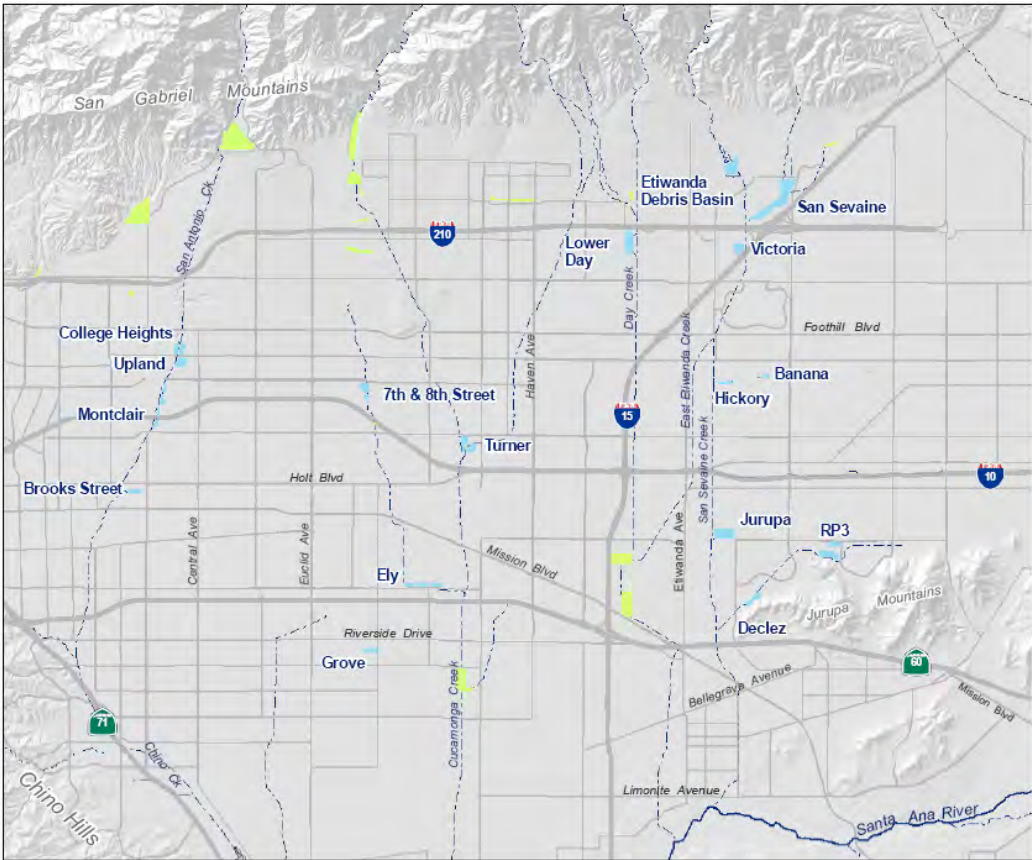


Chino Basin Recycled Water Groundwater Recharge Program

2016 Annual Report



May 1, 2017



Randy Lee, P.E.
Manager of Planning & Environmental Resources

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May 1, 2017

Regional Water Quality Control Board, Santa Ana Region

Attention: Mr. Kurt V. Berchtold

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

**Subject: Transmittal of the Annual Report for 2016
Chino Basin Recycled Water Groundwater Recharge Program**

Dear Mr. Berchtold:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) hereby submit the *2016 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 Inland Empire Utilities Agency and Chino Basin Watermaster. 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 Inland Empire Utilities Agency and Chino Basin Watermaster. 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 2016:

- The 2016 calendar year include annual program recharge of 28,374 acre-feet (AF), which includes 9,804 AF of storm water and dry weather flows; 14,310 AF of recycled water; and 4,260 AF of imported water.
- During 2016, recycled water quality monitoring was conducted in accordance with Monitoring and Reporting Program No. R8-2007-0039. No turbidity, coliform, and total organic carbon (TOC) compliance limits were exceeded during 2016. No primary or secondary regulated contaminants limits were exceeded during 2016, with the exception of secondary MCL for odor.
- During 2016, notifications were made to the State Water Resources Control Board – Division of Drinking Water (DDW) and Regional Board regarding the exceedance of the TN limit of 5 mg/L


for the average of two consecutive sample results at RP3 Basin using alternative monitoring with a 31% TN reduction factor.

- No corrective actions were necessary for RP-1 and RP-4. No unit process changes occurred during 2016.
- 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, and Hickory 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 2016, the volume-based 120-month running average recycled water contributions (RWCs), inclusive of groundwater underflow, by basin were: 8th Street - 23%; Banana - 36%; Brooks - 18%; Ely - 22%, Hickory - 24%, RP3 - 17%; San Sevaine 5 - 8%; Turner Basin Cells 1&2 - 19%; Turner Basin Cells 3&4 - 24%; and Victoria - 29%. 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 2016 for domestic or municipal use from zones that extend 500 feet and 6-months underground travel time from the 8th Street, Banana, Brooks, Declaz, 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) for 8th Street Basin; BRK-1/1 (5 months) and BRK-1/2 (17 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; TRN-1/2 (3.2 months) for Turner Cell 1; TRN-2/2 (13 months) and Ontario Well No. 25 (48 months) for Turner Cell 4; VCT-1/1 (7.5 months) for Victoria Basin and RP3-1 (3.3 months) for RP3 Basin Cell 1. 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.
- A regional groundwater elevation map for 2016 was not yet available from Chino Basin Watermaster for use in this report. Comparison of the pre-recharge groundwater elevation contour map (Fall 2003) with the most recent groundwater elevation contour map (Spring 2014) indicates that for areas near the recharge basins, there were minor regional changes in groundwater elevation, but the recharge program has not significantly changed groundwater flow directions. The 2014 groundwater elevations measured in the program monitoring wells have generally changed less than the contour interval (25 feet) used in the 2003, 2006, 2008, 2010, 2012, and 2014 groundwater elevation maps. 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 2014 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 2014 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 2017 in the Cities of Chino and Rancho Cucamonga.



Randy Lee, P.E.
*Executive Manager of Operations/
Assistant General Manager*



Peter Kavounas, P.E.
General Manager

Chino Basin Recycled Water Groundwater Recharge Program

2016 Annual Report

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May 1, 2017

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1 INTRODUCTION

This is the 2016 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 2016 quarterly monitoring reports to the Regional Board Water Quality Control Board (Regional Board) for these basins where recharge of recycled water has been initiated. During the 2016 calendar year, 28,374 acre-feet (AF) of water were recharged in the Chino Basin, which included 9,804 AF of storm water and dry weather flows; 14,310 AF of recycled water; and 4,260 AF of imported water.

1.1 Requirements of Order No. R8-2007-0039

This Recycled Water Groundwater Recharge Program is subject to the requirements found 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 Inland Empire Utilities Agency and Chino Basin Watermaster, 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 Inland Empire Utilities Agency and Chino Basin Watermaster, 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 Inland Empire Utilities Agency and Chino Basin Watermaster, 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 Inland Empire Utilities Agency and Chino Basin Watermaster. 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 equipments, 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 Organization of the Annual Report

The annual report contains two main sections: Section 2: Recycled Water Quality Monitoring and Section 3: Groundwater Recharge Monitoring. Supporting documents for these sections are included in the 2016 quarterly monitoring reports or are provided as appendices to this report. Section 2 discusses compliance with recycled water production specifications and other water quality requirements. Section 3 discusses the blending and movement of recycled water in the groundwater basin.

2 RECYCLED WATER QUALITY MONITORING

2.1 Recycled Water Quality Specifications

During 2016, 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 2016a, 2016b, 2016c, 2017).

2.1.1 *Detections and Compliance with Narrative Limits*

Recycled Water Specifications A.5 through A.9 are narrative limits in the permit. The 2016 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.

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 NPDES-permitted 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 coliform is daily; total inorganic nitrogen (TIN), total nitrogen (TN), and total organic carbon (TOC) is weekly; and total dissolved solids (TDS) is monthly. None of the narrative limits for turbidity, coliform, TDS, TIN, pH, or TOC were exceeded during 2016. Compliance with the TN limit of 5 mg/L can also be met at the lysimeters or at locations specified in alternative monitoring plans with the application of a TN reduction factor. This sampling is shown in Table 2-5a and 2-5b of the quarterly monitoring reports. During 2016, notifications were made to the State Water Resources Control Board – Division of Drinking Water (DDW) and Regional Board regarding the exceedance of the TN limit of 5 mg/L for the average of two consecutive sample results at RP3 Basin using alternative monitoring with a 31% TN reduction factor. The TN exceedances will be summarized in Section 2.5 of this report.

Table 2-2 presents IEUA's Agency-wide 12-month running average for TDS and TIN as required by the NPDES permit. During 2016, 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 is the turnout to NRG California South, LP (formerly known as Reliant Energy), as it represents a mixture of recycled water from both RP-1 and RP-4. The 2016 recycled water quality monitoring data and associated limits for Recycled Water Specifications A.1 through A.4 are shown in Table 2-3 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 2016, 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 odor (secondary MCL).

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 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 2-4 of the quarterly monitoring report. In 2016, the annual sampling for the non-regulated contaminants in the recycled water took place during the second quarter of 2016.

The compliance sampling point for Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5) are not at the NRG Turnout. TTHMs and HAA5 compliance sampling is performed at the recharge basin lysimeters prior to the recycled water reaching the groundwater table. During 2016, compliance sampling for TTHMs and HAA5 was collected at lysimeters actively receiving recycled water from basins. Compliance for TTHMs and HAA5 were consistently met throughout 2016 at the selected 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, Decléz & 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, and annually for constituents specified in the Phase II Findings of Fact, Attachment A in the permit (Bullet 27 in the Conditions Section). All groundwater-quality data collected at the monitoring wells is reported in Table 2-8a and 2-8b of the quarterly monitoring reports. Table 2-1 in this annual report summarizes the quarterly groundwater quality results from the nearby potable supply wells in 2016.

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.

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). Both of the 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 2017 and the EEA laboratory certification is valid through January 2018.

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 2016 Annual Laboratory QA/QC Data Summary Report was also submitted to the Regional Board as an attachment in IEUA's 2016 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 a QED MP20 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

No operational problems or corrective actions at RP-1 or RP-4 were initiated based on regulatory monitoring at the NRG Turnout and at the recharge basins.

In February 2016, the average of two consecutive TN sample results for the RP3 Basin, based on a 31% TN reduction factor applied to the delivered recycled water, exceeded the 5 mg/L limit. The DDW and the Regional Board were both notified via e-mail regarding the exceedance.

In October 2016, there were three exceedances for the 2-week average TN limit of 5 mg/L at RP3 Basin based on a 31% TN reduction factor applied to the delivered recycled water. The DDW and the Regional Board were both notified via e-mail as required.

Odor has a secondary MCL of 3 Units in Recycled Water Specification A.3. During every quarter of 2016, the 4-quarter running average threshold odor value exceeded the secondary MCL. The odor has been identified by Eaton Analytical (contract laboratory) as chlorine. Recycled water used for groundwater recharge must meet disinfected tertiary recycled water standards in accordance to Title 22. Sodium hypochlorite is used as the disinfection agent at the RP-1 and RP-4 water recycling facilities; hence, the smell of chlorine is prominent in recycled water and is therefore unavoidable. Order No. R8-2007-0039 allows compliance for secondary MCLs to be determined at the mound monitoring well. Based on the mound monitoring well data (Table 2-8a), threshold odor does not exceed 3 Units at any of the monitoring wells.

During 2016, 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. 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 2016 groundwater sampling, and any DDW notification:

- Turbidity exceeding the secondary MCL of 5 NTU was observed in several monitoring wells, namely: Alcoa MW1, 8TH-1/2, BRK-1/1, BRK-2/1, BRK-2/2, DCZ-1/1, Ely MW1, SS-1/1, and VCT-1/1.
- The secondary MCL for pH within the range of 6.5 to 8.5 was exceeded at 8TH-1/2.
- The secondary MCL of 15 units for color was exceeded at BRK-2/1 and BRK-2/2.
- The secondary MCL of 3 units for threshold odor was exceeded at Reliant Energy – East Well.
- The secondary MCL of 50 µg/L for manganese was exceeded at Ely MW1. Recycled water manganese concentrations are generally less than 20 µg/L. Historical stormwater manganese analyses have been observed to fall within the range of 10 to 180 µg/L.
- TDS and electrical conductivity (EC) were higher than their secondary MCLs of 500 mg/L and 900 µmhos/cm, respectively, in the RP3 basin area wells (Alcoa MW3 and Southridge JHS) and Ely MW2 (Walnut). BH-1/2, Alcoa MW1, Bishop of San Bernardino Corporation, JCSD Well No. 13, and VCT-1/1 exceeded the TDS secondary MCL. The wells south of the Ely Basins and near the RP3 Basins are located in areas where the TDS and EC concentrations in groundwater are historically elevated. The TDS concentration at the mound monitoring well BH-1/2 and VCT-1/1, is characteristic of the recycled water concentration and indicates a high percentage of recycled water at this well. The distribution of TDS concentrations observed at wells in the Chino Basin is summarized in Watermaster's State of the Basin Reports.
- Some monitoring wells in the Banana-Hickory, RP3, Brooks, and Ely Basins monitoring networks have NO₃-N concentrations above the primary MCL of 10 mg/L. These higher levels are characteristic of groundwater quality in the local area where historically the NO₃-N concentrations range from 10-30 mg/L. The distribution of NO₃-N concentrations observed at wells in the Chino Basin are 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.
- Total coliform was detected at Riverside Well (Ely) and Unitex 91090. In accordance with the MRP, notification to the DDW of coliform presence in active municipal drinking water wells must be made within 48 hours of receiving the results. There were no notifications made to the DDW for coliform presence 2016, as neither of the wells were active municipal drinking water wells.
- During the annual sampling event, perchlorate concentrations above the primary MCL of 6 µg/L were detected at 8TH-2/1. Perchlorate concentrations at 8TH-2/1 have occasionally

been at levels slightly above the MCL in the past. 8TH-2/1 is located in an area where perchlorate has historically been found in nearby wells. The perchlorate concentrations in this area are reported in the 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 2016 calendar year, therefore there was no impact on water quality.

2.7 Summary of Chemical Usage

The summary of treatment chemicals used on a monthly basis at RP-1 and RP-4 during the 2016 calendar year is presented in Table 2-2.

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 2016, IEUA's recycled water recharge totaled 14,310 AF.

Basin	2016 Recycled Water Recharge (AF)	Percent of 2016 Recycled Water Recharge
8 th Street	2,529	17.7%
Banana	1,126	7.9%
Brooks	1,344	9.4%
Declez	1,433	10.0%
Ely	1,432	10.0%
Hickory	299	2.1%
RP3	4,356	30.4%
San Sevaine	0	0%
Turner	1,272	8.9%
Victoria	519	3.6%
Total	14,310	100%

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, 2016a, 2016b, 2016c, and 2017), but are repeated in this section's discussion of RWC (recycled water contribution) management plans.

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 recharge using recycled water and diluent water can be shown in 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 horizontal groundwater flow travel velocity away from the recharge site is much slower than the vertical recharge percolation velocity. 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

The 2016 monthly recharge volumes by water type are presented in Appendix A and in the historical recharge portion of the RWC Management Plans (Appendix B). Recycled water and diluent water are typically recharged in distinct batches. However, there can be some blending of local runoff with recycled water as it is delivered to the basins, or if storm water enters a basin already containing some recycled water. Variations in the delivery period for batches of diluent water and recycled water provide a 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, initial use of the fraction of groundwater underflow used as a diluent water source in the RWC calculation is either October 2009 (the date the permit amendment was adopted allowing for its use) or the first month of a basin's recycled water recharge (if after October 2009). Underflow for each basin was calculated using the Darcy flow equation with input parameters originating from Chino Basin Watermaster's calibrated groundwater flow model. 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). 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.

The running average RWC calculation is equal to:

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

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 with the exception of Turner Basins and San Sevaine Basin. 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, recycled water arrival at the mound monitoring well based

on EC and chloride data are inconclusive to determine its arrival. Recycled water recharge at San Sevaine 5 was suspended in 2014 due to poor infiltration rates and resulting maintenance issues.

At the end of December 2016, the (volume-based) running average RWC for basins having initiated recharge using recycled water were as follows:

Basin	RWC Limit (prior to 6/18/15)	RWC Limit (after 6/18/15)	120-Mo. Running Avg. RWC
8 th Street	28%	50%	23%
Banana	36%	50%	36%
Brooks	42%	50%	18%
Ely	29%	50%	22%
Hickory	36%	50%	24%
RP3	50%	50%	17%
San Sevaine 5	27%	27%	8%
Turner 1&2	24%	24%	19%
Turner 3&4	45%	45%	24%
Victoria	50%	50%	29%

Maximum average RWC and the RWC management plans are discussed in more detail in Section 3.3. The volume-based percentages express reasonably anticipated blending as recharge waters move towards distant monitoring wells.

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 rare 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).

For the wells showing EC (and chloride) increases associated with recycled water recharge, Table 3-1 provides an estimated range of the peak percent blend of recycled water observed at a given well in the past year. The mass-balance blend percentages 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 in Table 3-1 is the approximate well water concentration prior to recycled water recharge. The recycled water EC in Table 3-1 is the current calendar year average concentration of the blended RP-1 and RP-4 recycled water.

8th Street Basin Area

For the 8th Street Basin area, in the shallower monitoring well (8TH-1/1) there was a 2009-10 increase in chloride concentrations indicating the arrival of recycled water that was recharged in 2007 and 2008. The break in recycled water delivery between September 2008 and August 2009 shows up at the end of 2010 as the downward trend of EC, TDS, and chloride at this well. This represents an approximate 21-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. This corresponds well with the previous estimate of 22 months. 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. As presented in Table 3-1, the highest percent blend of recycled water in the groundwater mound at 8TH-1/1 during 2016 was approximately 67% based on chloride concentrations. After the peak, recycled water blend at the well decreased through 2016.

In the deeper casing of 8TH-1/2 from mid-2011 to 2012, there were slight increases in the EC, TDS, and chloride concentrations after trending downward since the well was constructed. The increase suggests recycled water recharge from 2007 and 2008 may have started to arrive in the deeper casing after a travel time of roughly 46 months. From 2011 through 2016, the 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 nearly steady rate. As the TDS and EC data are within historical, pre-recycled water recharge values, continued monitoring of these water quality parameters at the deeper casing is needed to identify with certainty the arrival and blending of recycled water at this depth. Significant recycled water arrival would be confirmed should these concentrations continue to rise significantly above the 2011 baseline concentrations at this location and depth. As presented in Table 3-1, the highest percent blend of recycled water in the groundwater mound at 8TH-1/2 during 2016 may have reached approximately 30% based on chloride concentrations.

Water quality monitoring of the deeper well casing of 8TH-2 (located approximately 2,500 feet farther from 8TH-1) was suspended in the third quarter of 2015. After 8 years of monitoring, there is insufficient data from 8TH-2/2 to identify the source of the groundwater in relation to the recharge operations at 8th Street Basin. Between 2007 and 2016, the shallower casing of monitoring well 8TH-2 (8TH-2/1) shows cyclical seasonal variations and a medium-term trend of decreases in EC, TDS, and chloride that make the arrival of recycled water somewhat difficult to evaluate. 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 which have yet to be observed. In the deeper casing of monitoring well 8TH-2 (8TH2/2), TDS and EC concentrations both show an increase from 2007 through mid-2009 followed by a consistent decrease through early 2015 to below the 2007 concentrations. This increase and then decrease in concentration is sooner than would be expected if it were caused by recycled water recharge based on the well distance from the recharge basin and is thus considered background variations. Between 2007 and early 2015, these data likely indicate varied concentrations of groundwater are moving past the well site.

Banana & Hickory Basins Area

Beginning in early 2008 and peaking in mid-2009, the Banana and Hickory Basins area monitoring well BH-1 casing 2 (BH-1/2) located adjacent to Hickory Basin demonstrated significant changes in EC, TDS, and chloride (100 to 150-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 are observed and suggest a stabilized and perhaps sustained peak RWC with historical operations at Hickory and Banana Basins. In mid-2014 through 2016, EC, TDS, and chloride data increased to historically high levels. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water the groundwater mound at BH-1/2 reached approximately 98% to 100% in 2015. In 2016, concentrations of EC, TDS, and chloride remained at peak levels of 94% to 100%.

Since the initiation of recycled water recharge in 2005, the California Speedway Infield Well, south of Banana Basin, showed gradual increases for EC, TDS, and chloride concentrations (150-mg/L TDS and 19 mg/L chloride differences) through 2015. Concentrations of EC, TDS, and chloride continue to increase in 2016, with EC and chloride reaching peak levels. The gradual increase is to be expected with gradual blending as groundwater moves away from the basin (compare with the 150 to 200-mg/L TDS variation at the basin area mound). Travel time from Banana Basin to the California Speedway Infield Well based on these data is approximately 29 months. As presented in Table 3-1 based on EC and chloride variations, in 2016 the highest percent blend of recycled water in the groundwater at the California Speedway Infield Well reached approximately 33% to 88%.

For downgradient wells California Speedway No. 2, Reliant East, and Ontario Well No. 20, the EC, TDS, and chloride data do not definitively suggest that recycled water recharge has reached these wells. While, slight increases in EC, TDS, and chloride are observed at California Speedway No. 2 and Ontario Well No. 20 since late 2008, Fontana Water Company 37A (located 2,240 feet up gradient of Banana basin) has also shown small but steady increases in EC (85 μ mhos/cm), TDS (60 mg/L), and chloride (10-mg/L) between 2006 and 2016. Continued observation of the Fontana Water Company well is needed to evaluate whether these wells are being impacted by recycled water recharge or if they are revealing a slow regional change in background water quality.

Brooks Basin Area

For the Brooks Basin area, monitoring wells are located at the basin (BRK-1) and downgradient of the basin (BRK-2). 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 2015, concentration increases of 150 mg/L for TDS and 60 mg/L for chloride have been observed and attributed to the presence of recycled water at BRK-1/1. In 2015 and 2016, EC and TDS concentrations have been relatively stable in BRK-1/1. However, chloride concentrations have decreased throughout 2016. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water in the groundwater mound at the recharge basin during 2016 reached approximately 98 to 100% at BRK-1/1. The historical data shows that blending occurs in the aquifer beneath Brooks Basin.

Water quality monitoring of the deeper casing (BRK-1/2) was suspended in the second quarter of 2015. Between 2010 and 2015, the blend of recycled water and groundwater has reached relatively stable concentrations. In the deeper casing (BRK-1/2), smaller increases in EC, TDS, and chloride began in January 2010 and continued through 2015. Concentration increases of 50 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. Based on the historical EC and chloride data, the percent blend of recycled water at BRK-1/2 has been approximately 9% to 31%.

The chloride concentrations at BRK-2/1 show a 35-mg/L stepped increase in 2011 that oddly coincides with a 100 $\mu\text{mhos/cm}$ decrease in EC. Then in 2012 and continuing through 2014, chloride concentrations decrease to background levels while EC and TDS increase steadily. Beginning in mid-2014 through 2015, chloride concentrations in BRK-2/1 increased sharply (approximately 40 mg/L) to historical highs, similar to the increase observed from mid-2010 through mid-2011. While the chloride trends may indicate pulses of arrival of recycled water recharge in the shallower casing groundwater in 2011 and 2015, continued observations at this well would be necessary to identify, with certainty, the presence of recycled water based on TDS and EC changes. The return to background concentrations through 2013 and 2014 could suggest a change in groundwater flow direction (of Brooks Basin recharge) around this well. Groundwater flow direction west of Brooks Basin is subject to the dynamics of a pumping depression in Pomona which has been observed to gradually shift location and magnitude over the years (see Appendix E). Water quality monitoring of the shallow casing (BRK-2/1) was temporarily suspended in 2016.

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, 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 their proximity to the basin (0.0 miles, 0.5 mile and 1.0 mile for the Philadelphia, Walnut, and Riverside wells, respectively). At the downgradient 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 late 2014 sample results at the Philadelphia well show EC and chloride at historically high levels nearly equal to that of recycled water. Due to drought conditions in 2014, recycled water was the predominant recharge source water. In 2015 and 2016, EC, TDS and chloride concentrations at Philadelphia well have decreased, but remain above pre-2014 levels. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water in the groundwater at the Philadelphia well during 2016 reached approximately 68% to 79%.

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. The lower TDS concentrations may be linked with more intense periods of storm water and recycled water recharge that would dilute the higher

background TDS groundwater. The volume-based percent recycled water recharged at Ely basin has been between 10% and 22% since 2009 (including groundwater underflow).

Further down gradient of the Walnut well, the EC, TDS, and chloride of groundwater at the Riverside well are relatively stable but exhibit a gradual increase in concentration since monitoring began in 2007. These results while increasing do not indicate any direct impacts from recycled water or diluent water recharge at Ely Basin from 2007 through 2016.

Turner Basin Area

The Turner Basin area monitoring well TRN-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. After the recycled water start-up period at Turner 1 (2006-2007), recycled water deliveries had been limited, and thus EC, TDS, and chloride concentrations decreased towards background levels. However, with the recent drought conditions, a larger volume of recycled water was delivered in 2014, 2015, and 2016 than prior years. The rapid fluctuations in TDS, EC, and chloride concentrations at TRN-1 indicate recharge water moves quickly away from the Turner 1 basin. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water in the groundwater mound at Turner 1 during 2016 was approximately 69% to 71% at TRN-1/2.

At monitoring well TRN-2/2 (adjacent to Turner 4), the EC, TDS, and chloride concentrations are delayed several months from past recharge activities. The slower and smaller relative concentration changes at monitoring wells TRN-2/1 and TRN-2/2 (compared to TRN-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 2016, Turner 4 mound had a lower percent of recycled water than the prior year. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water in the groundwater mound at the Turner 4 basin during 2016 was approximately 52% to 54%. The TRN-1/2 and TRN-2/2 data show recycled water blending is occurring with groundwater in the aquifer beneath the Turner Basins.

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. Little variation in these parameters was evident in 2012 and a slight decline was observed in 2013. Since 2014, the EC, TDS and chloride concentrations in Ontario Well No. 25 have remained relatively constant, with a slight increase in levels through 2016. Estimated travel time based on these water quality data is approximately 48 months. As presented in Table 3-1 based on EC and chloride variations, the highest percent blend of recycled water in the groundwater at Ontario Well No. 25 during 2016 was approximately 13% to 26%.

In January 2009, downgradient Ontario Well No. 29 showed a slight stepped increase in TDS and chloride concentration similar in magnitude to the gradual rise at Ontario Well No. 25. However, the increase at Ontario Well No. 29 is 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 and 2016 data are lower than the wells' peak values in 2010 and are within background concentrations. A marked increase in EC and TDS concentrations occurred in January 2015, but returned to normal concentrations subsequently. Additional data from future

monitoring are required to assess the arrival and blending 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. Through 2012, variations in water quality concentrations from the RP3-1 monitoring wells were difficult to draw conclusions from in regards to 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. By April 2012, EC, TDS, and chloride concentrations reached historical lows for this well site. From late 2012 through late 2014, EC, TDS, and chloride concentrations steadily increased. EC and chloride in 2015 and 2016, yet TDS increase another 30 mg/L in 2016. Use of the low values in 2012 as baseline conditions and the three-year steady rise in EC, TDS, and chloride, has provided sufficient data to estimate a blend of recycled water beneath the basin. As presented in Table 3-1 based on EC and chloride variations, the percent blend of recycled water in the groundwater during 2016 at RP3-1/1 was 99% to 100%. Due to their similarities in water quality, sampling of RP3-1/2 was discontinued in 2015.

Downgradient well ALCOA MW-1 shows seasonal (summer through early fall) spikes in EC, TDS, and chloride from 2011 through 2016. These spikes of high concentrations are greater in magnitude than their respective concentrations in recycled water, and thus are likely due to salt contamination moving past the well. 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 at ALCOA MW-1.

Downgradient well ALCOA MW-3 has higher EC, TDS, and chloride concentrations than ALCOA MW-1. In 2016, ALCOA MW-3 groundwater continued to show decreasing and increasing EC, TDS, and chloride concentrations, which suggests salt contamination moving past the well site. The EC has ranged from 785 to 1,015 $\mu\text{mhos/cm}$ which is higher than the recycled water EC (about 750 $\mu\text{mhos/cm}$). More data is required to evaluate the arrival of recycled water at ALCOA MW-3.

The Southridge Junior High School (JHS) well water quality data show a slight but gradual decrease in EC, TDS, and chloride concentrations since quarterly sampling began in 2009 through 2016. The background concentrations at the Southridge JHS well are higher than that of recycled water. As such, mixing of groundwater with recycled water at this location would appear as a slight downward trend. Alternatively, it could increase as higher salinity upgradient groundwater moves southward. The well data do not suggest that recycled water recharge has reached the downgradient Southridge JHS well from the RP3 or Declez Basin recharge sites. In 2013, the well pump's electric motor failed and no samples were collected until its repair in 2014. In 2014, the well was rehabilitated and the pump was replaced. A well video was conducted and identified the well is screened at multiple depths. Louvered well screen intervals were observed below ground surface from 100 feet to 140 feet, 160 feet to 200 feet, 220 feet to 258 feet, 278 feet to 320 feet, and 340 feet to 360 feet.

San Sevaine & Victoria Basins Area

Monitoring of San Sevaine and Victoria Basins area wells began in late 2009 and continued through 2016. Initiation of recycled water recharge began in these two basins in mid-2010. For

the San Sevaine area, the 2010 through 2016 trends in EC, TDS, and chloride have yet to indicate the arrival of recycled water at monitoring points SSV-1 and Unitex 91090.

Victoria Basin mound monitoring well VCT-1/1 shows a steady increase in EC, TDS, and chloride concentrations beginning in May 2011 that continue into 2016. These values stabilize in mid to late 2016 at values typical of recycled water. Mound monitoring well VCT-1/1 water quality data support a travel time of approximately 7.5 months based on the initiation of recycled water recharge on September 2, 2010 and its arrival detection with the May 19, 2011 sample. As presented in Table 3-1 based on EC and chloride variations, the percent blend of recycled water in the groundwater mound at Victoria Basin during 2016 was 96% to 99% 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 5, Turner Basin 1&2, Turner Basin 3&4, Victoria, and Declz 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 RWQCB 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 2014 groundwater flow data, similar to that reviewed in 2009 when the underflow estimates were made, and determined the underflow estimates are still valid.

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. The basins whose RWC Plans include a recycled water recharge capacities less than its maximum include Turner 1, Turner 4, Declaz, Victoria, and San Sevaine. These basins each have an RWC limit of less than 50%, except for Victoria. Victoria and San Sevaine Basins also share a common underflow. No basins are forecasted to exceed their RWC limit with the forecasted estimates of average diluent water.

Table 3-2 lists the volume-based RWC actual at the end of 2016 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 2016 quarterly monitoring reports, CBWM has certified that there was no reported pumping of groundwater in 2016 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 Sevaine, Turner, and Victoria Basins. In fact, there are no domestic or municipal production wells in the buffer zones of the aforementioned recharge sites.

3.4.1 Recharge Water Arrival Times

As documented in annual reports and 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 and BRK-1/2 for Brooks Basin; BH-1/2 for Hickory Basin; California Speedway Infield Well for Banana Basin; TRN-1/2 and TRN-2/2 for Turner 1 and Turner 4 Basins, respectively; Ontario Well No. 25 for Turner 4 Basin; VCT-1/1 for Victoria Basin, and RP3-1/1 and RP3-1/2 for RP3 Basins. 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 natural seasonal variations.

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 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 as the shallow casing (8TH-2/1) data appear more useful for identifying a recycled water influence.

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 at approximately 59 days (IEUA and CBWM, 2009). The California Speedway Infield Well has demonstrated a small but gradual increase in EC, TDS, and chloride from September 2005 through the end of 2012. Travel time from Banana Basin to California Speedway Infield Well is estimated at 890 days (29 months) based on a stepped increase in EC, TDS, and chloride concentrations between data collected on October 9, 2007 and January 7, 2008 (IEUA and CBWM, 2009). The modeled travel time to the California Speedway Infield Well was 682 days (22 months) (CH2MHill, 2003).

Travel time from the Banana - Hickory Basin 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 2016. These parameters were relatively stable from 2006 to 2012. Speedway No. 2 is located about one half mile south of Hickory Basin. Due to the groundwater flow gradient direction, the travel time most likely is from travel 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 shows a similarly gradual increasing trend in these parameters continually from 2006 through 2016, which should not be due to recharge activities at Banana and Hickory Basins. The trend at Speedway No. 2 is interpreted as a recycled water arrival due to its relatively stable concentrations from 2006 to 2012. The downgradient monitoring well, Reliant East, has not yet shown definitive variations in EC, TDS, and chloride that would signal arrival of recycled water.

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 increase 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, variations of EC, TDS, and chloride concentrations following recharge are similar to the background variations prior to recycled water recharge, which makes identification of travel time to this well difficult. The 2016 EC and TDS data at BRK-2 (casings BRK-2/1 and BRK-2/2) continue to be within the range of the background concentration; an increase in chloride concentration at BRK-2/1 was observed through 2011 and 2012 and again in 2015 which may suggest brief arrivals of recycled water. In 2013 and 2014, chloride concentration at BRK-2/1 returned to background levels. These brief elevated chloride concentrations may suggest a minimum potential arrival time of 29 months (2.4 years), but is not definitive without a corresponding increase in EC and TDS.

Ely Basin Area

Groundwater in the Ely Basin area has high background TDS and nitrate concentrations from a history of irrigation. Due to the seasonal variations of TDS, EC, and chloride concentrations at the Philadelphia, Walnut, and Riverside Wells, 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 month prior and thus indicated a 13-month travel time to the Philadelphia well.

Turner Basin Area

Travel time from Turner Basins through the vadose zone to the groundwater is approximately 10 to 12 months for both Turner well sites. While the initial rise in EC, TDS, and chloride at TRN-1/2 suggested a 3-month travel time, the subsequent decline in EC, TDS, and chloride during summer and fall of 2008 suggested a longer travel time of approximately 10 months, after recycled water recharge stopped in the summer of 2007. At TRN-2/2, the EC, TDS, and chloride 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. TRN-1/1 is not currently sampled as it was constructed above the water table for future mound sampling, TRN-2-1 sampling was suspended in 2015 due to sampling results similar to TRN-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 TRN-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 water quality beneath Turner 1 and 4 still indicates the presence of recycled water from subsequent recycled water recharge activities.

The travel time from Turner Basins to downgradient Ontario Well No. 25 suggest a travel time of 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 2016 are consistent with the prior data interpretations for these two Ontario wells.

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 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. Recycled water has also been observed as a chloride increase in both the shallow and the deep casing RP3-1/1 and RP3-1/2 in the summer of 2010, approximately 12 months after initiation of the basin with recycled water. The longer time to observe a chloride response is likely due to background noise of water purged from the vadose zone. The water quality data from downgradient monitor wells ALCOA MW-1 and MW-3 do not indicate the arrival of recycled water at these locations. Data collected in 2016 are consistent with the prior data interpretations for the RP3 region monitoring wells.

San Sevaine & Victoria Basins Area

San Sevaine Basins lie directly upgradient of Victoria Basin and thus these two sites are considered together. There is currently insufficient data from the San Sevaine area monitoring wells to establish travel times of recharge to mound monitoring well SSV-1/1 and to cross gradient well Unitex 91090. 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 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. No indication of recycled water arrival has yet to be observed 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. 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 located downgradient of 8th Street, Banana, Brooks, Ely, Hickory, Turner Basins, Victoria, and RP3 Basins. Several production wells used for monitoring near the basins show a water quality change 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 2016, 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, and 2014. These groundwater elevation maps from the Chino Basin Watermaster's *Biennial State of the Basin Reports* are presented in Appendix E. Chino Basin Watermaster has not yet released a Spring 2016 water elevation contour map, once a map is finalized it will be included in the next Annual Report Appendix E. As such, the Spring 2014 elevation contour map will be used for discussion in 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 2014) indicates several things. First, local changes in groundwater elevation near the recharge basins due to recharge activities are present, but are not generally evident by the contour interval of 25 feet shown in the maps, indicating that the recharge program has not significantly impacted regional groundwater flow directions. Local recharge mounds at basins are evident in well hydrographs at the monitoring wells shown in Appendix D, but are generally smaller than the contour interval (25 feet) on the maps. Small differences in groundwater flow direction are noticeable for mounds building at 8th Street (+15 feet) and at Ely Basins (+20 feet) between the 2003 and 2012 maps, but neither difference suggests that downgradient monitoring well locations are inappropriately located to become characteristic of recharge water quality. Also of note, a deeper and larger area pumping depression has developed in the vicinity the Chino Desalter (hydraulic control) well field and a smaller (narrower) regional pumping depression has developed in the Pomona area west of Brooks Basin. There are some changes in the contouring style/methodology between the 2003 and 2014 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, 2012, and 2014 maps.

3.5.2 Water Level Trends in Monitoring Wells

Appendix D contains groundwater elevation hydrographs for wells constructed for the monitoring program and contain data from the approximate time of a basin's start-up period through the end of 2016. 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 2016, that seasonally fluctuate between 640 to 670 feet above mean sea level (MSL). There is an approximate 4-month delay, but a 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. There are missing water level data for both casings at 8TH-1 due to the replacement of damaged pumps and/or pressure transducers at the well. Manual water levels supplemented the hydrographs during those times. 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 through 2016. Short duration downward spikes in the 8TH-2 hydrograph are indicative of nearby groundwater pumping activities.

Brooks Basin Area

The hydrographs for the Brooks Basin mound monitoring well (BRK-1/1) show 2- to 10- foot seasonal fluctuations in water level and were relatively stable annually between mid-2009 and mid-2013. From mid-2013 through early 2016, water levels BRK-1/1 have steadily decreased approximately 15 feet, from 622 to 607 feet MSL. This decrease is perhaps due to drought and a decrease in stormwater recharge or other nearby groundwater stresses. Beginning in mid 2016, BRK-1/1 water levels began to rise a total of 3 feet, stabilizing at approximately 610 feet MSL. The shallower casing (BRK-1/1) was redeveloped during 2010. Due to the removal of monitoring equipment at that time, it does not have a continuous water level record in 2010.

At the deeper casing, BRK-1/2, groundwater elevations typically range between 584 and 614 feet MSL. The larger groundwater elevation fluctuations in the deeper casing (BRK-1/2) are due to a greater influence from nearby groundwater production at that depth. Recycled recharge began at Brooks Basin in August 2008 at the time when water levels were declining in this casing from their high of 612 feet MSL. Between 2009 and 2013, water levels in BRK-1/2 were generally stable fluctuating between 587 and 605 feet MSL. Like BRK-1/1, BRK-1/2 shows a decrease in water levels beginning 2013 and reaching historical lows in early 2016. Beginning in mid 2016, BRK-1/2 water levels began to rise a total of 5 feet, stabilizing at approximately 589 feet MSL.

The hydrograph of the downgradient (intermediate) monitoring well BRK-2 shows a similarly stable trend as BRK-1/2 from 2009 to 2013, followed by decreases through 2015, and then small increases in 2016. BRK-2 casings have slightly larger seasonal fluctuations and pumping influences.

Banana & Hickory Basins Area

The hydrograph for the Banana and Hickory Basins mound monitoring well (BH-1) shows seasonal and longer-term water level fluctuations of about 15 feet. Between 2006 and 2009, a 15-foot steady decline in water level occurred. From 2009 through 2016, the BH-1/2 hydrograph shows relatively stable water levels with 5-foot season fluctuations. For 2012, the hydrograph rose about 10 feet above the 2009 through 2011 levels, but came back down in 2013. 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.

Turner Basin Area

The hydrographs for the two Turner Basin monitoring wells, TRN-1/2 and TRN-2/2, show long term increased in water levels. For these two sites, between 2008 and 2016 the annual highs and lows of September 2008 through 2016 show a 40- and 25-foot increase, respectively, suggesting recharge at Turner Basins has a positive local impact on regional water levels. Annually the

hydrographs have shown 10- to 25-foot variations in groundwater elevation with delays of 1 to 2 months associated with peaks in recharge. The annual variations are related to stormwater recharge with peaks in recharge correlating to the following peak in water level.

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 +/-20 feet in response to recharge. In January 2015, the water level transducer malfunctioned and several months of water level data were lost. The transducer was repaired and water level data collection resumed in November 2015. From the end of 2015 through 2016 water levels were relatively stable with approximately 5-foot seasonal fluctuations.

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 2007 and 2008, the water elevation did not vary by more than 2 to 3 feet with recharge activity. However, after initiation in June 2009 of using Jurupa Basin for pumping water to RP3 cell 1 (recycled water and winter stormwater), delivery/recharge volumes increased. For 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 off line for maintenance. In 2013, water levels rebounded 5 to 10 feet upwards with renewed recharge at the RP3 site. 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. Since late 2014, water levels in both the shallow and deep RP3-1 casings have increased approximately 10 feet and experience relatively stable 6-foot seasonal fluctuations.

Declez Basin Area

Declez Basin monitoring well DCZ-1 contains data since 2008. The long-term water level trend at this site is has been stable between 2008 and 2016 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 occurred in Declez basin for its start-up period of December 2015 through September 2016 and appear to provide about a 5-foot increase in water level. Recycled water delivery will resume to Declez upon completion of a downgradient monitoring well in late 2017.

San Sevaine & Victoria Basins Area

Monitoring well SS-1 was installed in spring 2010 and does not have sufficient water level history to correlate with recharge at the San Sevaine Basins. Between 2010 and 2013, the hydrograph for the San Sevaine 5 basin mound monitoring well (SS-1) showed longer water level fluctuations of about 5 feet. Since 2013, water levels at SS-1 show a steady decline of about 25 feet, due in part to the low rainfall and stormwater recharge. In addition, recycled water recharge at San

Sevaine 5 has not occurred since May 2014 due to low basin infiltration rates and operating constraints.

The hydrograph for the Victoria Basin mound monitoring well (VCT-1/1) shows seasonal and longer-term water level fluctuations within a 20-foot range. The water level transducer installed at VCT-1/1 in April 2010 was found to be faulty and only manual measurements were measured until April 2011. The mound area water levels rose 15 feet from 2010 to 2011, then fell and rose 5 feet in 2012. In 2013, the mound area water levels fell approximately 10 feet. There appears to be about an 11-month delay between recharge and water table changes beneath the Victoria Basin, yet more observations are needed to confirm this delay. In late 2014, water levels rose sharply approximately 15 feet due to relatively higher volume recharge of recycled water in early 2014, and remained relatively stable until the December 2015. In 2016, there was a 20-foot drop in water level most likely due to the basin being off line for maintenance.

The hydrograph for the Victoria Basin downgradient (intermediate) monitoring well (VCT-2/2) shows long-term water level fluctuations within a 12-foot range. Seasonally, the hydrograph shows 5- to 8-foot water level fluctuations in 2010 through 2013. This well was installed in spring 2010 and the existing water level data set does not yet correlate well with recharge activities at the San Sevaine and Victoria Basins. While both the water levels and the 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 well's site which resulted in the ground and the well casing being lowered. Data collection was resumed in November 2015, and show water levels a few feet lower than the previous year. The transducer failed in mid 2016 and was replaced.

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- Inland Empire Utilities Agency and Chino Basin Watermaster, 2010c, Start-Up Period Report for RP3 Basin, December 13, 2010.
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TABLES

**Table 2-1
Quarterly Groundwater Quality at Nearest Potable Well**

Sample Location		Date	TOC (mg/L)	Total Coliform (MPN/100mL)	pH	EC (µmho/cm)	Al (µg/L)	Color (units)	Cu (µg/L)	Corrosivity Index (SI)	Foaming Agents (mg/L)	Fe (µg/L)	Mn (µg/L)	MTBE (µg/L)	Odor Threshold (TON)	Ag (µg/L)	Thiobencarb (µg/L)	Turbidity (NTU)	Zn (µg/L)	TDS (mg/L)	Cl (mg/L)	Hardness (mg CaCO3/L)	Na (mg/L)	SO4 (mg/L)	Nitrogen, Total (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	Dissolved Oxygen (mg/L)		
8th St		No active municipal drinking water wells within 10,000 feet of the 8th Street Basin during the 2016 calendar year																												
Banana & Hickory		No active municipal drinking water wells within 10,000 feet of the Banana and Hickory Basins during the 2016 calendar year																												
Brooks	Pomona Well No. 10	1Q16	0.14	<1.1	7.6	512	<25	<3	0.9	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	7	306	44	254	12	39	6.9	0.13	6.8	3.5		
	Pomona Well No. 10	2Q16	0.21	<1.1	7.6	517	<25	<3	0.8	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.25	5	342	43	228	12	41	7.1	<0.02	7.1	5.3		
	Pomona Well No. 10	3Q16	0.20	<1.1	8.0	535	<25	<3	0.8	0.1	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.30	4	382	43	227	11	42	7.2	<0.02	7.2	5.8		
	Pomona Well No. 10	4Q16	0.22	<1.1	7.9	563	<25	<3	0.7	0.3	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.15	<1	332	50	230	11	40	7.2	<0.02	7.2	5.9		
Ely	Bishop Of San Bernardino Corp.	1Q16	Well inoperable																											
	Bishop Of San Bernardino Corp.	2Q16	Well inoperable																											
	Bishop Of San Bernardino Corp.	3Q16	0.28	<1.1	7.8	842	<25	<3	0.7	0.3	<0.05	74	2	<0.5	1	<0.25	<0.2	0.80	673	506	40	344	23	67	22.5	<0.02	22.5	4.5		
	Bishop Of San Bernardino Corp.	4Q16	0.34	<1.1	7.6	838	<25	<3	1.0	0.3	<0.05	18	<1	<0.5	2	<0.25	<0.2	0.30	233	500	41	347	22	64	21.0	<0.02	21.0	6.2		
RP3 & Declez	JCSD Well No. 17	1Q16	0.21	<1.1	7.6	592	<25	<3	1.0	0.5	<0.05	<15	1	<0.5	1	<0.25	<0.2	0.20	<1	374	54	210	26	41	12.1	0.11	12.0	0.7		
	JCSD Well No. 17	2Q16	0.23	<1.1	7.9	573	<25	<3	1.4	0.2	<0.05	<15	2	<0.5	<1	<0.25	<0.2	0.15	<1	360	51	203	27	39	12.0	<0.02	12.0	4.5		
	JCSD Well No. 13	3Q16	<0.10	<1.1	7.8	714	<25	<3	1.4	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.35	2	570	107	269	29	26	6.8	<0.02	6.2	4.7		
	JCSD Well No. 17	4Q16	0.21	<1.1	7.8	697	<25	<3	1.1	0.1	<0.05	<15	<1	<0.5	2	<0.25	<0.2	0.20	<1	478	84	234	29	35	8.7	<0.02	8.7	3.7		
San Sevaine	Unitex 91090	1Q16	0.34	6.9	7.5	357	<25	<3	0.7	0.0	<0.05	79	2	<0.5	<1	<0.25	<0.2	0.25	2	232	28	163	17	27	2.6	0.12	1.9	0.3		
	Unitex 91090	2Q16	0.23	<1.1	8.0	400	<25	5	2.0	0.1	<0.05	126	1	<0.5	<1	<0.25	<0.2	1.30	4	258	32	172	13	31	2.6	<0.02	1.8	6.1		
	Unitex 91090	3Q16	<0.10	<1.1	7.7	408	<25	<3	0.7	0.0	<0.05	73	2	<0.5	<1	<0.25	<0.2	0.40	2	250	28	186	13	32	2.8	<0.02	2.2	4.7		
	Unitex 91090	4Q16	0.13	<1.1	7.9	423	<25	<3	0.6	-0.1	<0.05	32	<1	<0.5	<1	<0.25	<0.2	0.35	1	260	27	160	13	29	2.0	<0.02	2.0	6.0		
Turner	City of Ontario Well No. 25	1Q16	0.23	<1.1	7.4	425	<25	<3	0.6	0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.15	<1	286	26	197	24	19	5.2	0.16	5.0	6.7		
	City of Ontario Well No. 25	2Q16	0.12	<1.1	7.7	479	<25	<3	0.5	0.0	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	292	22	182	23	17	4.7	<0.02	4.7	4.6		
	City of Ontario Well No. 25	3Q16	<0.10	<1.1	7.8	448	<25	<3	0.6	0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.10	<1	274	20	190	23	16	4.3	<0.02	4.3	4.6		
	City of Ontario Well No. 25	4Q16	0.26	23	7.8	501	<25	<3	0.7	0.1	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.35	<1	302	26	186	22	17	5.0	<0.02	5.0	4.6		
Victoria & San Sevaine	CVWD No. 39	1Q16	<0.10	<1.1	7.9	317	<25	<3	3.8	-0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.20	<1	202	9	99	21	12	2.5	<0.02	2.5	7.9		
	CVWD No. 39	2Q16	<0.10	<1.1	7.9	294	<25	<3	1.3	-0.2	<0.05	<15	<1	<0.5	<1	0.55	<0.2	0.30	32	192	7	97	21	10	3.0	<0.02	3.0	4.9		
	CVWD No. 39	3Q16	<0.10	<1.1	7.7	302	<25	<3	0.9	-0.2	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.20	<1	202	10	96	22	12	2.6	<0.02	2.6	4.6		
	CVWD No. 39	4Q16	<0.10	<1.1	7.9	317	<25	<3	4	-0.3	<0.05	<15	<1	<0.5	<1	<0.25	<0.2	0.20	<1	202	9	99	21	12	2.5	<0.02	2.5	7.9		
Primary Maximum Contaminant Level						1000		1300						13			70									1	10			
Secondary Maximum Contaminant Level				6.5-8.5	900	200	15	1000		1	300	50	5	3	100	1	5	5000	500	250				250						

Blank cells indicate that analysis was not run for a constituent during the quarter

Table 2-2
Regional Plants No. 1 & No. 4 Chemical Usage Summary

Month	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.
Jan-16	26,900	2,715	8,084	121,600	7,215	921	18,097
Feb-16	24,500	415	3,996	112,100	5,870	898	17,762
Mar-16	25,000	4,840	4,800	106,700	6,410	1,245	20,650
Apr-16	24,500	5,363	3,500	116,400	7,038	1,108	19,119
May-16	25,200	11,414	3,200	105,300	6,918	1,217	20,793
Jun-16	21,900	14,908	2,950	122,200	6,819	1,034	22,195
Jul-16	23,500	15,385	2,850	110,800	7,369	977	26,543
Aug-16	29,450	14,592	3,700	125,100	7,621	1,045	24,476
Sep-16	30,600	9,488	4,600	129,000	7,559	805	16,232
Oct-16	29,600	6,970	3,700	119,100	8,039	1,055	20,484
Nov-16	27,700	10,027	3,200	109,700	6,560	1,139	22,251
Dec-16	26,200	7,147	2,850	105,100	6,062	1,126	23,459
Total	315,050	103,264	47,430	1,383,100	83,480	12,570	252,061

**Table 3-1
Evidence of Recycled Water Blending Based on Water Quality at
Monitoring Wells in 2016 Based on EC and Chloride**

Basin	Well	Well Position	Recycled Water EC* (µmhos/cm)	Groundwater Background EC (µmhos/cm)	Peak EC at Well (µmhos/cm)	Mass-Balance Blend (max) (% Recycled Water)	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	Mound	732	200	568	69%	Not sampled in 2016			
	8TH-1/2	Mound	732	255	354	21%	110	13	42	30%
	8TH-2/1	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	8TH-2/2	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Banana & Hickory	BH-1/2	Mound	732	360	761	100%	110	10	104	94%
	California Speedway Infield	Downgradient	732	420	695	88%	110	11	44	33%
	California Speedway No. 2	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Reliant East Well	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Fontana Water Co. 37A	Upgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Ontario No. 20	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Brooks	BRK-1/1	Mound	732	367	742	100%	110	11	108	98%
	BRK-1/2	Mound	Not sampled in 2016				Not sampled in 2016			
	BRK-2/1	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	BRK-2/2	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Ely	Philadelphia Well	Mound	732	245	628	79%	110	34	86	68%
	Walnut Well	Downgradient	Well impacted by regionally high TDS concentration				Well impacted by regionally high TDS concentration			
	Riverside Well	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
Turner	TRN-1/2	Mound	732	390	633	71%	110	21	82	69%
	TRN-2/2	Downgradient	732	350	550	52%	110	9	64	54%
	Ontario No. 25	Downgradient	732	420	501	26%	110	14	26	13%
	Ontario No. 29	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
RP-3	RP3-1/1	Mound	732	475	845	100%	110	20	109	99%
	RP3-1/2	Mound	Not sampled in 2016				Not sampled in 2016			
	Alcoa MW3	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Alcoa MW1	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	IEUA Southridge JHS	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
San Seavaine & Victoria	SS1-1/1	Mound	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	Unitex 91090	Cross gradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	VCT-1/1	Mound	732	330	714	96%	110	38	109	99%
	VCT-2/2	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
	CVWD No. 39	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			

Table 3-2
Volume-Based RWC Actuals by Basin

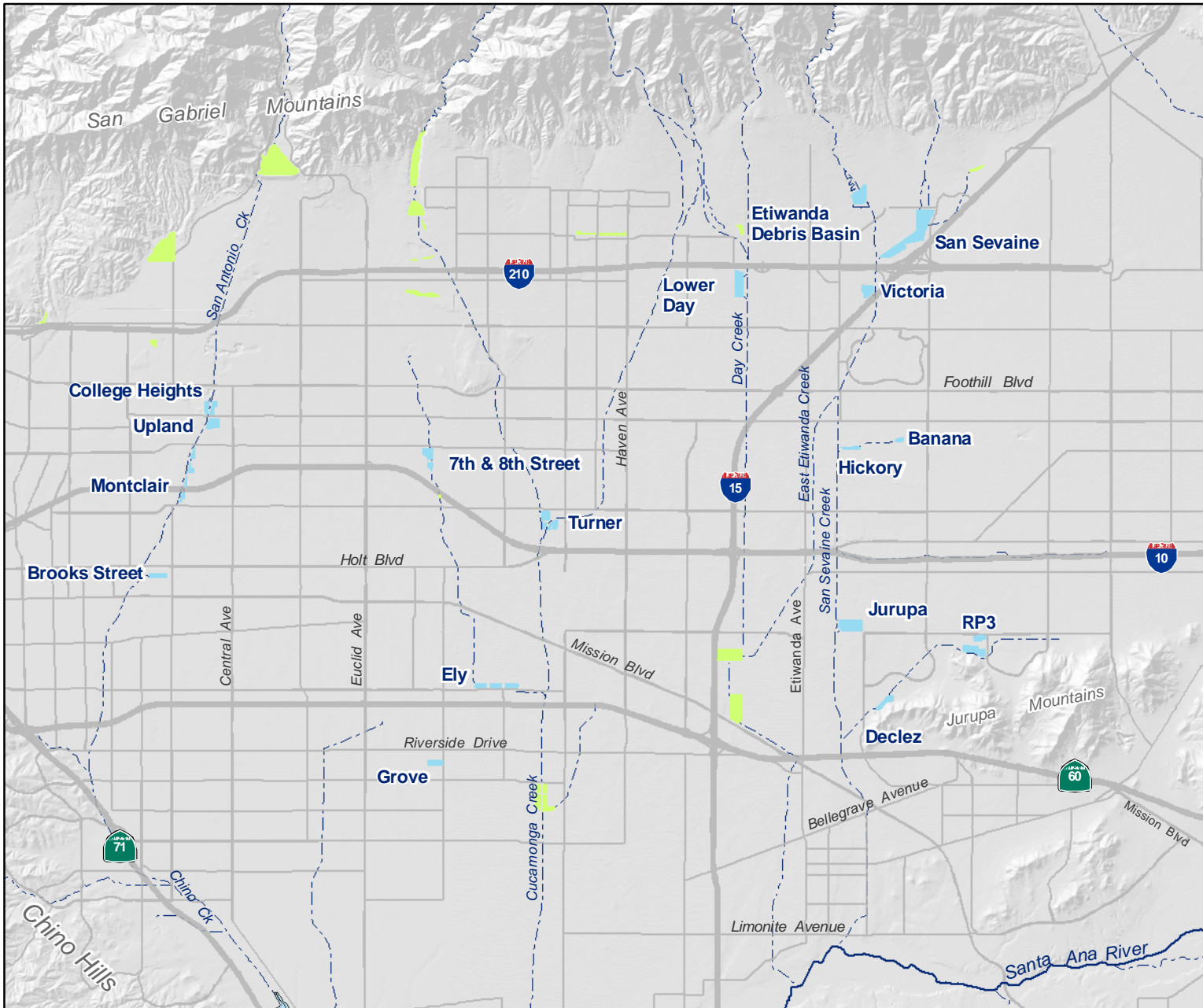
Basin	Owner	RW Start Up	Limit	2008*	2009**	2010	2011	2012	2013	2014	2015	2016
8th Street	SBCFCD	2007-10	28%	28%	23%	23%	21%	21%	24%	22%	21%	23%
Banana	SBCFCD	2005	36%	29%	30%	29%	32%	34%	34%	34%	37%	36%
Brooks	CBWCD	2008-09	42%	8%	30%	22%	18%	16%	18%	18%	17%	18%
Declez	SBCFCD	TBD	TBD	0%	0%	0%	0%	1%	1%	1%	1%	10%
Ely	CBWCD	2006	29%	17%	15%	12%	11%	11%	19%	21%	22%	22%
Hickory	SBCFCD	2005	36%	29%	29%	25%	22%	22%	23%	26%	27%	24%
RP3	IEUA	2009-10	50%	0%	17%	14%	12%	12%	14%	13%	15%	17%
San Sevaine 5	SBCFCD	2010-11	27%	0%	0%	1%	3%	4%	5%	5%	6%	8%
Turner 1&2	SBCFCD	2006-07	24%	12%	10%	8%	7%	6%	7%	11%	15%	19%
Turner 3&4	SBCFCD	2006-07	45%	20%	19%	19%	21%	22%	23%	25%	28%	24%
Victoria	SBCFCD	2010-11	50%	0%	0%	13%	19%	24%	23%	28%	30%	29%

* 2008 RWC Actuals are based on 60-months running average and exclusion of groundwater underflow as diluent water.

** 2009 RWC Actuals include groundwater underflow as a diluent source only after the October 2009 recharge permit amendment and upon initiation of recycled water recharge.

TBD To Be Determined. Declez basin has not been initiated with recycled water recharge, but received recycled water drained from RP3 basins prior to basin restoration activities.

FIGURES



- ### Main Map Features
- Recharge Basins in the Recycled Water Groundwater Recharge Program
 - Non-Program Basins
 - Rivers and Streams



Chino Basin Recycled Water Groundwater Recharge Program
Basin Locations

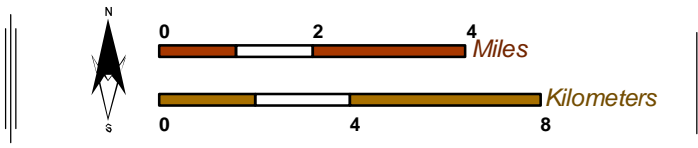
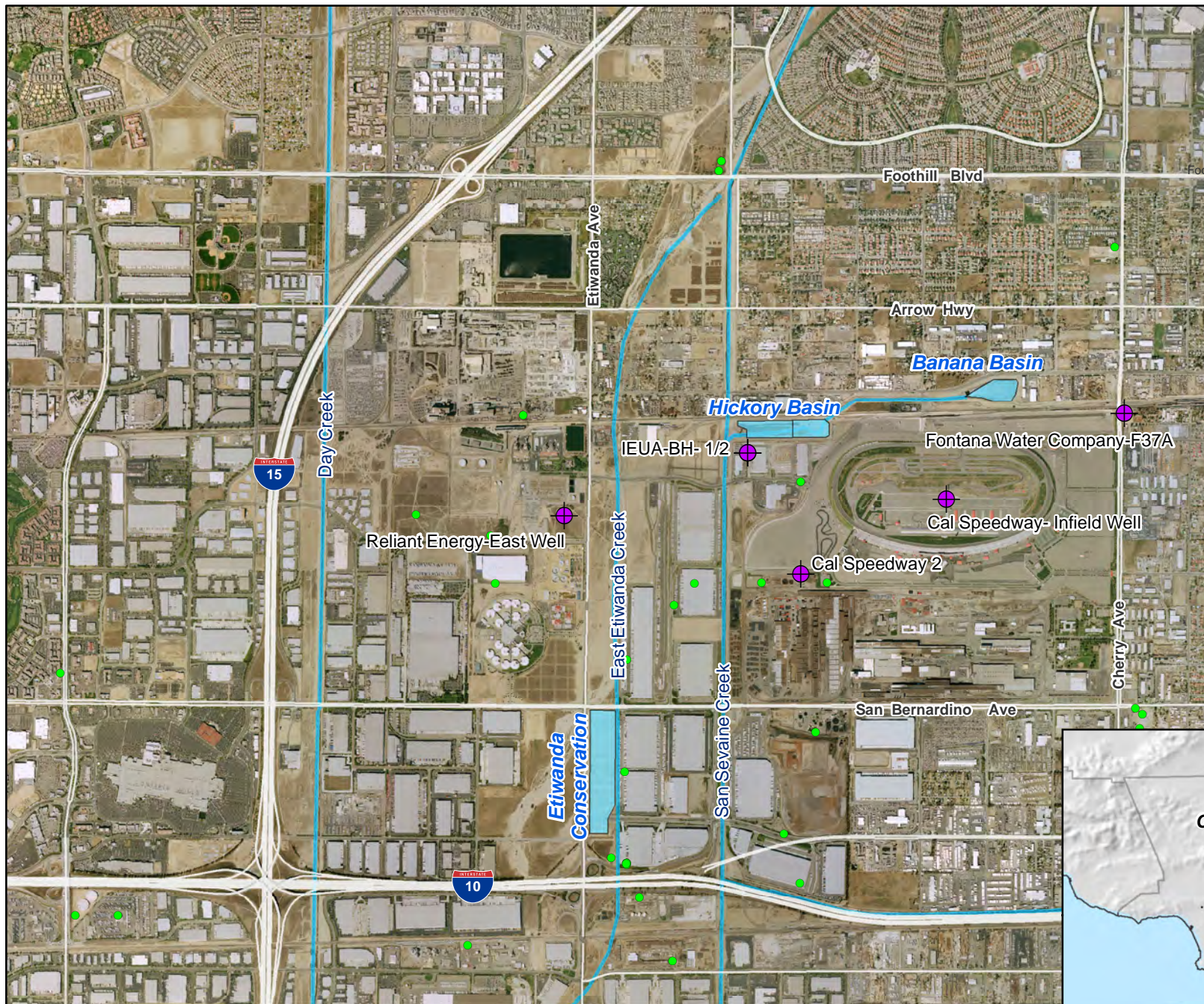






Figure 1-1



Main Map Features

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

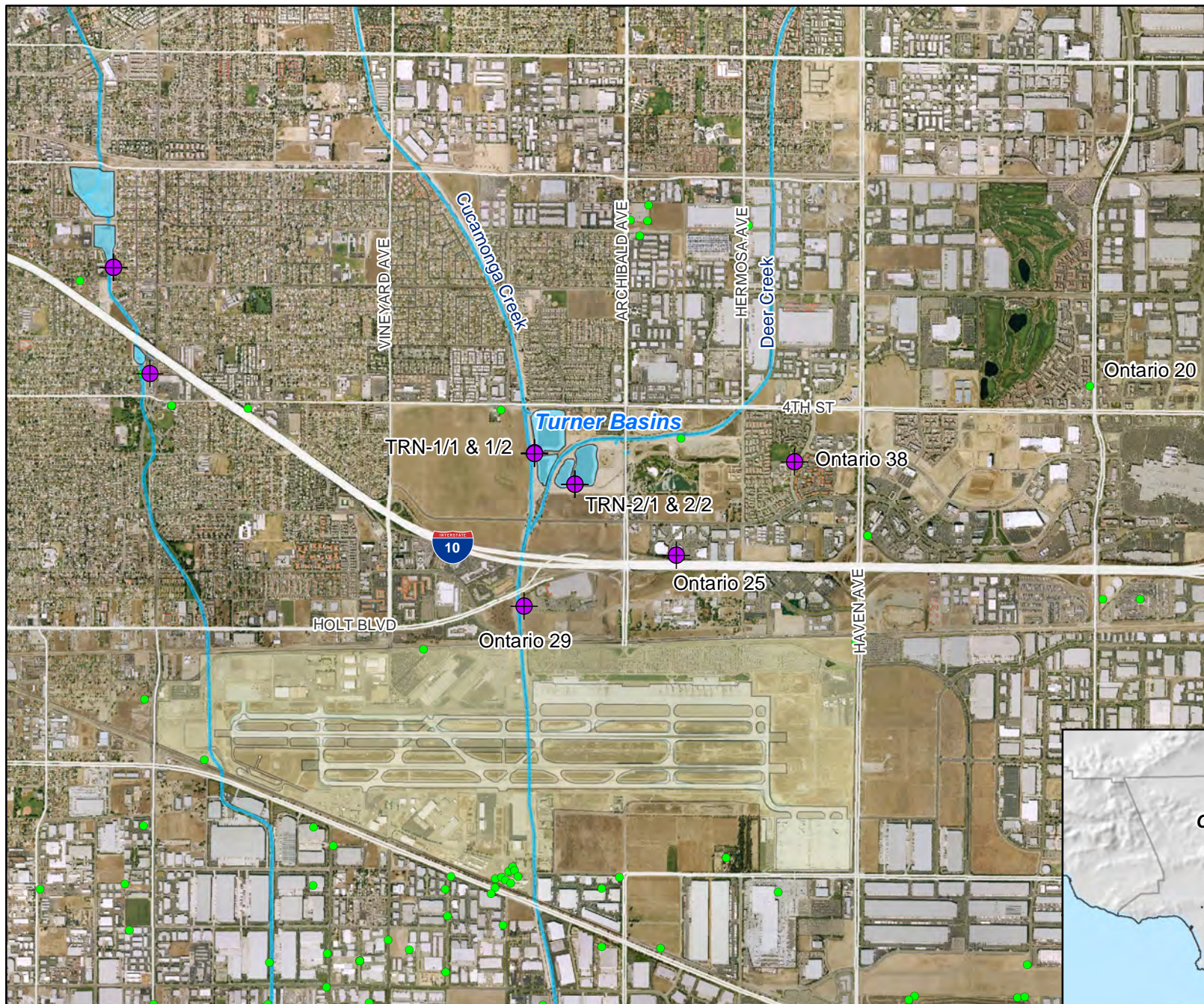


Monitoring Well Network
Hickory and Banana Basins





Figure 2-1

Recycled Water Recharge Program





Main Map Features

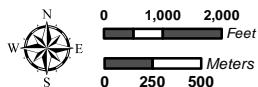
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

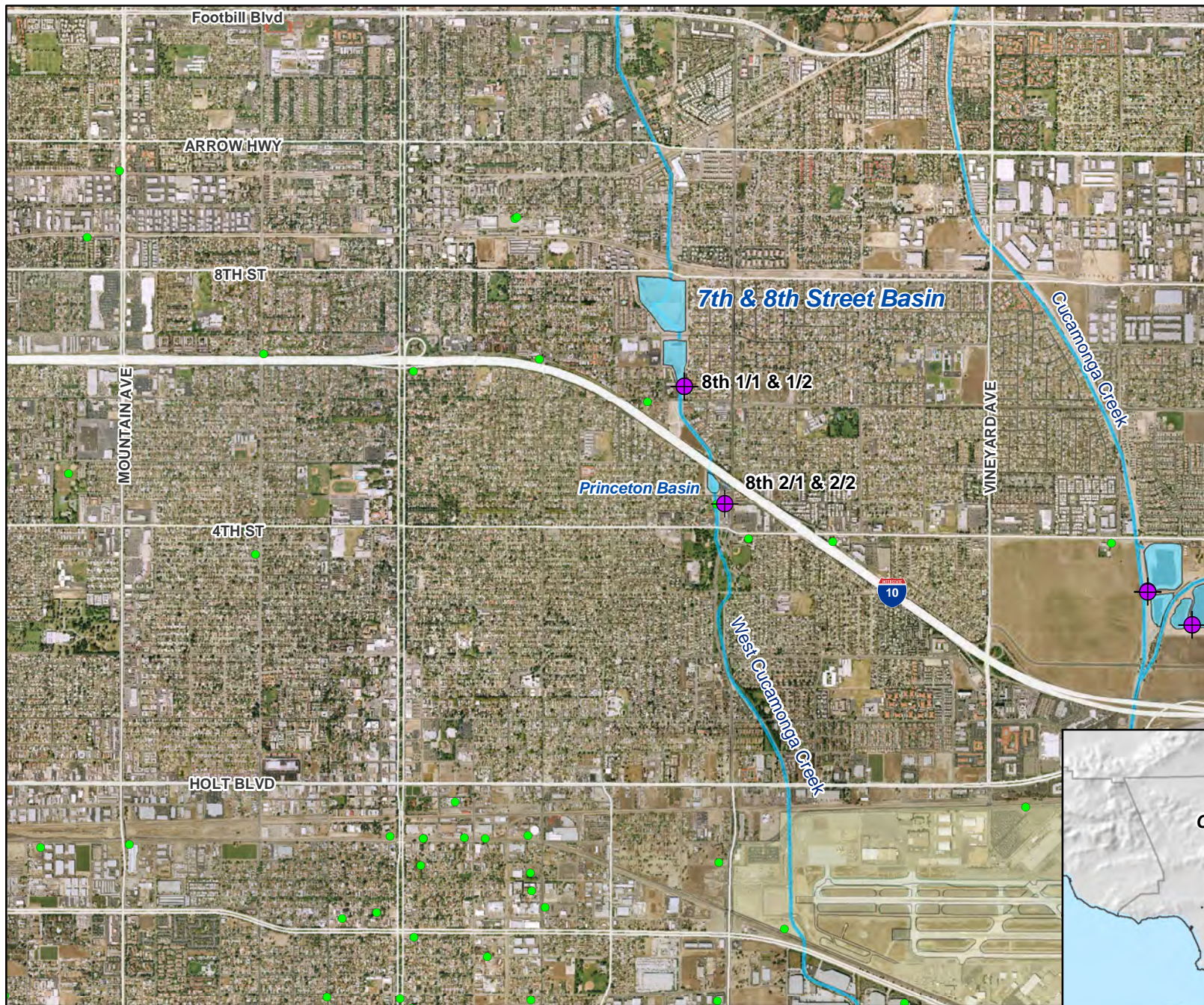


Monitoring Well Network
Turner Basins





Figure 2-2

Recycled Water Recharge Program





Main Map Features

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

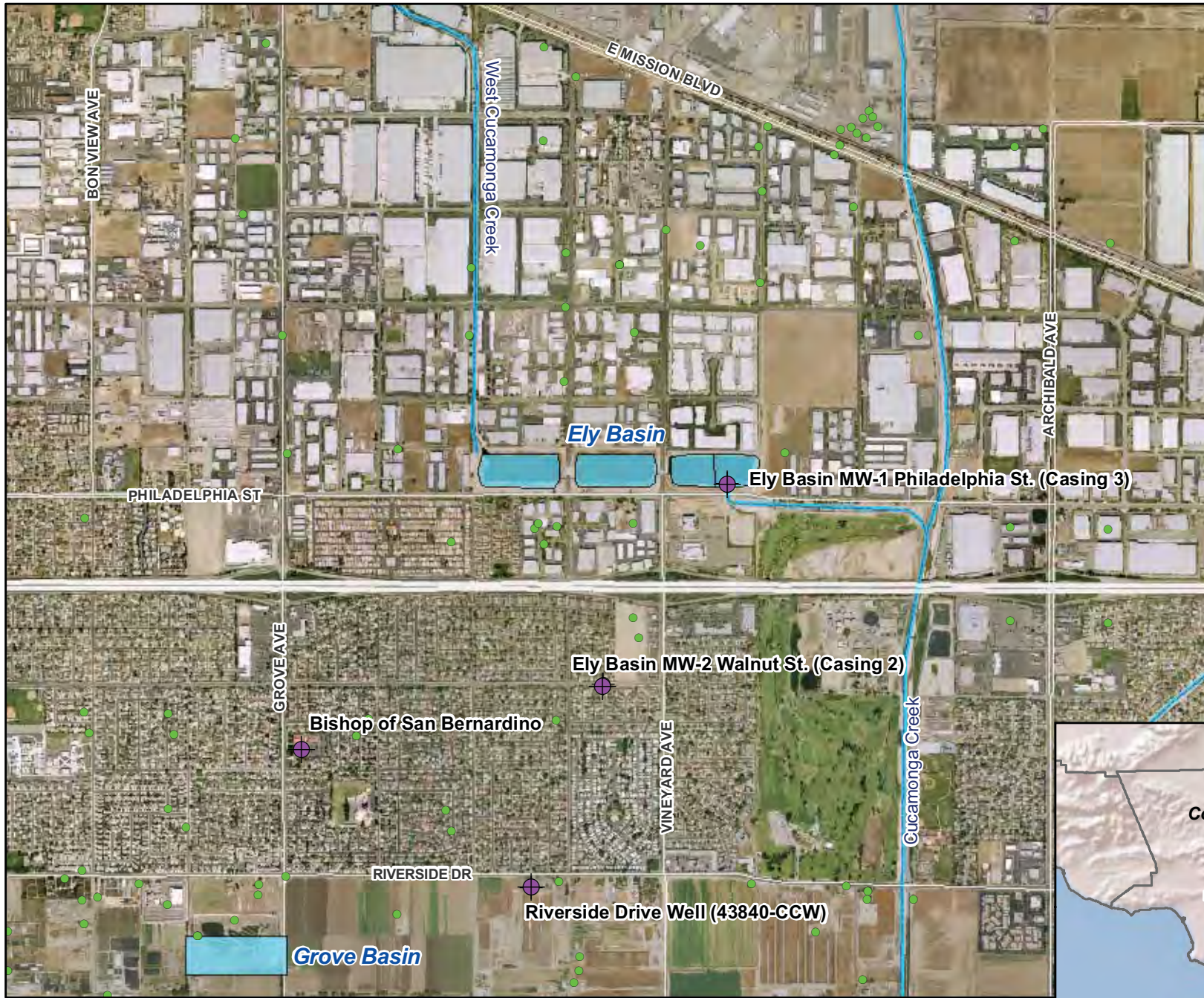


Monitoring Well Network
7th and 8th Street Basin





Figure 2-3

Recycled Water Recharge Program





Main Map Features

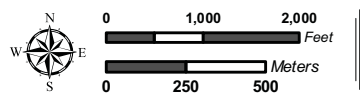
-  Existing Monitoring Well
-  "Other Wells"
-  Rivers/Streams/Creeks
-  Recharge Basins

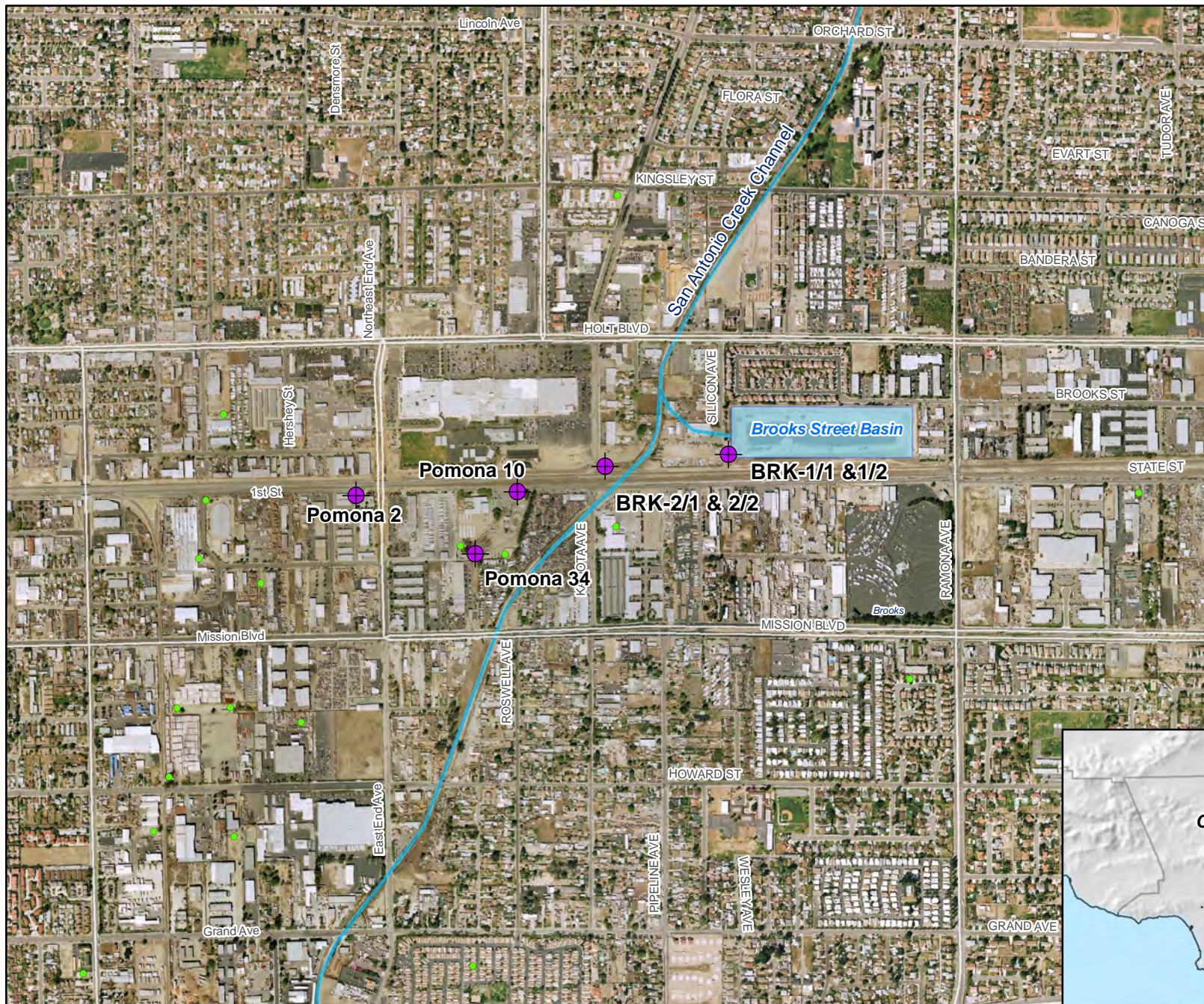


Monitoring Well Network
Ely Basins





Figure 2-4

Recycled Water Recharge Program





Main Map Features

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

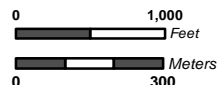


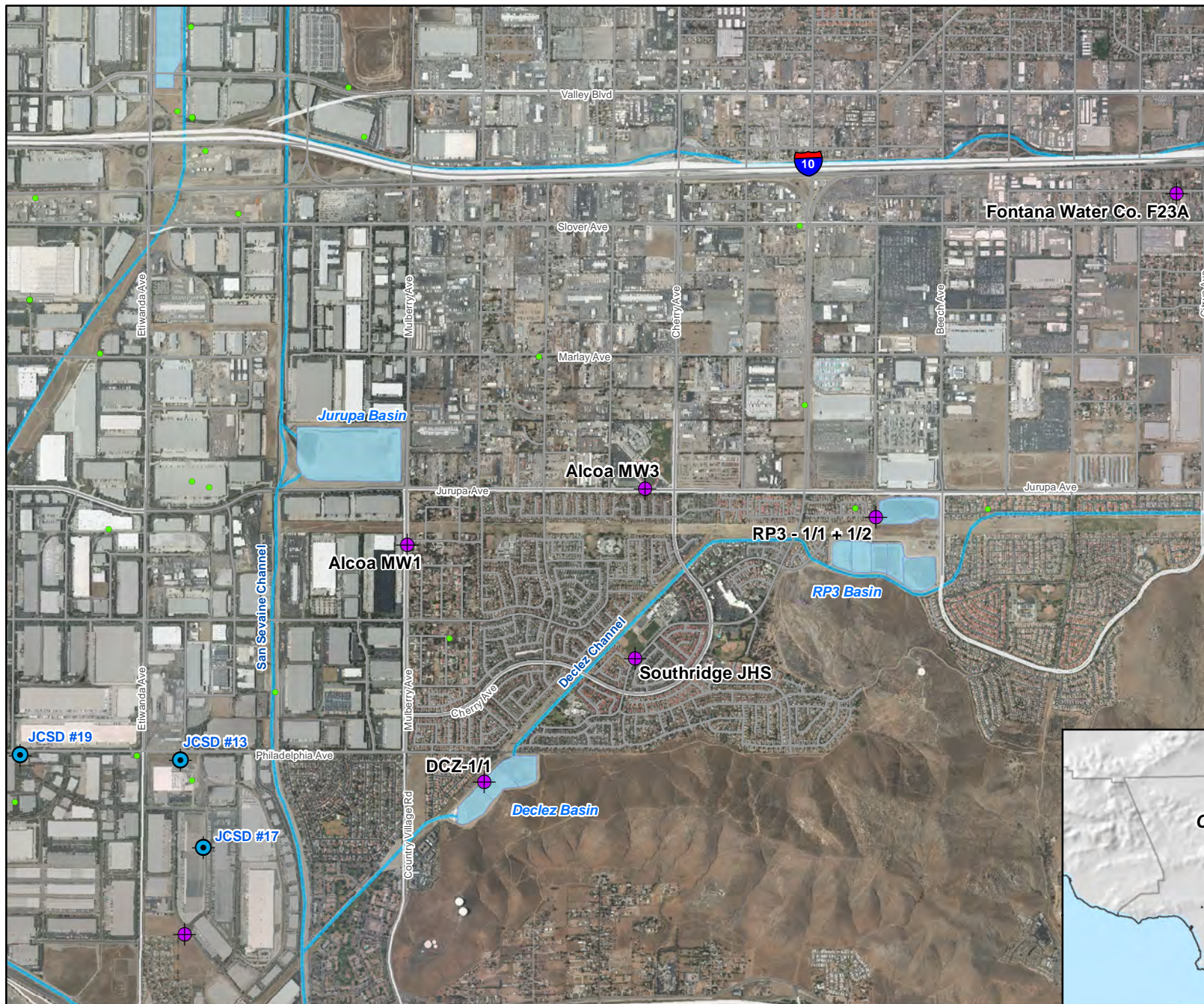
Monitoring Well Network

Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program





Main Map Features

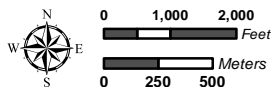
- JCSD Wells
- "Other Wells"
- Existing Monitoring Well
- Rivers/Streams/Creeks
- Recharge Basins

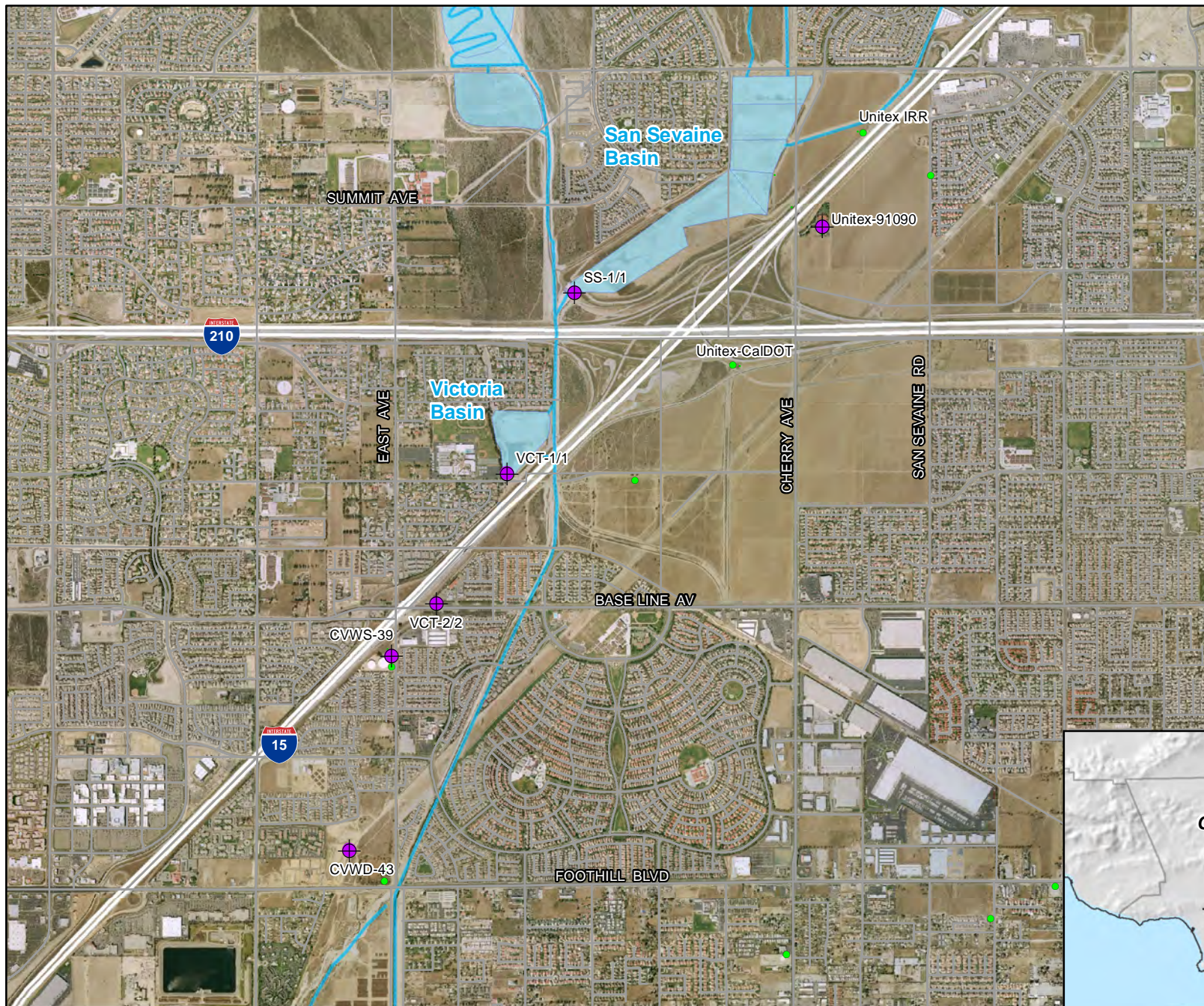


Monitoring Well Network
Declez and RP3 Basins

Figure 2-6

Recycled Water Recharge Program





Main Map Features

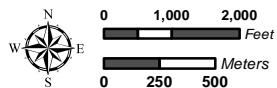
- "Other Wells"
- ⊕ Existing Monitoring Well
- Rivers/Streams/Creeks
- Recharge Basins



Monitoring Well Network
San Sevaine and Victoria Basin

Figure 2-7

Recycled Water Recharge Program



APPENDIX A

MONTHLY GROUNDWATER RECHARGE SUMMARIES

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

January 2016

Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 944 AF**	
Upland	154	-	N		
Montclair 1, 2, 3 & 4	175	-	N		
Brooks	54	-	254		
West Cucamonga Channel Drainage System					
8th Street	150	-	-	MZ-2 1,485 AF**	
7th Street	99	-	59		
Ely 1, 2, & 3	337	-	61		
Minor Drainage					
Grove	100	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	269	-	102		
Turner 3 & 4	82	-	-		
Day Creek Channel Drainage System					
Lower Day	119	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	26	-	X		
Victoria	87	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	101	-	-		
San Sevaine 5	143	-	-		
West Fontana Channel System					
Hickory	35	-	23	MZ-3 1,011 AF**	
Banana	71	-	75		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	205	-	390		
RP3 Cell 2	34	-	-		
Declez	158	-	78		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	(1)				
Turner (CVWD) MZ-2	-				
Month Total = 3,440 AF					
	2,398	0.0	1,042	January 2016	
Fiscal Year to Date Total					
Since July 1, 2015 = 13,440 AF	6,401	0.0	7,039	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 3,440 AF	2,398	0.0	1,042	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water - : No stormwater/local runoff, or basin not in use due to maintenance or testing. X : Turnouts not available - to be installed during future projects. N : No turnout planned for installation. * : Data are preliminary based on the data available at the time of this report preparation. ** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
February 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 572 AF**	
Upland	19	-	N		
Montclair 1, 2, 3 & 4	45	-	N		
Brooks	22	-	211		
West Cucamonga Channel Drainage System					
8th Street	93	-	165	MZ-2 542 AF**	
7th Street	-	-	41		
Ely 1, 2, & 3	59	-	89		
Minor Drainage					
Grove	15	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	51	-	198		
Turner 3 & 4	41	-	-		
Day Creek Channel Drainage System					
Lower Day	14	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	10	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	5	-	-		
San Sevaine 5	28	-	-		
West Fontana Channel System					
Hickory	5	-	27		
Banana	7	-	110		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	53	-	358	MZ-3 716 AF**	
RP3 Cell 2	1	-	-		
Declez	34	-	153		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	(24)				
Turner (CVWD) MZ-2	-				
Month Total = 1,830 AF					
	478	0	1,352	February 2015	
Fiscal Year to Date Total					
Since July 1, 2015 = 15,270 AF	6,879	0	8,391	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 5,270 AF	2,876	0	2,394	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
March 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 838 AF**	
Upland	183	-	N		
Montclair 1, 2, 3 & 4	100	-	N		
Brooks	91	-	116		
West Cucamonga Channel Drainage System					
8th Street	198	-	80	MZ-2 827 AF**	
7th Street	2	-	80		
Ely 1, 2, & 3	177	-	47		
Minor Drainage					
Grove	53	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	165	-	161		
Turner 3 & 4	47	-	-		
Day Creek Channel Drainage System					
Lower Day	37	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	79	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	44	-	-		
San Sevaine 5	44	-	-		
West Fontana Channel System					
Hickory	22	-	-	MZ-3 712 AF**	
Banana	38	-	74		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	155	-	134		
RP3 Cell 2	53	-	40		
Declez	92	-	126		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	(1)				
Montclair (MVWD) MZ-1	(11)				
Upland (SAWCo) MZ-1	(49)				
Month Total = 2,377 AF					
	1,519	0.0	858	March 2016	
Fiscal Year to Date Total					
Since July 1, 2015 = 17,647 AF	8,398	0.0	9,249	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 7,647 AF	4,395	0.0	3,252	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
April 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 462 AF**	
Upland	10	-	N		
Montclair 1, 2, 3 & 4	24	-	N		
Brooks	13	-	192		
West Cucamonga Channel Drainage System					
8th Street	32	-	163	MZ-2 470 AF**	
7th Street	2	-	32		
Ely 1, 2, & 3	24	-	127		
Minor Drainage					
Grove	15	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	19	-	128		
Turner 3 & 4	49	-	-		
Day Creek Channel Drainage System					
Lower Day	-	0.0	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	14	-	X		
Victoria	1	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	24	-	-		
San Sevaine 5	5	-	-		
West Fontana Channel System					
Hickory	21	0.0	43		
Banana	-	-	97		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	36	0.0	247	MZ-3 611 AF**	
RP3 Cell 2	14	-	-		
Declez	20	0.0	133		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	(2)				
Montclair (MVWD) MZ-1	(4)				
Turner (CVWD) MZ-2	-				
Month Total = 1,479 AF					
	317	0.0	1,162	April 2016	
Fiscal Year to Date Total					
Since July 1, 2015 = 19,126 AF	8,715	0.0	10,411	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 9,126 AF	4,712	0.0	4,414	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
May 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 557 AF**	
Upland	3	-	N		
Montclair 1, 2, 3 & 4	9	-	N		
Brooks	1	-	278		
West Cucamonga Channel Drainage System					
8th Street	71	-	204	MZ-2 637 AF**	
7th Street	1	-	-		
Ely 1, 2, & 3	197	-	119		
Minor Drainage					
Grove	47	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	38	-	156		
Turner 3 & 4	33	-	-		
Day Creek Channel Drainage System					
Lower Day	2	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	2	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	-	-	-		
San Sevaine 5	1	-	-		
West Fontana Channel System					
Hickory	-	0.0	52		
Banana	15	0.0	113		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	33	0.0	358	MZ-3 791 AF**	
RP3 Cell 2	15	-	17		
Declez	12	0.0	228		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	(1)				
Montclair (MVWD) MZ-1	(9)				
Turner (CVWD) MZ-2	-				
Month Total = 1,995 AF					
	470	0.0	1,525	May 2016	
Fiscal Year to Date Total					
Since July 1, 2015 = 21,121 AF	9,185	0.0	11,936	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 11,121 AF	5,182	0.0	5,939	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
June 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 301 AF**	
Upland	-	-	N		
Montclair 1, 2, 3 & 4	8	-	N		
Brooks	-	-	-		
West Cucamonga Channel Drainage System					
8th Street	5	-	296	MZ-2 462 AF**	
7th Street	-	-	-		
Ely 1, 2, & 3	1	-	210		
Minor Drainage					
Grove	-	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	5	-	159		
Turner 3 & 4	20	-	-		
Day Creek Channel Drainage System					
Lower Day	1	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	1	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	-	-	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	-	0.0	18	MZ-3 617 AF**	
Banana	-	0.0	157		
Declez Channel Drainage System					
RP3 Cells 1, 3, & 4	9	0.0	245		
RP3 Cell 2	2	-	-		
Declez	3	0.0	201		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	(8)				
Turner (CVWD) MZ-2	-				
Month Total = 1,333 AF					
	47	0.0	1,286	June 2016	
Fiscal Year to Date Total					
Since July 1, 2015 = 22,454 AF	9,232	0.0	13,222	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 12,454 AF	5,229	0.0	7,225	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
July 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 263 AF**	
Upland	-	-	N		
Montclair 1, 2, 3 & 4	-	-	N		
Brooks	-	-	-		
West Cucamonga Channel Drainage System					
8th Street	4	-	259	MZ-2 223 AF**	
7th Street	-	-	-		
Ely 1, 2, & 3	2	-	113		
Minor Drainage					
Grove	-	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	4	-	89		
Turner 3 & 4	15	-	-		
Day Creek Channel Drainage System					
Lower Day	-	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	-	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	-	-	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	-	-	-		
Banana	-	-	183		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	9	-	99	MZ-3 501 AF**	
RP3 Cell 2	9	-	-		
Declez	-	-	201		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	-				
Turner (CVWD) MZ-2	-				
Month Total = 987 AF	43	0.0	944	July 2016	
Fiscal Year to Date Total				Fiscal Year to Date	
Since July 1, 2016 = 987 AF	43	0.0	944		
Calendar Year to Date Total				Calendar Year to Date	
Since Jan. 1, 2016 = 13,437 AF	5,268	0.0	8,169		
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water - : No stormwater/local runoff, or basin not in use due to maintenance or testing. X : Turnouts not available - to be installed during future projects. N : No turnout planned for installation. * : Data are preliminary based on the data available at the time of this report preparation. ** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
August 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 276 AF**	
Upland	-	-	N		
Montclair 1, 2, 3 & 4	20	-	N		
Brooks	-	-	-		
West Cucamonga Channel Drainage System					
8th Street	8	-	268	MZ-2 214 AF**	
7th Street	-	-	-		
Ely 1, 2, & 3	-	-	89		
Minor Drainage					
Grove	1	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	22	-	52		
Turner 3 & 4	1	-	-		
Day Creek Channel Drainage System					
Lower Day	-	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	-	-	-		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	-	-	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	-	-	49		
Banana	-	-	49		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	9	-	289		
RP3 Cell 2	23	-	-		
Declez	-	-	261		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	(20)				
Turner (CVWD) MZ-2	-				
Month Total = 1,121 AF	64	-	1,057	August 2016	
Fiscal Year to Date Total				Fiscal Year to Date	
Since July 1, 2016 = 2,108 AF	107	-	2,001		
Calendar Year to Date Total				Calendar Year to Date	
Since Jan. 1, 2016 = 14,558 AF	5,332	0.0	9,226		
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
September 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 449 AF**	
Upland	20	-	N		
Montclair 1, 2, 3 & 4	35	-	N		
Brooks	31	-	145		
West Cucamonga Channel Drainage System					
8th Street	5	-	248	MZ-2 375 AF**	
7th Street	-	-	-		
Ely 1, 2, & 3	3	-	232		
Minor Drainage					
Grove	-	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	18	-	40		
Turner 3 & 4	-	-	-		
Day Creek Channel Drainage System					
Lower Day	-	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	-	-	X		
Victoria	-	-	53		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	-	-	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	-	-	29		
Banana	-	-	97		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	-	-	551	MZ-3 710 AF**	
RP3 Cell 2	9	-	-		
Declez	1	-	52		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD) MZ-1	(35)				
Turner (CVWD) MZ-2	-				
Month Total = 1,534 AF					
	87	-	1,447	September 2016	
Fiscal Year to Date Total					
Since July 1, 2016 = 3,642 AF	194	-	3,448	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 16,092 AF	5,419	0.0	10,673	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
October 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	570.0	N	MZ-1 4,588 AF**	
Upland	60	950.0	N		
Montclair 1, 2, 3 & 4	29	2,470.2	N		
Brooks	17	170.0	19		
West Cucamonga Channel Drainage System					
8th Street	35	-	230	MZ-2 640 AF**	
7th Street	-	-	55		
Ely 1, 2, & 3	47	-	233		
Minor Drainage					
Grove	23	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	38	-	104		
Turner 3 & 4	1	-	-		
Day Creek Channel Drainage System					
Lower Day	4	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	5	-	X		
Victoria	10	-	142		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	16	-	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	25	-	55	MZ-3 665 AF**	
Banana	6	-	115		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	81	-	392		
RP3 Cell 2	24	-	-		
Declez	47	-	-		
Non-Replenishment Recharge Deduct **					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD, Upland) MZ-1	(17)				
Upland (Upland) MZ-1	(46)				
Month Total = 5,910 AF					
	405	4,160.2	1,345	October 2016	
Fiscal Year to Date Total					
Since July 1, 2016 = 9,552 AF	599	4,160.2	4,793	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 22,002 AF	5,824	4,160.2	12,018	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
November 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	-	-	N	MZ-1 547 AF**	
Upland	25	-	N		
Montclair 1, 2, 3 & 4	59	-	N		
Brooks	39	-	116		
West Cucamonga Channel Drainage System					
8th Street	41	-	133	MZ-2 632 AF**	
7th Street	41	-	95		
Ely 1, 2, & 3	86	-	112		
Minor Drainage					
Grove	44	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	68	16.3	12		
Turner 3 & 4	-	-	-		
Day Creek Channel Drainage System					
Lower Day	9	2.5	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	11	-	X		
Victoria	24	7.0	218		
San Sevaine Channel Drainage System					
San Sevaine 1, 2, 3, & 4	12	14.0	-		
San Sevaine 5	-	-	-		
West Fontana Channel System					
Hickory	9	-	3		
Banana	21	-	55		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	44	-	664	MZ-3 884 AF**	
RP3 Cell 2	21	-	24		
Declez	55	-	-		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	-				
Montclair (MVWD, Upland) MZ-1	(2)				
Upland (Upland) MZ-1	(16)				
Month Total = 2,063 AF					
	591	39.8	1,432	November 2016	
Fiscal Year to Date Total					
Since July 1, 2016 = 11,615 AF	1,190	4,200.0	6,225	Fiscal Year to Date	
Calendar Year to Date Total					
Since Jan. 1, 2016 = 24,065 AF	6,415	4,200.0	13,450	Calendar Year to Date	
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water					
- : No stormwater/local runoff, or basin not in use due to maintenance or testing.					
X : Turnouts not available - to be installed during future projects.					
N : No turnout planned for installation.					
* : Data are preliminary based on the data available at the time of this report preparation.					
** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS					
December 2016					
Drainage System	Recharge Volume (AF)*			Management	
Basin	SW/LR	MW	RW	Zone Subtotals	
San Antonio Channel Drainage System					
College Heights	8	60	N	MZ-1 1,184 AF**	
Upland	84	-	N		
Montclair 1, 2, 3 & 4	347	-	N		
Brooks	196	-	13		
West Cucamonga Channel Drainage System					
8th Street	203	-	25	MZ-2 1,938 AF**	
7th Street	160	-	96		
Ely 1, 2, & 3	523	-	-		
Minor Drainage					
Grove	79	N	N		
Cucamonga and Deer Creek Channel Drainage Systems					
Turner 1 & 2	239	-	71		
Turner 3 & 4	316	-	-		
Day Creek Channel Drainage System					
Lower Day	87	-	X		
Etiwanda Channel Drainage System					
Etiwanda Debris	91	-	X		
Victoria	185	-	106		
San Sevaine Channel Drainage System (MZ-2)					
San Sevaine 1, 2, 3, & 4	144	-	-		
San Sevaine 5	12	-	-		
West Fontana Channel System					
Hickory	85	-	-	MZ-3 1,187 AF**	
Banana	71	-	1		
San Sevaine Channel Drainage System (MZ-3)					
Jurupa	14	-	-		
Declez Channel Drainage System					
RP3 Cells 1,3, & 4	246	-	548		
RP3 Cell 2	90	-	-		
Declez	217	-	-		
Non-Replenishment Recharge**					
Brooks (MVWD) MZ-1	(7)				
Montclair (MVWD, Upland) MZ-1	(1)				
Month Total = 4,309 AF	3,389	60.2	860	December 2016	
Fiscal Year to Date Total				Fiscal Year to Date	
Since July 1, 2016 = 15,924 AF	4,579	4,260.2	7,085		
Calendar Year to Date Total				Calendar Year to Date	
Since Jan. 1, 2016 = 28,374 AF	9,804	4,260.2	14,310		
SW : Storm Water, LR : Local Runoff (and GE, MVWD), MW : MWD Imported Water, RW : Recycled Water - : No stormwater/local runoff, or basin not in use due to maintenance or testing. X : Turnouts not available - to be installed during future projects. N : No turnout planned for installation. * : Data are preliminary based on the data available at the time of this report preparation. ** : Management Zone Subtotals have deducted from them any Non-Replenishment Recharge, which is recharge originating from pumped groundwater and is not new water.					

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
2011/12	Jul '11	46	10.	190.6	310.2	510.8	14,908	88.	4,432	19340	23%
	Aug '11	47	11.	221.6	310.2	542.8	15,451	46.	4,478	19929	22%
	Sep '11	48	8.	160.	310.2	478.2	15,929	2.	4,480	20409	22%
	Oct '11	49	43.	0.	310.2	353.2	16,282	0.	4,480	20762	22%
	Nov '11	50	138.	0.	310.2	448.2	16,730	0.	4,480	21210	21%
	Dec '11	51	76.	0.	310.2	386.2	17,116	0.	4,480	21597	21%
	Jan '12	52	57.	0.	310.2	367.2	17,484	27.	4,507	21991	20%
	Feb '12	53	154.	0.	310.2	464.2	17,948	0.	4,507	22455	20%
	Mar '12	54	281.	0.	310.2	591.2	18,539	0.	4,507	23046	20%
	Apr '12	55	223.	0.	310.2	533.2	19,072	34.	4,541	23613	19%
	May '12	56	25.	0.	310.2	335.2	19,407	256.	4,797	24205	20%
	Jun '12	57	21.	0.	310.2	331.2	19,739	188.	4,985	24724	20%
2012/13	Jul '12	58	20.	0.	310.2	330.2	20,069	137.	5,122	25191	20%
	Aug '12	59	21.	0.	310.2	331.2	20,400	0.	5,122	25522	20%
	Sep '12	60	33.	0.	310.2	343.2	20,743	124.	5,246	25989	20%
	Oct '12	61	29.	0.	310.2	339.2	21,083	309.	5,555	26638	21%
	Nov '12	62	66.	0.	310.2	376.2	21,459	248.	5,803	27262	21%
	Dec '12	63	278.	0.	310.2	588.2	22,047	103.	5,906	27953	21%
	Jan '13	64	70.	0.	310.2	380.2	22,427	230.	6,136	28563	21%
	Feb '13	65	90.	0.	310.2	400.2	22,827	226.	6,362	29189	22%
	Mar '13	66	65.	0.	310.2	375.2	23,203	240.	6,602	29805	22%
	Apr '13	67	24.	0.	310.2	334.2	23,537	152.	6,754	30291	22%
	May '13	68	43.	0.	310.2	353.2	23,890	221.	6,975	30865	23%
	Jun '13	69	12.	0.	310.2	322.2	24,212	271.	7,246	31458	23%
2013/14	Jul '13	70	13.	0.	310.2	323.2	24,535	186.	7,432	31968	23%
	Aug '13	71	13.	0.	310.2	323.2	24,859	118.	7,550	32409	23%
	Sep '13	72	11.	0.	310.2	321.2	25,180	150.	7,700	32880	23%
	Oct '13	73	48.	0.	310.2	358.2	25,538	239.	7,939	33477	24%
	Nov '13	74	49.	0.	310.2	359.2	25,897	249.	8,188	34085	24%
	Dec '13	75	46.	0.	310.2	356.2	26,253	121.	8,309	34563	24%
	Jan '14	76	27.	0.	310.2	337.2	26,591	108.	8,417	35008	24%
	Feb '14	77	59.	0.	310.2	369.2	26,960	88.	8,505	35465	24%
	Mar '14	78	46.	5.4	310.2	361.6	27,321	26.	8,531	35853	24%
	Apr '14	79	79.	0.	310.2	389.2	27,711	21.	8,552	36263	24%
	May '14	80	26.	0.	310.2	336.2	28,047	65.	8,617	36664	24%
	Jun '14	81	24	0.	310.2	334.2	28,381	52.	8,669	37050	23%
2014/15	Jul '14	82	25.	0.	310.2	335.2	28,716	8.	8,677	37393	23%
	Aug '14	83	15.	0.	310.2	325.2	29,041	8.	8,685	37727	23%
	Sep '14	84	14.	0.	310.2	324.2	29,366	32.	8,717	38083	23%
	Oct '14	85	0.	0.	310.2	310.2	29,676	0.	8,717	38393	23%
	Nov '14	86	146.	0.	310.2	456.2	30,132	0.	8,717	38849	22%
	Dec '14	87	353.	0.	310.2	663.2	30,795	0.	8,717	39512	22%
	Jan '15	88	110.	0.	310.2	420.2	31,216	0.	8,717	39933	22%
	Feb '15	89	42.	0.	310.2	352.2	31,568	0.	8,717	40285	22%
	Mar '15	90	42.	0.	310.2	352.2	31,920	0.	8,717	40637	21%
	Apr '15	91	25.	0.	310.2	335.2	32,255	0.	8,717	40972	21%
	May '15	92	57.	0.	310.2	367.2	32,622	0.	8,717	41340	21%
	Jun '15	93	12.	0.	310.2	322.2	32,945	0.	8,717	41662	21%
2015/16	Jul '15	94	44.	0.	310.2	354.2	33,299	0.	8,717	42016	21%
	Aug '15	95	4.	0.	310.2	314.2	33,613	23.	8,740	42353	21%
	Sep '15	96	76.	0.	310.2	386.2	33,939	60.	8,800	42739	21%
	Oct '15	97	39.	0.	310.2	349.2	34,156	13.	8,813	42969	21%
	Nov '15	98	19.	0.	310.2	329.2	34,425	95.	8,908	43333	21%
	Dec '15	99	86.	0.	310.2	396.2	34,761	159.	9,067	43828	21%
	Jan '16	100	249.	0.	310.2	559.2	35,204	59.	9,126	44331	21%
	Feb '16	101	93.	0.	310.2	403.2	35,365	206.	9,332	44697	21%
	Mar '16	102	200.	0.	310.2	510.2	35,550	160.	9,492	45042	21%
	Apr '16	103	34.	0.	310.2	344.2	35,664	195.	9,687	45351	21%
	May '16	104	72.	0.	310.2	382.2	35,996	204.	9,891	45887	22%
	Jun '16	105	5.	0.	310.2	315.2	36,296	296.	10,187	46484	22%
2016/17	Jul '16	106	4.	0.	310.2	314.2	36,599	259.	10,446	47045	22%
	Aug '16	107	8.	0.	310.2	318.2	36,911	268.	10,714	47625	22%
	Sep '16	108	5.	0.	310.2	315.2	37,204	248.	10,962	48166	23%
	Oct '16	109	35.	0.	310.2	345.2	37,509	285.	11,247	48756	23%
	Nov '16	110	82.	0.	310.2	392.2	37,859	228.	11,475	49334	23%
	Dec '16	111	363.	0.	310.2	673.2	38,453	121.	11,596	50049	23%
	Jan '17	112	323.	0.	310.2	633.2	39,027	50.	11,646	50673	23%
	Feb '17	113	100.	0.	310.2	410.2	39,270	50.	11,696	50966	23%
	Mar '17	114	116.	0.	310.2	426.2	39,658	130.	11,826	51484	23%
	Apr '17	115	93.	0.	310.2	403.2	39,972	160.	11,986	51958	23%
	May '17	116	42.	0.	310.2	352.2	40,282	210.	12,196	52478	23%
	Jun '17	117	20.	0.	310.2	330.2	40,570	230.	12,426	52996	23%

H I S T O R I C A L



RWC Management Plan for 8th Street Basins

(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluted 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
2017/18	Jul '17	118	17.		310.2	327.2	40,881	230.	12,656	53538	24%
	Aug '17	119	16.		310.2	326.2	41,192	230.	12,886	54078	24%
	Sep '17	120	23.		310.2	333.2	41,508	230.	12,988	54496	24%
	Oct '17	121	51.		310.2	361.2	41,827	200.	13,079	54906	24%
	Nov '17	122	100.		310.2	410.2	42,156	150.	13,068	55224	24%
	Dec '17	123	227.		310.2	537.2	42,470	20.	13,088	55558	24%
	Jan '18	124	131.		310.2	441.2	42,576	120.	13,207	55783	24%
	Feb '18	125	206.		310.2	516.2	42,994	40.	13,090	56084	23%
	Mar '18	126	116.		310.2	426.2	43,399	130.	13,056	56455	23%
	Apr '18	127	93.		310.2	403.2	43,791	160.	13,126	56917	23%
	May '18	128	42.		310.2	352.2	44,054	210.	13,178	57232	23%
	Jun '18	129	20.		310.2	330.2	44,369	230.	13,322	57691	23%
2018/2019	Jul '18	130	17.		310.2	327.2	44,667	230.	13,328	57995	23%
	Aug '18	131	16.		310.2	326.2	44,978	230.	13,430	58408	23%
	Sep '18	132	23.		310.2	333.2	45,296	230.	13,660	58956	23%
	Oct '18	133	51.		310.2	361.2	45,642	200.	13,860	59502	23%
	Nov '18	134	100.		310.2	410.2	45,915	150.	14,010	59925	23%
	Dec '18	135	227.		310.2	537.2	46,100	20.	14,030	60130	23%
	Jan '19	136	131.		310.2	441.2	46,506	120.	14,150	60656	23%
	Feb '19	137	206.		310.2	516.2	46,564	40.	14,190	60754	23%
	Mar '19	138	116.		310.2	426.2	46,970	130.	14,320	61290	23%
	Apr '19	139	93.		310.2	403.2	47,358	160.	14,480	61838	23%
	May '19	140	42.		310.2	352.2	47,694	210.	14,690	62384	24%
	Jun '19	141	20.		310.2	330.2	48,024	230.	14,920	62944	24%
2019/20	Jul '19	142	17.		310.2	327.2	48,332	230.	15,150	63482	24%
	Aug '19	143	16.		310.2	326.2	48,626	230.	15,356	63982	24%
	Sep '19	144	23.		310.2	333.2	48,941	230.	15,586	64527	24%
	Oct '19	145	51.		310.2	361.2	48,918	200.	15,786	64704	24%
	Nov '19	146	100.		310.2	410.2	48,925	150.	15,803	64728	24%
	Dec '19	147	227.		310.2	537.2	48,849	20.	15,730	64579	24%
	Jan '20	148	131.		310.2	441.2	48,593	120.	15,748	64341	24%
	Feb '20	149	206.		310.2	516.2	48,322	40.	15,788	64110	25%
	Mar '20	150	116.		310.2	426.2	48,365	130.	15,804	64169	25%
	Apr '20	151	93.		310.2	403.2	48,252	160.	15,864	64116	25%
	May '20	152	42.		310.2	352.2	48,260	210.	15,875	64135	25%
	Jun '20	153	20.		310.2	330.2	48,247	230.	15,803	64050	25%
2020/21	Jul '20	154	17.		310.2	327.2	48,234	230.	15,815	64049	25%
	Aug '20	155	16.		310.2	326.2	48,222	230.	15,939	64161	25%
	Sep '20	156	23.		310.2	333.2	48,209	230.	15,992	64201	25%
	Oct '20	157	51.		310.2	361.2	48,171	200.	15,904	64075	25%
	Nov '20	158	100.		310.2	410.2	48,084	150.	15,891	63975	25%
	Dec '20	159	227.		310.2	537.2	47,812	20.	15,891	63703	25%
	Jan '21	160	131.		310.2	441.2	47,833	120.	15,844	63677	25%
	Feb '21	161	206.		310.2	516.2	47,763	40.	15,801	63564	25%
	Mar '21	162	116.		310.2	426.2	47,629	130.	15,908	63537	25%
	Apr '21	163	93.		310.2	403.2	47,698	160.	15,887	63585	25%
	May '21	164	42.		310.2	352.2	47,489	210.	15,854	63343	25%
	Jun '21	165	20.		310.2	330.2	47,163	230.	15,882	63045	25%
2021/2022	Jul '21	166	17.		310.2	327.2	46,979	230.	16,024	63003	25%
	Aug '21	167	16.		310.2	326.2	46,762	230.	16,208	62970	26%
	Sep '21	168	23.		310.2	333.2	46,617	230.	16,436	63053	26%
	Oct '21	169	51.		310.2	361.2	46,625	200.	16,636	63261	26%
	Nov '21	170	100.		310.2	410.2	46,587	150.	16,786	63373	26%
	Dec '21	171	227.		310.2	537.2	46,738	20.	16,806	63544	26%
	Jan '22	172	131.		310.2	441.2	46,812	120.	16,899	63711	27%
	Feb '22	173	206.		310.2	516.2	46,864	40.	16,939	63803	27%
	Mar '22	174	116.		310.2	426.2	46,699	130.	17,069	63768	27%
	Apr '22	175	93.		310.2	403.2	46,569	160.	17,195	63764	27%
	May '22	176	42.		310.2	352.2	46,586	210.	17,149	63735	27%
	Jun '22	177	20.		310.2	330.2	46,585	230.	17,191	63776	27%
2022/2023	Jul '22	178	17.		310.2	327.2	46,582	230.	17,284	63866	27%
	Aug '22	179	16.		310.2	326.2	46,577	230.	17,514	64091	27%
	Sep '22	180	23.		310.2	333.2	46,567	230.	17,620	64187	27%
	Oct '22	181	51.		310.2	361.2	46,589	200.	17,511	64100	27%
	Nov '22	182	100.		310.2	410.2	46,623	150.	17,413	64036	27%
	Dec '22	183	227.		310.2	537.2	46,572	20.	17,330	63902	27%
	Jan '23	184	131.		310.2	441.2	46,633	120.	17,220	63853	27%
	Feb '23	185	206.		310.2	516.2	46,749	40.	17,034	63783	27%
	Mar '23	186	116.		310.2	426.2	46,800	130.	16,924	63724	27%
	Apr '23	187	93.		310.2	403.2	46,869	160.	16,932	63801	27%
	May '23	188	42.		310.2	352.2	46,868	210.	16,921	63789	27%
	Jun '23	189	20.		310.2	330.2	46,876	230.	16,880	63756	26%

P L A N N E D



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
2023/2024	Jul '23	190	17.		310.2	327.2	46,880	230.	16,924	63804	27%
	Aug '23	191	16.		310.2	326.2	46,883	230.	17,036	63919	27%
	Sep '23	192	23.		310.2	333.2	46,895	230.	17,116	64011	27%
	Oct '23	193	51.		310.2	361.2	46,898	200.	17,077	63975	27%
	Nov '23	194	100.		310.2	410.2	46,949	150.	16,978	63927	27%
	Dec '23	195	227.		310.2	537.2	47,130	20.	16,877	64007	26%
	Jan '24	196	131.		310.2	441.2	47,234	120.	16,889	64123	26%
	Feb '24	197	206.		310.2	516.2	47,381	40.	16,841	64222	26%
	Mar '24	198	116.		310.2	426.2	47,446	130.	16,945	64391	26%
	Apr '24	199	93.		310.2	403.2	47,460	160.	17,084	64544	26%
	May '24	200	42.		310.2	352.2	47,476	210.	17,229	64705	27%
	Jun '24	201	20.		310.2	330.2	47,472	230.	17,407	64879	27%
2024/2025	Jul '24	202	17.		310.2	327.2	47,464	230.	17,629	65093	27%
	Aug '24	203	16.		310.2	326.2	47,465	230.	17,851	65316	27%
	Sep '24	204	23.		310.2	333.2	47,474	230.	18,049	65523	28%
	Oct '24	205	51.		310.2	361.2	47,525	200.	18,249	65774	28%
	Nov '24	206	100.		310.2	410.2	47,479	150.	18,399	65878	28%
	Dec '24	207	227.		310.2	537.2	47,353	20.	18,419	65772	28%
	Jan '25	208	131.		310.2	441.2	47,374	120.	18,539	65913	28%
	Feb '25	209	206.		310.2	516.2	47,538	40.	18,579	66117	28%
	Mar '25	210	116.		310.2	426.2	47,612	130.	18,709	66321	28%
	Apr '25	211	93.		310.2	403.2	47,680	160.	18,869	66549	28%
	May '25	212	42.		310.2	352.2	47,665	210.	19,079	66744	29%
	Jun '25	213	20.		310.2	330.2	47,673	230.	19,309	66982	29%
2025/26	Jul '25	214	17.		310.2	327.2	47,646	230.	19,539	67185	29%
	Aug '25	215	16.		310.2	326.2	47,658	230.	19,746	67404	29%
	Sep '25	216	23.		310.2	333.2	47,605	230.	19,916	67521	29%
	Oct '25	217	51.		310.2	361.2	47,617	200.	20,103	67720	30%
	Nov '25	218	100.		310.2	410.2	47,698	150.	20,158	67856	30%
	Dec '25	219	227.		310.2	537.2	47,839	20.	20,019	67858	30%
	Jan '26	220	131.		310.2	441.2	47,721	120.	20,080	67801	30%
	Feb '26	221	206.		310.2	516.2	47,834	40.	19,914	67748	29%
	Mar '26	222	116.		310.2	426.2	47,750	130.	19,884	67634	29%
	Apr '26	223	93.		310.2	403.2	47,809	160.	19,849	67658	29%
	May '26	224	42.		310.2	352.2	47,779	210.	19,855	67634	29%
	Jun '26	225	20.		310.2	330.2	47,794	230.	19,789	67583	29%
2026/27	Jul '26	226	17.		310.2	327.2	47,807	230.	19,760	67567	29%
	Aug '26	227	16.		310.2	326.2	47,815	230.	19,722	67537	29%
	Sep '26	228	23.		310.2	333.2	47,833	230.	19,704	67537	29%
	Oct '26	229	51.		310.2	361.2	47,849	200.	19,619	67468	29%
	Nov '26	230	100.		310.2	410.2	47,867	150.	19,541	67408	29%
	Dec '26	231	227.		310.2	537.2	47,731	20.	19,440	67171	29%
	Jan '27	232	131.		310.2	441.2	47,539	120.	19,510	67049	29%
	Feb '27	233	206.		310.2	516.2	47,645	40.	19,500	67145	29%
	Mar '27	234	116.		310.2	426.2	47,645	130.	19,500	67145	29%
	Apr '27	235	93.		310.2	403.2	47,645	160.	19,500	67145	29%
	May '27	236	42.		310.2	352.2	47,645	210.	19,500	67145	29%
	Jun '27	237	20.		310.2	330.2	47,645	230.	19,500	67145	29%

P L A N N E D

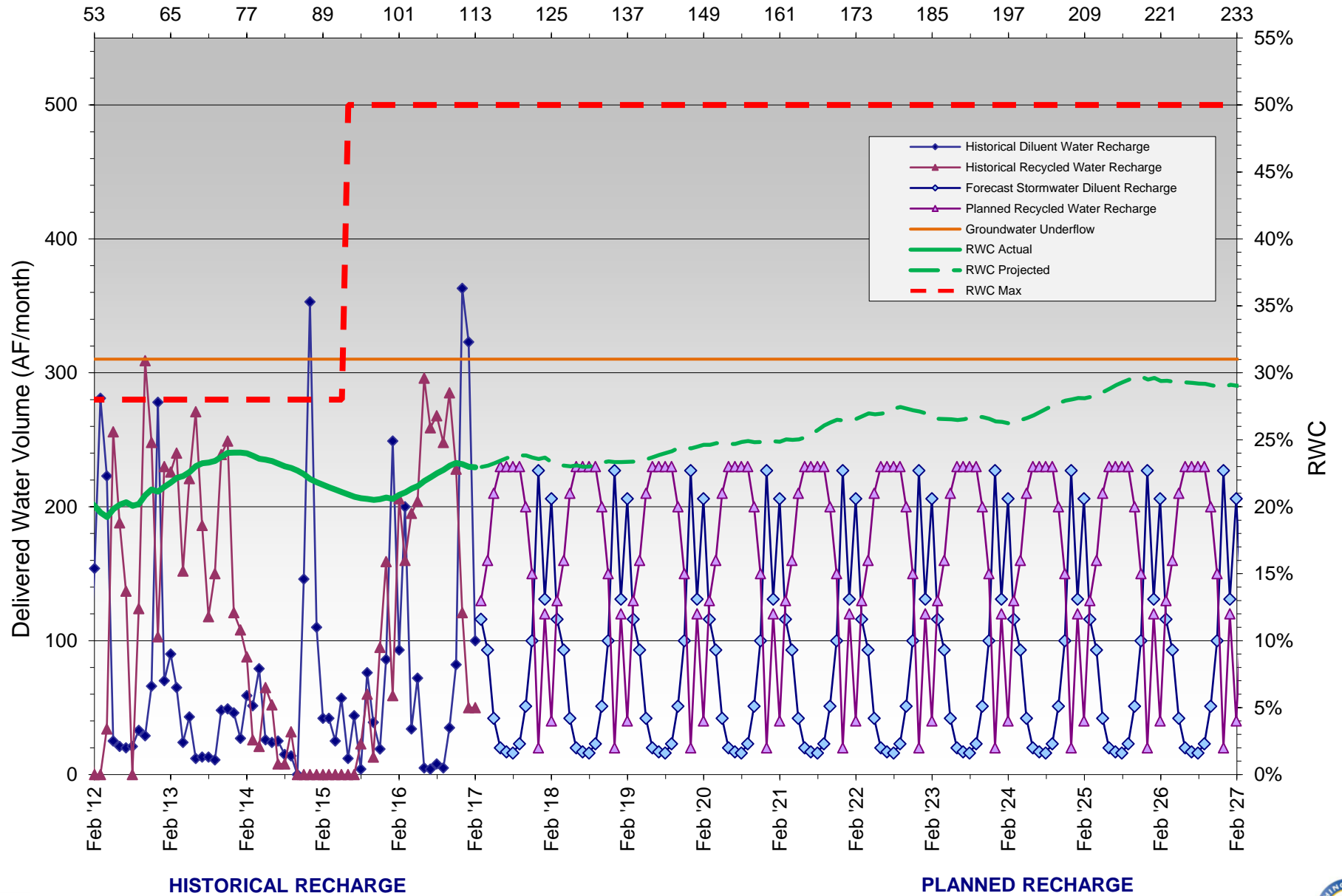
Notes:

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 - 8th Street Basins

Months Since Initial Recycled Water Delivery



HISTORICAL RECHARGE

PLANNED RECHARGE



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
2011/12	Jul '11	72	31.	0	151	182.3	7,102.7	0	2,604.1	9707	27%
	Aug '11	73	0.	0	151	151.3	7,254.	135	2,739.1	9993	27%
	Sep '11	74	0.	0	151	151.3	7,405.3	395	3,134.1	10539	30%
	Oct '11	75	20.	0	151	171.3	7,576.7	404	3,538.1	11115	32%
	Nov '11	76	30.	0	151	181.3	7,718.7	161	3,699.1	11418	32%
	Dec '11	77	18.	0	151	169.3	7,871.3	245	3,944.1	11815	33%
	Jan '12	78	48.	0	151	199.3	8,020.5	161.	4,105.1	12126	34%
	Feb '12	79	21.	0	151	172.3	8,171.9	167.	4,272.1	12444	34%
	Mar '12	80	44.	0	151	195.3	8,336.2	72	4,344.1	12680	34%
	Apr '12	81	35.	0	151	186.3	8,509.4	51	4,395.1	12904	34%
	May '12	82	0.	0	151	151.3	8,659.9	45	4,440.1	13100	34%
	Jun '12	83	0.	0	151	151.3	8,811.2	79	4,519.1	13330	34%
2012/13	Jul '12	84	0.	0	151	151.3	8,963	41	4,560	13,523	34%
	Aug '12	85	0.	0	151	151.3	9,114	2	4,562	13,676	33%
	Sep '12	86	0.	0	151	151.3	9,265	188	4,750	14,015	34%
	Oct '12	87	11.	0	151	162.3	9,427	103	4,853	14,281	34%
	Nov '12	88	5.	0	151	156.3	9,545	120	4,973	14,518	34%
	Dec '12	89	49.	0	151	200.3	9,686	15	4,988	14,674	34%
	Jan '13	90	18.	0	151	169.3	9,855	28	5,016	14,871	34%
	Feb '13	91	20.	0	151	171.3	9,946	2	5,018	14,964	34%
	Mar '13	92	8.	0	151	159.3	10,066	42	5,060	15,126	33%
	Apr '13	93	0.	0	151	151.3	10,131	55	5,115	15,246	34%
	May '13	94	3.	0	151	154.3	10,223	39	5,154	15,377	34%
	Jun '13	95	0.	0	151	151.3	10,375	35	5,189	15,564	33%
2013/14	Jul '13	96	0.	0	151	151.3	10,526	15	5,204	15,730	33%
	Aug '13	97	0.	0	151	151.3	10,677	12	5,216	15,893	33%
	Sep '13	98	0.	0	151	151.3	10,829	0	5,216	16,045	33%
	Oct '13	99	0.	0	151	151.3	10,980	385	5,601	16,581	34%
	Nov '13	100	22.	0	151	173.3	11,119	102	5,703	16,822	34%
	Dec '13	101	6.	0	151	157.3	11,239	0	5,703	16,942	34%
	Jan '14	102	9.	8	151	168.6	11,403	0	5,703	17,106	33%
	Feb '14	103	39.	16	151	206.3	11,526	0	5,703	17,229	33%
	Mar '14	104	9.	0	151	160.3	11,658	85	5,788	17,446	33%
	Apr '14	105	2.	0	151	153.3	11,811	88	5,876	17,687	33%
	May '14	106	0.	0	151	151.3	11,963	194	6,070	18,033	34%
	Jun '14	107	0.	0	151	151.3	12,114	190	6,260	18,374	34%
2014/15	Jul '14	108	0.	0	151	151.3	12,265.2	0	6,260.1	18525	34%
	Aug '14	109	0.	0	151	151.3	12,416.5	82.	6,342.1	18759	34%
	Sep '14	110	0.	0	151	151.3	12,567.8	72.	6,414.1	18982	34%
	Oct '14	111	0.	0	151	151.3	12,656.3	206.	6,620.1	19276	34%
	Nov '14	112	7.	0	151	158.3	12,797.6	173.	6,793.1	19591	35%
	Dec '14	113	145.	0	151	296.3	13,068.6	67.	6,860.1	19929	34%
	Jan '15	114	24.	0	151	175.3	13,150.3	144.	7,004.1	20154	35%
	Feb '15	115	16.	0	151	167.3	13,206.8	47.	7,051.1	20258	35%
	Mar '15	116	2.	0	151	153.3	13,335.2	80.	7,131.1	20466	35%
	Apr '15	117	3.	0	151	154.3	13,470.2	90.	7,221.1	20691	35%
	May '15	118	0.	0	151	151.3	13,606.9	161.	7,382.1	20989	35%
	Jun '15	119	0.	0	151	151.3	13,758.2	26.	7,408.1	21166	35%
2015/16	Jul '15	120	0.	0	151	151.3	13,717	54	7,442	21,159	35%
	Aug '15	121	0.	0	151	151.3	13,869	156	7,344	21,213	35%
	Sep '15	122	40.	0	151	191.3	14,060	376	7,592	21,651	35%
	Oct '15	123	105.	0	151	256.3	14,287	349	7,915	22,203	36%
	Nov '15	124	30.	0	151	181.3	14,469	262	8,169	22,638	36%
	Dec '15	125	59.	0	151	210.3	14,660	283	8,442	23,102	37%
	Jan '16	126	71.	0	151	222.3	14,876	75	8,467	23,343	36%
	Feb '16	127	7.	0	151	158.3	14,999	110	8,522	23,521	36%
	Mar '16	128	38.	0	151	189.3	15,133	74	8,596	23,729	36%
	Apr '16	129	0.	0	151	151.3	15,249	97	8,693	23,941	36%
	May '16	130	15.	0	151	166.3	15,358	113	8,806	24,164	36%
	Jun '16	131	0.	0	151	151.3	15,509	157	8,916	24,425	37%
2016/2017	Jul '16	132	0.	0	151	151.3	15,661	183	9,034	24,695	37%
	Aug '16	133	0.	0	151	151.3	15,812	49	8,998	24,810	36%
	Sep '16	134	0.	0	151	151.3	15,963	97	8,717	24,681	35%
	Oct '16	135	6.	0	151	157.3	16,046	115	8,783	24,829	35%
	Nov '16	136	21.	0	151	172.3	15,984	55	8,831	24,815	36%
	Dec '16	137	71.	0	151	222.3	16,005	1	8,782	24,787	35%
	Jan '17	138	50.	0	151	201.3	15,875	100	8,882	24,757	36%
	Feb '17	139	18.	0	151	169.3	15,971	100	8,982	24,953	36%
	Mar '17	140	17.	0	151	168.3	16,086	110	9,092	25,178	36%
	Apr '17	141	16.	0	151	167.3	16,224	110	9,198	25,422	36%
	May '17	142	10.	0	151	161.3	16,349	120	9,312	25,661	36%
	Jun '17	143	1.	0	151	152.3	16,501	120	9,432	25,933	36%

H I S T O R I C A L



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
2017/2018	Jul '17	144	6.	151	157.3	16,658	120	9,552	26,210	36%	P L A N E D
	Aug '17	145	4.	151	155.3	16,813	120	9,672	26,485	37%	
	Sep '17	146	7.	151	158.3	16,969	120	9,792	26,761	37%	
	Oct '17	147	21.	151	172.3	17,139	100	9,892	27,031	37%	
	Nov '17	148	18.	151	169.3	17,273	110	10,002	27,275	37%	
	Dec '17	149	51.	151	202.3	17,454	70	10,072	27,526	37%	
	Jan '18	150	41.	151	192.3	17,516	80	10,152	27,668	37%	
	Feb '18	151	50.	151	201.3	17,642	80	10,232	27,874	37%	
	Mar '18	152	17.	151	168.3	17,811	110	10,342	28,153	37%	
	Apr '18	153	16.	151	167.3	17,978	110	10,405	28,383	37%	
	May '18	154	10.	151	161.3	18,136	120	10,487	28,623	37%	
	Jun '18	155	1.	151	152.3	18,280	120	10,535	28,815	37%	
2018/2019	Jul '18	156	6.	151	157.3	18,407	120	10,655	29,062	37%	
	Aug '18	157	4.	151	155.3	18,517	120	10,775	29,292	37%	
	Sep '18	158	7.	151	158.3	18,641	120	10,895	29,536	37%	
	Oct '18	159	21.	151	172.3	18,778	100	10,995	29,773	37%	
	Nov '18	160	18.	151	169.3	18,897	110	11,105	30,002	37%	
	Dec '18	161	51.	151	202.3	19,012	70	11,175	30,187	37%	
	Jan '19	162	41.	151	192.3	19,200	80	11,215	30,415	37%	
	Feb '19	163	50.	151	201.3	19,306	80	11,295	30,601	37%	
	Mar '19	164	17.	151	168.3	19,474	110	11,405	30,879	37%	
	Apr '19	165	16.	151	167.3	19,642	110	11,515	31,157	37%	
	May '19	166	10.	151	161.3	19,803	120	11,635	31,438	37%	
	Jun '19	167	1.	151	152.3	19,955	120	11,755	31,710	37%	
2019/2020	Jul '19	168	6.	151	157.3	20,112	120	11,875	31,987	37%	
	Aug '19	169	4.	151	155.3	20,268	120	11,995	32,263	37%	
	Sep '19	170	7.	151	158.3	20,426	120	12,115	32,541	37%	
	Oct '19	171	21.	151	172.3	20,432	100	12,086	32,518	37%	
	Nov '19	172	18.	151	169.3	20,450	110	12,015	32,465	37%	
	Dec '19	173	51.	151	202.3	20,426	70	12,018	32,444	37%	
	Jan '20	174	41.	151	192.3	20,367	80	12,023	32,390	37%	
	Feb '20	175	50.	151	201.3	20,274	80	12,103	32,377	37%	
	Mar '20	176	17.	151	168.3	20,274	110	12,213	32,487	38%	
	Apr '20	177	16.	151	167.3	20,224	110	12,183	32,407	38%	
	May '20	178	10.	151	161.3	20,234	120	12,126	32,360	37%	
	Jun '20	179	1.	151	152.3	20,235	120	12,117	32,352	37%	
2020/2021	Jul '20	180	6.	151	157.3	20,241	120	12,160	32,401	38%	
	Aug '20	181	4.	151	155.3	20,245	120	12,226	32,471	38%	
	Sep '20	182	7.	151	158.3	20,252	120	12,287	32,539	38%	
	Oct '20	183	21.	151	172.3	20,268	100	12,339	32,607	38%	
	Nov '20	184	18.	151	169.3	20,270	110	12,420	32,690	38%	
	Dec '20	185	51.	151	202.3	20,270	70	12,490	32,760	38%	
	Jan '21	186	41.	151	192.3	20,301	80	12,570	32,871	38%	
	Feb '21	187	50.	151	201.3	20,325	80	12,650	32,975	38%	
	Mar '21	188	17.	151	168.3	20,342	110	12,760	33,102	39%	
	Apr '21	189	16.	151	167.3	20,358	110	12,870	33,228	39%	
	May '21	190	10.	151	161.3	20,368	120	12,990	33,358	39%	
	Jun '21	191	1.	151	152.3	20,369	120	13,110	33,479	39%	
2021/2022	Jul '21	192	6.	151	157.3	20,344	120	13,230	33,574	39%	
	Aug '21	193	4.	151	155.3	20,348	120	13,215	33,563	39%	
	Sep '21	194	7.	151	158.3	20,355	120	12,940	33,295	39%	
	Oct '21	195	21.	151	172.3	20,356	100	12,636	32,992	38%	
	Nov '21	196	18.	151	169.3	20,344	110	12,585	32,929	38%	
	Dec '21	197	51.	151	202.3	20,377	70	12,410	32,787	38%	
	Jan '22	198	41.	151	192.3	20,370	80	12,329	32,699	38%	
	Feb '22	199	50.	151	201.3	20,399	80	12,242	32,641	38%	
	Mar '22	200	17.	151	168.3	20,372	110	12,280	32,652	38%	
	Apr '22	201	16.	151	167.3	20,353	110	12,339	32,692	38%	
	May '22	202	10.	151	161.3	20,363	120	12,414	32,777	38%	
	Jun '22	203	1.	151	152.3	20,364	120	12,455	32,819	38%	
2022/2023	Jul '22	204	6.	151	157.3	20,370	120	12,534	32,904	38%	
	Aug '22	205	4.	151	155.3	20,374	120	12,652	33,026	38%	
	Sep '22	206	7.	151	158.3	20,381	120	12,584	32,965	38%	
	Oct '22	207	21.	151	172.3	20,391	100	12,581	32,972	38%	
	Nov '22	208	18.	151	169.3	20,404	110	12,571	32,975	38%	
	Dec '22	209	51.	151	202.3	20,406	70	12,626	33,032	38%	
	Jan '23	210	41.	151	192.3	20,429	80	12,678	33,107	38%	
	Feb '23	211	50.	151	201.3	20,459	80	12,756	33,215	38%	
	Mar '23	212	17.	151	168.3	20,468	110	12,824	33,292	39%	
	Apr '23	213	16.	151	167.3	20,484	110	12,879	33,363	39%	
	May '23	214	10.	151	161.3	20,491	120	12,960	33,451	39%	
	Jun '23	215	1.	151	152.3	20,492	120	13,045	33,537	39%	



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
2023/2024	Jul '23	216	6.	151	157.3	20,498	120	13,150	33,648	39%	P L A N E D
	Aug '23	217	4.	151	155.3	20,502	120	13,258	33,760	39%	
	Sep '23	218	7.	151	158.3	20,509	120	13,378	33,887	39%	
	Oct '23	219	21.	151	172.3	20,530	100	13,093	33,623	39%	
	Nov '23	220	18.	151	169.3	20,526	110	13,101	33,627	39%	
	Dec '23	221	51.	151	202.3	20,571	70	13,171	33,742	39%	
	Jan '24	222	41.	151	192.3	20,595	80	13,251	33,846	39%	
	Feb '24	223	50.	151	201.3	20,590	80	13,331	33,921	39%	
	Mar '24	224	17.	151	168.3	20,598	110	13,356	33,954	39%	
	Apr '24	225	16.	151	167.3	20,612	110	13,378	33,990	39%	
	May '24	226	10.	151	161.3	20,622	120	13,304	33,926	39%	
	Jun '24	227	1.	151	152.3	20,623	120	13,234	33,857	39%	
2024/2025	Jul '24	228	6.	151	157.3	20,629	120	13,354	33,983	39%	
	Aug '24	229	4.	151	155.3	20,633	120	13,392	34,025	39%	
	Sep '24	230	7.	151	158.3	20,640	120	13,440	34,080	39%	
	Oct '24	231	21.	151	172.3	20,661	100	13,334	33,995	39%	
	Nov '24	232	18.	151	169.3	20,672	110	13,271	33,943	39%	
	Dec '24	233	51.	151	202.3	20,578	70	13,274	33,852	39%	
	Jan '25	234	41.	151	192.3	20,595	80	13,210	33,805	39%	
	Feb '25	235	50.	151	201.3	20,629	80	13,243	33,872	39%	
	Mar '25	236	17.	151	168.3	20,644	110	13,273	33,917	39%	
	Apr '25	237	16.	151	167.3	20,657	110	13,293	33,950	39%	
	May '25	238	10.	151	161.3	20,667	120	13,252	33,919	39%	
	Jun '25	239	1.	151	152.3	20,668	120	13,346	34,014	39%	
2025/2026	Jul '25	240	6.	151	157.3	20,674	120	13,412	34,086	39%	
	Aug '25	241	4.	151	155.3	20,678	120	13,376	34,054	39%	
	Sep '25	242	7.	151	158.3	20,645	120	13,120	33,765	39%	
	Oct '25	243	21.	151	172.3	20,561	100	12,871	33,432	38%	
	Nov '25	244	18.	151	169.3	20,549	110	12,719	33,268	38%	
	Dec '25	245	51.	151	202.3	20,541	70	12,506	33,047	38%	
	Jan '26	246	41.	151	192.3	20,511	80	12,511	33,022	38%	
	Feb '26	247	50.	151	201.3	20,554	80	12,481	33,035	38%	
	Mar '26	248	17.	151	168.3	20,533	110	12,517	33,050	38%	
	Apr '26	249	16.	151	167.3	20,549	110	12,530	33,079	38%	
	May '26	250	10.	151	161.3	20,544	120	12,537	33,081	38%	
	Jun '26	251	1.	151	152.3	20,545	120	12,500	33,045	38%	
2026/2027	Jul '26	252	6.	151	157.3	20,551	120	12,437	32,988	38%	
	Aug '26	253	4.	151	155.3	20,555	120	12,508	33,063	38%	
	Sep '26	254	7.	151	158.3	20,562	120	12,531	33,093	38%	
	Oct '26	255	21.	151	172.3	20,577	100	12,516	33,093	38%	
	Nov '26	256	18.	151	169.3	20,574	110	12,571	33,145	38%	
	Dec '26	257	51.	151	202.3	20,554	70	12,640	33,194	38%	
	Jan '27	258	41.	151	192.3	20,545	80	12,620	33,165	38%	
	Feb '27	259	50.	151	201.3	20,577	80	12,600	33,177	38%	
	Mar '27	260	17.	151	168.3	20,577	110	12,600	33,177	38%	
	Apr '27	261	16.	151	167.3	20,577	110	12,600	33,177	38%	
	May '27	262	10.	151	161.3	20,577	120	12,600	33,177	38%	
	Jun '27	263	1.	151	152.3	20,577	120	12,600	33,177	38%	

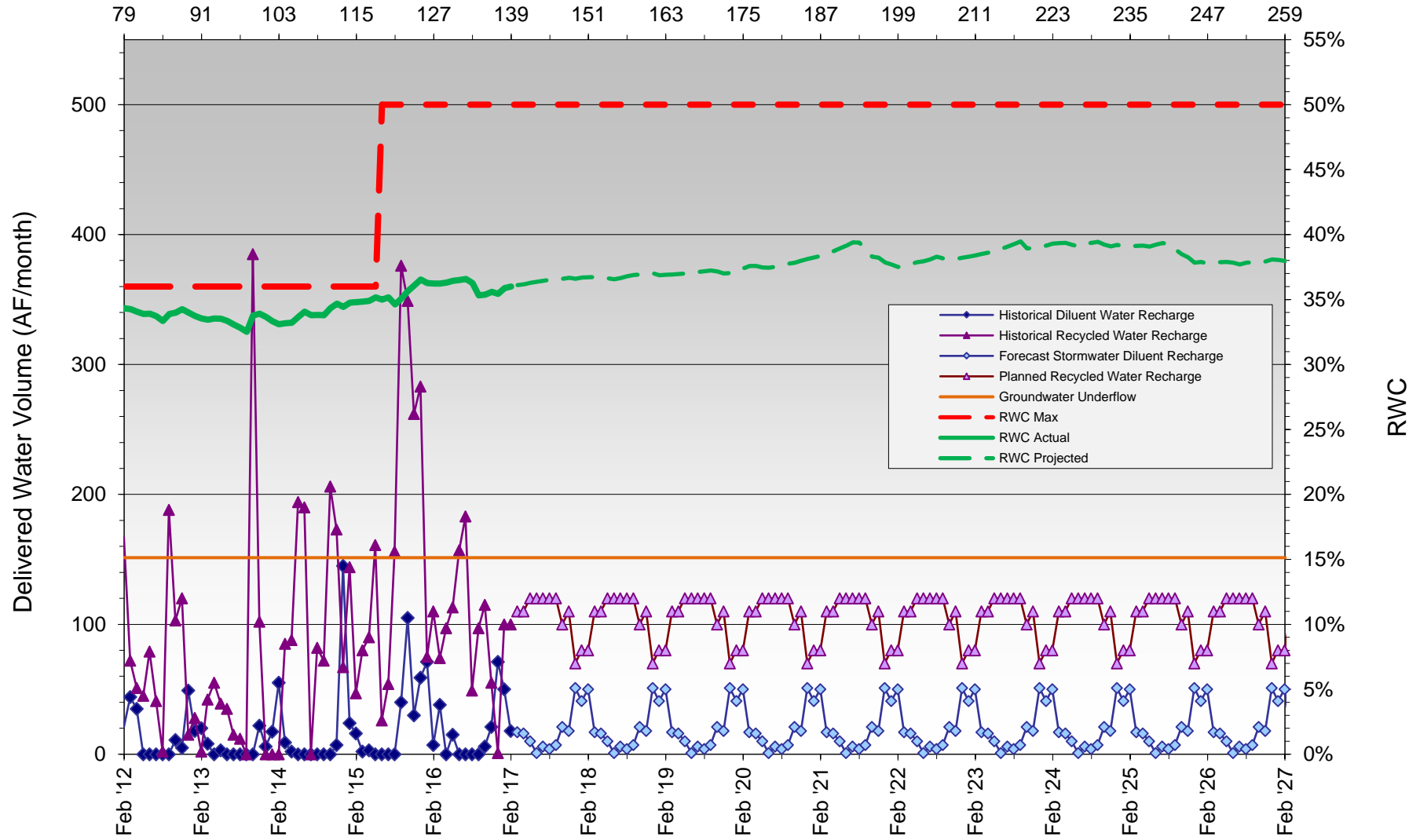
Notes:

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



HISTORICAL RECHARGE

PLANNED RECHARGE



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
2011/12	Jul '11	35	2.	235.6	509.2	746.8	19388	0.	4673	24061	19%
	Aug '11	36	2.	183.4	509.2	694.6	20082	0.	4673	24755	19%
	Sep '11	37	12.	141.5	509.2	662.7	20745	0.	4673	25418	18%
	Oct '11	38	18.	0.	509.2	527.2	21272	80.	4753	26025	18%
	Nov '11	39	50.	0.	509.2	559.2	21832	36.	4789	26621	18%
	Dec '11	40	16.	0.	509.2	525.2	22357	98.	4887	27244	18%
	Jan '12	41	45.	0.	509.2	554.2	22911	142.	5029	27940	18%
	Feb '12	42	50.	0.	509.2	559.2	23470	77.	5106	28576	18%
	Mar '12	43	103.	0.	509.2	612.2	24082	85.	5191	29273	18%
	Apr '12	44	64.	0.	509.2	573.2	24656	32.	5223	29879	17%
	May '12	45	1.	0.	509.2	510.2	25166	125.	5348	30514	18%
	Jun '12	46	0.	0.	509.2	509.2	25675	161.	5509	31184	18%
2012/13	Jul '12	47	1.	0.	509.2	510.2	26185	33.	5542	31727	17%
	Aug '12	48	2.	0.	509.2	511.2	26697	39.	5581	32278	17%
	Sep '12	49	2.	0.	509.2	511.2	27208	51.	5632	32840	17%
	Oct '12	50	0.	0.	509.2	509.2	27717	0.	5632	33349	17%
	Nov '12	51	0.	0.	509.2	509.2	28226	0.	5632	33858	17%
	Dec '12	52	0.	0.	509.2	509.2	28735	0.	5632	34367	16%
	Jan '13	53	35.	0.	509.2	544.2	29280	342.	5974	35254	17%
	Feb '13	54	26.	0.	509.2	544.2	29280	299.	6273	35553	18%
	Mar '13	55	32.	0.	509.2	541.2	29821	238.	6511	36332	18%
	Apr '13	56	0.	0.	509.2	509.2	30330	231.	6742	37072	18%
	May '13	57	17.	0.	509.2	526.2	30856	152.	6894	37750	18%
	Jun '13	58	1.	0.	509.2	510.2	31367	120.	7014	38381	18%
2013/14	Jul '13	59	1.	0.	509.2	510.2	31877	169.	7183	39060	18%
	Aug '13	60	1.	0.	509.2	510.2	32387	197.	7380	39767	19%
	Sep '13	61	28.	0.	509.2	537.2	32924	182.	7562	40486	19%
	Oct '13	62	23.	0.	509.2	532.2	33456	108.	7670	41126	19%
	Nov '13	63	4.	0.	509.2	513.2	33970	94.	7764	41734	19%
	Dec '13	64	8.	0.	509.2	517.2	34487	104.	7868	42355	19%
	Jan '14	65	3.	0.	509.2	512.2	34999	109.	7977	42976	19%
	Feb '14	66	47.	0.	509.2	556.2	35555	102.	8079	43634	19%
	Mar '14	67	12.	0.	509.2	521.2	36077	130.	8209	44286	19%
	Apr '14	68	14.	0.	509.2	523.2	36600	65.	8274	44874	18%
	May '14	69	0.	0.	509.2	509.2	37109	0.	8274	45383	18%
	Jun '14	70	19.	0.	509.2	528.2	37637	48.	8322	45959	18%
2014/15	Jul '14	71	7.	0.	509.2	516.2	38153	72.	8394	46547	18%
	Aug '14	72	1.	0.	509.2	510.2	38664	141.	8535	47199	18%
	Sep '14	73	1.	0.	509.2	510.2	39174	157.	8692	47866	18%
	Oct '14	74	6.	0.	509.2	515.2	39689	56.	8748	48437	18%
	Nov '14	75	28.	0.	509.2	537.2	40226	37.	8785	49011	18%
	Dec '14	76	95.	0.	509.2	604.2	40831	0.	8785	49616	18%
	Jan '15	77	19.	0.	509.2	528.2	41359	10.	8795	50154	18%
	Feb '15	78	27.	0.	509.2	536.2	41895	92.	8887	50782	18%
	Mar '15	79	13.	0.	509.2	522.2	42417	69.	8956	51373	17%
	Apr '15	80	10.	0.	509.2	519.2	42937	101.	9057	51994	17%
	May '15	81	21.	0.	509.2	530.2	43467	120.	9177	52644	17%
	Jun '15	82	0.	0.	509.2	509.2	43976	156.	9333	53309	18%
2015/16	Jul '15	83	0.	0.	509.2	509.2	44452	63.	9396	53848	17%
	Aug '15	84	0.	0.	509.2	509.2	44786	0.	9396	54182	17%
	Sep '15	85	1.	0.	509.2	510.2	44612	0.	9396	54008	17%
	Oct '15	86	0.	0.	509.2	509.2	44994	0.	9396	54390	17%
	Nov '15	87	1.	0.	509.2	510.2	45115	0.	9396	54511	17%
	Dec '15	88	0.	0.	509.2	509.2	45261	101.	9497	54758	17%
	Jan '16	89	54.	0.	509.2	563.2	45567	254.	9751	55318	18%
	Feb '16	90	91.	0.	509.2	600.2	45775	116.	9867	55642	18%
	Mar '16	91	91.	0.	509.2	600.2	46160	211.	10078	56238	18%
	Apr '16	92	13.	0.	509.2	522.2	46421	192.	10270	56691	18%
	May '16	93	1.	0.	509.2	510.2	46631	278.	10548	57179	18%
	Jun '16	94	0.	0.	509.2	509.2	46769	0.	10548	57317	18%
2016/17	Jul '16	95	0.	0.	509.2	509.2	47072	0.	10548	57620	18%
	Aug '16	96	0.	0.	509.2	509.2	47430	0.	10548	57978	18%
	Sep '16	97	31.	0.	509.2	540.2	47628	145.	10693	58321	18%
	Oct '16	98	17.	170.	509.2	696.2	48017	19.	10712	58729	18%
	Nov '16	99	39.	0.	509.2	548.2	48278	116.	10828	59106	18%
	Dec '16	100	196.	0.	509.2	705.2	48721	13.	10841	59562	18%
	Jan '17	101	254.	0.	509.2	763.2	49372	0.	10841	60213	18%
	Feb '17	102	142.	0.	509.2	651.2	49894	0.	10841	60735	18%
	Mar '17	103	58.	0.	509.2	567.2	50458	90.	10931	61389	18%
	Apr '17	104	38.	0.	509.2	547.2	50903	110.	11041	61944	18%
	May '17	105	13.	0.	509.2	522.2	51421	140.	11181	62602	18%
	Jun '17	106	3.	0.	509.2	512.2	51931	150.	11331	63262	18%

H I S T O R I C A L



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
2017/18	Jul '17	107	4.		509.2	513.2	52444	150.	11481	63925	18%
	Aug '17	108	5.		509.2	514.2	52959	150.	11631	64590	18%
	Sep '17	109	8.		509.2	517.2	53451	140.	11771	65222	18%
	Oct '17	110	13.		509.2	522.2	53938	140.	11911	65849	18%
	Nov '17	111	24.		509.2	533.2	54447	130.	12041	66488	18%
	Dec '17	112	72.		509.2	581.2	54987	80.	12121	67108	18%
	Jan '18	113	78.		509.2	587.2	55292	70.	12191	67483	18%
	Feb '18	114	100.		509.2	609.2	55851	50.	12241	68092	18%
	Mar '18	115	58.		509.2	567.2	56409	90.	12331	68740	18%
	Apr '18	116	38.		509.2	547.2	56952	110.	12441	69393	18%
	May '18	117	13.		509.2	522.2	57432	140.	12581	70013	18%
	Jun '18	118	3.		509.2	512.2	57941	150.	12731	70672	18%
2018/19	Jul '18	119	4.		509.2	513.2	58451	150.	12881	71332	18%
	Aug '18	120	5.		509.2	514.2	58949	150.	12914	71863	18%
	Sep '18	121	8.		509.2	517.2	59467	140.	12968	72435	18%
	Oct '18	122	13.		509.2	522.2	59989	140.	12942	72931	18%
	Nov '18	123	24.		509.2	533.2	60499	130.	12969	73468	18%
	Dec '18	124	72.		509.2	581.2	60918	80.	12961	73879	18%
	Jan '19	125	78.		509.2	587.2	61480	70.	12754	74234	17%
	Feb '19	126	100.		509.2	609.2	61882	50.	12784	74666	17%
	Mar '19	127	58.		509.2	567.2	62419	90.	12715	75134	17%
	Apr '19	128	38.		509.2	547.2	62965	110.	12529	75494	17%
	May '19	129	13.		509.2	522.2	63470	140.	12554	76024	17%
	Jun '19	130	3.		509.2	512.2	63983	150.	12526	76509	16%
2019/20	Jul '19	131	4.		509.2	513.2	64495	150.	12670	77165	16%
	Aug '19	132	5.		509.2	514.2	65009	150.	12812	77821	16%
	Sep '19	133	8.		509.2	517.2	65526	140.	12952	78478	17%
	Oct '19	134	13.		509.2	522.2	65526	140.	12908	78434	16%
	Nov '19	135	24.		509.2	533.2	65546	130.	12792	78338	16%
	Dec '19	136	72.		509.2	581.2	65489	80.	12728	78217	16%
	Jan '20	137	78.		509.2	587.2	65316	70.	12724	78040	16%
	Feb '20	138	100.		509.2	609.2	65201	50.	12720	77921	16%
	Mar '20	139	58.		509.2	567.2	65232	90.	12630	77862	16%
	Apr '20	140	38.		509.2	547.2	65247	110.	12505	77752	16%
	May '20	141	13.		509.2	522.2	65258	140.	12289	77547	16%
	Jun '20	142	3.		509.2	512.2	65260	150.	12231	77491	16%
2020/21	Jul '20	143	4.		509.2	513.2	65263	150.	12234	77497	16%
	Aug '20	144	5.		509.2	514.2	65250	150.	12109	77359	16%
	Sep '20	145	8.		509.2	517.2	65257	140.	12108	77365	16%
	Oct '20	146	13.		509.2	522.2	65246	140.	12118	77364	16%
	Nov '20	147	24.		509.2	533.2	65226	130.	12161	77387	16%
	Dec '20	148	72.		509.2	581.2	65016	80.	12207	77223	16%
	Jan '21	149	78.		509.2	587.2	64982	70.	12277	77259	16%
	Feb '21	150	100.		509.2	609.2	64918	50.	12327	77245	16%
	Mar '21	151	58.		509.2	567.2	64834	90.	12417	77251	16%
	Apr '21	152	38.		509.2	547.2	64871	110.	12353	77224	16%
	May '21	153	13.		509.2	522.2	64874	140.	12331	77205	16%
	Jun '21	154	3.		509.2	512.2	64876	150.	12258	77134	16%
2021/22	Jul '21	155	4.		509.2	513.2	64643	150.	12408	77051	16%
	Aug '21	156	5.		509.2	514.2	64462	150.	12558	77020	16%
	Sep '21	157	8.		509.2	517.2	64317	140.	12698	77015	16%
	Oct '21	158	13.		509.2	522.2	64312	140.	12758	77070	17%
	Nov '21	159	24.		509.2	533.2	64286	130.	12852	77138	17%
	Dec '21	160	72.		509.2	581.2	64342	80.	12834	77176	17%
	Jan '22	161	78.		509.2	587.2	64375	70.	12762	77137	17%
	Feb '22	162	100.		509.2	609.2	64425	50.	12735	77160	17%
	Mar '22	163	58.		509.2	567.2	64380	90.	12740	77120	17%
	Apr '22	164	38.		509.2	547.2	64354	110.	12818	77172	17%
	May '22	165	13.		509.2	522.2	64366	140.	12833	77199	17%
	Jun '22	166	3.		509.2	512.2	64369	150.	12822	77191	17%
2022/23	Jul '22	167	4.		509.2	513.2	64372	150.	12939	77311	17%
	Aug '22	168	5.		509.2	514.2	64375	150.	13050	77425	17%
	Sep '22	169	8.		509.2	517.2	64381	140.	13139	77520	17%
	Oct '22	170	13.		509.2	522.2	64394	140.	13279	77673	17%
	Nov '22	171	24.		509.2	533.2	64418	130.	13409	77827	17%
	Dec '22	172	72.		509.2	581.2	64490	80.	13489	77979	17%
	Jan '23	173	78.		509.2	587.2	64533	70.	13217	77750	17%
	Feb '23	174	100.		509.2	609.2	65142	50.	12968	78110	17%
	Mar '23	175	58.		509.2	567.2	65168	90.	12820	77988	16%
	Apr '23	176	38.		509.2	547.2	65206	110.	12699	77905	16%
	May '23	177	13.		509.2	522.2	65202	140.	12687	77889	16%
	Jun '23	178	3.		509.2	512.2	65204	150.	12717	77921	16%

P L A N N E D



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
2023/24	Jul '23	179	4.		509.2	513.2	65207	150.	12698	77905	16%
	Aug '23	180	5.		509.2	514.2	65211	150.	12651	77862	16%
	Sep '23	181	8.		509.2	517.2	65191	140.	12609	77800	16%
	Oct '23	182	13.		509.2	522.2	65181	140.	12641	77822	16%
	Nov '23	183	24.		509.2	533.2	65201	130.	12677	77878	16%
	Dec '23	184	72.		509.2	581.2	65265	80.	12653	77918	16%
	Jan '24	185	78.		509.2	587.2	65340	70.	12614	77954	16%
	Feb '24	186	100.		509.2	609.2	65393	50.	12562	77955	16%
	Mar '24	187	58.		509.2	567.2	65439	90.	12522	77961	16%
	Apr '24	188	38.		509.2	547.2	65463	110.	12567	78030	16%
	May '24	189	13.		509.2	522.2	65476	140.	12707	78183	16%
	Jun '24	190	3.		509.2	512.2	65460	150.	12809	78269	16%
2024/25	Jul '24	191	4.		509.2	513.2	65457	150.	12887	78344	16%
	Aug '24	192	5.		509.2	514.2	65461	150.	12896	78357	16%
	Sep '24	193	8.		509.2	517.2	65468	140.	12879	78347	16%
	Oct '24	194	13.		509.2	522.2	65475	140.	12963	78438	17%
	Nov '24	195	24.		509.2	533.2	65471	130.	13056	78527	17%
	Dec '24	196	72.		509.2	581.2	65448	80.	13136	78584	17%
	Jan '25	197	78.		509.2	587.2	65507	70.	13196	78703	17%
	Feb '25	198	100.		509.2	609.2	65580	50.	13154	78734	17%
	Mar '25	199	58.		509.2	567.2	65625	90.	13175	78800	17%
	Apr '25	200	38.		509.2	547.2	65653	110.	13184	78837	17%
	May '25	201	13.		509.2	522.2	65645	140.	13204	78849	17%
	Jun '25	202	3.		509.2	512.2	65648	150.	13198	78846	17%
2025/26	Jul '25	203	4.		509.2	513.2	65652	150.	13285	78937	17%
	Aug '25	204	5.		509.2	514.2	65657	150.	13435	79092	17%
	Sep '25	205	8.		509.2	517.2	65664	140.	13575	79239	17%
	Oct '25	206	13.		509.2	522.2	65677	140.	13715	79392	17%
	Nov '25	207	24.		509.2	533.2	65700	130.	13845	79545	17%
	Dec '25	208	72.		509.2	581.2	65772	80.	13824	79596	17%
	Jan '26	209	78.		509.2	587.2	65796	70.	13640	79436	17%
	Feb '26	210	100.		509.2	609.2	65805	50.	13574	79379	17%
	Mar '26	211	58.		509.2	567.2	65772	90.	13453	79225	17%
	Apr '26	212	38.		509.2	547.2	65797	110.	13371	79168	17%
	May '26	213	13.		509.2	522.2	65809	140.	13233	79042	17%
	Jun '26	214	3.		509.2	512.2	65812	150.	13383	79195	17%
2026/27	Jul '26	215	4.		509.2	513.2	65816	150.	13533	79349	17%
	Aug '26	216	5.		509.2	514.2	65821	150.	13683	79504	17%
	Sep '26	217	8.		509.2	517.2	65798	140.	13678	79476	17%
	Oct '26	218	13.		509.2	522.2	65624	140.	13799	79423	17%
	Nov '26	219	24.		509.2	533.2	65609	130.	13813	79422	17%
	Dec '26	220	72.		509.2	581.2	65485	80.	13880	79365	17%
	Jan '27	221	78.		509.2	587.2	65309	70.	13950	79259	18%
	Feb '27	222	100.		509.2	609.2	65267	50.	14000	79267	18%
	Mar '27	223	58.		509.2	567.2	65267	90.	14000	79267	18%
	Apr '27	224	38.		509.2	547.2	65267	110.	14000	79267	18%
	May '27	225	13.		509.2	522.2	65267	140.	14000	79267	18%
	Jun '27	226	3.		509.2	512.2	65267	150.	14000	79267	18%

P L A N N E D

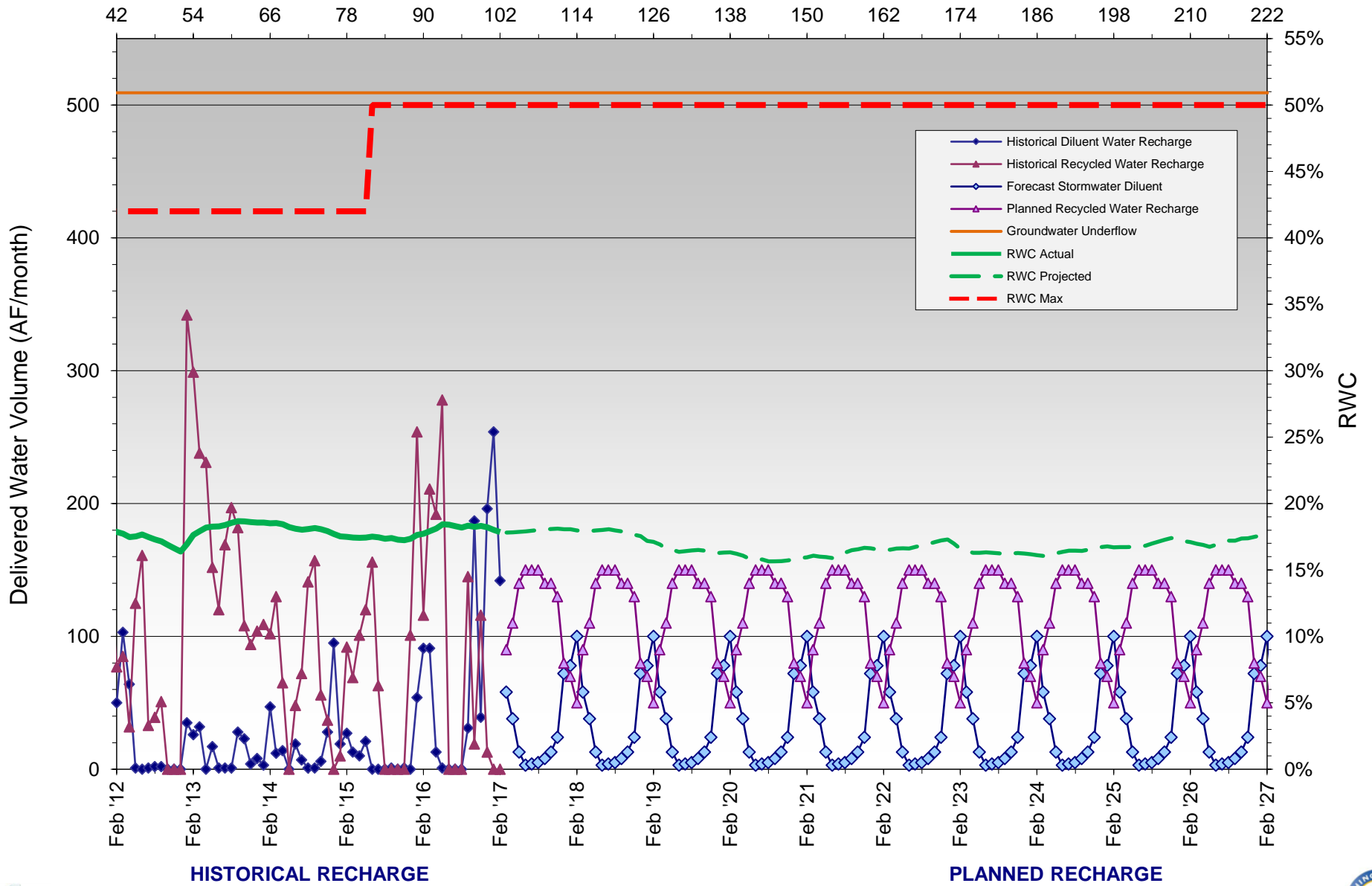
Notes:

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 - Brooks Street 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
2011/12	Jul '11	-53	81.	0.	0.	81.	4,418.5	0.	0.	4,418.5	0%
	Aug '11	-52	3.	0.	0.	3.	4,421.5	0.	0.	4,421.5	0%
	Sep '11	-51	6.	0.	0.	6.	4,427.5	0.	0.	4,427.5	0%
	Oct '11	-50	74.	0.	0.	74.	4,501.5	0.	0.	4,501.5	0%
	Nov '11	-49	120.	0.	0.	120.	4,621.5	0.	0.	4,621.5	0%
	Dec '11	-48	56.	0.	0.	56.	4,677.5	0.	0.	4,677.5	0%
	Jan '12	-47	87.	0.	0.	87.	4,764.5	65.	65.	4,829.5	1%
	Feb '12	-46	46.	0.	0.	46.	4,810.5	0.	65.	4,875.5	1%
	Mar '12	-45	184.	0.	0.	184.	4,994.5	0.	65.	5,059.5	1%
	Apr '12	-44	133.	0.	0.	133.	5,127.5	0.	65.	5,192.5	1%
	May '12	-43	7.	0.	0.	7.	5,134.5	0.	65.	5,199.5	1%
	Jun '12	-42	1.	0.	0.	1.	5,135.5	0.	65.	5,200.5	1%
2012/13	Jul '12	-41	1.	0.	0.	1.	5,136.5	0.	65.	5,201.5	1%
	Aug '12	-40	10.	0.	0.	10.	5,146.5	0.	65.	5,211.5	1%
	Sep '12	-39	15.	0.	0.	15.	5,161.5	0.	65.	5,226.5	1%
	Oct '12	-38	134.	0.	0.	134.	5,295.5	0.	65.	5,360.5	1%
	Nov '12	-37	21.	0.	0.	21.	5,316.5	0.	65.	5,381.5	1%
	Dec '12	-36	168.	0.	0.	168.	5,484.5	0.	65.	5,549.5	1%
	Jan '13	-35	48.	0.	0.	48.	5,532.5	0.	65.	5,597.5	1%
	Feb '13	-34	58.	0.	0.	58.	5,590.5	0.	65.	5,655.5	1%
	Mar '13	-33	61.	0.	0.	61.	5,651.5	0.	65.	5,716.5	1%
	Apr '13	-32	4.	0.	0.	4.	5,655.5	0.	65.	5,720.5	1%
	May '13	-31	6.	0.	0.	6.	5,661.5	0.	65.	5,726.5	1%
	Jun '13	-30	4.	0.	0.	4.	5,665.5	0.	65.	5,730.5	1%
2013/14	Jul '13	-29	6.	0.	0.	6.	5,671.5	0.	65.	5,736.5	1%
	Aug '13	-28	3.	0.	0.	3.	5,674.5	0.	65.	5,739.5	1%
	Sep '13	-27	2.	0.	0.	2.	5,676.5	0.	65.	5,741.5	1%
	Oct '13	-26	18.	0.	0.	18.	5,694.5	0.	65.	5,759.5	1%
	Nov '13	-25	52.	0.	0.	52.	5,746.5	0.	65.	5,811.5	1%
	Dec '13	-24	66.	0.	0.	66.	5,812.5	0.	65.	5,877.5	1%
	Jan '14	-23	3.	98.6	0.	101.6	5,914.1	0.	65.	5,979.1	1%
	Feb '14	-22	24.	152.	0.	176.	6,090.1	0.	65.	6,155.1	1%
	Mar '14	-21	56.	116.6	0.	172.6	6,262.7	0.	65.	6,327.7	1%
	Apr '14	-20	108.	7.2	0.	115.2	6,377.9	0.	65.	6,442.9	1%
	May '14	-19	1.	0.	0.	1.	6,378.9	0.	65.	6,443.9	1%
	Jun '14	-18	2	0	0	2	6,380.9	0.	65.	6,445.9	1%
2014/15	Jul '14	-17	2.	0.	0.	2.	6,382.9	0.	65.	6,447.9	1%
	Aug '14	-16	72.	0.	0.	72.	6,454.9	0.	65.	6,519.9	1%
	Sep '14	-15	30.	0.	0.	30.	6,484.9	0.	65.	6,549.9	1%
	Oct '14	-14	3.	0.	0.	3.	6,487.9	0.	65.	6,552.9	1%
	Nov '14	-13	100.	0.	0.	100.	6,587.9	0.	65.	6,652.9	1%
	Dec '14	-12	315.	0.	0.	315.	6,902.9	0.	65.	6,967.9	1%
	Jan '15	-11	47.	0.	0.	47.	6,949.9	0.	65.	7,014.9	1%
	Feb '15	-10	106.	0.	0.	106.	7,055.9	0.	65.	7,120.9	1%
	Mar '15	-9	15.	0.	0.	15.	7,070.9	0.	65.	7,135.9	1%
	Apr '15	-8	41.	0.	0.	41.	7,111.9	0.	65.	7,176.9	1%
	May '15	-7	99.	0.	0.	99.	7,210.9	0.	65.	7,275.9	1%
	Jun '15	-6	3	0	0	3	7,213.9	0.	65.	7,278.9	1%
2015/16	Jul '15	-5	49.	0.	0.	49.	7,252.4	0.	65.	7,317.4	1%
	Aug '15	-4	3.	0.	0.	3.	7,244.9	0.	65.	7,309.9	1%
	Sep '15	-3	147.	0.	0.	147.	7,361.9	0.	65.	7,426.9	1%
	Oct '15	-2	36.	0.	0.	36.	7,283.5	0.	65.	7,348.5	1%
	Nov '15	-1	4.	0.	0.	4.	7,257.5	0.	65.	7,322.5	1%
	Dec '15	0	49.	0.	497.	546.	7,773.5	50.	115.	7,888.5	1%
	Jan '16	1	158.	0.	497.	655.	8,393.2	78.	193.	8,586.2	2%
	Feb '16	2	34.	0.	497.	531.	8,814.3	153.	346.	9,160.3	4%
	Mar '16	3	92.	0.	497.	589.	9,212.7	126.	472.	9,684.7	5%
	Apr '16	4	20.	0.	497.	517.	9,628.3	133.	605.	10,233.3	6%
	May '16	5	12.	0.	497.	509.	10,079.8	228.	833.	10,912.8	8%
	Jun '16	6	3.	0.	497.	500.	10,563.8	201.	1,034.	11,597.8	9%
2016/17	Jul '16	7	0.	0.	497.	497.	11,046.1	201.	1,235.	12,281.1	10%
	Aug '16	8	0.	0.	497.	497.	11,523.2	261.	1,496.	13,019.2	11%
	Sep '16	9	1.	0.	497.	498.	12,003.2	52.	1,548.	13,551.2	11%
	Oct '16	10	47.	0.	497.	544.	12,513.3	0.	1,548.	14,061.3	11%
	Nov '16	11	55.	0.	497.	552.	13,034.3	0.	1,548.	14,582.3	11%
	Dec '16	12	217.	0.	497.	714.	13,658.5	0.	1,548.	15,206.5	10%
	Jan '17	13	167.	0.	497.	664.	14,239.4	0.	1,548.	15,787.4	10%
	Feb '17	14	70.	0.	497.	567.	14,659.4	0.	1,548.	16,207.4	10%
	Mar '17	15	81.	0.	497.	578.	15,216.4	110.	1,658.	16,874.4	10%
	Apr '17	16	57.9	0.	497.	554.9	15,683.3	130.	1,788.	17,471.3	10%
	May '17	17	23.9	0.	497.	520.9	16,186.2	170.	1,958.	18,144.2	11%
	Jun '17	18	7.1	0.	497.	504.1	16,690.3	180.	2,138.	18,828.3	11%

H I S T O R I C A L

S T A R T U P



(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
2017/18	Jul '17	19	17.3		497.	514.3	17,204.5	170.	2,308.	19,512.5	12%
	Aug '17	20	13.		497.	510.	17,708.6	180.	2,488.	20,196.6	12%
	Sep '17	21	24.8		497.	521.8	18,197.3	170.	2,658.	20,855.3	13%
	Oct '17	22	45.7		497.	542.7	18,726.	140.	2,798.	21,524.	13%
	Nov '17	23	60.7		497.	557.7	19,175.7	130.	2,928.	22,103.7	13%
	Dec '17	24	146.7		497.	643.7	19,742.4	40.	2,968.	22,710.4	13%
	Jan '18	25	86.3		497.	583.3	20,069.7	100.	3,068.	23,137.7	13%
	Feb '18	26	116.8		497.	613.8	20,537.5	70.	3,138.	23,675.5	13%
	Mar '18	27	81.		497.	578.	21,088.5	110.	3,248.	24,336.5	13%
	Apr '18	28	57.9		497.	554.9	21,630.4	130.	3,378.	25,008.4	14%
	May '18	29	23.9		497.	520.9	22,115.3	170.	3,548.	25,663.3	14%
	Jun '18	30	7.1		497.	504.1	22,605.4	180.	3,728.	26,333.4	14%
2018/19	Jul '18	31	17.3		497.	514.3	23,100.7	170.	3,898.	26,998.7	14%
	Aug '18	32	13.		497.	510.	23,606.7	180.	4,078.	27,684.7	15%
	Sep '18	33	24.8		497.	521.8	24,121.4	170.	4,248.	28,369.4	15%
	Oct '18	34	45.7		497.	542.7	24,650.1	140.	4,388.	29,038.1	15%
	Nov '18	35	60.7		497.	557.7	25,134.8	130.	4,518.	29,652.8	15%
	Dec '18	36	146.7		497.	643.7	25,571.5	40.	4,558.	30,129.5	15%
	Jan '19	37	86.3		497.	583.3	26,128.8	100.	4,658.	30,786.8	15%
	Feb '19	38	116.8		497.	613.8	26,518.6	70.	4,728.	31,246.6	15%
	Mar '19	39	81.		497.	578.	27,045.6	110.	4,838.	31,883.6	15%
	Apr '19	40	57.9		497.	554.9	27,595.5	130.	4,968.	32,563.5	15%
	May '19	41	23.9		497.	520.9	28,110.4	170.	5,138.	33,248.4	15%
	Jun '19	42	7.1		497.	504.1	28,594.5	180.	5,318.	33,912.5	16%
2019/20	Jul '19	43	17.3		497.	514.3	29,087.8	170.	5,488.	34,575.8	16%
	Aug '19	44	13.		497.	510.	29,580.8	180.	5,668.	35,248.8	16%
	Sep '19	45	24.8		497.	521.8	30,096.5	170.	5,838.	35,934.5	16%
	Oct '19	46	45.7		497.	542.7	30,624.2	140.	5,978.	36,602.2	16%
	Nov '19	47	60.7		497.	557.7	31,142.9	130.	6,108.	37,250.9	16%
	Dec '19	48	146.7		497.	643.7	31,613.6	40.	6,148.	37,761.6	16%
	Jan '20	49	86.3		497.	583.3	32,123.9	100.	6,248.	38,371.9	16%
	Feb '20	50	116.8		497.	613.8	32,496.7	70.	6,318.	38,814.7	16%
	Mar '20	51	81.		497.	578.	33,019.7	110.	6,428.	39,447.7	16%
	Apr '20	52	57.9		497.	554.9	33,452.6	130.	6,558.	40,010.6	16%
	May '20	53	23.9		497.	520.9	33,967.5	170.	6,728.	40,695.5	17%
	Jun '20	54	7.1		497.	504.1	34,465.6	180.	6,908.	41,373.6	17%
2020/21	Jul '20	55	17.3		497.	514.3	34,976.9	170.	7,078.	42,054.9	17%
	Aug '20	56	13.		497.	510.	35,478.9	180.	7,258.	42,736.9	17%
	Sep '20	57	24.8		497.	521.8	35,998.7	170.	7,428.	43,426.7	17%
	Oct '20	58	45.7		497.	542.7	36,496.3	140.	7,568.	44,064.3	17%
	Nov '20	59	60.7		497.	557.7	36,959.	130.	7,698.	44,657.	17%
	Dec '20	60	146.7		497.	643.7	37,289.7	40.	7,738.	45,027.7	17%
	Jan '21	61	86.3		497.	583.3	37,821.	100.	7,838.	45,659.	17%
	Feb '21	62	116.8		497.	613.8	38,238.9	70.	7,908.	46,146.9	17%
	Mar '21	63	81.		497.	578.	38,678.8	110.	8,018.	46,696.8	17%
	Apr '21	64	57.9		497.	554.9	39,231.8	130.	8,148.	47,379.8	17%
	May '21	65	23.9		497.	520.9	39,738.6	170.	8,318.	48,058.6	17%
	Jun '21	66	7.1		497.	504.1	40,233.7	180.	8,498.	48,731.7	17%
2021/22	Jul '21	67	17.3		497.	514.3	40,667.	170.	8,668.	49,335.	18%
	Aug '21	68	13.		497.	510.	41,174.	180.	8,848.	50,022.	18%
	Sep '21	69	24.8		497.	521.8	41,689.8	170.	9,018.	50,707.8	18%
	Oct '21	70	45.7		497.	542.7	42,158.5	140.	9,158.	51,316.5	18%
	Nov '21	71	60.7		497.	557.7	42,596.1	130.	9,288.	51,884.1	18%
	Dec '21	72	146.7		497.	643.7	43,183.9	40.	9,328.	52,511.9	18%
	Jan '22	73	86.3		497.	583.3	43,680.1	100.	9,368.	53,043.1	18%
	Feb '22	74	116.8		497.	613.8	44,248.	70.	9,438.	53,681.	18%
	Mar '22	75	81.		497.	578.	44,641.9	110.	9,548.	54,189.9	18%
	Apr '22	76	57.9		497.	554.9	45,063.9	130.	9,678.	54,736.9	18%
	May '22	77	23.9		497.	520.9	45,577.7	170.	9,848.	55,425.7	18%
	Jun '22	78	7.1		497.	504.1	46,080.8	180.	10,028.	56,108.8	18%
2022/23	Jul '22	79	17.3		497.	514.3	46,594.1	170.	10,198.	56,792.1	18%
	Aug '22	80	13.		497.	510.	47,094.1	180.	10,378.	57,472.1	18%
	Sep '22	81	24.8		497.	521.8	47,600.9	170.	10,548.	58,148.9	18%
	Oct '22	82	45.7		497.	542.7	48,009.6	140.	10,688.	58,698.6	18%
	Nov '22	83	60.7		497.	557.7	48,546.2	130.	10,818.	59,364.2	18%
	Dec '22	84	146.7		497.	643.7	49,022.	40.	10,858.	59,880.	18%
	Jan '23	85	86.3		497.	583.3	49,557.3	100.	10,958.	60,515.3	18%
	Feb '23	86	116.8		497.	613.8	50,113.1	70.	11,028.	61,141.1	18%
	Mar '23	87	81.		497.	578.	50,630.	110.	11,138.	61,768.	18%
	Apr '23	88	57.9		497.	554.9	51,181.	130.	11,268.	62,449.	18%
	May '23	89	23.9		497.	520.9	51,695.9	170.	11,438.	63,134.9	18%
	Jun '23	90	7.1		497.	504.1	52,196.	180.	11,618.	63,814.9	18%

P L A N N E D



(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
2023/24	Jul '23	91	17.3		497.	514.3	52,704.2	170.	11,783.	64,487.2	18%
	Aug '23	92	13.		497.	510.	53,211.2	180.	11,963.	65,174.2	18%
	Sep '23	93	24.8		497.	521.8	53,731.	170.	12,133.	65,864.	18%
	Oct '23	94	45.7		497.	542.7	54,255.7	140.	12,273.	66,528.7	18%
	Nov '23	95	60.7		497.	557.7	54,761.4	130.	12,403.	67,164.4	18%
	Dec '23	96	146.7		497.	643.7	55,339.1	40.	12,443.	67,782.1	18%
	Jan '24	97	86.3		497.	583.3	55,820.8	100.	12,543.	68,363.8	18%
	Feb '24	98	116.8		497.	613.8	56,258.6	70.	12,613.	68,871.6	18%
	Mar '24	99	81.		497.	578.	56,664.	110.	12,723.	69,387.	18%
	Apr '24	100	57.9		497.	554.9	57,103.7	130.	12,853.	69,956.7	18%
	May '24	101	23.9		497.	520.9	57,623.6	170.	13,023.	70,646.6	18%
	Jun '24	102	7.1		497.	504.1	58,125.7	180.	13,203.	71,328.7	19%
2024/25	Jul '24	103	17.3		497.	514.3	58,637.9	170.	13,373.	72,010.9	19%
	Aug '24	104	13.		497.	510.	59,076.	180.	13,553.	72,629.	19%
	Sep '24	105	24.8		497.	521.8	59,567.7	170.	13,723.	73,290.7	19%
	Oct '24	106	45.7		497.	542.7	60,107.4	140.	13,863.	73,970.4	19%
	Nov '24	107	60.7		497.	557.7	60,565.1	130.	13,993.	74,558.1	19%
	Dec '24	108	146.7		497.	643.7	60,893.8	40.	14,033.	74,926.8	19%
	Jan '25	109	86.3		497.	583.3	61,430.1	100.	14,133.	75,563.1	19%
	Feb '25	110	116.8		497.	613.8	61,937.9	70.	14,203.	76,140.9	19%
	Mar '25	111	81.		497.	578.	62,500.9	110.	14,313.	76,813.9	19%
	Apr '25	112	57.9		497.	554.9	63,014.8	130.	14,443.	77,457.8	19%
	May '25	113	23.9		497.	520.9	63,436.7	170.	14,613.	78,049.7	19%
	Jun '25	114	7.1		497.	504.1	63,937.8	180.	14,793.	78,730.8	19%
2025/26	Jul '25	115	17.3		497.	514.3	64,403.	170.	14,963.	79,366.	19%
	Aug '25	116	13.		497.	510.	64,910.1	180.	15,143.	80,053.1	19%
	Sep '25	117	24.8		497.	521.8	65,284.8	170.	15,313.	80,597.8	19%
	Oct '25	118	45.7		497.	542.7	65,791.5	140.	15,453.	81,244.5	19%
	Nov '25	119	60.7		497.	557.7	66,345.2	130.	15,583.	81,928.2	19%
	Dec '25	120	146.7		497.	643.7	66,442.9	40.	15,573.	82,015.9	19%
	Jan '26	121	86.3		497.	583.3	66,371.2	100.	15,595.	81,966.2	19%
	Feb '26	122	116.8		497.	613.8	66,454.	70.	15,512.	81,966.	19%
	Mar '26	123	81.		497.	578.	66,443.	110.	15,496.	81,939.	19%
	Apr '26	124	57.9		497.	554.9	66,480.9	130.	15,493.	81,973.9	19%
	May '26	125	23.9		497.	520.9	66,492.8	170.	15,435.	81,927.8	19%
	Jun '26	126	7.1		497.	504.1	66,496.9	180.	15,414.	81,910.9	19%
2026/27	Jul '26	127	17.3		497.	514.3	66,514.2	170.	15,383.	81,897.2	19%
	Aug '26	128	13.		497.	510.	66,527.2	180.	15,302.	81,829.2	19%
	Sep '26	129	24.8		497.	521.8	66,550.9	170.	15,420.	81,970.9	19%
	Oct '26	130	45.7		497.	542.7	66,549.6	140.	15,560.	82,109.6	19%
	Nov '26	131	60.7		497.	557.7	66,555.3	130.	15,690.	82,245.3	19%
	Dec '26	132	146.7		497.	643.7	66,485.	40.	15,730.	82,215.	19%
	Jan '27	133	86.3		497.	583.3	66,404.3	100.	15,830.	82,234.3	19%
	Feb '27	134	116.8		497.	613.8	66,451.1	70.	15,900.	82,351.1	19%
	Mar '27	135	81.		497.	578.	66,451.1	110.	15,900.	82,351.1	19%
	Apr '27	136	57.9		497.	554.9	66,451.1	130.	15,900.	82,351.1	19%
	May '27	137	23.9		497.	520.9	66,451.1	170.	15,900.	82,351.1	19%
	Jun '27	138	7.1		497.	504.1	66,451.1	180.	15,900.	82,351.1	19%

Notes:

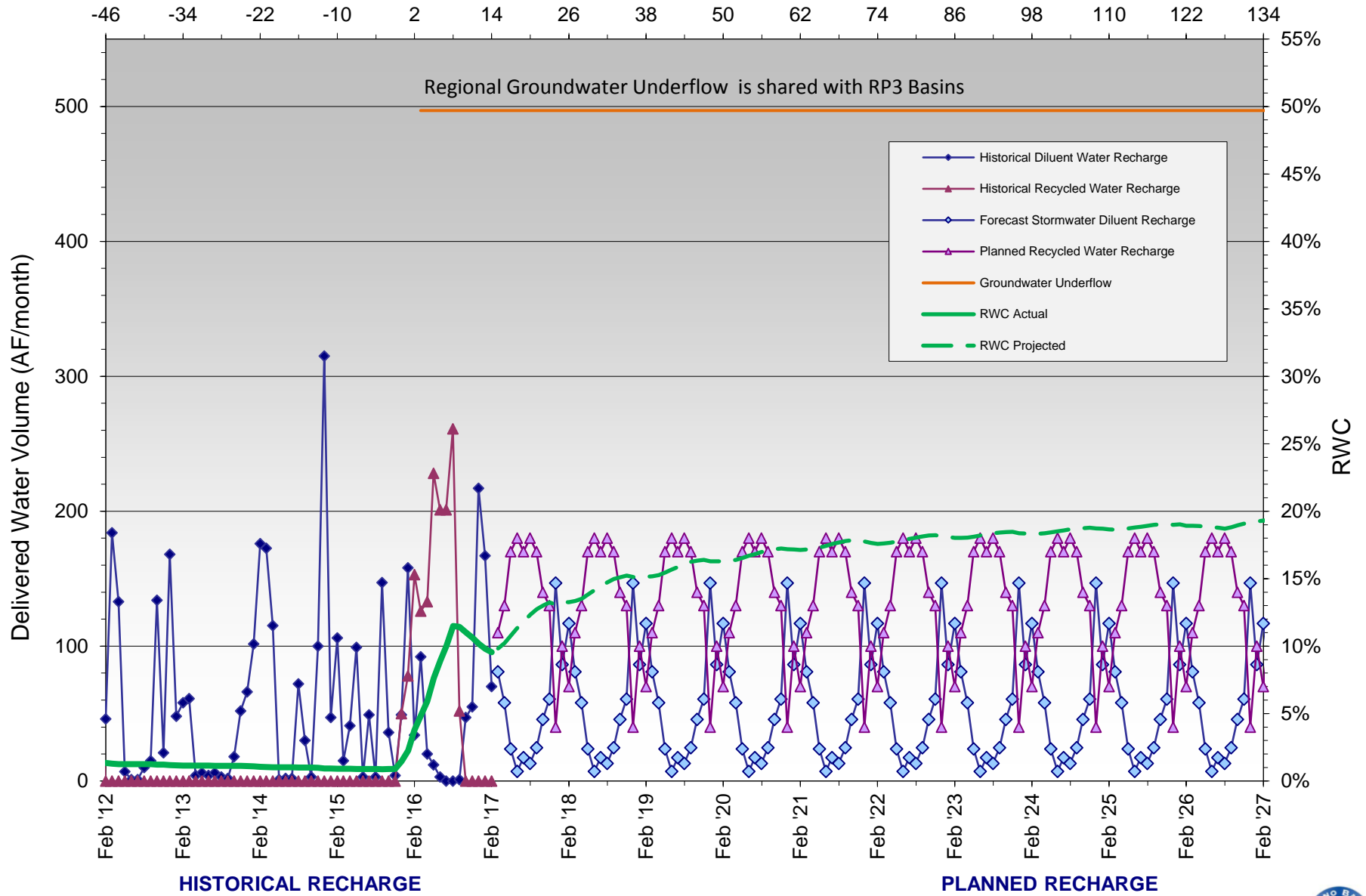
DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.
RW = Recycled Water
RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.
While an RWC calculation 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 - Declez 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
2011/12	Jul '11	142	18	285	286	589	22,847	176	3,552	26,399	13%
	Aug '11	143	16	275	286	577	23,414	141	3,662	27,076	14%
	Sep '11	144	19	325	286	630	24,018	6	3,490	27,508	13%
	Oct '11	145	215	0	286	501	24,443	0	3,304	27,746	12%
	Nov '11	146	211	0	286	497	24,611	0	3,194	27,806	11%
	Dec '11	147	36	0	286	322	24,820	0	3,194	28,015	11%
	Jan '12	148	89	0	286	375	25,018	64	3,258	28,276	12%
	Feb '12	149	95	0	286	381	25,293	6	3,264	28,557	11%
	Mar '12	150	247	0	286	533	25,607	0	3,264	28,872	11%
	Apr '12	151	135	0	286	421	25,908	0	3,264	29,172	11%
	May '12	152	3	0	286	289	26,111	0	3,264	29,375	11%
	Jun '12	153	12	0	286	298	26,393	0	3,264	29,658	11%
2012/13	Jul '12	154	7	0	286	293	26,571	0	3,264	29,835	11%
	Aug '12	155	7	0	286	293	26,728	0	3,264	29,992	11%
	Sep '12	156	5	0	286	291	26,922	0	3,264	30,187	11%
	Oct '12	157	5	0	286	291	27,034	0	3,264	30,298	11%
	Nov '12	158	9	0	286	295	26,999	80	3,344	30,343	11%
	Dec '12	159	335	0	286	621	27,290	67	3,411	30,702	11%
	Jan '13	160	72	0	286	358	27,472	145	3,556	31,028	11%
	Feb '13	161	37	0	286	323	27,465	225	3,781	31,246	12%
	Mar '13	162	63	0	286	349	27,484	314	4,095	31,580	13%
	Apr '13	163	1	0	286	287	27,441	79	4,174	31,616	13%
	May '13	164	23	0	286	309	27,420	259	4,403	31,824	14%
	Jun '13	165	4	0	286	290	27,599	209	4,458	32,057	14%
2013/14	Jul '13	166	6	0	286	292	27,786	157	4,615	32,401	14%
	Aug '13	167	4	0	286	290	28,044	334	4,949	32,993	15%
	Sep '13	168	6	0	286	292	28,325	457	5,406	33,731	16%
	Oct '13	169	0	0	286	286	28,600	358	5,764	34,364	17%
	Nov '13	170	21	0	286	307	28,803	421	6,185	34,988	18%
	Dec '13	171	24	0	286	310	28,920	413	6,598	35,518	19%
	Jan '14	172	8	0	286	294	29,181	211	6,809	35,990	19%
	Feb '14	173	294	0	286	580	29,431	194	7,003	36,434	19%
	Mar '14	174	63	0	286	349	29,606	108	7,111	36,717	19%
	Apr '14	175	83	0	286	369	29,907	218	7,329	37,236	20%
	May '14	176	9	0	286	295	30,185	241	7,565	37,750	20%
	Jun '14	177	15	0	286	301	30,473	186	7,707	38,181	20%
2014/15	Jul '14	178	16	0	286	302	30,761	101	7,762	38,524	20%
	Aug '14	179	16	0	286	302	30,969	8	7,722	38,692	20%
	Sep '14	180	15	0	286	301	31,092	121	7,802	38,894	20%
	Oct '14	181	16	0	286	302	31,064	286	8,065	39,129	21%
	Nov '14	182	170	0	286	456	31,190	70	8,135	39,326	21%
	Dec '14	183	392	0	286	678	31,539	5	8,140	39,679	21%
	Jan '15	184	44	0	286	330	31,539	183	8,323	39,862	21%
	Feb '15	185	72	0	286	358	31,567	222	8,545	40,112	21%
	Mar '15	186	15	0	286	301	31,630	157	8,702	40,332	22%
	Apr '15	187	100	0	286	386	31,841	165	8,867	40,708	22%
	May '15	188	231	0	286	517	32,218	160	9,027	41,246	22%
	Jun '15	189	0	0	286	286	32,502	273	9,300	41,802	22%
2015/16	Jul '15	190	285	0	286	571	33,073	102	9,402	42,475	22%
	Aug '15	191	3	0	286	289	33,362	1	9,403	42,765	22%
	Sep '15	192	215	0	286	501	33,863	31	9,434	43,298	22%
	Oct '15	193	75	0	286	361	34,026	76	9,478	43,504	22%
	Nov '15	194	41	0	286	327	34,338	21	9,499	43,838	22%
	Dec '15	195	92	0	286	378	34,609	128	9,592	44,201	22%
	Jan '16	196	337	0	286	623	35,042	61	9,633	44,675	22%
	Feb '16	197	59	0	286	345	35,120	89	9,647	44,767	22%
	Mar '16	198	177	0	286	463	35,245	47	9,694	44,939	22%
	Apr '16	199	24	0	286	310	35,193	127	9,821	45,014	22%
	May '16	200	197	0	286	483	35,641	119	9,940	45,581	22%
	Jun '16	201	1	0	286	287	35,902	210	10,124	46,026	22%
2016/17	Jul '16	202	2	0	286	288	36,157	113	10,196	46,353	22%
	Aug '16	203	0	0	286	286	36,433	89	10,279	46,712	22%
	Sep '16	204	3	0	286	289	36,682	232	10,428	47,110	22%
	Oct '16	205	47	0	286	333	36,961	233	10,630	47,591	22%
	Nov '16	206	86	0	286	372	37,270	112	10,692	47,962	22%
	Dec '16	207	523	0	286	809	37,994	0	10,650	48,644	22%
	Jan '17	208	317	0	286	603	38,502	0	10,593	49,094	22%
	Feb '17	209	338	0	286	624	38,976	0	10,570	49,546	21%
	Mar '17	210	121	0	286	407	39,366	100	10,625	49,991	21%
	Apr '17	211	121	0	286	407	39,715	100	10,684	50,399	21%
	May '17	212	66	0	286	352	40,053	150	10,794	50,847	21%
	Jun '17	213	11	0	286	297	40,332	210	10,997	51,329	21%

H I S T O R I C A L



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
2017/18	Jul '17	214	37	286	323	40,629	180	11,177	51,806	22%	P L A N E D
	Aug '17	215	10	286	296	40,896	210	11,387	52,283	22%	
	Sep '17	216	49	286	335	41,197	170	11,557	52,754	22%	
	Oct '17	217	76	286	362	41,526	140	11,697	53,223	22%	
	Nov '17	218	111	286	397	41,757	110	11,720	53,477	22%	
	Dec '17	219	221	286	507	42,007	0	11,667	53,674	22%	
	Jan '18	220	190	286	476	41,690	30	11,697	53,387	22%	
	Feb '18	221	196	286	482	41,939	20	11,717	53,656	22%	
	Mar '18	222	121	286	407	42,326	100	11,701	54,027	22%	
	Apr '18	223	121	286	407	42,704	100	11,685	54,389	21%	
	May '18	224	66	286	352	43,026	150	11,748	54,774	21%	
	Jun '18	225	11	286	297	43,305	210	11,958	55,263	22%	
2018/19	Jul '18	226	37	286	323	43,611	180	12,071	55,682	22%	
	Aug '18	227	10	286	296	43,899	210	12,281	56,180	22%	
	Sep '18	228	49	286	335	44,229	170	12,451	56,680	22%	
	Oct '18	229	76	286	362	44,575	140	12,456	57,031	22%	
	Nov '18	230	111	286	397	44,858	110	12,478	57,336	22%	
	Dec '18	231	221	286	507	45,078	0	12,478	57,556	22%	
	Jan '19	232	190	286	476	45,516	30	12,469	57,985	22%	
	Feb '19	233	196	286	482	45,589	20	12,480	58,069	21%	
	Mar '19	234	121	286	407	45,949	100	12,580	58,529	21%	
	Apr '19	235	121	286	407	46,221	100	12,665	58,886	22%	
	May '19	236	66	286	352	46,505	150	12,804	59,309	22%	
	Jun '19	237	11	286	297	46,778	210	13,014	59,792	22%	
2019/20	Jul '19	238	37	286	323	47,101	180	13,194	60,295	22%	
	Aug '19	239	10	286	296	47,376	210	13,404	60,780	22%	
	Sep '19	240	49	286	335	47,510	170	13,550	61,060	22%	
	Oct '19	241	76	286	362	47,399	140	13,588	60,987	22%	
	Nov '19	242	111	286	397	47,228	110	13,578	60,806	22%	
	Dec '19	243	221	286	507	47,207	0	13,578	60,785	22%	
	Jan '20	244	190	286	476	47,078	30	13,608	60,686	22%	
	Feb '20	245	196	286	482	47,053	20	13,628	60,681	22%	
	Mar '20	246	121	286	407	47,070	100	13,728	60,798	23%	
	Apr '20	247	121	286	407	46,797	100	13,828	60,625	23%	
	May '20	248	66	286	352	46,765	150	13,978	60,743	23%	
	Jun '20	249	11	286	297	46,776	210	14,188	60,964	23%	
2020/21	Jul '20	250	37	286	323	46,813	180	14,368	61,181	23%	
	Aug '20	251	10	286	296	46,823	210	14,578	61,401	24%	
	Sep '20	252	49	286	335	46,872	170	14,748	61,620	24%	
	Oct '20	253	76	286	362	46,919	140	14,774	61,693	24%	
	Nov '20	254	111	286	397	46,903	110	14,764	61,667	24%	
	Dec '20	255	221	286	507	46,552	0	14,752	61,304	24%	
	Jan '21	256	190	286	476	46,638	30	14,782	61,420	24%	
	Feb '21	257	196	286	482	46,511	20	14,759	61,270	24%	
	Mar '21	258	121	286	407	46,396	100	14,859	61,255	24%	
	Apr '21	259	121	286	407	46,514	100	14,852	61,366	24%	
	May '21	260	66	286	352	46,567	150	14,847	61,414	24%	
	Jun '21	261	11	286	297	46,487	210	14,851	61,338	24%	
2021/22	Jul '21	262	37	286	323	46,221	180	14,855	61,076	24%	
	Aug '21	263	10	286	296	45,940	210	14,924	60,864	25%	
	Sep '21	264	49	286	335	45,645	170	15,088	60,733	25%	
	Oct '21	265	76	286	362	45,506	140	15,228	60,734	25%	
	Nov '21	266	111	286	397	45,406	110	15,338	60,744	25%	
	Dec '21	267	221	286	507	45,591	0	15,338	60,929	25%	
	Jan '22	268	190	286	476	45,692	30	15,304	60,996	25%	
	Feb '22	269	196	286	482	45,793	20	15,318	61,111	25%	
	Mar '22	270	121	286	407	45,667	100	15,418	61,085	25%	
	Apr '22	271	121	286	407	45,653	100	15,518	61,171	25%	
	May '22	272	66	286	352	45,716	150	15,668	61,384	26%	
	Jun '22	273	11	286	297	45,715	210	15,878	61,593	26%	
2022/23	Jul '22	274	37	286	323	45,745	180	16,058	61,803	26%	
	Aug '22	275	10	286	296	45,748	210	16,268	62,016	26%	
	Sep '22	276	49	286	335	45,792	170	16,438	62,230	26%	
	Oct '22	277	76	286	362	45,863	140	16,578	62,441	27%	
	Nov '22	278	111	286	397	45,965	110	16,608	62,573	27%	
	Dec '22	279	221	286	507	45,851	0	16,541	62,392	27%	
	Jan '23	280	190	286	476	45,969	30	16,426	62,395	26%	
	Feb '23	281	196	286	482	46,128	20	16,221	62,349	26%	
	Mar '23	282	121	286	407	46,186	100	16,007	62,193	26%	
	Apr '23	283	121	286	407	46,306	100	16,028	62,334	26%	
	May '23	284	66	286	352	46,349	150	15,919	62,268	26%	
	Jun '23	285	11	286	297	46,356	210	15,920	62,276	26%	



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
2023/24	Jul '23	286	37		286	323	46,387	180	15,943	62,330	26%
	Aug '23	287	10		286	296	46,393	210	15,819	62,212	25%
	Sep '23	288	49		286	335	46,436	170	15,532	61,968	25%
	Oct '23	289	76		286	362	46,512	140	15,314	61,826	25%
	Nov '23	290	111		286	397	46,602	110	15,003	61,605	24%
	Dec '23	291	221		286	507	46,799	0	14,590	61,389	24%
	Jan '24	292	190		286	476	46,981	30	14,409	61,390	23%
	Feb '24	293	196		286	482	46,883	20	14,235	61,118	23%
	Mar '24	294	121		286	407	46,941	100	14,227	61,168	23%
	Apr '24	295	121		286	407	46,979	100	14,109	61,088	23%
	May '24	296	66		286	352	47,036	150	14,018	61,054	23%
	Jun '24	297	11		286	297	47,032	210	14,042	61,074	23%
2024/25	Jul '24	298	37		286	323	47,053	180	14,121	61,174	23%
	Aug '24	299	10		286	296	47,047	210	14,323	61,370	23%
	Sep '24	300	49		286	335	47,081	170	14,372	61,453	23%
	Oct '24	301	76		286	362	47,141	140	14,226	61,367	23%
	Nov '24	302	111		286	397	47,082	110	14,266	61,348	23%
	Dec '24	303	221		286	507	46,911	0	14,261	61,172	23%
	Jan '25	304	190		286	476	47,057	30	14,108	61,165	23%
	Feb '25	305	196		286	482	47,181	20	13,906	61,087	23%
	Mar '25	306	121		286	407	47,287	100	13,849	61,136	23%
	Apr '25	307	121		286	407	47,308	100	13,784	61,092	23%
	May '25	308	66		286	352	47,143	150	13,774	60,917	23%
	Jun '25	309	11		286	297	47,154	210	13,711	60,865	23%
2025/26	Jul '25	310	37		286	323	46,906	180	13,789	60,695	23%
	Aug '25	311	10		286	296	46,913	210	13,998	60,911	23%
	Sep '25	312	49		286	335	46,747	170	14,137	60,884	23%
	Oct '25	313	76		286	362	46,748	140	14,201	60,949	23%
	Nov '25	314	111		286	397	46,818	110	14,290	61,108	23%
	Dec '25	315	221		286	507	46,947	0	14,162	61,109	23%
	Jan '26	316	190		286	476	46,800	30	14,131	60,931	23%
	Feb '26	317	196		286	482	46,937	20	14,062	60,999	23%
	Mar '26	318	121		286	407	46,881	100	14,115	60,996	23%
	Apr '26	319	121		286	407	46,978	100	14,088	61,066	23%
	May '26	320	66		286	352	46,847	150	14,119	60,966	23%
	Jun '26	321	11		286	297	46,857	210	14,119	60,976	23%
2026/27	Jul '26	322	37		286	323	46,892	180	14,186	61,078	23%
	Aug '26	323	10		286	296	46,902	210	14,307	61,209	23%
	Sep '26	324	49		286	335	46,948	170	14,245	61,193	23%
	Oct '26	325	76		286	362	46,977	140	14,152	61,129	23%
	Nov '26	326	111		286	397	47,002	110	14,150	61,152	23%
	Dec '26	327	221		286	507	46,700	0	14,150	60,850	23%
	Jan '27	328	190		286	476	46,573	30	14,180	60,753	23%
	Feb '27	329	196		286	482	46,431	20	14,200	60,631	23%
	Mar '27	330	196		286	482	46,506	100	14,200	60,706	23%
	Apr '27	331	196		286	482	46,581	100	14,200	60,781	23%
	May '27	332	196		286	482	46,711	150	14,200	60,911	23%
	Jun '27	333	196		286	482	46,896	210	14,200	61,096	23%

P L A N N E D

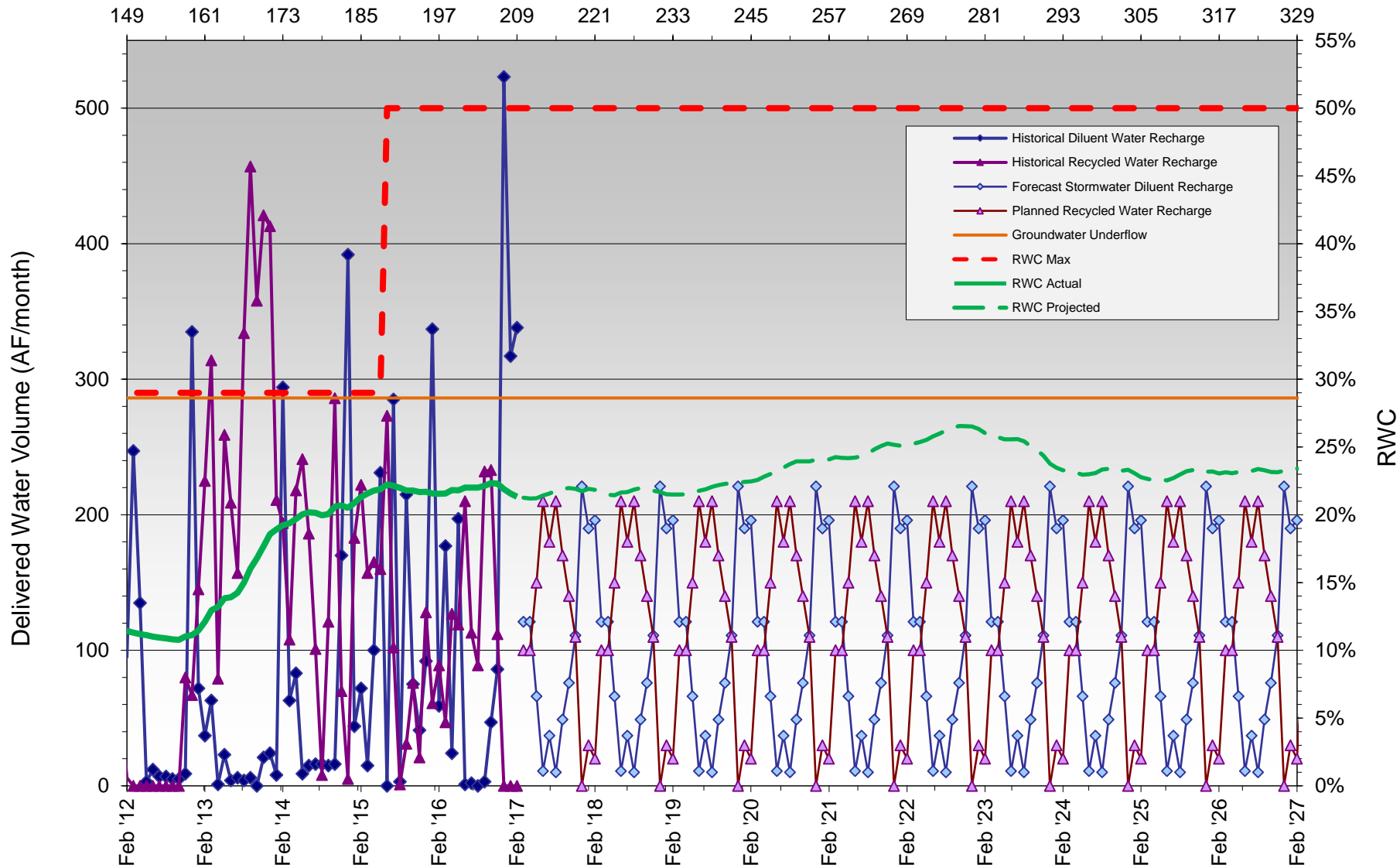
Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the Slate 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 Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2011/12	Jul '11	70	0.	0.	266.6	266.6	11607	14.	3423.1	15030	23%
	Aug '11	71	4.	68.1	266.6	338.7	11946	0.	3423.1	15369	22%
	Sep '11	72	32.	447.2	266.6	745.8	12692	20.	3443.1	16135	21%
	Oct '11	73	17.	0.	266.6	283.6	12975	35.	3478.1	16453	21%
	Nov '11	74	11.	0.	266.6	277.6	13192	202.	3680.1	16872	22%
	Dec '11	75	1.	0.	266.6	267.6	13457	226.	3906.1	17364	22%
	Jan '12	76	49.	0.	266.6	315.6	13738	16.	3922.1	17660	22%
	Feb '12	77	59.	0.	266.6	325.6	14063	83.	4005.1	18068	22%
	Mar '12	78	53.	0.	266.6	319.6	14379	79.	4084.1	18463	22%
	Apr '12	79	30.	0.	266.6	296.6	14674	66.	4150.1	18824	22%
	May '12	80	0.	0.	266.6	266.6	14941	40.	4190.1	19131	22%
	Jun '12	81	2.	0.	266.6	268.6	15209	2.	4192.1	19402	22%
2012/13	Jul '12	82	22.	0.	266.6	288.6	15498	57.	4249.1	19747	22%
	Aug '12	83	50.	0.	266.6	316.6	15815	44.	4293.1	20108	21%
	Sep '12	84	29.	0.	266.6	295.6	16110	0.	4293.1	20403	21%
	Oct '12	85	51.	0.	266.6	317.6	16428	0.	4293.1	20721	21%
	Nov '12	86	13.	0.	266.6	279.6	16626	177.	4470.1	21096	21%
	Dec '12	87	6.	0.	266.6	272.6	16777	144.	4614.1	21391	22%
	Jan '13	88	0.	0.	266.6	266.6	17043	115.	4729.1	21773	22%
	Feb '13	89	8.	0.	266.6	274.6	17172	3.	4732.1	21904	22%
	Mar '13	90	13.	0.	266.6	279.6	17346	147.	4879.1	22225	22%
	Apr '13	91	0.	0.	266.6	266.6	17523	71.	4950.1	22474	22%
	May '13	92	6.	0.	266.6	272.6	17789	0.	4950.1	22739	22%
	Jun '13	93	1.	0	266.6	267.6	18057	116.	5066.1	23123	22%
2013/14	Jul '13	94	4.	0	266.6	270.6	18327	201.	5267.1	23594	22%
	Aug '13	95	0.	0	266.6	266.6	18594	11.	5278.1	23872	22%
	Sep '13	96	0.	0	266.6	266.6	18860	0.	5278.1	24139	22%
	Oct '13	97	1.	0	266.6	267.6	19128	1.	5279.1	24407	22%
	Nov '13	98	59.	0	266.6	325.6	19449	339.	5618.1	25067	22%
	Dec '13	99	8.	0	266.6	274.6	19688	108.	5726.1	25415	23%
	Jan '14	100	9.	3	266.6	278.1	19966	86.	5812.1	25778	23%
	Feb '14	101	19.	1	266.6	286.6	20124	67.	5879.1	26003	23%
	Mar '14	102	13.	0	266.6	279.6	20349	224.	6103.1	26452	23%
	Apr '14	103	23.	10	266.6	299.1	20648	379.	6482.1	27130	24%
	May '14	104	33.	0	266.6	299.6	20947	292.	6774.1	27721	24%
	Jun '14	105	2.	0	266.6	268.6	21216	212.	6986.1	28202	25%
2014/15	Jul '14	106	0.	0	266.6	266.6	21483	118.	7104.1	28587	25%
	Aug '14	107	0.	0	266.6	266.6	21749	82.	7186.1	28935	25%
	Sep '14	108	0.	0	266.6	266.6	22016	236.	7422.1	29438	25%
	Oct '14	109	0.	0	266.6	266.6	22165	226.	7648.1	29813	26%
	Nov '14	110	0.	0	266.6	266.6	22429	272.	7920.1	30350	26%
	Dec '14	111	185.	0	266.6	451.6	22842	46.	7966.1	30808	26%
	Jan '15	112	8.	0	266.6	274.6	22967	194.	8160.1	31127	26%
	Feb '15	113	47.	0	266.6	313.6	23153	180.	8340.1	31493	26%
	Mar '15	114	0.	0.	266.6	266.6	23392	115.	8455.1	31848	27%
	Apr '15	115	0.	0.	266.6	266.6	23655	229.	8684.1	32339	27%
	May '15	116	3.	0.	266.6	269.6	23873	139.	8823.1	32696	27%
	Jun '15	117	0.	0.	266.6	266.6	23920	197.	9020.1	32941	27%
2015/16	Jul '15	118	0.	0.	266.6	266.6	23922	39.	9059.1	32981	27%
	Aug '15	119	0.	0.	266.6	266.6	23701	56.	9115.1	32816	28%
	Sep '15	120	9.	0.	266.6	275.6	23846	107.	9083.3	32930	28%
	Oct '15	121	14.	0.	266.6	280.6	24105	73.	9063.6	33169	27%
	Nov '15	122	14.	0.	266.6	280.6	24386	84.	9055.3	33441	27%
	Dec '15	123	64.	0.	266.6	330.6	24709	53.	9076.7	33785	27%
	Jan '16	124	35.	0.	266.6	301.6	24998	23.	9016.8	34014	27%
	Feb '16	125	5.	0.	266.6	271.6	25235	27.	8964.6	34199	26%
	Mar '16	126	22.	0.	266.6	288.6	25497	0.	8964.6	34461	26%
	Apr '16	127	21.	0.	266.6	287.6	25741	43.	9007.6	34748	26%
	May '16	128	0.	0.	266.6	266.6	25924	52.	9059.6	34984	26%
	Jun '16	129	0.	0.	266.6	266.6	26147	18.	9077.6	35224	26%
2016/2017	Jul '16	130	0.	0.	266.6	266.6	26284	0.	8894.9	35179	25%
	Aug '16	131	0.	0.	266.6	266.6	26504	49.	8763.9	35268	25%
	Sep '16	132	0.	0.	266.6	266.6	26681	29.	8792.9	35474	25%
	Oct '16	133	25.	0.	266.6	291.6	26930	55.	8704.2	35634	24%
	Nov '16	134	9.	0.	266.6	275.6	27147	3.	8671.8	35819	24%
	Dec '16	135	85.	0.	266.6	351.6	27414	0.	8671.8	36086	24%
	Jan '17	136	19.	0.	266.6	285.6	27683	0.	8671.8	36355	24%
	Feb '17	137	4.	0.	266.6	270.6	27914	0.	8629.8	36544	24%
	Mar '17	138	29.	0.	266.6	295.6	28175	120.	8749.8	36925	24%
	Apr '17	139	26.	0.	266.6	292.6	28417	120.	8806.8	37224	24%
	May '17	140	22.	0.	266.6	288.6	28648	130.	8936.8	37585	24%
	Jun '17	141	14.	0.	266.6	280.6	28839	140.	9076.8	37915	24%

H I C K O R Y B A S I N



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 Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2017/2018	Jul '17	142	27.		266.6	293.6	29039	120.	9055.8	38095	24%
	Aug '17	143	26.		266.6	292.6	29239	120.	9097.8	38337	24%
	Sep '17	144	30.		266.6	296.6	29443	120.	9202.8	38646	24%
	Oct '17	145	22.		266.6	288.6	29659	130.	9310.	38969	24%
	Nov '17	146	27.		266.6	293.6	29851	120.	9332.	39183	24%
	Dec '17	147	69.		266.6	335.6	30084	80.	9412.	39496	24%
	Jan '18	148	44.		266.6	310.6	30269	110.	9522.	39791	24%
	Feb '18	149	59.		266.6	325.6	30497	90.	9573.	40070	24%
	Mar '18	150	29.		266.6	295.6	30749	120.	9613.	40362	24%
	Apr '18	151	26.		266.6	292.6	30978	120.	9726.	40704	24%
	May '18	152	22.		266.6	288.6	31227	130.	9770.	40997	24%
	Jun '18	153	14.		266.6	280.6	31484	140.	9910.	41394	24%
2018/2019	Jul '18	154	27.		266.6	293.6	31759	120.	10030.	41789	24%
	Aug '18	155	26.		266.6	292.6	32046	120.	10150.	42196	24%
	Sep '18	156	30.		266.6	296.6	32340	120.	10270.	42610	24%
	Oct '18	157	22.		266.6	288.6	32625	130.	10400.	43025	24%
	Nov '18	158	27.		266.6	293.6	32916	120.	10520.	43436	24%
	Dec '18	159	69.		266.6	335.6	33216	80.	10600.	43816	24%
	Jan '19	160	44.		266.6	310.6	33527	110.	10710.	44237	24%
	Feb '19	161	59.		266.6	325.6	33790	90.	10777.	44567	24%
	Mar '19	162	29.		266.6	295.6	34054	120.	10874.	44928	24%
	Apr '19	163	26.		266.6	292.6	34339	120.	10994.	45333	24%
	May '19	164	22.		266.6	288.6	34609	130.	11124.	45733	24%
	Jun '19	165	14.		266.6	280.6	34887	140.	11264.	46151	24%
2019/2020	Jul '19	166	27.		266.6	293.6	35172	120.	11384.	46556	24%
	Aug '19	167	26.		266.6	292.6	35460	120.	11504.	46964	24%
	Sep '19	168	30.		266.6	296.6	35754	120.	11590.	47344	24%
	Oct '19	169	22.		266.6	288.6	35745	130.	11531.	47276	24%
	Nov '19	170	27.		266.6	293.6	35746	120.	11408.	47154	24%
	Dec '19	171	69.		266.6	335.6	35657	80.	11395.	47052	24%
	Jan '20	172	44.		266.6	310.6	35487	110.	11486.	46973	24%
	Feb '20	173	59.		266.6	325.6	35346	90.	11576.	46922	25%
	Mar '20	174	29.		266.6	295.6	35359	120.	11635.	46994	25%
	Apr '20	175	26.		266.6	292.6	35339	120.	11699.	47038	25%
	May '20	176	22.		266.6	288.6	35361	130.	11718.	47079	25%
	Jun '20	177	14.		266.6	280.6	35375	140.	11808.	47183	25%
2020/2021	Jul '20	178	27.		266.6	293.6	35402	120.	11907.	47309	25%
	Aug '20	179	26.		266.6	292.6	35428	120.	11999.	47427	25%
	Sep '20	180	30.		266.6	296.6	35446	120.	11834.	47280	25%
	Oct '20	181	22.		266.6	288.6	35455	130.	11870.	47325	25%
	Nov '20	182	27.		266.6	293.6	35446	120.	11939.	47385	25%
	Dec '20	183	69.		266.6	335.6	35366	80.	12019.	47385	25%
	Jan '21	184	44.		266.6	310.6	35398	110.	12079.	47477	25%
	Feb '21	185	59.		266.6	325.6	35378	90.	12132.	47510	26%
	Mar '21	186	29.		266.6	295.6	35337	120.	12252.	47589	26%
	Apr '21	187	26.		266.6	292.6	35363	120.	12320.	47683	26%
	May '21	188	22.		266.6	288.6	35383	130.	12366.	47749	26%
	Jun '21	189	14.		266.6	280.6	35389	140.	12432.	47821	26%
2021/2022	Jul '21	190	27.		266.6	293.6	35416	120.	12538.	47954	26%
	Aug '21	191	26.		266.6	292.6	35370	120.	12658.	48028	26%
	Sep '21	192	30.		266.6	296.6	34921	120.	12758.	47679	27%
	Oct '21	193	22.		266.6	288.6	34926	130.	12853.	47779	27%
	Nov '21	194	27.		266.6	293.6	34942	120.	12771.	47713	27%
	Dec '21	195	69.		266.6	335.6	35010	80.	12625.	47635	27%
	Jan '22	196	44.		266.6	310.6	35005	110.	12719.	47724	27%
	Feb '22	197	59.		266.6	325.6	35005	90.	12726.	47731	27%
	Mar '22	198	29.		266.6	295.6	34981	120.	12767.	47748	27%
	Apr '22	199	26.		266.6	292.6	34977	120.	12821.	47798	27%
	May '22	200	22.		266.6	288.6	34999	130.	12911.	47910	27%
	Jun '22	201	14.		266.6	280.6	35011	140.	13049.	48060	27%
2022/2023	Jul '22	202	27.		266.6	293.6	35016	120.	13112.	48128	27%
	Aug '22	203	26.		266.6	292.6	34992	120.	13188.	48180	27%
	Sep '22	204	30.		266.6	296.6	34993	120.	13308.	48301	28%
	Oct '22	205	22.		266.6	288.6	34964	130.	13438.	48402	28%
	Nov '22	206	27.		266.6	293.6	34978	120.	13381.	48359	28%
	Dec '22	207	69.		266.6	335.6	35041	80.	13317.	48358	28%
	Jan '23	208	44.		266.6	310.6	35085	110.	13312.	48397	28%
	Feb '23	209	59.		266.6	325.6	35136	90.	13399.	48535	28%
	Mar '23	210	29.		266.6	295.6	35152	120.	13372.	48524	28%
	Apr '23	211	26.		266.6	292.6	35178	120.	13421.	48599	28%
	May '23	212	22.		266.6	288.6	35194	130.	13551.	48745	28%
	Jun '23	213	14.		266.6	280.6	35207	140.	13575.	48782	28%

P L A N N E D



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 Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2023/2024	Jul '23	214	27.		266.6	293.6	35230	120.	13494.	48724	28%
	Aug '23	215	26.		266.6	292.6	35256	120.	13603.	48859	28%
	Sep '23	216	30.		266.6	296.6	35286	120.	13723.	49009	28%
	Oct '23	217	22.		266.6	288.6	35307	130.	13852.	49159	28%
	Nov '23	218	27.		266.6	293.6	35275	120.	13633.	48908	28%
	Dec '23	219	69.		266.6	335.6	35336	80.	13605.	48941	28%
	Jan '24	220	44.		266.6	310.6	35368	110.	13629.	48997	28%
	Feb '24	221	59.		266.6	325.6	35407	90.	13652.	49059	28%
	Mar '24	222	29.		266.6	295.6	35423	120.	13548.	48971	28%
	Apr '24	223	26.		266.6	292.6	35417	120.	13289.	48706	27%
	May '24	224	22.		266.6	288.6	35406	130.	13127.	48533	27%
	Jun '24	225	14.		266.6	280.6	35418	140.	13055.	48473	27%
2024/2025	Jul '24	226	27.		266.6	293.6	35445	120.	13057.	48502	27%
	Aug '24	227	26.		266.6	292.6	35471	120.	13095.	48566	27%
	Sep '24	228	30.		266.6	296.6	35501	120.	12979.	48480	27%
	Oct '24	229	22.		266.6	288.6	35523	130.	12883.	48406	27%
	Nov '24	230	27.		266.6	293.6	35550	120.	12731.	48281	26%
	Dec '24	231	69.		266.6	335.6	35434	80.	12765.	48199	26%
	Jan '25	232	44.		266.6	310.6	35470	110.	12681.	48151	26%
	Feb '25	233	59.		266.6	325.6	35482	90.	12591.	48073	26%
	Mar '25	234	29.		266.6	295.6	35511	120.	12596.	48107	26%
	Apr '25	235	26.		266.6	292.6	35537	120.	12487.	48024	26%
	May '25	236	22.		266.6	288.6	35556	130.	12478.	48034	26%
	Jun '25	237	14.		266.6	280.6	35570	140.	12421.	47991	26%
2025/26	Jul '25	238	27.		266.6	293.6	35597	120.	12502.	48099	26%
	Aug '25	239	26.		266.6	292.6	35623	120.	12566.	48189	26%
	Sep '25	240	30.		266.6	296.6	35644	120.	12579.	48223	26%
	Oct '25	241	22.		266.6	288.6	35652	130.	12636.	48288	26%
	Nov '25	242	27.		266.6	293.6	35665	120.	12672.	48337	26%
	Dec '25	243	69.		266.6	335.6	35670	80.	12699.	48369	26%
	Jan '26	244	44.		266.6	310.6	35679	110.	12786.	48465	26%
	Feb '26	245	59.		266.6	325.6	35733	90.	12849.	48582	26%
	Mar '26	246	59.		266.6	325.6	35770	120.	12969.	48739	27%
	Apr '26	247	59.		266.6	325.6	35808	120.	13046.	48854	27%
	May '26	248	59.		266.6	325.6	35867	130.	13124.	48991	27%
	Jun '26	249	59.		266.6	325.6	35926	140.	13246.	49172	27%
2026/27	Jul '26	250	27.		266.6	293.6	35953	120.	13366.	49319	27%
	Aug '26	251	26.		266.6	292.6	35979	120.	13437.	49416	27%
	Sep '26	252	30.		266.6	296.6	36009	120.	13528.	49537	27%
	Oct '26	253	22.		266.6	288.6	36006	130.	13603.	49609	27%
	Nov '26	254	27.		266.6	293.6	36024	120.	13720.	49744	28%
	Dec '26	255	69.		266.6	335.6	36008	80.	13800.	49808	28%
	Jan '27	256	44.		266.6	310.6	36033	110.	13910.	49943	28%
	Feb '27	257	59.		266.6	325.6	36088	90.	14000.	50088	28%
	Mar '27	258	59.		266.6	325.6	36118	120.	14000.	50118	28%
	Apr '27	259	59.		266.6	325.6	36151	120.	14000.	50151	28%
	May '27	260	59.		266.6	325.6	36188	130.	14000.	50188	28%
	Jun '27	261	59.		266.6	325.6	36233	140.	14000.	50233	28%

P L A N N E D

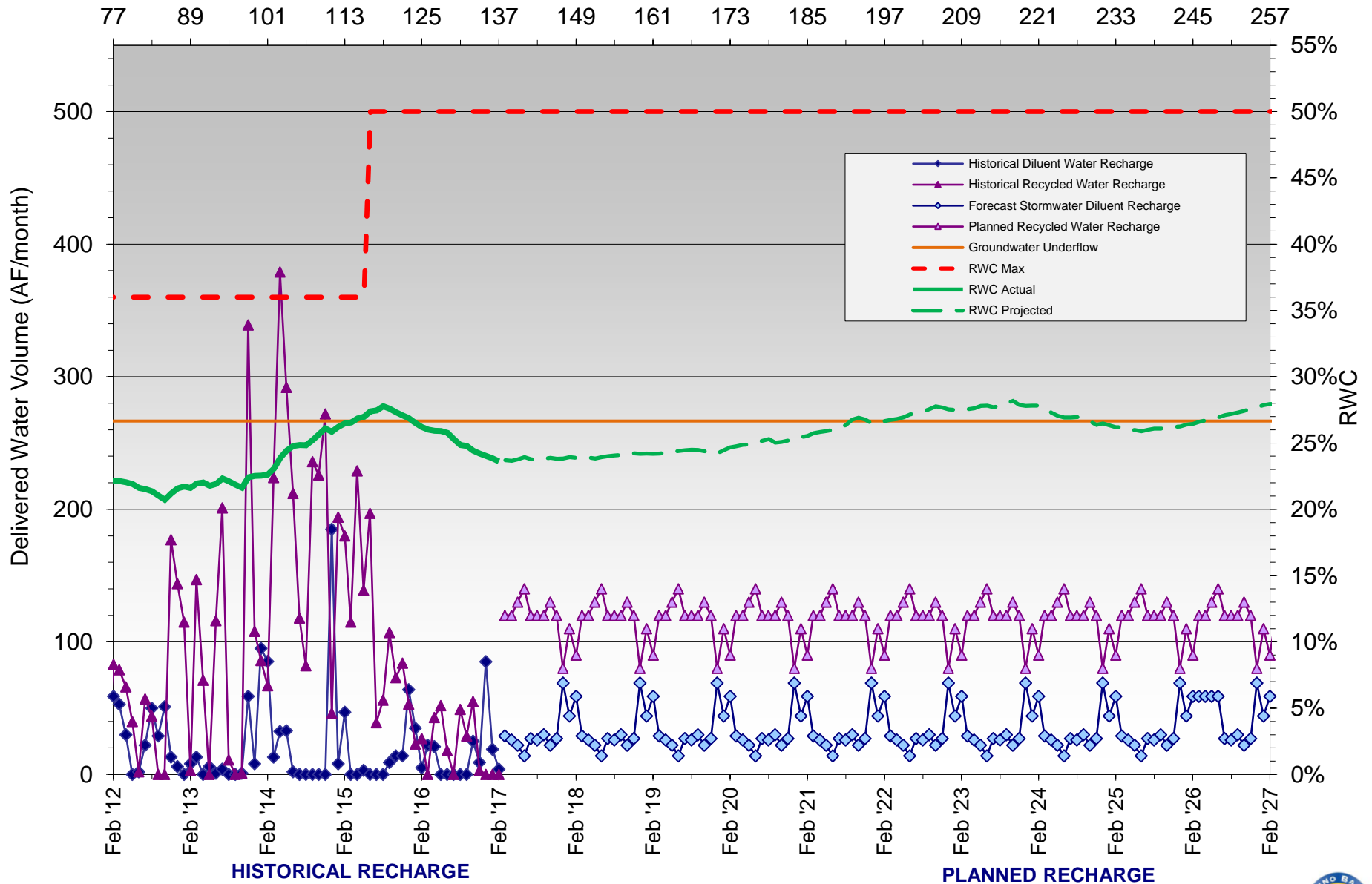
Notes:

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 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

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
2011/12	Jul '11	25	80.	787.4	903.8	1771.2	27,834.8	253.	4,209.0	32,043.8	13%
	Aug '11	26	31.	286.6	903.8	1221.4	29,056.1	15.	4,224.0	33,280.1	13%
	Sep '11	27	47.	567.2	903.8	1518.	30,574.1	30.	4,254.0	34,828.1	12%
	Oct '11	28	138.	82.8	903.8	1124.6	31,698.6	182.	4,436.0	36,134.6	12%
	Nov '11	29	122.	0.	903.8	1025.8	32,724.4	97.	4,533.0	37,257.4	12%
	Dec '11	30	78.	0.	903.8	981.8	33,706.1	164.	4,697.0	38,403.1	12%
	Jan '12	31	104.	0.	903.8	1007.8	34,713.9	91.	4,788.0	39,501.9	12%
	Feb '12	32	176.	0.	903.8	1079.8	35,793.7	160.	4,948.0	40,741.7	12%
	Mar '12	33	222.	0.	903.8	1125.8	36,919.4	94.	5,042.0	41,961.4	12%
	Apr '12	34	220.	0.	903.8	1123.8	38,043.2	147.	5,189.0	43,232.2	12%
	May '12	35	61.	0.	903.8	964.8	39,007.9	375.	5,564.0	44,571.9	12%
	Jun '12	36	60.	0.	903.8	963.8	39,971.7	181.	5,745.0	45,716.7	13%
2012/13	Jul '12	37	50.	0.	903.8	953.8	40,925.4	12.	5,757.0	46,682.4	12%
	Aug '12	38	12.	0.	903.8	915.8	41,841.2	0.	5,757.0	47,598.2	12%
	Sep '12	39	4.	0.	903.8	907.8	42,748.9	0.	5,757.0	48,505.9	12%
	Oct '12	40	18.	0.	903.8	921.8	43,670.7	0.	5,757.0	49,427.7	12%
	Nov '12	41	101.	0.	903.8	1004.8	44,675.5	154.	5,911.0	50,586.5	12%
	Dec '12	42	361.	0.	903.8	1264.8	45,940.2	220.	6,131.0	52,071.2	12%
	Jan '13	43	147.	0.	903.8	1050.8	46,991.0	353.	6,484.0	53,475.0	12%
	Feb '13	44	113.	0.	903.8	1016.8	48,007.7	297.	6,781.0	54,788.7	12%
	Mar '13	45	78.	0.	903.8	981.8	48,989.5	275.	7,056.0	56,045.5	13%
	Apr '13	46	40.	0.	903.8	943.8	49,933.2	386.	7,442.0	57,375.2	13%
	May '13	47	54.	0.	903.8	957.8	50,891.0	262.	7,704.0	58,595.0	13%
	Jun '13	48	43.	0.	903.8	946.8	51,837.7	239.	7,943.0	59,780.7	13%
2013/14	Jul '13	49	72.	0.	903.8	975.8	52,813.5	74.	8,017.0	60,830.5	13%
	Aug '13	50	68.	0.	903.8	971.8	53,785.2	216.	8,233.0	62,018.2	13%
	Sep '13	51	58.	0.	903.8	961.8	54,747.0	353.	8,586.0	63,333.0	14%
	Oct '13	52	53.	0.	903.8	956.8	55,703.8	164.	8,750.0	64,453.8	14%
	Nov '13	53	60.	0.	903.8	963.8	56,667.5	4.	8,754.0	65,421.5	13%
	Dec '13	54	72.	0.	903.8	975.8	57,643.3	251.	9,005.0	66,648.3	14%
	Jan '14	55	43.	86	903.8	1032.8	58,676.0	72.	9,077.0	67,753.0	13%
	Feb '14	56	131.	66	903.8	1101.1	59,777.1	0.	9,077.0	68,854.1	13%
	Mar '14	57	103.	160	903.8	1166.9	60,943.9	0.	9,077.0	70,020.9	13%
	Apr '14	58	48.	38	903.8	989.4	61,933.3	49.	9,126.0	71,059.3	13%
	May '14	59	3.	0	903.8	906.8	62,840.0	0.	9,126.0	71,966.0	13%
	Jun '14	60	6.	0	903.8	909.8	63,749.8	172.	9,298.0	73,047.8	13%
2014/15	Jul '14	61	9.	0	903.8	912.8	64,662.6	184.	9,482.0	74,144.6	13%
	Aug '14	62	23.	0	903.8	926.8	65,589.3	192.	9,674.0	75,263.3	13%
	Sep '14	63	40.	0	903.8	943.8	66,533.1	243.	9,917.0	76,450.1	13%
	Oct '14	64	25.	0	903.8	928.8	67,461.8	335.	10,252.0	77,713.8	13%
	Nov '14	65	112.	0	903.8	1015.8	68,477.6	250.	10,502.0	78,979.6	13%
	Dec '14	66	419.	0	903.8	1322.8	69,800.3	6.	10,508.0	80,308.3	13%
	Jan '15	67	132.	0	903.8	1035.8	70,836.1	29.	10,537.0	81,373.1	13%
	Feb '15	68	95.	0	903.8	998.8	71,834.8	243.	10,780.0	82,614.8	13%
	Mar '15	69	69.	0.	903.8	972.8	72,807.6	325.	11,105.0	83,912.6	13%
	Apr '15	70	41.	0.	903.8	944.8	73,752.3	282.	11,387.0	85,139.3	13%
	May '15	71	121.	0.	903.8	1024.8	74,777.1	348.	11,735.0	86,512.1	14%
	Jun '15	72	12.	0.	903.8	915.8	75,692.9	531.	12,266.0	87,958.9	14%
2015/16	Jul '15	73	134.	0.	903.8	1037.8	76,699.6	268.	12,534.0	89,233.6	14%
	Aug '15	74	31.	0.	903.8	934.8	77,603.4	141.	12,675.0	90,278.4	14%
	Sep '15	75	123.	0.	903.8	1026.8	78,570.1	219.	12,894.0	91,464.1	14%
	Oct '15	76	86.	0.	903.8	989.8	79,481.9	363.	13,257.0	92,738.9	14%
	Nov '15	77	54.	0.	903.8	957.8	80,379.6	228.	13,485.0	93,864.6	14%
	Dec '15	78	188.	0.	407.	595.	80,914.6	274.	13,759.0	94,673.6	15%
	Jan '16	79	239.	0.	407.	646.	81,528.1	390.	14,149.0	95,677.1	15%
	Feb '16	80	54.	0.	407.	461.	81,924.7	358.	14,507.0	96,431.7	15%
	Mar '16	81	208.	0.	407.	615.	82,379.0	174.	14,681.0	97,060.0	15%
	Apr '16	82	50.	0.	407.	457.	82,709.1	247.	14,928.0	97,637.1	15%
	May '16	83	48.	0.	407.	455.	83,127.1	375.	15,303.0	98,430.1	16%
	Jun '16	84	11.	0.	407.	418.	83,520.1	245.	15,548.0	99,068.1	16%
2016/17	Jul '16	85	18.	0.	407.	425.	83,930.1	99.	15,647.0	99,577.1	16%
	Aug '16	86	32.	0.	407.	439.	84,333.1	289.	15,936.0	100,269.1	16%
	Sep '16	87	9.	0.	407.	416.	84,714.1	551.	16,487.0	101,201.1	16%
	Oct '16	88	105.	0.	407.	512.	85,193.1	392.	16,879.0	102,072.1	17%
	Nov '16	89	65.	0.	407.	472.	85,629.1	688.	17,567.0	103,196.1	17%
	Dec '16	90	336.	0.	407.	743.	86,346.5	548.	18,115.0	104,461.5	17%
	Jan '17	91	588.	0.	407.	995.	87,319.4	431.	18,546.0	105,865.4	18%
	Feb '17	92	235.	0.	407.	642.	87,942.4	381.	18,927.0	106,869.4	18%
	Mar '17	93	129.	0.	407.	536.	88,471.0	440.	19,367.0	107,838.0	18%
	Apr '17	94	75.	0.	407.	482.	88,949.0	500.	19,867.0	108,816.0	18%
	May '17	95	43.	0.	407.	450.	89,397.0	530.	20,397.0	109,794.0	19%
	Jun '17	96	22.	0.	407.	429.	89,824.0	550.	20,947.0	110,771.0	19%

H I S T O R I C A L



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
2017/18	Jul '17	97	37.		407.	444.	90,268.0	530.	21,477.0	111,745.0	19%
	Aug '17	98	27.		407.	434.	90,699.0	540.	22,017.0	112,716.0	20%
	Sep '17	99	38.		407.	445.	91,141.0	530.	22,547.0	113,688.0	20%
	Oct '17	100	63.		407.	470.	91,602.0	510.	23,057.0	114,659.0	20%
	Nov '17	101	78.		407.	485.	92,040.0	490.	23,547.0	115,587.0	20%
	Dec '17	102	243.		407.	650.	92,582.0	330.	23,877.0	116,459.0	21%
	Jan '18	103	187.		407.	594.	93,011.0	380.	24,257.0	117,268.0	21%
	Feb '18	104	165.		407.	572.	93,453.0	410.	24,667.0	118,120.0	21%
	Mar '18	105	129.		407.	536.	93,984.0	440.	25,107.0	119,091.0	21%
	Apr '18	106	75.		407.	482.	94,463.0	500.	25,607.0	120,070.0	21%
	May '18	107	43.		407.	450.	94,879.0	530.	26,137.0	121,016.0	22%
	Jun '18	108	22.		407.	429.	95,304.0	550.	26,687.0	121,991.0	22%
2018/19	Jul '18	109	37.		407.	444.	95,748.0	530.	27,217.0	122,965.0	22%
	Aug '18	110	27.		407.	434.	96,166.0	540.	27,757.0	123,923.0	22%
	Sep '18	111	38.		407.	445.	96,595.0	530.	28,287.0	124,882.0	23%
	Oct '18	112	63.		407.	470.	97,052.0	510.	28,797.0	125,849.0	23%
	Nov '18	113	78.		407.	485.	97,510.0	490.	29,287.0	126,797.0	23%
	Dec '18	114	243.		407.	650.	98,004.0	330.	29,617.0	127,621.0	23%
	Jan '19	115	187.		407.	594.	98,586.0	380.	29,997.0	128,583.0	23%
	Feb '19	116	165.		407.	572.	98,885.0	410.	30,407.0	129,292.0	24%
	Mar '19	117	129.		407.	536.	99,374.0	440.	30,847.0	130,221.0	24%
	Apr '19	118	75.		407.	482.	99,838.0	500.	31,347.0	131,185.0	24%
	May '19	119	43.		407.	450.	100,282.0	530.	31,877.0	132,159.0	24%
	Jun '19	120	22.		407.	429.	100,711.0	550.	32,321.0	133,032.0	24%
2019/20	Jul '19	121	37.		407.	444.	101,133.0	530.	32,767.0	133,900.0	24%
	Aug '19	122	27.		407.	434.	101,537.0	540.	33,159.0	134,696.0	25%
	Sep '19	123	38.		407.	445.	101,946.0	530.	33,469.0	135,415.0	25%
	Oct '19	124	63.		407.	470.	101,389.2	510.	33,776.0	135,165.2	25%
	Nov '19	125	78.		407.	485.	100,870.5	490.	33,979.0	134,849.5	25%
	Dec '19	126	243.		407.	650.	100,243.7	330.	34,206.0	134,449.7	25%
	Jan '20	127	187.		407.	594.	99,407.9	380.	34,510.0	133,917.9	26%
	Feb '20	128	165.		407.	572.	98,706.2	410.	34,807.0	133,513.2	26%
	Mar '20	129	129.		407.	536.	98,234.4	440.	35,034.0	133,268.4	26%
	Apr '20	130	75.		407.	482.	97,684.7	500.	35,463.0	133,147.7	27%
	May '20	131	43.		407.	450.	97,181.9	530.	35,721.0	132,902.9	27%
	Jun '20	132	22.		407.	429.	96,665.2	550.	36,010.0	132,675.2	27%
2020/21	Jul '20	133	37.		407.	444.	96,198.4	530.	36,311.0	132,509.4	27%
	Aug '20	134	27.		407.	434.	95,722.7	540.	36,670.0	132,392.7	28%
	Sep '20	135	38.		407.	445.	95,238.9	530.	37,152.0	132,390.9	28%
	Oct '20	136	63.		407.	470.	94,734.2	510.	37,639.0	132,373.2	28%
	Nov '20	137	78.		407.	485.	94,169.4	490.	37,936.0	132,105.4	29%
	Dec '20	138	243.		407.	650.	93,171.6	330.	38,144.0	131,315.6	29%
	Jan '21	139	187.		407.	594.	92,626.9	380.	38,421.0	131,047.9	29%
	Feb '21	140	165.		407.	572.	91,980.1	410.	38,654.0	130,634.1	30%
	Mar '21	141	129.		407.	536.	91,198.4	440.	38,968.0	130,166.4	30%
	Apr '21	142	75.		407.	482.	90,634.6	500.	39,231.0	129,865.6	30%
	May '21	143	43.		407.	450.	89,820.0	530.	39,585.0	129,405.0	31%
	Jun '21	144	22.		407.	429.	88,728.0	550.	39,951.0	128,679.0	31%
2021/22	Jul '21	145	37.		407.	444.	87,400.9	530.	40,228.0	127,628.9	32%
	Aug '21	146	27.		407.	434.	86,613.5	540.	40,753.0	127,366.5	32%
	Sep '21	147	38.		407.	445.	85,540.5	530.	41,253.0	126,793.5	33%
	Oct '21	148	63.		407.	470.	84,886.0	510.	41,581.0	126,467.0	33%
	Nov '21	149	78.		407.	485.	84,345.2	490.	41,974.0	126,319.2	33%
	Dec '21	150	243.		407.	650.	84,013.5	330.	42,140.0	126,153.5	33%
	Jan '22	151	187.		407.	594.	83,599.7	380.	42,429.0	126,028.7	34%
	Feb '22	152	165.		407.	572.	83,092.0	410.	42,679.0	125,771.0	34%
	Mar '22	153	129.		407.	536.	82,502.2	440.	43,025.0	125,527.2	34%
	Apr '22	154	75.		407.	482.	81,860.5	500.	43,378.0	125,238.5	35%
	May '22	155	43.		407.	450.	81,345.7	530.	43,533.0	124,878.7	35%
	Jun '22	156	22.		407.	429.	80,811.0	550.	43,902.0	124,713.0	35%
2022/23	Jul '22	157	37.		407.	444.	80,301.2	530.	44,420.0	124,721.2	36%
	Aug '22	158	27.		407.	434.	79,819.4	540.	44,960.0	124,779.4	36%
	Sep '22	159	38.		407.	445.	79,356.7	530.	45,490.0	124,846.7	36%
	Oct '22	160	63.		407.	470.	78,904.9	510.	46,000.0	124,904.9	37%
	Nov '22	161	78.		407.	485.	78,385.2	490.	46,336.0	124,721.2	37%
	Dec '22	162	243.		407.	650.	77,770.4	330.	46,446.0	124,216.4	37%
	Jan '23	163	187.		407.	594.	77,313.7	380.	46,473.0	123,786.7	38%
	Feb '23	164	165.		407.	572.	76,868.9	410.	46,586.0	123,454.9	38%
	Mar '23	165	129.		407.	536.	76,423.2	440.	46,751.0	123,174.2	38%
	Apr '23	166	75.		407.	482.	75,961.4	500.	46,865.0	122,826.4	38%
	May '23	167	43.		407.	450.	75,453.6	530.	47,133.0	122,586.6	38%
	Jun '23	168	22.		407.	429.	74,935.9	550.	47,444.0	122,379.9	39%

P L A N N E D



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
2023/24	Jul '23	169	37.		407.	444.	74,404.1	530.	47,900.0	122,304.1	39%
	Aug '23	170	27.		407.	434.	73,866.4	540.	48,224.0	122,090.4	39%
	Sep '23	171	38.		407.	445.	73,349.6	530.	48,401.0	121,750.6	40%
	Oct '23	172	63.		407.	470.	72,862.9	510.	48,747.0	121,609.9	40%
	Nov '23	173	78.		407.	485.	72,384.1	490.	49,233.0	121,617.1	40%
	Dec '23	174	243.		407.	650.	72,058.4	330.	49,312.0	121,370.4	41%
	Jan '24	175	187.		407.	594.	71,619.6	380.	49,620.0	121,239.6	41%
	Feb '24	176	165.		407.	572.	71,090.6	410.	50,030.0	121,120.6	41%
	Mar '24	177	129.		407.	536.	70,459.7	440.	50,470.0	120,929.7	42%
	Apr '24	178	75.		407.	482.	69,952.3	500.	50,921.0	120,873.3	42%
	May '24	179	43.		407.	450.	69,495.6	530.	51,451.0	120,946.6	43%
	Jun '24	180	22.		407.	429.	69,014.8	550.	51,829.0	120,843.8	43%
2024/25	Jul '24	181	37.		407.	444.	68,546.1	530.	52,175.0	120,721.1	43%
	Aug '24	182	27.		407.	434.	68,053.3	540.	52,523.0	120,576.3	44%
	Sep '24	183	38.		407.	445.	67,554.6	530.	52,810.0	120,364.6	44%
	Oct '24	184	63.		407.	470.	67,095.8	510.	52,985.0	120,080.8	44%
	Nov '24	185	78.		407.	485.	66,565.1	490.	53,225.0	119,790.1	44%
	Dec '24	186	243.		407.	650.	65,892.3	330.	53,549.0	119,441.3	45%
	Jan '25	187	187.		407.	594.	65,450.5	380.	53,900.0	119,350.5	45%
	Feb '25	188	165.		407.	572.	65,023.8	410.	54,067.0	119,090.8	45%
	Mar '25	189	129.		407.	536.	64,587.0	440.	54,182.0	118,769.0	46%
	Apr '25	190	75.		407.	482.	64,124.3	500.	54,400.0	118,524.3	46%
	May '25	191	43.		407.	450.	63,549.5	530.	54,582.0	118,131.5	46%
	Jun '25	192	22.		407.	429.	63,062.8	550.	54,601.0	117,663.8	46%
2025/26	Jul '25	193	37.		407.	444.	62,469.0	530.	54,863.0	117,332.0	47%
	Aug '25	194	27.		407.	434.	61,968.3	540.	55,262.0	117,230.3	47%
	Sep '25	195	38.		407.	445.	61,386.5	530.	55,573.0	116,959.5	48%
	Oct '25	196	63.		407.	470.	60,866.8	510.	55,720.0	116,586.8	48%
	Nov '25	197	78.		407.	485.	60,394.0	490.	55,982.0	116,376.0	48%
	Dec '25	198	243.		407.	650.	60,449.0	330.	56,038.0	116,487.0	48%
	Jan '26	199	187.		407.	594.	60,397.0	380.	56,028.0	116,425.0	48%
	Feb '26	200	165.		407.	572.	60,508.0	410.	56,080.0	116,588.0	48%
	Mar '26	201	129.		407.	536.	60,429.0	440.	56,346.0	116,775.0	48%
	Apr '26	202	75.		407.	482.	60,454.0	500.	56,599.0	117,053.0	48%
	May '26	203	43.		407.	450.	60,449.0	530.	56,754.0	117,203.0	48%
	Jun '26	204	22.		407.	429.	60,460.0	550.	57,059.0	117,519.0	49%
2026/27	Jul '26	205	37.		407.	444.	60,479.0	530.	57,490.0	117,969.0	49%
	Aug '26	206	27.		407.	434.	60,474.0	540.	57,741.0	118,215.0	49%
	Sep '26	207	38.		407.	445.	60,503.0	530.	57,720.0	118,223.0	49%
	Oct '26	208	63.		407.	470.	60,461.0	510.	57,838.0	118,299.0	49%
	Nov '26	209	78.		407.	485.	60,474.0	490.	57,640.0	118,114.0	49%
	Dec '26	210	243.		407.	650.	60,381.0	330.	57,422.0	117,803.0	49%
	Jan '27	211	187.		407.	594.	59,980.0	380.	57,371.0	117,351.0	49%
	Feb '27	212	165.		407.	572.	59,910.0	410.	57,400.0	117,310.0	49%
	Mar '27	213	129.		407.	536.	59,910.0	440.	57,400.0	117,310.0	49%
	Apr '27	214	75.		407.	482.	59,910.0	500.	57,400.0	117,310.0	49%
	May '27	215	43.		407.	450.	59,910.0	530.	57,400.0	117,310.0	49%
	Jun '27	216	22.		407.	429.	59,910.0	550.	57,400.0	117,310.0	49%

P L A N E D

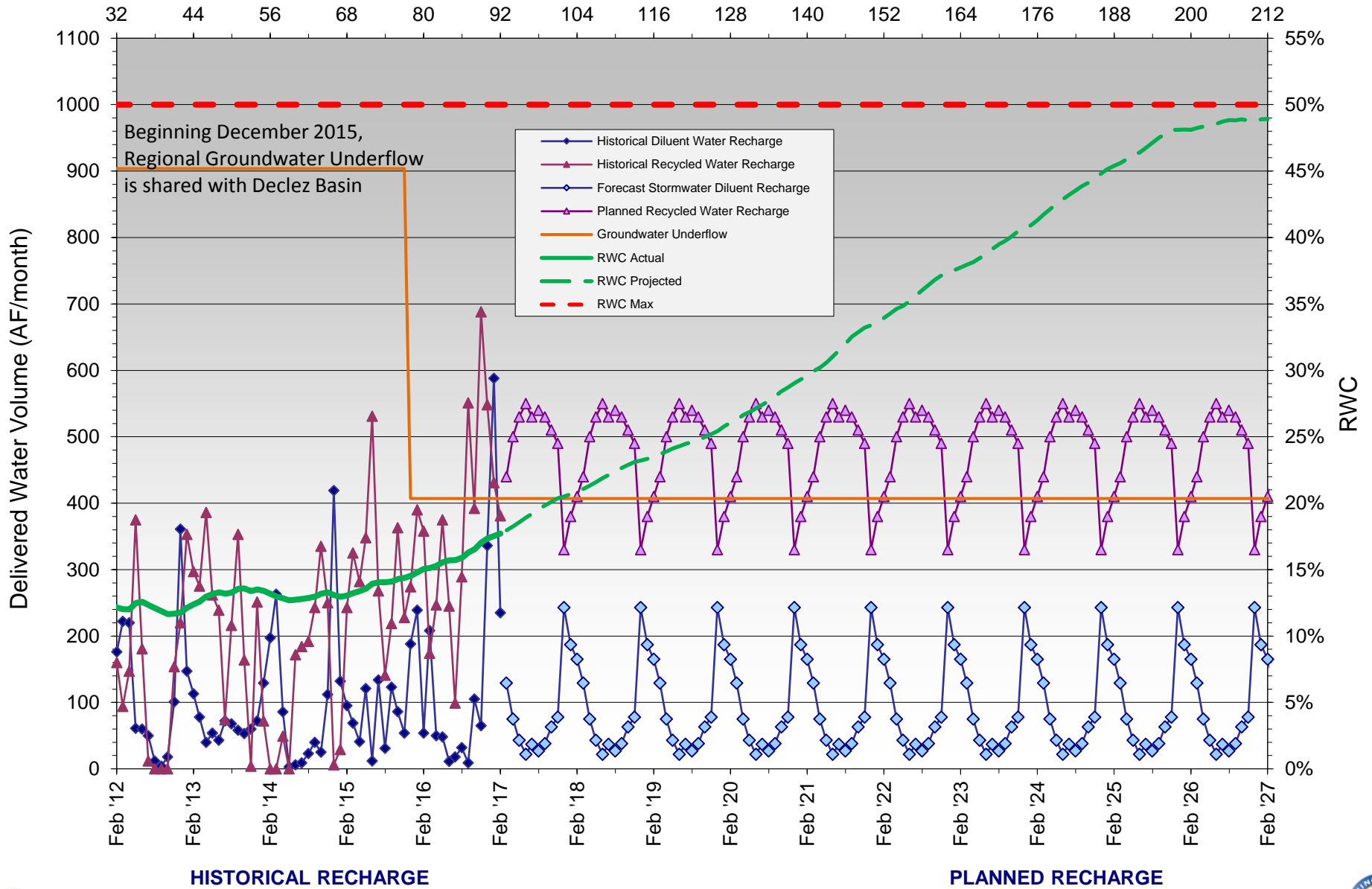
Notes:

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 - RP3 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
2011/12	Jul '11	12	0.	1010.7	139.	1149.7	25084	113.	509	25593	2%
	Aug '11	13	0.	11.2	139.	150.2	25235	90.	599	25834	2%
	Sep '11	14	0.	205.6	139.	344.6	25579	0.	599	26178	2%
	Oct '11	15	39.	0.	139.	178.	25757	0.	599	26356	2%
	Nov '11	16	32.	0.	139.	171.	25928	0.	599	26527	2%
	Dec '11	17	20.	0.	139.	159.	26087	0.	599	26686	2%
	Jan '12	18	55.	0.	139.	194.	26281	159.	758	27039	3%
	Feb '12	19	54.	0.	139.	193.	26474	74.	832	27306	3%
	Mar '12	20	160.	0.	139.	299.	26773	16.	848	27621	3%
	Apr '12	21	76.	0.	139.	215.	26988	4.	852	27840	3%
	May '12	22	0.	0.	139.	139.	27127	3.	855	27982	3%
	Jun '12	23	0.	0.	139.	139.	27266	54.	909	28175	3%
2012/13	Jul '12	24	0.	0.	139.	139.	27405	122.	1031	28436	4%
	Aug '12	25	1.	0.	139.	140.	27545	84.	1115	28660	4%
	Sep '12	26	0.	0.	139.	139.	27684	39.	1154	28838	4%
	Oct '12	27	1.	0.	139.	140.	27824	63.	1217	29041	4%
	Nov '12	28	14.	0.	139.	153.	27977	66.	1283	29260	4%
	Dec '12	29	79.	0.	139.	218.	28194	1.	1284	29478	4%
	Jan '13	30	21.	0.	139.	160.	28354	59.	1343	29697	5%
	Feb '13	31	9.	0.	139.	148.	28502	19.	1362	29864	5%
	Mar '13	32	13.	0.	139.	152.	28654	53.	1415	30069	5%
	Apr '13	33	5.	0.	139.	144.	28798	41.	1456	30254	5%
	May '13	34	4.	0.	139.	143.	28941	26.	1482	30423	5%
	Jun '13	35	0.	0.	139.	139.	29080	2.	1484	30564	5%
2013/14	Jul '13	36	0.	0.	139.	139.	29219	0.	1484	30703	5%
	Aug '13	37	0.	0.	139.	139.	29358	0.	1484	30842	5%
	Sep '13	38	0.	0.	139.	139.	29497	154.	1638	31135	5%
	Oct '13	39	11.	0.	139.	150.	29647	69.	1707	31354	5%
	Nov '13	40	39.	0.	139.	178.	29825	9.	1716	31541	5%
	Dec '13	41	6.	0.	139.	145.	29970	0.	1716	31686	5%
	Jan '14	42	0.	0.	139.	139.	30109	12.	1728	31837	5%
	Feb '14	43	69.	0.	139.	208.	30317	16.	1744	32061	5%
	Mar '14	44	20.	0.	139.	159.	30476	0.	1744	32220	5%
	Apr '14	45	17.	0.	139.	156.	30632	2.	1746	32378	5%
	May '14	46	0.	0.	139.	139.	30771	12.	1758	32529	5%
	Jun '14	47	0.	0.	139.	139.	30910	0.	1758	32668	5%
2014/15	Jul '14	48	0.	0.	139.	139.	31049	0.	1758	32807	5%
	Aug '14	49	6.	0.	139.	145.	31193	0.	1758	32951	5%
	Sep '14	50	1.	0.	139.	140.	31333	1.	1759	33092	5%
	Oct '14	51	0.	0.	139.	139.	31472	0.	1759	33231	5%
	Nov '14	52	18.	0.	139.	157.	31629	0.	1759	33388	5%
	Dec '14	53	247.	0.	139.	386.	32015	0.	1759	33774	5%
	Jan '15	54	- 6.	0.	139.	133.	32148	0.	1759	33907	5%
	Feb '15	55	39.	0.	139.	178.	32326	0.	1759	34085	5%
	Mar '15	56	2.	0.	139.	141.	32467	0.	1759	34226	5%
	Apr '15	57	0.	0.	139.	139.	32606	0.	1759	34365	5%
	May '15	58	17.	0.	139.	156.	32368	0.	1759	34127	5%
	Jun '15	59	0.	0.	139.	139.	31316	0.	1759	33075	5%
2015/16	Jul '15	60	9.	0.	139	148	30995	0.	1759	32754	5%
	Aug '15	61	0.	0.	139	139	30921	0.	1759	32680	5%
	Sep '15	62	53.	0.	139	192	30555	0.	1759	32314	5%
	Oct '15	63	47.	0.	139	186	30166	0.	1759	31925	6%
	Nov '15	64	1.	0.	139	140	29164	0.	1759	30923	6%
	Dec '15	65	80.	0.	139	219	28396	0.	1759	30155	6%
	Jan '16	66	244.	0.	139	383	27811	0.	1759	29570	6%
	Feb '16	67	33.	0.	139	172	26859	0.	1759	28618	6%
	Mar '16	68	88.	0.	139	227	26122	0.	1759	27881	6%
	Apr '16	69	29.	0.	139	168	25103	0.	1759	26862	7%
	May '16	70	1.	0.	139	140	23857	0.	1759	25616	7%
	Jun '16	71	0.	0.	139	139	23047	0.	1759	24806	7%
2016/17	Jul '16	72	0.	0.	139	139	23171	0.	1759	24930	7%
	Aug '16	73	0.	0.	139	139	22280	0.	1759	24039	7%
	Sep '16	74	0.	0.	139	139	21413	0.	1759	23172	8%
	Oct '16	75	16.	0.	139	155	20557	0.	1759	22316	8%
	Nov '16	76	12.	14.	139	165	20157	0.	1759	21916	8%
	Dec '16	77	156.	0.	139	295	19433	0.	1759	21192	8%
	Jan '17	78	488.	0.	139	627	19123	0.	1759	20882	8%
	Feb '17	79	93.	0.	139	232	19013	0.	1759	20772	8%
	Mar '17	80	90.		139	229	19237	0.	1759	20996	8%
	Apr '17	81	125.		139	264	19498	0.	1759	21257	8%
	May '17	82	22.		139	161	19628	0.	1759	21387	8%
	Jun '17	83	3.		139	142	19740	0.	1759	21499	8%

H I S T O R I C A L



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
2017/18	Jul '17	84	1.		139	140	19880	0.	1759	21639	8%
	Aug '17	85	1.		139	140	20020	0.	1759	21779	8%
	Sep '17	86	5.		139	144	20162	0.	1759	21921	8%
	Oct '17	87	24.		139	163	20319	0.	1759	22078	8%
	Nov '17	88	22.		139	161	20442	0.	1759	22201	8%
	Dec '17	89	145.		139	284	20651	0.	1759	22410	8%
	Jan '18	90	113.		139	252	20350	0.	1759	22109	8%
	Feb '18	91	83.		139	222	20543	0.	1759	22302	8%
	Mar '18	92	90.		139	229	20772	0.	1759	22531	8%
	Apr '18	93	125.		139	264	21036	0.	1759	22795	8%
	May '18	94	22.		139	161	21150	0.	1759	22909	8%
	Jun '18	95	3.		139	142	21292	0.	1759	23051	8%
2018/19	Jul '18	96	1.		139	140.	21432	120.	1879	23311	8%
	Aug '18	97	1.		139	140.	21572	120.	1999	23571	8%
	Sep '18	98	5.		139	144.	21716	120.	2119	23835	9%
	Oct '18	99	24.		139	163.	21879	100.	2219	24098	9%
	Nov '18	100	22.		139	161.	22032	100.	2319	24351	10%
	Dec '18	101	145.		139	284.	22230	0.	2319	24549	9%
	Jan '19	102	113.		139	252.	22466	10.	2329	24795	9%
	Feb '19	103	83.		139	222.	22581	40.	2369	24950	9%
	Mar '19	104	90.		139	229.	22802	40.	2409	25211	10%
	Apr '19	105	125.		139	264.	23066	0.	2409	25475	9%
	May '19	106	22.		139	161.	23227	100.	2509	25736	10%
	Jun '19	107	3.		139	142.	23369	120.	2629	25998	10%
2019/20	Jul '19	108	1.		139	140.	23509	120.	2749	26258	10%
	Aug '19	109	1.		139	140.	23648	120.	2869	26517	11%
	Sep '19	110	5.		139	144.	23792	120.	2989	26781	11%
	Oct '19	111	24.		139	163.	23899	100.	3089	26988	11%
	Nov '19	112	22.		139	161.	24039	100.	3189	27228	12%
	Dec '19	113	145.		139	284.	23989	0.	3189	27178	12%
	Jan '20	114	113.		139	252.	23951	10.	3199	27150	12%
	Feb '20	115	83.		139	222.	23950	40.	3239	27189	12%
	Mar '20	116	90.		139	229.	24163	40.	3279	27442	12%
	Apr '20	117	125.		139	264.	24374	0.	3279	27653	12%
	May '20	118	22.		139	161.	24535	100.	3379	27914	12%
	Jun '20	119	3.		139	142.	24677	120.	3499	28176	12%
2020/21	Jul '20	120	1.		139	140.	24817	120.	3569	28386	13%
	Aug '20	121	1.		139	140.	24957	120.	3645	28602	13%
	Sep '20	122	5.		139	144.	25101	120.	3723	28824	13%
	Oct '20	123	24.		139	163.	25169	100.	3750	28919	13%
	Nov '20	124	22.		139	161.	25110	100.	3837	28947	13%
	Dec '20	125	145.		139	284.	24678	0.	3805	28483	13%
	Jan '21	126	113.		139	252.	24778	10.	3743	28521	13%
	Feb '21	127	83.		139	222.	24718	40.	3783	28501	13%
	Mar '21	128	90.		139	229.	24675	40.	3823	28498	13%
	Apr '21	129	125.		139	264.	24800	0.	3823	28623	13%
	May '21	130	22.		139	161.	24277	100.	3887	28164	14%
	Jun '21	131	3.		139	142.	23111	120.	3973	27084	15%
2021/22	Jul '21	132	1.		139	140.	22101	120.	3980	26081	15%
	Aug '21	133	1.		139	140.	22091	120.	4010	26101	15%
	Sep '21	134	5.		139	144.	21890	120.	4130	26020	16%
	Oct '21	135	24.		139	163.	21875	100.	4230	26105	16%
	Nov '21	136	22.		139	161.	21865	100.	4330	26195	17%
	Dec '21	137	145.		139	284.	21990	0.	4330	26320	16%
	Jan '22	138	113.		139	252.	22048	10.	4181	26229	16%
	Feb '22	139	83.		139	222.	22077	40.	4147	26224	16%
	Mar '22	140	90.		139	229.	22007	40.	4171	26178	16%
	Apr '22	141	125.		139	264.	22056	0.	4167	26223	16%
	May '22	142	22.		139	161.	22078	100.	4264	26342	16%
	Jun '22	143	3.		139	142.	22081	120.	4330	26411	16%
2022/23	Jul '22	144	1.		139	140.	22082	120.	4328	26410	16%
	Aug '22	145	1.		139	140.	22082	120.	4364	26446	17%
	Sep '22	146	5.		139	144.	22087	120.	4445	26532	17%
	Oct '22	147	24.		139	163.	22110	100.	4482	26592	17%
	Nov '22	148	22.		139	161.	22118	100.	4516	26634	17%
	Dec '22	149	145.		139	284.	22184	0.	4515	26699	17%
	Jan '23	150	113.		139	252.	22276	10.	4466	26742	17%
	Feb '23	151	83.		139	222.	22350	40.	4487	26837	17%
	Mar '23	152	90.		139	229.	22427	40.	4474	26901	17%
	Apr '23	153	125.		139	264.	22547	0.	4433	26980	16%
	May '23	154	22.		139	161.	22565	100.	4507	27072	17%
	Jun '23	155	3.		139	142.	22568	120.	4625	27193	17%

P L A N N E D



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
2023/24	Jul '23	156	1.		139	140.	22569	120.	4745	27314	17%
	Aug '23	157	1.		139	140.	22570	120.	4865	27435	18%
	Sep '23	158	5.		139	144.	22575	120.	4831	27406	18%
	Oct '23	159	24.		139	163.	22588	100.	4862	27450	18%
	Nov '23	160	22.		139	161.	22571	100.	4953	27524	18%
	Dec '23	161	145.		139	284.	22710	0.	4953	27663	18%
	Jan '24	162	113.		139	252.	22823	10.	4951	27774	18%
	Feb '24	163	83.		139	222.	22837	40.	4975	27812	18%
	Mar '24	164	90.		139	229.	22907	40.	5015	27922	18%
	Apr '24	165	125.		139	264.	23015	0.	5013	28028	18%
	May '24	166	22.		139	161.	23037	100.	5101	28138	18%
	Jun '24	167	3.		139	142.	23040	120.	5221	28261	18%
2024/25	Jul '24	168	1.		139	140.	23041	120.	5341	28382	19%
	Aug '24	169	1.		139	140.	23036	120.	5461	28497	19%
	Sep '24	170	5.		139	144.	23040	120.	5580	28620	19%
	Oct '24	171	24.		139	163.	23064	100.	5680	28744	20%
	Nov '24	172	22.		139	161.	23068	100.	5780	28848	20%
	Dec '24	173	145.		139	284.	22966	0.	5780	28746	20%
	Jan '25	174	113.		139	252.	23085	10.	5790	28875	20%
	Feb '25	175	83.		139	222.	23129	40.	5830	28959	20%
	Mar '25	176	90.		139	229.	23217	40.	5870	29087	20%
	Apr '25	177	125.		139	264.	23342	0.	5870	29212	20%
	May '25	178	22.		139	161.	23347	100.	5970	29317	20%
	Jun '25	179	3.		139	142.	23350	120.	6090	29440	21%
2025/26	Jul '25	180	1.		139	140.	23342	120.	6210	29552	21%
	Aug '25	181	1.		139	140.	23343	120.	6330	29673	21%
	Sep '25	182	5.		139	144.	23295	120.	6450	29745	22%
	Oct '25	183	24.		139	163.	23272	100.	6550	29822	22%
	Nov '25	184	22.		139	161.	23293	100.	6650	29943	22%
	Dec '25	185	145.		139	284.	23358	0.	6650	30008	22%
	Jan '26	186	113.		139	252.	23227	10.	6660	29887	22%
	Feb '26	187	83.		139	222.	23277	40.	6700	29977	22%
	Mar '26	188	90.		139	229.	23279	40.	6740	30019	22%
	Apr '26	189	125.		139	264.	23375	0.	6740	30115	22%
	May '26	190	22.		139	161.	23396	100.	6840	30236	23%
	Jun '26	191	3.		139	142.	23399	120.	6960	30359	23%
2026/27	Jul '26	192	1.		139	140.	23400	120.	7080	30480	23%
	Aug '26	193	1.		139	140.	23401	120.	7200	30601	24%
	Sep '26	194	5.		139	144.	23406	120.	7320	30726	24%
	Oct '26	195	24.		139	163.	23414	100.	7420	30834	24%
	Nov '26	196	22.		139	161.	23410	100.	7520	30930	24%
	Dec '26	197	145.		139	284.	23399	0.	7520	30919	24%
	Jan '27	198	113.		139	252.	23024	10.	7530	30554	25%
	Feb '27	199	83.		139	222.	23014	40.	7570	30584	25%
	Mar '27	200	90.		139	229.	23014	40.	7610	30624	25%
	Apr '27	201	125.		139	264.	23014	0.	7610	30624	25%
	May '27	202	22.		139	161.	23014	100.	7710	30724	25%
	Jun '27	203	3.		139	142.	23014	120.	7830	30844	25%

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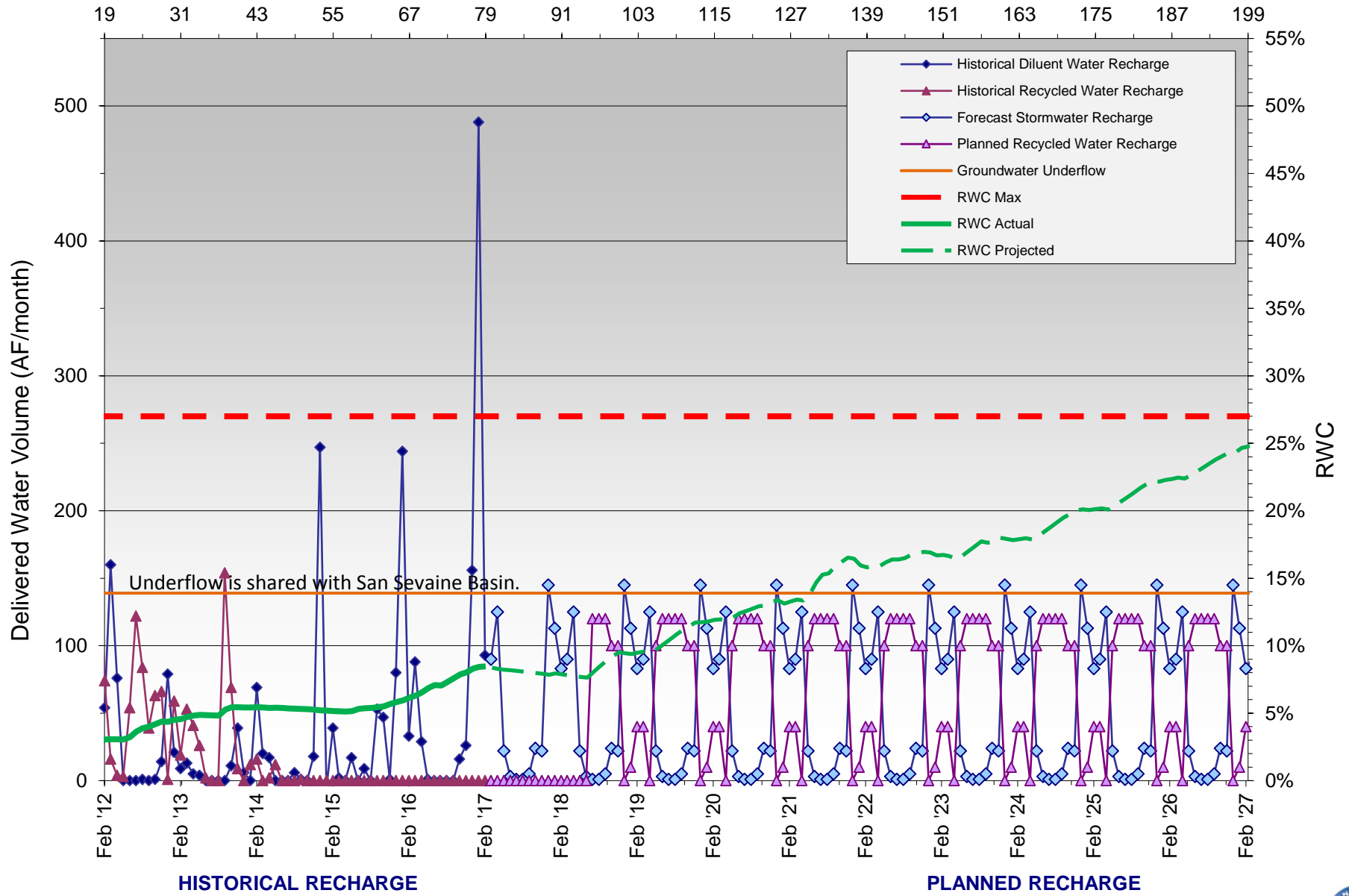
Notes:

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 - San Sevaine Basins 1 through 5

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
2011/12	Jul '11	60	16.	0.	67.3	83.3	10794	0.	763	11557	7%
	Aug '11	61	22.	0.	67.3	89.3	10883	0.	763	11646	7%
	Sep '11	62	2.	0.	67.3	69.3	10952	0.	763	11716	7%
	Oct '11	63	0.	0.	67.3	67.3	11020	0.	763	11783	6%
	Nov '11	64	81.	0.	67.3	148.3	11148	41.	804	11952	7%
	Dec '11	65	88.	0.	67.3	155.3	11285	60.	864	12149	7%
	Jan '12	66	146.	0.	67.3	213.3	11478	29.	893	12371	7%
	Feb '12	67	221.	0.	67.3	288.3	11742	0.	893	12636	7%
	Mar '12	68	295.	0.	67.3	362.3	12092	0.	893	12985	7%
	Apr '12	69	258.	0.	67.3	325.3	12414	0.	893	13307	7%
	May '12	70	14.	0.	67.3	81.3	12494	0.	893	13387	7%
	Jun '12	71	20.	0.	67.3	87.3	12581	0.	893	13474	7%
2012/13	Jul '12	72	83.	0.	67.3	150.3	12731	0.	893	13624	7%
	Aug '12	73	36.	0.	67.3	103.3	12834	0.	893	13728	7%
	Sep '12	74	31.	0.	67.3	98.3	12933	0.	893	13826	6%
	Oct '12	75	61.	0.	67.3	128.3	13061	0.	893	13954	6%
	Nov '12	76	61.	0.	67.3	128.3	13179	0.	893	14072	6%
	Dec '12	77	290.	0.	67.3	357.3	13506	0.	893	14399	6%
	Jan '13	78	149.	0.	67.3	216.3	13722	0.	893	14615	6%
	Feb '13	79	116.	0.	67.3	183.3	13876	26.	919	14795	6%
	Mar '13	80	48.	0.	67.3	115.3	13959	21.	940	14899	6%
	Apr '13	81	0.	0.	67.3	67.3	13989	0.	940	14929	6%
	May '13	82	0.	0.	67.3	67.3	14004	0.	940	14944	6%
	Jun '13	83	0.	0	67.3	67.3	14071	0.	940	15011	6%
2013/14	Jul '13	84	0.	0	67.3	67.3	14138	0.	940	15078	6%
	Aug '13	85	0.	0	67.3	67.3	14205	0.	940	15146	6%
	Sep '13	86	0.	0	67.3	67.3	14273	0.	940	15213	6%
	Oct '13	87	0.	0	67.3	67.3	14340	0.	940	15280	6%
	Nov '13	88	0.	0	67.3	67.3	14407	0.	940	15348	6%
	Dec '13	89	72.	0	67.3	139.3	14547	174.	1114	15661	7%
	Jan '14	90	45.	0	67.3	112.3	14659	102.	1216	15875	8%
	Feb '14	91	94.	0	67.3	161.3	14820	70.	1286	16106	8%
	Mar '14	92	63.	0	67.3	130.3	14950	20.	1306	16257	8%
	Apr '14	93	61.	0	67.3	128.3	15079	105.	1411	16490	9%
	May '14	94	21.	0	67.3	88.3	15167	136.	1547	16714	9%
	Jun '14	95	23.	0	67.3	90.3	15257	32.	1579	16836	9%
2014/15	Jul '14	96	0.	0	67.3	67.3	15324	0.	1579	16904	9%
	Aug '14	97	76.	0	67.3	143.3	15468	205.	1784	17252	10%
	Sep '14	98	54.	0	67.3	121.3	15589	128.	1912	17501	11%
	Oct '14	99	39.	0	67.3	106.3	15635	63.	1975	17610	11%
	Nov '14	100	108.	0	67.3	175.3	15679	58.	2033	17712	11%
	Dec '14	101	255.	0	67.3	322.3	15836	2.	2035	17871	11%
	Jan '15	102	117.	0	67.3	184.3	15924	0.	2035	17959	11%
	Feb '15	103	93.	0	67.3	160.3	15996	60.	2095	18092	12%
	Mar '15	104	52.	0.	67.3	119.3	16050	143.	2238	18288	12%
	Apr '15	105	0.	0.	67.3	67.3	16117	0.	2238	18356	12%
	May '15	106	0.	0.	67.3	67.3	16184	0.	2238	18422	12%
	Jun '15	107	0.	0.	67.3	67.3	16251	0.	2238	18490	12%
2015/16	Jul '15	108	0.	0.	67.3	67.3	16319	0.	2238	18557	12%
	Aug '15	109	1.	0.	67.3	68.3	16387	0.	2238	18625	12%
	Sep '15	110	120.	0.	67.3	187.3	16485	145.	2383	18868	13%
	Oct '15	111	98.	0.	67.3	165.3	16555	238.	2621	19176	14%
	Nov '15	112	45.	0.	67.3	112.3	16489	79.	2700	19189	14%
	Dec '15	113	105.	0.	67.3	172.3	16302	224.	2924	19226	15%
	Jan '16	114	269.	0.	67.3	336.3	16376	102.	3026	19403	16%
	Feb '16	115	51.	0.	67.3	118.3	16343	198.	3224	19567	16%
	Mar '16	116	165.	0.	67.3	232.3	16148	161.	3385	19634	17%
	Apr '16	117	19.	0.	67.3	86.3	15845	128.	3513	19358	18%
	May '16	118	38.	0.	67.3	105.3	15853	156.	3669	19522	19%
	Jun '16	119	5.	0.	67.3	72.3	15914	159.	3828	19743	19%
2016/17	Jul '16	120	4.	0.	67.3	71.3	15923	89.	3895	19818	20%
	Aug '16	121	22.	0.	67.3	89.3	15991	52.	3834	19825	19%
	Sep '16	122	18.	0.	67.3	85.3	15970	40.	3760	19730	19%
	Oct '16	123	38.	0.	67.3	105.3	15911	104.	3864	19775	20%
	Nov '16	124	68.	16.3	67.3	151.6	16034	12.	3876	19909	19%
	Dec '16	125	239.	0.	67.3	306.3	16310	71.	3843	20153	19%
	Jan '17	126	233.	0.	67.3	300.3	16583	0.	3773	20356	19%
	Feb '17	127	130.	0.	67.3	197.3	16769	0.	3729	20497	18%
	Mar '17	128	131.	0.	67.3	198.3	16941	0.	3672	20613	18%
	Apr '17	129	114.	0.	67.3	181.3	17117	0.	3658	20775	18%
	May '17	130	51.	0.	67.3	118.3	17224	40.	3619	20843	17%
	Jun '17	131	22.	0.	67.3	89.3	17312	70.	3686	20998	18%

H I S T O R I C A L



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
2017/18	Jul '17	132	14.		67.3	81.3	17389	80.	3766	21155	18%
	Aug '17	133	24.		67.3	91.3	17443	70.	3836	21279	18%
	Sep '17	134	48.		67.3	115.3	17554	40.	3876	21430	18%
	Oct '17	135	57.		67.3	124.3	17616	30.	3906	21522	18%
	Nov '17	136	80.		67.3	147.3	17667	10.	3916	21583	18%
	Dec '17	137	220.		67.3	287.3	17740	0.	3916	21656	18%
	Jan '18	138	161.		67.3	228.3	17657	0.	3916	21573	18%
	Feb '18	139	173.		67.3	240.3	17646	0.	3916	21562	18%
	Mar '18	140	131.		67.3	198.3	17827	0.	3916	21743	18%
	Apr '18	141	114.		67.3	181.3	17995	0.	3916	21911	18%
	May '18	142	51.		67.3	118.3	17970	40.	3956	21926	18%
	Jun '18	143	22.		67.3	89.3	18048	70.	4026	22074	18%
2018/19	Jul '18	144	14.		67.3	81.3	18123	80.	4106	22229	18%
	Aug '18	145	24.		67.3	91.3	18211	70.	4176	22387	19%
	Sep '18	146	48.		67.3	115.3	18199	40.	4216	22415	19%
	Oct '18	147	57.		67.3	124.3	18243	30.	4218	22461	19%
	Nov '18	148	80.		67.3	147.3	18310	10.	4198	22508	19%
	Dec '18	149	220.		67.3	287.3	18253	0.	4198	22451	19%
	Jan '19	150	161.		67.3	228.3	18452	0.	4198	22650	19%
	Feb '19	151	173.		67.3	240.3	18347	0.	4198	22545	19%
	Mar '19	152	131.		67.3	198.3	18499	0.	4198	22697	18%
	Apr '19	153	114.		67.3	181.3	18669	0.	4198	22867	18%
	May '19	154	51.		67.3	118.3	18769	40.	4208	22977	18%
	Jun '19	155	22.		67.3	89.3	18782	70.	4269	23051	19%
2019/20	Jul '19	156	14.		67.3	81.3	18831	80.	4349	23180	19%
	Aug '19	157	24.		67.3	91.3	18903	70.	4399	23302	19%
	Sep '19	158	48.		67.3	115.3	18990	40.	4421	23411	19%
	Oct '19	159	57.		67.3	124.3	18967	30.	4451	23418	19%
	Nov '19	160	80.		67.3	147.3	18998	10.	4461	23459	19%
	Dec '19	161	220.		67.3	287.3	18817	0.	4461	23278	19%
	Jan '20	162	161.		67.3	228.3	18684	0.	4461	23145	19%
	Feb '20	163	173.		67.3	240.3	18527	0.	4461	22988	19%
	Mar '20	164	131.		67.3	198.3	18624	0.	4461	23085	19%
	Apr '20	165	114.		67.3	181.3	18580	0.	4461	23041	19%
	May '20	166	51.		67.3	118.3	18593	40.	4501	23094	19%
	Jun '20	167	22.		67.3	89.3	18615	70.	4571	23186	20%
2020/21	Jul '20	168	14.		67.3	81.3	18606	80.	4651	23257	20%
	Aug '20	169	24.		67.3	91.3	18577	70.	4713	23290	20%
	Sep '20	170	48.		67.3	115.3	18568	40.	4753	23321	20%
	Oct '20	171	57.		67.3	124.3	18535	30.	4783	23318	21%
	Nov '20	172	80.		67.3	147.3	18450	10.	4793	23243	21%
	Dec '20	173	220.		67.3	287.3	18305	0.	4793	23098	21%
	Jan '21	174	161.		67.3	228.3	18276	0.	4793	23069	21%
	Feb '21	175	173.		67.3	240.3	18216	0.	4793	23009	21%
	Mar '21	176	131.		67.3	198.3	18083	0.	4793	22876	21%
	Apr '21	177	114.		67.3	181.3	17864	0.	4793	22657	21%
	May '21	178	51.		67.3	118.3	17734	40.	4833	22567	21%
	Jun '21	179	22.		67.3	89.3	17666	70.	4903	22569	22%
2021/22	Jul '21	180	14.		67.3	81.3	17664	80.	4983	22647	22%
	Aug '21	181	24.		67.3	91.3	17666	70.	5053	22719	22%
	Sep '21	182	48.		67.3	115.3	17712	40.	5093	22805	22%
	Oct '21	183	57.		67.3	124.3	17769	30.	5123	22892	22%
	Nov '21	184	80.		67.3	147.3	17768	10.	5092	22860	22%
	Dec '21	185	220.		67.3	287.3	17900	0.	5032	22932	22%
	Jan '22	186	161.		67.3	228.3	17915	0.	5003	22918	22%
	Feb '22	187	173.		67.3	240.3	17867	0.	5003	22870	22%
	Mar '22	188	131.		67.3	198.3	17703	0.	5003	22706	22%
	Apr '22	189	114.		67.3	181.3	17559	0.	5003	22562	22%
	May '22	190	51.		67.3	118.3	17596	40.	5043	22639	22%
	Jun '22	191	22.		67.3	89.3	17598	70.	5113	22711	23%
2022/23	Jul '22	192	14.		67.3	81.3	17529	80.	5193	22722	23%
	Aug '22	193	24.		67.3	91.3	17517	70.	5263	22780	23%
	Sep '22	194	48.		67.3	115.3	17534	40.	5303	22837	23%
	Oct '22	195	57.		67.3	124.3	17530	30.	5333	22863	23%
	Nov '22	196	80.		67.3	147.3	17549	10.	5343	22892	23%
	Dec '22	197	220.		67.3	287.3	17479	0.	5343	22822	23%
	Jan '23	198	161.		67.3	228.3	17491	0.	5343	22834	23%
	Feb '23	199	173.		67.3	240.3	17548	0.	5317	22865	23%
	Mar '23	200	131.		67.3	198.3	17631	0.	5296	22927	23%
	Apr '23	201	114.		67.3	181.3	17745	0.	5296	23041	23%
	May '23	202	51.		67.3	118.3	17796	40.	5336	23132	23%
	Jun '23	203	22.		67.3	89.3	17818	70.	5406	23224	23%

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
2023/24	Jul '23	204	14.		67.3	81.3	17832	80.	5486	23318	24%
	Aug '23	205	24.		67.3	91.3	17856	70.	5556	23412	24%
	Sep '23	206	48.		67.3	115.3	17904	40.	5596	23500	24%
	Oct '23	207	57.		67.3	124.3	17961	30.	5626	23587	24%
	Nov '23	208	80.		67.3	147.3	18041	10.	5636	23677	24%
	Dec '23	209	220.		67.3	287.3	18189	0.	5462	23651	23%
	Jan '24	210	161.		67.3	228.3	18305	0.	5360	23665	23%
	Feb '24	211	173.		67.3	240.3	18384	0.	5290	23674	22%
	Mar '24	212	131.		67.3	198.3	18452	0.	5270	23722	22%
	Apr '24	213	114.		67.3	181.3	18505	0.	5165	23670	22%
	May '24	214	51.		67.3	118.3	18535	40.	5069	23604	21%
	Jun '24	215	22.		67.3	89.3	18534	70.	5107	23641	22%
2024/25	Jul '24	216	14.		67.3	81.3	18548	80.	5187	23735	22%
	Aug '24	217	24.		67.3	91.3	18496	70.	5052	23548	21%
	Sep '24	218	48.		67.3	115.3	18490	40.	4964	23454	21%
	Oct '24	219	57.		67.3	124.3	18508	30.	4931	23439	21%
	Nov '24	220	80.		67.3	147.3	18480	10.	4883	23363	21%
	Dec '24	221	220.		67.3	287.3	18445	0.	4881	23326	21%
	Jan '25	222	161.		67.3	228.3	18489	0.	4881	23370	21%
	Feb '25	223	173.		67.3	240.3	18569	0.	4821	23390	21%
	Mar '25	224	131.		67.3	198.3	18648	0.	4678	23326	20%
	Apr '25	225	114.		67.3	181.3	18762	0.	4678	23440	20%
	May '25	226	51.		67.3	118.3	18813	40.	4718	23531	20%
	Jun '25	227	22.		67.3	89.3	18835	70.	4788	23623	20%
2025/26	Jul '25	228	14.		67.3	81.3	18849	80.	4868	23717	21%
	Aug '25	229	24.		67.3	91.3	18872	70.	4938	23810	21%
	Sep '25	230	48.		67.3	115.3	18800	40.	4833	23633	20%
	Oct '25	231	57.		67.3	124.3	18759	30.	4625	23384	20%
	Nov '25	232	80.		67.3	147.3	18794	10.	4556	23350	20%
	Dec '25	233	220.		67.3	287.3	18909	0.	4332	23241	19%
	Jan '26	234	161.		67.3	228.3	18801	0.	4230	23031	18%
	Feb '26	235	173.		67.3	240.3	18923	0.	4032	22955	18%
	Mar '26	236	173.		67.3	240.3	18931	0.	3871	22802	17%
	Apr '26	237	173.		67.3	240.3	19085	0.	3743	22828	16%
	May '26	238	173.		67.3	240.3	19220	40.	3627	22847	16%
	Jun '26	239	173.		67.3	240.3	19388	70.	3538	22926	15%
2026/27	Jul '26	240	14.		67.3	81.3	19398	80.	3529	22927	15%
	Aug '26	241	24.		67.3	91.3	19400	70.	3547	22947	15%
	Sep '26	242	48.		67.3	115.3	19430	40.	3547	22977	15%
	Oct '26	243	57.		67.3	124.3	19449	30.	3473	22922	15%
	Nov '26	244	80.		67.3	147.3	19445	10.	3471	22916	15%
	Dec '26	245	220.		67.3	287.3	19426	0.	3400	22826	15%
	Jan '27	246	161.		67.3	228.3	19354	0.	3400	22754	15%
	Feb '27	247	173.		67.3	240.3	19397	0.	3400	22797	15%
	Mar '27	248	173.		67.3	240.3	19439	0.	3400	22839	15%
	Apr '27	249	173.		67.3	240.3	19498	0.	3400	22898	15%
	May '27	250	173.		67.3	240.3	19620	40.	3400	23020	15%
	Jun '27	251	173.		67.3	240.3	19771	70.	3400	23171	15%

P L A N N E D

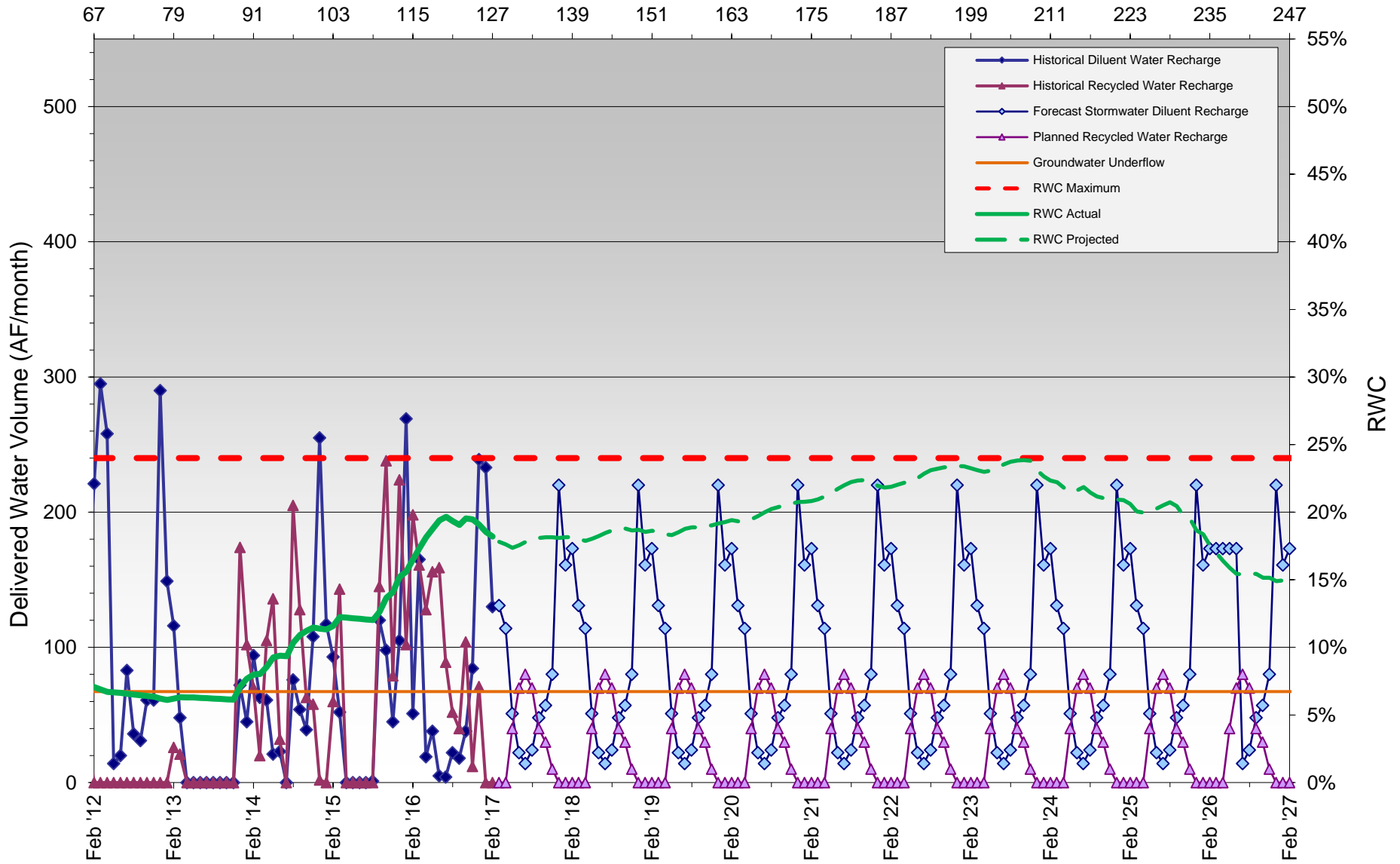
Notes:

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 Turner Basin Cells 1 & 2

Months Since Initial Recycled Water Delivery



HISTORICAL RECHARGE

PLANNED RECHARGE



RWC Management Plan for Turner Basin Cells 3 & 4
(120-month averaging period)

Calculation of Recycled Water Contribution (RWC) from Historical Diluted 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
2011/12	Jul '11	60	0.	0.	59.7	59.7	5492	0.	1090	6581	17%
	Aug '11	61	3.	54.6	59.7	117.3	5609	7.	1097	6706	16%
	Sep '11	62	41.	144.5	59.7	245.2	5854	186.	1283	7137	18%
	Oct '11	63	63.	0.	59.7	122.7	5977	223.	1506	7483	20%
	Nov '11	64	66.	0.	59.7	125.7	6103	96.	1602	7704	21%
	Dec '11	65	69.	0.	59.7	128.7	6232	52.	1654	7885	21%
	Jan '12	66	86.	0.	59.7	145.7	6377	72.	1726	8103	21%
	Feb '12	67	109.	0.	59.7	168.7	6546	97.	1823	8369	22%
	Mar '12	68	126.	0.	59.7	185.7	6732	35.	1858	8589	22%
	Apr '12	69	88.	0.	59.7	147.7	6880	15.	1873	8752	21%
	May '12	70	40.	0.	59.7	99.7	6979	56.	1929	8908	22%
	Jun '12	71	25.	0.	59.7	84.7	7064	65.	1994	9058	22%
2012/13	Jul '12	72	25.	0.	59.7	84.7	7149	51.	2045	9193	22%
	Aug '12	73	36.	0.	59.7	95.7	7245	35.	2080	9324	22%
	Sep '12	74	31.	0.	59.7	90.7	7335	24.	2104	9439	22%
	Oct '12	75	22.	0.	59.7	81.7	7417	9.	2113	9530	22%
	Nov '12	76	30.	0.	59.7	89.7	7507	5.	2118	9624	22%
	Dec '12	77	47.	0.	59.7	106.7	7614	5.	2123	9736	22%
	Jan '13	78	15.	0.	59.7	74.7	7688	0.	2123	9811	22%
	Feb '13	79	25.	0.	59.7	84.7	7773	0.	2123	9896	21%
	Mar '13	80	14.	0.	59.7	73.7	7847	0.	2123	9969	21%
	Apr '13	81	0.	0.	59.7	59.7	7907	0.	2123	10029	21%
	May '13	82	0.	0.	59.7	59.7	7966	0.	2123	10089	21%
	Jun '13	83	0.	0.	59.7	59.7	8026	0.	2123	10149	21%
2013/14	Jul '13	84	0.	0.	59.7	59.7	8086	0.	2123	10208	21%
	Aug '13	85	0.	0.	59.7	59.7	8146	0.	2123	10268	21%
	Sep '13	86	24.	0.	59.7	83.7	8229	107.	2230	10459	21%
	Oct '13	87	20.	0.	59.7	79.7	8309	117.	2347	10656	22%
	Nov '13	88	17.	0.	59.7	76.7	8386	89.	2436	10821	23%
	Dec '13	89	5.	0.	59.7	64.7	8451	85.	2521	10971	23%
	Jan '14	90	16.	0.	59.7	75.7	8526	139.	2660	11186	24%
	Feb '14	91	62.	0.	59.7	121.7	8648	120.	2780	11428	24%
	Mar '14	92	50.	0.	59.7	109.7	8758	47.	2827	11584	24%
	Apr '14	93	0.	0.	59.7	59.7	8817	0.	2827	11644	24%
	May '14	94	23.	0.	59.7	82.7	8900	168.	2995	11895	25%
	Jun '14	95	12.	0.	59.7	71.7	8972	54.	3049	12021	25%
2014/15	Jul '14	96	11.	0.	59.7	70.7	9043	0.	3049	12091	25%
	Aug '14	97	0.	0.	59.7	59.7	9102	0.	3049	12151	25%
	Sep '14	98	0.	0.	59.7	59.7	9162	0.	3049	12211	25%
	Oct '14	99	0.	0.	59.7	59.7	9101	0.	3049	12150	25%
	Nov '14	100	0.	0.	59.7	59.7	9033	0.	3049	12081	25%
	Dec '14	101	348.	0.	59.7	407.7	9223	0.	3049	12271	25%
	Jan '15	102	4.	0.	59.7	63.7	9029	0.	3049	12078	25%
	Feb '15	103	65.	0.	59.7	124.7	8922	53.	3102	12023	26%
	Mar '15	104	71.	0.	59.7	130.7	8878	155.	3257	12135	27%
	Apr '15	105	39.	0.	59.7	98.7	8977	0.	3257	12233	27%
	May '15	106	0.	0.	59.7	59.7	9036	0.	3257	12293	26%
	Jun '15	107	2.	0.	59.7	61.7	9098	81.	3338	12435	27%
2015/16	Jul '15	108	87.	0.	59.7	146.7	9245	85.	3423	12667	27%
	Aug '15	109	15.	0.	59.7	74.7	9319	163.	3586	12905	28%
	Sep '15	110	74.	0.	59.7	133.7	9453	51.	3637	13090	28%
	Oct '15	111	64.	0.	59.7	123.7	9577	65.	3702	13278	28%
	Nov '15	112	44.	0.	59.7	103.7	9681	3.	3705	13385	28%
	Dec '15	113	144.	0.	59.7	203.7	9760	1.	3706	13466	28%
	Jan '16	114	82.	0.	59.7	141.7	9827	0.	3706	13533	27%
	Feb '16	115	41.	0.	59.7	100.7	9857	0.	3706	13563	27%
	Mar '16	116	47.	0.	59.7	106.7	9792	0.	3706	13498	27%
	Apr '16	117	49.	0.	59.7	108.7	9641	0.	3706	13346	28%
	May '16	118	33.	0.	59.7	92.7	9661	0.	3706	13367	28%
	Jun '16	119	20.	0.	59.7	79.7	9654	0.	3706	13360	28%
2016/17	Jul '16	120	15.	0.	59.7	74.7	9699	0.	3568	13266	27%
	Aug '16	121	1.	0.	59.7	60.7	9726	0.	3333	13058	26%
	Sep '16	122	0.	0.	59.7	59.7	9763	0.	3293	13056	25%
	Oct '16	123	1.	0.	59.7	60.7	9759	0.	3293	13052	25%
	Nov '16	124	0.	0.	59.7	59.7	9803	0.	3293	13096	25%
	Dec '16	125	316.	0.	59.7	375.7	10165	0.	3227	13392	24%
	Jan '17	126	298.	0.	59.7	357.7	10513	40.	3236	13749	24%
	Feb '17	127	171.	0.	59.7	230.7	10735	40.	3255	13990	23%
	Mar '17	128	69.	0.	59.7	128.7	10859	50.	3289	14148	23%
	Apr '17	129	44.	0.	59.7	103.7	10960	80.	3361	14321	23%
	May '17	130	20.	0.	59.7	79.7	11032	100.	3404	14436	24%
	Jun '17	131	19.	0.	59.7	78.7	11101	100.	3504	14605	24%

H I S T O R I C A L



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
2017/18	Jul '17	132	21.		59.7	80.7	11180	100.	3604	14784	24%
	Aug '17	133	14.		59.7	73.7	11244	110.	3714	14958	25%
	Sep '17	134	20.		59.7	79.7	11312	100.	3814	15126	25%
	Oct '17	135	30.		59.7	89.7	11399	90.	3904	15303	26%
	Nov '17	136	34.		59.7	93.7	11426	90.	3994	15420	26%
	Dec '17	137	120.		59.7	179.7	11544	0.	3994	15538	26%
	Jan '18	138	88.		59.7	147.7	11549	30.	4024	15573	26%
	Feb '18	139	84.		59.7	143.7	11684	40.	4064	15748	26%
	Mar '18	140	69.		59.7	128.7	11812	50.	4114	15926	26%
	Apr '18	141	44.		59.7	103.7	11912	80.	4194	16106	26%
	May '18	142	20.		59.7	79.7	11954	100.	4294	16248	26%
	Jun '18	143	19.		59.7	78.7	12005	100.	4394	16399	27%
2018/19	Jul '18	144	21.		59.7	80.7	12081	100.	4494	16575	27%
	Aug '18	145	14.		59.7	73.7	12150	110.	4604	16754	27%
	Sep '18	146	20.		59.7	79.7	12216	100.	4704	16920	28%
	Oct '18	147	30.		59.7	89.7	12269	90.	4728	16997	28%
	Nov '18	148	34.		59.7	93.7	12326	90.	4810	17136	28%
	Dec '18	149	120.		59.7	179.7	12456	0.	4810	17266	28%
	Jan '19	150	88.		59.7	147.7	12594	30.	4840	17434	28%
	Feb '19	151	84.		59.7	143.7	12670	40.	4880	17550	28%
	Mar '19	152	69.		59.7	128.7	12788	50.	4930	17718	28%
	Apr '19	153	44.		59.7	103.7	12890	80.	5010	17900	28%
	May '19	154	20.		59.7	79.7	12969	100.	5110	18079	28%
	Jun '19	155	19.		59.7	78.7	13048	100.	5210	18258	29%
2019/2020	Jul '19	156	21.		59.7	80.7	13128	100.	5310	18438	29%
	Aug '19	157	14.		59.7	73.7	13202	110.	5420	18622	29%
	Sep '19	158	20.		59.7	79.7	13282	100.	5520	18802	29%
	Oct '19	159	30.		59.7	89.7	13312	90.	5610	18922	30%
	Nov '19	160	34.		59.7	93.7	13343	90.	5700	19043	30%
	Dec '19	161	120.		59.7	179.7	13365	0.	5637	19002	30%
	Jan '20	162	88.		59.7	147.7	13268	30.	5540	18808	29%
	Feb '20	163	84.		59.7	143.7	13177	40.	5580	18757	30%
	Mar '20	164	69.		59.7	128.7	13132	50.	5586	18718	30%
	Apr '20	165	44.		59.7	103.7	13093	80.	5651	18744	30%
	May '20	166	20.		59.7	79.7	13086	100.	5681	18767	30%
	Jun '20	167	19.		59.7	78.7	13030	100.	5741	18771	31%
2020/21	Jul '20	168	21.		59.7	80.7	12956	100.	5835	18791	31%
	Aug '20	169	14.		59.7	73.7	12886	110.	5923	18809	31%
	Sep '20	170	20.		59.7	79.7	12852	100.	6006	18858	32%
	Oct '20	171	30.		59.7	89.7	12827	90.	6096	18923	32%
	Nov '20	172	34.		59.7	93.7	12822	90.	6186	19008	33%
	Dec '20	173	120.		59.7	179.7	12781	0.	6186	18967	33%
	Jan '21	174	88.		59.7	147.7	12868	30.	6216	19084	33%
	Feb '21	175	84.		59.7	143.7	12902	40.	6256	19158	33%
	Mar '21	176	69.		59.7	128.7	12922	50.	6306	19228	33%
	Apr '21	177	44.		59.7	103.7	12966	80.	6386	19352	33%
	May '21	178	20.		59.7	79.7	12986	100.	6486	19472	33%
	Jun '21	179	19.		59.7	78.7	13005	100.	6586	19591	34%
2021/22	Jul '21	180	21.		59.7	80.7	13026	100.	6686	19712	34%
	Aug '21	181	14.		59.7	73.7	12982	110.	6789	19771	34%
	Sep '21	182	20.		59.7	79.7	12817	100.	6703	19520	34%
	Oct '21	183	30.		59.7	89.7	12784	90.	6570	19354	34%
	Nov '21	184	34.		59.7	93.7	12752	90.	6564	19316	34%
	Dec '21	185	120.		59.7	179.7	12803	0.	6512	19315	34%
	Jan '22	186	88.		59.7	147.7	12805	30.	6470	19275	34%
	Feb '22	187	84.		59.7	143.7	12780	40.	6413	19193	33%
	Mar '22	188	69.		59.7	128.7	12723	50.	6428	19151	34%
	Apr '22	189	44.		59.7	103.7	12679	80.	6493	19172	34%
	May '22	190	20.		59.7	79.7	12659	100.	6537	19196	34%
	Jun '22	191	19.		59.7	78.7	12653	100.	6572	19225	34%
2022/23	Jul '22	192	21.		59.7	80.7	12649	100.	6621	19270	34%
	Aug '22	193	14.		59.7	73.7	12627	110.	6696	19323	35%
	Sep '22	194	20.		59.7	79.7	12616	100.	6772	19388	35%
	Oct '22	195	30.		59.7	89.7	12624	90.	6853	19477	35%
	Nov '22	196	34.		59.7	93.7	12628	90.	6938	19566	35%
	Dec '22	197	120.		59.7	179.7	12701	0.	6933	19634	35%
	Jan '23	198	88.		59.7	147.7	12774	30.	6963	19737	35%
	Feb '23	199	84.		59.7	143.7	12833	40.	7003	19836	35%
	Mar '23	200	69.		59.7	128.7	12888	50.	7053	19941	35%
	Apr '23	201	44.		59.7	103.7	12932	80.	7133	20065	36%
	May '23	202	20.		59.7	79.7	12952	100.	7233	20185	36%
	Jun '23	203	19.		59.7	78.7	12971	100.	7333	20304	36%

P L A N N E D



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
2023/24	Jul '23	204	21.		59.7	80.7	12992	100.	7433	20425	36%
	Aug '23	205	14.		59.7	73.7	13006	110.	7543	20549	37%
	Sep '23	206	20.		59.7	79.7	13002	100.	7536	20538	37%
	Oct '23	207	30.		59.7	89.7	13012	90.	7509	20521	37%
	Nov '23	208	34.		59.7	93.7	13029	90.	7510	20539	37%
	Dec '23	209	120.		59.7	179.7	13144	0.	7425	20569	36%
	Jan '24	210	88.		59.7	147.7	13216	30.	7316	20532	36%
	Feb '24	211	84.		59.7	143.7	13238	40.	7236	20474	35%
	Mar '24	212	69.		59.7	128.7	13257	50.	7239	20496	35%
	Apr '24	213	44.		59.7	103.7	13301	80.	7319	20620	35%
	May '24	214	20.		59.7	79.7	13298	100.	7251	20549	35%
	Jun '24	215	19.		59.7	78.7	13305	100.	7297	20602	35%
2024/25	Jul '24	216	21.		59.7	80.7	13315	100.	7397	20712	36%
	Aug '24	217	14.		59.7	73.7	13329	110.	7507	20836	36%
	Sep '24	218	20.		59.7	79.7	13349	100.	7607	20956	36%
	Oct '24	219	30.		59.7	89.7	13379	90.	7697	21076	37%
	Nov '24	220	34.		59.7	93.7	13413	90.	7787	21200	37%
	Dec '24	221	120.		59.7	179.7	13185	0.	7787	20972	37%
	Jan '25	222	88.		59.7	147.7	13269	30.	7817	21086	37%
	Feb '25	223	84.		59.7	143.7	13288	40.	7804	21092	37%
	Mar '25	224	69.		59.7	128.7	13286	50.	7699	20985	37%
	Apr '25	225	44.		59.7	103.7	13291	80.	7779	21070	37%
	May '25	226	20.		59.7	79.7	13311	100.	7879	21190	37%
	Jun '25	227	19.		59.7	78.7	13328	100.	7898	21226	37%
2025/26	Jul '25	228	21.		59.7	80.7	13262	100.	7913	21175	37%
	Aug '25	229	14.		59.7	73.7	13261	110.	7860	21121	37%
	Sep '25	230	20.		59.7	79.7	13207	100.	7909	21116	37%
	Oct '25	231	30.		59.7	89.7	13173	90.	7934	21107	38%
	Nov '25	232	34.		59.7	93.7	13163	90.	8021	21184	38%
	Dec '25	233	120.		59.7	179.7	13139	0.	8020	21159	38%
	Jan '26	234	88.		59.7	147.7	13145	30.	8050	21195	38%
	Feb '26	235	84.		59.7	143.7	13188	40.	8090	21278	38%
	Mar '26	236	69.		59.7	128.7	13210	50.	8140	21350	38%
	Apr '26	237	44.		59.7	103.7	13205	80.	8220	21425	38%
	May '26	238	20.		59.7	79.7	13192	100.	8320	21512	39%
	Jun '26	239	19.		59.7	78.7	13191	100.	8420	21611	39%
2026/27	Jul '26	240	21.		59.7	80.7	13197	100.	8520	21717	39%
	Aug '26	241	14.		59.7	73.7	13210	110.	8630	21840	40%
	Sep '26	242	20.		59.7	79.7	13230	100.	8730	21960	40%
	Oct '26	243	30.		59.7	89.7	13259	90.	8820	22079	40%
	Nov '26	244	34.		59.7	93.7	13293	90.	8910	22203	40%
	Dec '26	245	120.		59.7	179.7	13097	0.	8910	22007	40%
	Jan '27	246	88.		59.7	147.7	12887	30.	8900	21787	41%
	Feb '27	247	84.		59.7	143.7	12800	40.	8900	21700	41%
	Mar '27	248	69.		59.7	128.7	12800	50.	8900	21700	41%
	Apr '27	249	44.		59.7	103.7	12800	80.	8900	21700	41%
	May '27	250	20.		59.7	79.7	12800	100.	8900	21700	41%
	Jun '27	251	19.		59.7	78.7	12800	100.	8900	21700	41%

P L A N N E D

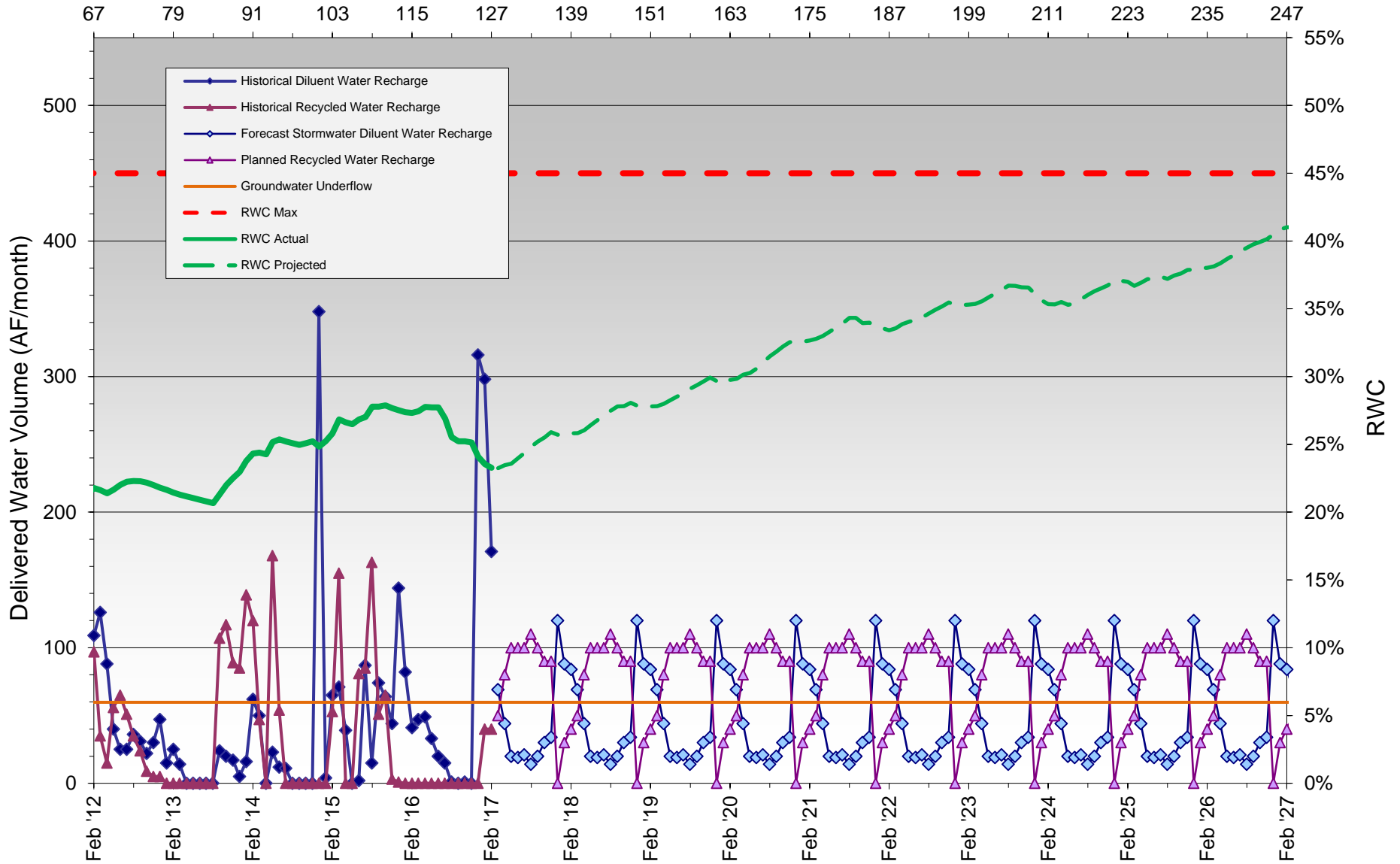
Notes:

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 - 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
2011/12	Jul '11	10	4.	0.	139.	143.	62.	835.	4,623.7	18%	H I S T O R I C A L
	Aug '11	11	1.	122.7	139.	262.7	52.	887.	4,938.4	18%	
	Sep '11	12	0.	158.3	139.	297.3	0.	887.	5,235.6	17%	
	Oct '11	13	30.	0.	139.	169.	0.	887.	5,404.6	16%	
	Nov '11	14	25.	0.	139.	164.	15.	902.	5,583.5	16%	
	Dec '11	15	9.	0.	139.	148.	25.	927.	5,756.5	16%	
	Jan '12	16	11.	0.	139.	150.	0.	927.	5,906.4	16%	
	Feb '12	17	4.	0.	139.	143.	0.	927.	6,049.4	15%	
	Mar '12	18	18.	0.	139.	157.	0.	927.	6,206.3	15%	
	Apr '12	19	96.	0.	139.	235.	18.	945.	6,459.3	15%	
	May '12	20	20.	0.	139.	159.	271.	1,216.	6,889.2	18%	
	Jun '12	21	3.	0.	139.	142.	222.	1,438.	7,253.2	20%	
2012/13	Jul '12	22	3.	0.	139.	142.	94.	1,532.	7,489.1	20%	
	Aug '12	23	5.	0.	139.	144.	118.	1,650.	7,751.1	21%	
	Sep '12	24	1.	0.	139.	140.	55.	1,705.	7,946.	21%	
	Oct '12	25	1.	0.	139.	140.	131.	1,836.	8,217.	22%	
	Nov '12	26	6.	0.	139.	145.	71.	1,907.	8,432.9	23%	
	Dec '12	27	19.	0.	139.	158.	21.	1,928.	8,611.9	22%	
	Jan '13	28	35.	0.	139.	174.	12.	1,940.	8,797.8	22%	
	Feb '13	29	10.	0.	139.	149.	10.	1,950.	8,956.8	22%	
	Mar '13	30	7.	0.	139.	146.	57.	2,007.	9,159.7	22%	
	Apr '13	31	1.	0.	139.	140.	98.	2,105.	9,397.7	22%	
	May '13	32	5.	0.	139.	144.	93.	2,198.	9,634.6	23%	
	Jun '13	33	1.	0.	139.	140.	82.	2,280.	9,856.6	23%	
2013/14	Jul '13	34	2.	0.	139.	141.	74.	2,354.	10,071.5	23%	
	Aug '13	35	2.	0.	139.	141.	42.	2,396.	10,254.5	23%	
	Sep '13	36	2.	0.	139.	141.	46.	2,442.	10,441.4	23%	
	Oct '13	37	7.	0.	139.	146.	0.	2,442.	10,587.4	23%	
	Nov '13	38	12.	0.	139.	151.	0.	2,442.	10,738.3	23%	
	Dec '13	39	10.	0.	139.	149.	118.	2,560.	11,005.3	23%	
	Jan '14	40	2.	0.	139.	141.	158.	2,718.	11,304.3	24%	
	Feb '14	41	37.	0.	139.	176.	191.	2,909.	11,671.2	25%	
	Mar '14	42	99.	0.	139.	238.	142.	3,051.	12,051.2	25%	
	Apr '14	43	15.	0.	139.	154.	250.	3,301.	12,455.1	27%	
	May '14	44	2.	0.	139.	141.	214.	3,515.	12,810.1	27%	
	Jun '14	45	2.	0.	139.	141.	144.	3,659.	13,095.	28%	
2014/15	Jul '14	46	2.	0.	139.	141.	91.	3,750.	13,327.	28%	
	Aug '14	47	5.	0.	139.	144.	107.	3,857.	13,577.9	28%	
	Sep '14	48	2.	0.	139.	141.	155.	4,012.	13,873.9	29%	
	Oct '14	49	3.	0.	139.	142.	75.	4,087.	14,090.8	29%	
	Nov '14	50	57.	0.	139.	196.	4.	4,091.	14,290.8	29%	
	Dec '14	51	153.	0.	139.	292.	0.	4,091.	14,582.7	28%	
	Jan '15	52	18.	0.	139.	157.	63.	4,154.	14,802.7	28%	
	Feb '15	53	40.	0.	139.	179.	57.	4,211.	15,038.6	28%	
	Mar '15	54	12.	0.	139.	151.	79.	4,290.	15,268.6	28%	
	Apr '15	55	0.	0.	139.	139.	127.	4,417.	15,475.5	29%	
	May '15	56	13.	0.	139.	152.	141.	4,558.	15,742.5	29%	
	Jun '15	57	1.	0.	139.	140.	32.	4,590.	15,902.4	29%	
2015/16	Jul '15	58	4.	0.	139.	143.	139.	4,729.	16,184.4	29%	
	Aug '15	59	1.	0.	139.	140.	165.	4,894.	16,489.3	30%	
	Sep '15	60	37.	0.	139.	176.	136.	5,030.	16,801.3	30%	
	Oct '15	61	35.	0.	139.	174.	101.	5,131.	17,027.2	30%	
	Nov '15	62	0.	0.	139.	139.	34.	5,165.	17,200.2	30%	
	Dec '15	63	86.	0.	139.	225.	60.	5,225.	17,475.7	30%	
	Jan '16	64	87.	0.	139.	226.	0.	5,225.	17,675.9	30%	
	Feb '16	65	10.	0.	139.	149.	0.	5,225.	17,782.2	29%	
	Mar '16	66	79.	0.	139.	218.	0.	5,225.	17,890.3	29%	
	Apr '16	67	1.	0.	139.	140.	0.	5,225.	17,971.6	29%	
	May '16	68	0.	0.	139.	139.	0.	5,225.	18,081.8	29%	
	Jun '16	69	0.	0.	139.	139.	0.	5,225.	18,208.8	29%	
2016/17	Jul '16	70	0.	0.	139.	139.	0.	5,225.	18,339.	28%	
	Aug '16	71	0.	0.	139.	139.	0.	5,225.	18,474.9	28%	
	Sep '16	72	0.	0.	139.	139.	53.	5,278.	18,663.8	28%	
	Oct '16	73	10.	0.	139.	149.	142.	5,420.	18,946.7	29%	
	Nov '16	74	24.	7.	139.	170.	218.	5,638.	19,330.7	29%	
	Dec '16	75	185.	0.	139.	324.	106.	5,744.	19,671.8	29%	
	Jan '17	76	327.	0.	139.	466.	100.	5,844.	20,223.1	29%	
	Feb '17	77	65.	0.	139.	204.	100.	5,944.	20,457.3	29%	
	Mar '17	78	37.	0.	139.	176.	150.	6,094.	20,775.	29%	
	Apr '17	79	22.	0.	139.	161.	170.	6,264.	21,071.	30%	
	May '17	80	12.	0.	139.	151.	180.	6,444.	21,394.9	30%	
	Jun '17	81	3.	0.	139.	142.	190.	6,634.	21,717.9	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
2017/18	Jul '17	82	3.	139.	142.	15,225.8	190.	6,824.	22,049.8	31%	P L A N E D
	Aug '17	83	2.	139.	141.	15,366.8	190.	7,014.	22,380.8	31%	
	Sep '17	84	5.	139.	144.	15,505.7	190.	7,204.	22,709.7	32%	
	Oct '17	85	17.	139.	156.	15,653.7	170.	7,374.	23,027.7	32%	
	Nov '17	86	22.	139.	161.	15,765.6	170.	7,544.	23,309.6	32%	
	Dec '17	87	86.	139.	225.	15,924.6	100.	7,644.	23,568.6	32%	
	Jan '18	88	74.	139.	213.	15,957.5	120.	7,764.	23,721.5	33%	
	Feb '18	89	57.	139.	196.	16,092.5	130.	7,894.	23,986.5	33%	
	Mar '18	90	37.	139.	176.	16,266.4	150.	8,044.	24,310.4	33%	
	Apr '18	91	22.	139.	161.	16,420.4	170.	8,214.	24,634.4	33%	
	May '18	92	12.	139.	151.	16,525.3	180.	8,394.	24,919.3	34%	
	Jun '18	93	3.	139.	142.	16,664.3	190.	8,584.	25,248.3	34%	
2018/19	Jul '18	94	3.	139.	142.	16,803.2	190.	8,774.	25,577.2	34%	
	Aug '18	95	2.	139.	141.	16,941.2	190.	8,964.	25,905.2	35%	
	Sep '18	96	5.	139.	144.	17,083.1	190.	9,154.	26,237.1	35%	
	Oct '18	97	17.	139.	156.	17,235.1	170.	9,324.	26,559.1	35%	
	Nov '18	98	22.	139.	161.	17,361.	170.	9,494.	26,855.	35%	
	Dec '18	99	86.	139.	225.	17,512.	100.	9,594.	27,106.	35%	
	Jan '19	100	74.	139.	213.	17,709.9	120.	9,714.	27,423.9	35%	
	Feb '19	101	57.	139.	196.	17,810.9	130.	9,844.	27,654.9	36%	
	Mar '19	102	37.	139.	176.	17,973.9	150.	9,994.	27,967.9	36%	
	Apr '19	103	22.	139.	161.	18,131.8	170.	10,164.	28,295.8	36%	
	May '19	104	12.	139.	151.	18,279.8	180.	10,344.	28,623.8	36%	
	Jun '19	105	3.	139.	142.	18,421.7	190.	10,534.	28,955.7	36%	
2019/20	Jul '19	106	3.	139.	142.	18,562.7	190.	10,724.	29,286.7	37%	
	Aug '19	107	2.	139.	141.	18,703.6	190.	10,914.	29,617.6	37%	
	Sep '19	108	5.	139.	144.	18,847.6	190.	11,104.	29,951.6	37%	
	Oct '19	109	17.	139.	156.	18,964.5	170.	11,274.	30,238.5	37%	
	Nov '19	110	22.	139.	161.	19,106.5	170.	11,444.	30,550.5	37%	
	Dec '19	111	86.	139.	225.	19,242.4	100.	11,544.	30,786.4	37%	
	Jan '20	112	74.	139.	213.	19,302.4	120.	11,664.	30,966.4	38%	
	Feb '20	113	57.	139.	196.	19,324.3	130.	11,794.	31,118.3	38%	
	Mar '20	114	37.	139.	176.	19,500.3	150.	11,944.	31,444.3	38%	
	Apr '20	115	22.	139.	161.	19,641.2	170.	12,114.	31,755.2	38%	
	May '20	116	12.	139.	151.	19,792.2	180.	12,294.	32,086.2	38%	
	Jun '20	117	3.	139.	142.	19,933.1	190.	12,484.	32,417.1	39%	
2020/21	Jul '20	118	3.	139.	142.	20,072.1	190.	12,674.	32,746.1	39%	
	Aug '20	119	2.	139.	141.	20,211.	190.	12,864.	33,075.	39%	
	Sep '20	120	5.	139.	144.	20,353.	190.	12,987.	33,340.	39%	
	Oct '20	121	17.	139.	156.	20,355.	170.	13,004.	33,359.	39%	
	Nov '20	122	22.	139.	161.	20,343.	170.	13,057.	33,400.	39%	
	Dec '20	123	86.	139.	225.	20,187.	100.	13,115.	33,302.	39%	
	Jan '21	124	74.	139.	213.	20,243.	120.	13,149.	33,392.	39%	
	Feb '21	125	57.	139.	196.	20,228.	130.	13,212.	33,440.	40%	
	Mar '21	126	37.	139.	176.	20,206.	150.	13,323.	33,529.	40%	
	Apr '21	127	22.	139.	161.	20,223.	170.	13,493.	33,716.	40%	
	May '21	128	12.	139.	151.	20,160.2	180.	13,532.	33,692.2	40%	
	Jun '21	129	3.	139.	142.	20,160.2	190.	13,661.	33,821.2	40%	
2021/22	Jul '21	130	3.	139.	142.	20,159.2	190.	13,789.	33,948.2	41%	
	Aug '21	131	2.	139.	141.	20,037.5	190.	13,927.	33,964.5	41%	
	Sep '21	132	5.	139.	144.	19,884.2	190.	14,117.	34,001.2	42%	
	Oct '21	133	17.	139.	156.	19,871.2	170.	14,287.	34,158.2	42%	
	Nov '21	134	22.	139.	161.	19,868.2	170.	14,442.	34,310.2	42%	
	Dec '21	135	86.	139.	225.	19,945.2	100.	14,517.	34,462.2	42%	
	Jan '22	136	74.	139.	213.	20,008.2	120.	14,637.	34,645.2	42%	
	Feb '22	137	57.	139.	196.	20,061.2	130.	14,767.	34,828.2	42%	
	Mar '22	138	37.	139.	176.	20,080.2	150.	14,917.	34,997.2	43%	
	Apr '22	139	22.	139.	161.	20,006.2	170.	15,069.	35,075.2	43%	
	May '22	140	12.	139.	151.	19,998.2	180.	14,978.	34,976.2	43%	
	Jun '22	141	3.	139.	142.	19,998.2	190.	14,946.	34,944.2	43%	
2022/23	Jul '22	142	3.	139.	142.	19,998.2	190.	15,042.	35,040.2	43%	
	Aug '22	143	2.	139.	141.	19,995.2	190.	15,114.	35,109.2	43%	
	Sep '22	144	5.	139.	144.	19,999.2	190.	15,249.	35,248.2	43%	
	Oct '22	145	17.	139.	156.	20,015.2	170.	15,288.	35,303.2	43%	
	Nov '22	146	22.	139.	161.	20,031.2	170.	15,387.	35,418.2	43%	
	Dec '22	147	86.	139.	225.	20,098.2	100.	15,466.	35,564.2	43%	
	Jan '23	148	74.	139.	213.	20,137.2	120.	15,574.	35,711.2	44%	
	Feb '23	149	57.	139.	196.	20,184.2	130.	15,694.	35,878.2	44%	
	Mar '23	150	37.	139.	176.	20,214.2	150.	15,787.	36,001.2	44%	
	Apr '23	151	22.	139.	161.	20,235.2	170.	15,859.	36,094.2	44%	
	May '23	152	12.	139.	151.	20,242.2	180.	15,946.	36,188.2	44%	
	Jun '23	153	3.	139.	142.	20,244.2	190.	16,054.	36,298.2	44%	



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
2023/24	Jul '23	154	3.	139.	142.	20,245.2	190.	16,170.	36,415.2	44%	P L A N E D
	Aug '23	155	2.	139.	141.	20,245.2	190.	16,318.	36,563.2	45%	
	Sep '23	156	5.	139.	144.	20,248.2	190.	16,462.	36,710.2	45%	
	Oct '23	157	17.	139.	156.	20,258.2	170.	16,632.	36,890.2	45%	
	Nov '23	158	22.	139.	161.	20,268.2	170.	16,802.	37,070.2	45%	
	Dec '23	159	86.	139.	225.	20,344.2	100.	16,784.	37,128.2	45%	
	Jan '24	160	74.	139.	213.	20,416.2	120.	16,746.	37,162.2	45%	
	Feb '24	161	57.	139.	196.	20,436.2	130.	16,685.	37,121.2	45%	
	Mar '24	162	37.	139.	176.	20,374.2	150.	16,693.	37,067.2	45%	
	Apr '24	163	22.	139.	161.	20,381.2	170.	16,613.	36,994.2	45%	
	May '24	164	12.	139.	151.	20,391.2	180.	16,579.	36,970.2	45%	
	Jun '24	165	3.	139.	142.	20,392.2	190.	16,625.	37,017.2	45%	
2024/25	Jul '24	166	3.	139.	142.	20,393.2	190.	16,724.	37,117.2	45%	
	Aug '24	167	2.	139.	141.	20,390.2	190.	16,807.	37,197.2	45%	
	Sep '24	168	5.	139.	144.	20,393.2	190.	16,842.	37,235.2	45%	
	Oct '24	169	17.	139.	156.	20,407.2	170.	16,937.	37,344.2	45%	
	Nov '24	170	22.	139.	161.	20,372.2	170.	17,103.	37,475.2	46%	
	Dec '24	171	86.	139.	225.	20,305.2	100.	17,203.	37,508.2	46%	
	Jan '25	172	74.	139.	213.	20,361.2	120.	17,260.	37,621.2	46%	
	Feb '25	173	57.	139.	196.	20,378.2	130.	17,333.	37,711.2	46%	
	Mar '25	174	37.	139.	176.	20,403.2	150.	17,404.	37,807.2	46%	
	Apr '25	175	22.	139.	161.	20,425.2	170.	17,447.	37,872.2	46%	
	May '25	176	12.	139.	151.	20,424.2	180.	17,486.	37,910.2	46%	
	Jun '25	177	3.	139.	142.	20,426.2	190.	17,644.	38,070.2	46%	
2025/26	Jul '25	178	3.	139.	142.	20,425.2	190.	17,695.	38,120.2	46%	
	Aug '25	179	2.	139.	141.	20,426.2	190.	17,720.	38,146.2	46%	
	Sep '25	180	5.	139.	144.	20,394.2	190.	17,774.	38,168.2	47%	
	Oct '25	181	17.	139.	156.	20,376.2	170.	17,843.	38,219.2	47%	
	Nov '25	182	22.	139.	161.	20,398.2	170.	17,979.	38,377.2	47%	
	Dec '25	183	86.	139.	225.	20,398.2	100.	18,019.	38,417.2	47%	
	Jan '26	184	74.	139.	213.	20,385.2	120.	18,139.	38,524.2	47%	
	Feb '26	185	57.	139.	196.	20,432.2	130.	18,269.	38,701.2	47%	
	Mar '26	186	37.	139.	176.	20,390.2	150.	18,419.	38,809.2	47%	
	Apr '26	187	22.	139.	161.	20,411.2	170.	18,589.	39,000.2	48%	
	May '26	188	12.	139.	151.	20,423.2	180.	18,769.	39,192.2	48%	
	Jun '26	189	3.	139.	142.	20,426.2	190.	18,959.	39,385.2	48%	
2026/27	Jul '26	190	3.	139.	142.	20,429.2	190.	19,149.	39,578.2	48%	
	Aug '26	191	2.	139.	141.	20,431.2	190.	19,339.	39,770.2	49%	
	Sep '26	192	5.	139.	144.	20,436.2	190.	19,476.	39,912.2	49%	
	Oct '26	193	17.	139.	156.	20,443.2	170.	19,504.	39,947.2	49%	
	Nov '26	194	22.	139.	161.	20,434.2	170.	19,456.	39,890.2	49%	
	Dec '26	195	86.	139.	225.	20,335.2	100.	19,450.	39,785.2	49%	
	Jan '27	196	74.	139.	213.	20,082.2	120.	19,470.	39,552.2	49%	
	Feb '27	197	57.	139.	196.	20,074.2	130.	19,500.	39,574.2	49%	
	Mar '27	198	37.	139.	176.	20,074.2	150.	19,500.	39,574.2	49%	
	Apr '27	199	22.	139.	161.	20,074.2	170.	19,500.	39,574.2	49%	
	May '27	200	12.	139.	151.	20,074.2	180.	19,500.	39,574.2	49%	
	Jun '27	201	3.	139.	142.	20,074.2	190.	19,500.	39,574.2	49%	

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.

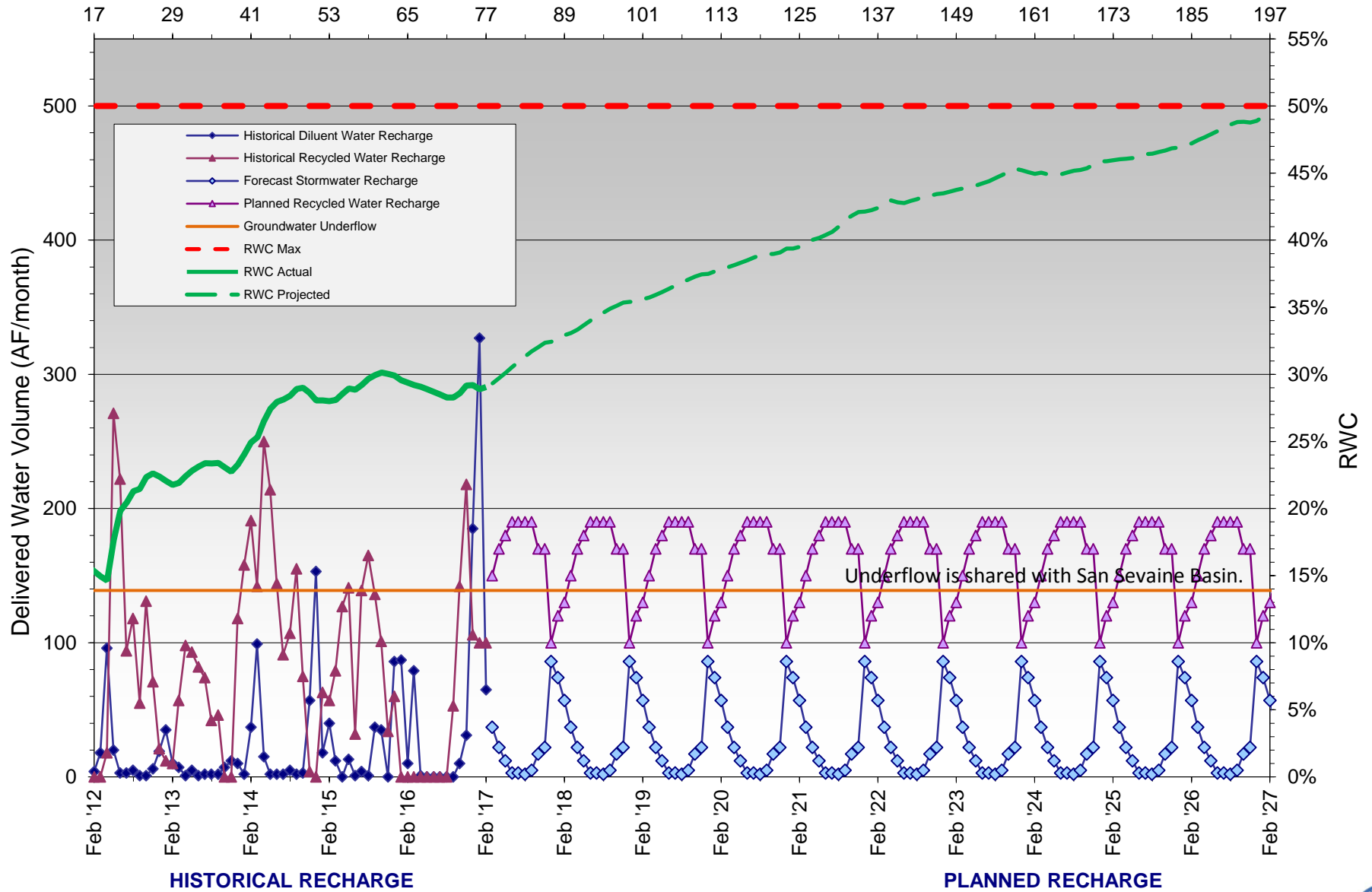
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.

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

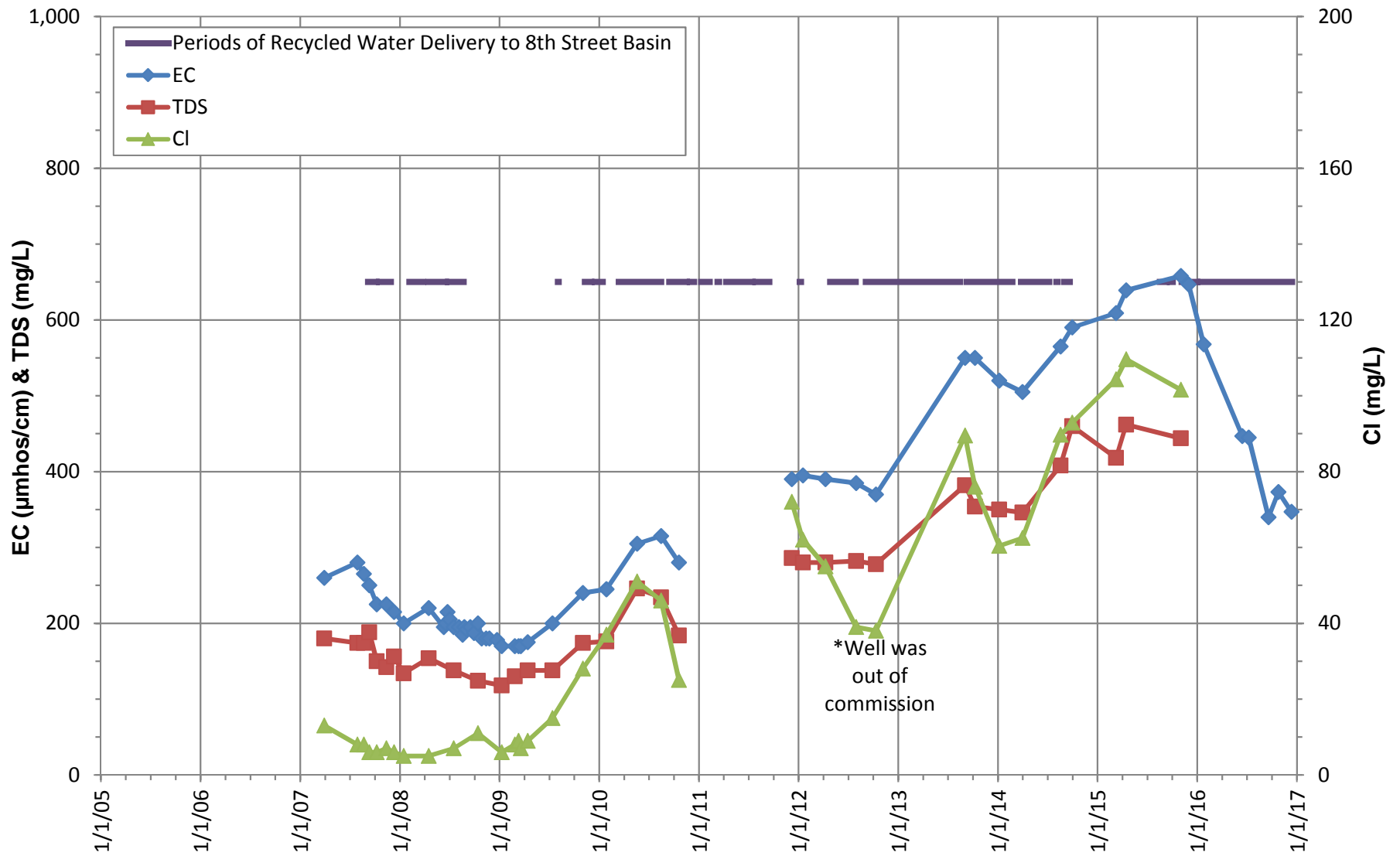
Months Since Initial Recycled Water Delivery



APPENDIX C

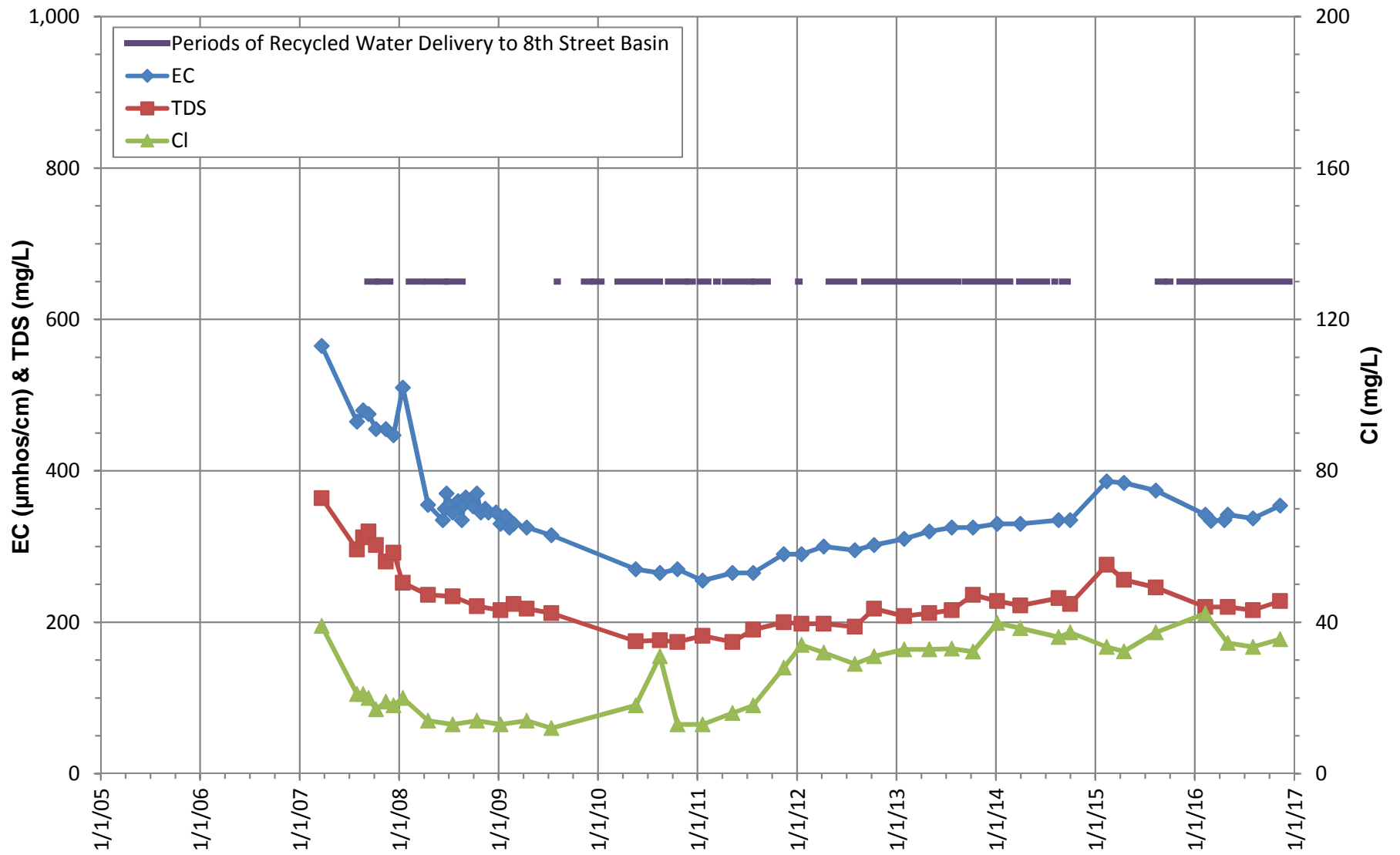
EVIDENCE FOR BLENDING:

EC, TDS, CHLORIDE TIME-SERIES GRAPHS



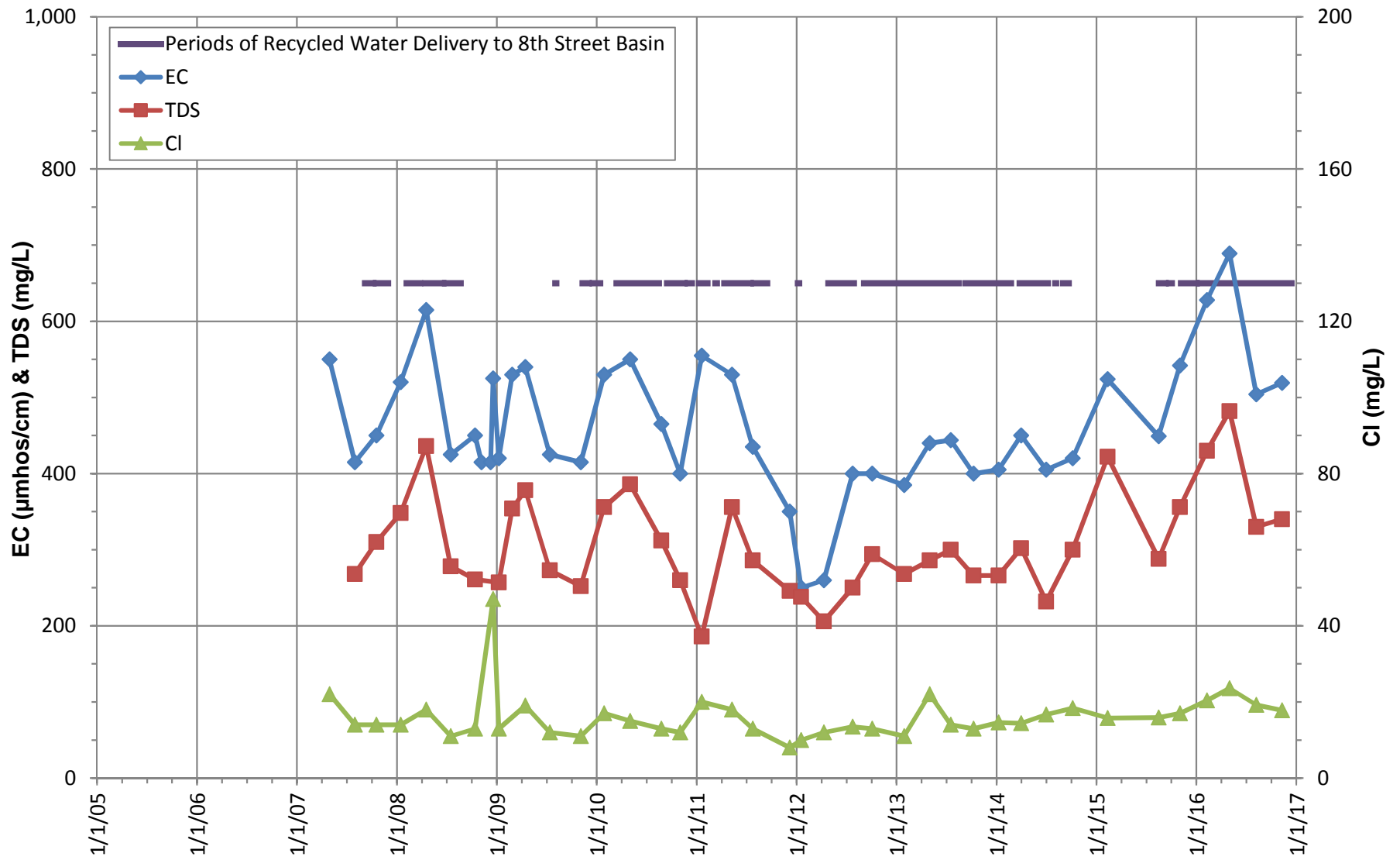
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/1**





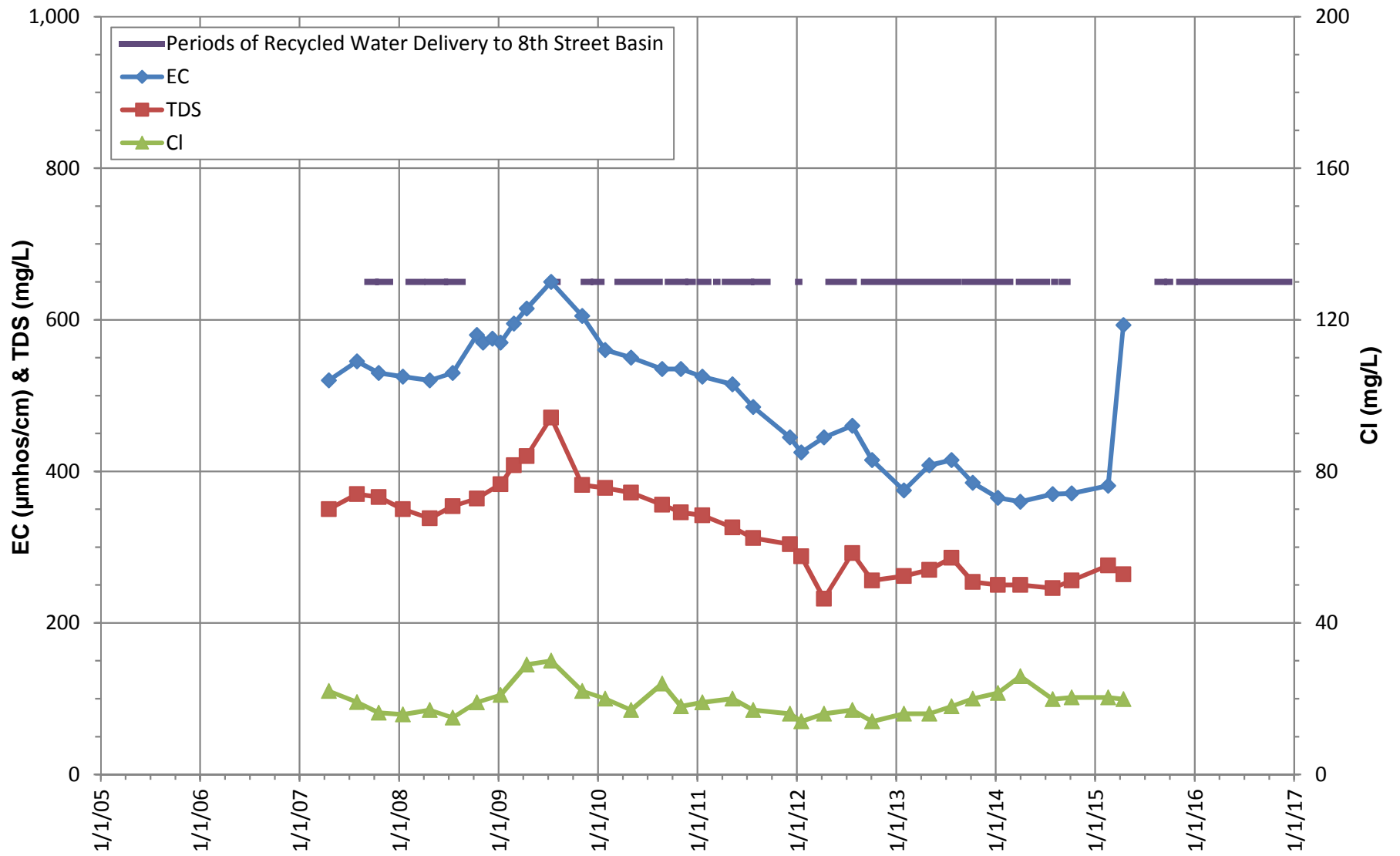
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/2**





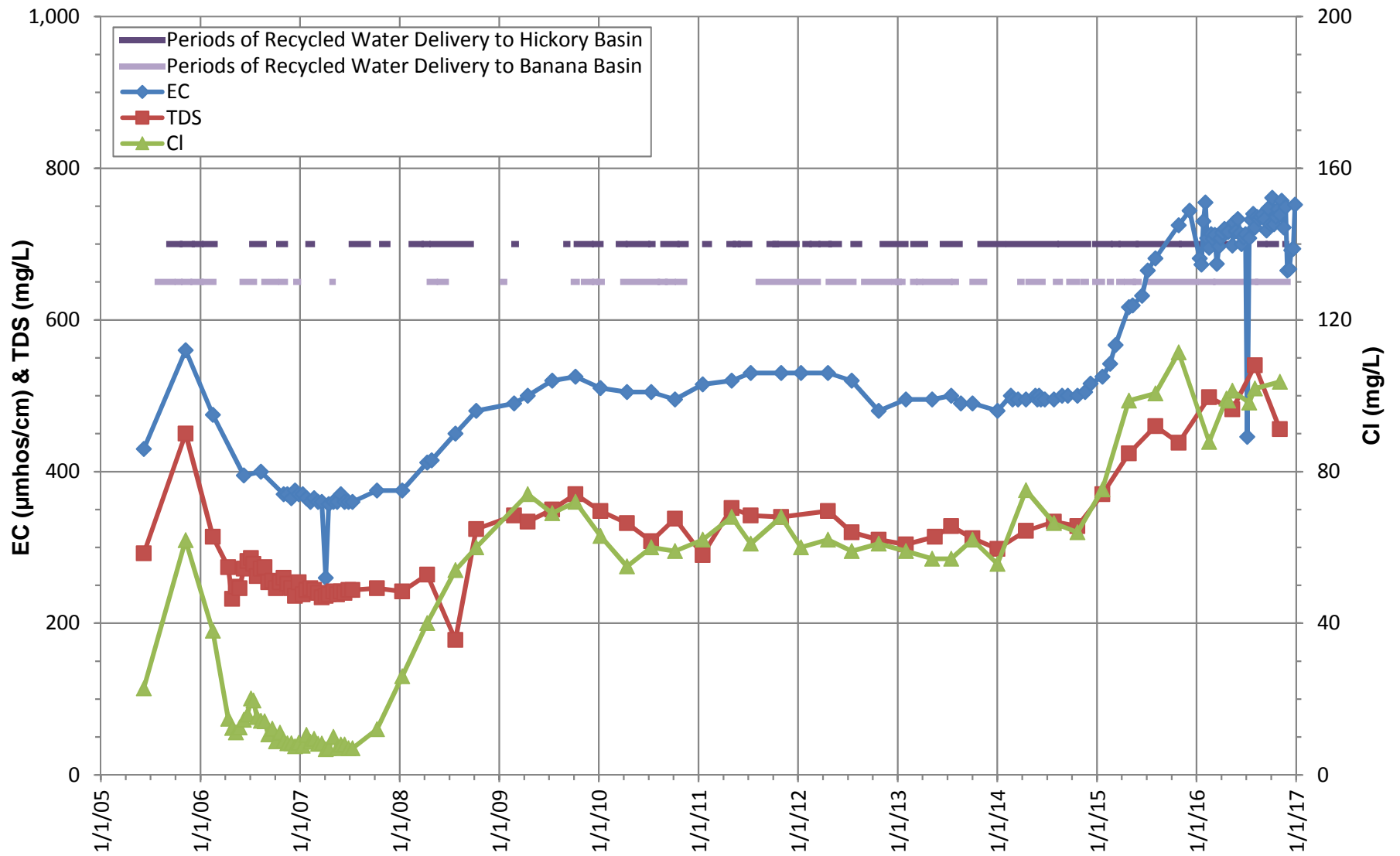
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/1**





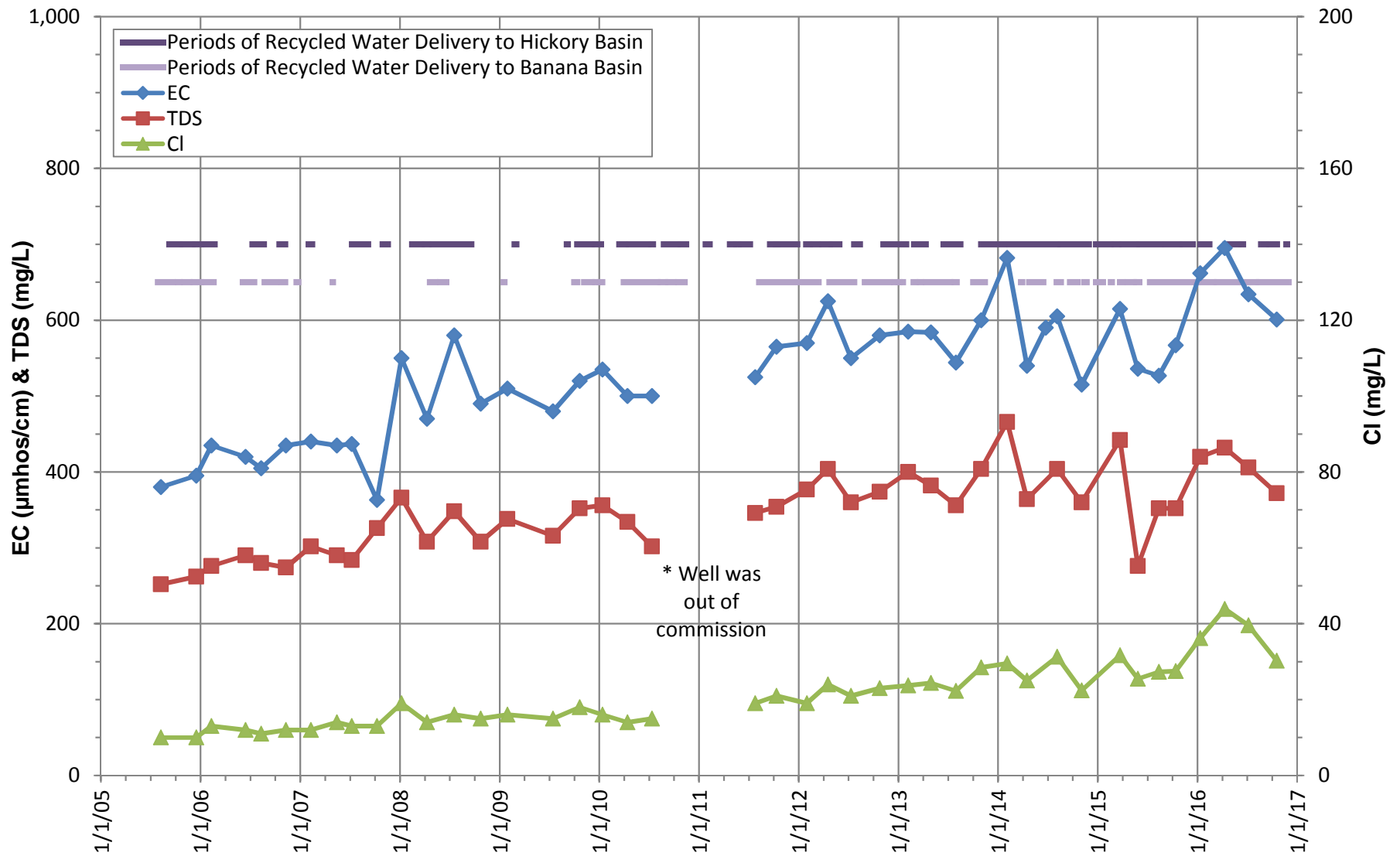
**EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/2**





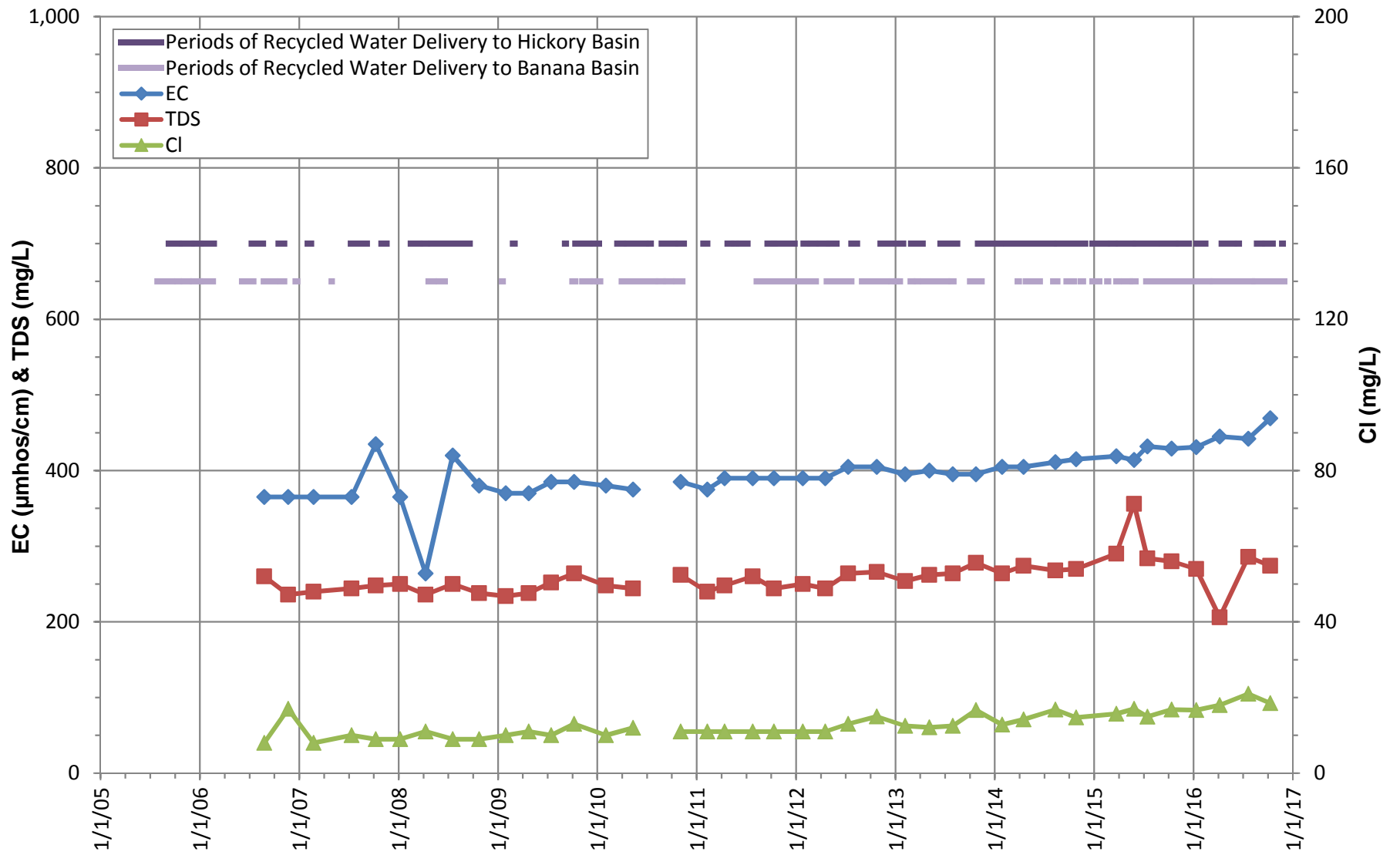
**EC, TDS, CHLORIDE TRENDS
HICKORY BANANA BASINS
MW BH-1/2**





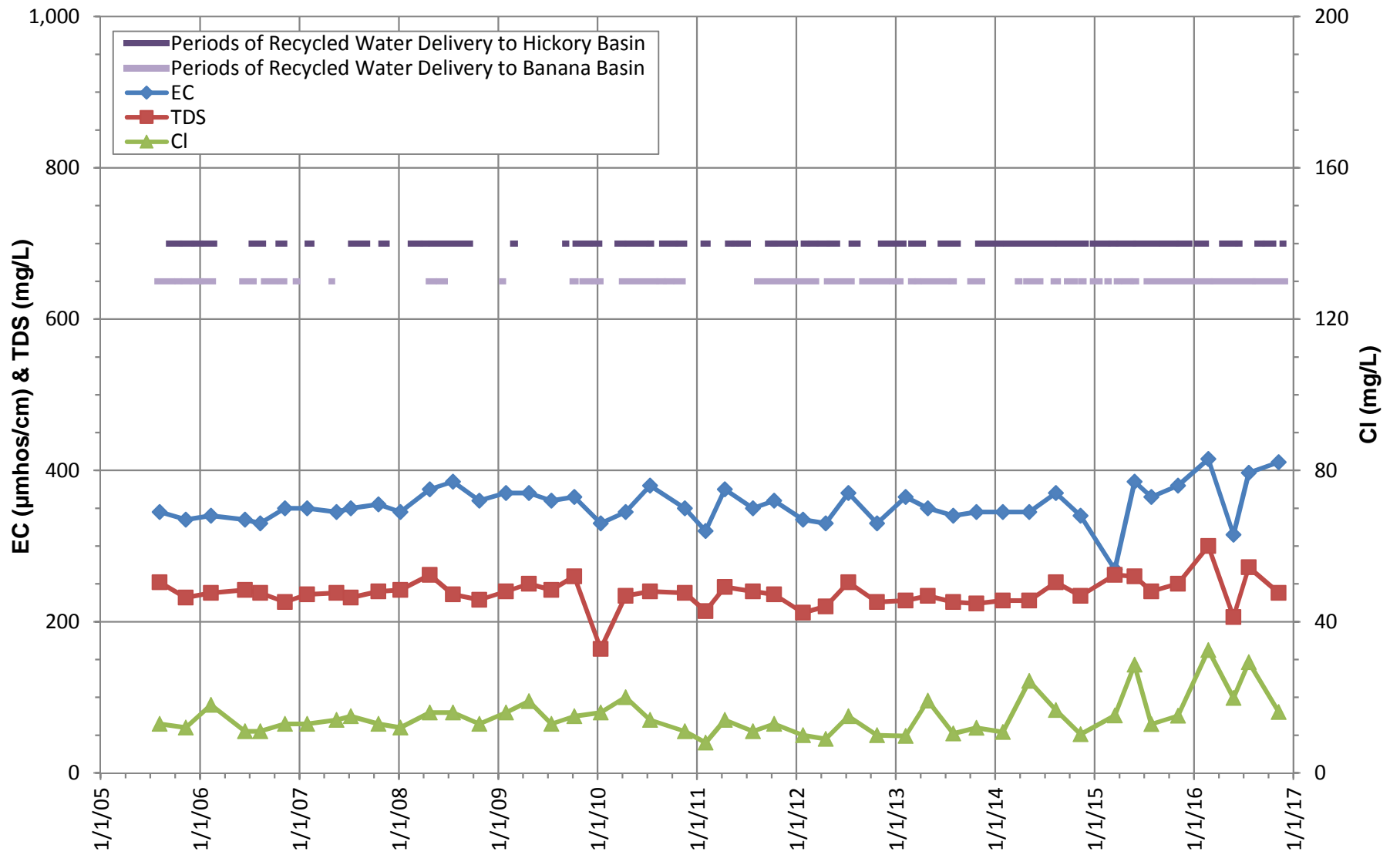
**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY INFIELD WELL**





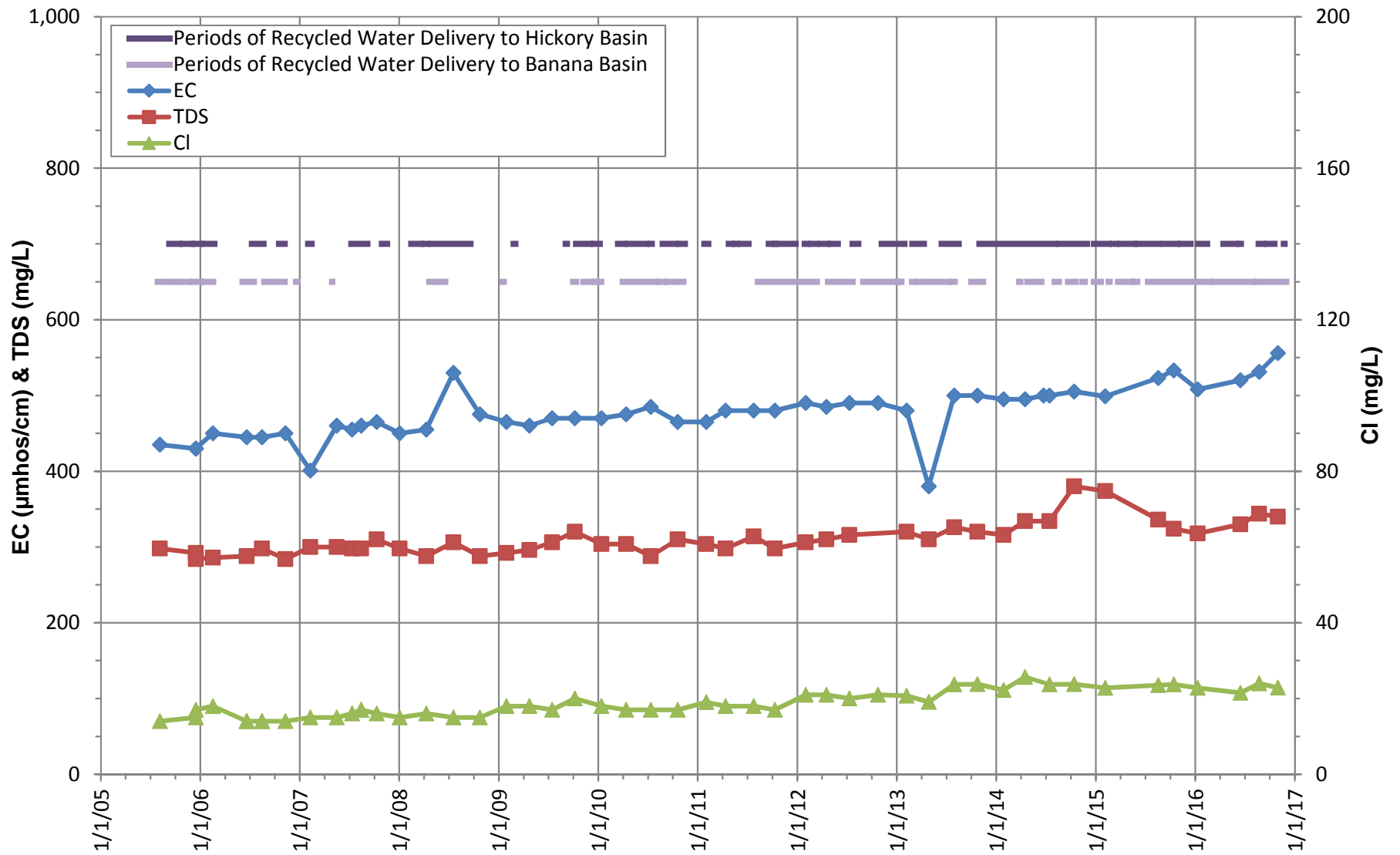
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BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY NO. 2**





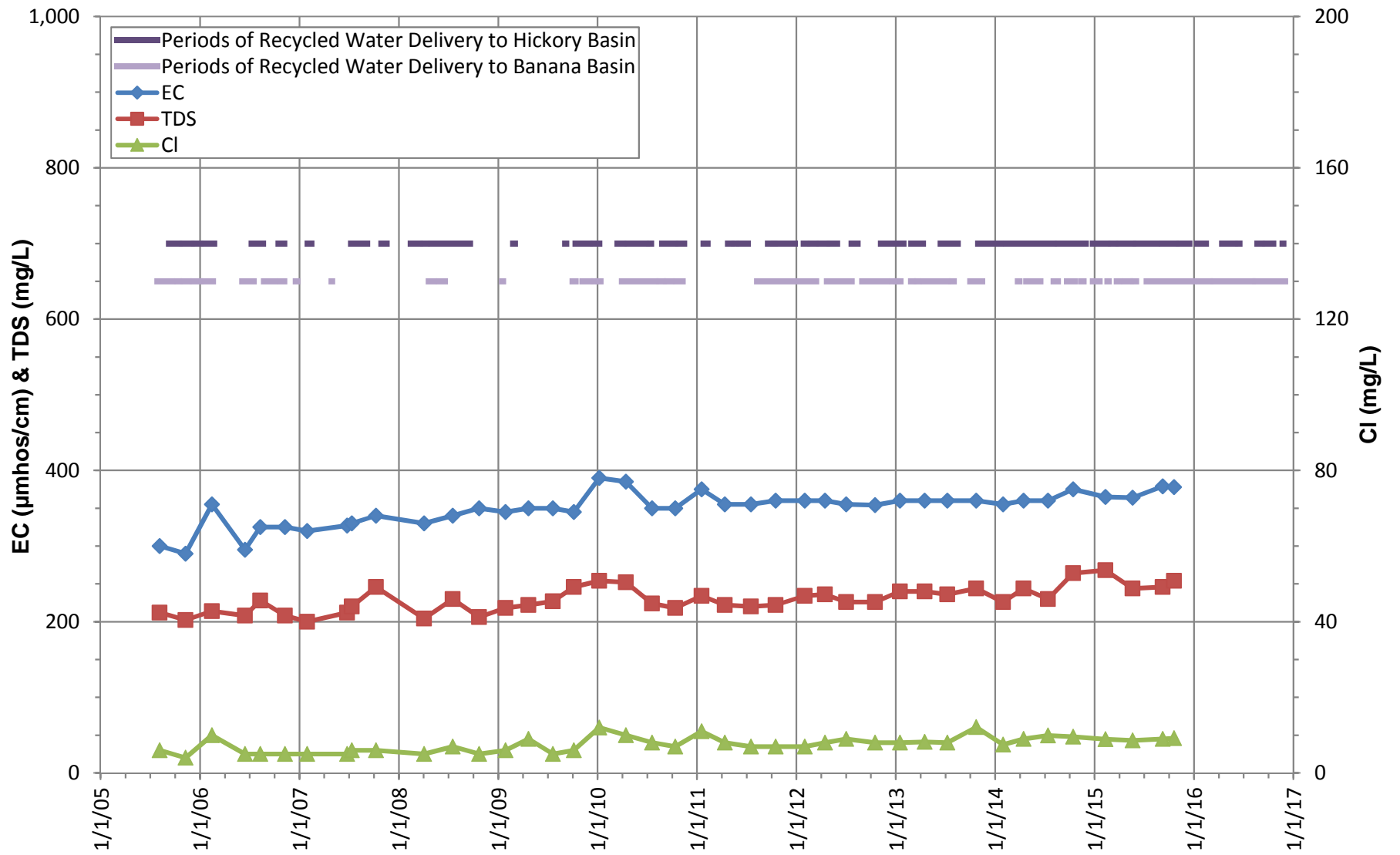
**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
RELIANT EAST WELL**





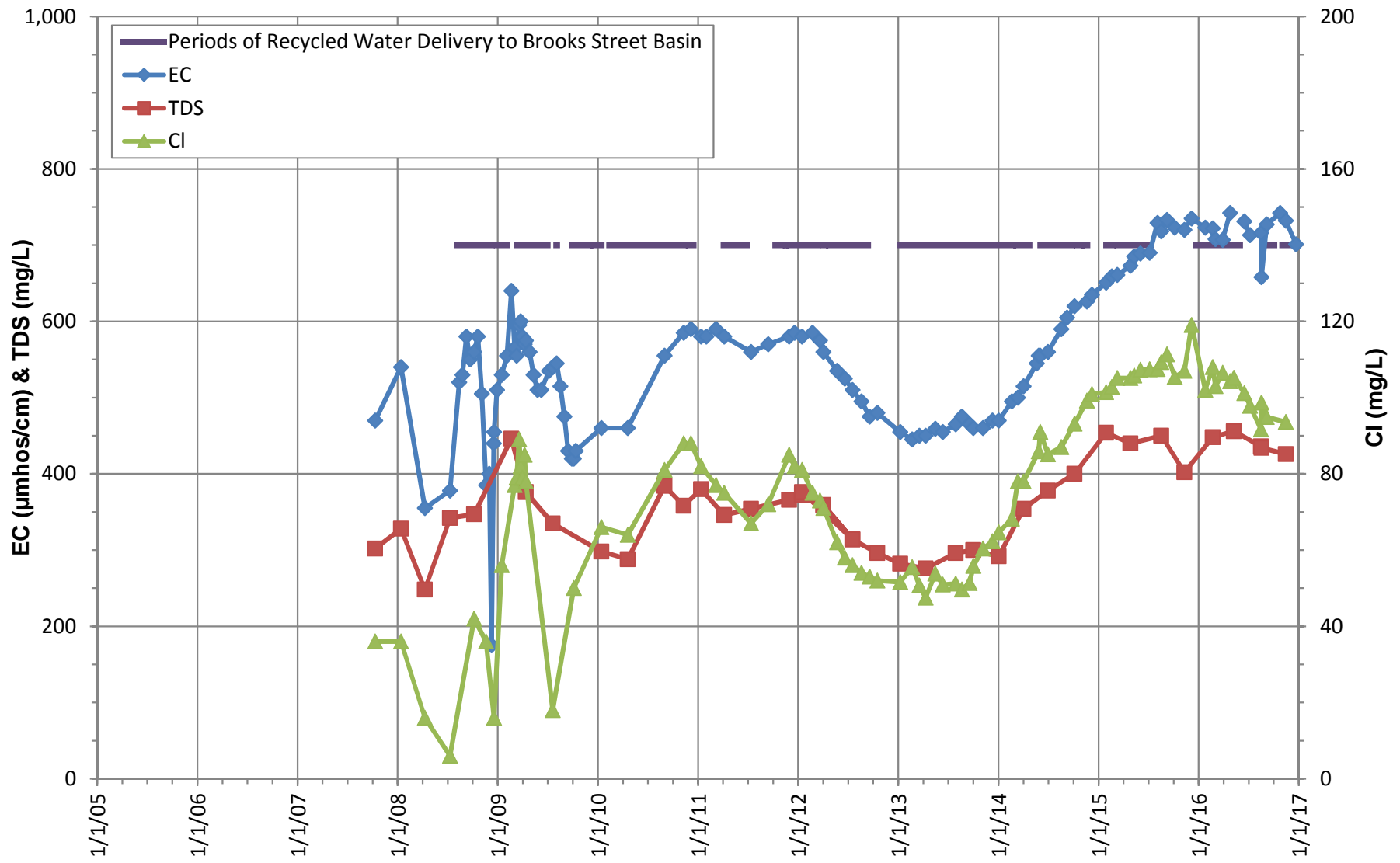
**EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
FONTANA WATER CO. 37A**





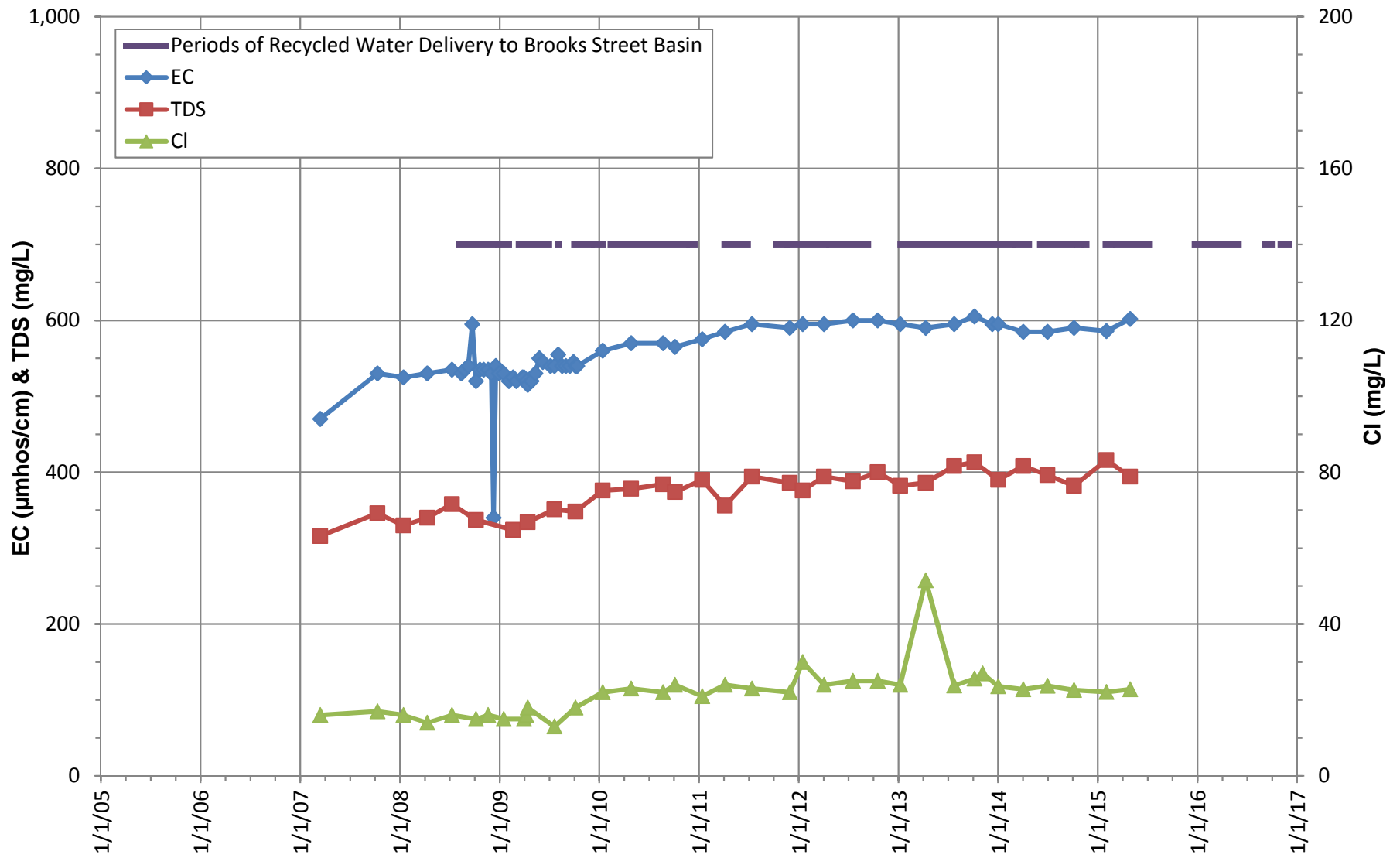
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BANANA-HICKORY BASINS
ONTARIO NO. 20**





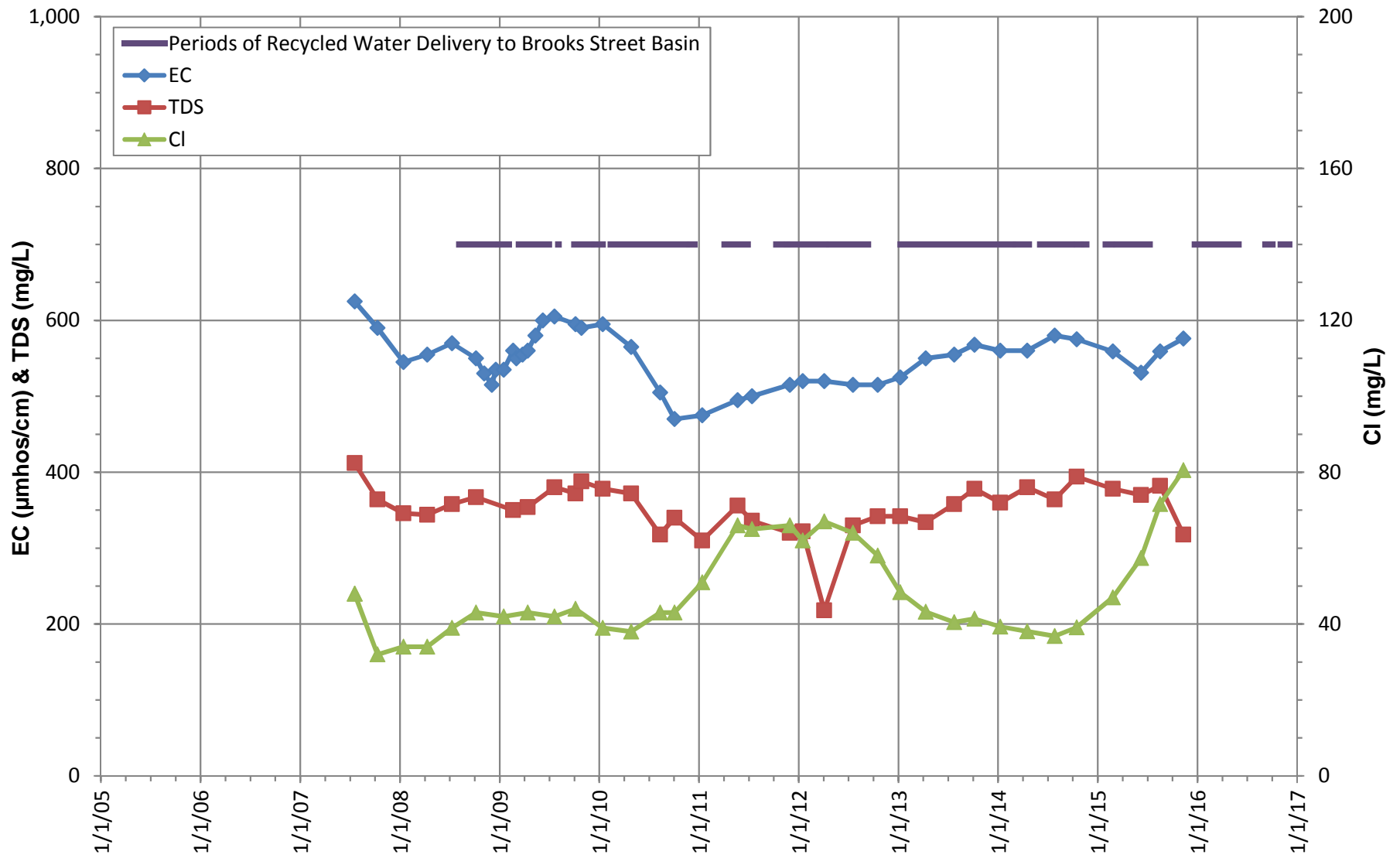
**EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-1/1**





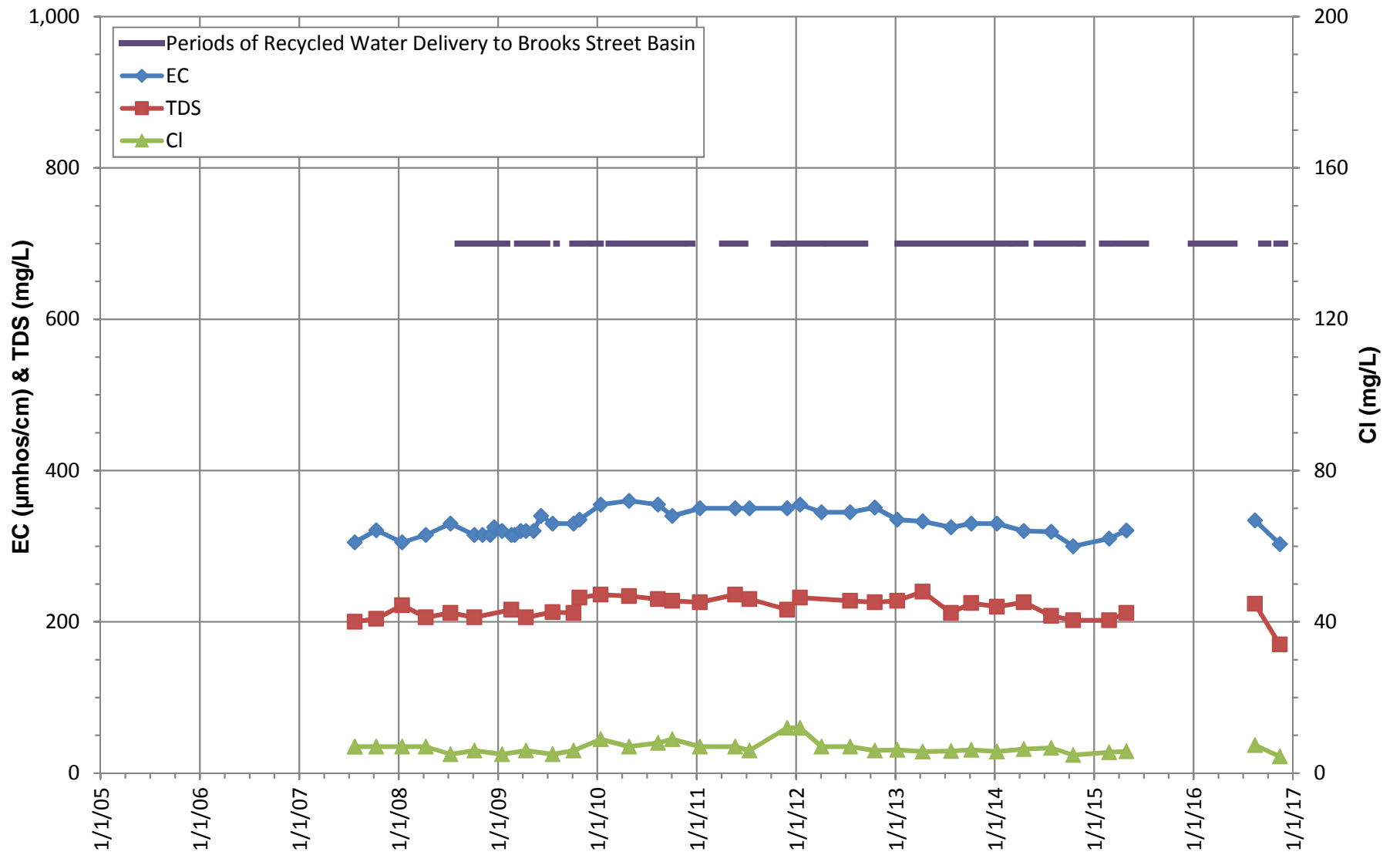
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BROOKS STREET BASIN
MW BRK-1/2**





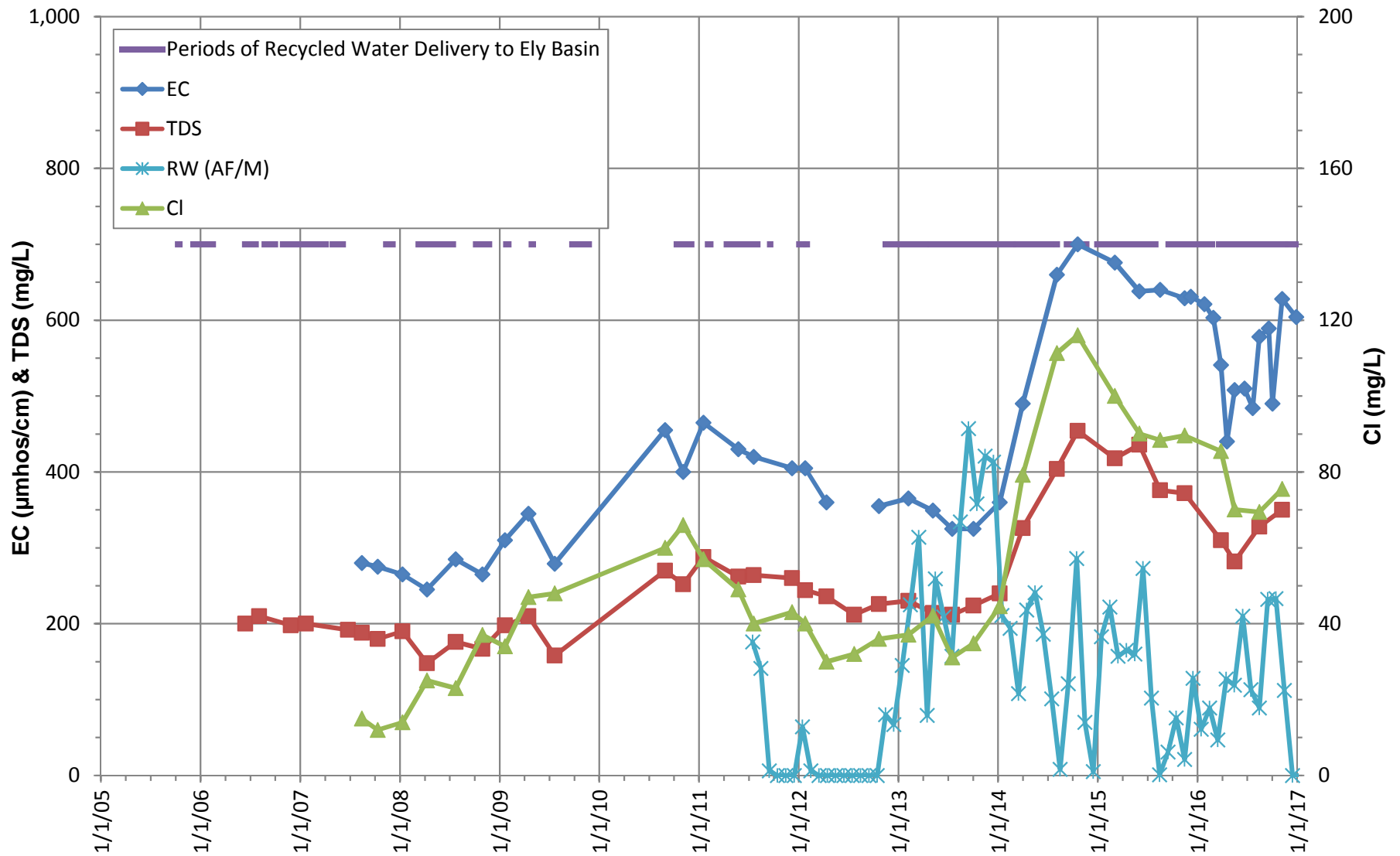
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 BROOKS STREET BASIN
 MW BRK-2/1





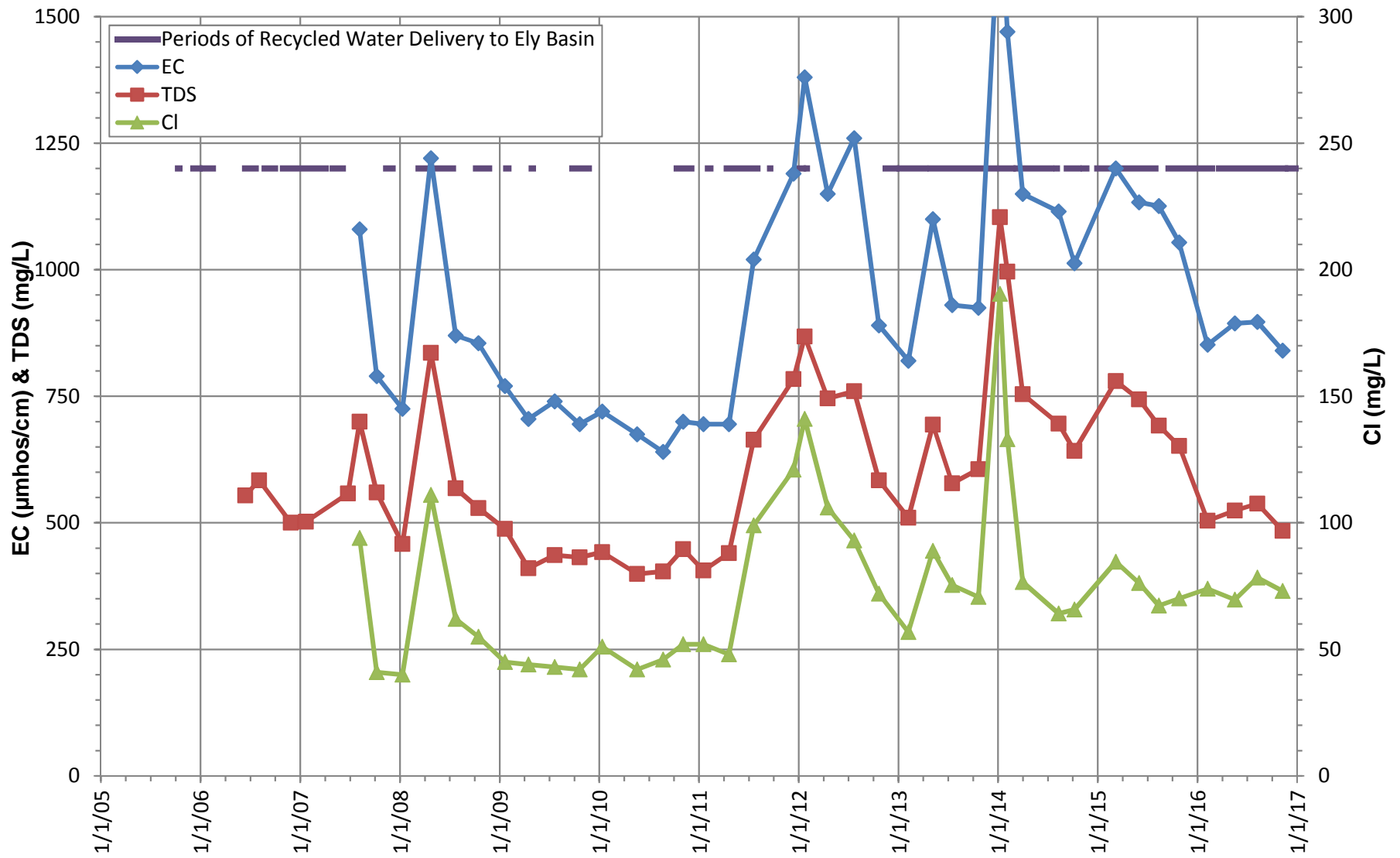
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BROOKS STREET BASIN
MW BRK-2/2**





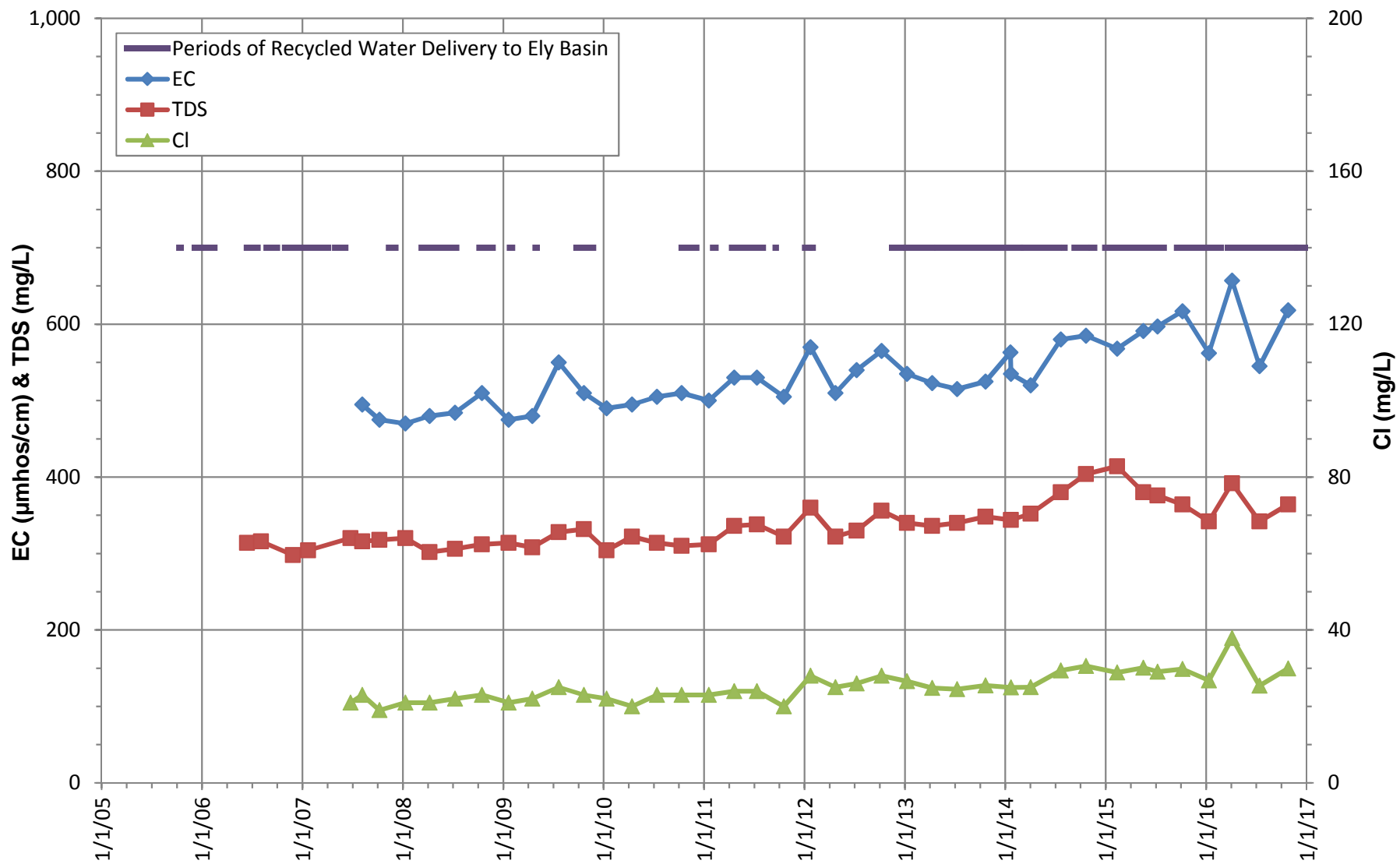
**EC, TDS, CHLORIDE TRENDS
ELY BASIN
PHILADELPHIA WELL**





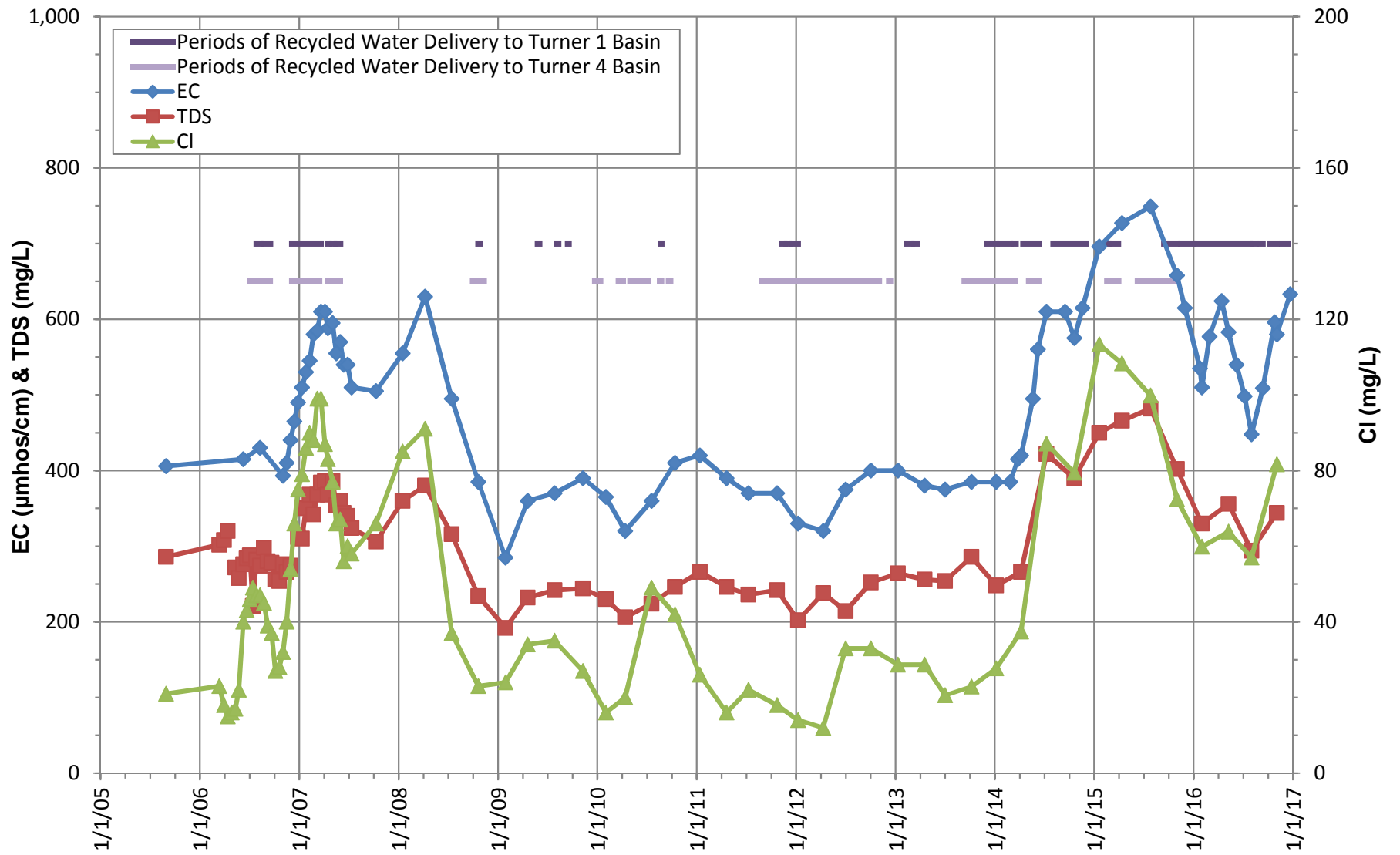
**EC, TDS, CHLORIDE TRENDS
ELY BASIN
WALNUT WELL**





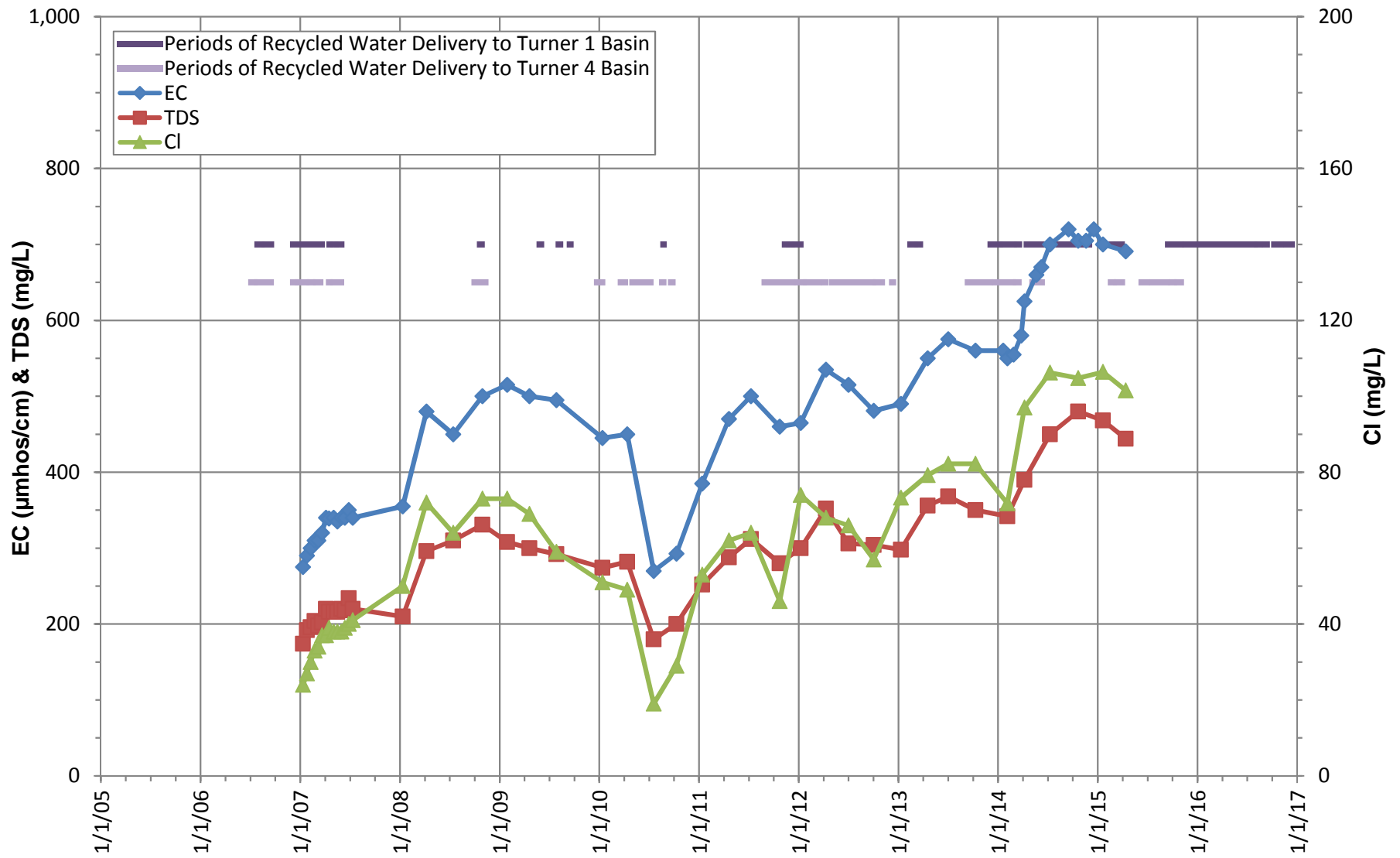
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ELY BASIN
RIVERSIDE WELL**





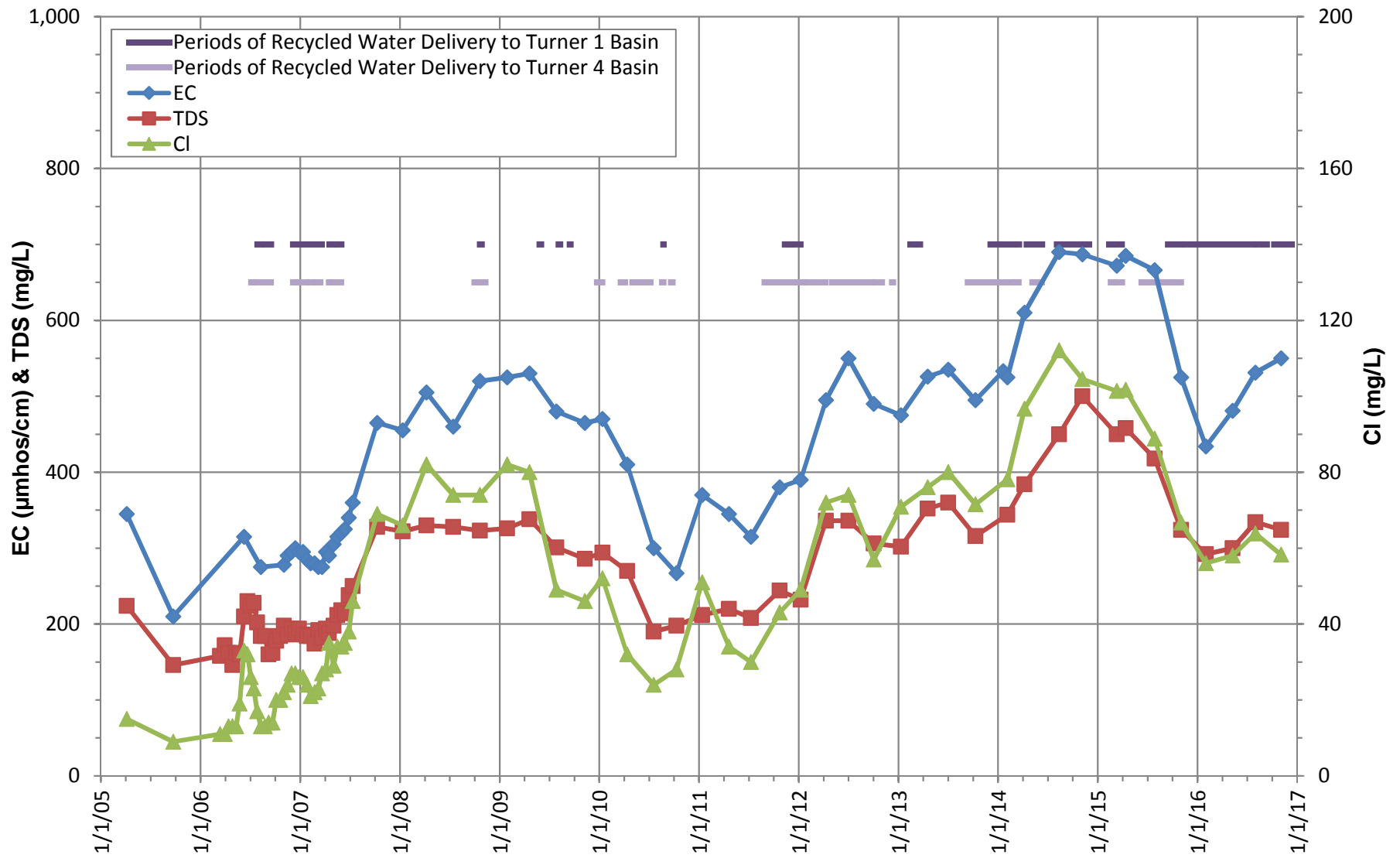
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TURNER BASINS
MW TRN-1/2**





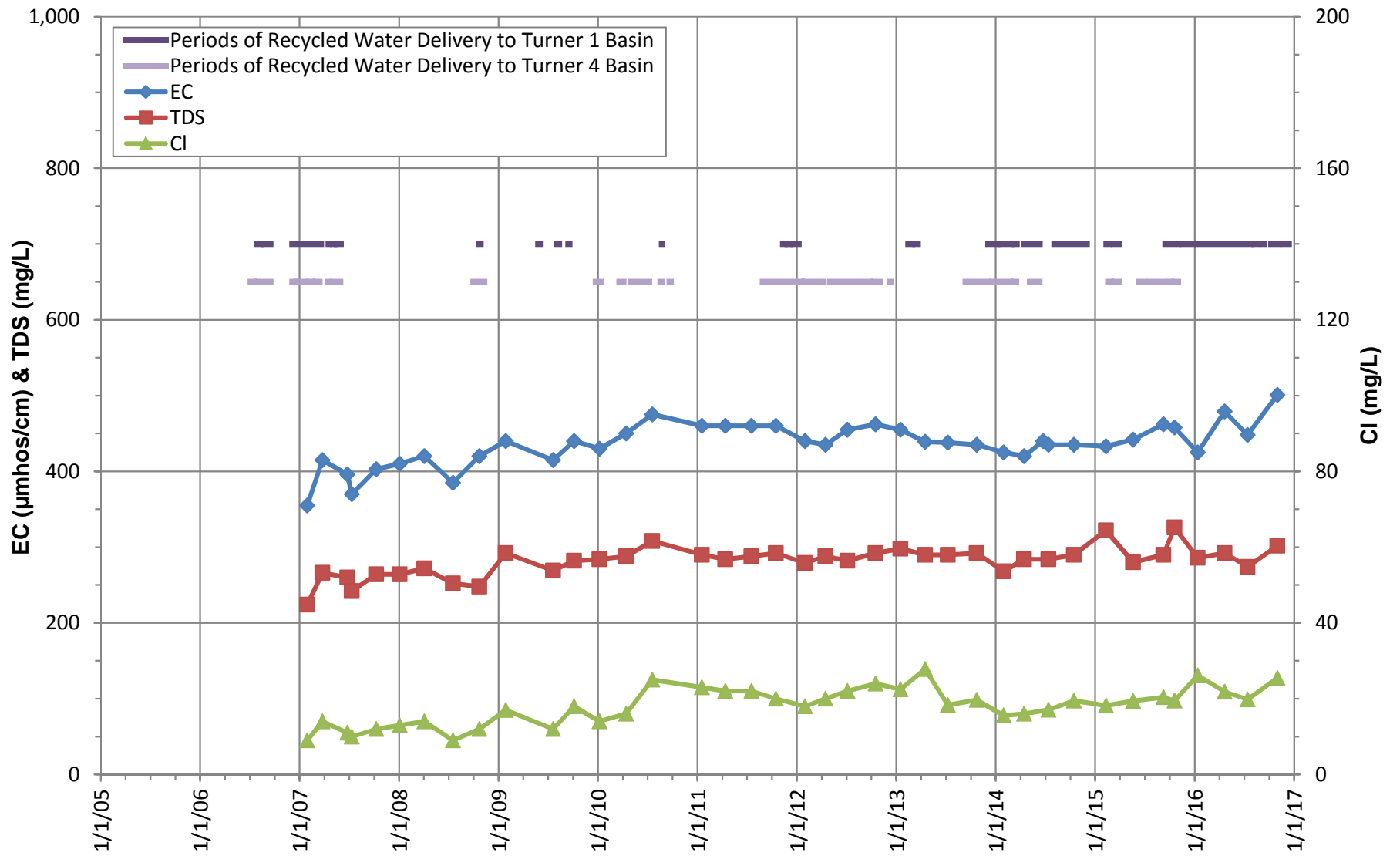
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TURNER BASINS
MW TRN-2/1**





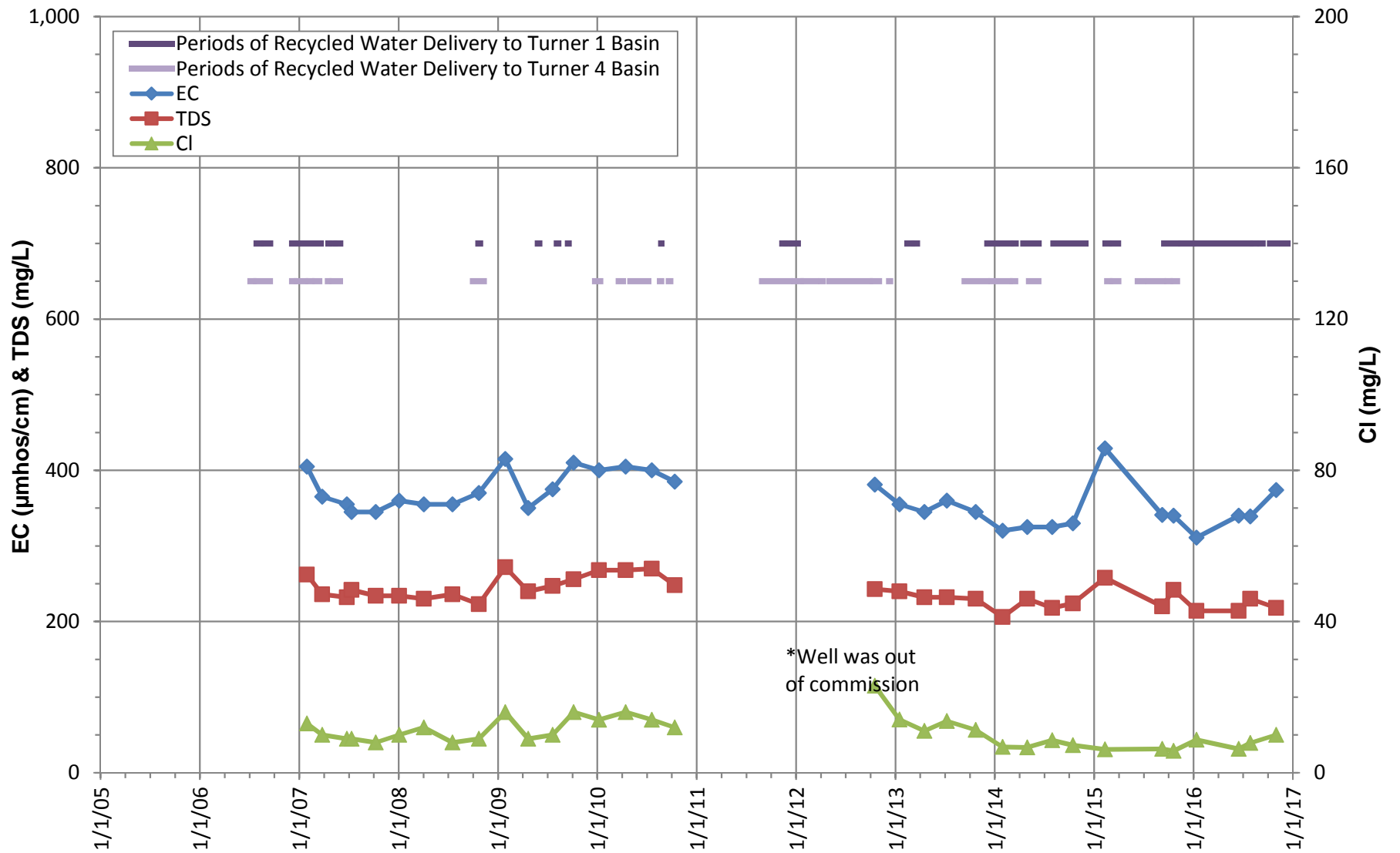
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TURNER BASINS
MW TRN-2/2**





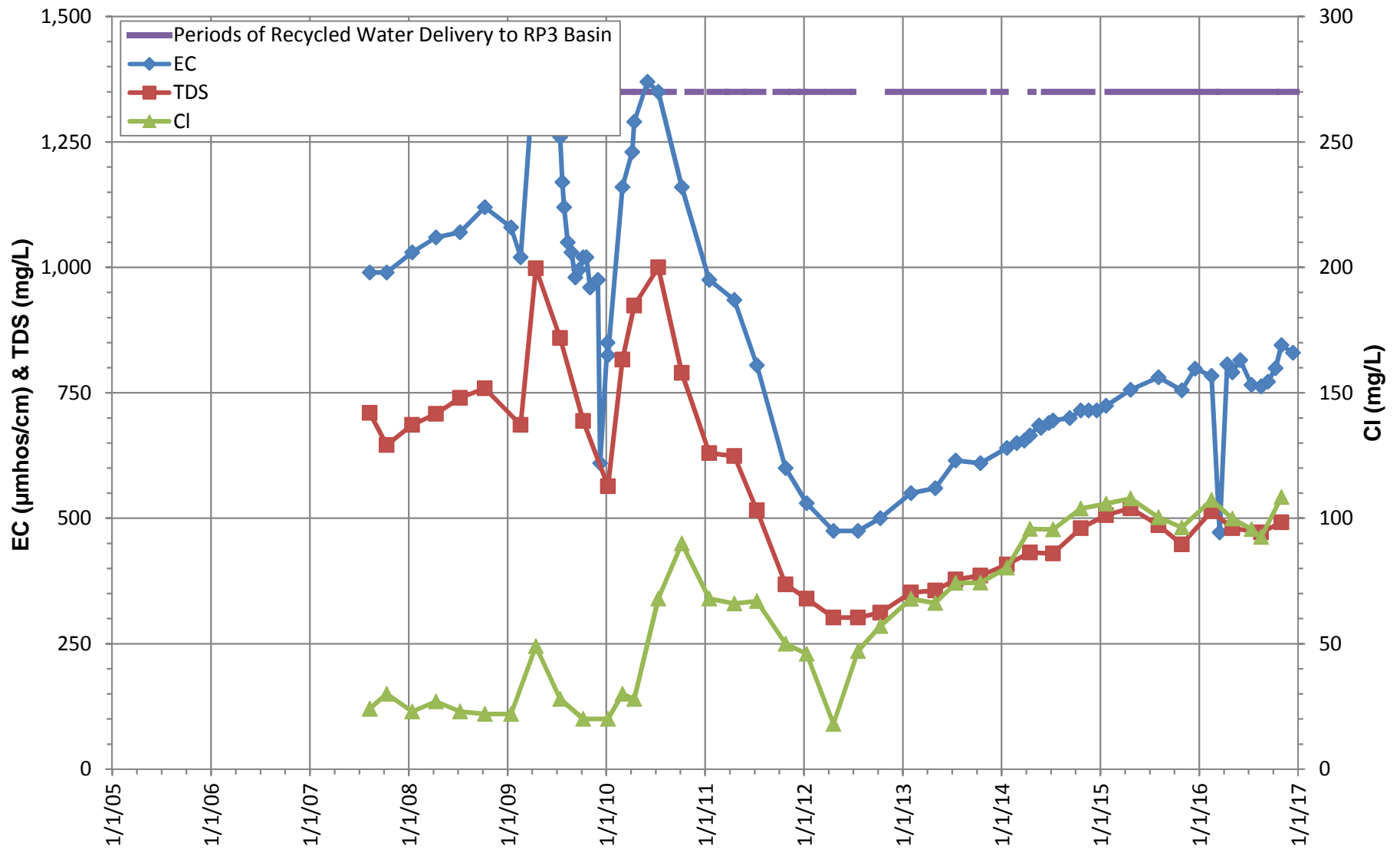
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TURNER BASINS
ONTARIO NO. 25**





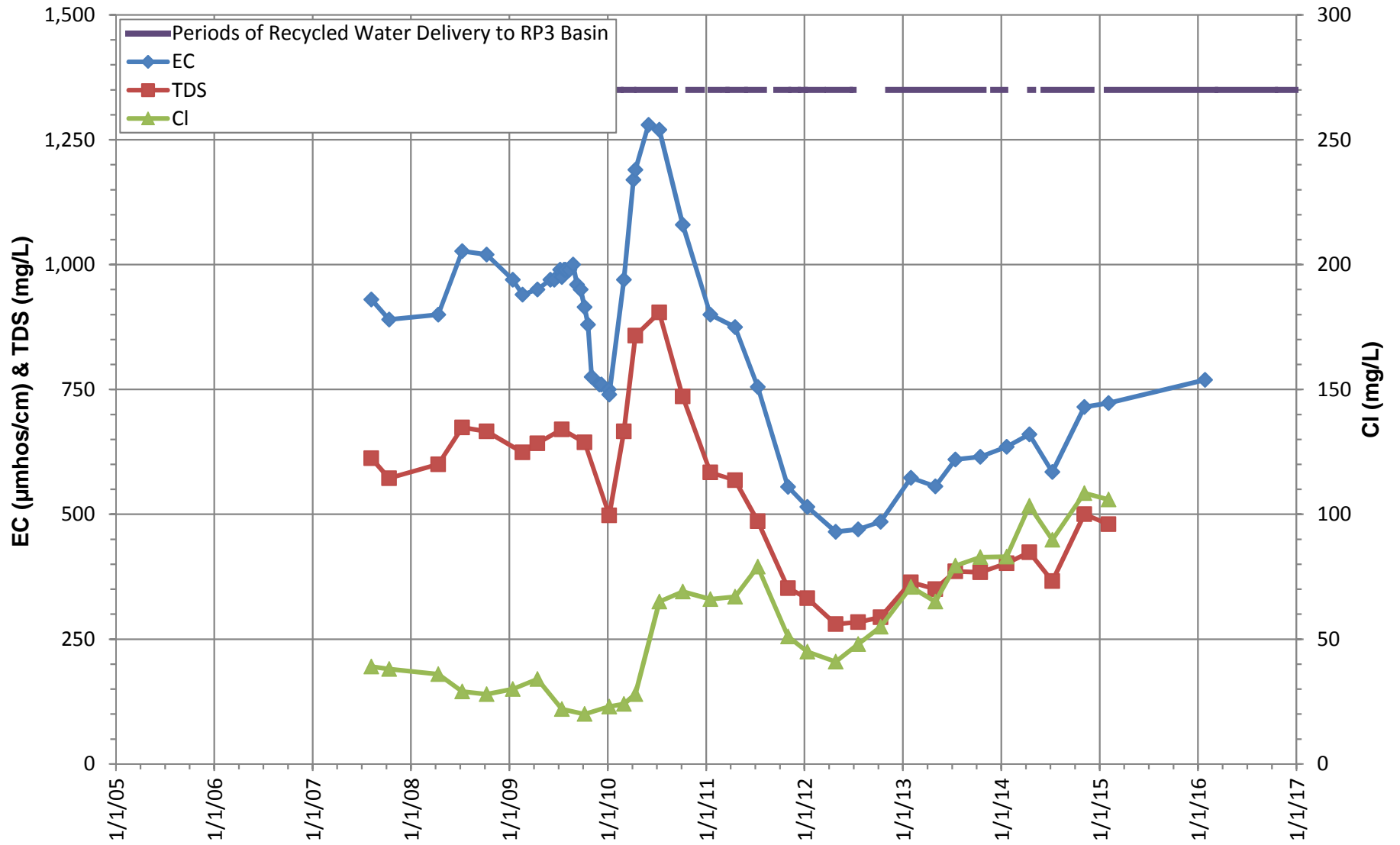
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TURNER BASINS
ONTARIO NO. 29**





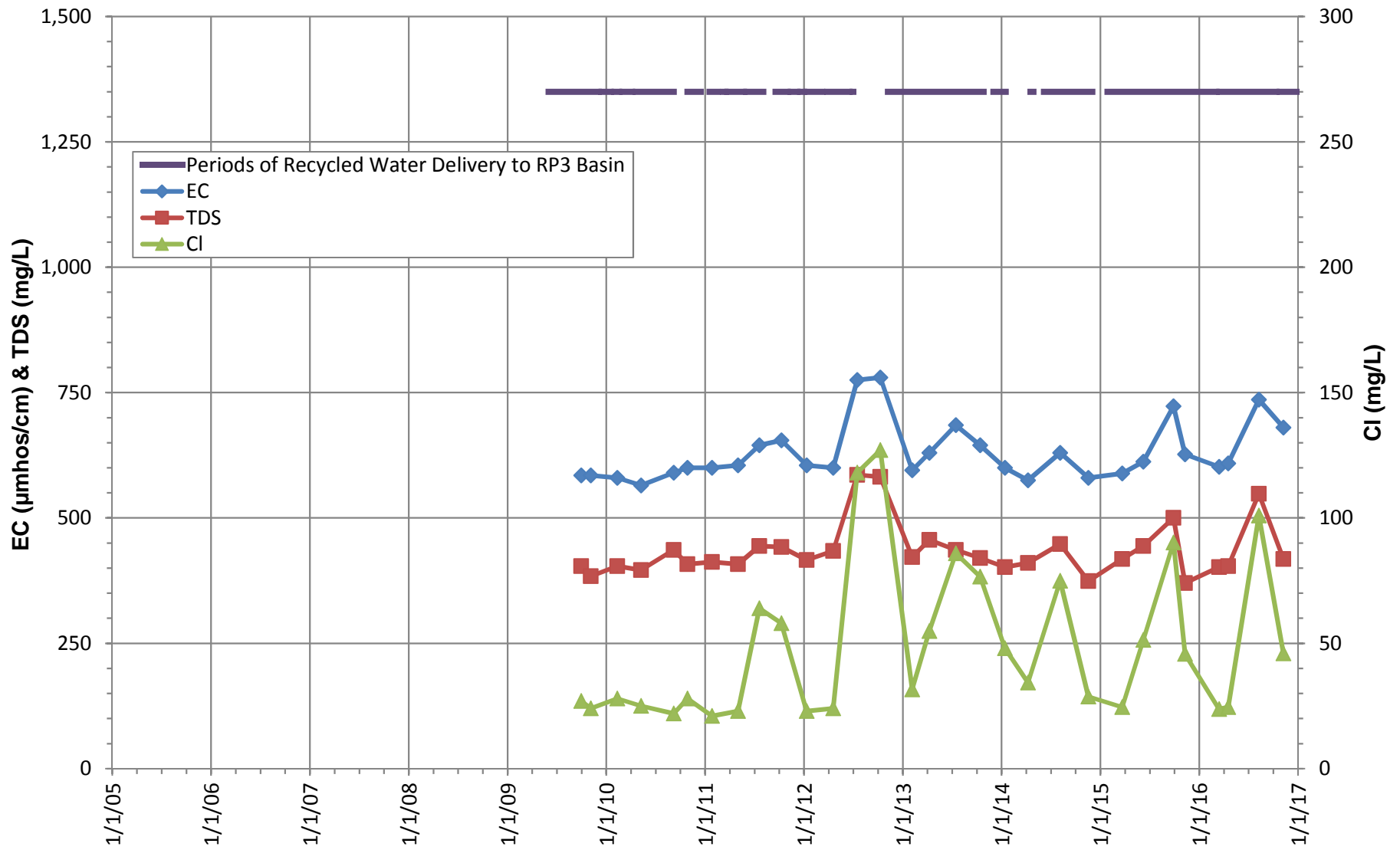
**EC, TDS, CHLORIDE TRENDS
RP3 BASINS
RP3-1/1**





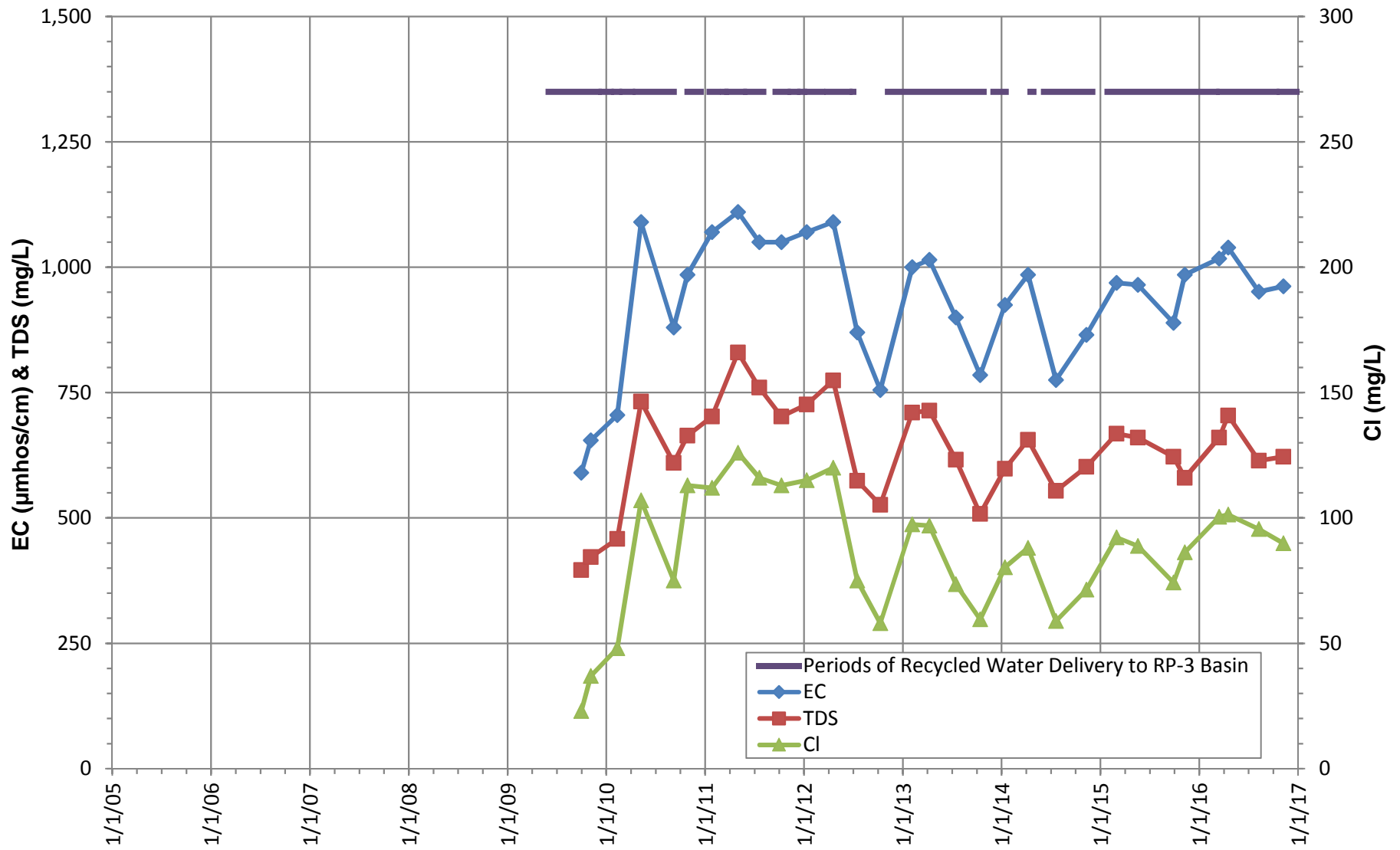
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RP3 BASINS
RP3-1/2**





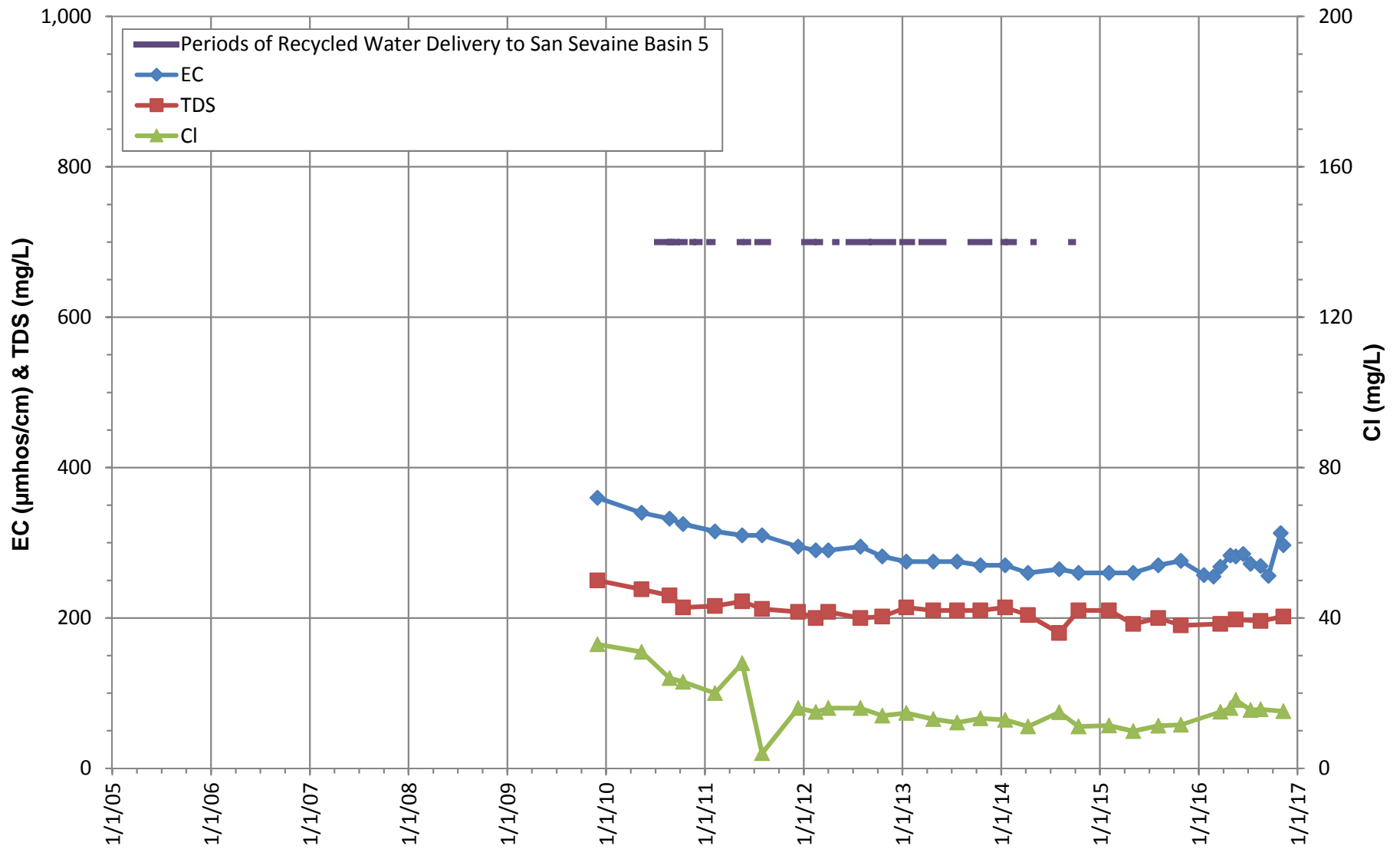
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RP3 BASINS
ALCOA MW-1**





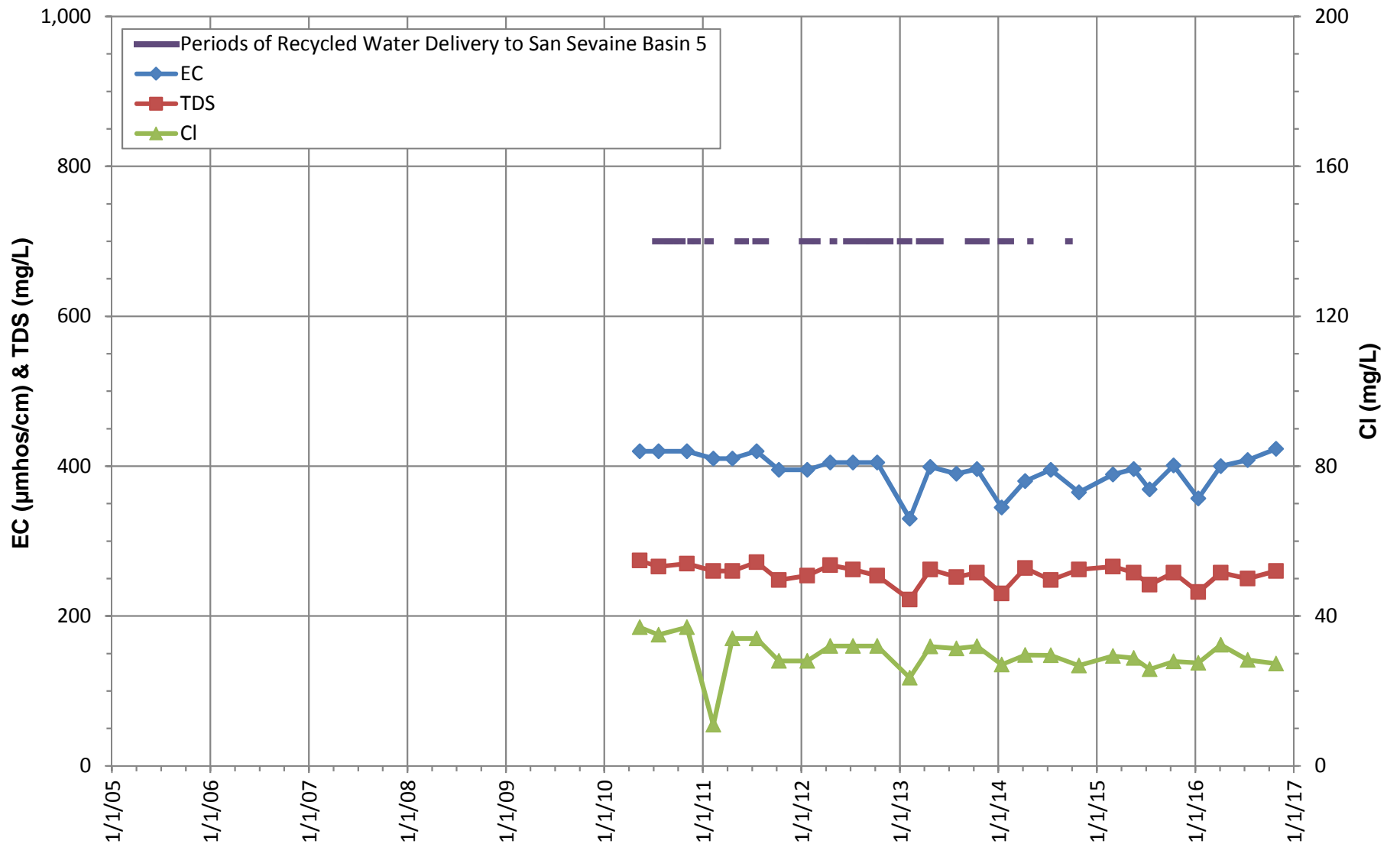
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RP3 BASINS
ALCOA MW-3**





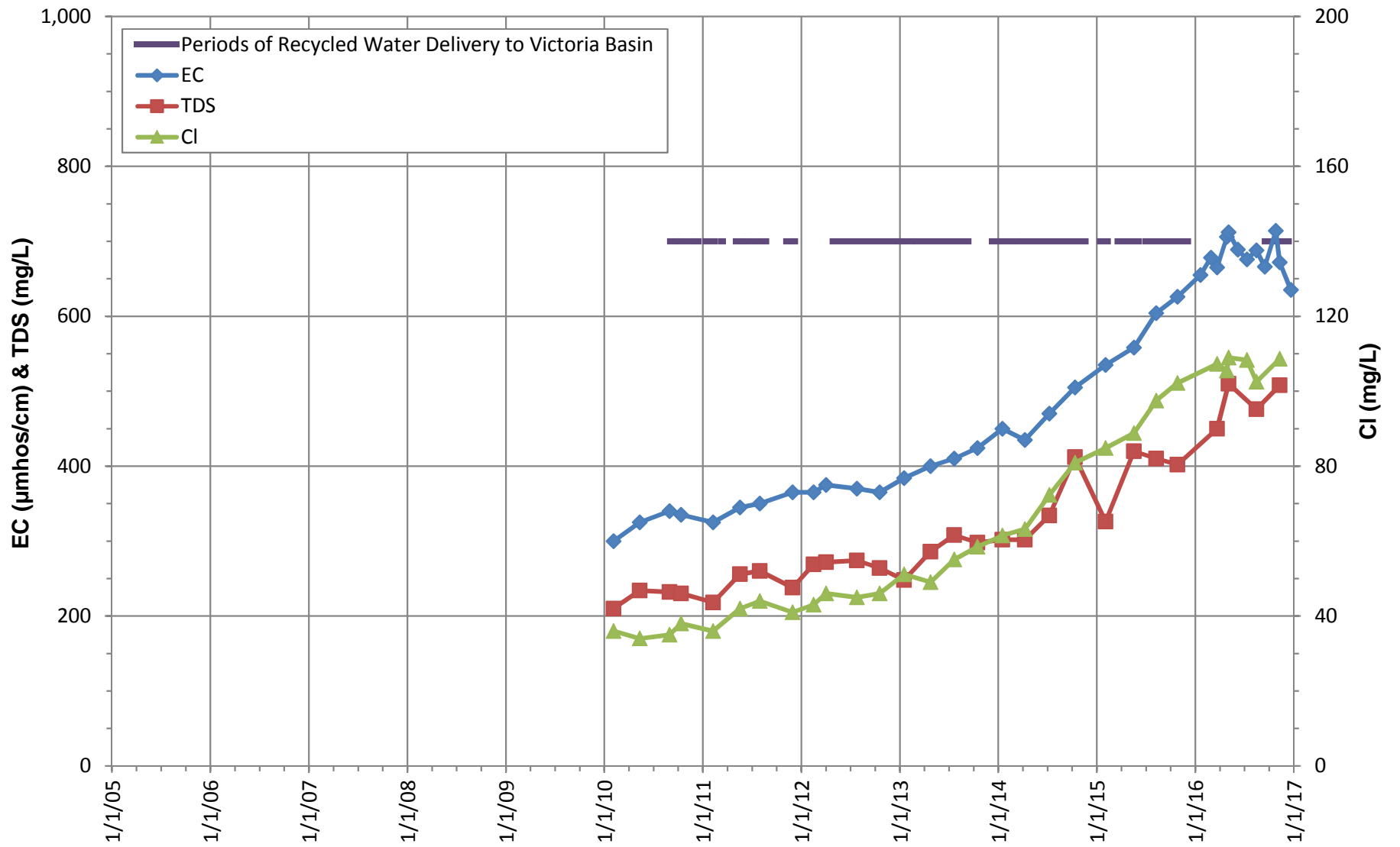
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SAN SEVAINE BASINS
SS-1/1**





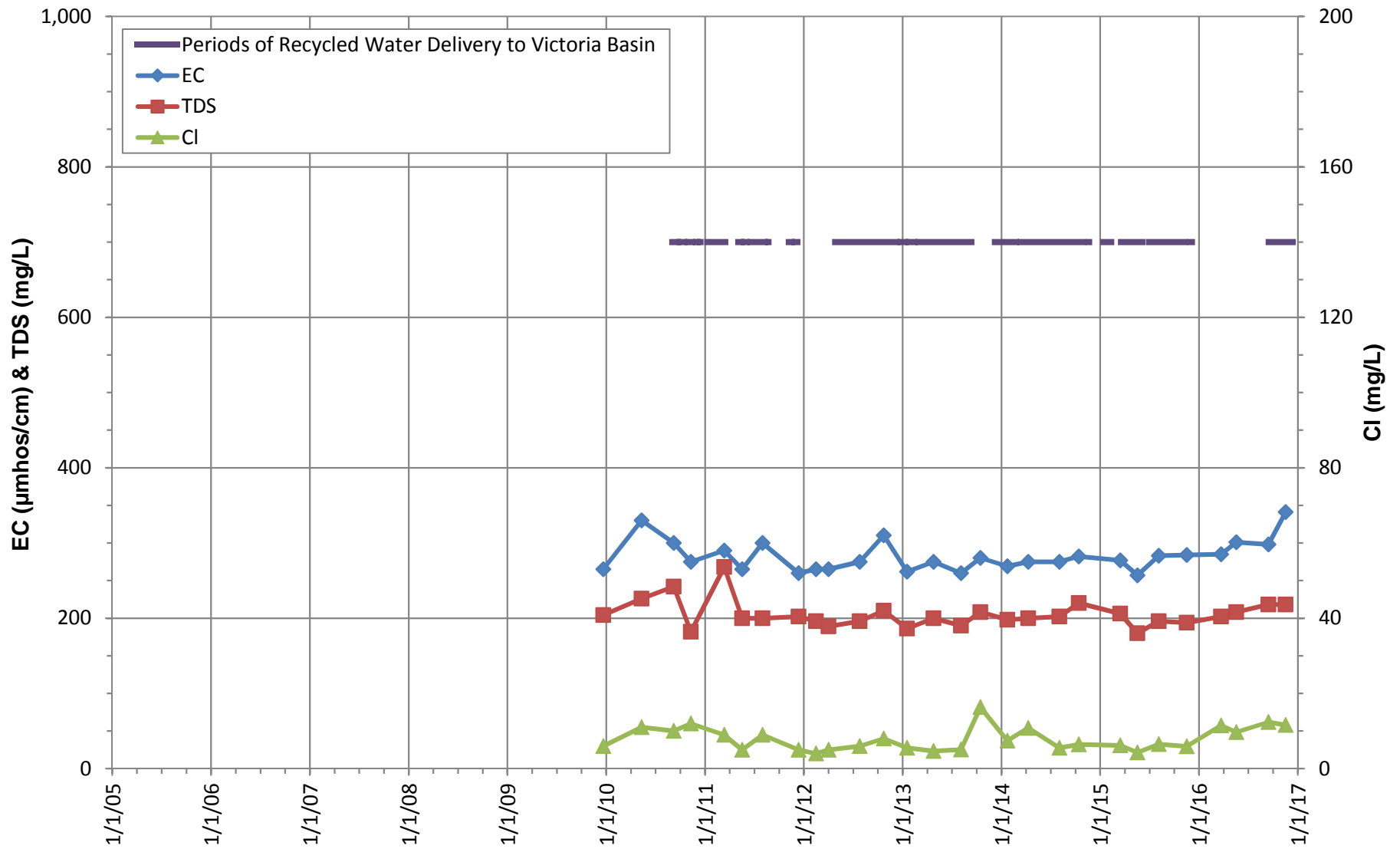
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SAN SEVAINE BASINS
Unitex 91090**





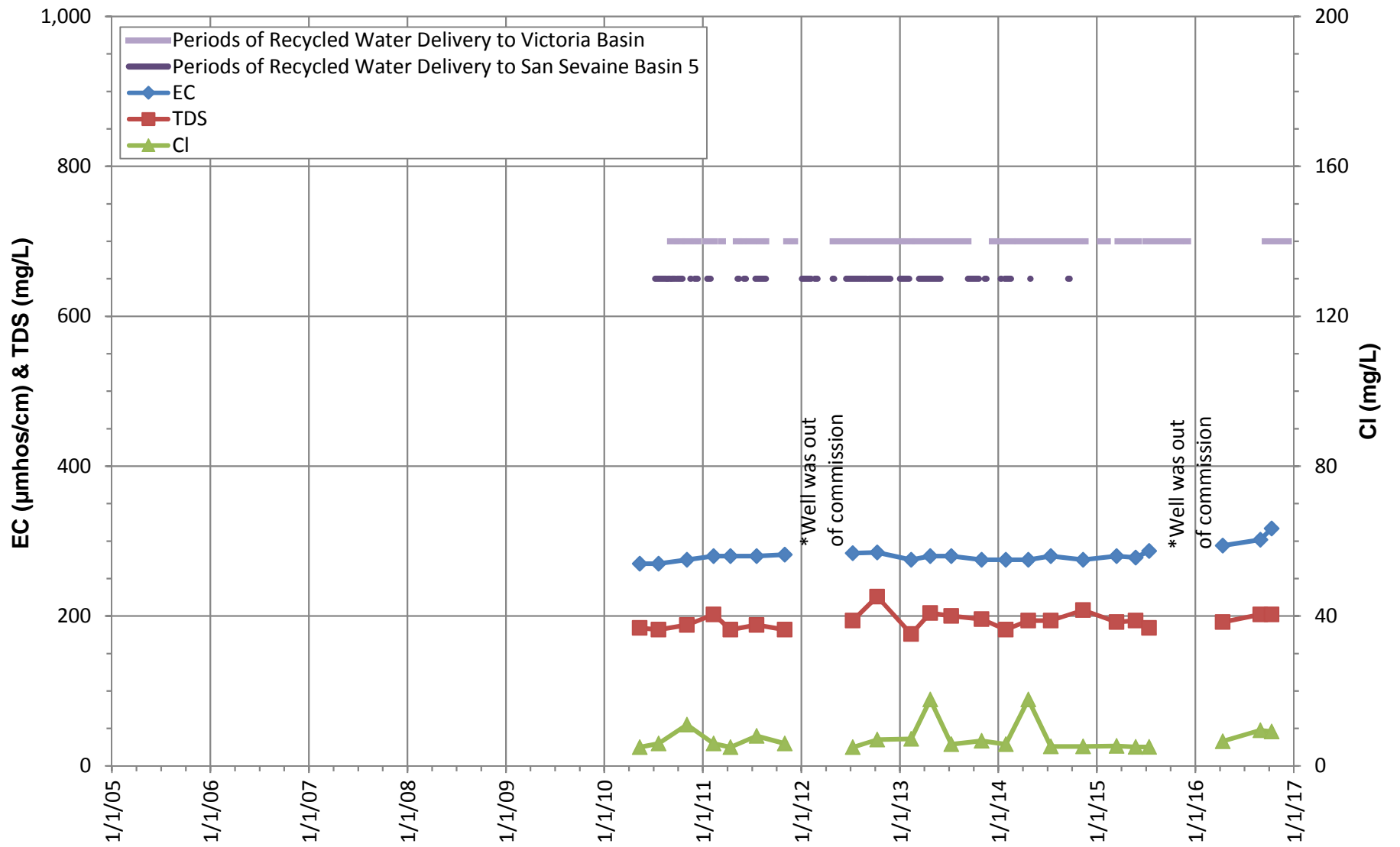
**EC, TDS, CHLORIDE TRENDS
VICTORIA BASIN
VCT-1/1**





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



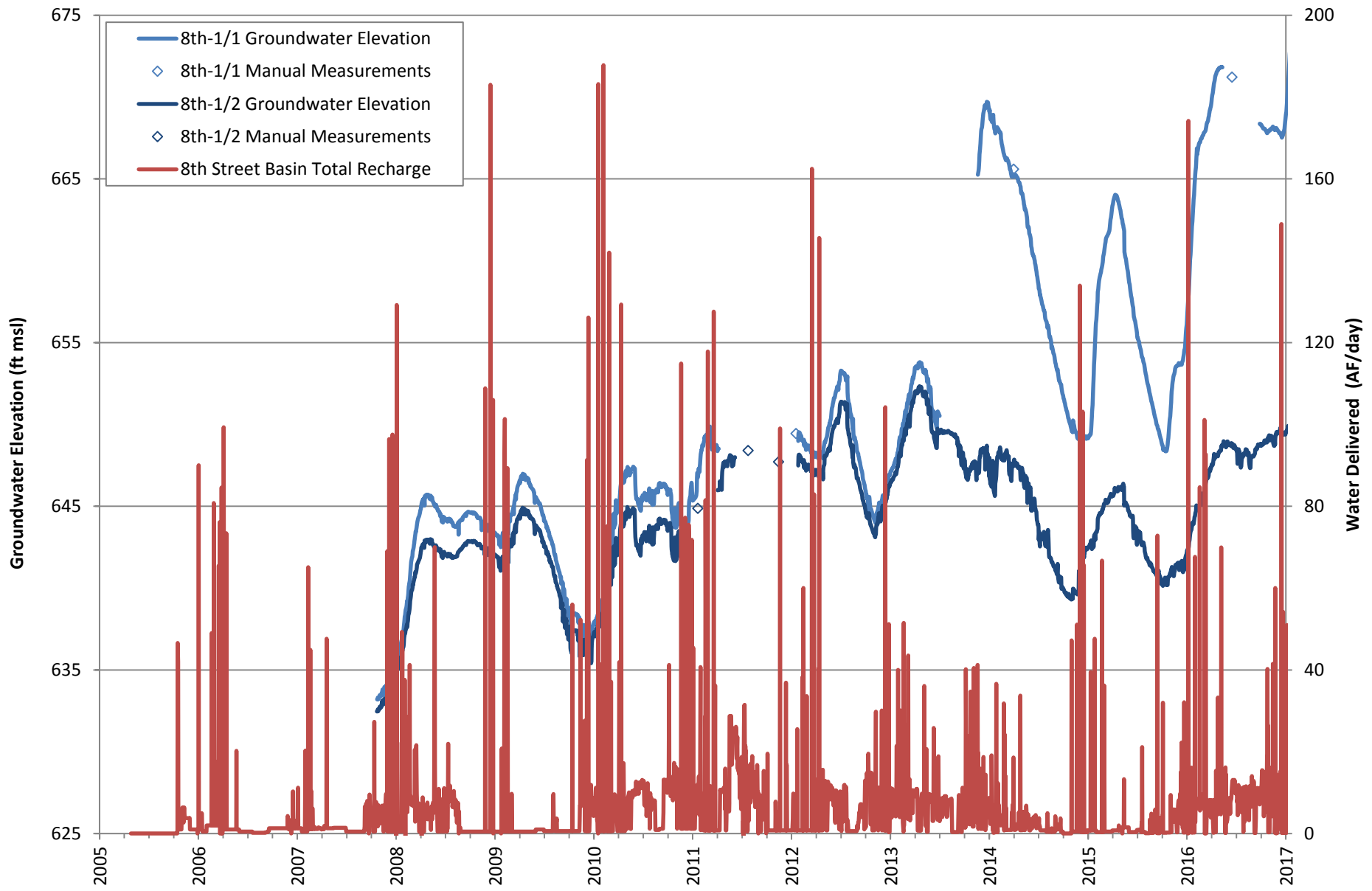


**EC, TDS, CHLORIDE TRENDS
SAN SEVAIRE & VICTORIA BASINS
CVWD Well No. 39**

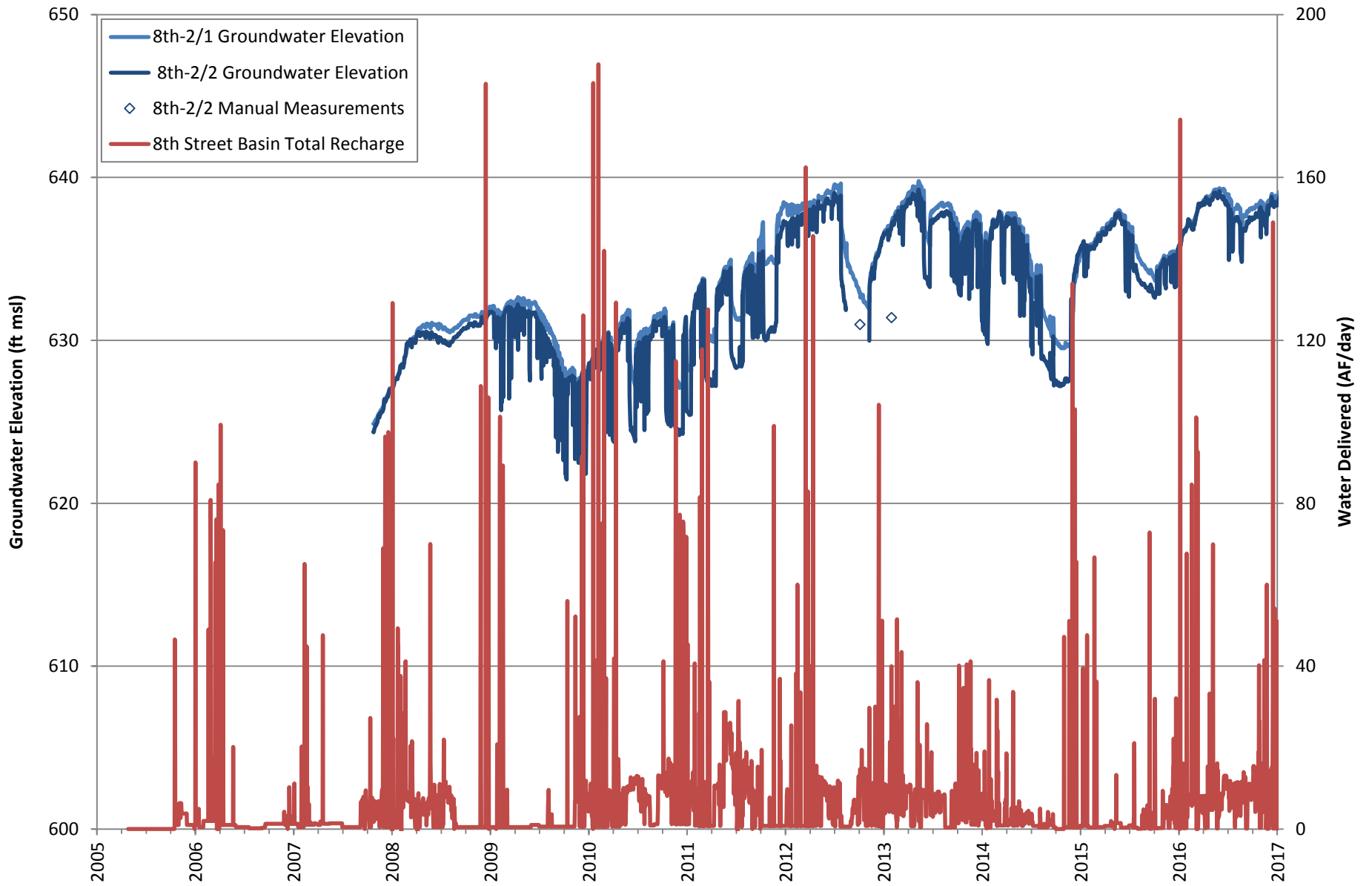


APPENDIX D

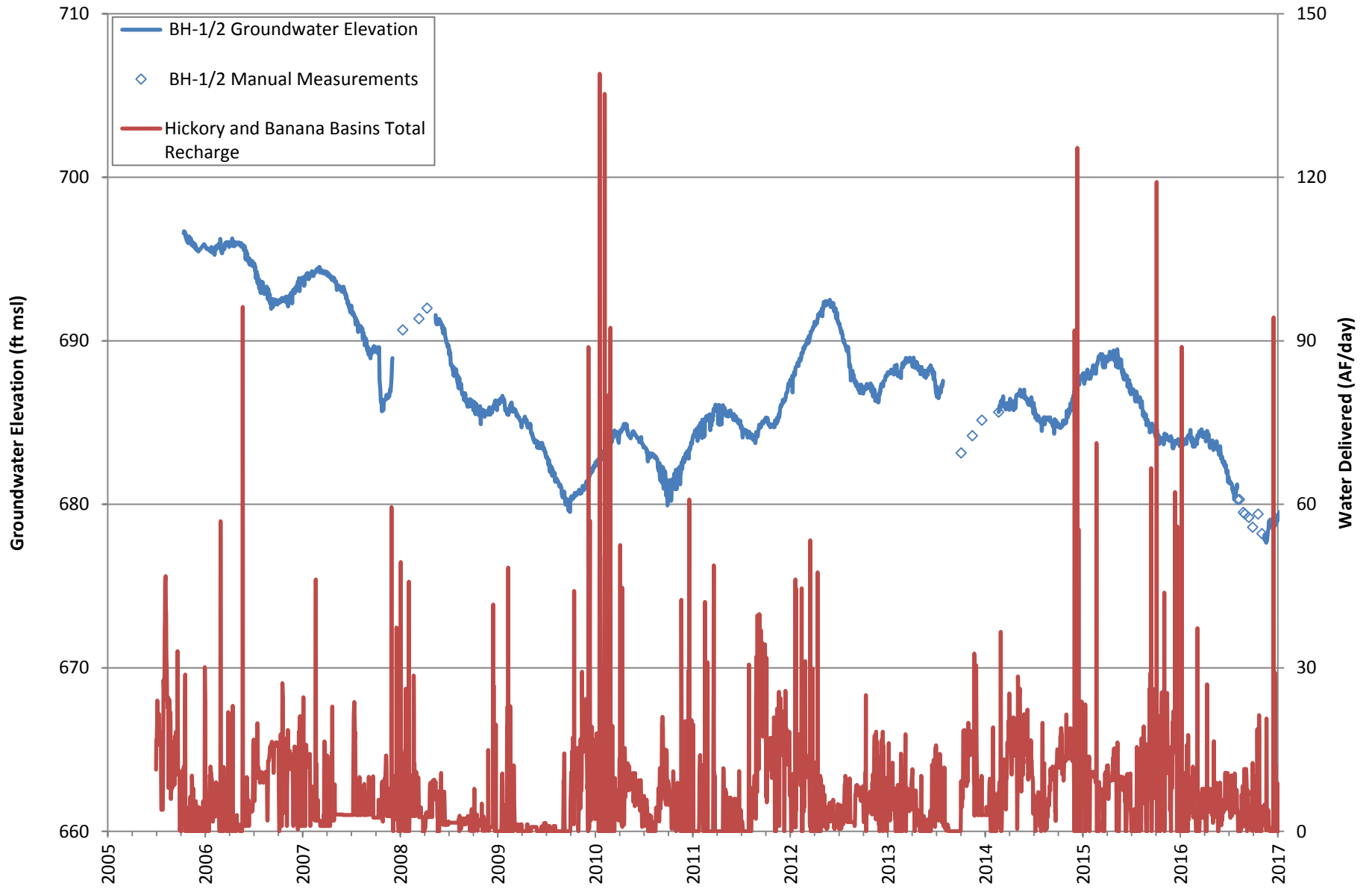
MONITORING WELL HYDROGRAPHS



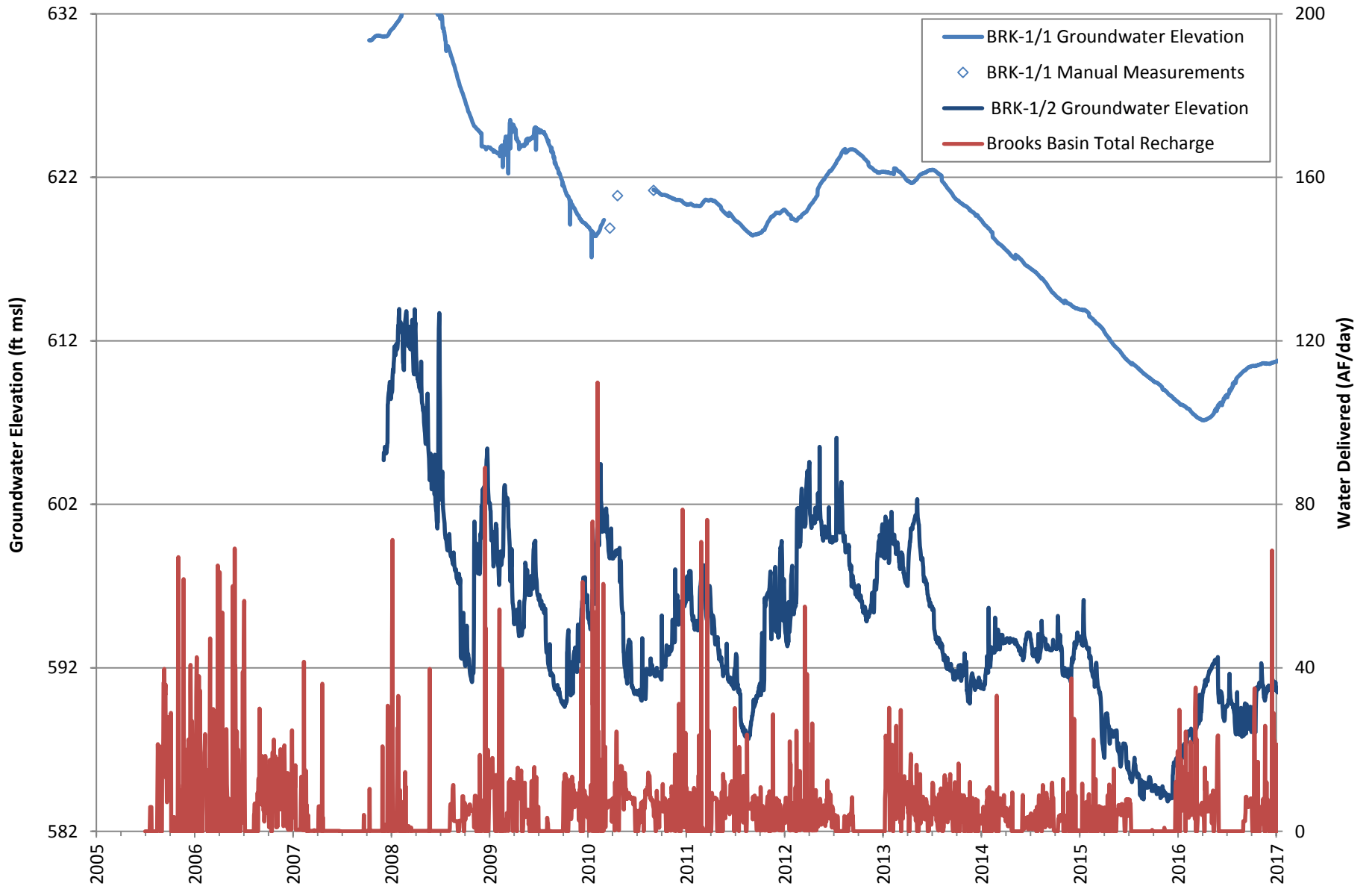
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MW 8TH-1/1 & 8TH-1/2**



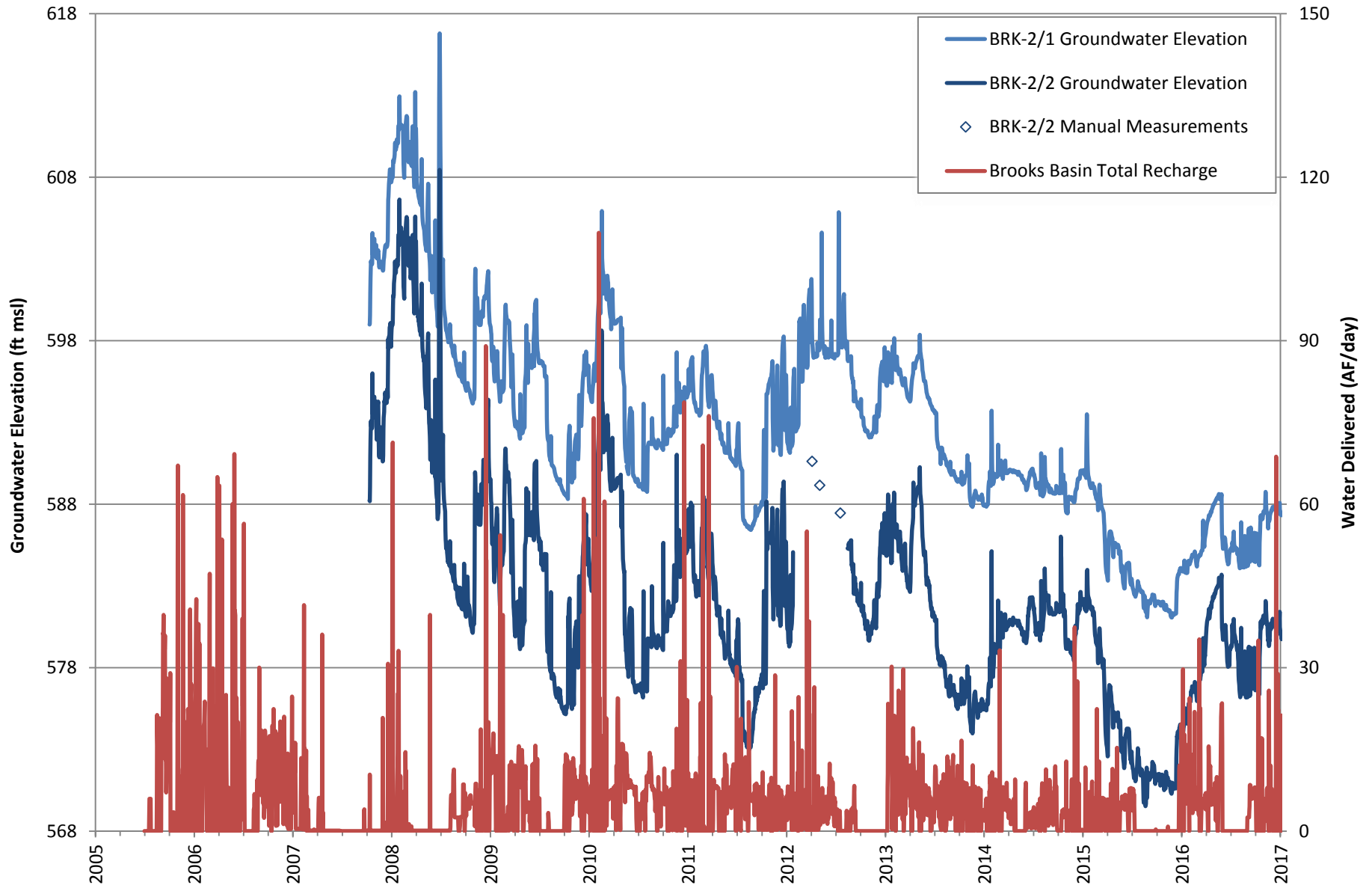
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MW 8TH-2/1 & 8TH-2/2



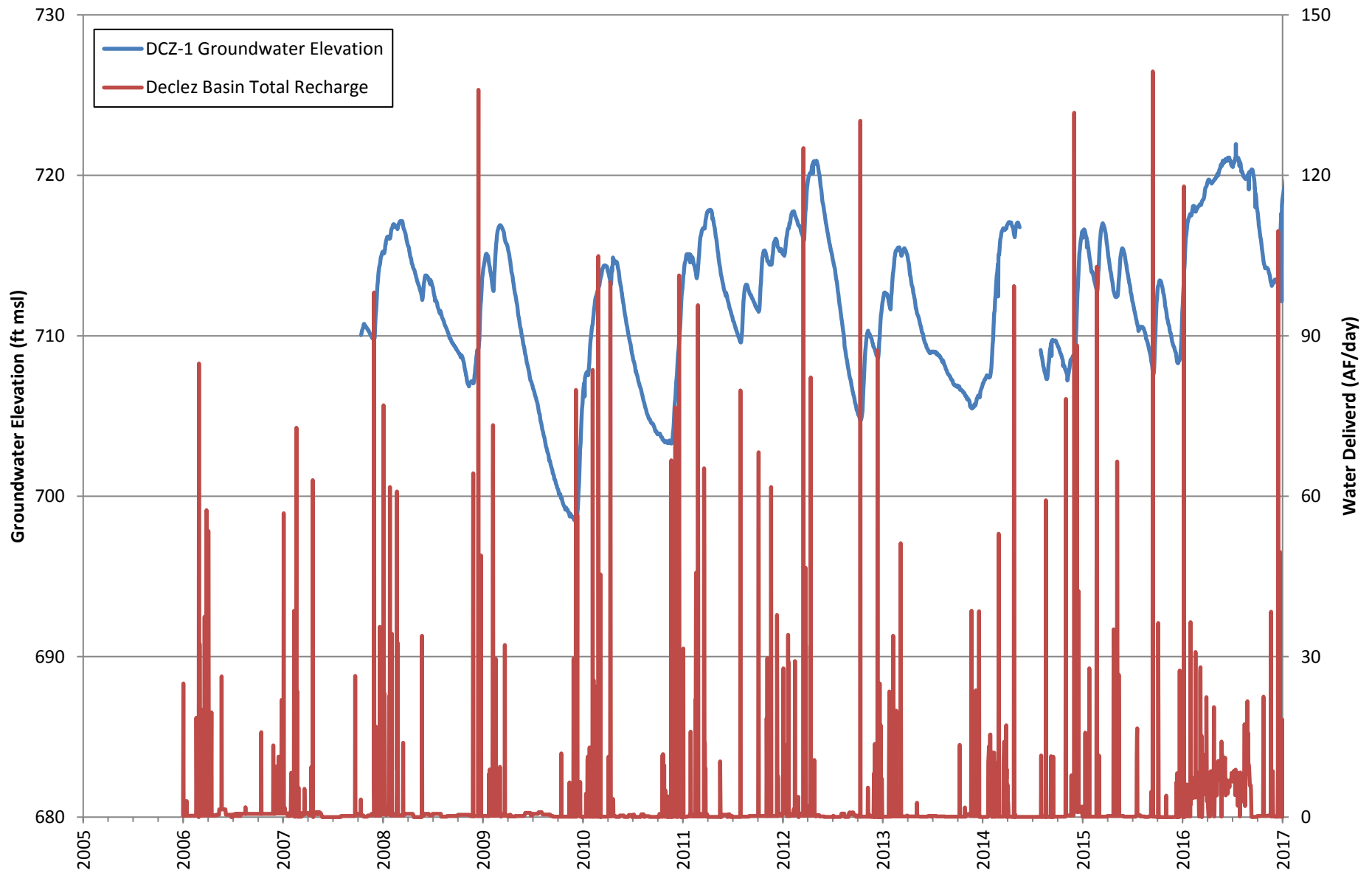
**HYDROGRAPH
MW BH-1/2**



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

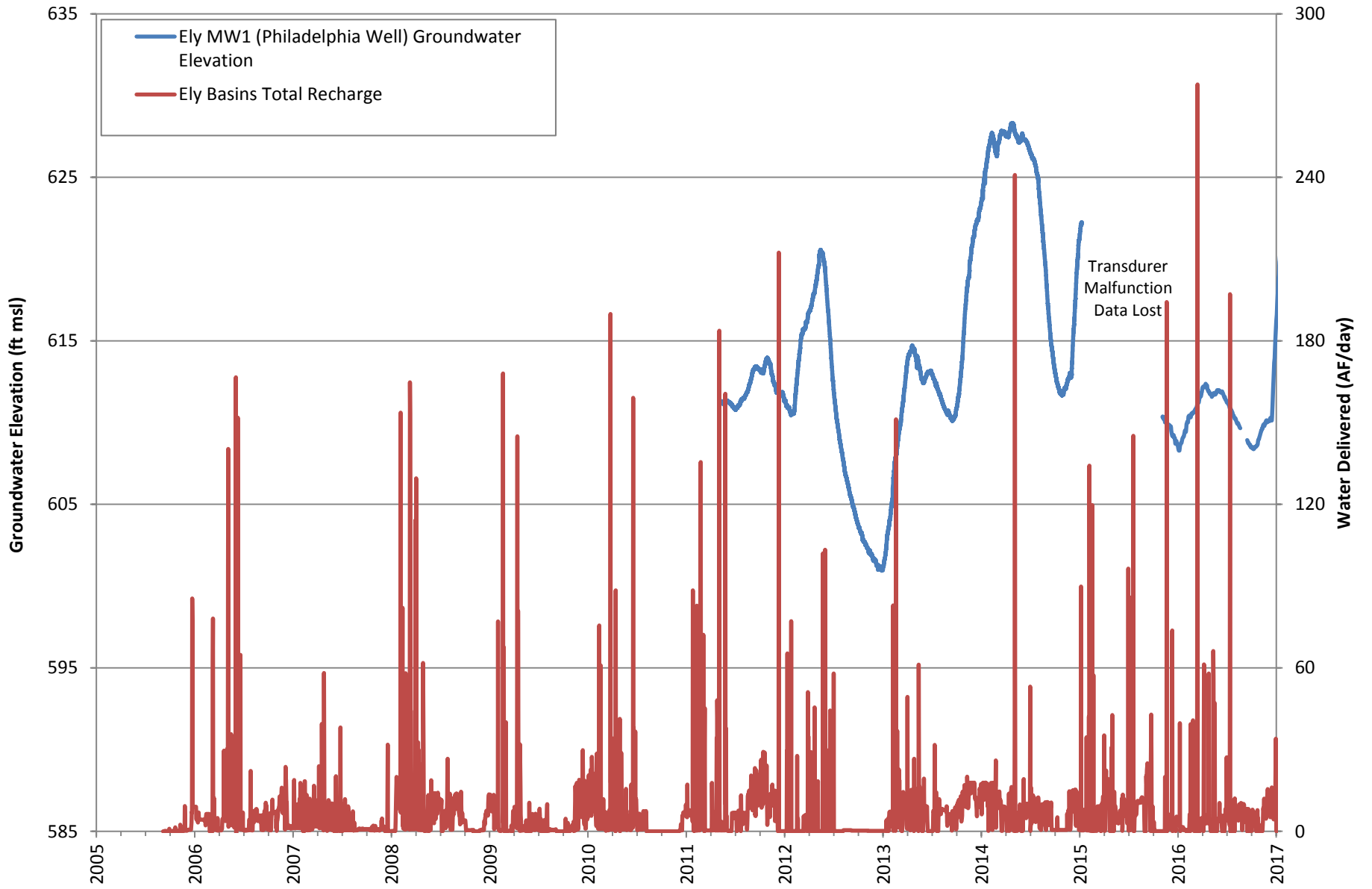


**HYDROGRAPH
MW BRK-2/1 & BRK-2/2**



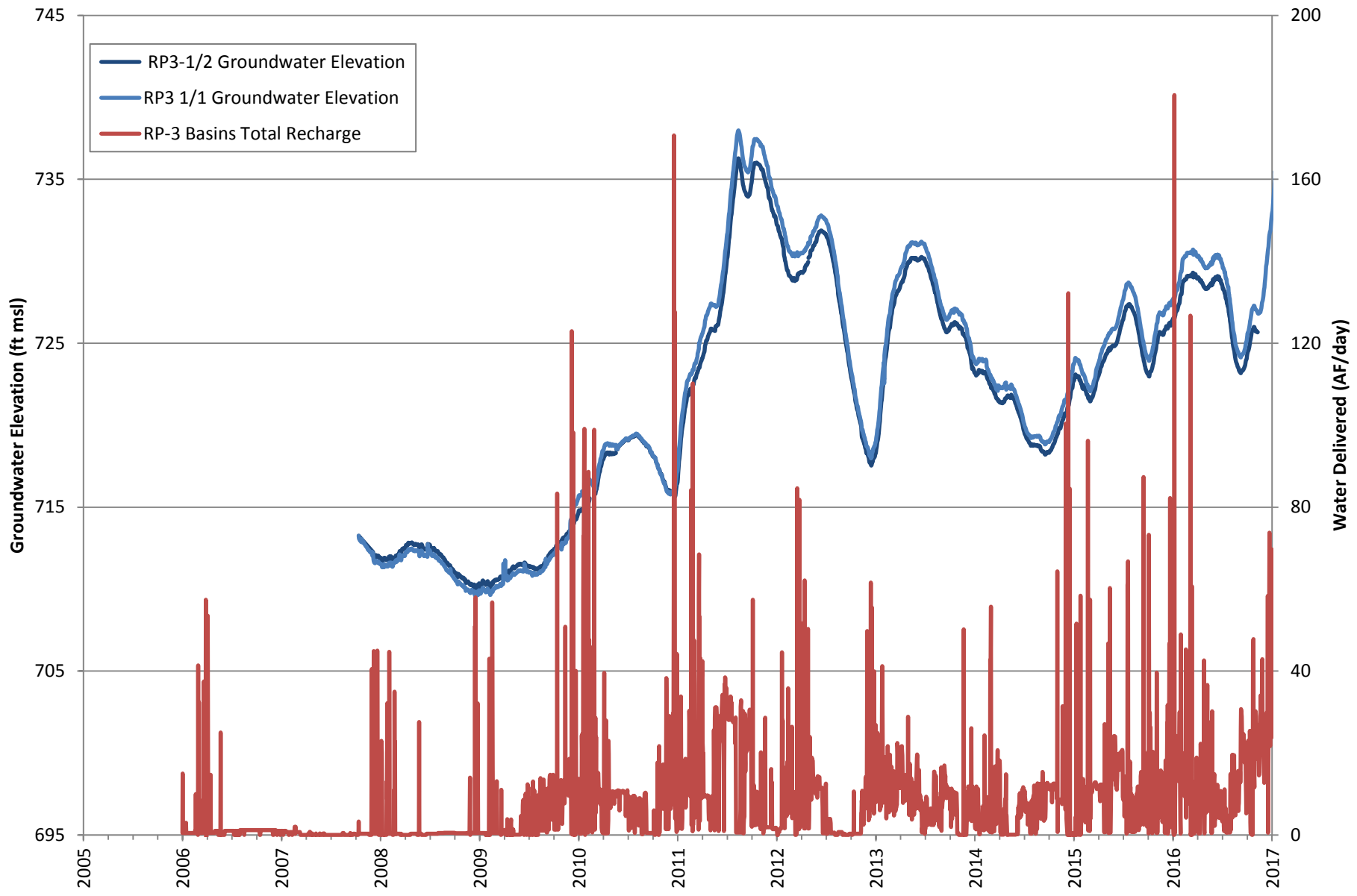
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MW DCZ-1**



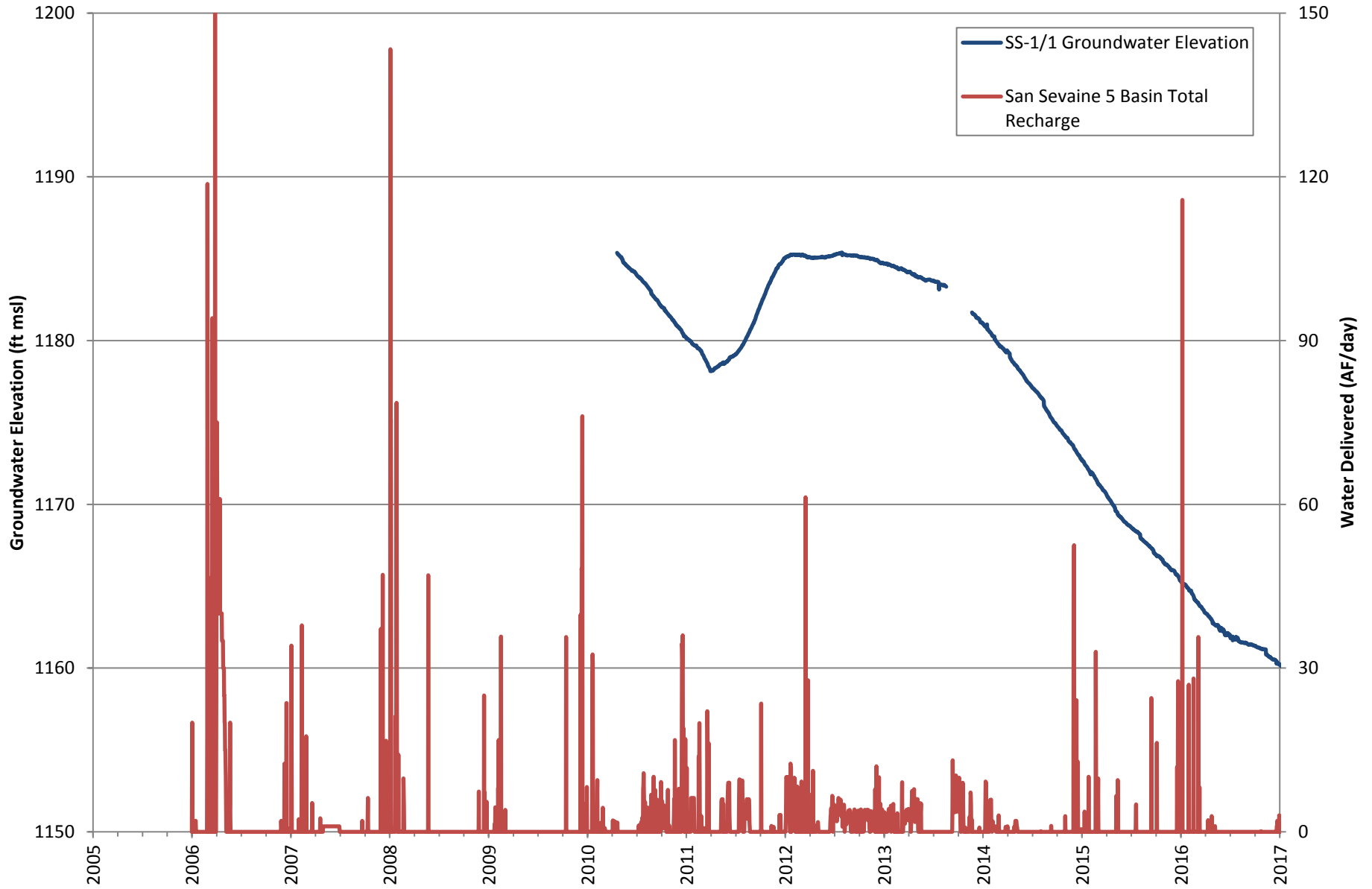


HYDROGRAPH
Ely MW1 (Philadelphia Well)

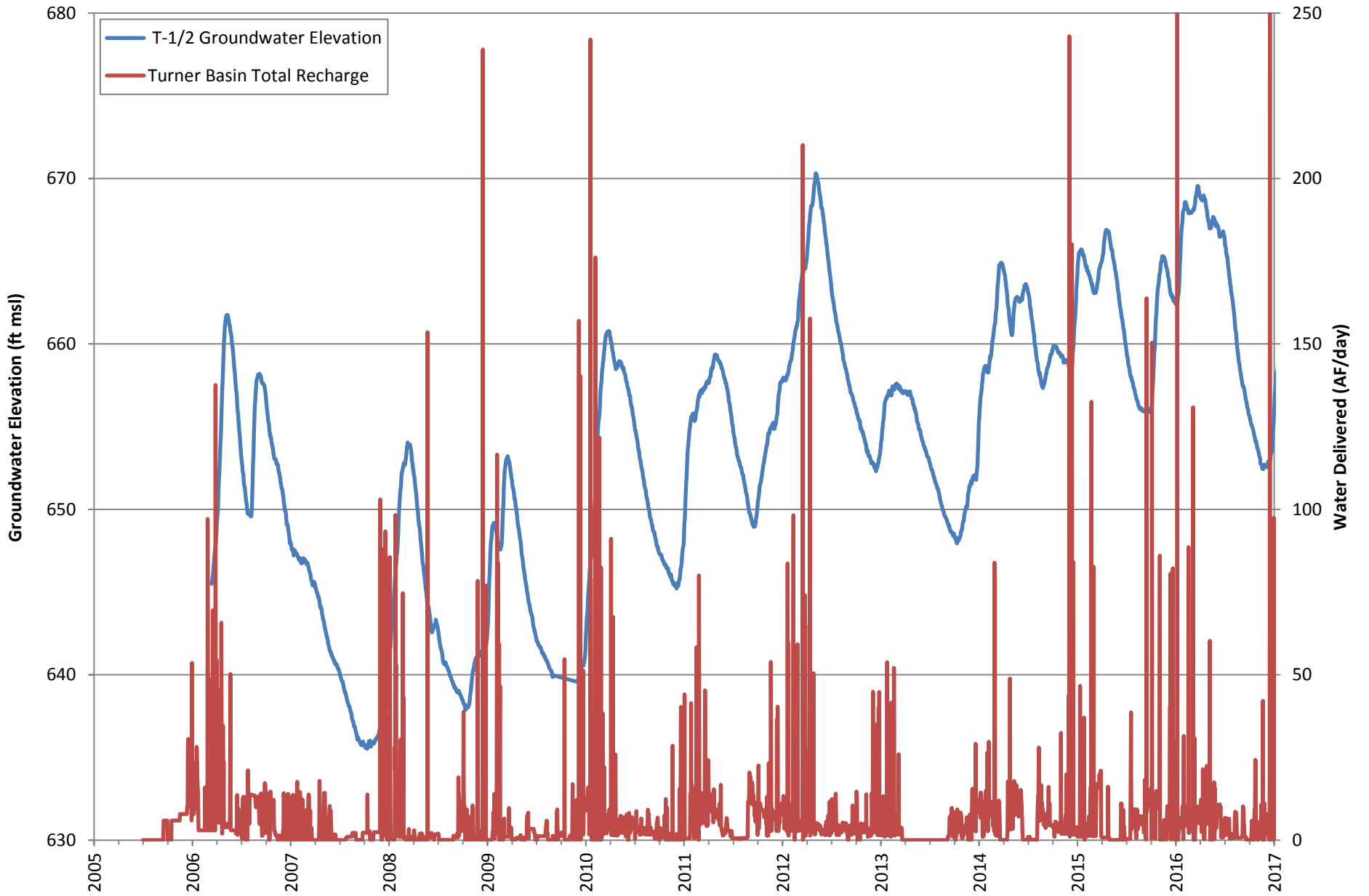




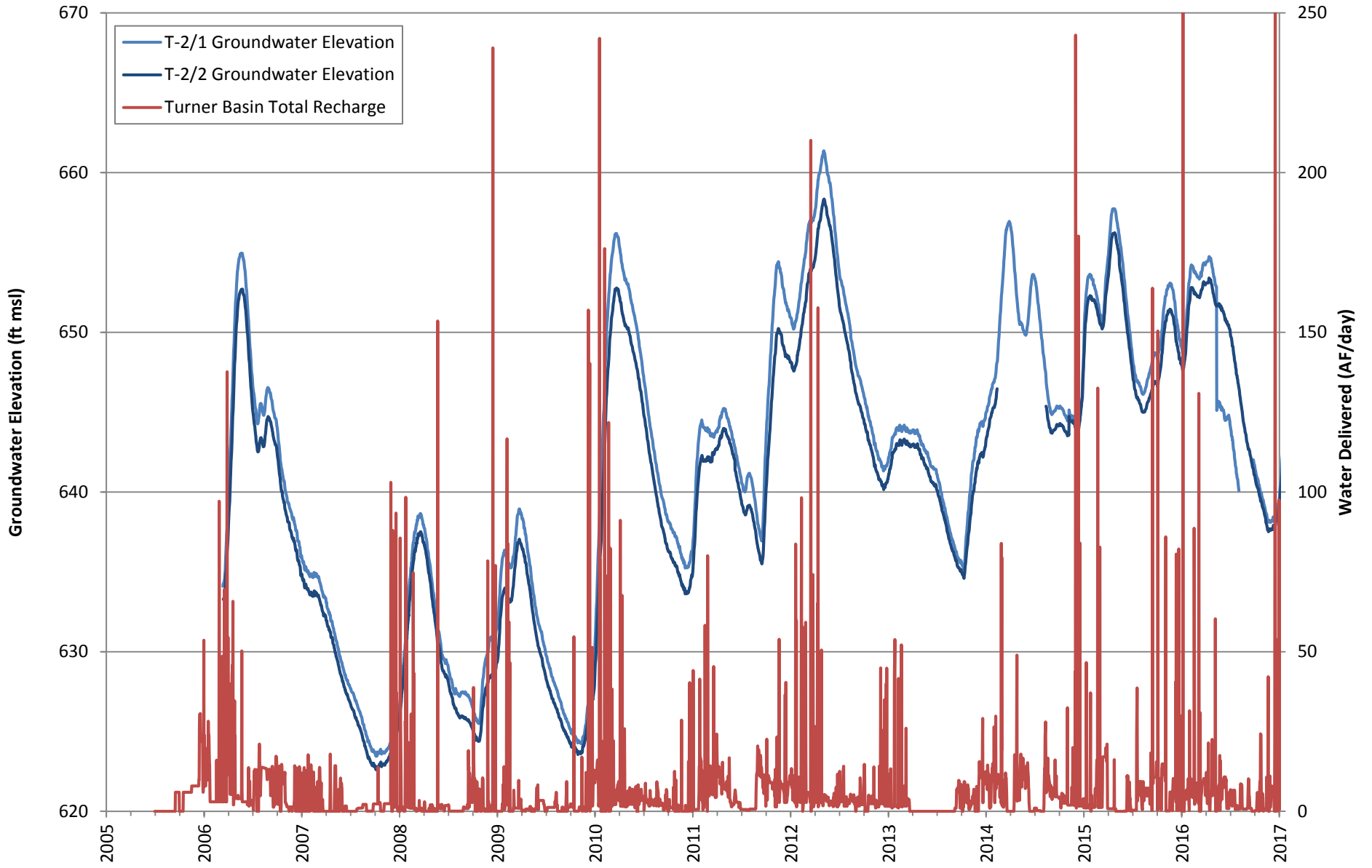
HYDROGRAPH
MW RP3-1/1 & RP3-1/2



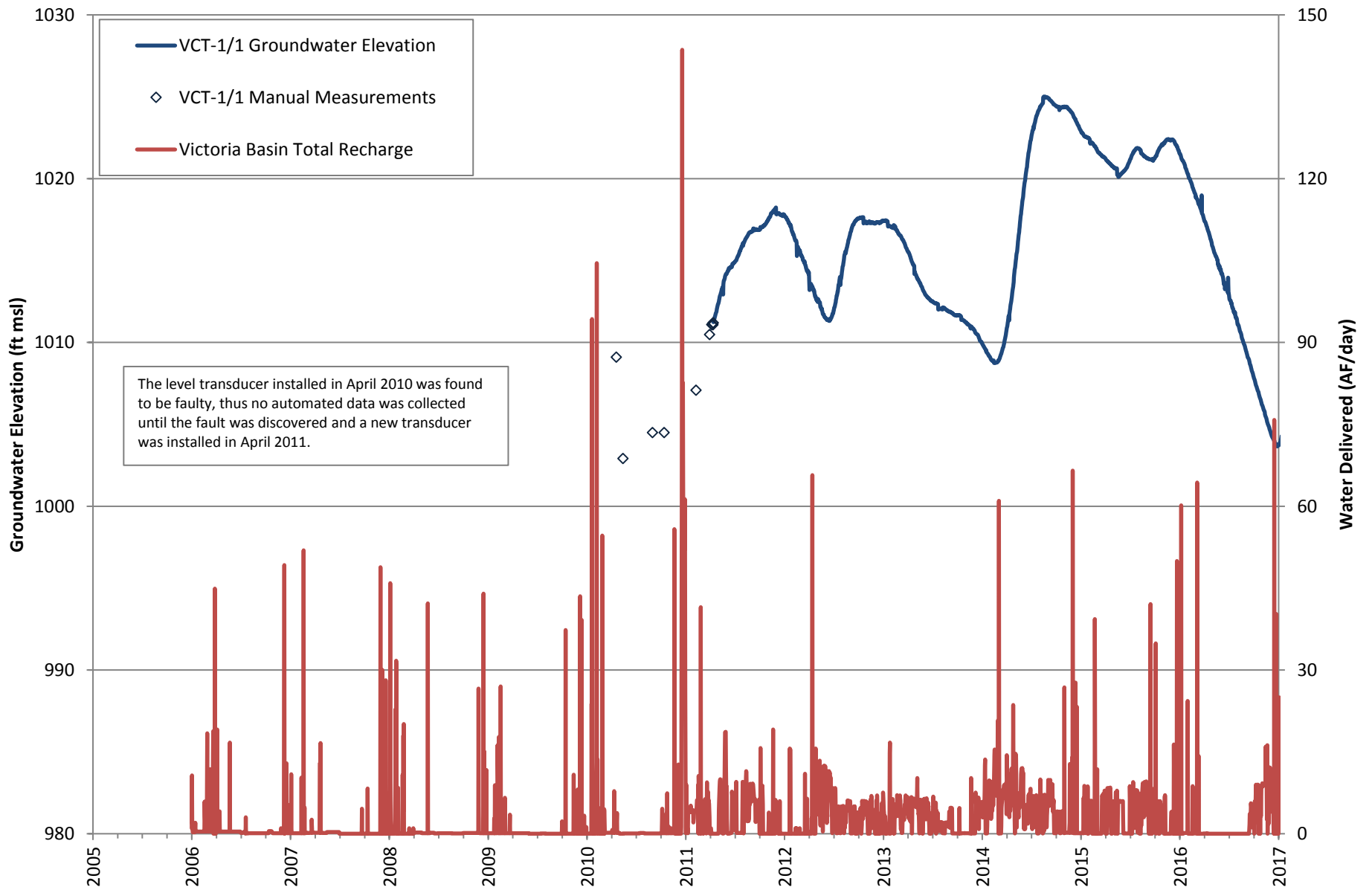
**HYDROGRAPH
MW SS-1/1**



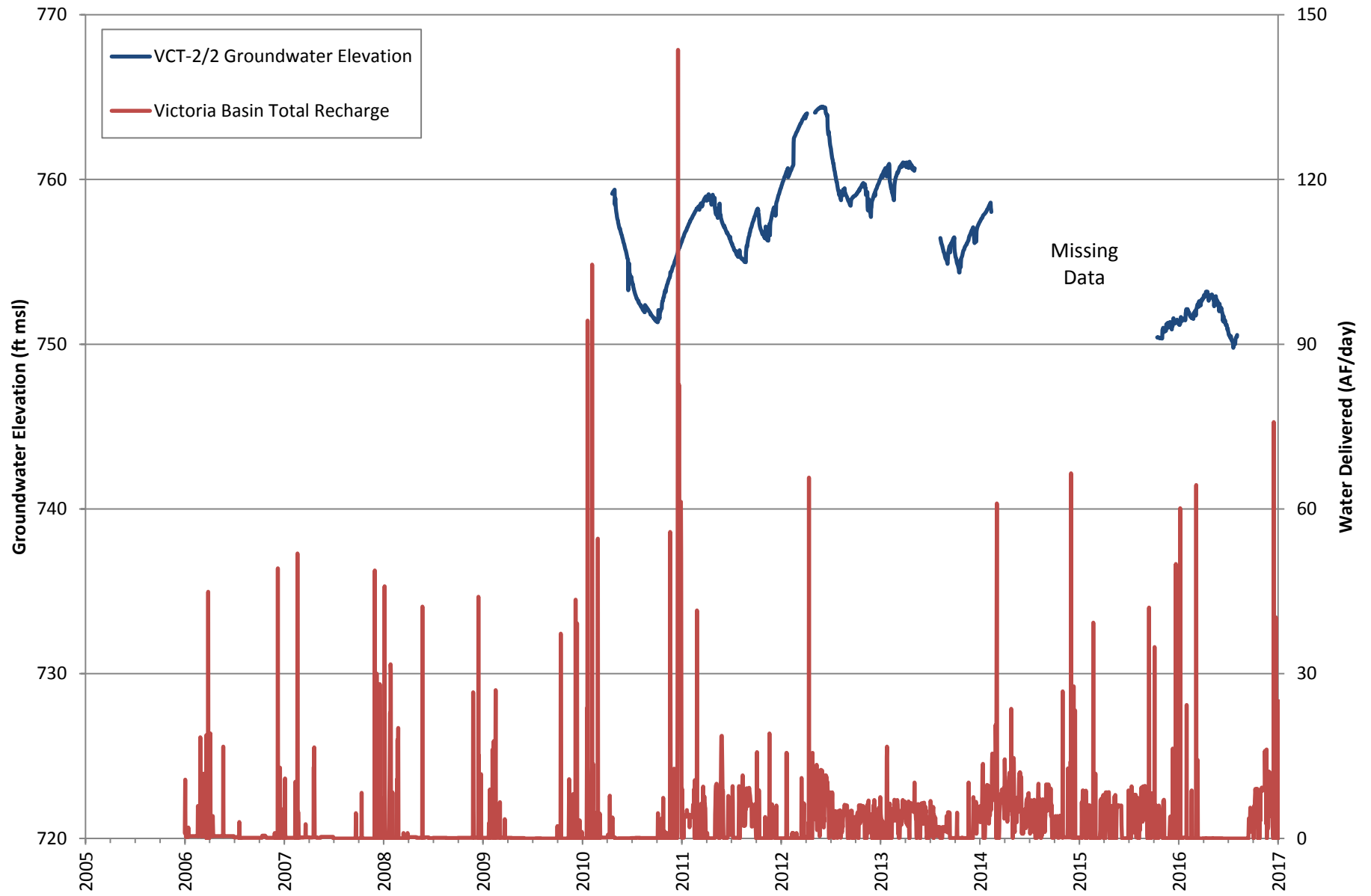
**HYDROGRAPH
MW TRN-1/2**



**HYDROGRAPH
MW TRN-2/1 & TRN-2/2**



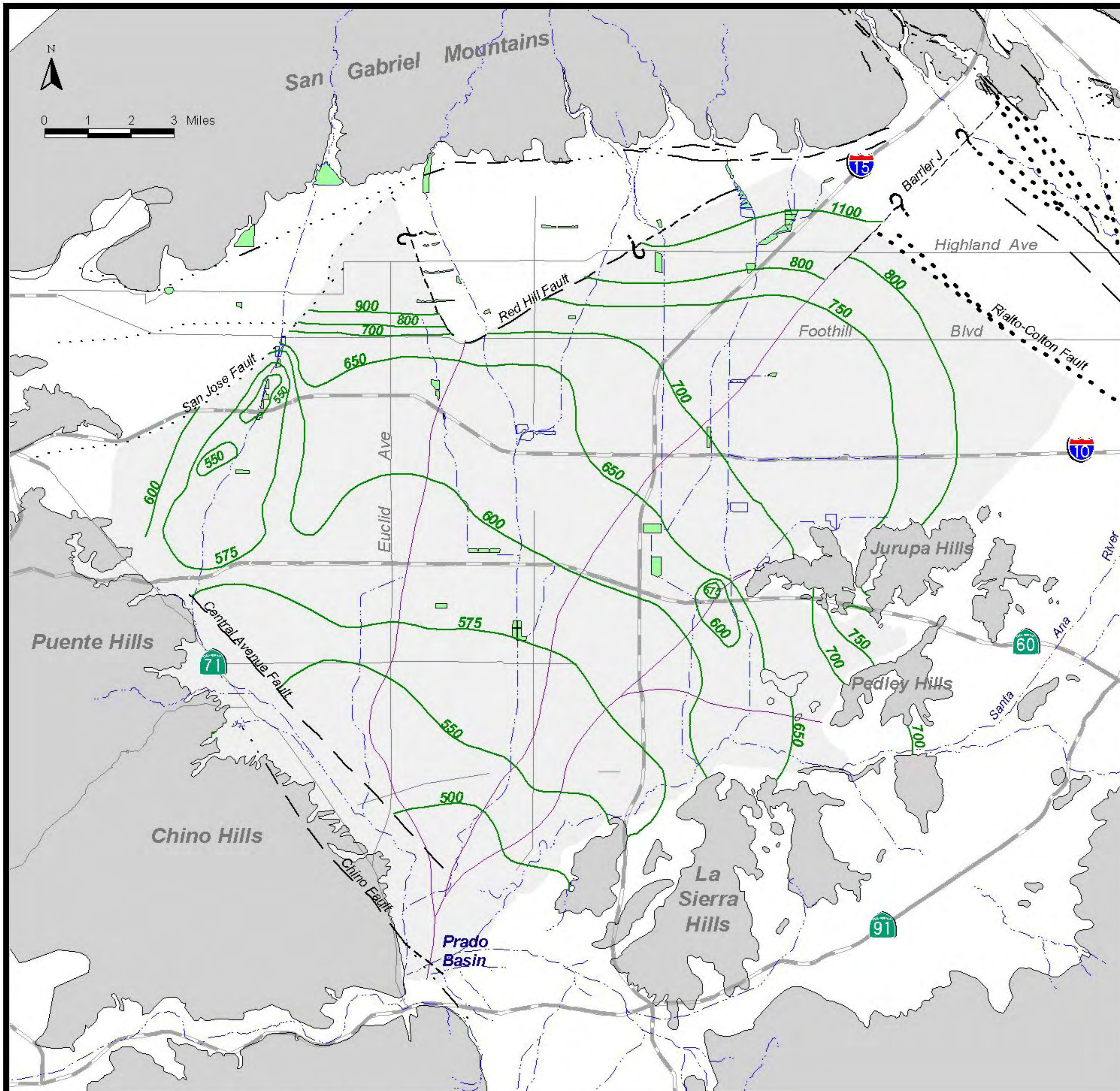
**HYDROGRAPH
MW VCT-1/1**



**HYDROGRAPH
MW VCT-2/2**

APPENDIX E

GROUNDWATER ELEVATION CONTOUR MAPS



Optimum Basin Management Program
Chino Basin Watermaster

Legend

- Fall 1997 Groundwater Elevation (ft-msl)
- Fault
 - Dashed Where Approximate
 - Dotted Where Concealed
 - Queried Where Uncertain
 - Large Dots Where Groundwater Barrier (Suspected Fault)
- Rivers & Streams
- Management Zone Boundary
- Hydrologic Chino Basin
- Recharge Basins
- Bedrock

Management Zone Index Map

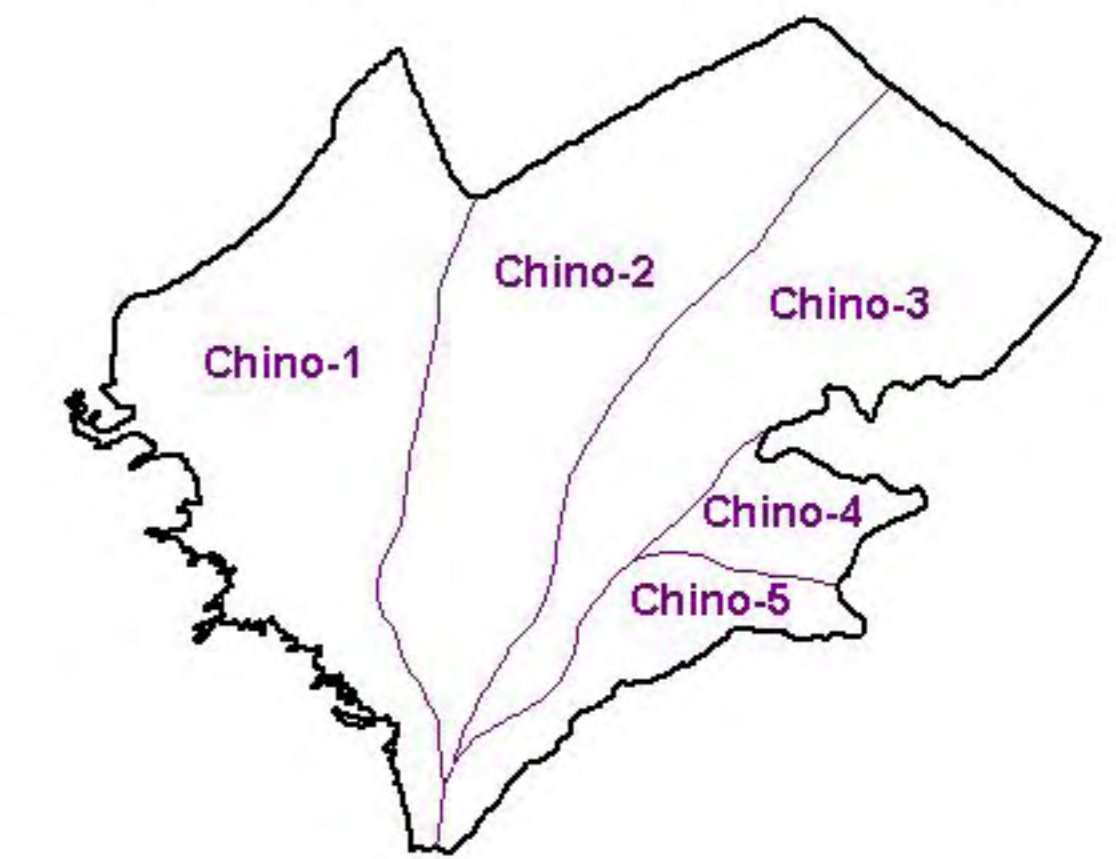
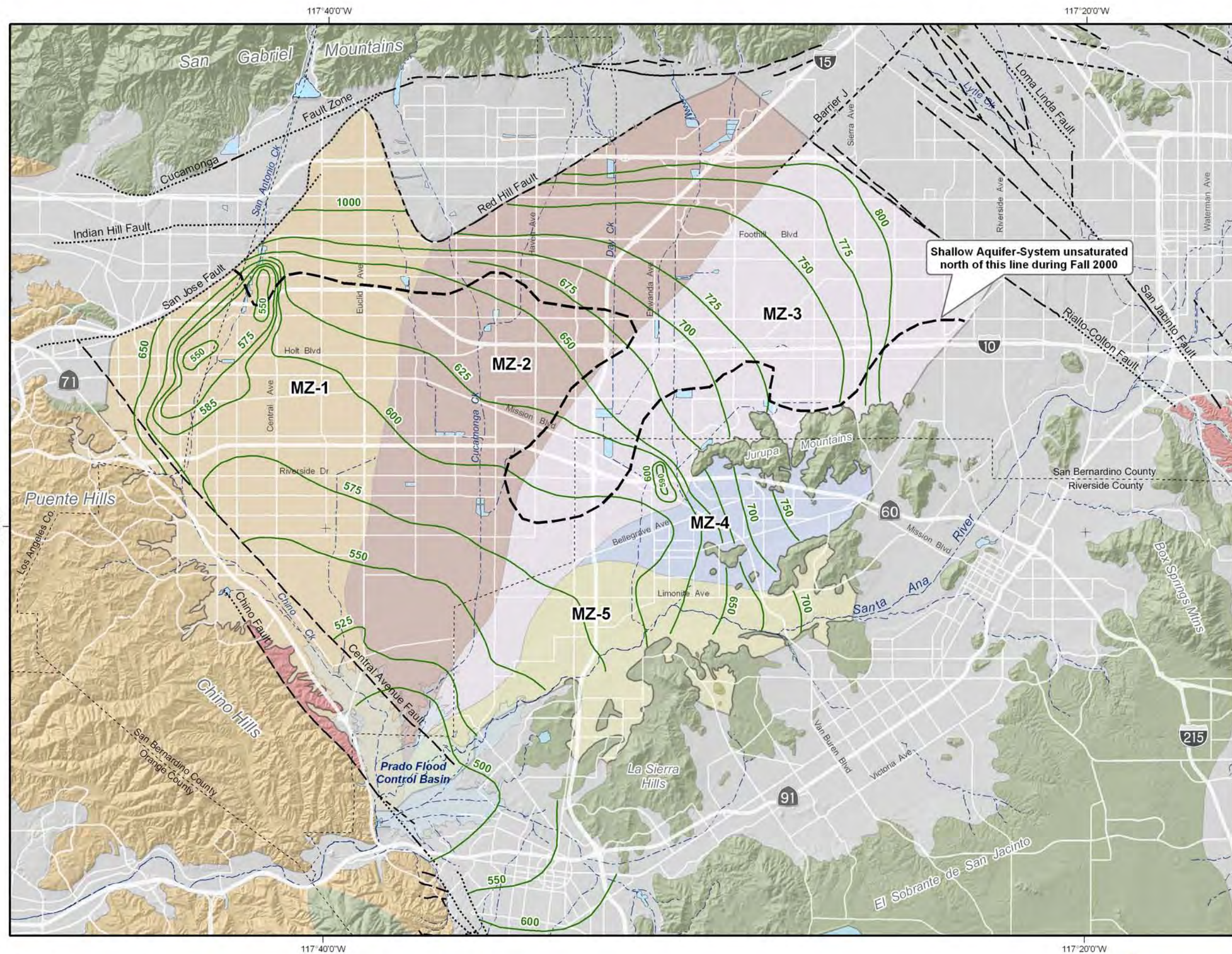


Figure 2-19
Fall 1997
Groundwater Elevation Map

WE WILDERMUTH ENVIRONMENTAL, INC.

Date: August 19, 1999



Main Features

- 800 Groundwater Elevation Contours -- Fall 2000 (feet above mean sea level)
- 775 Groundwater Elevation Contours -- Fall 2000 (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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 ENVIRONMENTAL INC.
 23692 Britcher Drive
 Lake Forest, CA 92630
 949.420.3030
<http://www.wildermuthenvironmental.com>

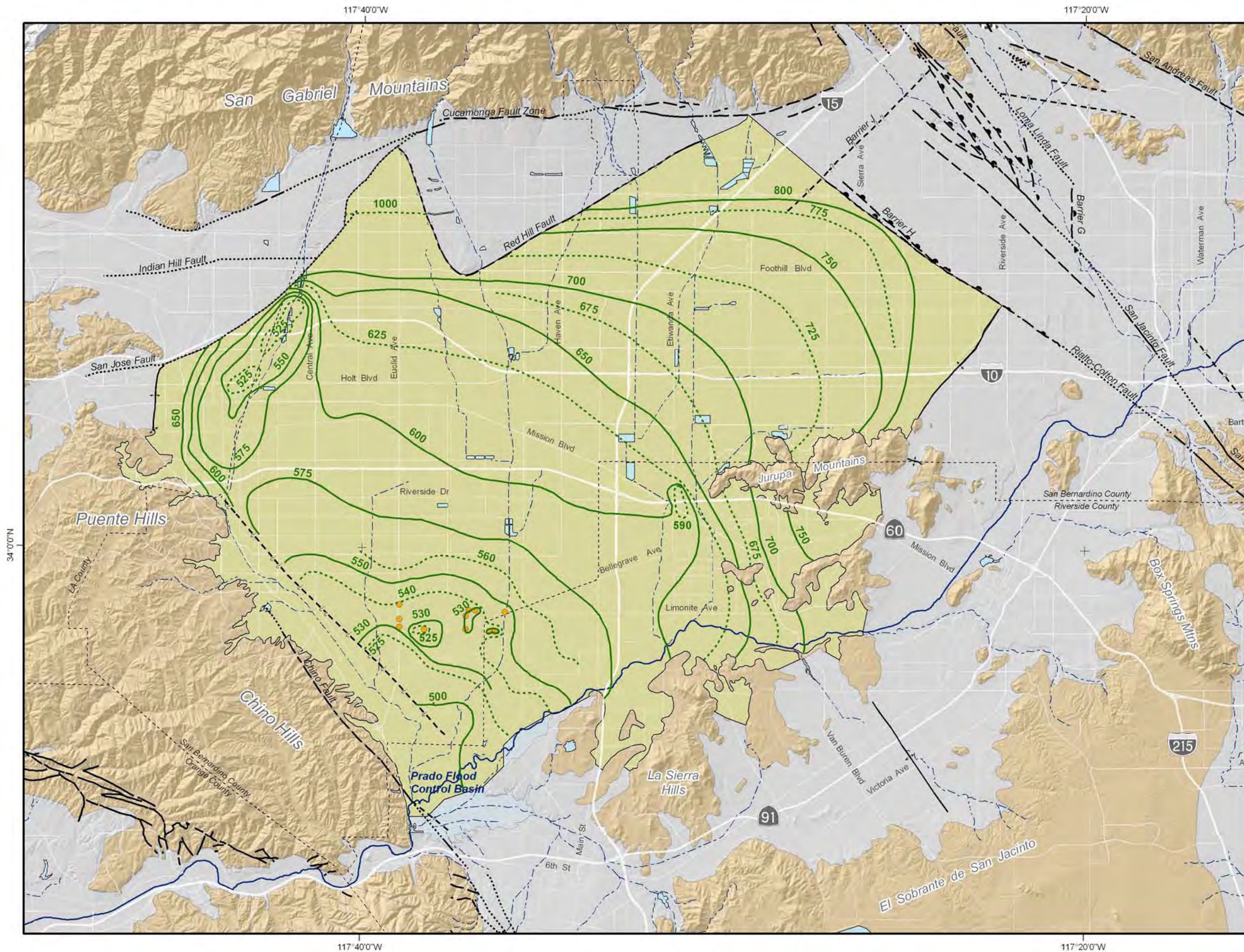
Author: AEM
 Update: WEL
 Date: 20050714
 File: Figure 8-03.mxd



Inland Empire
 UTILITIES AGENCY
 Phase II Recycled Water
 Groundwater Recharge Project

**Groundwater Elevation Map
 Fall 2000**

Figure 8-3



Main Features

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

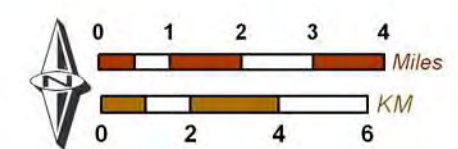
Faults & Groundwater Divides

- Location Certain
- Location Approximate
- Location Concealed
- Location Uncertain
- Groundwater Divide



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Author: KD
 Date: 20050627
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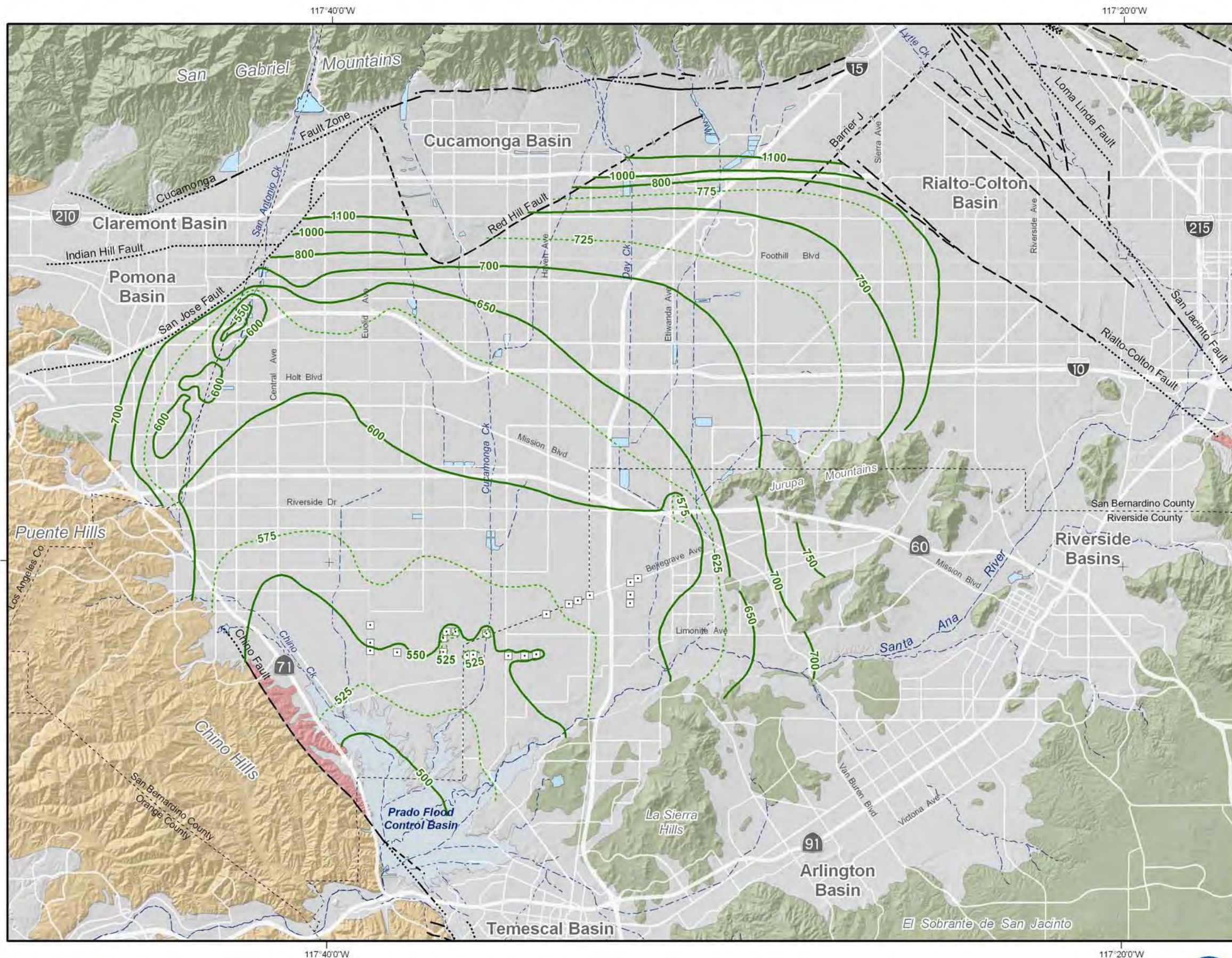


State of the Basin Report -- 2004
 Groundwater Basin Operation and Response



Groundwater Elevation Contours
 Fall 2003 -- Chino Basin

Figure 3-6



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

Other Features

- Chino Desalter Well
- ☾ Flood Control and Conservation Basins

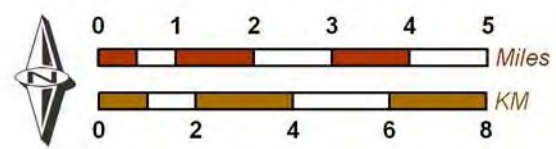
Geology

- 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



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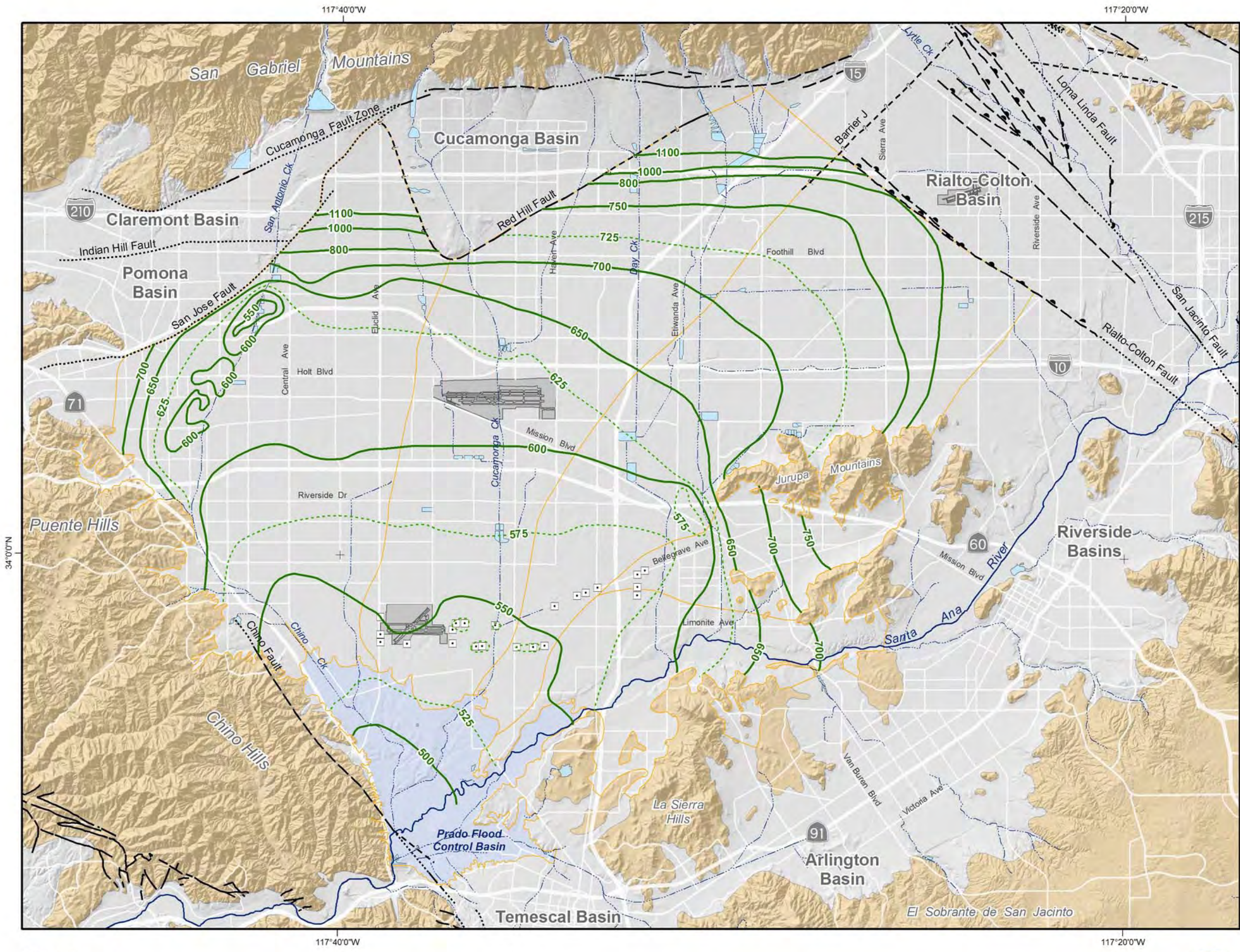
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 Date: 20070511
 File: Figure_3-18.mxd



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



Groundwater Elevation Contours
(feet above mean sea-level)

800
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

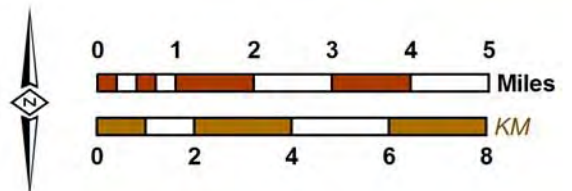
Faults

- Location Certain
- Location Approximate
- Location Concealed
- Location Uncertain



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 Date: 20090401
 File: Figure_3-19.mxd

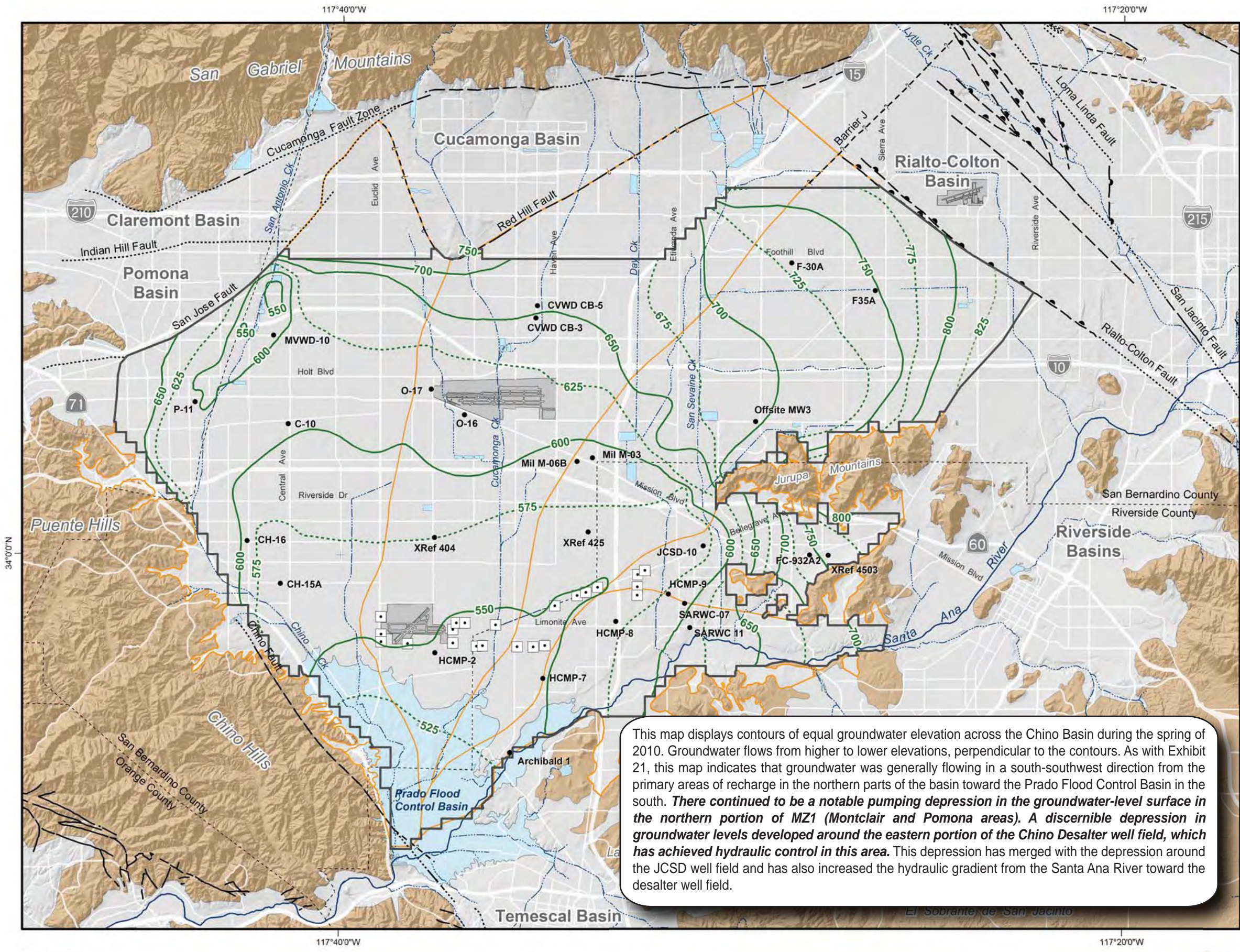


2008 State of the Basin Report
 Groundwater Levels



Groundwater Elevation Contours
 Fall 2008 -- Chino Basin

Figure 3-19



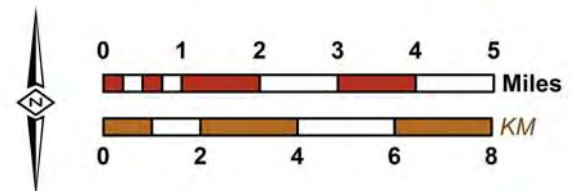
- Groundwater Elevation Contours (feet above mean sea-level)
 - Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)
 - Well used for Time History Analysis (Exhibits 16 through 20)
 - OBMP Management Zones
 - Chino Desalter Wells
 - Streams & Flood 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 Concealed
 - Location Approximate
 - Location Uncertain
 - Approximate Location of Groundwater Barrier

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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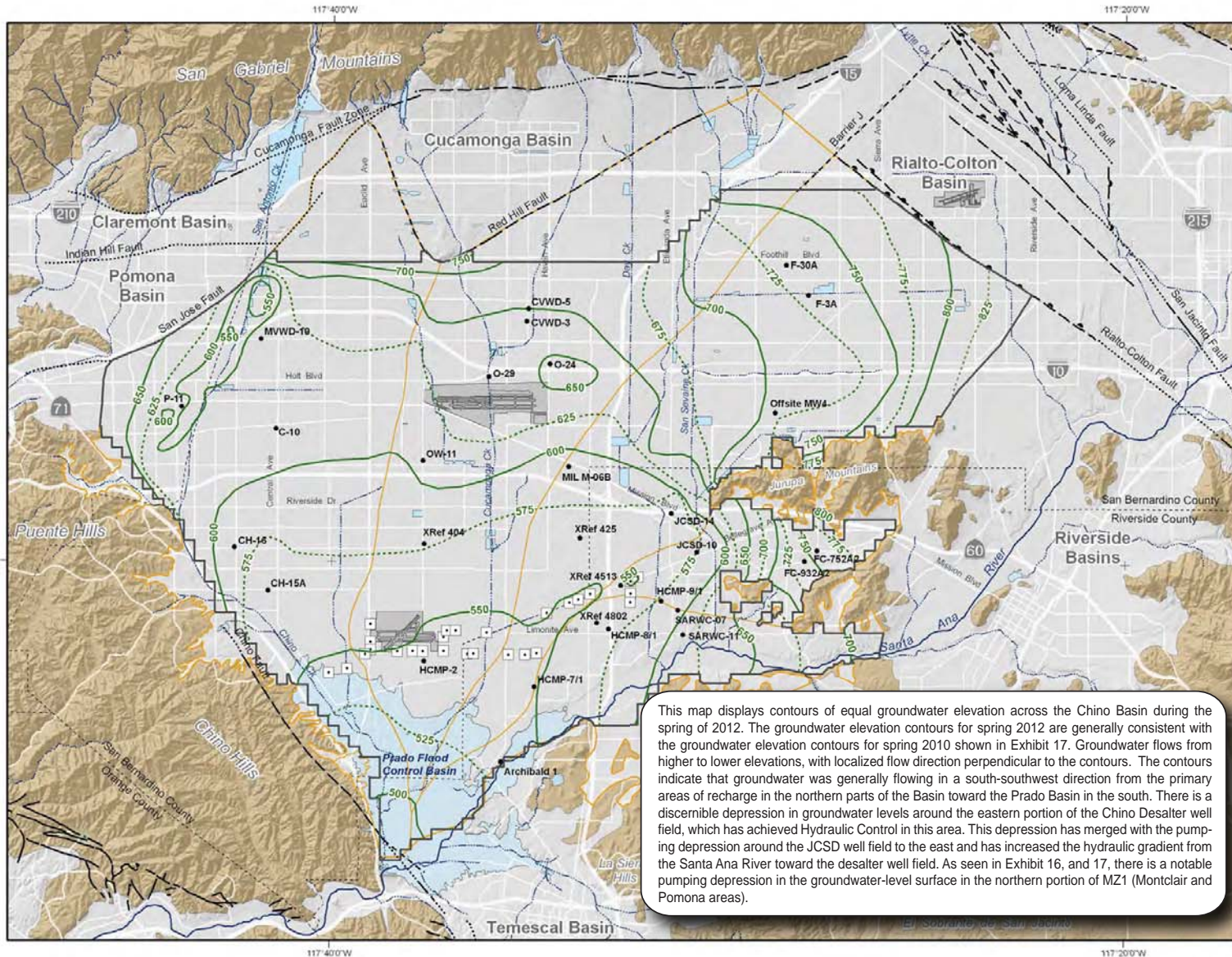
Author: TCR
 Date: 20111027
 File: Exhibit_22.mxd



2010 State of the Basin
 Groundwater Levels

Groundwater Elevation Contours

Spring 2010



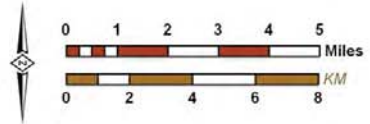
- Groundwater Elevation Contours (feet above mean sea-level)
 - Boundary of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)
 - Well With a Water-Level Time History Plotted on Exhibits 24 through 28.
 - OBMP Management Zones
 - Chino Desalter Wells
 - Streams & 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

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 2012. The groundwater elevation contours for spring 2012 are generally consistent with the groundwater elevation contours for spring 2010 shown in Exhibit 17. Groundwater flows from higher to lower elevations, with localized flow direction perpendicular to the contours. The contours indicate 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 Basin in the south. There is a discernible depression in groundwater levels around the eastern portion of the Chino Desalter well field, which has achieved Hydraulic Control in this area. This depression has merged with the pumping depression around the JCSD well field to the east and has increased the hydraulic gradient from the Santa Ana River toward the desalter well field. As seen in Exhibit 16, and 17, there is a notable pumping depression in the groundwater-level surface in the northern portion of MZ1 (Montclair and Pomona areas).



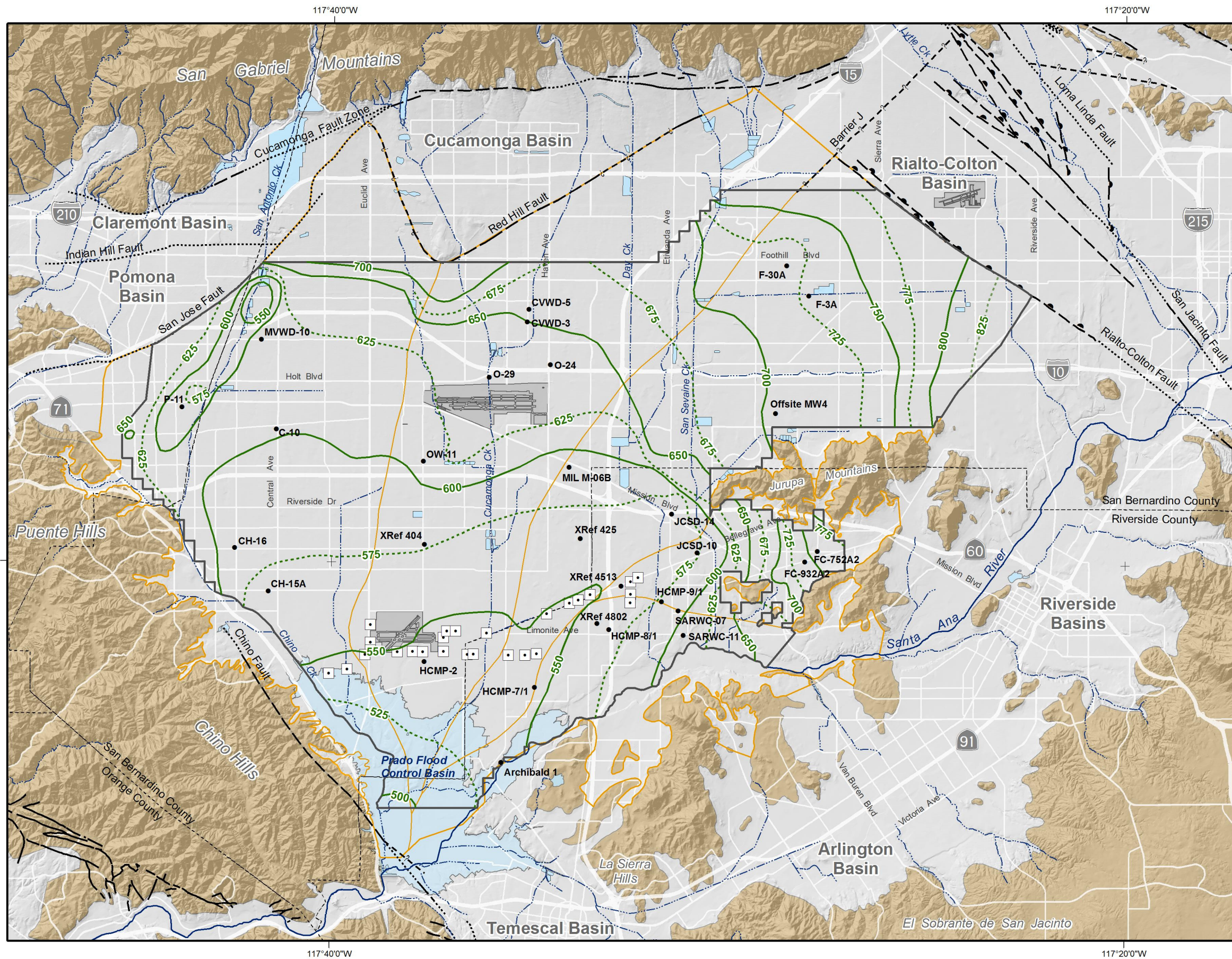
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Author: TCR
 Date: 20121130
 File: Exhibit_18.mxd



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

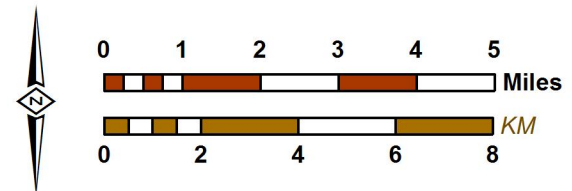
- Chino Desalter Wells
- Streams & Flood Control Channels
- Flood Control & Conservation Basins

- 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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2014 State of the Basin DRAFT
 Groundwater Levels

Groundwater Elevation Contours in Spring 2014

Shallow Aquifer System