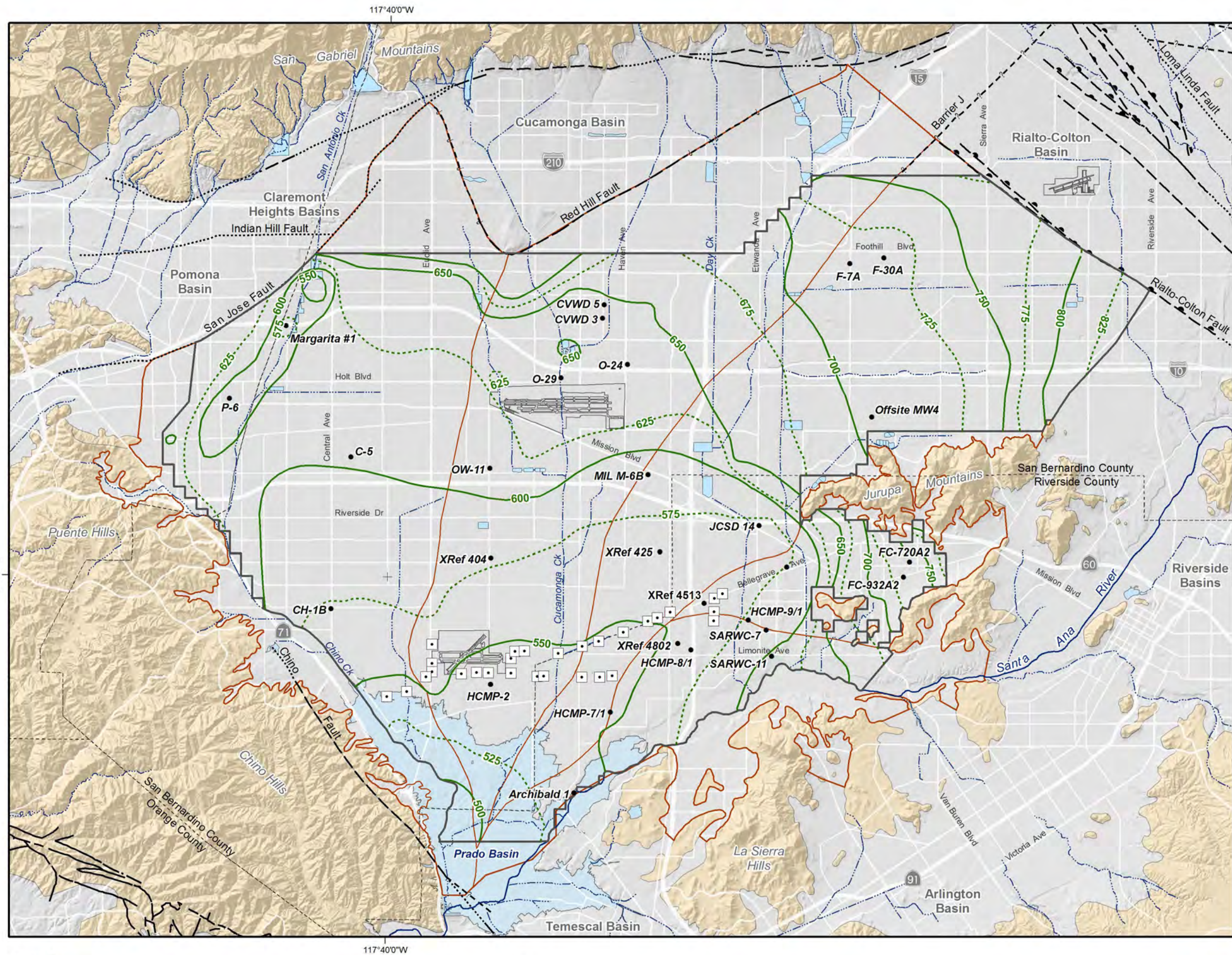
- Groundwater-Elevation Contours (feet above mean sea-level)
- Boundary of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater-level data)
- Well with a Groundwater-Level Time History Plotted on Exhibits 4-10 through 4-14

- OBMP Management Zones
- Chino Basin Desalter Well
- Streams & Flood Control Channels
- Flood Control & Conservation Basins

- Geology**
- Water-Bearing Sediments
 - Quaternary Alluvium
 - Consolidated Bedrock
 - Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks
 - Faults
 - Location Certain
 - Location Approximate
 - Approximate Location of Groundwater Barrier
 - Location Concealed
 - Location Uncertain

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 2016—showing the effects of about 16 years of OBMP implementation. The contours are generally consistent with the groundwater-elevation contours for spring 2014, indicating regional groundwater flow in a south-southwest direction from the primary areas of recharge in the northern parts of the Basin toward the Prado Basin in the south. There continued to be a discernible depression in groundwater levels around the eastern portion of the Chino Basin Desalter well field, which demonstrates the achievement of Hydraulic Control in this area. This depression merged with the pumping depression around the JCSD well field to the east and increased the hydraulic gradient from the Santa Ana River toward the desalter well field. As was the case in 2000 and 2014, there continued to be a notable pumping depression in the groundwater-level surface in the northern portion of MZ1 (Montclair and Pomona areas).





- 800 Groundwater-Elevation Contours (feet above mean sea-level)
- - - 775
- Boundary of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater-level data)
- Well With a Groundwater-Level Time History Plotted on Exhibits 4-10 through 4-14
- ◻ Chino Basin Desalter Well

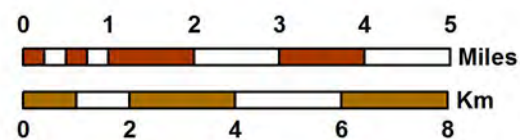
Other key map features are described in the legend of Exhibit 1-1.

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 2018, showing the effects of about 18 years of OBMP implementation. The contours are generally consistent with the groundwater-elevation contours for spring 2016, indicating regional groundwater flow in a south-southwest direction from the primary areas of recharge in the northern parts of the Basin toward the Prado Basin in the south. There continued to be a discernible depression in groundwater levels around the eastern portion of the Chino Basin Desalter well field, which demonstrates the achievement of Hydraulic Control in this area. This depression merged with the pumping depression around the JCSD well field to the east and increased the hydraulic gradient from the Santa Ana River toward the desalter well field. As was the case in 2000 and 2016, there continues to be a notable pumping depression in the groundwater-level surface in the northern portion of MZ1 (Montclair and Pomona areas).

Prepared by:



Author: EM
Date: 5/24/2019
File: Exhibit_4-4_sp2018.mxd

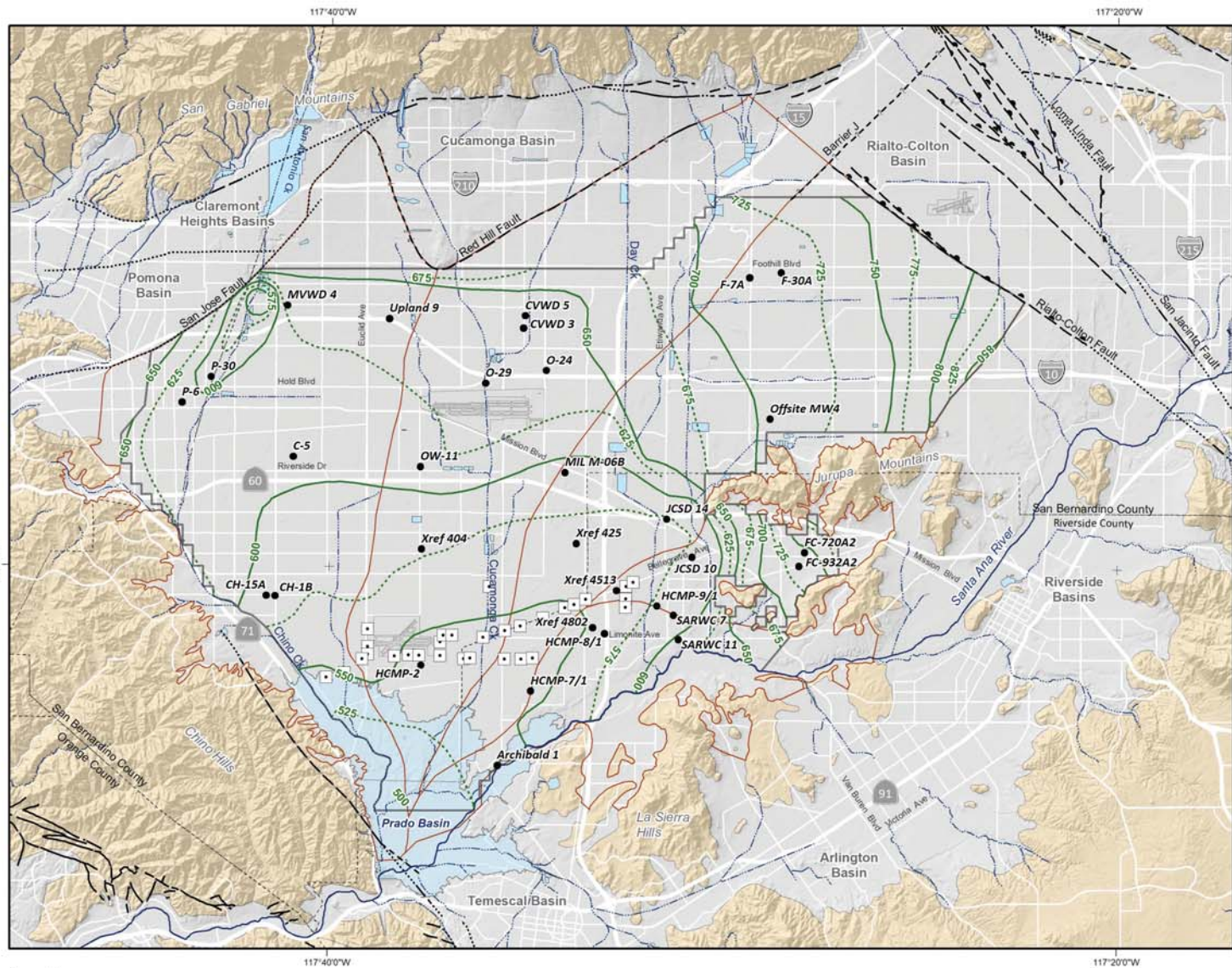


Prepared for:
2018 State of the Basin Report
Groundwater Levels



Groundwater-Elevation Contours
for Spring 2018
Shallow Aquifer System

Exhibit 4-4



- 800' Groundwater-Elevation Contours (feet above mean sea-level)
- 775' Groundwater-Elevation Contours (feet above mean sea-level)
- Boundary of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater-level data)
- Well With a Groundwater-Level Time History Plotted on Exhibits 4-10 through 4-14
- Chino Desalter Wells

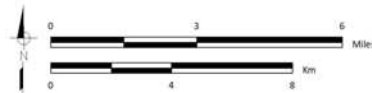
Other key map features are described in the legend of Exhibit 1-1.

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 2020, showing the effects of about 20 years of OBMP implementation. The contours are generally consistent with the groundwater-elevation contours for spring 2018, indicating regional groundwater flow in a south-southwest direction from the primary areas of recharge in the northern parts of the Basin toward the Prado Basin in the south. There continued to be a discernible depression in groundwater levels around the eastern portion of the Chino Basin Desalter well field, which demonstrates the achievement of Hydraulic Control in this area. This depression merged with the pumping depression around the JCSD well field to the east and increased the hydraulic gradient from the Santa Ana River toward the desalter well field. As was the case in 2000 and 2018, there continues to be a notable pumping depression in the groundwater-level surface in the northern portion of MZ1 (Montclair and Pomona areas).

Prepared by:
WEST YOST
Water. Engineered.

Author: TA
Date: 6/21/2021

K:\Clients\341 Chino Basin Watermaster\Chino Basin Master Project\508\GIS\MOXD\2020\316x_3-1



Chino Basin Watermaster
2020 State of the Basin Report
Groundwater Levels



Groundwater-Elevation Contours for Spring 2020
Shallow Aquifer System

Exhibit 4-4