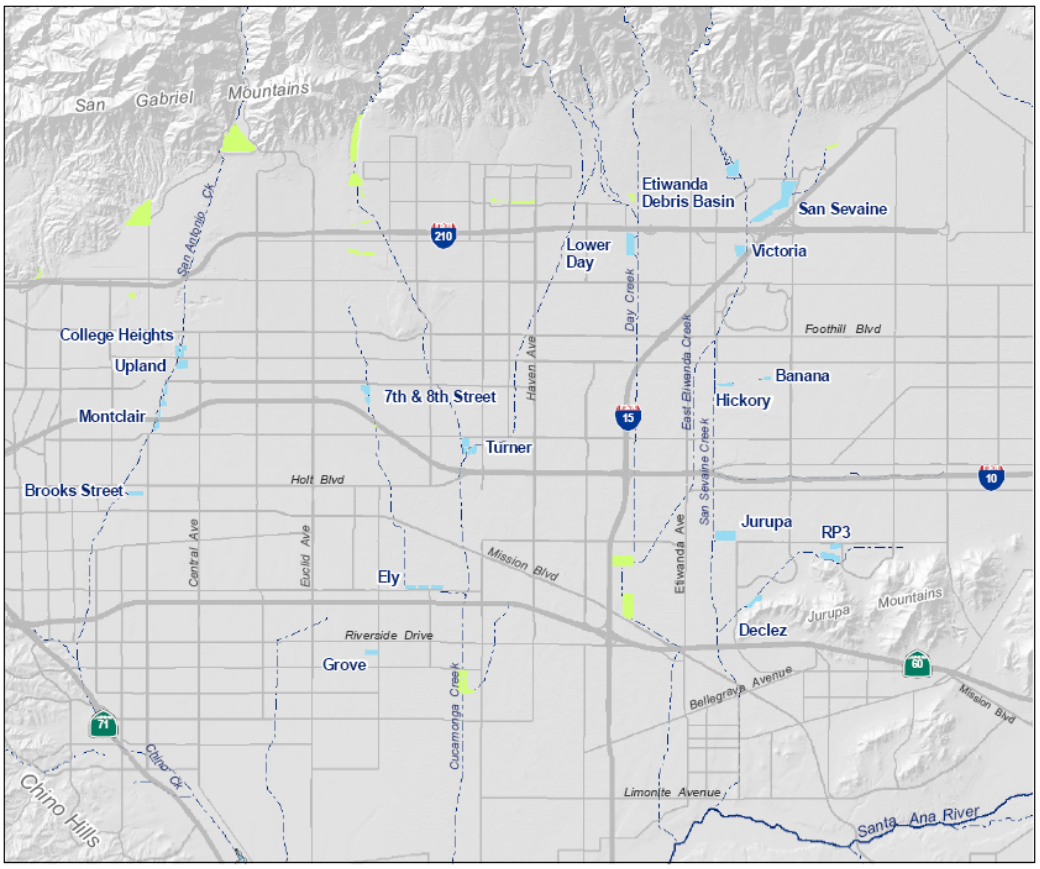
Chino Basin Recycled Water Groundwater Recharge Program

2017

Annual Report



May 1, 2018

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Chino Basin Watermaster
Partners in Basin Management

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

Peter Kavounas, P.E.
General Manager

May 1, 2018

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

Subject: Transmittal of the Annual Report for 2017
Chino Basin Recycled Water Groundwater Recharge Program

Dear Ms. Smythe:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) hereby submit the *2017 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 2017:

- The 2017 calendar year include annual program recharge of 59,448 acre-feet (AF), which includes 7,570.9 AF of storm water and dry weather flows; 14,371.9 AF of recycled water; and 37,505 AF of imported water.
- During 2017, 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 2017. No primary or secondary regulated contaminants limits were exceeded during 2017, with the exception of the secondary MCL for odor.
- No corrective actions were necessary for RP-1 and RP-4. No unit process changes occurred during 2017.

- 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 2017, the volume-based 120-month running average recycled water contributions (RWCs), inclusive of groundwater underflow, by basin were: 8th Street - 22%; Banana - 36%; Brooks - 18%; Declez 7%, Ely - 22%, Hickory - 22%, RP3 - 17%; San Sevaine 5 - 7%; Turner Basin Cells 1&2 - 22%; Turner Basin Cells 3&4 - 23%; and Victoria - 30%. 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 2017 for domestic or municipal use from zones that extend 500 feet and 6-months underground travel time from the 8th Street, Banana, Brooks, Declez, Ely, Hickory, Turner, RP3, San Sevaine, and Victoria recharge sites.
- Sufficient data exist to estimate approximate arrival times of recycled water at several monitoring wells based on observed trends in EC, TDS, and chloride concentration at the following monitoring wells 8TH-1/1 (22 months) 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.
- Comparison of the pre-recharge groundwater elevation contour map (Fall 2003) with the most recent groundwater elevation contour map (Spring 2016) 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 2016 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. The only significant differences in groundwater flow direction between the 2003 and 2016 maps is for the mound at 8th Street, which between 2012 and 2016 had a more westward direction as opposed to a south-southwest direction in 2013. This difference may indicate the 8th Street Basin downgradient monitoring well location (8TH-2) is not appropriately located to characterize downgradient recharge water quality. Other differences include a deeper and larger area pumping depression has developed in the vicinity of the Chino Desalter well field (area of hydraulic control) and a smaller pumping depression has developed in Pomona west of Brooks Basin. Some changes in the contouring style/methodology are evident between the 2003 and 2016 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 2016 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 2018 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

2017 Annual Report

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May 1, 2018

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1 INTRODUCTION

This is the 2017 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 2017 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 2017 calendar year, 59,448 acre-feet (AF) of water were recharged in the Chino Basin, which included 7,570.9 AF of storm water and dry weather flows; 14,371.9 AF of recycled water; and 37,505 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.

On June 18, 2014, the State Water Resources Control Board – Division of Drinking Water (DDW) adopted new regulations pertaining to Groundwater Replenishment Reuse Projects (GRRP), which can be found in Title 22 California Code of Regulations, Division 4, Chapter 3. Article 5.1

"Indirect Potable Reuse: Groundwater Replenishment - Surface Application" found in Sections §60320.100 through 60320.130. Pursuant to the new GRRP regulations, additional monitoring and reporting began in 3Q15.

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 2017 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 2017, 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 2017a, 2017b, 2017c, 2018).

2.1.1 Detections and Compliance with Narrative Limits

Recycled Water Specifications A.5 though A.9 are narrative limits in the permit. The 2017 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. Compliance with the TN limit of 5 mg/L can also be met at the lysimeters (Table 2-5a of quarterly reports) or at locations specified in alternative monitoring plans (Table 2-5b of quarterly reports). None of the narrative limits for turbidity, coliform, TDS, TIN, pH, or TOC were exceeded during 2017.

Table 2-2 of the quarterly report presents IEUA's Agency-wide 12-month running average for TDS and TIN as required by the NPDES permit. During 2017, 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 2017 recycled water quality monitoring data and associated limits for Recycled Water Specifications A.1 through A.3 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 2017, the 4-quarter running average concentrations for constituents with constituents with primary MCLs,

secondary MCLs, and action levels did not exceed compliance limits, with the exception of the secondary MCL for odor (see Section 2.5).

Non-regulated contaminants include the remaining priority pollutants, endocrine disrupting chemicals & pharmaceuticals, and unregulated chemicals. These constituents do not have associated limits; however, they require annual monitoring in accordance with MRP No. R8-2007-0039 (Table II. Recycled Water Monitoring). Several non-regulated contaminants are sampled and reported more frequently than the required annual frequency due to having the same analysis methods used to monitor compounds with primary MCLs. Additionally, in accordance with Title 22, Division 4, Chapter 3. Article 5.1 §60320.120(b) the monitoring frequency of recycled water for chemicals with State notification levels (NLs) increased from annually to quarterly. The non-regulated contaminants monitoring data for recycled water can be found in Table 2-4 of the quarterly monitoring report. In 2017, the annual sampling for the non-regulated contaminants in the recycled water took place during the third quarter of 2017.

The compliance sampling point for Total Trihalomethanes (TTHMs), Total Haloacetic Acids (HAA5), and 1,2,3-Trichloropropane (1,2,3-TCP was added in 3Q17 after it was adopted as a primary MCL in July 2017) are not at the NRG Turnout. Lysimeter compliance sampling for these parameters is performed at groundwater recharge basins actively receiving recycled water prior to sampling. Compliance for TTHMs and HAA5 were consistently met throughout 2017 and 1,2,3-TCP were consistently met starting 3Q17 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, Declez & RP3, and San Sevaine & Victoria Basins, respectively. Groundwater quality samples are collected and tested quarterly for all constituents listed in Table 1 of Section V in the MRP R8-2007-0039. At the monitoring wells specified in Condition No. 19 in the Phase I Findings of Fact (FOF) of Order No. R8-2005-0033 and Condition No. 25 in the Phase II FOF of Order No. R8-2007-0039, groundwater quality samples are collected and tested annually for constituents specified in Condition No. 27 of the Phase II FOF.

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

All groundwater-quality data collected at the monitoring wells is reported in Table 2-9a and 2-9b of the quarterly monitoring reports. Annual monitoring data for 2017 can be found in Table 2-9c in the 3Q17 report.

Groundwater quality monitoring results can be used to assess background or baseline conditions, to estimate the time of arrival of recharge waters and the percentage of recycled water at a

monitoring well, and to access the impacts of recharged water on down-gradient groundwater supplies. Section 3.2 and Section 3.4 of this report describe how the groundwater quality monitoring results are used for these purposes in more detail. Section 2.5 of this report describes any exceedances of a primary or secondary MCL, or the presence of total coliform in groundwater samples during 2017, and the notification to the DDW.

2.3 Laboratory Certifications and Test Methods

Water quality samples collected for the recycled water recharge program are analyzed by either the IEUA or Eurofins Eaton Analytical (EEA) laboratories. Both laboratories are DDW Environmental Laboratory Accreditation Program (ELAP) certified, pursuant to the California Environmental Laboratory Improvement Act. The IEUA laboratory certification is valid through October 2019 and the EEA laboratory certification is valid through January 2019.

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 2017 Annual Laboratory QA/QC Data Summary Report was also submitted to the Regional Board as an attachment in IEUA's 2017 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.

Odor has a secondary MCL of 3 Units in Recycled Water Specification A.3. During every quarter of 2017, the 4-quarter running average threshold odor value exceeded the secondary MCL. The odor has been identified by EEA 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 2-9a in the quarterly reports), threshold odor does not exceed 3 Units at any of the monitoring wells.

During 2017, there were exceedances of limits for constituents sampled at groundwater monitoring wells adjacent to recharge basins receiving recycled water. These exceedances were primarily for secondary MCLs, and some for primary MCLs, and total coliform presence. The DDW

is notified within 48 hours of receiving the results for primary MCL exceedances or coliform presence at active municipal drinking water wells. Exceedances of primary MCLs and coliform presence at non-drinking water monitoring wells and all secondary MCL exceedances will only be reported in the quarterly reports.

As required in MRP R8-2007-0039 Section V.2 the DDW were notified when necessary. The following describes the exceedances that were detected during 2017 groundwater sampling, and any DDW notification:

- Turbidity exceeding the secondary MCL of 5 NTU was observed at several wells, namely: 8TH-1/1, Bishop of San Bernardino Corporation (Ely), BRK-1/1, BRK-2/1, BRK-2/2, DCZ-1/1, Ely MW1, RP3-1/1, T-2/1, and VCT-1/1.
- The secondary MCL of 15 units for color was exceeded at several wells, namely: 8TH-1/1, Bishop of San Bernardino Corporation (Ely), BRK-1/1, BRK-2/1, BRK-2/2, DCZ-1/1, and RP3-1/1.
- The secondary MCL for pH within the range of 6.5 to 8.5 was exceeded at Ontario Well No. 38 and Reliant Energy – East Well.
- The secondary MCL of 3 units for threshold odor was exceeded at Reliant Energy – East Well.
- The secondary MCLs of 50 µg/L for manganese and 300 µg/L for iron were exceeded at Ely MW1.
- 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). Bishop of San Bernardino Corporation and RP3-1/1 exceeded the TDS secondary MCL. The wells south of the Ely Basins and near the RP3 Basins are in areas where the TDS and EC concentrations in groundwater are historically elevated. The distribution of TDS concentrations observed at wells in the Chino Basin is summarized in Watermaster's State of the Basin Reports.
- Some monitoring wells, including potable supply wells, in the Banana-Hickory, RP3, Brooks, and Ely Basins monitoring networks have NO_3-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 NO_3-N concentrations range from 10-30 mg/L. The distribution of NO_3-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 NO_3-N concentrations are comparable to the ambient NO_3-N concentration in groundwater for each monitoring well's respective groundwater management zone within the Chino Basin.
- Total coliform was detected at various wells during 2017. 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 2017, as none of wells that showed coliform presence were active municipal drinking water wells.

Unitex 91090 is an active private potable well that has shown coliform presence. No notification was made to the DDW or municipality due to the well not being a municipal well. Additionally, there has been no recycled water recharge upgradient of this well at San Sevaine 5 since 2Q14.

- During the annual sampling event, the perchlorate concentration at BRK-1/2 was above the primary MCL of 6 µg/L. Perchlorate concentrations at BRK-1/2 have always been at levels slightly above the MCL since sampling at this well began in early 2007, prior to recycled water recharge. The perchlorate concentrations in BRK-1/2 are consistent with historical background groundwater concentration founds at nearby wells in the Pomona area. The perchlorate concentrations in these areas are reported in the Watermaster's State of the Basin reports.

2.6 Unit Process Changes and Anticipated Impact on Water Quality

No unit process changes occurred during the 2017 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 2017 calendar year is presented in Table 2-1.

3 GROUNDWATER RECHARGE MONITORING

3.1 Summary of Recharge Operations

Groundwater recharge using recycled water has been initiated in 8th Street, Banana, Brooks, Declez, Ely, Hickory, RP3, Turner, San Sevaine, and Victoria Basins. During 2017, IEUA's recycled water recharge totaled 14,372 AF. The table below summarizes the volume of recycled water recharged during 2017 at each basin, and the percent of total recharge that is comprised of recycled water. The table shows the distribution of recharge amongst the basins and the percent does not represent the blend of the water recharged.

Basin	2017 Recycled Water Recharge (AF)	Percent of 2017 Recycled Water Recharge
8th Street	1,729	11.9%
Banana	1,269	8.8%
Brooks	9,25	6.4%
Declez	0	0%
Ely	1,339	9.2%
Hickory	765	5.3%
RP3	4,858	33.6%
San Sevaine	0	0%
Turner	1,757	12.1%
Victoria	1,835	12.7%
Total	14,372	100.0%

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, 2017a, 2017b, 2017c, and 2018), 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 recycled water recharge is shown two ways. The first is the mass balance of relative volumes of the recharge water sources - recycled water and diluent water, including storm water / local runoff, groundwater underflow, and imported water - presented in the RWC Management Plans. The second is by comparison of relative concentrations of water quality parameters that have distinct concentrations in both the background (or baseline) groundwater and the recycled water used for recharge, such as EC, TDS, and chloride.

While both these methods are appropriate, they should be used together as evidence of in-aquifer blending. They are appropriate as the 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 2017 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). The underflow estimation method was documented in Appendix G of the 2009 Annual Report for the Recycled Water Groundwater Recharge Program (IEUA and CBWM, 2010a). Underflow for each basin was calculated using the Darcy flow equation with input parameters originating from CBWM's calibrated groundwater flow model. For basins that share the flow path of groundwater underflow, the underflow volume is used for both basins as the travel time between these basins exceeds that required for drinking water wells, and thus any upstream blend has become groundwater again upon reaching the downstream basin. Conservatively, the underflow calculation was made using only the upper-most sediments (upper model layer), and thus does not included 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:

Recycled Water 120-Month Total Volume / (Recycled Water + 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 except for 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 2017, 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
8th Street	28%	50%	22%
Banana	36%	50%	36%
Brooks	42%	50%	18%
Ely	29%	50%	22%
Declez	NA	20%	7%
Hickory	36%	50%	22%
RP3	50%	50%	17%
San Sevaine 5	27%	27%	7%
Turner 1&2	24%	24%	22%
Turner 3&4	45%	45%	23%
Victoria	50%	50%	30%

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 based on the peak EC and Cl concentrations. 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. 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. 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. EC concentrations showed an increasing trend in 2017, while chloride and TDS concentrations showed a decreasing trend. As presented in Table 3-1, the highest percent blend of recycled water in the groundwater mound at 8TH-1/1 during 2017 was approximately 60% to 64% based on chloride and EC concentrations. After the 2015 peak, recycled water blend at the well decreased through 2017.

In the deeper casing (8TH-1/2), there were slight increases in the EC, TDS, and chloride concentrations from mid-2011 to 2017 after trending downward since the well was constructed in 2007. These increases suggest recycled water recharge upon start up in 2007 and 2008 may have started to arrive in the deeper casing after a travel time of roughly 46 months. From 2011 through 2017, 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 two water quality parameters at the deeper casing is needed to identify with certainty the arrival and blending of recycled water at this depth. At 50 mg/L, the chloride concentration continues to be above background levels (approximately 20 mg/L) However, recycled water arrival would be confirmed should EC and TDS continue to rise significantly above the 2011 baseline concentrations (460 µmhos/cm and 300 mg/L, respectively) 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 2017 may have reached approximately 35% based on chloride concentrations.

Between 2007 and 2017, the shallower casing of monitoring well 8TH-2 (8TH-2/1) shows cyclical seasonal variations and a trend of decreasing 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. In 2016 and 2017, EC and TDS peaks were greater than their historical peak (about 50 mg/L higher for TDS). This would suggest an 8.5 to 9-year travel time to this well casing. Chloride remained in the historical range. 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, and resumed in the second quarter of 2017. Since monitoring began in 2007, there is insufficient indication from 8TH-2/2 to identify a recycled water source in the groundwater in relation to the recharge operations at 8th Street Basin. In the deeper casing of monitoring well 8TH-2 (8TH-2/2), TDS and EC concentrations both showed an increase from 2007 through mid-2009 followed by a consistent decrease through early 2015 to below the initial 2007 concentrations. This increase and then decrease in concentration is sooner than would be excepted 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 2017, these data likely indicate varied concentrations of groundwater are moving past the well site. Of note, chloride concentrations appear to be trending slowly upwards in 2017 to a historical high (35 mg/l) and should watched for possible higher concentrations in 2018.

Banana & Hickory Basins Area

Beginning in early 2008 and plateauing in mid-2009, the deeper casing of monitoring well BH-1 (BH-1/2) located adjacent to Hickory Basin demonstrated significant changes in EC, TDS, and chloride (a 110-mg/L difference in TDS). These changes are attributed to the initiation and continued recharge of recycled water at Hickory and Banana Basins. In 2010 through 2014, generally consistent EC, TDS, and chloride concentrations of the groundwater at BH-1/2 are observed and suggest a stabilized RWC with historical operations at Hickory and Banana Basins. In mid-2014 through 2015, EC, TDS, and chloride data increased to historically high levels (another 130 mg/L increase in TDS). In 2016 and 2017, concentrations remained fairly stable. As presented in Table 3-1 in 2017, the highest percent blend of recycled water the groundwater mound at BH-1/2 based on EC and chloride variations reached approximately 90% to 100%.

Since initiation of recycled water recharge in 2005, the California Speedway Infield Well, south of Banana Basin, showed gradual increases in EC, TDS, and chloride concentrations through 2015 (150-mg/L TDS and 19 mg/L chloride differences). 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. In 2016 and 2017, concentrations of EC, TDS, and chloride generally plateaued at peak historical levels. As presented in Table 3-1 based on EC and chloride variations, in 2017 the highest percent blend of recycled water in the groundwater at the California Speedway Infield Well reached approximately 28% to 68%.

For downgradient well California Speedway No. 2, EC, TDS, and chloride concentrations generally remained the same from 2005 through mid-2012. In April 2012, a slight increase in concentration trend began and continued through 2017. While small, the change supports a recycled water arrived at this well in April 2012, an approximately 6.5-year travel time. As presented in Table 3-1 based on EC and chloride variations, in 2017 the highest percent blend of recycled water in the groundwater at the California Speedway Well No. 2 reached approximately 10% to 25%.

For downgradient well Reliant East, the EC, TDS, and chloride data do not definitively suggest arrival of recycled water recharge, although slight increases in the monitored parameters were observed in 2015 and 2016. Continued observation of the Reliant well is needed to evaluate whether it is being impacted by recycled water recharge. Ontario Well No. 20 was taken out of service in 2015 and is no longer monitored. Fontana Water Company 37A (located 2,240 feet up gradient of Banana basin) was taken out of service in 2016 and will be replaced with Fontana Water Company 7A in 2018.

Brooks Basin Area

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

Recycled water recharge began in September 2008. EC, TDS, and chloride concentrations at BRK-1/1 show seasonal increases and decreases through its history, likely related to recharge activity. From 2013 to 2017, concentration increases of 150 mg/L for TDS and 60 mg/L for chloride have been observed and attributed to the presence of recycled water at BRK-1/1. In 2015, 2016, and 2017, the EC and TDS concentrations have been relatively stable in BRK-1/1. However, chloride concentrations decreased from approximately 110 mg/L in 2015 to 90 mg/L in 2017. 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 2017 reached approximately 86 to 100% at BRK-1/1. The historical data shows that blending occurs in the aquifer beneath Brooks Basin. In the deeper casing (BRK-1/2), a smaller (than BRK-1/1) increases in EC, TDS, and chloride began in January 2010 and continued through 2017. Concentration increases of 100 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 10% to 59%.

The chloride concentrations at BRK-2/1 show a 35-mg/L stepped increase in 2011 that oddly coincides with a 100 µmhos/cm decrease in EC. Then in 2012 and continuing through 2014, chloride concentrations decreased to background levels while EC and TDS increase steadily. Beginning in mid-2014 through 2017, 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, 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). For downgradient well BRK-2/2, the EC, TDS, and chloride data are relatively stable and do not definitively suggest arrival of recycled water recharge. Continued observation of the BRK-2/2 is needed to evaluate whether it is being impacted by recycled water recharge.

Ely Basin Area

Groundwater in the area directly south of Ely Basin (south of the 60 Freeway) is on the northern perimeter of a portion of the Chino Groundwater Basin with high TDS and nitrate concentrations. Groundwater in this area has TDS concentrations between 500 and 1,000 mg/L, as is typical of the Chino Basin areas with a long irrigation history (CBWM & IEUA, 2003). Recycled water has been recharged at Ely Basin since 1999. Quarterly sampling of the Ely area monitoring wells began in 2007, when the site was incorporated in the program's recharge permit.

For Ely Basin, monitoring wells are located at the basin (Philadelphia well) and downgradient (Walnut well and Riverside well). Historical recycled water recharge is estimated to have traveled

to and beyond the three monitoring wells directly downgradient of Ely basin due to the basin's recharge history and the wells proximity to the basin (0.0 miles, 0.5 mile and 1.0 mile for the Philadelphia, Walnut, and Riverside wells, respectively).

The late 2014 sample results at the Philadelphia well show EC and chloride at historical high levels nearly equal to that of recycled water. Due to drought conditions in 2014, recycled water was the predominant recharge source water. In 2015 2016, and 2017, the EC, TDS and chloride concentrations at the Philadelphia well have decreased slightly, but remain well 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 2017 reached approximately 67% to 85%.

At the downgradient Walnut and Riverside wells, the high background concentrations of EC, TDS, and chloride make it difficult to identify the arrival of lower concentration storm water and recycled water. The EC, TDS, and chloride concentrations at the Walnut well have historically been at 1.5 to 2 times the concentrations found in recycled water. It is thus difficult to attribute variations in concentration with recharge activity at Ely Basin. The lower TDS concentrations in 2009 to 2011 may be linked with more intense periods of storm water and recycled water recharge that would dilute the higher background TDS groundwater; however, these return to higher levels in from 2011 to 2017. Further down gradient of the Walnut well, the EC, TDS, and chloride of groundwater at the Riverside well are relatively stable but exhibited a gradual increase in concentration between 2007 and 2015 followed by a slight decrease in 2016 and 2017. These results do not indicate any direct seasonal changes from recycled water or diluent water recharge at Ely Basin. The volume-based percent recycled water recharged at Ely basin has been between 12% and 22% the past 5 years (including groundwater underflow).

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. For the 5 years after the Turner 1 recycled water start-up period (2006-2007), recycled water deliveries had been limited, and thus EC, TDS, and chloride concentrations decreased towards background levels. However, with the recent drought conditions, a larger volume of recycled water was delivered in late 2014, 2015, and early 2017 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 2017 was approximately 79% to 100% 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 (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 2017, Turner 4 mound had a lower percent of recycled water than the prior two years. 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 2017 was approximately 40% to 55%. 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 µmhos/cm), TDS (40 mg/L), and chloride (10 mg/L) above background levels that suggest recycled water arrival in July 2010. Between mid 2010 through 2016, the EC, TDS and chloride concentrations in Ontario Well No. 25 have remained relatively constant. Declines towards background concentrations were observed by the end of 2017. 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 2017 was approximately 7% to 8%.

In January 2009 through 2010, 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 increases at Ontario Well No. 29 are within the range of background data. These changes are not definitive changes that would correlate with groundwater recharge using recycled water. Ontario Well No. 29 was not sampled from October 2010 to October 2012 because the well was out of commission. The 2013 and 2017 data are lower than the wells' peak values in 2010 and are within background concentrations. Additional data from future monitoring are required to assess the arrival and 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 regarding the percent recycled water. The variations were likely due to purging of higher TDS and chloride water from the soil and groundwater beneath the basin. By April 2012, EC, TDS, and chloride concentrations reached historical lows for this well site. From late 2012 through late 2017, EC, TDS, and chloride concentrations steadily increased. Use of the low values in 2012 as baseline conditions followed by a steady rise in EC, TDS, and chloride through 2017, 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 2017 at well RP3-1/1 was 97% to 100%. Due to their similarities in water quality, sampling of the deeper casing 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 2017. 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 recharge at ALCOA MW-1.

Downgradient well ALCOA MW-3 has higher EC, TDS, and chloride concentrations than ALCOA MW-1. In 2017, ALCOA MW-3 groundwater continued to show fluctuating EC, TDS, and chloride concentrations, which suggests salt contamination moving past the well site. The EC has ranged from 785 to 1,163 µmhos/cm which is higher than the recycled water EC (about 750 µmhos/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 2013 and then relatively stable values through 2017. 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 recharge site. 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.

Declez Basin Area

Recycled water recharge at Declez Basin began in December 2015 and was voluntarily suspended in September 2016 after its Start-Up Period. Recycled water recharge will resume in 2018 upon completion of an intermediate downgradient monitoring well. Background EC, TDS, and chloride have notable annual variation in concentration, which may make determination of percent recycled water difficult. In 2017 all parameters rose to slightly higher than prior background levels. Conditions at DCZ-1/1 appear to be similar to the fluctuations at the upstream ALCOA and Southridge monitoring wells. The two DCZ-1/1 EC data spikes during the start-up period are likely anomalous as they do not remain high as does the basin surface water and lysimeter waster (IEUA, draft Start-Up Protocol for Declez Basin) and these spikes are not seen in the TDS and chloride data. Additional long-term monitoring will be needed to determine the impact of recycled water recharge at this location.

San Sevaine & Victoria Basins Area

Monitoring of San Sevaine and Victoria Basins area wells began in late 2009. Initiation of recycled water recharge began in these two basins in mid-2010. Recycled water recharge at San Sevaine 5 was suspended voluntarily in 2014 to develop plans to mitigate poor infiltration rates and midgefly control. The solution was to build a pipeline to the San Sevaine 1, 2, and 3 basins and resume recycled water recharge there in mid 2018. For the San Sevaine area, the trends in EC, TDS, and chloride have yet to indicate a detectable arrival of recycled water at monitoring wells SS-1 and Unitex 91090. Both wells show slightly declining or stable concentrations.

Victoria Basin mound monitoring well VCT-1/1 shows a steady increase in EC, TDS, and chloride concentrations beginning in May 2011 that continued into early 2016. These values stabilize in mid to late 2016 at values typical of recycled water. Through 2017, these parameters began to decline slightly. 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 93% to 96% 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 Declez Basins. While the plans contain calculations for up to 120 months of historical data, the tabulated and graphed RWC Management Plans (Appendix B) show only the previous 5 years (60 months) of historical recharge and 10 years (120 months) of forecast (planned) data. Historical data not contained in the current report appendices are contained in prior annual reports.

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

In 2009, IEUA and CBWM received a permit amendment from the 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. For basins that share the flow path of groundwater underflow, the underflow volume is used for both basins as the travel time between these basins exceeds that required for drinking water wells, and thus any upstream blend has become groundwater again upon reaching the downstream basin. Victoria and San Sevaine Basins share a common underflow as do RP3 and Declez Basins.

Forecasts for recycled water are made by determining a basins optimal monthly capacity and then subtracting the average monthly stormwater. Thus, the RWC Plan includes the maximum possible recharge and is thus a conservatively high estimate of future RWC. The conservative calculations do not include months of no recharge during future basin maintenance. Should the forecasted recycled water volume cause a basin RWC prediction to exceed its RWC limit, the basin capacity number is sequentially reduced until the RWC limit is no longer exceeded. Turner 1, Turner 4, Declez, Victoria, and San Sevaine are basins whose RWC Plans include a recycled water recharge capacity less than the basin's maximum capacity. These basins each have an RWC limit of less than 50%, except for Victoria. 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 2017 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 2017 quarterly monitoring reports, CBWM has certified that there was no reported pumping of groundwater in 2017 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-time estimate for 8TH-1/1 is approximately 660 days (22 months). Downgradient monitoring well 8TH-2 does not yet show conclusive indication of recycled water arrival. Water quality sampling of the deeper casing of 8TH-2 (8TH-2/2 was suspended in mid 2015 but added back into the program until a long-term trend is identified for an influence from recharge activity.

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 2017. 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 (being replaced in 2018) showed 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 increased from background concentration to over 80 mg/L in January, February, and March 2009 are indicative of the arrival of recycled water. Evaluation of 2010 through 2015 EC, TDS, and chloride data indicate recycled water arrived at the deeper casing (BRK-1/2) in January 2010 for a travel time of approximately 526 days (17 months). At the downgradient monitoring well BRK-2, variations of EC, TDS, and chloride concentrations after recharge are similar to the background variations prior to recycled water recharge, which makes identification of travel time to this well difficult. 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 and 2017 which may suggest grief 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 concentrations increased significantly from background concentrations in the summer of 2007 and indicated an (initial) 11-month travel time. Both monitoring wells have two casings, with the shallower being designated /1 and the deeper being designated /2. TRN-1/1 is not currently sampled as it was constructed above the water table for future mound sampling needs, TRN-2-1 sampling was suspended in 2015 due to sampling results very 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 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 2017 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 (IEUA & CBWM, 2010d) findings indicate the earlier data did not represent the arrival of recycled water, but was instead evidence of vadose zone flushing (IEUA and CBWM, 2010c). The EC and water level trends support a travel time estimate of approximately 99 days. While the background EC prior to recycled water recharge was 1,000 to 1,100 µmhos/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 µmhos/cm. Recycled water recharge began on June 2, 2009 and a 400-µmhos/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 the purged of 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. Travel time from recharge at San Sevaine 5 to the water table is complicated by recharge activities at San Sevaine 1. For the 2017 Annual Report, the hydrograph of SS-1 is complimented with recharge of both basin 5 (storm water and recycled water) and the combined basins 1, 2, and 3 (stormwater and imported water). Both sets of basins appear to have different impacts timing on the well water levels (varying from 2 to 4 months). The timing of water level impacts from these recharge is complicated and warrants further data collection. There is currently insufficient data from the San Sevaine area monitoring wells to establish travel times of recharge from the mound 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 2017, nor are any planned for the current program.

3.5 Groundwater Elevations

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

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

3.5.1 Current Groundwater Elevations

Groundwater elevations from the recharge program monitoring wells and many other wells are used by CBWM to periodically prepare groundwater elevation contours of the Chino groundwater basin. Groundwater contour maps were prepared for 1997, 2000, 2003, 2006, 2008, 2010, 2012, 2014, and 2016. These groundwater elevation maps from the Chino Basin Watermaster's *Biennial State of the Basin Reports* are presented in Appendix E. The Spring 2016 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 2016) indicates several things. First, local changes in groundwater elevation near the recharge basins due to recharge activities are present, but (apart from Hickory and Ely basins) are not generally evident using the 25-foot contour interval of the maps, indicating that the recharge program has not significantly impacted regional groundwater flow directions. The only significant differences in groundwater flow direction between the 2003 and 2016 maps is for the mound at 8th Street, which between 2012 and 2016 had a more westward direction as opposed to a south-southwest direction in 2013. This difference may indicate the 8th Street Basin downgradient monitoring well location (8TH-2) is not appropriately located to characterize downgradient recharge water quality. Recharge mounds at basins are evident locally by the well hydrographs at the monitoring wells (Appendix D), but are generally within the contour interval (25 feet) of the maps. Also of note, since 2008 a deeper and larger area pumping depression has developed and stabilized around the Chino Desalter (hydraulic control) well field. Also during this time, the regional pumping depression in the Pomona area west of Brooks Basin has become smaller and narrower. There are some changes in the contouring style/methodology between the 2003 and 2016 maps. For example, the groundwater contours in the area north of Victoria and San Sevaine Basins were interpreted for the 2003 map, but were not interpreted for the 2010 through 2016 maps.

3.5.2 Water Level Trends in Monitoring Wells

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

8th Street Basin Area

The hydrographs of the 8th Street Basin mound monitoring well (8TH-1) show relatively stable long-term groundwater elevations from 2008 through 2017, that seasonally fluctuate between 640 to 680 feet above mean sea level (MSL). Since 2014, 8TH-1/1 has shown increase seasonal fluctuations in water levels likely due to well production changes in this area. 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 2017. 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, through 2017, BRK-1/1 water levels rose slightly, stabilizing at approximately 610 feet MSL.

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, and through 2017 generally stabilized at approximately 590 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, small increases in 2016, then generally stable in 2017. 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 water level fluctuations between 680 and 690 feet MSL and generally stable through the 10 years of data shown. From 2008 through 2017, the BH-1/2 hydrograph shows relatively stable water levels with 5 to 10-foot season fluctuations. The peak and trough seasonal fluctuations appear delayed between 3 and 4 months from peak recharge activities. Impacts on water elevations due to recharge at Hickory and Banana Basins are muted and delayed due to the over 400-foot depth to the water table at this location.

Ely Basin Area

Ely Basin has received recycled water recharge since 1999, 6 years prior to the currently permitted regional recharge program. In 2011, IEUA installed a transducer in MW-1 (aka the Philadelphia well) and began recording water levels. Since 2011, the long-term water-level trend near Ely Basins in 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. From the end of 2015 through 2016 water levels were relatively stable with approximately 5-foot seasonal

fluctuations. In 2017, two months of intense recharge coincided with an approximately 15-foot seasonal increased water level.

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 2017 the annual winter highs and summer lows show 10 to 20-foot differences, suggesting recharge at Turner Basins has a positive local impact on regional water levels. Since 2010, hydrographs have shown about a 2 to 3-foot per year increase in groundwater elevation. Peak water levels are delayed about 1 to 2 months from peaks in recharge.

RP3 Basin Area

The hydrographs of the RP3 Basin mound monitoring well, RP3-1, shows a good correlation with recharge activity at the basin. Prior to 2009, the water elevation varied by no 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 (both 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. This resulted in water levels in both the shallow and deep RP3-1 casings increasing 10 to 20 feet to a high in 2017 of nearly 40 feet higher than pre-2009 elevations.

Declez Basin Area

The long-term water level trend at this site is has been stable between 2008 and 2017 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 the season water level high. Recycled water delivery has stopped in September 2016 and will resume to Declez Basin upon completion of a downgradient monitoring well in spring 2018.

San Sevaine & Victoria Basins Area

Monitoring well SS-1 was installed in spring 2010 for monitoring recycled water recharge at San Sevaine 5. The recharge history of San Sevaine 5 alone does not correlate well with SS-1 water levels. However, imported water recharge in San Sevaine Basins 1and 2 during 2011 and 2017 does appear to correlate with SS-1 water level changes beneath San Sevaine 5. The hydrograph for San Sevaine 5 has been modified for the 2017 Annual Report to include recharge for both San Sevaine 5 and the combined San Sevaine 1, 2, and 3. Between 2010 and April 2011, the hydrograph for the San Sevaine 5 basin mound monitoring well (SS-1) shows a water level decrease of 5 feet, but began recovering steeply in July 2011 approximately 2 months after the initiation of imported water recharge in San Sevaine 1 and 2 in May 2011. The initial water level rise in May is likely related to the earlier San Sevaine 5 recharge in December 2011. Thus, it appears to be an approximately 2-month delay to the well for recharge at San Sevaine 1 and 2

and an approximately 4-month delay for recharge at San Sevaine 5. Similarly, between 2013 and mid 2017, the SS-1 water levels showed a steady decline, due in part to the low rainfall and low stormwater recharge in the 2015 winter. A small upward change in water level began in June 2017 following imported water recharge in late 2016. A similar water level increase is predicted to continue through mid 2018 following the 2017 imported water charge in San Sevaine 1 and 2. Recycled water recharge at San Sevaine 5 has not occurred since May 2014 due to low basin infiltration rates and operating constraints. Recycled Water recharge will resume in 2018 following completion of a pipeline to San Sevaine 1, 2, and 3.

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 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. Water levels recovered 30 feet through the first half of 2017.

The hydrograph for the Victoria Basin downgradient (intermediate) monitoring well (VCT-2/2) shows 8-year record of relative stability within the elevations 750 to 765 feet MSL. Seasonally, the hydrograph shows 5- to 8-foot water level fluctuations in 2010 through 2018. This well was installed in spring 2010. The existing water level data set does not yet correlate definitively with recharge activities at the San Sevaine and Victoria Basins. While water level and recharge volumes rise and fall annually, comparison of a longer duration data set is required to determine their correlation with certainty. Water level data for 2014 and early 2015 were not available due to Caltrans construction activities at the 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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TABLES

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

	RP-1 (Flow)		RP-1 (Tertiary)		RP-4		
	Ferric Chloride	Sodium Hypochlorite	Aluminum Sulfate	Sodium Hypochlorite	Ferric Chloride	Aluminum Sulfate	Sodium Hypochlorite
Month	Gal.	Gal.	lbs.	Gal.	Gal.	Gal.	Gal.
Jan-17	26,450	2,941	3,150	102,200	5,861	1,295	23,565
Feb-17	24,900	0	4,600	89,200	4,021	919	20,388
Mar-17	27,700	0	3,900	98,400	4,353	1,012	26,377
Apr-17	27,300	0	5,900	121,100	3,870	745	29,366
May-17	27,200	802	3,650	108,500	3,973	830	29,756
Jun-17	26,050	0	4,000	109,400	3,672	589	30,210
Jul-17	28,200	0	4,600	126,000	5,189	796	29,464
Aug-17	27,800	0	4,600	118,200	8,711	1,005	35,304
Sep-17	25,900	0	5,500	89,000	7,465	1,094	28,704
Oct-17	27,800	0	5,700	86,600	7,427	1,364	23,950
Nov-17	27,800	0	5,200	95,700	7,363	1,222	22,153
Dec-17	27,400	0	5,400	102,400	7,438	1,488	23,493
Total	324,500	3,743	56,200	1,246,700	69,343	12,359	322,730

Table 3-1
Evidence of Recycled Water Blending Based on Water Quality at Monitoring Wells in 2017 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	539	64%	110	9	70	60%
	8TH-1/2	Mound	732	255	421	35%	110	13	50	38%
	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	775	100%	110	10	100	90%
	California Speedway Infield	Downgradient	732	420	631	68%	110	10	38	28%
	California Speedway No. 2	Downgradient	732	365	457	25%	110	10	20	10%
	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	751	100%	110	11	96	86%
	BRK-1/2	Mound	732	535	652	59%	110	16	26	11%
	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	677	85%	110	34	85	67%
	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	789	100%	110	21	91	79%
	TRN-2/2	Downgradient	732	350	501	40%	110	9	65	55%
	Ontario No. 25	Downgradient	732	420	441	7%	110	14	22	8%
	Ontario No. 29	Downgradient	Inconclusive evidence of recycled water				Inconclusive evidence of recycled water			
RP-3	RP3-1/1	Mound	732	475	838	100%	110	20	107	97%
	RP3-1/2	Mound	732	465	769	100%	110	41	62	30%
	Alcoa MW3	Downgradient	732	590	1163	100%	110	23	137	100%
	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 Sevaine & 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	704	93%	110	38	107	96%
	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

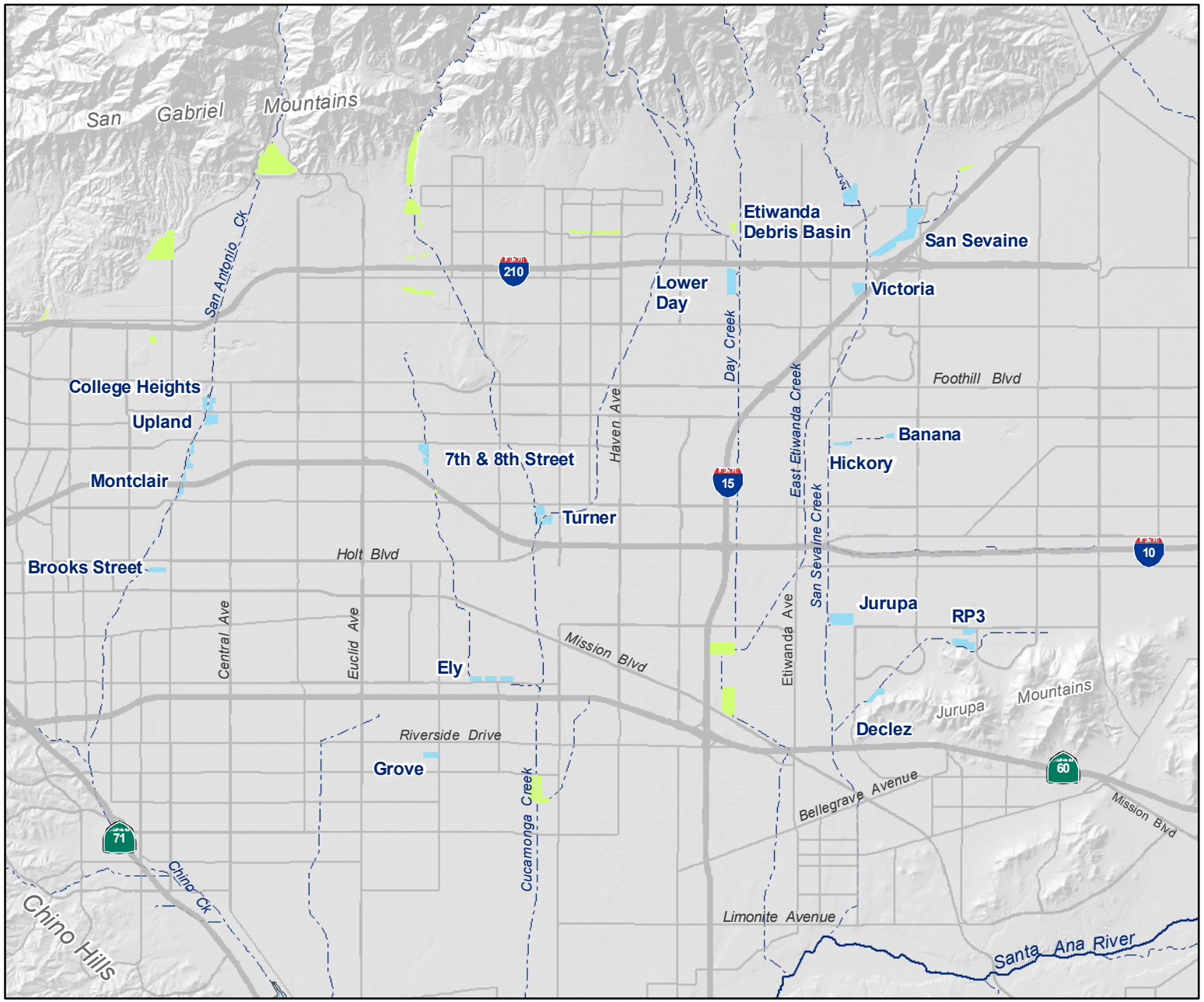
Basin	Owner	RW Start Up	Limit	2008*	2009**	2010	2011	2012	2013	2014	2015	2016	2017
8th Street	SBCFCD	2007-10	28%	28%	23%	23%	21%	21%	24%	22%	21%	23%	22%
Banana	SBCFCD	2005	36%	29%	30%	29%	32%	34%	34%	34%	37%	36%	36%
Brooks	CBWCD	2008-09	42%	8%	30%	22%	18%	16%	18%	18%	17%	18%	18%
Declez	SBCFCD	TBD	TBD	0%	0%	0%	0%	1%	1%	1%	1%	10%	7%
Ely	CBWCD	2006	29%	17%	15%	12%	11%	11%	19%	21%	22%	22%	22%
Hickory	SBCFCD	2005	36%	29%	29%	25%	22%	22%	23%	26%	27%	24%	22%
RP3	IEUA	2009-10	50%	0%	17%	14%	12%	12%	14%	13%	14%	17%	17%
San Sevaine 5	SBCFCD	2010-11	27%	0%	0%	1%	3%	4%	5%	5%	6%	8%	7%
Turner 1&2	SBCFCD	2006-07	24%	12%	10%	8%	7%	6%	7%	11%	15%	19%	22%
Turner 3&4	SBCFCD	2006-07	45%	20%	19%	19%	21%	22%	23%	25%	28%	24%	23%
Victoria	SBCFCD	2010-11	50%	0%	0%	13%	19%	24%	23%	28%	30%	29%	30%

* 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.

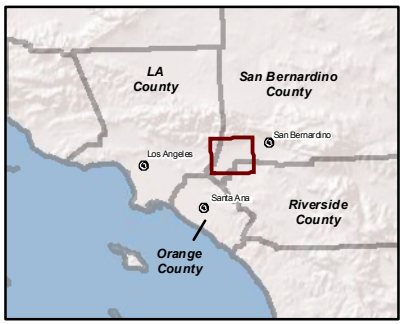
TBD To Be Determined. Declez basin has not been initiated with recycled water recharge, but received recycled water drained from RP3 basins prior to basin restoration activities.

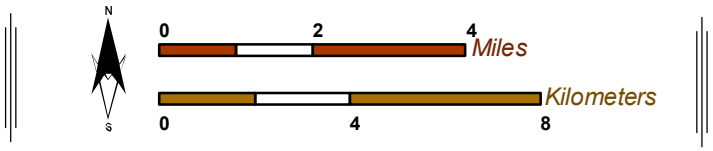
FIGURES



Main Map Features

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

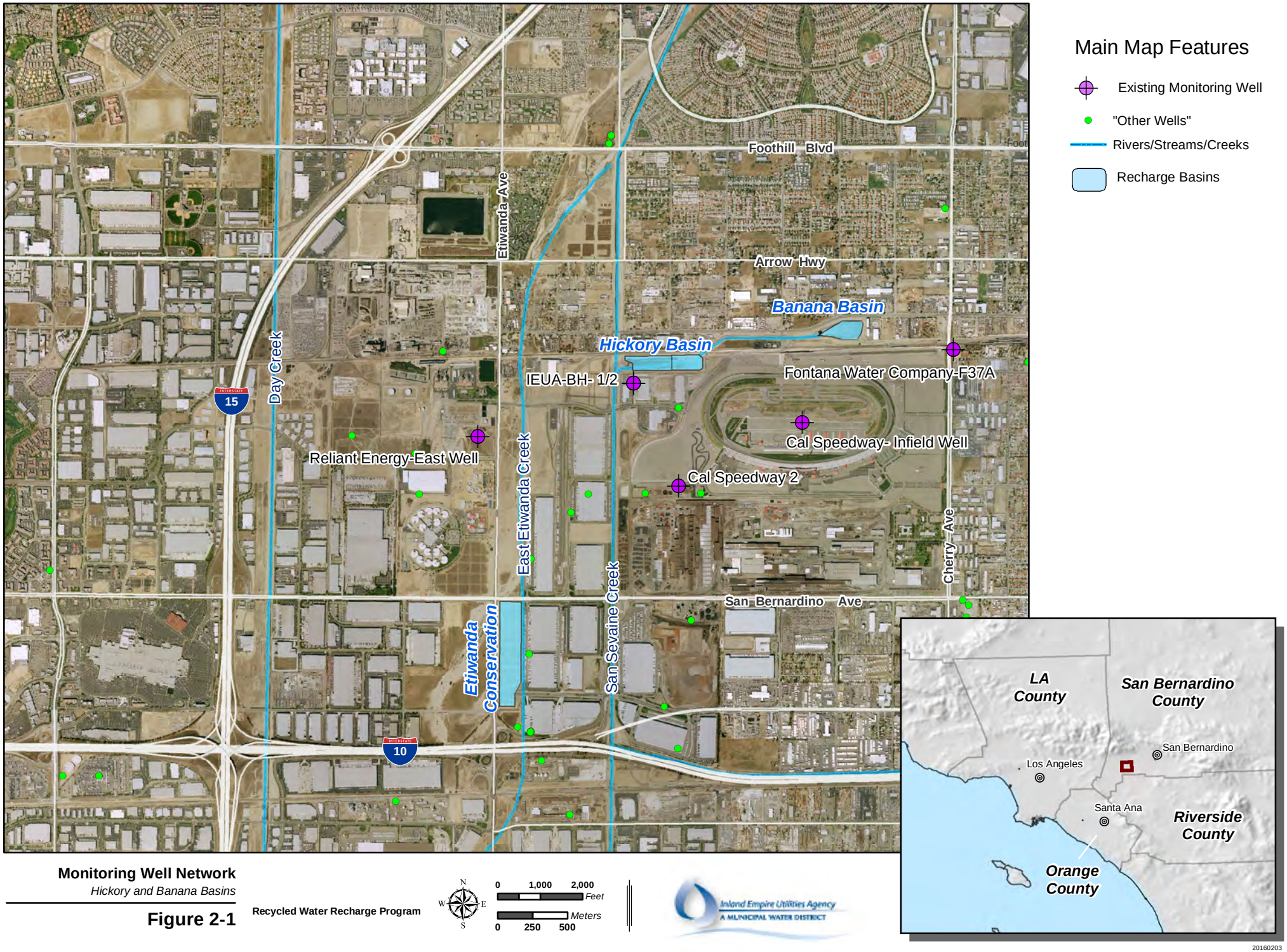




Chino Basin Recycled Water Groundwater Recharge Program

Basin Locations

Figure 1-1

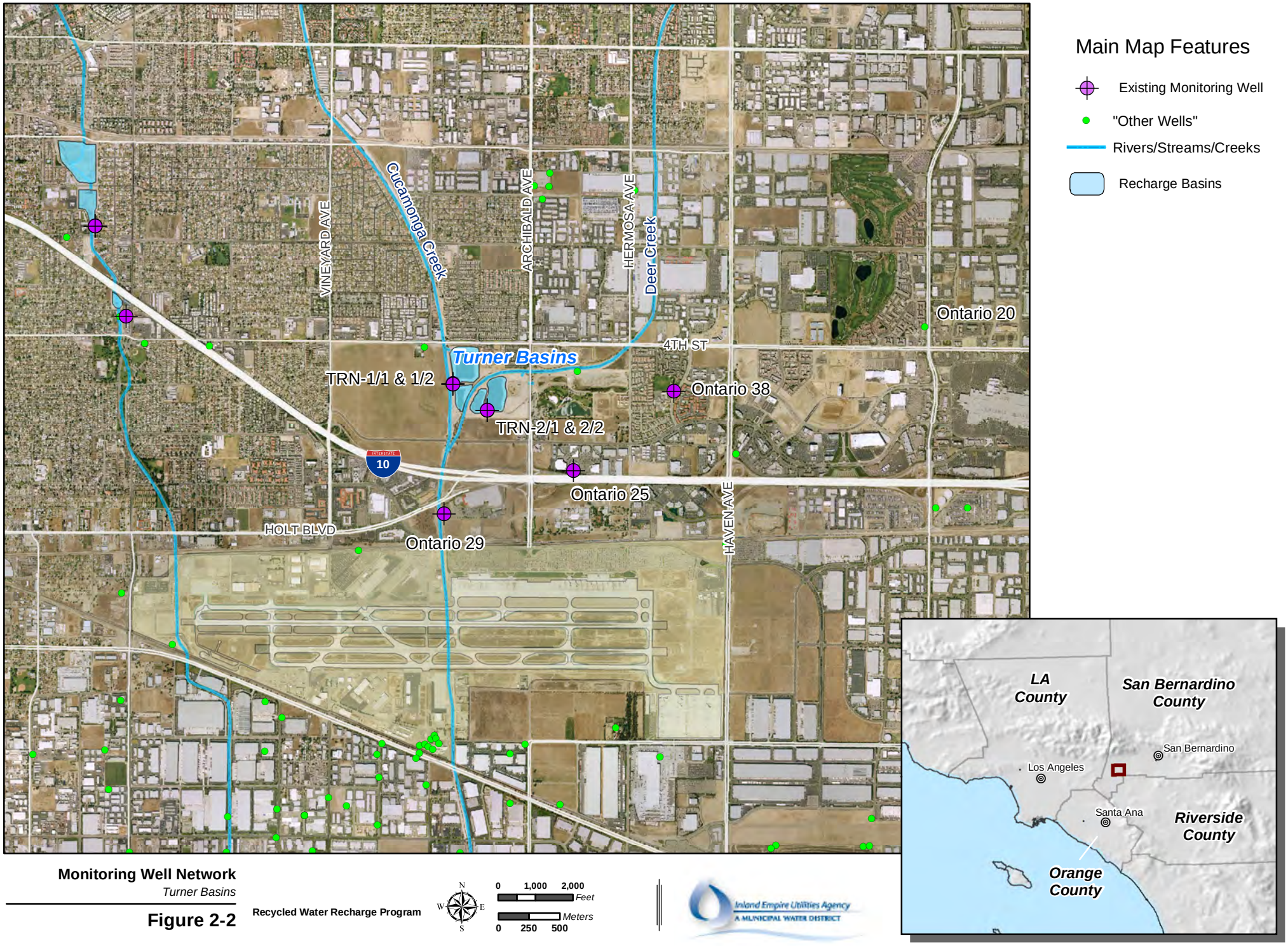


Monitoring Well Network

Hickory and Banana Basins

Figure 2-1

Recycled Water Recharge Program

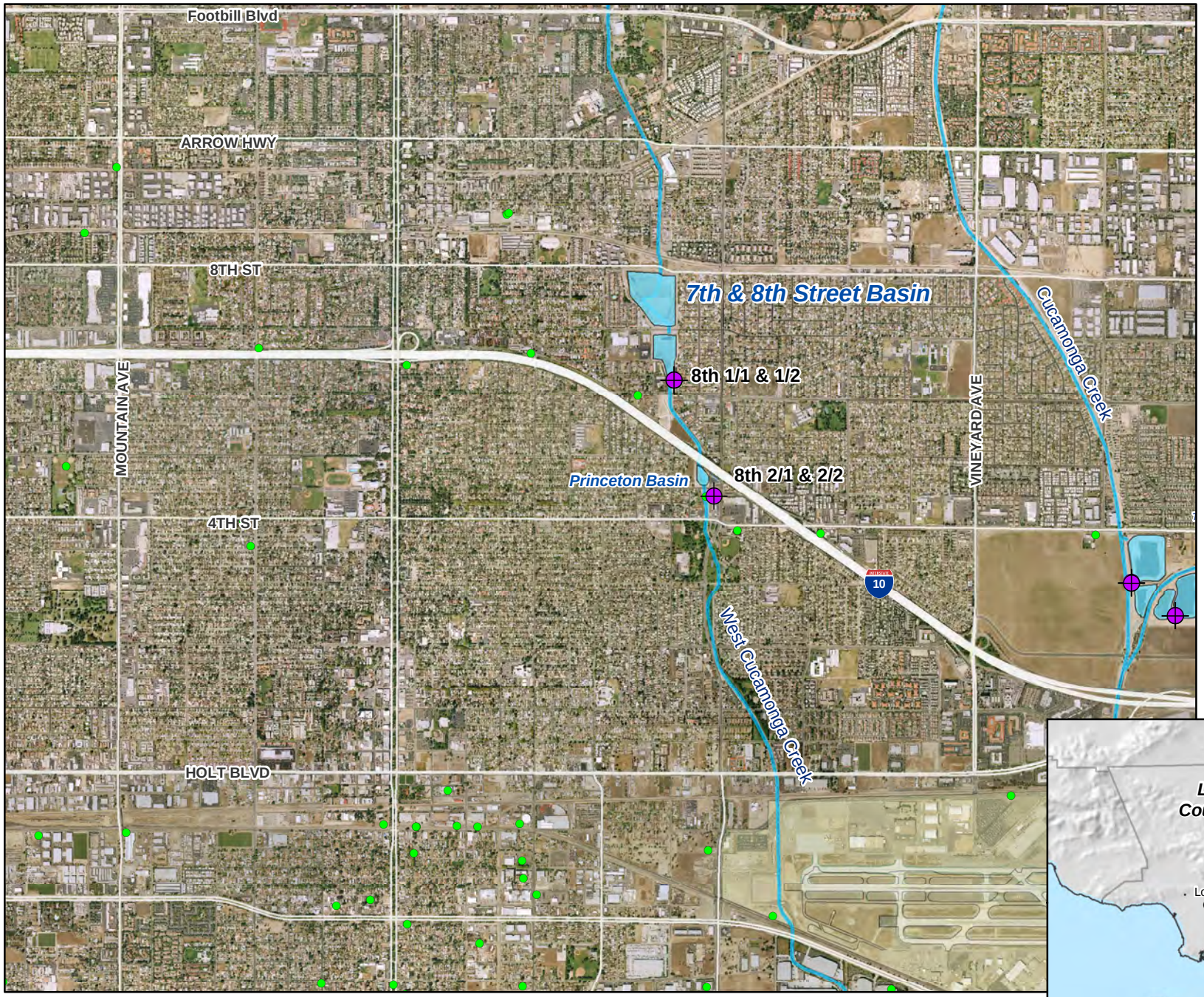


Monitoring Well Network

Turner Basins

Figure 2-2

Recycled Water Recharge Program



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

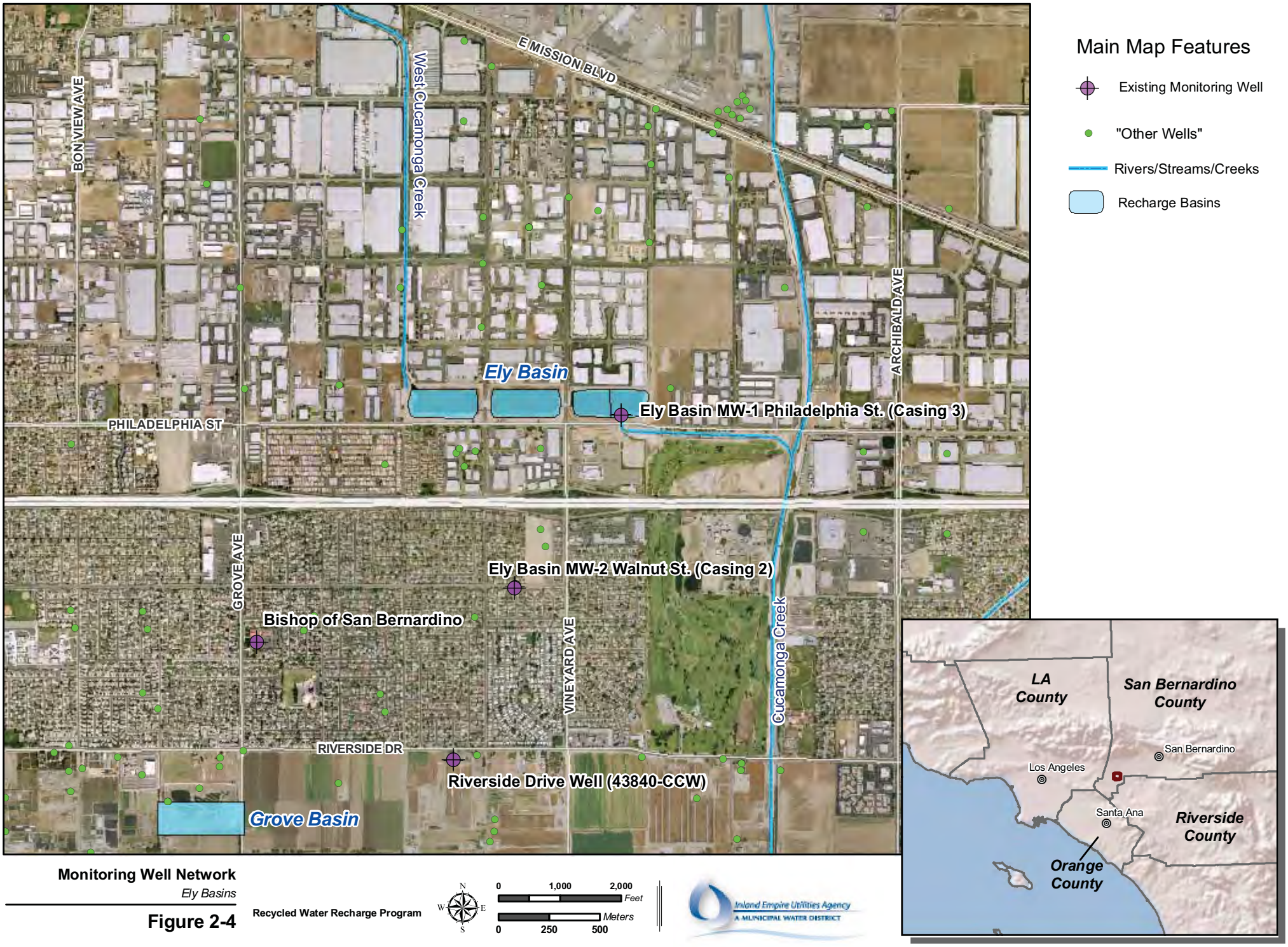
N W E S

0 1,000 2,000 Feet

0 250 500 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

20160203

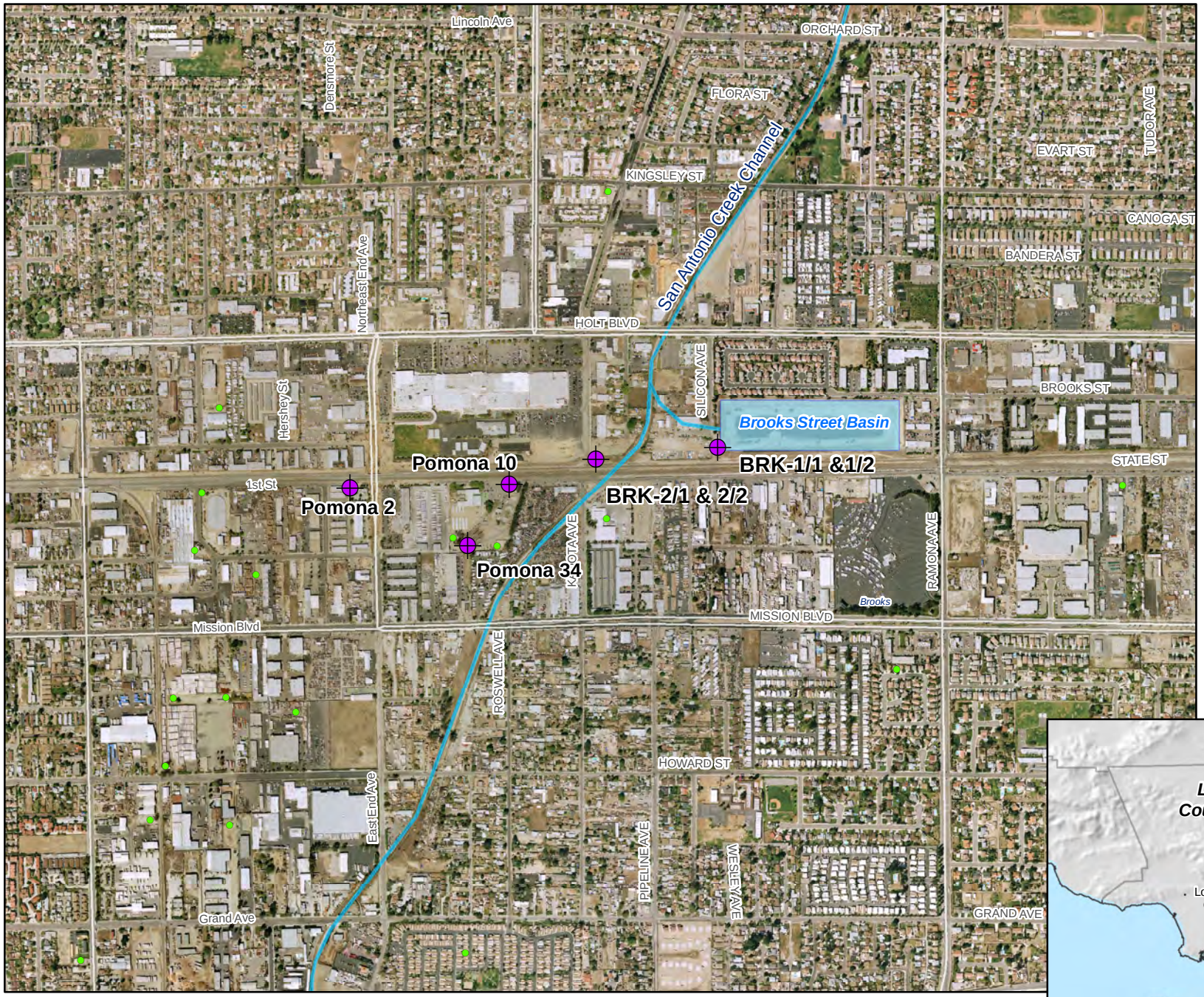


Monitoring Well Network

Ely Basins

Figure 2-4

Recycled Water Recharge Program



Main Map Features

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

Monitoring Well Network

Brooks Street Basin

Figure 2-5

Recycled Water Recharge Program

N W E S

0 1,000 Feet

0 300 Meters

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

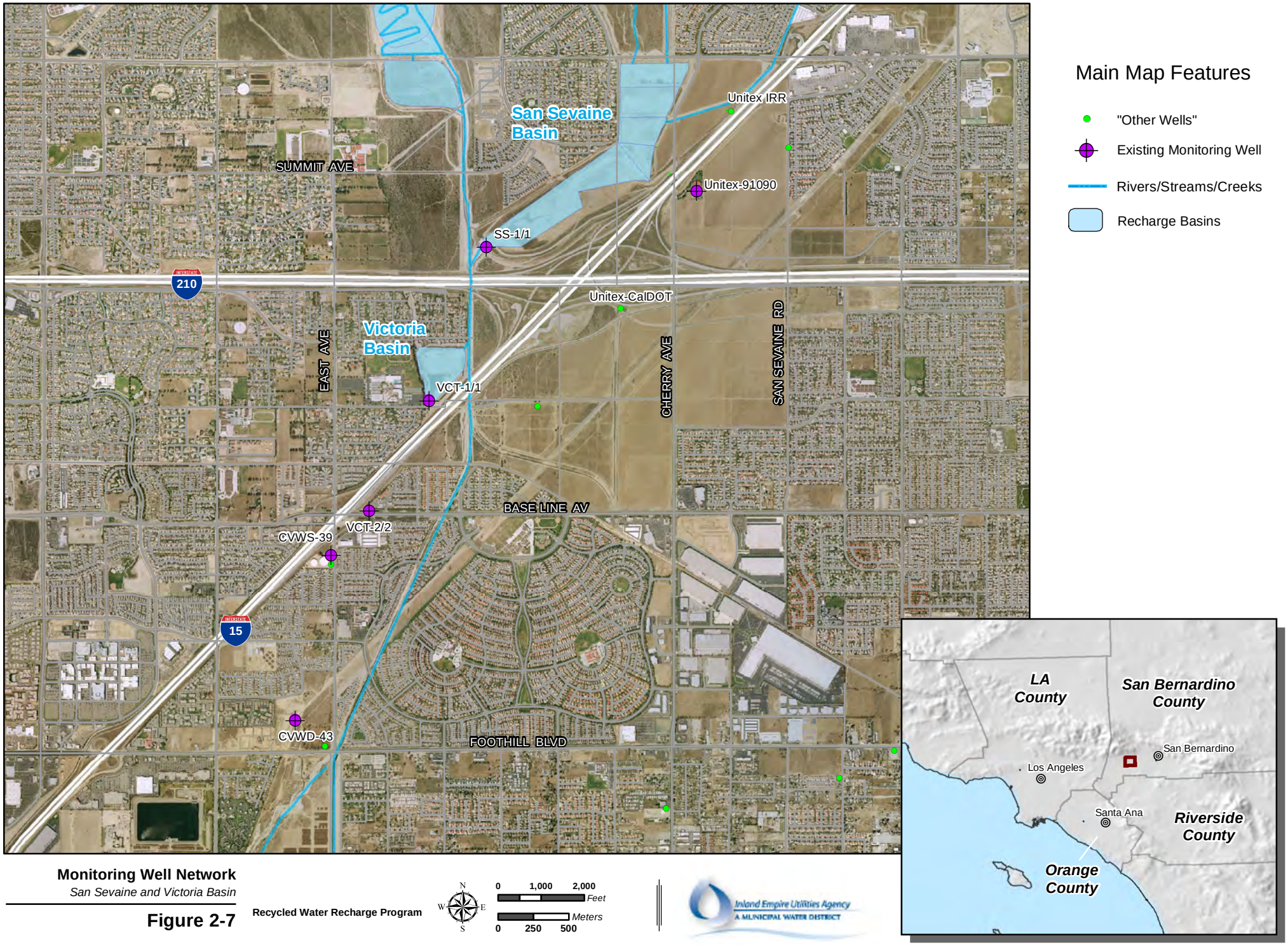
20160203

Monitoring Well Network

Declez and RP3 Basins

Figure 2-6

Recycled Water Recharge Program



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 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	**57**	-	N	MZ-1
Upland	**373**	-	N	**1,407**
Montclair 1, 2, 3 & 4	**400**	**125.8**	N	AF**
Brooks	**254**	-	-	
West Cucamonga Channel Drainage System				
8th Street	**203**	-	-	
7th Street	**120**	-	-	
Ely 1, 2, & 3	**317**	-	-	
Minor Drainage				
Grove	**121**	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**233**	-	-	
Turner 3 & 4	**298**	-	-	MZ-2
Day Creek Channel Drainage System				**2,343**
Lower Day	**268**	-	X	
Etiwanda Channel Drainage System				
Etiwanda Debris	**272**	-	X	
Victoria	**327**	-	-	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	**264**	-	-	
San Sevaine 5	**224**	-	-	
West Fontana Channel System				
Hickory	**19**	-	-	
Banana	**50**	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	**157**	-	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	**431**	-	**431**	**1,393**
RP3 Cell 2	**157**	-	-	AF**
Declez	**167**	-	-	
Non-Replenishment Recharge**				
MZ1: Montclair (SAWCo)	-	**(125.8)**		
Month Total = 5,143 AF	**4,712**	**0.0**	**431**	January 2017
Fiscal Year to Date Total Since July 1, 2016 = 21,067 AF	**9,291**	**4,260.2**	**7,516**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 5,143 AF	**4,712**	**0.0**	**431**	Calendar Year to Date

SW : Storm Water, LR : Local Runoff (and GE, MVWD), IW : 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 to waste discharges and water recharged for storage agreements.

Printed: May. 01, 17 v.3

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

February 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	**5**	-	N	MZ-1
Upland	**80**	-	N	**555**
Montclair 1, 2, 3 & 4	**194**	**136.7**	N	AF**
Brooks	**142**	-	-	
West Cucamonga Channel Drainage System				
8th Street	**79**	-	**34**	
7th Street	**21**	-	-	
Ely 1, 2, & 3	**338**	-	-	
Minor Drainage				
Grove	**73**	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**130**	-	**66**	
Turner 3 & 4	**171**	-	**8**	MZ-2
Day Creek Channel Drainage System				**1,114**
Lower Day	**75**	-	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	**38**	-	X	
Victoria	**65**	-	**53**	
San Sevaine Channel Drainage System				
San Sevaine 1, 2, 3, & 4	**67**	-	-	
San Sevaine 5	**26**	-	-	
West Fontana Channel System				
Hickory	**4**	-	-	
Banana	**18**	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	**15**	-	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	**171**	-	**381**	**719**
RP3 Cell 2	**64**	-	-	AF**
Declez	**70**	-	-	
Non-Replenishment Recharge**				
MZ1: Montclair (SAWCo)	-	**(136.7)**		
Month Total = 2,388 AF	**1,846**	**0.0**	**542**	February 2017
Fiscal Year to Date Total Since July 1, 2016 = 23,455 AF	**11,137**	**4,260.2**	**8,058**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 7,531 AF	**6,558**	**0.0**	**973**	Calendar Year to Date

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N : No turnout planned for installation.

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Printed: May. 01, 17 v.2

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

March 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	-	-	N	MZ-1
Upland	-	-	N	**205**
Montclair 1, 2, 3 & 4	**12**	**497.9**	N	AF**
Brooks	**1**	-	**16**	
West Cucamonga Channel Drainage System				
8th Street	**22**	-	**153**	
7th Street	-	-	**23**	
Ely 1, 2, & 3	**16**	-	**123**	
Minor Drainage				
Grove	**4**	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**14**	-	**139**	
Turner 3 & 4	**34**	-	**165**	MZ-2
Day Creek Channel Drainage System				**738**
Lower Day	**1**	-	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	**2**	-	X	
Victoria	**18**	-	**219**	
San Sevaine Channel Drainage System				
San Sevaine 1, 2, 3, & 4	**3**	-	-	
San Sevaine 5	-	-	-	
West Fontana Channel System				
Hickory	-	-	-	
Banana	-	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	-	-	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	**6**	-	**703**	**791**
RP3 Cell 2	**5**	-	**57**	AF**
Declez	**20**	-	-	
Non-Replenishment Recharge**				
MZ1: Montclair (SAWCo)	-	**(497.9)**		
MZ1: Montclair (MVWD)	**(8)**	-		
MZ1: Brooks (MVWD)	**(1)**	-		
MZ1: 8th St. (Upland)	**(13)**			
Month Total = 1,734 AF	**136**	**0.0**	**1,598**	March 2017
Fiscal Year to Date Total Since July 1, 2016 = 25,189 AF	**11,273**	**4,260.2**	**9,656**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 9,265 AF	**6,694**	**0.0**	**2,571**	Calendar Year to Date

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Printed: May. 01, 17 v.3

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

April 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	-	**516.0**	N	MZ-1
Upland	**1**	**162.0**	N	**1,898**
Montclair 1, 2, 3 & 4	**3**	**1,102.2**	N	AF**
Brooks	-	**16.0**	**8**	
West Cucamonga Channel Drainage System				
8th Street	**57**	-	**280**	
7th Street	-	-	-	
Ely 1, 2, & 3	**9**	-	**190**	
Minor Drainage				
Grove	-	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**9**	-	**110**	
Turner 3 & 4	**23**	-	**99**	MZ-2
Day Creek Channel Drainage System				**710**
Lower Day	-	-	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	-	-	X	
Victoria	-	-	**317**	
San Sevaine Channel Drainage System				
San Sevaine 1, 2, 3, & 4	**1**	-	-	
San Sevaine 5	-	-	-	
West Fontana Channel System				
Hickory	-	-	-	
Banana	-	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	-	-	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	**21**	-	**479**	**540**
RP3 Cell 2	**3**	-	**34**	AF**
Declez	**3**	-	-	
Non-Replenishment Recharge**				
MZ1: Montclair 1 (SAWCo)		**(246)**		
MZ1: Montclair 1 (Upland)	**(1)**			
MZ2: 8th St. Basin (Upland)	**(48)**			
Month Total = 3,149 AF	**81**	**1,550.5**	**1,517**	April 2017
Fiscal Year to Date Total Since July 1, 2016 = 28,338 AF	**11,354**	**5,810.7**	**11,173**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 12,414 AF	**6,775**	**1,550.5**	**4,088**	Calendar Year to Date

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Printed: May. 22, 17 v.2

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

May 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	-	-	N	MZ-1
Upland	**4**	-	N	**269**
Montclair 1, 2, 3 & 4	**32**	**14.6**	N	AF**
Brooks	**1**	-	**38**	
West Cucamonga Channel Drainage System				
8th Street	**16**	-	**184**	
7th Street	-	-	-	
Ely 1, 2, & 3	**37**	-	**250**	
Minor Drainage				
Grove	**18**	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**6**	-	**56**	
Turner 3 & 4	**16**	-	**125**	MZ-2
Day Creek Channel Drainage System				**861**
Lower Day	**5**	-	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	**7**	-	X	
Victoria	**13**	-	**312**	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	**10**	-	-	
San Sevaine 5	**6**	-	-	
West Fontana Channel System				
Hickory	-	**0.0**	-	
Banana	-	**0.0**	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	-	-	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	-	**0.0**	**653**	**684**
RP3 Cell 2	**5**	-	**2**	AF**
Declez	**24**	**0.0**	-	
Non-Replenishment Recharge**				
MZ1: SAWCo IW, Upland SW	**(6)**	**(14.6)**		
MZ2:	-			
MZ3:	-			
Month Total = 1,814 AF	**194**	**0.0**	**1,620**	May 2017
Fiscal Year to Date Total Since July 1, 2016 = 30,152 AF	**11,548**	**5,810.7**	**12,793**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 14,228 AF	**6,969**	**1,550.5**	**5,708**	Calendar Year to Date

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

N : No turnout planned for installation.

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Printed: Jul. 13, 17 v.2

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

June 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	-	**1,033.3**	N	MZ-1
Upland	**2**	**1,462.7**	N	**4,549**
Montclair 1, 2, 3 & 4	**9**	**1,801.9**	N	AF**
Brooks	-	**2.0**	**30**	
West Cucamonga Channel Drainage System				
8th Street	**19**	-	**178**	
7th Street	-	**18.2**	**20**	
Ely 1, 2, & 3	-	-	**149**	
Minor Drainage				
Grove	-	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**3**	-	**90**	
Turner 3 & 4	**8**	**273.7**	**10**	MZ-2
Day Creek Channel Drainage System				**1,952**
Lower Day	-	**289.0**	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	-	**281.3**	X	
Victoria	-	**121.0**	**201**	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	-	**526.1**	-	
San Sevaine 5	-	-	-	
West Fontana Channel System				
Hickory	-	-	-	
Banana	-	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	-	**24.5**	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1, 3, & 4	**4**	**386.0**	**437**	**985**
RP3 Cell 2	**5**	-	**26**	AF**
Declez	**3**	**99.0**	-	
Non-Replenishment Recharge**				
MZ1: Upland SW, MVWD SW	**(27)**	-		
MZ2:	-			
MZ3:	-			
Month Total = 7,486 AF	**26**	**6,318.7**	**1,141**	June 2017
Fiscal Year to Date Total Since July 1, 2016 = 37,638 AF	**11,574**	**12,129.4**	**13,934**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 21,713 AF	**6,995**	**7,869.2**	**6,849**	Calendar Year to Date

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N : No turnout planned for installation.

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Printed: Aug. 03, 17 v.3

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

July 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	-	**1,997.4**	N	
Upland	**2**	**414.5**	N	MZ-1
Montclair 1, 2, 3 & 4	**7**	**2,218.7**	N	**4,957**
Brooks	-	**93.6**	**228**	AF**
West Cucamonga Channel Drainage System				
8th Street	-	-	-	
7th Street	**105**	-	**1**	
Ely 1, 2, & 3	**37**	-	**34**	
Minor Drainage				
Grove	-	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**3**	-	**156**	
Turner 3 & 4	**10**	**219.9**	-	MZ-2
Day Creek Channel Drainage System				**2,864**
Lower Day	-	**657.1**	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	-	**110.0**	X	
Victoria	-	**235.4**	**140**	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	-	**566.8**	-	
San Sevaine 5	-	-	-	
West Fontana Channel System				
Hickory	-	**527.2**	**168**	
Banana	-	-	-	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	**2**	**14.6**	-	
Declez Channel Drainage System				MZ-3
RP3 Cells 1,3, & 4	**5**	**231.7**	**225**	**544**
RP3 Cell 2	-	**14.0**	-	AF**
Declez	**7**	**45.0**	-	
Non-Replenishment Recharge**				
MZ1: Upland (Upland, Mont, & 8th/7th)	**(103)**			
MZ1: MVWD (Montlcair & Brooks)	**(7)**			
MZ2: None	**0**			
MZ3: None	**0**			
Month Total = 8,366 AF	**68**	**7,345.9**	**952**	July 2017
Fiscal Year to Date Total Since July 1, 2017 = 8,366 AF	**68**	**7,345.9**	**952**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 30,079 AF	**7,063**	**15,215.1**	**7,801**	Calendar Year to Date

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

N : No turnout planned for installation.

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

Printed: Jan. 31, 18 v.4

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

August 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	**0**	**2,300.6**	N	MZ-1
Upland	**3**	**365.1**	N	**5,451.2**
Montclair 1, 2, 3 & 4	**4**	**1,852.2**	N	AF**
Brooks	**0**	**95.6**	**55**	
West Cucamonga Channel Drainage System				
8th Street	**20**	**538.3**	**178**	
7th Street	**0**	**45.4**	**18**	
Ely 1, 2, & 3	**126**	**0.0**	**27**	
Minor Drainage				
Grove	**12**	N	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**3**	**0.0**	**43**	
Turner 3 & 4	**21**	**79.1**	**13**	**MZ-2**
Day Creek Channel Drainage System				**2,021.7**
Lower Day	**4**	**497.3**	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	**9**	**319.0**	X	
Victoria	**4**	**20.3**	**239**	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	**44**	**116.6**	**0**	
San Sevaine 5	**4**	**0.0**	**0**	
West Fontana Channel System				
Hickory	**0**	**420.4**	**20**	
Banana	**2**	**0.0**	**131**	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	**0**	**0.0**	**0**	
Declez Channel Drainage System				MZ-3
RP3 Cells 1,3, & 4	**13**	**371.2**	**176**	**844.2**
RP3 Cell 2	**2**	**47.0**	**32**	AF**
Declez	**70**	**0.0**	**0**	
Non-Replenishment Recharge**				
MZ1: Upland (Upland, Mont, & 8th/7th)	**(21)**			
MZ1: MVWD (Montclair)	**(3)**			
MZ2: None	**0**			
MZ3: None	**0**			
Month Total = 8,317 AF	**317**	**7,068.1**	**932**	August 2017
Fiscal Year to Date Total Since July 1, 2017 = 16,683 AF	**385**	**14,414.0**	**1,884**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 38,396 AF	**7,380**	**22,283.2**	**8,733**	Calendar Year to Date

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Printed: Jan. 31, 18 v.4

SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS
September 2017

Drainage System / Basin	Recharge Volume (AF)* SW/LR	IW	RW	Management Zone Subtotals
San Antonio Channel Drainage System				
College Heights	**0**	**636.0**	**N**	MZ-1
Upland	**2**	**242.5**	**N**	**2,872.9**
Montclair 1, 2, 3 & 4	**1**	**1,402.4**	**N**	AF**
Brooks	**1**	**3.0**	**169**	
West Cucamonga Channel Drainage System				
8th Street	**3**	**224.2**	**101**	
7th Street	**0**	**62.8**	**30**	
Ely 1, 2, & 3	**0**	**0.0**	**216**	
Minor Drainage				
Grove	**0**	**0.0**	N	
Cucamonga and Deer Creek Channel Drainage Systems				
Turner 1 & 2	**2**	**0.0**	**70**	
Turner 3 & 4	**16**	**0.0**	**51**	MZ-2
Day Creek Channel Drainage System				**1,519.8**
Lower Day	**0**	**201.3**	X	AF**
Etiwanda Channel Drainage System				
Etiwanda Debris	**0**	**123.9**	X	
Victoria	**0**	**129.8**	**167**	
San Sevaine Channel Drainage System (MZ-2)				
San Sevaine 1, 2, 3, & 4	**0**	**150.8**	**0**	
San Sevaine 5	**0**	**0.0**	**0**	
West Fontana Channel System				
Hickory	**10**	**263.0**	**119**	
Banana	**2**	**133.6**	**161**	
San Sevaine Channel Drainage System (MZ-3)				
Jurupa	**0**	**0.0**	**0**	
Declez Channel Drainage System				MZ-3
RP3 Cells 1,3, & 4	**15**	**191.5**	**214**	**761.1**
RP3 Cell 2	**0**	**9.0**	**9**	AF**
Declez	**6**	**20.0**	**0**	
Non-Replenishment Recharge**				
MZ1: Upland (Upland, Mont, & 8th/7th)	**(4)**			
MZ1: MVWD (Montclair)	**(1)**			
MZ2: None	**0**			
MZ3: None	**0**			
Month Total = 5,154 AF	**53**	**3,793.8**	**1,307**	September 2017
Fiscal Year to Date Total Since July 1, 2017 = 21,837 AF	**438**	**18,207.8**	**3,191**	Fiscal Year to Date
Calendar Year to Date Total Since Jan. 1, 2017 = 43,550 AF	**7,433**	**26,077.0**	**10,040**	Calendar Year to Date

SW : Storm Water, LR : Local Runoff (and GE, MVWD), IW : 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 to waste discharges and water recharged for storage agreements.

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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - October 2017

Drainage System / Basin	SW/LR Delivered	Imported Delivered	Imported Evaporation	Recycled Water Delivered	Recycled Water Evaporation	Management Zone Subtotals
San Antonio Channel Drainage System						
College Heights	**0.0**	**1,053.8**	**(44.3)**	N	N	MZ-1
Upland	**2.3**	**259.9**	**(10.9)**	N	N	**2,942.8**
Montclair 1, 2, 3 & 4	**7.7**	**1,222.9**	**(51.4)**	N	N	AF***
Brooks	**1.2**	**0.0**	**0.0**	**103.8**	**(4.4)**	
West Cucamonga Channel Drainage System						
8th Street	**51.0**	**143.4**	**(6.0)**	**179.3**	**(7.5)**	
7th Street	**0.0**	**65.3**	**(2.7)**	**33.4**	**(1.4)**	
Ely 1, 2, & 3	**47.9**	**9.0**	**(0.4)**	**91.2**	**(3.8)**	
Minor Drainage						
Grove	**0.0**	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	**3.1**	**0.0**	**0.0**	**244.0**	**(10.2)**	
Turner 3 & 4	**0.7**	**0.0**	**0.0**	**4.5**	**(0.2)**	**MZ-2**
Day Creek Channel Drainage System						**1,909.9**
Lower Day	**0.0**	**332.6**	**(14.0)**	X	**0.0**	AF***
Etiwanda Channel Drainage System						
Etiwanda Debris	**0.0**	**183.2**	**(7.7)**	X	**0.0**	
Victoria	**0.0**	**156.4**	**(6.6)**	**45.4**	**(1.9)**	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	**0.0**	**524.6**	**(22.0)**	**0.0**	**0.0**	
San Sevaine 5	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
West Fontana Channel System						
Hickory	**9.7**	**160.2**	**(6.7)**	**178.4**	**(7.5)**	
Banana	**2.5**	**125.9**	**(5.3)**	**251.5**	**(10.6)**	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Declez Channel Drainage System						MZ-3
RP3 Cells 1,3, & 4	**3.6**	**138.4**	**(5.8)**	**245.3**	**(10.3)**	**891.9**
RP3 Cell 2	**0.0**	**32.1**	**(1.3)**	**55.8**	**(2.3)**	AF***
Declez	**6.2**	**69.2**	**(2.9)**	**0.0**	**0.0**	
Non-Replenishment Recharge**						
MZ1: Upland (Upland, Montclair,& 8th	**(51.4)**					
MZ1: MVWD (Brooks)	**(1.2)**					
MZ2: None	**0.0**					
MZ3: None	**0.0**					
		4,476.9	**(188.0)**	**1,432.6**	**(60.2)**	October 2017
Month Total = 5,745 AF	**83.3**	**4,288.9**		**1,372.4**		
All Sources	**SW/LR**	**Imported**		**Recycled Water**		
Fiscal Year Delivery (with evaporation)		**22,684.7**	**(188.0)**	**4,623.6**	**(60.2)**	Fiscal Year
Since July 1, 2017 = 27,581 AF	**521.3**	**22,496.7**		**4,563.4**		to Date
Calendar Year Delivery (with evaporation)		**30,553.9**	**(188.0)**	**11,472.6**	**(60.2)**	Calendar Year
Since Jan. 1, 2017 = 49,295 AF	**7,516.3**	**30,365.9**		**11,412.4**		to Date

SW : Storm Water, LR : Local Runoff (and GE, MVWD), IW : Imported Water, RW : Recycled Water

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

N : No turnout planned for installation.

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

** : Beginning October 2017, evaporation losses are applied per Watermaster (4.2% April through October and 1.5% November through March).

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

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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - November 2017

Drainage System / Basin	SW/LR Delivered	Imported Delivered	Imported Evaporation	Recycled Water Delivered	Recycled Water Evaporation	Management Zone Subtotals
San Antonio Channel Drainage System						
College Heights	**0.0**	**732.0**	**(11.0)**	N	N	MZ-1
Upland	**0.0**	**54.5**	**(0.8)**	N	N	**2,176.6**
Montclair 1, 2, 3 & 4	**3.6**	**1,164.0**	**(17.5)**	N	N	AF***
Brooks	**3.2**	**0.0**	**0.0**	**153.5**	**(2.3)**	
West Cucamonga Channel Drainage System						
8th Street	**3.0**	**0.0**	**0.0**	**84.7**	**(1.3)**	
7th Street	**0.0**	**0.0**	**0.0**	**17.0**	**(0.3)**	
Ely 1, 2, & 3	**0.0**	**0.0**	**0.0**	**37.0**	**(0.6)**	
Minor Drainage						
Grove	**0.0**	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	**3.0**	**0.0**	**0.0**	**149.4**	**(2.2)**	
Turner 3 & 4	**3.9**	**0.0**	**0.0**	**0.0**	**0.0**	**MZ-2**
Day Creek Channel Drainage System						**937.7**
Lower Day	**0.0**	**444.9**	**(6.7)**	X	**0.0**	AF***
Etiwanda Channel Drainage System						
Etiwanda Debris	**0.0**	**29.8**	**(0.4)**	X	**0.0**	
Victoria	**0.0**	**0.0**	**0.0**	**41.0**	**(0.6)**	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	**0.0**	**55.2**	**(0.8)**	**0.0**	**0.0**	
San Sevaine 5	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
West Fontana Channel System						
Hickory	**15.0**	**0.0**	**0.0**	**172.4**	**(2.6)**	
Banana	**0.0**	**0.0**	**0.0**	**469.8**	**(7.0)**	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Declez Channel Drainage System						MZ-3
RP3 Cells 1,3, & 4	**0.0**	**0.0**	**0.0**	**257.6**	**(3.9)**	**753.0**
RP3 Cell 2	**0.0**	**0.0**	**0.0**	**31.0**	**(0.5)**	AF***
Declez	**6.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Non-Replenishment Recharge**						
MZ1: Upland (Upland & Montclair)	**(3.4)**					
MZ1: MVWD (Montclair & Brooks)	**(2.4)**					
MZ2: None	**0.0**					
MZ3: None	**0.0**					
		2,480.4	**(37.2)**	**1,413.4**	**(21.2)**	November 2017
Month Total = 3,867 AF	**31.9**	**2,443.2**		**1,392.2**		
All Sources	**SW/LR**	**Imported**		**Recycled Water**		
Fiscal Year Delivery (with evaporation)		**25,165.1**	**(225.2)**	**6,037.0**	**(81.4)**	Fiscal Year
Since July 1, 2017 = 31,449 AF	**553.20**	**24,939.9**		**5,955.6**		to Date
Calendar Year Delivery (with evaporation)		**33,034.3**	**(225.2)**	**12,886.0**	**(81.4)**	Calendar Year
Since Jan. 1, 2017 = 53,162 AF	**7,548.2**	**32,809.1**		**12,804.6**		to Date

SW : Storm Water, LR : Local Runoff (and GE, MVWD), IW : Imported Water, RW : Recycled Water

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

N : No turnout planned for installation.

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

** : Beginning October 2017, evaporation losses are applied per Watermaster (4.2% April through October and 1.5% November through March).

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

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SUMMARY OF CHINO BASIN GROUNDWATER RECHARGE OPERATIONS

Water Delivered* and Evaporation** (AF) - December 2017

Drainage System / Basin	SW/LR Delivered	Imported Delivered	Imported Evaporation	Recycled Water Delivered	Recycled Water Evaporation	Management Zone Subtotals
San Antonio Channel Drainage System						
College Heights	**0.0**	**490.0**	**(7.4)**	N	N	MZ-1
Upland	**2.2**	**117.6**	**(1.8)**	N	N	**2,857.1**
Montclair 1, 2, 3 & 4	**1.9**	**1,951.2**	**(29.3)**	N	N	AF***
Brooks	**0.6**	**0.0**	**0.0**	**124.0**	**(1.9)**	
West Cucamonga Channel Drainage System						
8th Street	**3.1**	**0.0**	**0.0**	**214.7**	**(3.2)**	
7th Street	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Ely 1, 2, & 3	**0.0**	**0.0**	**0.0**	**221.7**	**(3.3)**	
Minor Drainage						
Grove	**0.0**	N	N	N	N	
Cucamonga and Deer Creek Channel Drainage Systems						
Turner 1 & 2	**0.6**	**0.0**	**0.0**	**158.3**	**(2.4)**	
Turner 3 & 4	**1.7**	**0.0**	**0.0**	**0.0**	**0.0**	**MZ-2**
Day Creek Channel Drainage System						**2,555.2**
Lower Day	**0.0**	**505.8**	**(7.6)**	X	**0.0**	AF***
Etiwanda Channel Drainage System						
Etiwanda Debris	**0.0**	**296.7**	**(4.5)**	X	**0.0**	
Victoria	**0.0**	**4.0**	**(0.1)**	**100.1**	**(1.5)**	
San Sevaine Channel Drainage System (MZ-2)						
San Sevaine 1, 2, 3, & 4	**0.0**	**1,120.7**	**(16.8)**	**0.0**	**0.0**	
San Sevaine 5	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
West Fontana Channel System						
Hickory	**7.9**	**69.3**	**(1.0)**	**107.2**	**(1.6)**	
Banana	**1.9**	**140.1**	**(2.1)**	**255.9**	**(3.8)**	
San Sevaine Channel Drainage System (MZ-3)						
Jurupa	**0.0**	**8.3**	**(0.1)**	**0.0**	**0.0**	
Declez Channel Drainage System						MZ-3
RP3 Cells 1,3, & 4	**1.3**	**63.8**	**(1.0)**	**341.2**	**(5.1)**	**873.5**
RP3 Cell 2	**0.0**	**0.0**	**0.0**	**68.0**	**(1.0)**	AF***
Declez	**6.2**	**0.0**	**0.0**	**0.0**	**0.0**	
Non-Replenishment Recharge**						
MZ1: Montclair (Upland & MVWD)	**(1.9)**					
MZ1: Brooks (MVWD)	**(0.6)**					
MZ1: Upland (Upland)	**(2.2)**					
MZ2 and MZ3: none	**0.0**					
		4,767.5	**(71.5)**	**1,591.1**	**(23.9)**	December 2017
Month Total = 6,286 AF	**22.7**	**4,696.0**		**1,567.2**		
All Sources	**SW/LR**	**Imported**		**Recycled Water**		
Fiscal Year Delivery (with evaporation)		**29,932.6**	**(296.7)**	**7,628.1**	**(105.2)**	Fiscal Year
Since July 1, 2017 = 37,735 AF	**575.9**	**29,635.9**		**7,522.9**		to Date
Calendar Year Delivery (with evaporation)		**37,801.8**	**(296.7)**	**14,477.1**	**(105.2)**	Calendar Year
Since Jan. 1, 2017 = 59,448 AF	**7,570.9**	**37,505.1**		**14,371.9**		to Date

SW : Storm Water, LR : Local Runoff (and GE, MVWD), IW : Imported Water, RW : Recycled Water

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

N : No turnout planned for installation.

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

** : Beginning October 2017, evaporation losses are applied per Watermaster (4.2% April through October and 1.5% November through March).

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

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APPENDIX B

RWC MANAGEMENT PLANS

RWC Management Plan for 8th Street Basins

(120-month averaging period)

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

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW Total (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2012/13	Jul '12	58	20	0	310	330	20,069	137	5,122	25,191	20%	HISTORICAL
	Aug '12	59	21	0	310	331	20,400	0	5,122	25,522	20%	
	Sep '12	60	33	0	310	343	20,743	124	5,246	25,989	20%	
	Oct '12	61	29	0	310	339	21,083	309	5,555	26,638	21%	
	Nov '12	62	66	0	310	376	21,459	248	5,803	27,262	21%	
	Dec '12	63	278	0	310	588	22,047	103	5,906	27,953	21%	
	Jan '13	64	70	0	310	380	22,427	230	6,136	28,563	21%	
	Feb '13	65	90	0	310	400	22,827	226	6,362	29,189	22%	
	Mar '13	66	65	0	310	375	23,203	240	6,602	29,805	22%	
	Apr '13	67	24	0	310	334	23,537	152	6,754	30,291	22%	
	May '13	68	43	0	310	353	23,890	221	6,975	30,865	23%	
	Jun '13	69	12	0	310	322	24,212	271	7,246	31,458	23%	
2013/14	Jul '13	70	13	0	310	323	24,535	186	7,432	31,968	23%	
	Aug '13	71	13	0	310	323	24,859	118	7,550	32,409	23%	
	Sep '13	72	11	0	310	321	25,180	150	7,700	32,880	23%	
	Oct '13	73	48	0	310	358	25,538	239	7,939	33,477	24%	
	Nov '13	74	49	0	310	359	25,897	249	8,188	34,085	24%	
	Dec '13	75	46	0	310	356	26,253	121	8,309	34,563	24%	
	Jan '14	76	27	0	310	337	26,591	108	8,417	35,008	24%	
	Feb '14	77	59	0	310	369	26,960	88	8,505	35,465	24%	
	Mar '14	78	46	5	310	362	27,321	26	8,531	35,853	24%	
	Apr '14	79	79	0	310	389	27,711	21	8,552	36,263	24%	
	May '14	80	26	0	310	336	28,047	65	8,617	36,664	24%	
	Jun '14	81	24	0	310	334	28,381	52	8,669	37,050	23%	
2014/15	Jul '14	82	25	0	310	335	28,716	8	8,677	37,393	23%	
	Aug '14	83	15	0	310	325	29,041	8	8,685	37,727	23%	
	Sep '14	84	14	0	310	324	29,366	32	8,717	38,083	23%	
	Oct '14	85	0	0	310	310	29,676	0	8,717	38,393	23%	
	Nov '14	86	146	0	310	456	30,132	0	8,717	38,849	22%	
	Dec '14	87	353	0	310	663	30,795	0	8,717	39,512	22%	
	Jan '15	88	110	0	310	420	31,216	0	8,717	39,933	22%	
	Feb '15	89	42	0	310	352	31,568	0	8,717	40,285	22%	
	Mar '15	90	42	0	310	352	31,920	0	8,717	40,637	21%	
	Apr '15	91	25	0	310	335	32,255	0	8,717	40,972	21%	
	May '15	92	57	0	310	367	32,622	0	8,717	41,340	21%	
	Jun '15	93	12	0	310	322	32,945	0	8,717	41,662	21%	
2015/16	Jul '15	94	44	0	310	354	33,299	0	8,717	42,016	21%	
	Aug '15	95	4	0	310	314	33,613	23	8,740	42,353	21%	
	Sep '15	96	76	0	310	386	33,939	60	8,800	42,739	21%	
	Oct '15	97	39	0	310	349	34,156	13	8,813	42,969	21%	
	Nov '15	98	19	0	310	329	34,425	95	8,908	43,333	21%	
	Dec '15	99	86	0	310	396	34,761	159	9,067	43,828	21%	
	Jan '16	100	249	0	310	559	35,204	59	9,126	44,331	21%	
	Feb '16	101	93	0	310	403	35,365	206	9,332	44,697	21%	
	Mar '16	102	200	0	310	510	35,550	160	9,492	45,042	21%	
	Apr '16	103	34	0	310	344	35,664	195	9,687	45,351	21%	
	May '16	104	72	0	310	382	35,996	204	9,891	45,887	22%	
	Jun '16	105	5	0	310	315	36,296	296	10,187	46,484	22%	
2016/17	Jul '16	106	4	0	310	314	36,599	259	10,446	47,045	22%	
	Aug '16	107	8	0	310	318	36,911	268	10,714	47,625	22%	
	Sep '16	108	5	0	310	315	37,204	248	10,962	48,166	23%	
	Oct '16	109	35	0	310	345	37,509	285	11,247	48,756	23%	
	Nov '16	110	82	0	310	392	37,859	228	11,475	49,334	23%	
	Dec '16	111	363	0	310	673	38,453	121	11,596	50,049	23%	
	Jan '17	112	323	0	310	633	39,027	0	11,596	50,623	23%	
	Feb '17	113	100	0	310	410	39,270	34	11,630	50,900	23%	
	Mar '17	114	22	0	310	332	39,564	176	11,806	51,370	23%	
	Apr '17	115	57	0	310	367	39,842	280	12,086	51,928	23%	
	May '17	116	16	0	310	326	40,126	184	12,270	52,396	23%	
	Jun '17	117	19	18	310	347	40,431	198	12,468	52,900	24%	
2017/18	Jul '17	118	105	0	310	415	40,831	1	12,469	53,300	23%	
	Aug '17	119	20	584	310	914	41,729	196	12,665	54,394	23%	
	Sep '17	120	3	287	310	600	42,312	131	12,668	54,980	23%	
	Oct '17	121	51	63	310	424	42,694	32	12,591	55,285	23%	
	Nov '17	122	3	0	310	313	42,926	17	12,447	55,373	22%	
	Dec '17	123	3	0	310	313	43,015	0	12,447	55,462	22%	
	Jan '18	124	121	0	310	432	43,112	0	12,446	55,557	22%	
	Feb '18	125	85	0	310	395	43,409	0	12,289	55,697	22%	
	Mar '18	126	115		310	425	43,813	140	12,265	56,078	22%	
	Apr '18	127	85		310	395	44,197	170	12,345	56,542	22%	
	May '18	128	42		310	352	44,459	210	12,397	56,856	22%	
	Jun '18	129	18		310	328	44,772	230	12,541	57,313	22%	

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
2018/2019	Jul '18	130	25		310	335	45,079	230	12,547	57,625	22%	PLANNED
	Aug '18	131	15		310	325	45,389	240	12,659	58,048	22%	
	Sep '18	132	24		310	334	45,708	230	12,889	58,597	22%	
	Oct '18	133	49		310	359	46,051	200	13,089	59,140	22%	
	Nov '18	134	85		310	395	46,309	170	13,259	59,568	22%	
	Dec '18	135	209		310	519	46,477	40	13,299	59,775	22%	
	Jan '19	136	154		310	464	46,906	100	13,399	60,305	22%	
	Feb '19	137	180		310	490	46,938	70	13,469	60,407	22%	
	Mar '19	138	115		310	425	47,342	140	13,609	60,951	22%	
	Apr '19	139	85		310	395	47,722	170	13,779	61,501	22%	
	May '19	140	42		310	352	48,059	210	13,989	62,047	23%	
	Jun '19	141	18		310	328	48,387	230	14,219	62,606	23%	
2019/20	Jul '19	142	25		310	335	48,703	230	14,449	63,152	23%	
	Aug '19	143	15		310	325	48,995	240	14,665	63,660	23%	
	Sep '19	144	24		310	334	49,312	230	14,895	64,206	23%	
	Oct '19	145	49		310	359	49,287	200	15,095	64,381	23%	
	Nov '19	146	85		310	395	49,279	170	15,132	64,410	23%	
	Dec '19	147	209		310	519	49,185	40	15,079	64,263	23%	
	Jan '20	148	154		310	464	48,952	100	15,077	64,028	24%	
	Feb '20	149	180		310	490	48,655	70	15,147	63,801	24%	
	Mar '20	150	115		310	425	48,697	140	15,173	63,869	24%	
	Apr '20	151	85		310	395	48,576	170	15,243	63,818	24%	
	May '20	152	42		310	352	48,584	210	15,254	63,837	24%	
	Jun '20	153	18		310	328	48,569	230	15,182	63,750	24%	
2020/21	Jul '20	154	25		310	335	48,564	230	15,194	63,757	24%	
	Aug '20	155	15		310	325	48,551	240	15,328	63,878	24%	
	Sep '20	156	24		310	334	48,539	230	15,381	63,919	24%	
	Oct '20	157	49		310	359	48,499	200	15,293	63,791	24%	
	Nov '20	158	85		310	395	48,397	170	15,300	63,696	24%	
	Dec '20	159	209		310	519	48,107	40	15,320	63,426	24%	
	Jan '21	160	154		310	464	48,151	100	15,253	63,403	24%	
	Feb '21	161	180		310	490	48,055	70	15,240	63,294	24%	
	Mar '21	162	115		310	425	47,920	140	15,357	63,276	24%	
	Apr '21	163	85		310	395	47,981	170	15,346	63,326	24%	
	May '21	164	42		310	352	47,772	210	15,313	63,084	24%	
	Jun '21	165	18		310	328	47,443	230	15,341	62,784	24%	
2021/2022	Jul '21	166	25		310	335	47,268	230	15,483	62,750	25%	
	Aug '21	167	15		310	325	47,050	240	15,677	62,727	25%	
	Sep '21	168	24		310	334	46,906	230	15,905	62,811	25%	
	Oct '21	169	49		310	359	46,912	200	16,105	63,017	26%	
	Nov '21	170	85		310	395	46,859	170	16,275	63,134	26%	
	Dec '21	171	209		310	519	46,992	40	16,315	63,307	26%	
	Jan '22	172	154		310	464	47,089	100	16,388	63,477	26%	
	Feb '22	173	180		310	490	47,115	70	16,458	63,573	26%	
	Mar '22	174	115		310	425	46,949	140	16,598	63,547	26%	
	Apr '22	175	85		310	395	46,811	170	16,734	63,545	26%	
	May '22	176	42		310	352	46,828	210	16,688	63,516	26%	
	Jun '22	177	18		310	328	46,825	230	16,730	63,555	26%	
2022/2023	Jul '22	178	25		310	335	46,830	230	16,823	63,653	26%	
	Aug '22	179	15		310	325	46,824	240	17,063	63,887	27%	
	Sep '22	180	24		310	334	46,815	230	17,169	63,984	27%	
	Oct '22	181	49		310	359	46,835	200	17,060	63,895	27%	
	Nov '22	182	85		310	395	46,854	170	16,982	63,836	27%	
	Dec '22	183	209		310	519	46,785	40	16,919	63,704	27%	
	Jan '23	184	154		310	464	46,869	100	16,789	63,658	26%	
	Feb '23	185	180		310	490	46,959	70	16,633	63,592	26%	
	Mar '23	186	115		310	425	47,009	140	16,533	63,542	26%	
	Apr '23	187	85		310	395	47,070	170	16,551	63,621	26%	
	May '23	188	42		310	352	47,069	210	16,540	63,609	26%	
	Jun '23	189	18		310	328	47,075	230	16,499	63,574	26%	
2023/2024	Jul '23	190	25		310	335	47,087	230	16,543	63,630	26%	
	Aug '23	191	15		310	325	47,089	240	16,665	63,754	26%	
	Sep '23	192	24		310	334	47,102	230	16,745	63,847	26%	
	Oct '23	193	49		310	359	47,103	200	16,706	63,809	26%	
	Nov '23	194	85		310	395	47,139	170	16,627	63,766	26%	
	Dec '23	195	209		310	519	47,302	40	16,546	63,848	26%	
	Jan '24	196	154		310	464	47,429	100	16,538	63,967	26%	
	Feb '24	197	180		310	490	47,550	70	16,520	64,070	26%	
	Mar '24	198	115		310	425	47,614	140	16,634	64,247	26%	
	Apr '24	199	85		310	395	47,620	170	16,783	64,402	26%	
	May '24	200	42		310	352	47,636	210	16,928	64,563	26%	
	Jun '24	201	18		310	328	47,630	230	17,106	64,735	26%	

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
2024/2025	Jul '24	202	25		310	335	47,630	230	17,328	64,957	27%	PLANNED
	Aug '24	203	15		310	325	47,630	240	17,560	65,189	27%	
	Sep '24	204	24		310	334	47,640	230	17,758	65,397	27%	
	Oct '24	205	49		310	359	47,689	200	17,958	65,646	27%	
	Nov '24	206	85		310	395	47,628	170	18,128	65,755	28%	
	Dec '24	207	209		310	519	47,484	40	18,168	65,651	28%	
	Jan '25	208	154		310	464	47,528	100	18,268	65,795	28%	
	Feb '25	209	180		310	490	47,666	70	18,338	66,003	28%	
	Mar '25	210	115		310	425	47,739	140	18,478	66,216	28%	
	Apr '25	211	85		310	395	47,799	170	18,648	66,446	28%	
	May '25	212	42		310	352	47,784	210	18,858	66,641	28%	
	Jun '25	213	18		310	328	47,790	230	19,088	66,877	29%	
2025/26	Jul '25	214	25		310	335	47,771	230	19,318	67,088	29%	
	Aug '25	215	15		310	325	47,782	240	19,535	67,316	29%	
	Sep '25	216	24		310	334	47,730	230	19,705	67,434	29%	
	Oct '25	217	49		310	359	47,740	200	19,892	67,631	29%	
	Nov '25	218	85		310	395	47,806	170	19,967	67,772	29%	
	Dec '25	219	209		310	519	47,929	40	19,848	67,776	29%	
	Jan '26	220	154		310	464	47,834	100	19,889	67,722	29%	
	Feb '26	221	180		310	490	47,921	70	19,753	67,673	29%	
	Mar '26	222	115		310	425	47,836	140	19,733	67,568	29%	
	Apr '26	223	85		310	395	47,887	170	19,708	67,594	29%	
	May '26	224	42		310	352	47,857	210	19,714	67,570	29%	
	Jun '26	225	18		310	328	47,870	230	19,648	67,517	29%	
2026/27	Jul '26	226	25		310	335	47,891	230	19,619	67,509	29%	
	Aug '26	227	15		310	325	47,898	240	19,591	67,488	29%	
	Sep '26	228	24		310	334	47,917	230	19,573	67,489	29%	
	Oct '26	229	49		310	359	47,931	200	19,488	67,418	29%	
	Nov '26	230	85		310	395	47,934	170	19,430	67,363	29%	
	Dec '26	231	209		310	519	47,780	40	19,349	67,128	29%	
	Jan '27	232	154		310	464	47,611	100	19,449	67,059	29%	
	Feb '27	233	180		310	490	47,691	70	19,485	67,175	29%	
	Mar '27	234	115		310	425	47,784	140	19,449	67,232	29%	
	Apr '27	235	85		310	395	47,812	170	19,339	67,150	29%	
	May '27	236	42		310	352	47,838	210	19,365	67,202	29%	
	Jun '27	237	18		310	328	47,818	230	19,397	67,215	29%	
2027/28	Jul '27	238	25		310	335	47,738	230	19,626	67,364	29%	
	Aug '27	239	15		310	325	47,150	240	19,670	66,819	29%	
	Sep '27	240	24		310	334	46,884	230	19,769	66,652	30%	
	Oct '27	241	49		310	359	46,819	200	19,937	66,756	30%	
	Nov '27	242	85		310	395	46,901	170	20,090	66,991	30%	
	Dec '27	243	209		310	519	47,107	40	20,130	67,237	30%	
	Jan '28	244	154		310	464	47,140	100	20,230	67,370	30%	
	Feb '28	245	180		310	490	47,235	70	20,300	67,535	30%	
	Mar '28	246	115		310	425	47,235	140	20,300	67,535	30%	
	Apr '28	247	85		310	395	47,235	170	20,300	67,535	30%	
	May '28	248	42		310	352	47,235	210	20,300	67,535	30%	
	Jun '28	249	18		310	328	47,235	230	20,300	67,535	30%	

Notes:

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

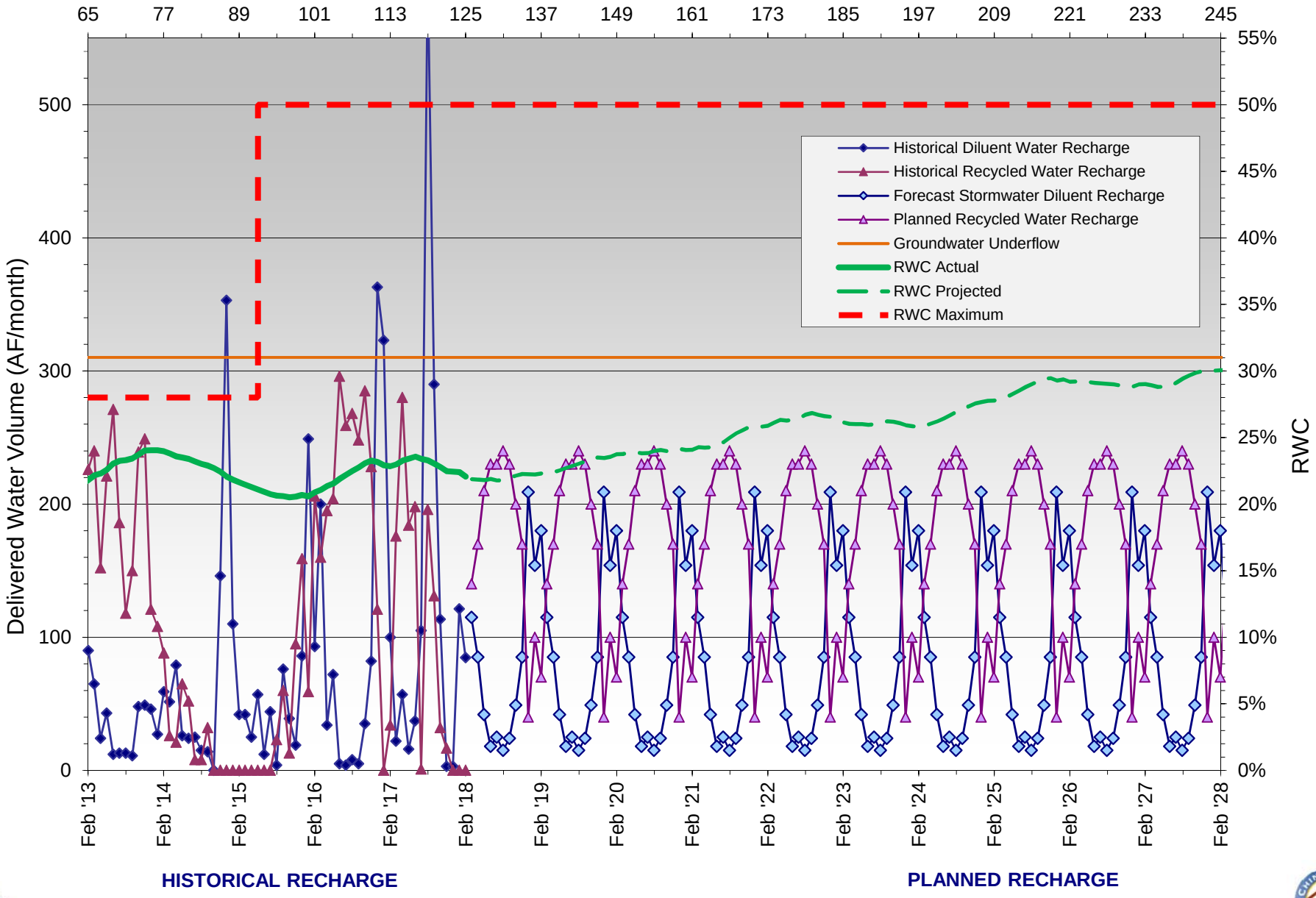
RW = Recycled Water

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

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

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

RWC Management Plan - 8th Street Basins



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
2012/13	Jul '12	84	0	0	151	151	8,949	41	4,560	13,509	34%	
	Aug '12	85	0	0	151	151	9,100	2	4,562	13,662	33%	
	Sep '12	86	0	0	151	151	9,252	188	4,750	14,002	34%	
	Oct '12	87	11	0	151	162	9,414	103	4,853	14,267	34%	
	Nov '12	88	5	0	151	156	9,531	120	4,973	14,505	34%	
	Dec '12	89	49	0	151	200	9,672	15	4,988	14,661	34%	
	Jan '13	90	18	0	151	169	9,842	28	5,016	14,858	34%	
	Feb '13	91	20	0	151	171	9,933	2	5,018	14,951	34%	
	Mar '13	92	8	0	151	159	10,053	42	5,060	15,113	33%	
	Apr '13	93	0	0	151	151	10,117	55	5,115	15,232	34%	
	May '13	94	3	0	151	154	10,210	39	5,154	15,364	34%	
	Jun '13	95	0	0	151	151	10,361	35	5,189	15,550	33%	
2013/14	Jul '13	96	0	0	151	151	10,513	15	5,204	15,717	33%	
	Aug '13	97	0	0	151	151	10,664	12	5,216	15,880	33%	
	Sep '13	98	0	0	151	151	10,815	0	5,216	16,031	33%	
	Oct '13	99	0	0	151	151	10,967	385	5,601	16,568	34%	
	Nov '13	100	22	0	151	173	11,106	102	5,703	16,809	34%	
	Dec '13	101	6	0	151	157	11,226	0	5,703	16,929	34%	
	Jan '14	102	9	8	151	169	11,390	0	5,703	17,093	33%	
	Feb '14	103	39	16	151	206	11,513	0	5,703	17,216	33%	
	Mar '14	104	9	0	151	160	11,645	85	5,788	17,433	33%	
	Apr '14	105	2	0	151	153	11,798	88	5,876	17,674	33%	
	May '14	106	0	0	151	151	11,949	194	6,070	18,019	34%	
	Jun '14	107	0	0	151	151	12,100	190	6,260	18,361	34%	
2014/15	Jul '14	108	0	0	151	151	12,252	0	6,260	18,512	34%	
	Aug '14	109	0	0	151	151	12,403	82	6,342	18,745	34%	
	Sep '14	110	0	0	151	151	12,554	72	6,414	18,968	34%	
	Oct '14	111	0	0	151	151	12,643	206	6,620	19,263	34%	
	Nov '14	112	7	0	151	158	12,784	173	6,793	19,577	35%	
	Dec '14	113	145	0	151	296	13,055	67	6,860	19,915	34%	
	Jan '15	114	24	0	151	175	13,137	144	7,004	20,141	35%	
	Feb '15	115	16	0	151	167	13,193	47	7,051	20,244	35%	
	Mar '15	116	2	0	151	153	13,322	80	7,131	20,453	35%	
	Apr '15	117	3	0	151	154	13,457	90	7,221	20,678	35%	
	May '15	118	0	0	151	151	13,594	161	7,382	20,976	35%	
	Jun '15	119	0	0	151	151	13,745	26	7,408	21,153	35%	
2015/16	Jul '15	120	0	0	151	151	13,704	54	7,442	21,146	35%	
	Aug '15	121	0	0	151	151	13,855	156	7,344	21,200	35%	
	Sep '15	122	40	0	151	191	14,046	376	7,592	21,638	35%	
	Oct '15	123	105	0	151	256	14,274	349	7,915	22,189	36%	
	Nov '15	124	30	0	151	181	14,455	262	8,169	22,625	36%	
	Dec '15	125	59	0	151	210	14,647	283	8,442	23,089	37%	
	Jan '16	126	71	0	151	222	14,863	75	8,467	23,330	36%	
	Feb '16	127	7	0	151	158	14,999	110	8,522	23,521	36%	
	Mar '16	128	38	0	151	189	15,133	74	8,596	23,729	36%	
	Apr '16	129	0	0	151	151	15,249	97	8,693	23,941	36%	
	May '16	130	15	0	151	166	15,358	113	8,806	24,164	36%	
	Jun '16	131	0	0	151	151	15,509	157	8,916	24,425	37%	
2016/2017	Jul '16	132	0	0	151	151	15,661	183	9,034	24,695	37%	
	Aug '16	133	0	0	151	151	15,812	49	8,998	24,810	36%	
	Sep '16	134	0	0	151	151	15,963	97	8,717	24,681	35%	
	Oct '16	135	6	0	151	157	16,046	115	8,783	24,829	35%	
	Nov '16	136	21	0	151	172	15,984	55	8,831	24,815	36%	
	Dec '16	137	71	0	151	222	16,005	1	8,782	24,787	35%	
	Jan '17	138	50	0	151	201	15,875	0	8,782	24,657	36%	
	Feb '17	139	18	0	151	169	15,971	0	8,782	24,753	35%	
	Mar '17	140	0	0	151	151	16,069	0	8,782	24,851	35%	
	Apr '17	141	0	0	151	151	16,191	0	8,778	24,969	35%	
	May '17	142	0	0	151	151	16,306	0	8,772	25,078	35%	
	Jun '17	143	0	0	151	151	16,457	0	8,772	25,229	35%	
2017/2018	Jul '17	144	0	0	151	151	16,608	0	8,772	25,380	35%	
	Aug '17	145	2	0	151	153	16,761	131	8,903	25,664	35%	
	Sep '17	146	2	134	151	287	17,045	161	9,064	26,109	35%	
	Oct '17	147	3	121	151	274	17,318	241	9,305	26,623	35%	
	Nov '17	148	0	0	151	151	17,434	463	9,768	27,202	36%	
	Dec '17	149	2	138	151	291	17,703	252	10,020	27,723	36%	
	Jan '18	150	115	93	151	359	17,932	126	10,146	28,078	36%	
	Feb '18	151	11	0	151	163	18,020	206	10,352	28,372	36%	
	Mar '18	152	15		151	166	18,186	110	10,462	28,648	37%	
	Apr '18	153	14		151	165	18,351	110	10,525	28,876	36%	
	May '18	154	10		151	161	18,510	120	10,607	29,117	36%	
	Jun '18	155	1		151	152	18,654	120	10,655	29,309	36%	

HISTORICAL

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
2018/2019	Jul '18	156	5		151	156	18,779	120	10,775	29,554	36%	
	Aug '18	157	4		151	155	18,890	120	10,895	29,784	37%	
	Sep '18	158	6		151	157	19,013	120	11,015	30,028	37%	
	Oct '18	159	19		151	170	19,147	110	11,125	30,272	37%	
	Nov '18	160	17		151	168	19,266	110	11,235	30,500	37%	
	Dec '18	161	49		151	200	19,379	80	11,315	30,694	37%	
	Jan '19	162	48		151	199	19,573	80	11,355	30,928	37%	
	Feb '19	163	44		151	195	19,674	80	11,435	31,108	37%	
	Mar '19	164	15		151	166	19,840	110	11,545	31,385	37%	
	Apr '19	165	14		151	165	20,005	110	11,655	31,660	37%	
	May '19	166	10		151	161	20,166	120	11,775	31,941	37%	
	Jun '19	167	1		151	152	20,319	120	11,895	32,214	37%	
2019/2020	Jul '19	168	5		151	156	20,475	120	12,015	32,490	37%	
	Aug '19	169	4		151	155	20,630	120	12,135	32,765	37%	
	Sep '19	170	6		151	157	20,788	120	12,255	33,042	37%	
	Oct '19	171	19		151	170	20,792	110	12,236	33,027	37%	
	Nov '19	172	17		151	168	20,809	110	12,165	32,973	37%	
	Dec '19	173	49		151	200	20,783	80	12,178	32,960	37%	
	Jan '20	174	48		151	199	20,731	80	12,183	32,913	37%	
	Feb '20	175	44		151	195	20,632	80	12,263	32,894	37%	
	Mar '20	176	15		151	166	20,630	110	12,373	33,002	37%	
	Apr '20	177	14		151	165	20,578	110	12,343	32,920	37%	
	May '20	178	10		151	161	20,588	120	12,286	32,873	37%	
	Jun '20	179	1		151	152	20,589	120	12,277	32,865	37%	
2020/2021	Jul '20	180	5		151	156	20,594	120	12,320	32,913	37%	
	Aug '20	181	4		151	155	20,598	120	12,386	32,983	38%	
	Sep '20	182	6		151	157	20,604	120	12,447	33,050	38%	
	Oct '20	183	19		151	170	20,618	110	12,509	33,126	38%	
	Nov '20	184	17		151	168	20,619	110	12,590	33,208	38%	
	Dec '20	185	49		151	200	20,617	80	12,670	33,286	38%	
	Jan '21	186	48		151	199	20,655	80	12,750	33,404	38%	
	Feb '21	187	44		151	195	20,673	80	12,830	33,502	38%	
	Mar '21	188	15		151	166	20,688	110	12,940	33,627	38%	
	Apr '21	189	14		151	165	20,702	110	13,050	33,751	39%	P
	May '21	190	10		151	161	20,712	120	13,170	33,881	39%	L
	Jun '21	191	1		151	152	20,713	120	13,290	34,002	39%	A
2021/2022	Jul '21	192	5		151	156	20,687	120	13,410	34,096	39%	N
	Aug '21	193	4		151	155	20,691	120	13,395	34,085	39%	N
	Sep '21	194	6		151	157	20,697	120	13,120	33,816	39%	E
	Oct '21	195	19		151	170	20,696	110	12,826	33,521	38%	D
	Nov '21	196	17		151	168	20,683	110	12,775	33,457	38%	
	Dec '21	197	49		151	200	20,714	80	12,610	33,323	38%	
	Jan '22	198	48		151	199	20,714	80	12,529	33,242	38%	
	Feb '22	199	44		151	195	20,737	80	12,442	33,178	37%	
	Mar '22	200	15		151	166	20,708	110	12,480	33,187	38%	
	Apr '22	201	14		151	165	20,687	110	12,539	33,225	38%	
	May '22	202	10		151	161	20,697	120	12,614	33,310	38%	
	Jun '22	203	1		151	152	20,698	120	12,655	33,352	38%	
2022/2023	Jul '22	204	5		151	156	20,703	120	12,734	33,436	38%	
	Aug '22	205	4		151	155	20,707	120	12,852	33,558	38%	
	Sep '22	206	6		151	157	20,713	120	12,784	33,496	38%	
	Oct '22	207	19		151	170	20,721	110	12,791	33,511	38%	
	Nov '22	208	17		151	168	20,733	110	12,781	33,513	38%	
	Dec '22	209	49		151	200	20,733	80	12,846	33,578	38%	
	Jan '23	210	48		151	199	20,763	80	12,898	33,660	38%	
	Feb '23	211	44		151	195	20,787	80	12,976	33,762	38%	
	Mar '23	212	15		151	166	20,794	110	13,044	33,837	39%	
	Apr '23	213	14		151	165	20,808	110	13,099	33,906	39%	
	May '23	214	10		151	161	20,815	120	13,180	33,994	39%	
	Jun '23	215	1		151	152	20,816	120	13,265	34,080	39%	
2023/2024	Jul '23	216	5		151	156	20,821	120	13,370	34,190	39%	
	Aug '23	217	4		151	155	20,825	120	13,478	34,302	39%	
	Sep '23	218	6		151	157	20,831	120	13,598	34,428	39%	
	Oct '23	219	19		151	170	20,850	110	13,323	34,172	39%	
	Nov '23	220	17		151	168	20,845	110	13,331	34,175	39%	
	Dec '23	221	49		151	200	20,888	80	13,411	34,298	39%	
	Jan '24	222	48		151	199	20,918	80	13,491	34,409	39%	
	Feb '24	223	44		151	195	20,907	80	13,571	34,478	39%	
	Mar '24	224	15		151	166	20,913	110	13,596	34,509	39%	
	Apr '24	225	14		151	165	20,925	110	13,618	34,543	39%	
	May '24	226	10		151	161	20,935	120	13,544	34,479	39%	
	Jun '24	227	1		151	152	20,936	120	13,474	34,410	39%	

RWC Management Plan for Banana Basin

(120-month averaging period)

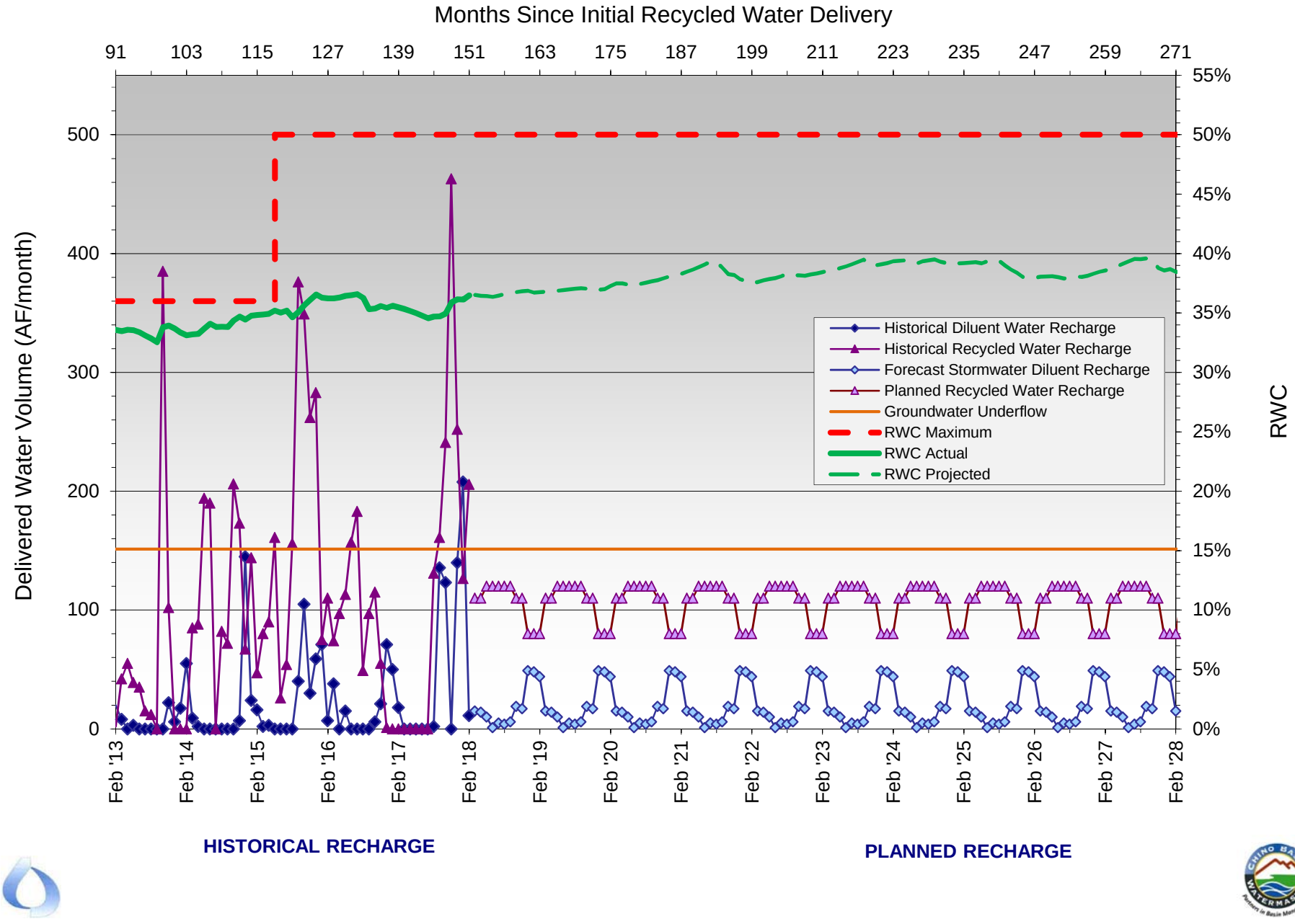
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

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
2024/2025	Jul '24	228	5		151	156	20,941	120	13,594	34,535	39%	PLANED
	Aug '24	229	4		151	155	20,945	120	13,632	34,577	39%	
	Sep '24	230	6		151	157	20,951	120	13,680	34,631	40%	
	Oct '24	231	19		151	170	20,970	110	13,584	34,554	39%	
	Nov '24	232	17		151	168	20,980	110	13,521	34,501	39%	
	Dec '24	233	49		151	200	20,884	80	13,534	34,418	39%	
	Jan '25	234	48		151	199	20,908	80	13,470	34,378	39%	
	Feb '25	235	44		151	195	20,936	80	13,503	34,439	39%	
	Mar '25	236	15		151	166	20,949	110	13,533	34,482	39%	
	Apr '25	237	14		151	165	20,960	110	13,553	34,513	39%	
	May '25	238	10		151	161	20,970	120	13,512	34,482	39%	
	Jun '25	239	1		151	152	20,971	120	13,606	34,577	39%	
2025/2026	Jul '25	240	5		151	156	20,976	120	13,672	34,648	39%	
	Aug '25	241	4		151	155	20,980	120	13,636	34,616	39%	
	Sep '25	242	6		151	157	20,946	120	13,380	34,326	39%	
	Oct '25	243	19		151	170	20,860	110	13,141	34,001	39%	
	Nov '25	244	17		151	168	20,847	110	12,989	33,836	38%	
	Dec '25	245	49		151	200	20,837	80	12,786	33,623	38%	
	Jan '26	246	48		151	199	20,814	80	12,791	33,605	38%	
	Feb '26	247	44		151	195	20,851	80	12,761	33,612	38%	
	Mar '26	248	15		151	166	20,828	110	12,797	33,625	38%	
	Apr '26	249	14		151	165	20,842	110	12,810	33,652	38%	
	May '26	250	10		151	161	20,837	120	12,817	33,654	38%	
	Jun '26	251	1		151	152	20,838	120	12,780	33,618	38%	
2026/2027	Jul '26	252	5		151	156	20,843	120	12,717	33,560	38%	
	Aug '26	253	4		151	155	20,847	120	12,788	33,635	38%	
	Sep '26	254	6		151	157	20,853	120	12,811	33,664	38%	
	Oct '26	255	19		151	170	20,866	110	12,806	33,672	38%	
	Nov '26	256	17		151	168	20,862	110	12,861	33,723	38%	
	Dec '26	257	49		151	200	20,840	80	12,940	33,780	38%	
	Jan '27	258	48		151	199	20,838	80	13,020	33,858	38%	
	Feb '27	259	44		151	195	20,864	80	13,100	33,964	39%	
	Mar '27	260	15		151	166	20,879	110	13,210	34,089	39%	
	Apr '27	261	14		151	165	20,893	110	13,320	34,213	39%	
	May '27	262	10		151	161	20,903	120	13,440	34,343	39%	
	Jun '27	263	1		151	152	20,904	120	13,560	34,464	39%	
2027/28	Jul '27	264	4		151	155	20,908	120	13,680	34,588	40%	
	Aug '27	265	6		151	157	20,912	120	13,669	34,581	40%	
	Sep '27	266	19		151	170	20,796	120	13,628	34,424	40%	
	Oct '27	267	17		151	168	20,690	110	13,497	34,187	39%	
	Nov '27	268	49		151	200	20,739	110	13,144	33,883	39%	
	Dec '27	269	48		151	199	20,647	80	12,972	33,619	39%	
	Jan '28	270	44		151	195	20,483	80	12,926	33,409	39%	
	Feb '28	271	15		151	166	20,487	80	12,800	33,287	38%	
	Mar '28	272	14		151	165	20,486	110	12,800	33,286	38%	
	Apr '28	273	10		151	161	20,482	110	12,800	33,282	38%	
	May '28	274	1		151	152	20,473	120	12,800	33,273	38%	
	Jun '28	275	4		151	155	20,476	120	12,800	33,276	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



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
2012/13	Jul '12	47	1	0	509	510	26,187	33	5,542	31,729	17%	
	Aug '12	48	2	0	509	511	26,699	39	5,581	32,280	17%	
	Sep '12	49	2	0	509	511	27,210	51	5,632	32,842	17%	
	Oct '12	50	0	0	509	509	27,719	0	5,632	33,351	17%	
	Nov '12	51	0	0	509	509	28,228	0	5,632	33,860	17%	
	Dec '12	52	0	0	509	509	28,737	0	5,632	34,369	16%	
	Jan '13	53	35	0	509	544	29,282	342	5,974	35,256	17%	
	Feb '13	54	26	0	509	535	29,817	299	6,273	36,090	17%	
	Mar '13	55	32	0	509	541	30,358	238	6,511	36,869	18%	
	Apr '13	56	0	0	509	509	30,867	231	6,742	37,609	18%	
	May '13	57	17	0	509	526	31,394	152	6,894	38,288	18%	
	Jun '13	58	1	0	509	510	31,904	120	7,014	38,918	18%	
2013/14	Jul '13	59	1	0	509	510	32,414	169	7,183	39,597	18%	
	Aug '13	60	1	0	509	510	32,924	197	7,380	40,304	18%	
	Sep '13	61	28	0	509	537	33,461	182	7,562	41,023	18%	
	Oct '13	62	23	0	509	532	33,994	108	7,670	41,664	18%	
	Nov '13	63	4	0	509	513	34,507	94	7,764	42,271	18%	
	Dec '13	64	8	0	509	517	35,024	104	7,868	42,892	18%	
	Jan '14	65	3	0	509	512	35,536	109	7,977	43,513	18%	
	Feb '14	66	47	0	509	556	36,093	102	8,079	44,172	18%	
	Mar '14	67	12	0	509	521	36,614	130	8,209	44,823	18%	
	Apr '14	68	14	0	509	523	37,137	65	8,274	45,411	18%	
	May '14	69	0	0	509	509	37,646	0	8,274	45,920	18%	
	Jun '14	70	19	0	509	528	38,174	48	8,322	46,496	18%	
2014/15	Jul '14	71	7	0	509	516	38,691	72	8,394	47,085	18%	
	Aug '14	72	1	0	509	510	39,201	141	8,535	47,736	18%	
	Sep '14	73	1	0	509	510	39,711	157	8,692	48,403	18%	HISTORICAL
	Oct '14	74	6	0	509	515	40,226	56	8,748	48,974	18%	
	Nov '14	75	28	0	509	537	40,764	37	8,785	49,549	18%	
	Dec '14	76	95	0	509	604	41,368	0	8,785	50,153	18%	
	Jan '15	77	19	0	509	528	41,896	10	8,795	50,691	17%	
	Feb '15	78	27	0	509	536	42,432	92	8,887	51,319	17%	
	Mar '15	79	13	0	509	522	42,955	69	8,956	51,911	17%	
	Apr '15	80	10	0	509	519	43,474	101	9,057	52,531	17%	
	May '15	81	21	0	509	530	44,004	120	9,177	53,181	17%	
	Jun '15	82	0	0	509	509	44,513	156	9,333	53,846	17%	
2015/16	Jul '15	83	0	0	509	509	44,990	63	9,396	54,386	17%	
	Aug '15	84	0	0	509	509	45,324	0	9,396	54,720	17%	
	Sep '15	85	1	0	509	510	45,148	0	9,396	54,544	17%	
	Oct '15	86	0	0	509	509	45,530	0	9,396	54,926	17%	
	Nov '15	87	1	0	509	510	45,650	0	9,396	55,046	17%	
	Dec '15	88	0	0	509	509	45,796	101	9,497	55,293	17%	
	Jan '16	89	54	0	509	563	46,103	254	9,751	55,854	17%	
	Feb '16	90	91	0	509	600	46,310	116	9,867	56,177	18%	
	Mar '16	91	91	0	509	600	46,696	211	10,078	56,774	18%	
	Apr '16	92	13	0	509	522	46,956	192	10,270	57,226	18%	
	May '16	93	1	0	509	510	47,166	278	10,548	57,714	18%	
	Jun '16	94	0	0	509	509	47,304	0	10,548	57,852	18%	
2016/17	Jul '16	95	0	0	509	509	47,607	0	10,548	58,155	18%	
	Aug '16	96	0	0	509	509	47,965	0	10,548	58,513	18%	
	Sep '16	97	31	0	509	540	48,163	145	10,693	58,856	18%	
	Oct '16	98	17	170	509	696	48,552	19	10,712	59,264	18%	
	Nov '16	99	39	0	509	548	48,813	116	10,828	59,641	18%	
	Dec '16	100	196	0	509	705	49,256	13	10,841	60,097	18%	
	Jan '17	101	254	0	509	763	49,907	0	10,841	60,748	18%	
	Feb '17	102	142	0	509	651	50,429	0	10,841	61,270	18%	
	Mar '17	103	1	0	509	510	50,936	16	10,857	61,793	18%	
	Apr '17	104	0	16	509	525	51,359	8	10,865	62,224	17%	
	May '17	105	1	0	509	510	51,865	38	10,903	62,768	17%	
	Jun '17	106	0	2	509	511	52,374	30	10,933	63,307	17%	
2017/18	Jul '17	107	0	94	509	603	52,977	228	11,161	64,138	17%	
	Aug '17	108	0	96	509	605	53,582	55	11,216	64,798	17%	
	Sep '17	109	1	3	509	513	54,070	169	11,385	65,455	17%	
	Oct '17	110	1	0	509	510	54,546	99	11,484	66,030	17%	
	Nov '17	111	3	0	509	512	55,034	151	11,636	66,670	17%	
	Dec '17	112	1	0	509	510	55,502	122	11,758	67,260	17%	
	Jan '18	113	28	5	509	542	55,762	94	11,852	67,614	18%	
	Feb '18	114	9	0	509	518	56,230	106	11,958	68,188	18%	
	Mar '18	115	0		509	509	56,731	150	12,108	68,839	18%	
	Apr '18	116	0		509	509	57,236	150	12,258	69,494	18%	
	May '18	117	0		509	509	57,702	150	12,408	70,110	18%	
	Jun '18	118	0		509	509	58,208	150	12,558	70,766	18%	

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
2018/19	Jul '18	119	4		509	513	58,719	150	12,708	71,427	18%	
	Aug '18	120	5		509	514	59,217	150	12,741	71,958	18%	
	Sep '18	121	9		509	518	59,735	140	12,795	72,530	18%	
	Oct '18	122	12		509	521	60,256	140	12,769	73,025	17%	
	Nov '18	123	24		509	533	60,766	130	12,796	73,562	17%	
	Dec '18	124	76		509	585	61,190	70	12,778	73,968	17%	
	Jan '19	125	88		509	597	61,762	60	12,561	74,323	17%	
	Feb '19	126	96		509	605	62,159	50	12,591	74,750	17%	
	Mar '19	127	0		509	509	62,638	150	12,582	75,220	17%	
	Apr '19	128	0		509	509	63,147	150	12,436	75,583	16%	
	May '19	129	0		509	509	63,639	150	12,471	76,110	16%	
	Jun '19	130	0		509	509	64,148	150	12,443	76,591	16%	
2019/20	Jul '19	131	4		509	513	64,660	150	12,587	77,247	16%	
	Aug '19	132	5		509	514	65,174	150	12,729	77,904	16%	
	Sep '19	133	9		509	518	65,693	140	12,869	78,562	16%	
	Oct '19	134	12		509	521	65,692	140	12,825	78,517	16%	
	Nov '19	135	24		509	533	65,712	130	12,709	78,421	16%	
	Dec '19	136	76		509	585	65,659	70	12,635	78,294	16%	
	Jan '20	137	88		509	597	65,496	60	12,621	78,117	16%	
	Feb '20	138	96		509	605	65,377	50	12,617	77,994	16%	
	Mar '20	139	0		509	509	65,350	150	12,587	77,937	16%	
	Apr '20	140	0		509	509	65,327	150	12,502	77,829	16%	
	May '20	141	0		509	509	65,325	150	12,296	77,621	16%	
	Jun '20	142	0		509	509	65,324	150	12,238	77,562	16%	
2020/21	Jul '20	143	4		509	513	65,327	150	12,241	77,568	16%	
	Aug '20	144	5		509	514	65,314	150	12,116	77,430	16%	
	Sep '20	145	9		509	518	65,322	140	12,115	77,437	16%	
	Oct '20	146	12		509	521	65,310	140	12,125	77,435	16%	
	Nov '20	147	24		509	533	65,290	130	12,168	77,458	16%	
	Dec '20	148	76		509	585	65,084	70	12,204	77,288	16%	
	Jan '21	149	88		509	597	65,060	60	12,264	77,324	16%	
	Feb '21	150	96		509	605	64,992	50	12,314	77,306	16%	
	Mar '21	151	0		509	509	64,850	150	12,464	77,314	16%	
	Apr '21	152	0		509	509	64,849	150	12,440	77,289	16%	
	May '21	153	0		509	509	64,839	150	12,428	77,267	16%	
	Jun '21	154	0		509	509	64,838	150	12,355	77,193	16%	
2021/22	Jul '21	155	4		509	513	64,604	150	12,505	77,109	16%	
	Aug '21	156	5		509	514	64,424	150	12,655	77,079	16%	
	Sep '21	157	9		509	518	64,279	140	12,795	77,074	17%	PLANNED
	Oct '21	158	12		509	521	64,273	140	12,855	77,128	17%	
	Nov '21	159	24		509	533	64,247	130	12,949	77,196	17%	
	Dec '21	160	76		509	585	64,307	70	12,921	77,228	17%	
	Jan '22	161	88		509	597	64,350	60	12,839	77,189	17%	
	Feb '22	162	96		509	605	64,396	50	12,812	77,208	17%	
	Mar '22	163	0		509	509	64,293	150	12,877	77,170	17%	
	Apr '22	164	0		509	509	64,229	150	12,995	77,224	17%	
	May '22	165	0		509	509	64,228	150	13,020	77,248	17%	
	Jun '22	166	0		509	509	64,228	150	13,009	77,237	17%	
2022/23	Jul '22	167	4		509	513	64,231	150	13,126	77,357	17%	
	Aug '22	168	5		509	514	64,234	150	13,237	77,471	17%	
	Sep '22	169	9		509	518	64,241	140	13,326	77,567	17%	
	Oct '22	170	12		509	521	64,253	140	13,466	77,719	17%	
	Nov '22	171	24		509	533	64,277	130	13,596	77,873	17%	
	Dec '22	172	76		509	585	64,353	70	13,666	78,019	18%	
	Jan '23	173	88		509	597	64,406	60	13,384	77,790	17%	
	Feb '23	174	96		509	605	64,476	50	13,135	77,611	17%	
	Mar '23	175	0		509	509	64,444	150	13,047	77,491	17%	
	Apr '23	176	0		509	509	64,444	150	12,966	77,410	17%	
	May '23	177	0		509	509	64,427	150	12,964	77,391	17%	
	Jun '23	178	0		509	509	64,426	150	12,994	77,420	17%	
2023/24	Jul '23	179	4		509	513	64,429	150	12,975	77,404	17%	
	Aug '23	180	5		509	514	64,433	150	12,928	77,361	17%	
	Sep '23	181	9		509	518	64,414	140	12,886	77,300	17%	
	Oct '23	182	12		509	521	64,403	140	12,918	77,321	17%	
	Nov '23	183	24		509	533	64,423	130	12,954	77,377	17%	
	Dec '23	184	76		509	585	64,491	70	12,920	77,411	17%	
	Jan '24	185	88		509	597	64,576	60	12,871	77,447	17%	
	Feb '24	186	96		509	605	64,625	50	12,819	77,444	17%	
	Mar '24	187	0		509	509	64,613	150	12,839	77,452	17%	
	Apr '24	188	0		509	509	64,599	150	12,924	77,523	17%	
	May '24	189	0		509	509	64,599	150	13,074	77,673	17%	
	Jun '24	190	0		509	509	64,580	150	13,176	77,756	17%	

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
2024/25	Jul '24	191	4		509	513	64,577	150	13,254	77,831	17%	
	Aug '24	192	5		509	514	64,581	150	13,263	77,844	17%	
	Sep '24	193	9		509	518	64,589	140	13,246	77,835	17%	
	Oct '24	194	12		509	521	64,595	140	13,330	77,925	17%	
	Nov '24	195	24		509	533	64,591	130	13,423	78,014	17%	
	Dec '24	196	76		509	585	64,572	70	13,493	78,065	17%	
	Jan '25	197	88		509	597	64,641	60	13,543	78,184	17%	
	Feb '25	198	96		509	605	64,710	50	13,501	78,211	17%	
	Mar '25	199	0		509	509	64,697	150	13,582	78,279	17%	
	Apr '25	200	0		509	509	64,687	150	13,631	78,318	17%	
	May '25	201	0		509	509	64,666	150	13,661	78,327	17%	
	Jun '25	202	0		509	509	64,666	150	13,655	78,321	17%	
2025/26	Jul '25	203	4		509	513	64,670	150	13,742	78,412	18%	P L A N N E D
	Aug '25	204	5		509	514	64,675	150	13,892	78,567	18%	
	Sep '25	205	9		509	518	64,683	140	14,032	78,715	18%	
	Oct '25	206	12		509	521	64,695	140	14,172	78,867	18%	
	Nov '25	207	24		509	533	64,718	130	14,302	79,020	18%	
	Dec '25	208	76		509	585	64,794	70	14,271	79,065	18%	
	Jan '26	209	88		509	597	64,828	60	14,077	78,905	18%	
	Feb '26	210	96		509	605	64,833	50	14,011	78,844	18%	
	Mar '26	211	0		509	509	64,742	150	13,950	78,692	18%	
	Apr '26	212	0		509	509	64,729	150	13,908	78,637	18%	
	May '26	213	0		509	509	64,728	150	13,780	78,508	18%	
	Jun '26	214	0		509	509	64,728	150	13,930	78,658	18%	
2026/27	Jul '26	215	4		509	513	64,732	150	14,080	78,812	18%	
	Aug '26	216	5		509	514	64,737	150	14,230	78,967	18%	
	Sep '26	217	9		509	518	64,715	140	14,225	78,940	18%	
	Oct '26	218	12		509	521	64,540	140	14,346	78,886	18%	
	Nov '26	219	24		509	533	64,525	130	14,360	78,885	18%	
	Dec '26	220	76		509	585	64,405	70	14,417	78,822	18%	
	Jan '27	221	88		509	597	64,239	60	14,477	78,716	18%	
	Feb '27	222	96		509	605	64,193	50	14,527	78,720	18%	
	Mar '27	223	0		509	509	64,192	150	14,661	78,853	19%	
	Apr '27	224	0		509	509	64,176	150	14,803	78,979	19%	
	May '27	225	0		509	509	64,175	150	14,915	79,090	19%	
	Jun '27	226	0		509	509	64,173	150	15,035	79,208	19%	
2027/28	Jul '27	227	4		509	513	64,084	150	14,957	79,041	19%	
	Aug '27	228	5		509	514	63,993	150	15,052	79,045	19%	
	Sep '27	229	9		509	518	63,998	140	15,023	79,021	19%	
	Oct '27	230	12		509	521	64,009	140	15,064	79,072	19%	
	Nov '27	231	24		509	533	64,030	130	15,042	79,072	19%	
	Dec '27	232	76		509	585	64,105	70	14,990	79,095	19%	
	Jan '28	233	88		509	597	64,160	60	14,956	79,116	19%	
	Feb '28	234	96		509	605	64,247	50	14,900	79,147	19%	
	Mar '28	235	0		509	509	64,247	150	14,900	79,147	19%	
	Apr '28	236	0		509	509	64,247	150	14,900	79,147	19%	
	May '28	237	0		509	509	64,247	150	14,900	79,147	19%	
	Jun '28	238	0		509	509	64,247	150	14,900	79,147	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.

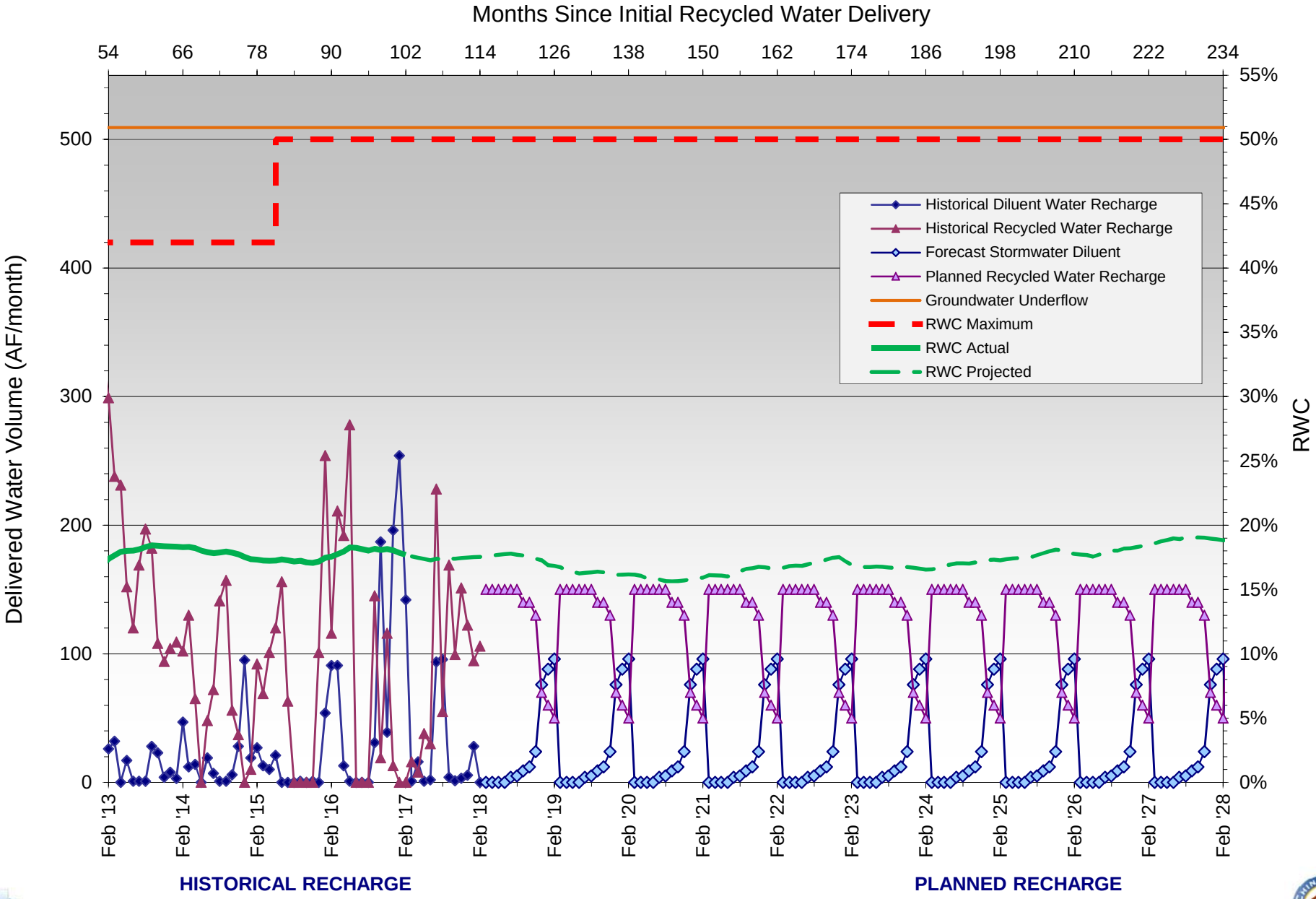
RW = Recycled Water

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

RWC Management Plan - Brooks Street Basin



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
2012/13	Jul '12	-41	1	0	0	1	5,136	0	65	5,201	1%	
	Aug '12	-40	10	0	0	10	5,146	0	65	5,211	1%	
	Sep '12	-39	15	0	0	15	5,161	0	65	5,226	1%	
	Oct '12	-38	134	0	0	134	5,295	0	65	5,360	1%	
	Nov '12	-37	21	0	0	21	5,316	0	65	5,381	1%	
	Dec '12	-36	168	0	0	168	5,484	0	65	5,549	1%	
	Jan '13	-35	48	0	0	48	5,532	0	65	5,597	1%	
	Feb '13	-34	58	0	0	58	5,590	0	65	5,655	1%	
	Mar '13	-33	61	0	0	61	5,651	0	65	5,716	1%	
	Apr '13	-32	4	0	0	4	5,655	0	65	5,720	1%	
	May '13	-31	6	0	0	6	5,661	0	65	5,726	1%	
	Jun '13	-30	4	0	0	4	5,665	0	65	5,730	1%	
2013/14	Jul '13	-29	6	0	0	6	5,671	0	65	5,736	1%	HISTORICAL
	Aug '13	-28	3	0	0	3	5,674	0	65	5,739	1%	
	Sep '13	-27	2	0	0	2	5,676	0	65	5,741	1%	
	Oct '13	-26	18	0	0	18	5,694	0	65	5,759	1%	
	Nov '13	-25	52	0	0	52	5,746	0	65	5,811	1%	
	Dec '13	-24	66	0	0	66	5,812	0	65	5,877	1%	
	Jan '14	-23	3	99	0	102	5,914	0	65	5,979	1%	
	Feb '14	-22	24	152	0	176	6,090	0	65	6,155	1%	
	Mar '14	-21	56	117	0	173	6,263	0	65	6,328	1%	
	Apr '14	-20	108	7	0	115	6,378	0	65	6,443	1%	
	May '14	-19	1	0	0	1	6,379	0	65	6,444	1%	
	Jun '14	-18	2	0	0	2	6,381	0	65	6,446	1%	
2014/15	Jul '14	-17	2	0	0	2	6,383	0	65	6,448	1%	
	Aug '14	-16	72	0	0	72	6,455	0	65	6,520	1%	
	Sep '14	-15	30	0	0	30	6,485	0	65	6,550	1%	
	Oct '14	-14	3	0	0	3	6,488	0	65	6,553	1%	
	Nov '14	-13	100	0	0	100	6,588	0	65	6,653	1%	
	Dec '14	-12	315	0	0	315	6,903	0	65	6,968	1%	
	Jan '15	-11	47	0	0	47	6,950	0	65	7,015	1%	
	Feb '15	-10	106	0	0	106	7,056	0	65	7,121	1%	
	Mar '15	-9	15	0	0	15	7,071	0	65	7,136	1%	
	Apr '15	-8	41	0	0	41	7,112	0	65	7,177	1%	
	May '15	-7	99	0	0	99	7,211	0	65	7,276	1%	
	Jun '15	-6	3	0	0	3	7,214	0	65	7,279	1%	
2015/16	Jul '15	-5	49	0	0	49	7,252	0	65	7,317	1%	
	Aug '15	-4	3	0	0	3	7,245	0	65	7,310	1%	
	Sep '15	-3	147	0	0	147	7,362	0	65	7,427	1%	
	Oct '15	-2	36	0	0	36	7,283	0	65	7,348	1%	
	Nov '15	-1	4	0	0	4	7,257	0	65	7,322	1%	
12/23/2015	Dec '15	0	49	0	904	953	8,180	50	115	8,295	1%	START-UP
	Jan '16	1	158	0	904	1,062	9,207	78	193	9,400	2%	
	Feb '16	2	34	0	904	938	10,035	153	346	10,381	3%	
	Mar '16	3	92	0	904	996	10,840	126	472	11,312	4%	
	Apr '16	4	20	0	904	924	11,662	133	605	12,267	5%	
	May '16	5	12	0	904	916	12,520	228	833	13,353	6%	
	Jun '16	6	3	0	904	907	13,411	201	1,034	14,445	7%	
2016/17	Jul '16	7	0	0	904	904	14,300	201	1,235	15,535	8%	
	Aug '16	8	0	0	904	904	15,184	261	1,496	16,680	9%	
	Sep '16	9	1	0	904	905	16,071	52	1,548	17,619	9%	
	Oct '16	10	47	0	904	951	16,988	0	1,548	18,536	8%	
	Nov '16	11	55	0	904	959	17,915	0	1,548	19,463	8%	
	Dec '16	12	217	0	904	1,121	18,946	0	1,548	20,494	8%	
	Jan '17	13	167	0	904	1,071	19,934	0	1,548	21,482	7%	
	Feb '17	14	70	0	904	974	20,761	0	1,548	22,309	7%	
	Mar '17	15	20	0	904	924	21,663	0	1,548	23,211	7%	
	Apr '17	16	3	0	904	907	22,482	0	1,548	24,030	6%	
	May '17	17	24	0	904	928	23,392	0	1,548	24,940	6%	
	Jun '17	18	3	99	904	1,006	24,398	0	1,548	25,946	6%	
2017/18	Jul '17	19	7	45	904	956	25,353	0	1,548	26,901	6%	
	Aug '17	20	70	0	904	974	26,321	0	1,548	27,869	6%	
	Sep '17	21	6	20	904	930	27,218	0	1,548	28,766	5%	
	Oct '17	22	6	66	904	976	28,180	0	1,548	29,728	5%	
	Nov '17	23	6	0	904	910	28,982	0	1,548	30,530	5%	
	Dec '17	24	6	0	904	910	29,815	0	1,548	31,363	5%	
	Jan '18	25	136	0	904	1,040	30,599	0	1,548	32,147	5%	
	Feb '18	26	49	0	904	952	31,405	0	1,548	32,953	5%	
	Mar '18	27	81		904	985	32,363	0	1,548	33,911	5%	
	Apr '18	28	58		904	962	33,312	0	1,548	34,860	4%	
	May '18	29	24		904	928	34,203	170	1,718	35,921	5%	
	Jun '18	30	7		904	911	35,100	180	1,898	36,998	5%	

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
2018/19	Jul '18	31	17		904	921	36,002	170	2,068	38,070	5%	PLANNED
	Aug '18	32	13		904	917	36,915	170	2,238	39,153	6%	
	Sep '18	33	25		904	929	37,836	170	2,408	40,244	6%	
	Oct '18	34	46		904	949	38,772	150	2,558	41,330	6%	
	Nov '18	35	61		904	964	39,663	130	2,688	42,351	6%	
	Dec '18	36	147		904	1,050	40,507	50	2,738	43,245	6%	
	Jan '19	37	86		904	990	41,471	100	2,838	44,309	6%	
	Feb '19	38	117		904	1,021	42,267	80	2,918	45,185	6%	
	Mar '19	39	81		904	985	43,201	110	3,028	46,229	7%	
	Apr '19	40	58		904	962	44,158	140	3,168	47,326	7%	
	May '19	41	24		904	928	45,079	170	3,338	48,417	7%	
	Jun '19	42	7		904	911	45,970	180	3,518	49,488	7%	
2019/20	Jul '19	43	17		904	921	46,870	170	3,688	50,558	7%	
	Aug '19	44	13		904	917	47,770	170	3,858	51,628	7%	
	Sep '19	45	25		904	929	48,693	170	4,028	52,721	8%	
	Oct '19	46	46		904	949	49,627	150	4,178	53,805	8%	
	Nov '19	47	61		904	964	50,553	130	4,308	54,861	8%	
	Dec '19	48	147		904	1,050	51,430	50	4,358	55,788	8%	
	Jan '20	49	86		904	990	52,347	100	4,458	56,805	8%	
	Feb '20	50	117		904	1,021	53,127	80	4,538	57,665	8%	
	Mar '20	51	81		904	985	54,056	110	4,648	58,704	8%	
	Apr '20	52	58		904	962	54,896	140	4,788	59,684	8%	
	May '20	53	24		904	928	55,818	170	4,958	60,776	8%	
	Jun '20	54	7		904	911	56,723	180	5,138	61,861	8%	
2020/21	Jul '20	55	17		904	921	57,641	170	5,308	62,949	8%	
	Aug '20	56	13		904	917	58,549	170	5,478	64,027	9%	
	Sep '20	57	25		904	929	59,476	170	5,648	65,124	9%	
	Oct '20	58	46		904	949	60,380	150	5,798	66,178	9%	
	Nov '20	59	61		904	964	61,250	130	5,928	67,178	9%	
	Dec '20	60	147		904	1,050	61,987	50	5,978	67,965	9%	
	Jan '21	61	86		904	990	62,925	100	6,078	69,003	9%	
	Feb '21	62	117		904	1,021	63,750	80	6,158	69,908	9%	
	Mar '21	63	81		904	985	64,597	110	6,268	70,865	9%	
	Apr '21	64	58		904	962	65,556	140	6,408	71,964	9%	
	May '21	65	24		904	928	66,470	170	6,578	73,048	9%	
	Jun '21	66	7		904	911	67,372	180	6,758	74,130	9%	
2021/22	Jul '21	67	17		904	921	68,212	170	6,928	75,140	9%	
	Aug '21	68	13		904	917	69,125	170	7,098	76,223	9%	
	Sep '21	69	25		904	929	70,048	170	7,268	77,316	9%	
	Oct '21	70	46		904	949	70,923	150	7,418	78,341	9%	
	Nov '21	71	61		904	964	71,768	130	7,548	79,316	10%	
	Dec '21	72	147		904	1,050	72,762	50	7,598	80,360	9%	
	Jan '22	73	86		904	990	73,665	100	7,633	81,298	9%	
	Feb '22	74	117		904	1,021	74,640	80	7,713	82,353	9%	
	Mar '22	75	81		904	985	75,441	110	7,823	83,264	9%	
	Apr '22	76	58		904	962	76,269	140	7,963	84,232	9%	
	May '22	77	24		904	928	77,190	170	8,133	85,323	10%	
	Jun '22	78	7		904	911	78,100	180	8,313	86,413	10%	
2022/23	Jul '22	79	17		904	921	79,020	170	8,483	87,503	10%	
	Aug '22	80	13		904	917	79,927	170	8,653	88,580	10%	
	Sep '22	81	25		904	929	80,840	170	8,823	89,663	10%	
	Oct '22	82	46		904	949	81,656	150	8,973	90,629	10%	
	Nov '22	83	61		904	964	82,599	130	9,103	91,702	10%	
	Dec '22	84	147		904	1,050	83,482	50	9,153	92,635	10%	
	Jan '23	85	86		904	990	84,424	100	9,253	93,677	10%	
	Feb '23	86	117		904	1,021	85,386	80	9,333	94,719	10%	
	Mar '23	87	81		904	985	86,310	110	9,443	95,753	10%	
	Apr '23	88	58		904	962	87,268	140	9,583	96,851	10%	
	May '23	89	24		904	928	88,189	170	9,753	97,942	10%	
	Jun '23	90	7		904	911	89,096	180	9,933	99,029	10%	
2023/24	Jul '23	91	17		904	921	90,011	170	10,103	100,114	10%	
	Aug '23	92	13		904	917	90,925	170	10,273	101,198	10%	
	Sep '23	93	25		904	929	91,851	170	10,443	102,294	10%	
	Oct '23	94	46		904	949	92,783	150	10,593	103,376	10%	
	Nov '23	95	61		904	964	93,695	130	10,723	104,418	10%	
	Dec '23	96	147		904	1,050	94,680	50	10,773	105,453	10%	
	Jan '24	97	86		904	990	95,568	100	10,873	106,441	10%	
	Feb '24	98	117		904	1,021	96,413	80	10,953	107,366	10%	
	Mar '24	99	81		904	985	97,225	110	11,063	108,288	10%	
	Apr '24	100	58		904	962	98,071	140	11,203	109,274	10%	
	May '24	101	24		904	928	98,998	170	11,373	110,371	10%	
	Jun '24	102	7		904	911	99,907	180	11,553	111,460	10%	

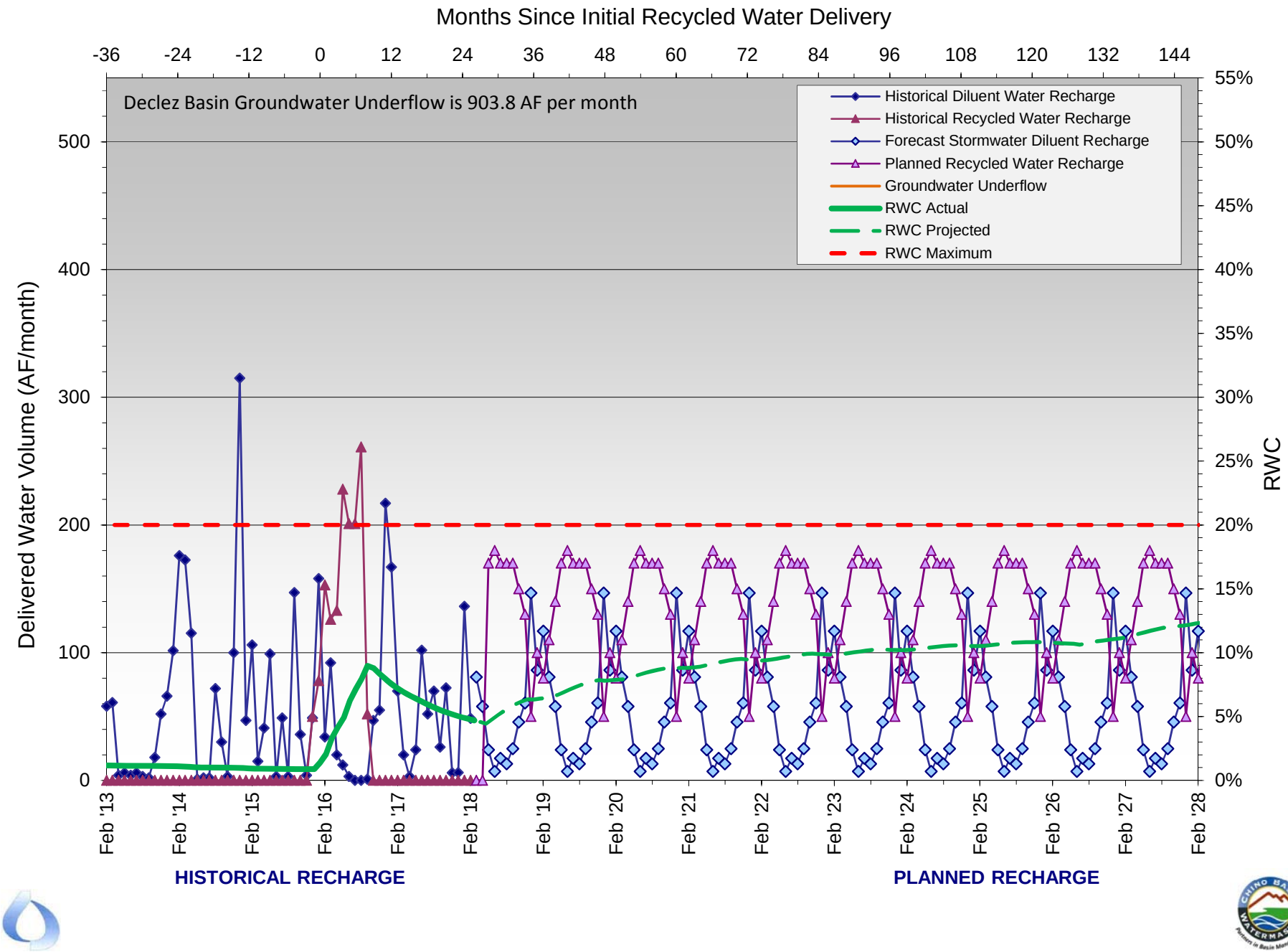
RWC Management Plan for Declez Basin

(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
2024/25	Jul '24	103	17		904	921	100,826	170	11,723	112,549	10%	PLANNED
	Aug '24	104	13		904	917	101,671	170	11,893	113,564	10%	
	Sep '24	105	25		904	929	102,569	170	12,063	114,632	11%	
	Oct '24	106	46		904	949	103,516	150	12,213	115,729	11%	
	Nov '24	107	61		904	964	104,380	130	12,343	116,723	11%	
	Dec '24	108	147		904	1,050	105,115	50	12,393	117,508	11%	
	Jan '25	109	86		904	990	106,059	100	12,493	118,552	11%	
	Feb '25	110	117		904	1,021	106,973	80	12,573	119,546	11%	
	Mar '25	111	81		904	985	107,943	110	12,683	120,626	11%	
	Apr '25	112	58		904	962	108,864	140	12,823	121,687	11%	
	May '25	113	24		904	928	109,692	170	12,993	122,685	11%	
	Jun '25	114	7		904	911	110,600	180	13,173	123,773	11%	
2025/26	Jul '25	115	17		904	921	111,472	170	13,343	124,815	11%	
	Aug '25	116	13		904	917	112,386	170	13,513	125,899	11%	
	Sep '25	117	25		904	929	113,167	170	13,683	126,850	11%	
	Oct '25	118	46		904	949	114,081	150	13,833	127,914	11%	
	Nov '25	119	61		904	964	115,041	130	13,963	129,004	11%	
	Dec '25	120	147		904	1,050	115,139	50	13,963	129,102	11%	
	Jan '26	121	86		904	990	115,067	100	13,985	129,052	11%	
	Feb '26	122	117		904	1,021	115,150	80	13,912	129,062	11%	
	Mar '26	123	81		904	985	115,139	110	13,896	129,035	11%	
	Apr '26	124	58		904	962	115,177	140	13,903	129,080	11%	
	May '26	125	24		904	928	115,189	170	13,845	129,034	11%	
	Jun '26	126	7		904	911	115,193	180	13,824	129,017	11%	
2026/27	Jul '26	127	17		904	921	115,210	170	13,793	129,003	11%	
	Aug '26	128	13		904	917	115,223	170	13,702	128,925	11%	
	Sep '26	129	25		904	929	115,247	170	13,820	129,067	11%	
	Oct '26	130	46		904	949	115,246	150	13,970	129,216	11%	
	Nov '26	131	61		904	964	115,251	130	14,100	129,351	11%	
	Dec '26	132	147		904	1,050	115,181	50	14,150	129,331	11%	
	Jan '27	133	86		904	990	115,100	100	14,250	129,350	11%	
	Feb '27	134	117		904	1,021	115,147	80	14,330	129,477	11%	
	Mar '27	135	81		904	985	115,208	110	14,440	129,648	11%	
	Apr '27	136	58		904	962	115,263	140	14,580	129,843	11%	
	May '27	137	24		904	928	115,263	170	14,750	130,013	11%	
	Jun '27	138	7		904	911	115,168	180	14,930	130,098	11%	
2027/28	Jul '27	139	17		904	921	115,133	170	15,100	130,233	12%	
	Aug '27	140	13		904	917	115,076	170	15,270	130,346	12%	
	Sep '27	141	25		904	929	115,075	170	15,440	130,515	12%	
	Oct '27	142	46		904	949	115,048	150	15,590	130,638	12%	
	Nov '27	143	61		904	964	115,103	130	15,720	130,823	12%	
	Dec '27	144	147		904	1,050	115,243	50	15,770	131,013	12%	
	Jan '28	145	86		904	990	115,193	100	15,870	131,063	12%	
	Feb '28	146	117		904	1,021	115,262	80	15,950	131,212	12%	
	Mar '28	147	81		904	985	115,262	110	16,060	131,322	12%	
	Apr '28	148	58		904	962	115,262	140	16,200	131,462	12%	
	May '28	149	24		904	928	115,262	170	16,200	131,462	12%	
	Jun '28	150	7		904	911	115,262	180	16,200	131,462	12%	

RWC Management Plan - Declez Basin



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
2012/13	Jul '12	154	7	0	286	293	26,571	0	3,367	29,938	11%	
	Aug '12	155	7	0	286	293	26,728	0	3,367	30,095	11%	
	Sep '12	156	5	0	286	291	26,922	0	3,367	30,290	11%	
	Oct '12	157	5	0	286	291	27,034	0	3,367	30,401	11%	
	Nov '12	158	9	0	286	295	26,999	80	3,447	30,446	11%	
	Dec '12	159	335	0	286	621	27,290	67	3,514	30,805	11%	
	Jan '13	160	72	0	286	358	27,472	145	3,659	31,131	12%	
	Feb '13	161	37	0	286	323	27,465	225	3,884	31,349	12%	
	Mar '13	162	63	0	286	349	27,484	314	4,198	31,683	13%	
	Apr '13	163	1	0	286	287	27,441	79	4,277	31,719	13%	
	May '13	164	23	0	286	309	27,420	259	4,506	31,927	14%	
	Jun '13	165	4	0	286	290	27,599	209	4,561	32,160	14%	
2013/14	Jul '13	166	6	0	286	292	27,786	157	4,718	32,504	15%	
	Aug '13	167	4	0	286	290	28,044	334	5,052	33,096	15%	
	Sep '13	168	6	0	286	292	28,325	457	5,509	33,834	16%	
	Oct '13	169	0	0	286	286	28,600	358	5,867	34,467	17%	
	Nov '13	170	21	0	286	307	28,803	421	6,288	35,091	18%	
	Dec '13	171	24	0	286	310	28,920	413	6,701	35,621	19%	
	Jan '14	172	8	0	286	294	29,181	211	6,912	36,093	19%	
	Feb '14	173	294	0	286	580	29,431	194	7,106	36,537	19%	
	Mar '14	174	63	0	286	349	29,606	108	7,214	36,820	20%	
	Apr '14	175	83	0	286	369	29,907	218	7,432	37,339	20%	
	May '14	176	9	0	286	295	30,185	241	7,668	37,853	20%	
	Jun '14	177	15	0	286	301	30,473	186	7,810	38,284	20%	
2014/15	Jul '14	178	16	0	286	302	30,761	101	7,865	38,627	20%	
	Aug '14	179	16	0	286	302	30,969	8	7,825	38,795	20%	
	Sep '14	180	15	0	286	301	31,092	121	7,905	38,997	20%	
	Oct '14	181	16	0	286	302	31,064	286	8,168	39,232	21%	
	Nov '14	182	170	0	286	456	31,190	70	8,238	39,429	21%	
	Dec '14	183	392	0	286	678	31,539	5	8,243	39,782	21%	
	Jan '15	184	44	0	286	330	31,539	183	8,426	39,965	21%	
	Feb '15	185	72	0	286	358	31,567	222	8,648	40,215	22%	
	Mar '15	186	15	0	286	301	31,630	157	8,805	40,435	22%	
	Apr '15	187	100	0	286	386	31,841	165	8,970	40,811	22%	
	May '15	188	231	0	286	517	32,218	160	9,130	41,349	22%	
	Jun '15	189	0	0	286	286	32,502	273	9,403	41,905	22%	
2015/16	Jul '15	190	285	0	286	571	33,073	102	9,505	42,578	22%	
	Aug '15	191	3	0	286	289	33,362	1	9,506	42,868	22%	
	Sep '15	192	215	0	286	501	33,863	31	9,537	43,401	22%	
	Oct '15	193	75	0	286	361	34,026	76	9,581	43,607	22%	
	Nov '15	194	41	0	286	327	34,338	21	9,602	43,941	22%	
	Dec '15	195	92	0	286	378	34,609	128	9,695	44,304	22%	
	Jan '16	196	337	0	286	623	35,042	61	9,736	44,778	22%	
	Feb '16	197	59	0	286	345	35,120	89	9,750	44,870	22%	
	Mar '16	198	177	0	286	463	35,245	47	9,797	45,042	22%	
	Apr '16	199	24	0	286	310	35,193	127	9,924	45,117	22%	
	May '16	200	197	0	286	483	35,641	119	10,043	45,684	22%	
	Jun '16	201	1	0	286	287	35,902	210	10,227	46,129	22%	
2016/17	Jul '16	202	2	0	286	288	36,157	113	10,299	46,456	22%	
	Aug '16	203	0	0	286	286	36,433	89	10,382	46,815	22%	
	Sep '16	204	3	0	286	289	36,682	232	10,531	47,213	22%	
	Oct '16	205	47	0	286	333	36,961	233	10,733	47,694	23%	
	Nov '16	206	86	0	286	372	37,270	112	10,795	48,065	22%	
	Dec '16	207	523	0	286	809	37,994	0	10,753	48,747	22%	
	Jan '17	208	317	0	286	603	38,502	0	10,696	49,197	22%	
	Feb '17	209	338	0	286	624	38,976	0	10,673	49,649	21%	
	Mar '17	210	16	0	286	302	39,261	123	10,751	50,012	21%	
	Apr '17	211	9	0	286	295	39,498	190	10,900	50,398	22%	
	May '17	212	37	0	286	323	39,807	250	11,110	50,917	22%	
	Jun '17	213	0	0	286	286	40,075	149	11,252	51,327	22%	
2017/18	Jul '17	214	37	0	286	323	40,372	34	11,286	51,658	22%	
	Aug '17	215	126	0	286	412	40,755	27	11,313	52,068	22%	
	Sep '17	216	0	0	286	286	41,007	216	11,529	52,536	22%	
	Oct '17	217	48	9	286	343	41,316	87	11,616	52,932	22%	
	Nov '17	218	0	0	286	286	41,436	36	11,566	53,002	22%	
	Dec '17	219	0	0	286	286	41,465	218	11,731	53,197	22%	
	Jan '18	220	255	0	286	541	41,214	30	11,762	52,975	22%	
	Feb '18	221	91	0	286	377	41,357	181	11,943	53,300	22%	
	Mar '18	222	121		286	407	41,744	100	11,927	53,671	22%	
	Apr '18	223	121		286	407	42,122	100	11,911	54,032	22%	
	May '18	224	66		286	352	42,444	150	11,974	54,417	22%	
	Jun '18	225	11		286	297	42,723	210	12,081	54,804	22%	

HISTORICAL

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
2018/19	Jul '18	226	44		286	330	43,036	170	12,184	55,220	22%	
	Aug '18	227	34		286	320	43,348	180	12,364	55,712	22%	
	Sep '18	228	57		286	343	43,686	160	12,524	56,210	22%	
	Oct '18	229	91		286	377	44,047	130	12,519	56,565	22%	
	Nov '18	230	138		286	424	44,357	80	12,511	56,868	22%	
	Dec '18	231	215		286	501	44,571	0	12,511	57,082	22%	
	Jan '19	232	208		286	494	45,027	10	12,482	57,509	22%	
	Feb '19	233	229		286	515	45,133	0	12,473	57,606	22%	
	Mar '19	234	121		286	407	45,492	100	12,573	58,065	22%	
	Apr '19	235	121		286	407	45,765	100	12,658	58,422	22%	
	May '19	236	66		286	352	46,049	150	12,797	58,846	22%	
	Jun '19	237	11		286	297	46,322	210	13,007	59,329	22%	
2019/20	Jul '19	238	44		286	330	46,652	170	13,177	59,829	22%	
	Aug '19	239	34		286	320	46,951	180	13,357	60,308	22%	
	Sep '19	240	57		286	343	47,093	160	13,493	60,585	22%	
	Oct '19	241	91		286	377	46,997	130	13,521	60,517	22%	
	Nov '19	242	138		286	424	46,853	80	13,481	60,333	22%	
	Dec '19	243	215		286	501	46,826	0	13,481	60,306	22%	
	Jan '20	244	208		286	494	46,715	10	13,491	60,205	22%	
	Feb '20	245	229		286	515	46,723	0	13,491	60,213	22%	
	Mar '20	246	121		286	407	46,740	100	13,591	60,330	23%	
	Apr '20	247	121		286	407	46,467	100	13,691	60,157	23%	
	May '20	248	66		286	352	46,435	150	13,841	60,275	23%	
	Jun '20	249	11		286	297	46,446	210	14,051	60,496	23%	
2020/21	Jul '20	250	44		286	330	46,490	170	14,221	60,710	23%	
	Aug '20	251	34		286	320	46,524	180	14,401	60,924	24%	
	Sep '20	252	57		286	343	46,581	160	14,561	61,141	24%	
	Oct '20	253	91		286	377	46,643	130	14,577	61,219	24%	
	Nov '20	254	138		286	424	46,654	80	14,537	61,190	24%	
	Dec '20	255	215		286	501	46,297	0	14,525	60,821	24%	
	Jan '21	256	208		286	494	46,401	10	14,535	60,935	24%	
	Feb '21	257	229		286	515	46,307	0	14,492	60,798	24%	
	Mar '21	258	121		286	407	46,192	100	14,592	60,783	24%	
	Apr '21	259	121		286	407	46,310	100	14,585	60,894	24%	
	May '21	260	66		286	352	46,363	150	14,580	60,942	24%	
	Jun '21	261	11		286	297	46,283	210	14,584	60,866	24%	
2021/22	Jul '21	262	44		286	330	46,024	170	14,578	60,601	24%	PLANNED
	Aug '21	263	34		286	320	45,767	180	14,617	60,384	24%	
	Sep '21	264	57		286	343	45,480	160	14,771	60,250	25%	
	Oct '21	265	91		286	377	45,356	130	14,901	60,256	25%	
	Nov '21	266	138		286	424	45,283	80	14,981	60,263	25%	
	Dec '21	267	215		286	501	45,462	0	14,981	60,442	25%	
	Jan '22	268	208		286	494	45,581	10	14,927	60,507	25%	
	Feb '22	269	229		286	515	45,715	0	14,921	60,635	25%	
	Mar '22	270	121		286	407	45,589	100	15,021	60,609	25%	
	Apr '22	271	121		286	407	45,575	100	15,121	60,695	25%	
	May '22	272	66		286	352	45,638	150	15,271	60,908	25%	
	Jun '22	273	11		286	297	45,637	210	15,481	61,117	25%	
2022/23	Jul '22	274	44		286	330	45,674	170	15,651	61,324	26%	
	Aug '22	275	34		286	320	45,701	180	15,831	61,531	26%	
	Sep '22	276	57		286	343	45,753	160	15,991	61,743	26%	
	Oct '22	277	91		286	377	45,839	130	16,121	61,959	26%	
	Nov '22	278	138		286	424	45,968	80	16,121	62,088	26%	
	Dec '22	279	215		286	501	45,848	0	16,054	61,901	26%	
	Jan '23	280	208		286	494	45,984	10	15,919	61,902	26%	
	Feb '23	281	229		286	515	46,176	0	15,694	61,869	25%	
	Mar '23	282	121		286	407	46,234	100	15,480	61,713	25%	
	Apr '23	283	121		286	407	46,354	100	15,501	61,854	25%	
	May '23	284	66		286	352	46,397	150	15,392	61,788	25%	
	Jun '23	285	11		286	297	46,404	210	15,393	61,796	25%	
2023/24	Jul '23	286	44		286	330	46,442	170	15,406	61,847	25%	
	Aug '23	287	34		286	320	46,472	180	15,252	61,723	25%	
	Sep '23	288	57		286	343	46,523	160	14,955	61,477	24%	
	Oct '23	289	91		286	377	46,614	130	14,727	61,340	24%	
	Nov '23	290	138		286	424	46,731	80	14,386	61,116	24%	
	Dec '23	291	215		286	501	46,922	0	13,973	60,894	23%	
	Jan '24	292	208		286	494	47,122	10	13,772	60,893	23%	
	Feb '24	293	229		286	515	47,057	0	13,578	60,634	22%	
	Mar '24	294	121		286	407	47,115	100	13,570	60,684	22%	
	Apr '24	295	121		286	407	47,153	100	13,452	60,604	22%	
	May '24	296	66		286	352	47,210	150	13,361	60,570	22%	
	Jun '24	297	11		286	297	47,206	210	13,385	60,590	22%	

RWC Management Plan for Ely Basin

(120-month averaging period)

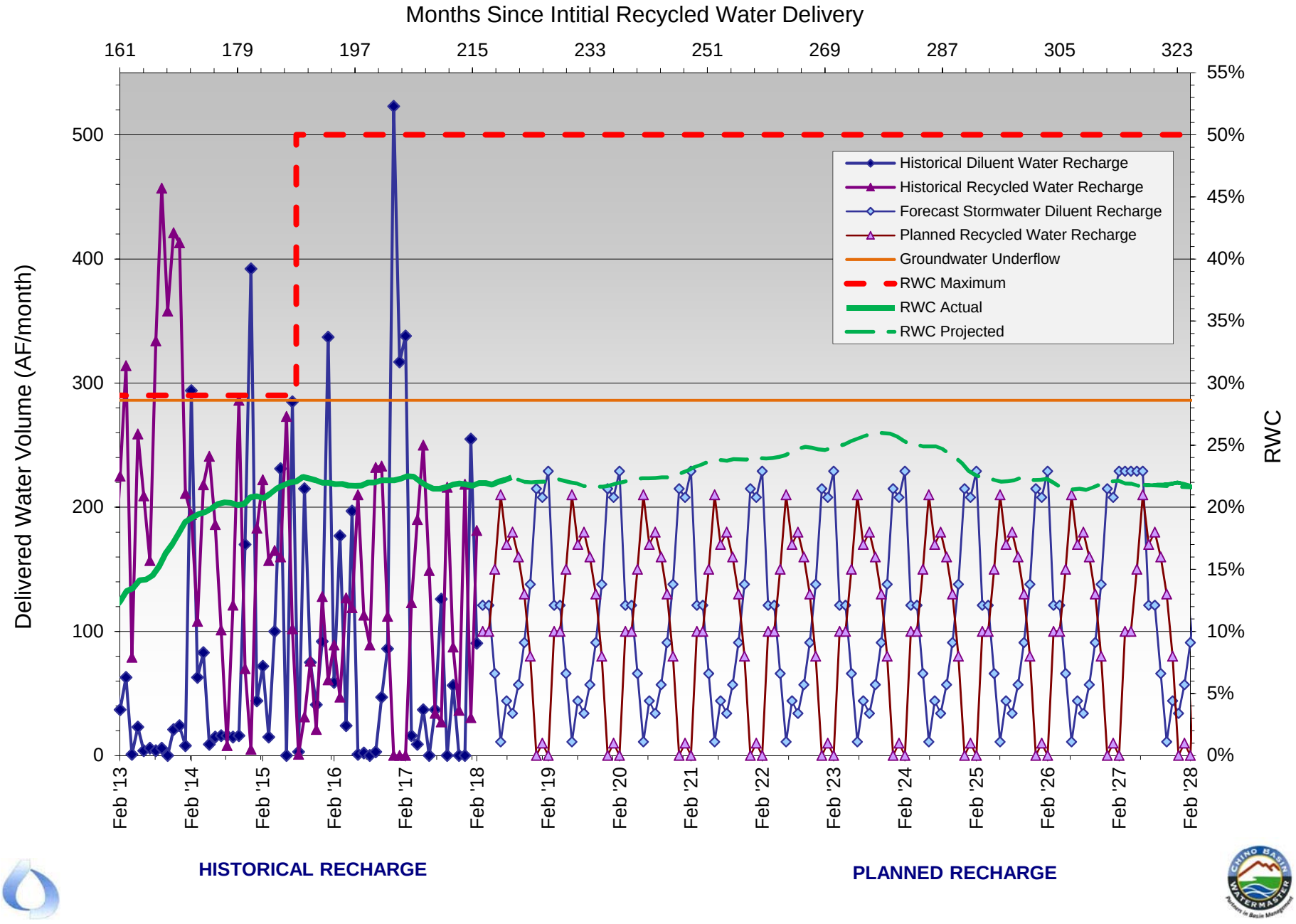
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

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
2024/25	Jul '24	298	44		286	330	47,234	170	13,454	60,687	22%	PLANNED
	Aug '24	299	34		286	320	47,252	180	13,626	60,877	22%	
	Sep '24	300	57		286	343	47,294	160	13,665	60,958	22%	
	Oct '24	301	91		286	377	47,369	130	13,509	60,877	22%	
	Nov '24	302	138		286	424	47,337	80	13,519	60,855	22%	
	Dec '24	303	215		286	501	47,160	0	13,514	60,673	22%	
	Jan '25	304	208		286	494	47,324	10	13,341	60,664	22%	
	Feb '25	305	229		286	515	47,481	0	13,119	60,599	22%	
	Mar '25	306	121		286	407	47,587	100	13,062	60,648	22%	
	Apr '25	307	121		286	407	47,608	100	12,997	60,604	21%	
	May '25	308	66		286	352	47,443	150	12,987	60,429	21%	
	Jun '25	309	11		286	297	47,454	210	12,924	60,377	21%	
2025/26	Jul '25	310	44		286	330	47,213	170	12,992	60,204	22%	
	Aug '25	311	34		286	320	47,244	180	13,171	60,414	22%	
	Sep '25	312	57		286	343	47,086	160	13,300	60,385	22%	
	Oct '25	313	91		286	377	47,102	130	13,354	60,455	22%	
	Nov '25	314	138		286	424	47,199	80	13,413	60,611	22%	
	Dec '25	315	215		286	501	47,322	0	13,285	60,606	22%	
	Jan '26	316	208		286	494	47,193	10	13,234	60,426	22%	
	Feb '26	317	229		286	515	47,363	0	13,145	60,507	22%	
	Mar '26	318	121		286	407	47,307	100	13,198	60,504	22%	
	Apr '26	319	121		286	407	47,404	100	13,171	60,574	22%	
	May '26	320	66		286	352	47,273	150	13,202	60,474	22%	
	Jun '26	321	11		286	297	47,283	210	13,202	60,484	22%	
2026/27	Jul '26	322	44		286	330	47,325	170	13,259	60,583	22%	
	Aug '26	323	34		286	320	47,359	180	13,350	60,708	22%	
	Sep '26	324	57		286	343	47,413	160	13,278	60,690	22%	
	Oct '26	325	91		286	377	47,457	130	13,175	60,631	22%	
	Nov '26	326	138		286	424	47,509	80	13,143	60,651	22%	
	Dec '26	327	215		286	501	47,201	0	13,143	60,343	22%	
	Jan '27	328	208		286	494	47,092	10	13,153	60,244	22%	
	Feb '27	329	229		286	515	46,983	0	13,153	60,135	22%	
	Mar '27	330	229		286	515	47,196	100	13,130	60,325	22%	
	Apr '27	331	229		286	515	47,416	100	13,040	60,455	22%	
	May '27	332	229		286	515	47,608	150	12,940	60,547	21%	
	Jun '27	333	229		286	515	47,837	210	13,001	60,837	21%	
2027/28	Jul '27	318	121		286	407	47,307	170	13,198	60,504	22%	
	Aug '27	319	121		286	407	47,404	180	13,171	60,574	22%	
	Sep '27	320	66		286	352	47,273	160	13,202	60,474	22%	
	Oct '27	321	11		286	297	47,283	130	13,202	60,484	22%	
	Nov '27	322	44		286	330	47,325	80	13,259	60,583	22%	
	Dec '27	323	34		286	320	47,359	0	13,350	60,708	22%	
	Jan '28	324	57		286	343	47,413	10	13,278	60,690	22%	
	Feb '28	325	91		286	377	47,457	0	13,175	60,631	22%	
	Mar '28	326	138		286	424	47,509	100	13,143	60,651	22%	
	Apr '28	327	215		286	501	47,201	100	13,143	60,343	22%	
	May '28	328	208		286	494	47,092	150	13,153	60,244	22%	
	Jun '28	329	229		286	515	46,983	210	13,153	60,135	22%	

Notes:

DW = Diluent Water; Total DW is the sum of Stormwater & Local Runoff (SW), Imported Water from the State Water Project (MWD), and groundwater underflow.
RW = Recycled Water
RWC = 120-month running total of recycled water / 120-month running total of all diluent and recycled water.
While an RWC calculation is provided starting on the first month of RW recharge, 120 months of data may not be available until 10 years of recharge operations.
RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period

RWC Management Plan for Ely Basin



RWC Management Plan for Hickory Basin

(120-month averaging period)

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

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2012/13	Jul '12	82	22	0	267	289	15,498	57	4,249	19,747	22%	HISTORICAL
	Aug '12	83	50	0	267	317	15,815	44	4,293	20,108	21%	
	Sep '12	84	29	0	267	296	16,110	0	4,293	20,403	21%	
	Oct '12	85	51	0	267	318	16,428	0	4,293	20,721	21%	
	Nov '12	86	13	0	267	280	16,626	177	4,470	21,096	21%	
	Dec '12	87	6	0	267	273	16,777	144	4,614	21,391	22%	
	Jan '13	88	0	0	267	267	17,043	115	4,729	21,773	22%	
	Feb '13	89	8	0	267	275	17,172	3	4,732	21,904	22%	
	Mar '13	90	13	0	267	280	17,346	147	4,879	22,225	22%	
	Apr '13	91	0	0	267	267	17,523	71	4,950	22,474	22%	
	May '13	92	6	0	267	273	17,789	0	4,950	22,739	22%	
	Jun '13	93	1	0	267	268	18,057	116	5,066	23,123	22%	
2013/14	Jul '13	94	4	0	267	271	18,327	201	5,267	23,594	22%	
	Aug '13	95	0	0	267	267	18,594	11	5,278	23,872	22%	
	Sep '13	96	0	0	267	267	18,860	0	5,278	24,139	22%	
	Oct '13	97	1	0	267	268	19,128	1	5,279	24,407	22%	
	Nov '13	98	59	0	267	326	19,449	339	5,618	25,067	22%	
	Dec '13	99	8	0	267	275	19,688	108	5,726	25,415	23%	
	Jan '14	100	9	3	267	278	19,966	86	5,812	25,778	23%	
	Feb '14	101	19	1	267	287	20,124	67	5,879	26,003	23%	
	Mar '14	102	13	0	267	280	20,349	224	6,103	26,452	23%	
	Apr '14	103	23	10	267	299	20,648	379	6,482	27,130	24%	
	May '14	104	33	0	267	300	20,947	292	6,774	27,721	24%	
	Jun '14	105	2	0	267	269	21,216	212	6,986	28,202	25%	
2014/15	Jul '14	106	0	0	267	267	21,483	118	7,104	28,587	25%	
	Aug '14	107	0	0	267	267	21,749	82	7,186	28,935	25%	
	Sep '14	108	0	0	267	267	22,016	236	7,422	29,438	25%	
	Oct '14	109	0	0	267	267	22,165	226	7,648	29,813	26%	
	Nov '14	110	0	0	267	267	22,429	272	7,920	30,350	26%	
	Dec '14	111	185	0	267	452	22,842	46	7,966	30,808	26%	
	Jan '15	112	8	0	267	275	22,967	194	8,160	31,127	26%	
	Feb '15	113	47	0	267	314	23,153	180	8,340	31,493	26%	
	Mar '15	114	0	0	267	267	23,392	115	8,455	31,848	27%	
	Apr '15	115	0	0	267	267	23,655	229	8,684	32,339	27%	
	May '15	116	3	0	267	270	23,873	139	8,823	32,696	27%	
	Jun '15	117	0	0	267	267	23,920	197	9,020	32,941	27%	
2015/16	Jul '15	118	0	0	267	267	23,922	39	9,059	32,981	27%	
	Aug '15	119	0	0	267	267	23,701	56	9,115	32,816	28%	
	Sep '15	120	9	0	267	276	23,846	107	9,083	32,930	28%	
	Oct '15	121	14	0	267	281	24,105	73	9,064	33,169	27%	
	Nov '15	122	14	0	267	281	24,386	84	9,055	33,441	27%	
	Dec '15	123	64	0	267	331	24,709	53	9,077	33,785	27%	
	Jan '16	124	35	0	267	302	24,998	23	9,017	34,014	27%	
	Feb '16	125	5	0	267	272	25,235	27	8,965	34,199	26%	
	Mar '16	126	22	0	267	289	25,497	0	8,965	34,461	26%	
	Apr '16	127	21	0	267	288	25,741	43	9,008	34,748	26%	
	May '16	128	0	0	267	267	25,924	52	9,060	34,984	26%	
	Jun '16	129	0	0	267	267	26,147	18	9,078	35,224	26%	
2016/2017	Jul '16	130	0	0	267	267	26,284	0	8,895	35,179	25%	
	Aug '16	131	0	0	267	267	26,504	49	8,764	35,268	25%	
	Sep '16	132	0	0	267	267	26,681	29	8,793	35,474	25%	
	Oct '16	133	25	0	267	292	26,930	55	8,704	35,634	24%	
	Nov '16	134	9	0	267	276	27,147	3	8,672	35,819	24%	
	Dec '16	135	85	0	267	352	27,414	0	8,672	36,086	24%	
	Jan '17	136	19	0	267	286	27,683	0	8,672	36,355	24%	
	Feb '17	137	4	0	267	271	27,914	0	8,630	36,544	24%	
	Mar '17	138	0	0	267	267	28,146	0	8,630	36,776	23%	
	Apr '17	139	0	0	267	267	28,362	0	8,567	36,929	23%	
	May '17	140	0	0	267	267	28,571	0	8,567	37,138	23%	
	Jun '17	141	0	0	267	267	28,748	0	8,567	37,314	23%	
2017/2018	Jul '17	142	0	527	267	794	29,448	168	8,594	38,042	23%	
	Aug '17	143	0	420	267	687	30,042	20	8,536	38,578	22%	
	Sep '17	144	10	263	267	540	30,490	119	8,640	39,130	22%	
	Oct '17	145	10	153	267	430	30,847	171	8,788	39,635	22%	
	Nov '17	146	15	0	267	282	31,026	170	8,860	39,886	22%	
	Dec '17	147	8	68	267	343	31,267	106	8,965	40,232	22%	
	Jan '18	148	85	40	267	391	31,533	85	9,050	40,583	22%	
	Feb '18	149	16	0	267	283	31,718	134	9,145	40,863	22%	
	Mar '18	150	26		267	293	31,967	120	9,185	41,152	22%	
	Apr '18	151	24		267	291	32,193	130	9,308	41,501	22%	
	May '18	152	20		267	287	32,441	130	9,352	41,793	22%	
	Jun '18	153	13		267	280	32,697	140	9,492	42,189	22%	

RWC Management Plan for Hickory Basin

(120-month averaging period)

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

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2018/2019	Jul '18	154	23		267	290	32,968	130	9,622	42,590	23%	
	Aug '18	155	22		267	289	33,251	130	9,752	43,003	23%	
	Sep '18	156	26		267	293	33,540	120	9,872	43,412	23%	
	Oct '18	157	22		267	289	33,826	130	10,002	43,828	23%	
	Nov '18	158	24		267	291	34,114	130	10,132	44,246	23%	
	Dec '18	159	66		267	333	34,411	80	10,212	44,623	23%	
	Jan '19	160	45		267	312	34,723	110	10,322	45,045	23%	
	Feb '19	161	52		267	319	34,978	100	10,399	45,377	23%	
	Mar '19	162	26		267	293	35,240	120	10,496	45,736	23%	
	Apr '19	163	24		267	291	35,523	130	10,626	46,149	23%	
	May '19	164	20		267	287	35,791	130	10,756	46,547	23%	
	Jun '19	165	13		267	280	36,068	140	10,896	46,964	23%	
2019/2020	Jul '19	166	23		267	290	36,348	130	11,026	47,374	23%	
	Aug '19	167	22		267	289	36,633	130	11,156	47,789	23%	
	Sep '19	168	26		267	293	36,923	120	11,242	48,165	23%	
	Oct '19	169	22		267	289	36,914	130	11,183	48,097	23%	
	Nov '19	170	24		267	291	36,912	130	11,070	47,982	23%	
	Dec '19	171	66		267	333	36,820	80	11,057	47,877	23%	
	Jan '20	172	45		267	312	36,651	110	11,148	47,799	23%	
	Feb '20	173	52		267	319	36,503	100	11,248	47,751	24%	
	Mar '20	174	26		267	293	36,513	120	11,307	47,820	24%	
	Apr '20	175	24		267	291	36,491	130	11,381	47,872	24%	
	May '20	176	20		267	287	36,511	130	11,400	47,911	24%	
	Jun '20	177	13		267	280	36,524	140	11,490	48,014	24%	
2020/2021	Jul '20	178	23		267	290	36,547	130	11,599	48,146	24%	
	Aug '20	179	22		267	289	36,569	130	11,701	48,270	24%	
	Sep '20	180	26		267	293	36,583	120	11,536	48,119	24%	
	Oct '20	181	22		267	289	36,592	130	11,572	48,164	24%	
	Nov '20	182	24		267	291	36,580	130	11,651	48,231	24%	
	Dec '20	183	66		267	333	36,497	80	11,731	48,228	24%	
	Jan '21	184	45		267	312	36,530	110	11,791	48,321	24%	
	Feb '21	185	52		267	319	36,503	100	11,854	48,357	25%	
	Mar '21	186	26		267	293	36,459	120	11,974	48,433	25%	
	Apr '21	187	24		267	291	36,483	130	12,052	48,535	25%	
	May '21	188	20		267	287	36,501	130	12,098	48,599	25%	
	Jun '21	189	13		267	280	36,506	140	12,164	48,670	25%	PLANNED
2021/2022	Jul '21	190	23		267	290	36,529	130	12,280	48,809	25%	
	Aug '21	191	22		267	289	36,479	130	12,410	48,889	25%	
	Sep '21	192	26		267	293	36,025	120	12,510	48,535	26%	
	Oct '21	193	22		267	289	36,030	130	12,605	48,635	26%	
	Nov '21	194	24		267	291	36,043	130	12,533	48,576	26%	
	Dec '21	195	66		267	333	36,108	80	12,387	48,495	26%	
	Jan '22	196	45		267	312	36,104	110	12,481	48,585	26%	
	Feb '22	197	52		267	319	36,097	100	12,498	48,595	26%	
	Mar '22	198	26		267	293	36,070	120	12,539	48,609	26%	
	Apr '22	199	24		267	291	36,064	130	12,603	48,667	26%	
	May '22	200	20		267	287	36,084	130	12,693	48,777	26%	
	Jun '22	201	13		267	280	36,095	140	12,831	48,926	26%	
2022/2023	Jul '22	202	23		267	290	36,096	130	12,904	49,000	26%	
	Aug '22	203	22		267	289	36,068	130	12,990	49,058	26%	
	Sep '22	204	26		267	293	36,065	120	13,110	49,175	27%	
	Oct '22	205	22		267	289	36,036	130	13,240	49,276	27%	
	Nov '22	206	24		267	291	36,047	130	13,193	49,240	27%	
	Dec '22	207	66		267	333	36,107	80	13,129	49,236	27%	
	Jan '23	208	45		267	312	36,152	110	13,124	49,276	27%	
	Feb '23	209	52		267	319	36,196	100	13,221	49,417	27%	
	Mar '23	210	26		267	293	36,209	120	13,194	49,403	27%	
	Apr '23	211	24		267	291	36,233	130	13,253	49,486	27%	
	May '23	212	20		267	287	36,247	130	13,383	49,630	27%	
	Jun '23	213	13		267	280	36,259	140	13,407	49,666	27%	
2023/2024	Jul '23	214	23		267	290	36,278	130	13,336	49,614	27%	
	Aug '23	215	22		267	289	36,300	130	13,455	49,755	27%	
	Sep '23	216	26		267	293	36,326	120	13,575	49,901	27%	
	Oct '23	217	22		267	289	36,347	130	13,704	50,051	27%	
	Nov '23	218	24		267	291	36,312	130	13,495	49,807	27%	
	Dec '23	219	66		267	333	36,370	80	13,467	49,837	27%	
	Jan '24	220	45		267	312	36,404	110	13,491	49,895	27%	
	Feb '24	221	52		267	319	36,436	100	13,524	49,960	27%	
	Mar '24	222	26		267	293	36,449	120	13,420	49,869	27%	
	Apr '24	223	24		267	291	36,440	130	13,171	49,611	27%	
	May '24	224	20		267	287	36,427	130	13,009	49,436	26%	
	Jun '24	225	13		267	280	36,438	140	12,937	49,375	26%	

RWC Management Plan for Hickory Basin

(120-month averaging period)

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

Date		No. Mos. Since Initial RW Delivery	SW (AF)	MWD (AF)	Underflow (AF)	DW (AF)	DW 120-Month Total (AF)	RW (AF)	RW 120-Month Total (AF)	DW + RW 120-Month Total (AF)	RWC	Period
2024/2025	Jul '24	226	23		267	290	36,461	130	12,949	49,410	26%	PLANNED
	Aug '24	227	22		267	289	36,483	130	12,997	49,480	26%	
	Sep '24	228	26		267	293	36,509	120	12,881	49,390	26%	
	Oct '24	229	22		267	289	36,531	130	12,785	49,316	26%	
	Nov '24	230	24		267	291	36,555	130	12,643	49,198	26%	
	Dec '24	231	66		267	333	36,436	80	12,677	49,113	26%	
	Jan '25	232	45		267	312	36,473	110	12,593	49,066	26%	
	Feb '25	233	52		267	319	36,478	100	12,513	48,991	26%	
	Mar '25	234	26		267	293	36,504	120	12,518	49,022	26%	
	Apr '25	235	24		267	291	36,528	130	12,419	48,947	25%	
	May '25	236	20		267	287	36,545	130	12,410	48,955	25%	
	Jun '25	237	13		267	280	36,558	140	12,353	48,911	25%	
2025/26	Jul '25	238	23		267	290	36,581	130	12,444	49,025	25%	
	Aug '25	239	22		267	289	36,603	130	12,518	49,121	25%	
	Sep '25	240	26		267	293	36,620	120	12,531	49,151	25%	
	Oct '25	241	22		267	289	36,628	130	12,588	49,216	26%	
	Nov '25	242	24		267	291	36,638	130	12,634	49,272	26%	
	Dec '25	243	66		267	333	36,640	80	12,661	49,301	26%	
	Jan '26	244	45		267	312	36,650	110	12,748	49,398	26%	
	Feb '26	245	52		267	319	36,697	100	12,821	49,518	26%	
	Mar '26	246	52		267	319	36,727	120	12,941	49,668	26%	
	Apr '26	247	52		267	319	36,758	130	13,028	49,786	26%	
	May '26	248	52		267	319	36,810	130	13,106	49,916	26%	
	Jun '26	249	52		267	319	36,862	140	13,228	50,090	26%	
2026/27	Jul '26	250	23		267	290	36,885	130	13,358	50,243	27%	
	Aug '26	251	22		267	289	36,907	130	13,439	50,346	27%	
	Sep '26	252	26		267	293	36,933	120	13,530	50,463	27%	
	Oct '26	253	22		267	289	36,930	130	13,605	50,535	27%	
	Nov '26	254	24		267	291	36,945	130	13,732	50,677	27%	
	Dec '26	255	66		267	333	36,926	80	13,812	50,738	27%	
	Jan '27	256	45		267	312	36,952	110	13,922	50,874	27%	
	Feb '27	257	52		267	319	37,000	100	14,022	51,022	27%	
	Mar '27	258	52		267	319	37,052	120	14,142	51,194	28%	
	Apr '27	259	52		267	319	37,104	130	14,272	51,376	28%	
	May '27	260	52		267	319	37,156	130	14,402	51,558	28%	
	Jun '27	261	52		267	319	37,208	140	14,542	51,750	28%	
2027/28	Jul '27	262	23		267	290	36,704	130	14,504	51,208	28%	
	Aug '27	263	22		267	289	36,306	130	14,614	50,920	29%	
	Sep '27	264	26		267	293	36,059	120	14,615	50,674	29%	
	Oct '27	265	22		267	289	35,918	130	14,574	50,492	29%	
	Nov '27	266	24		267	291	35,927	130	14,534	50,461	29%	
	Dec '27	267	66		267	333	35,916	80	14,509	50,425	29%	
	Jan '28	268	45		267	312	35,837	110	14,534	50,370	29%	
	Feb '28	269	52		267	319	35,873	100	14,500	50,373	29%	
	Mar '28	270	52		267	319	35,899	120	14,500	50,399	29%	
	Apr '28	271	52		267	319	35,927	130	14,500	50,427	29%	
	May '28	272	52		267	319	35,959	130	14,500	50,459	29%	
	Jun '28	273	52		267	319	35,998	140	14,500	50,498	29%	

Notes:

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

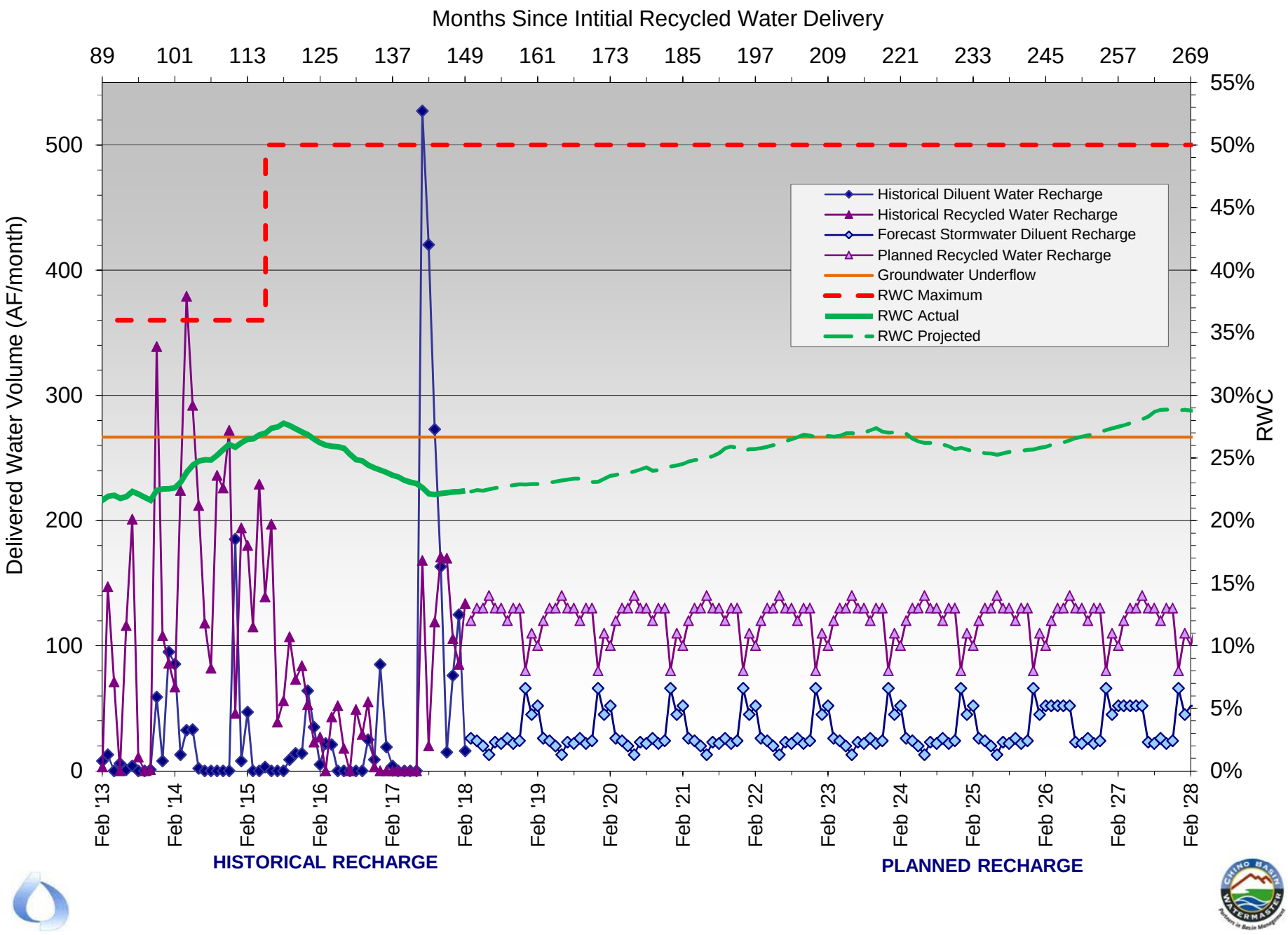
RW = Recycled Water

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

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

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

RWC Management Plan for Hickory Basin



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
2012/13	Jul '12	37	50	0	904	954	40,925	12	5,757	46,682	12%	
	Aug '12	38	12	0	904	916	41,841	0	5,757	47,598	12%	
	Sep '12	39	4	0	904	908	42,749	0	5,757	48,506	12%	
	Oct '12	40	18	0	904	922	43,671	0	5,757	49,428	12%	
	Nov '12	41	101	0	904	1,005	44,675	154	5,911	50,586	12%	
	Dec '12	42	361	0	904	1,265	45,940	220	6,131	52,071	12%	
	Jan '13	43	147	0	904	1,051	46,991	353	6,484	53,475	12%	
	Feb '13	44	113	0	904	1,017	48,008	297	6,781	54,789	12%	
	Mar '13	45	78	0	904	982	48,989	275	7,056	56,045	13%	
	Apr '13	46	40	0	904	944	49,933	386	7,442	57,375	13%	
	May '13	47	54	0	904	958	50,891	262	7,704	58,595	13%	
	Jun '13	48	43	0	904	947	51,838	239	7,943	59,781	13%	
2013/14	Jul '13	49	72	0	904	976	52,813	74	8,017	60,830	13%	HISTORICAL
	Aug '13	50	68	0	904	972	53,785	216	8,233	62,018	13%	
	Sep '13	51	58	0	904	962	54,747	353	8,586	63,333	14%	
	Oct '13	52	53	0	904	957	55,704	164	8,750	64,454	14%	
	Nov '13	53	60	0	904	964	56,668	4	8,754	65,422	13%	
	Dec '13	54	72	0	904	976	57,643	251	9,005	66,648	14%	
	Jan '14	55	43	86	904	1,033	58,676	72	9,077	67,753	13%	
	Feb '14	56	131	66	904	1,101	59,777	0	9,077	68,854	13%	
	Mar '14	57	103	160	904	1,167	60,944	0	9,077	70,021	13%	
	Apr '14	58	48	38	904	989	61,933	49	9,126	71,059	13%	
	May '14	59	3	0	904	907	62,840	0	9,126	71,966	13%	
	Jun '14	60	6	0	904	910	63,750	172	9,298	73,048	13%	
2014/15	Jul '14	61	9	0	904	913	64,663	184	9,482	74,145	13%	
	Aug '14	62	23	0	904	927	65,589	192	9,674	75,263	13%	
	Sep '14	63	40	0	904	944	66,533	243	9,917	76,450	13%	
	Oct '14	64	25	0	904	929	67,462	335	10,252	77,714	13%	
	Nov '14	65	112	0	904	1,016	68,478	250	10,502	78,980	13%	
	Dec '14	66	419	0	904	1,323	69,800	6	10,508	80,308	13%	
	Jan '15	67	132	0	904	1,036	70,836	29	10,537	81,373	13%	
	Feb '15	68	95	0	904	999	71,835	243	10,780	82,615	13%	
	Mar '15	69	69	0	904	973	72,808	325	11,105	83,913	13%	
	Apr '15	70	41	0	904	945	73,752	282	11,387	85,139	13%	
	May '15	71	121	0	904	1,025	74,777	348	11,735	86,512	14%	
	Jun '15	72	12	0	904	916	75,693	531	12,266	87,959	14%	
2015/16	Jul '15	73	134	0	904	1,038	76,700	268	12,534	89,234	14%	
	Aug '15	74	31	0	904	935	77,603	141	12,675	90,278	14%	
	Sep '15	75	123	0	904	1,027	78,570	219	12,894	91,464	14%	
	Oct '15	76	86	0	904	990	79,482	363	13,257	92,739	14%	
	Nov '15	77	54	0	904	958	80,380	228	13,485	93,865	14%	
	Dec '15	78	188	0	904	1,092	81,411	274	13,759	95,170	14%	
	Jan '16	79	239	0	904	1,143	82,522	390	14,149	96,671	15%	
	Feb '16	80	54	0	904	958	83,415	358	14,507	97,922	15%	
	Mar '16	81	208	0	904	1,112	84,366	174	14,681	99,047	15%	
	Apr '16	82	50	0	904	954	85,193	247	14,928	100,121	15%	
	May '16	83	48	0	904	952	86,108	375	15,303	101,411	15%	
	Jun '16	84	11	0	904	915	86,997	245	15,548	102,545	15%	
2016/17	Jul '16	85	18	0	904	922	87,904	99	15,647	103,551	15%	
	Aug '16	86	32	0	904	936	88,804	289	15,936	104,740	15%	
	Sep '16	87	9	0	904	913	89,682	551	16,487	106,169	16%	
	Oct '16	88	105	0	904	1,009	90,657	392	16,879	107,536	16%	
	Nov '16	89	65	0	904	969	91,590	688	17,567	109,157	16%	
	Dec '16	90	336	0	904	1,240	92,804	548	18,115	110,919	16%	
	Jan '17	91	588	0	904	1,492	94,274	431	18,546	112,820	16%	
	Feb '17	92	235	0	904	1,139	95,394	381	18,927	114,321	17%	
	Mar '17	93	11	0	904	915	96,301	760	19,687	115,988	17%	
	Apr '17	94	24	0	904	928	97,225	513	20,200	117,425	17%	
	May '17	95	5	0	904	909	98,132	655	20,855	118,987	18%	
	Jun '17	96	9	386	904	1,299	99,428	463	21,318	120,746	18%	
2017/18	Jul '17	97	5	246	904	1,154	100,583	225	21,543	122,126	18%	
	Aug '17	98	15	418	904	1,337	101,917	208	21,751	123,668	18%	
	Sep '17	99	15	201	904	1,119	103,033	223	21,974	125,007	18%	
	Oct '17	100	4	31	904	938	103,962	53	22,027	125,990	17%	
	Nov '17	101	0	0	904	904	104,819	31	22,058	126,877	17%	
	Dec '17	102	1	0	904	905	105,616	67	22,125	127,741	17%	
	Jan '18	103	92	0	904	995	106,446	67	22,192	128,638	17%	
	Feb '18	104	19	0	904	923	107,239	12	22,204	129,443	17%	
	Mar '18	105	119		904	1,023	108,257	450	22,654	130,911	17%	
	Apr '18	106	70		904	974	109,228	500	23,154	132,381	17%	
	May '18	107	40		904	944	110,137	530	23,684	133,821	18%	
	Jun '18	108	21		904	925	111,058	550	24,234	135,292	18%	

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
2018/19	Jul '18	109	34		904	938	111,996	540	24,774	136,770	18%	PLANNED
	Aug '18	110	26		904	930	112,910	540	25,314	138,224	18%	
	Sep '18	111	36		904	940	113,833	530	25,844	139,677	19%	
	Oct '18	112	58		904	962	114,782	510	26,354	141,136	19%	
	Nov '18	113	72		904	976	115,731	500	26,854	142,585	19%	
	Dec '18	114	225		904	1,129	116,704	350	27,204	143,908	19%	
	Jan '19	115	180		904	1,084	117,776	390	27,594	145,369	19%	
	Feb '19	116	153		904	1,057	118,559	420	28,014	146,573	19%	
	Mar '19	117	119		904	1,023	119,535	450	28,464	147,999	19%	
	Apr '19	118	70		904	974	120,491	500	28,964	149,455	19%	
	May '19	119	40		904	944	121,429	530	29,494	150,922	20%	
	Jun '19	120	21		904	925	122,353	550	29,938	152,291	20%	
2019/20	Jul '19	121	34		904	938	123,269	540	30,394	153,663	20%	
	Aug '19	122	26		904	930	124,169	540	30,786	154,955	20%	
	Sep '19	123	36		904	940	125,073	530	31,096	156,168	20%	
	Oct '19	124	58		904	962	125,008	510	31,403	156,410	20%	
	Nov '19	125	72		904	976	124,980	500	31,616	156,595	20%	
	Dec '19	126	225		904	1,129	124,832	350	31,863	156,694	20%	
	Jan '20	127	180		904	1,084	124,486	390	32,177	156,662	21%	
	Feb '20	128	153		904	1,057	124,269	420	32,484	156,752	21%	
	Mar '20	129	119		904	1,023	124,284	450	32,721	157,004	21%	
	Apr '20	130	70		904	974	124,226	500	33,150	157,375	21%	
	May '20	131	40		904	944	124,217	530	33,408	157,624	21%	
	Jun '20	132	21		904	925	124,196	550	33,697	157,892	21%	
2020/21	Jul '20	133	34		904	938	124,223	540	34,008	158,230	21%	
	Aug '20	134	26		904	930	124,243	540	34,367	158,609	22%	
	Sep '20	135	36		904	940	124,254	530	34,849	159,102	22%	
	Oct '20	136	58		904	962	124,241	510	35,336	159,576	22%	
	Nov '20	137	72		904	976	124,167	500	35,643	159,809	22%	
	Dec '20	138	225		904	1,129	123,648	350	35,871	159,518	22%	
	Jan '21	139	180		904	1,084	123,593	390	36,158	159,750	23%	
	Feb '21	140	153		904	1,057	123,431	420	36,401	159,831	23%	
	Mar '21	141	119		904	1,023	123,136	450	36,725	159,860	23%	
	Apr '21	142	70		904	974	123,064	500	36,988	160,051	23%	
	May '21	143	40		904	944	122,743	530	37,342	160,084	23%	
	Jun '21	144	21		904	925	122,146	550	37,708	159,854	24%	
2021/22	Jul '21	145	34		904	938	121,313	540	37,995	159,308	24%	
	Aug '21	146	26		904	930	121,021	540	38,520	159,541	24%	
	Sep '21	147	36		904	940	120,443	530	39,020	159,463	24%	
	Oct '21	148	58		904	962	120,280	510	39,348	159,628	25%	
	Nov '21	149	72		904	976	120,230	500	39,751	159,981	25%	
	Dec '21	150	225		904	1,129	120,377	350	39,937	160,314	25%	
	Jan '22	151	180		904	1,084	120,453	390	40,236	160,689	25%	
	Feb '22	152	153		904	1,057	120,430	420	40,496	160,926	25%	
	Mar '22	153	119		904	1,023	120,327	450	40,852	161,179	25%	
	Apr '22	154	70		904	974	120,177	500	41,205	161,382	26%	
	May '22	155	40		904	944	120,156	530	41,360	161,516	26%	
	Jun '22	156	21		904	925	120,117	550	41,729	161,846	26%	
2022/23	Jul '22	157	34		904	938	120,101	540	42,257	162,358	26%	
	Aug '22	158	26		904	930	120,115	540	42,797	162,912	26%	
	Sep '22	159	36		904	940	120,147	530	43,327	163,474	27%	
	Oct '22	160	58		904	962	120,187	510	43,837	164,024	27%	
	Nov '22	161	72		904	976	120,158	500	44,183	164,341	27%	
	Dec '22	162	225		904	1,129	120,022	350	44,313	164,335	27%	
	Jan '23	163	180		904	1,084	120,055	390	44,350	164,405	27%	
	Feb '23	164	153		904	1,057	120,095	420	44,473	164,568	27%	
	Mar '23	165	119		904	1,023	120,136	450	44,648	164,784	27%	
	Apr '23	166	70		904	974	120,166	500	44,762	164,928	27%	
	May '23	167	40		904	944	120,152	530	45,030	165,182	27%	
	Jun '23	168	21		904	925	120,130	550	45,341	165,471	27%	
2023/24	Jul '23	169	34		904	938	120,092	540	45,807	165,899	28%	
	Aug '23	170	26		904	930	120,050	540	46,131	166,181	28%	
	Sep '23	171	36		904	940	120,028	530	46,308	166,336	28%	
	Oct '23	172	58		904	962	120,033	510	46,654	166,687	28%	
	Nov '23	173	72		904	976	120,045	500	47,150	167,195	28%	
	Dec '23	174	225		904	1,129	120,198	350	47,249	167,447	28%	
	Jan '24	175	180		904	1,084	120,249	390	47,567	167,816	28%	
	Feb '24	176	153		904	1,057	120,205	420	47,987	168,192	29%	
	Mar '24	177	119		904	1,023	120,061	450	48,437	168,498	29%	
	Apr '24	178	70		904	974	120,045	500	48,888	168,933	29%	
	May '24	179	40		904	944	120,082	530	49,418	169,500	29%	
	Jun '24	180	21		904	925	120,097	550	49,796	169,893	29%	

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
2024/25	Jul '24	181	34		904	938	120,122	540	50,152	170,274	29%	PLANED
	Aug '24	182	26		904	930	120,125	540	50,500	170,625	30%	
	Sep '24	183	36		904	940	120,121	530	50,787	170,908	30%	
	Oct '24	184	58		904	962	120,154	510	50,962	171,116	30%	
	Nov '24	185	72		904	976	120,114	500	51,212	171,326	30%	
	Dec '24	186	225		904	1,129	119,920	350	51,556	171,476	30%	
	Jan '25	187	180		904	1,084	119,968	390	51,917	171,885	30%	
	Feb '25	188	153		904	1,057	120,026	420	52,094	172,120	30%	
	Mar '25	189	119		904	1,023	120,076	450	52,219	172,295	30%	
	Apr '25	190	70		904	974	120,105	500	52,437	172,542	30%	
	May '25	191	40		904	944	120,024	530	52,619	172,643	30%	
	Jun '25	192	21		904	925	120,033	550	52,638	172,671	30%	
2025/26	Jul '25	193	34		904	938	119,933	540	52,910	172,843	31%	
	Aug '25	194	26		904	930	119,928	540	53,309	173,237	31%	
	Sep '25	195	36		904	940	119,841	530	53,620	173,461	31%	
	Oct '25	196	58		904	962	119,813	510	53,767	173,580	31%	
	Nov '25	197	72		904	976	119,831	500	54,039	173,870	31%	
	Dec '25	198	225		904	1,129	119,868	350	54,115	173,983	31%	
	Jan '26	199	180		904	1,084	119,809	390	54,115	173,924	31%	
	Feb '26	200	153		904	1,057	119,908	420	54,177	174,085	31%	
	Mar '26	201	119		904	1,023	119,819	450	54,453	174,272	31%	
	Apr '26	202	70		904	974	119,839	500	54,706	174,545	31%	
	May '26	203	40		904	944	119,831	530	54,861	174,692	31%	
	Jun '26	204	21		904	925	119,841	550	55,166	175,007	32%	
2026/27	Jul '26	205	34		904	938	119,857	540	55,607	175,464	32%	
	Aug '26	206	26		904	930	119,851	540	55,858	175,709	32%	
	Sep '26	207	36		904	940	119,878	530	55,837	175,715	32%	
	Oct '26	208	58		904	962	119,831	510	55,955	175,786	32%	
	Nov '26	209	72		904	976	119,838	500	55,767	175,605	32%	
	Dec '26	210	225		904	1,129	119,727	350	55,569	175,296	32%	
	Jan '27	211	180		904	1,084	119,319	390	55,528	174,847	32%	
	Feb '27	212	153		904	1,057	119,237	420	55,567	174,804	32%	
	Mar '27	213	119		904	1,023	119,345	450	55,257	174,602	32%	
	Apr '27	214	70		904	974	119,391	500	55,244	174,635	32%	
	May '27	215	40		904	944	119,426	530	55,119	174,545	32%	
	Jun '27	216	21		904	925	119,052	550	55,206	174,258	32%	
2027/28	Jul '27	217	34		904	938	118,836	540	55,521	174,357	32%	
	Aug '27	218	26		904	930	118,429	540	55,853	174,281	32%	
	Sep '27	219	36		904	940	118,249	530	56,160	174,409	32%	
	Oct '27	220	58		904	962	118,273	510	56,616	174,889	32%	
	Nov '27	221	72		904	976	118,345	500	57,086	175,430	33%	
	Dec '27	222	225		904	1,129	118,568	350	57,369	175,937	33%	
	Jan '28	223	180		904	1,084	118,657	390	57,692	176,349	33%	
	Feb '28	224	153		904	1,057	118,791	420	58,100	176,891	33%	
	Mar '28	225	119		904	1,023	118,791	450	58,100	176,891	33%	
	Apr '28	226	70		904	974	118,791	500	58,100	176,891	33%	
	May '28	227	40		904	944	118,791	530	58,100	176,891	33%	
	Jun '28	228	21		904	925	118,791	550	58,100	176,891	33%	

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.

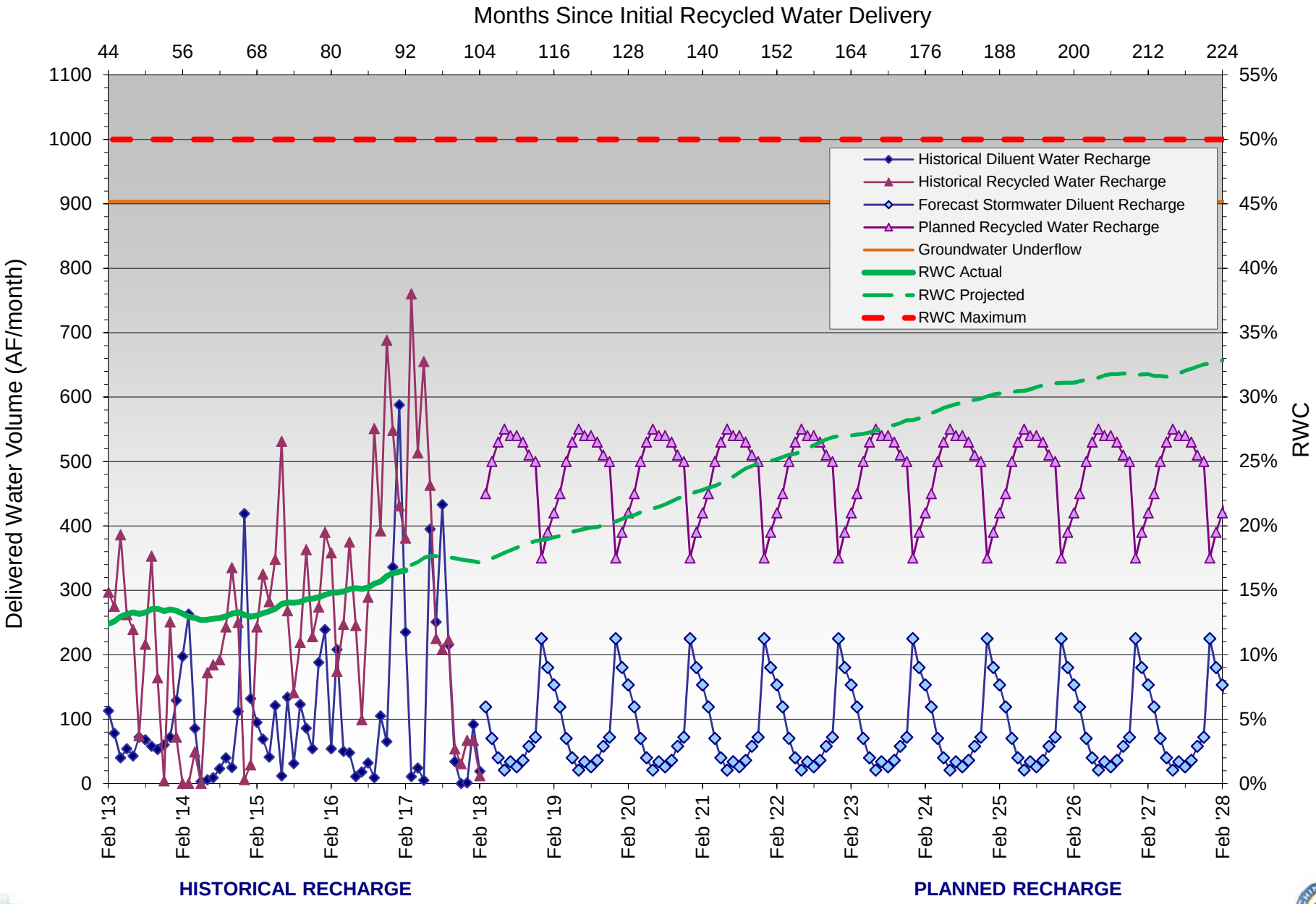
RW = Recycled Water

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



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
2012/13	Jul '12	24	0	0	139	139	27,371	122	1,031	28,402	4%	HISTORICAL
	Aug '12	25	1	0	139	140	27,511	84	1,115	28,626	4%	
	Sep '12	26	0	0	139	139	27,650	39	1,154	28,804	4%	
	Oct '12	27	1	0	139	140	27,789	63	1,217	29,006	4%	
	Nov '12	28	14	0	139	153	27,942	66	1,283	29,225	4%	
	Dec '12	29	79	0	139	218	28,160	1	1,284	29,444	4%	
	Jan '13	30	21	0	139	160	28,320	59	1,343	29,663	5%	
	Feb '13	31	9	0	139	148	28,468	19	1,362	29,830	5%	
	Mar '13	32	13	0	139	152	28,620	53	1,415	30,035	5%	
	Apr '13	33	5	0	139	144	28,764	41	1,456	30,220	5%	
	May '13	34	4	0	139	143	28,907	26	1,482	30,389	5%	
	Jun '13	35	0	0	139	139	29,046	2	1,484	30,530	5%	
2013/14	Jul '13	36	0	0	139	139	29,185	0	1,484	30,669	5%	
	Aug '13	37	0	0	139	139	29,324	0	1,484	30,808	5%	
	Sep '13	38	0	0	139	139	29,463	154	1,638	31,101	5%	
	Oct '13	39	11	0	139	150	29,613	69	1,707	31,320	5%	
	Nov '13	40	39	0	139	178	29,791	9	1,716	31,507	5%	
	Dec '13	41	6	0	139	145	29,936	0	1,716	31,652	5%	
	Jan '14	42	0	0	139	139	30,075	12	1,728	31,803	5%	
	Feb '14	43	69	0	139	208	30,283	16	1,744	32,027	5%	
	Mar '14	44	20	0	139	159	30,442	0	1,744	32,186	5%	
	Apr '14	45	17	0	139	156	30,598	2	1,746	32,344	5%	
	May '14	46	0	0	139	139	30,737	12	1,758	32,495	5%	
	Jun '14	47	0	0	139	139	30,875	0	1,758	32,633	5%	
2014/15	Jul '14	48	0	0	139	139	31,014	0	1,758	32,772	5%	
	Aug '14	49	6	0	139	145	31,159	0	1,758	32,917	5%	
	Sep '14	50	1	0	139	140	31,299	1	1,759	33,058	5%	
	Oct '14	51	0	0	139	139	31,438	0	1,759	33,197	5%	
	Nov '14	52	18	0	139	157	31,595	0	1,759	33,354	5%	
	Dec '14	53	247	0	139	386	31,981	0	1,759	33,740	5%	
	Jan '15	54	-6	0	139	133	32,114	0	1,759	33,873	5%	
	Feb '15	55	39	0	139	178	32,292	0	1,759	34,051	5%	
	Mar '15	56	2	0	139	141	32,433	0	1,759	34,192	5%	
	Apr '15	57	0	0	139	139	32,572	0	1,759	34,331	5%	
	May '15	58	17	0	139	156	32,334	0	1,759	34,093	5%	
	Jun '15	59	0	0	139	139	31,282	0	1,759	33,041	5%	
2015/16	Jul '15	60	9	0	139	148	30,995	0	1,759	32,754	5%	
	Aug '15	61	0	0	139	139	30,921	0	1,759	32,680	5%	
	Sep '15	62	53	0	139	192	30,555	0	1,759	32,314	5%	
	Oct '15	63	47	0	139	186	30,166	0	1,759	31,925	6%	
	Nov '15	64	1	0	139	140	29,164	0	1,759	30,923	6%	
	Dec '15	65	80	0	139	219	28,396	0	1,759	30,155	6%	
	Jan '16	66	244	0	139	383	27,811	0	1,759	29,570	6%	
	Feb '16	67	33	0	139	172	26,859	0	1,759	28,618	6%	
	Mar '16	68	88	0	139	227	26,122	0	1,759	27,881	6%	
	Apr '16	69	29	0	139	168	25,103	0	1,759	26,862	7%	
	May '16	70	1	0	139	140	23,857	0	1,759	25,616	7%	
	Jun '16	71	0	0	139	139	23,047	0	1,759	24,806	7%	
2016/17	Jul '16	72	0	0	139	139	23,171	0	1,759	24,930	7%	
	Aug '16	73	0	0	139	139	22,280	0	1,759	24,039	7%	
	Sep '16	74	0	0	139	139	21,413	0	1,759	23,172	8%	
	Oct '16	75	16	0	139	155	20,557	0	1,759	22,316	8%	
	Nov '16	76	12	14	139	165	20,157	0	1,759	21,916	8%	
	Dec '16	77	156	0	139	295	19,433	0	1,759	21,192	8%	
	Jan '17	78	488	0	139	627	19,123	0	1,759	20,882	8%	
	Feb '17	79	93	0	278	371	19,152	0	1,759	20,911	8%	
	Mar '17	80	3	0	278	281	19,428	0	1,759	21,187	8%	
	Apr '17	81	1	0	278	279	19,704	0	1,759	21,463	8%	
	May '17	82	16	0	278	294	19,967	0	1,759	21,726	8%	
	Jun '17	83	0	526	278	804	20,741	0	1,759	22,500	8%	
2017/18	Jul '17	84	0	567	278	845	21,585	0	1,759	23,344	8%	
	Aug '17	85	48	117	278	443	22,028	0	1,759	23,787	7%	
	Sep '17	86	0	151	278	429	22,454	0	1,759	24,213	7%	
	Oct '17	87	0	503	278	780	23,229	0	1,759	24,988	7%	
	Nov '17	88	0	54	278	332	23,524	0	1,759	25,283	7%	
	Dec '17	89	0	1,104	278	1,382	24,831	0	1,759	26,590	7%	
	Jan '18	90	104	893	278	1,275	25,553	0	1,759	27,312	6%	
	Feb '18	91	21	0	278	299	25,823	0	1,759	27,582	6%	
	Mar '18	92	83		278	361	26,184	0	1,759	27,943	6%	
	Apr '18	93	114		278	392	26,576	0	1,759	28,335	6%	
	May '18	94	22		278	300	26,829	0	1,759	28,588	6%	
	Jun '18	95	3		278	281	27,109	0	1,759	28,868	6%	

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
2018/19	Jul '18	96	1		278	279	27,388	150	1,909	29,297	7%	PLANNED
	Aug '18	97	4		278	282	27,670	150	2,059	29,729	7%	
	Sep '18	98	4		278	282	27,952	150	2,209	30,161	7%	
	Oct '18	99	22		278	300	28,252	130	2,339	30,591	8%	
	Nov '18	100	20		278	298	28,542	130	2,469	31,011	8%	
	Dec '18	101	134		278	412	28,868	20	2,489	31,357	8%	
	Jan '19	102	141		278	419	29,271	10	2,499	31,770	8%	
	Feb '19	103	79		278	357	29,521	70	2,569	32,090	8%	
	Mar '19	104	83		278	361	29,874	70	2,639	32,513	8%	
	Apr '19	105	114		278	392	30,265	40	2,679	32,944	8%	
	May '19	106	22		278	300	30,565	130	2,809	33,374	8%	
	Jun '19	107	3		278	281	30,846	150	2,959	33,805	9%	
2019/20	Jul '19	108	1		278	279	31,125	150	3,109	34,234	9%	
	Aug '19	109	4		278	282	31,407	150	3,259	34,666	9%	
	Sep '19	110	4		278	282	31,689	150	3,409	35,098	10%	
	Oct '19	111	22		278	300	31,933	130	3,539	35,472	10%	
	Nov '19	112	20		278	298	32,210	130	3,669	35,879	10%	
	Dec '19	113	134		278	412	32,288	20	3,689	35,977	10%	
	Jan '20	114	141		278	419	32,417	10	3,699	36,116	10%	
	Feb '20	115	79		278	357	32,551	70	3,769	36,320	10%	
	Mar '20	116	83		278	361	32,895	70	3,839	36,734	10%	
	Apr '20	117	114		278	392	33,234	40	3,879	37,113	10%	
	May '20	118	22		278	300	33,534	130	4,009	37,543	11%	
	Jun '20	119	3		278	281	33,815	150	4,159	37,974	11%	
2020/21	Jul '20	120	1		278	279	34,094	150	4,259	38,353	11%	
	Aug '20	121	4		278	282	34,376	150	4,365	38,741	11%	
	Sep '20	122	4		278	282	34,658	150	4,473	39,131	11%	
	Oct '20	123	22		278	300	34,863	130	4,530	39,393	11%	
	Nov '20	124	20		278	298	34,941	130	4,647	39,588	12%	
	Dec '20	125	134		278	412	34,637	20	4,635	39,272	12%	
	Jan '21	126	141		278	419	34,904	10	4,573	39,477	12%	
	Feb '21	127	79		278	357	34,979	70	4,643	39,622	12%	
	Mar '21	128	83		278	361	35,067	70	4,713	39,780	12%	
	Apr '21	129	114		278	392	35,320	40	4,753	40,073	12%	
	May '21	130	22		278	300	34,936	130	4,847	39,783	12%	
	Jun '21	131	3		278	281	33,909	150	4,963	38,872	13%	
2021/22	Jul '21	132	1		278	279	33,038	150	5,000	38,038	13%	
	Aug '21	133	4		278	282	33,170	150	5,060	38,230	13%	
	Sep '21	134	4		278	282	33,108	150	5,210	38,318	14%	
	Oct '21	135	22		278	300	33,230	130	5,340	38,570	14%	
	Nov '21	136	20		278	298	33,356	130	5,470	38,826	14%	
	Dec '21	137	134		278	412	33,609	20	5,490	39,099	14%	
	Jan '22	138	141		278	419	33,834	10	5,341	39,175	14%	
	Feb '22	139	79		278	357	33,998	70	5,337	39,335	14%	
	Mar '22	140	83		278	361	34,060	70	5,391	39,451	14%	
	Apr '22	141	114		278	392	34,237	40	5,427	39,664	14%	
	May '22	142	22		278	300	34,398	130	5,554	39,952	14%	
	Jun '22	143	3		278	281	34,540	150	5,650	40,190	14%	
2022/23	Jul '22	144	1		278	279	34,680	150	5,678	40,358	14%	
	Aug '22	145	4		278	282	34,822	150	5,744	40,566	14%	
	Sep '22	146	4		278	282	34,965	150	5,855	40,820	14%	
	Oct '22	147	22		278	300	35,125	130	5,922	41,047	14%	
	Nov '22	148	20		278	298	35,270	130	5,986	41,256	15%	
	Dec '22	149	134		278	412	35,464	20	6,005	41,469	14%	
	Jan '23	150	141		278	419	35,723	10	5,956	41,679	14%	
	Feb '23	151	79		278	357	35,932	70	6,007	41,939	14%	
	Mar '23	152	83		278	361	36,141	70	6,024	42,165	14%	
	Apr '23	153	114		278	392	36,389	40	6,023	42,412	14%	
	May '23	154	22		278	300	36,546	130	6,127	42,673	14%	
	Jun '23	155	3		278	281	36,688	150	6,275	42,963	15%	
2023/24	Jul '23	156	1		278	279	36,828	150	6,425	43,253	15%	
	Aug '23	157	4		278	282	36,970	150	6,575	43,545	15%	
	Sep '23	158	4		278	282	37,113	150	6,571	43,684	15%	
	Oct '23	159	22		278	300	37,263	130	6,632	43,895	15%	
	Nov '23	160	20		278	298	37,383	130	6,753	44,136	15%	
	Dec '23	161	134		278	412	37,650	20	6,773	44,423	15%	
	Jan '24	162	141		278	419	37,930	10	6,771	44,701	15%	
	Feb '24	163	79		278	357	38,079	70	6,825	44,904	15%	
	Mar '24	164	83		278	361	38,281	70	6,895	45,176	15%	
	Apr '24	165	114		278	392	38,517	40	6,933	45,450	15%	
	May '24	166	22		278	300	38,678	130	7,051	45,729	15%	
	Jun '24	167	3		278	281	38,820	150	7,201	46,021	16%	

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
2024/25	Jul '24	168	1		278	279	38,960	150	7,351	46,311	16%	PLANED
	Aug '24	169	4		278	282	39,097	150	7,501	46,598	16%	
	Sep '24	170	4		278	282	39,239	150	7,650	46,889	16%	
	Oct '24	171	22		278	300	39,400	130	7,780	47,180	16%	
	Nov '24	172	20		278	298	39,541	130	7,910	47,451	17%	
	Dec '24	173	134		278	412	39,567	20	7,930	47,497	17%	
	Jan '25	174	141		278	419	39,853	10	7,940	47,793	17%	
	Feb '25	175	79		278	357	40,032	70	8,010	48,042	17%	
	Mar '25	176	83		278	361	40,252	70	8,080	48,332	17%	
	Apr '25	177	114		278	392	40,505	40	8,120	48,625	17%	
	May '25	178	22		278	300	40,648	130	8,250	48,898	17%	
	Jun '25	179	3		278	281	40,790	150	8,400	49,190	17%	
2025/26	Jul '25	180	1		278	279	40,921	150	8,550	49,471	17%	
	Aug '25	181	4		278	282	41,064	150	8,700	49,764	17%	
	Sep '25	182	4		278	282	41,154	150	8,850	50,004	18%	
	Oct '25	183	22		278	300	41,268	130	8,980	50,248	18%	
	Nov '25	184	20		278	298	41,426	130	9,110	50,536	18%	
	Dec '25	185	134		278	412	41,619	20	9,130	50,749	18%	
	Jan '26	186	141		278	419	41,655	10	9,140	50,795	18%	
	Feb '26	187	79		278	357	41,840	70	9,210	51,050	18%	
	Mar '26	188	83		278	361	41,974	70	9,280	51,254	18%	
	Apr '26	189	114		278	392	42,198	40	9,320	51,518	18%	
	May '26	190	22		278	300	42,358	130	9,450	51,808	18%	
	Jun '26	191	3		278	281	42,500	150	9,600	52,100	18%	
2026/27	Jul '26	192	1		278	279	42,640	150	9,750	52,390	19%	
	Aug '26	193	4		278	282	42,783	150	9,900	52,683	19%	
	Sep '26	194	4		278	282	42,926	150	10,050	52,976	19%	
	Oct '26	195	22		278	300	43,071	130	10,180	53,251	19%	
	Nov '26	196	20		278	298	43,204	130	10,310	53,514	19%	
	Dec '26	197	134		278	412	43,321	20	10,330	53,651	19%	
	Jan '27	198	141		278	419	43,112	10	10,340	53,452	19%	
	Feb '27	199	79		278	357	43,098	70	10,410	53,508	19%	
	Mar '27	200	83		278	361	43,178	70	10,480	53,658	20%	
	Apr '27	201	114		278	392	43,291	40	10,520	53,811	20%	
	May '27	202	22		278	300	43,297	130	10,650	53,947	20%	
	Jun '27	203	3		278	281	42,774	150	10,800	53,574	20%	
2027/28	Jul '27	204	1		278	279	42,209	150	10,950	53,159	21%	
	Aug '27	205	4		278	282	42,048	150	11,100	53,148	21%	
	Sep '27	206	4		278	282	41,901	150	11,250	53,151	21%	
	Oct '27	207	22		278	300	41,421	130	11,380	52,801	22%	
	Nov '27	208	20		278	298	41,386	130	11,510	52,896	22%	
	Dec '27	209	134		278	412	40,416	20	11,530	51,946	22%	
	Jan '28	210	141		278	419	39,561	10	11,540	51,101	23%	
	Feb '28	211	79		278	357	39,618	70	11,610	51,228	23%	
	Mar '28	212	79		278	357	39,614	70	11,680	51,294	23%	
	Apr '28	213	79		278	357	39,579	40	11,720	51,299	23%	
	May '28	214	79		278	357	39,636	130	11,850	51,486	23%	
	Jun '28	215	79		278	357	39,712	150	12,000	51,712	23%	

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.

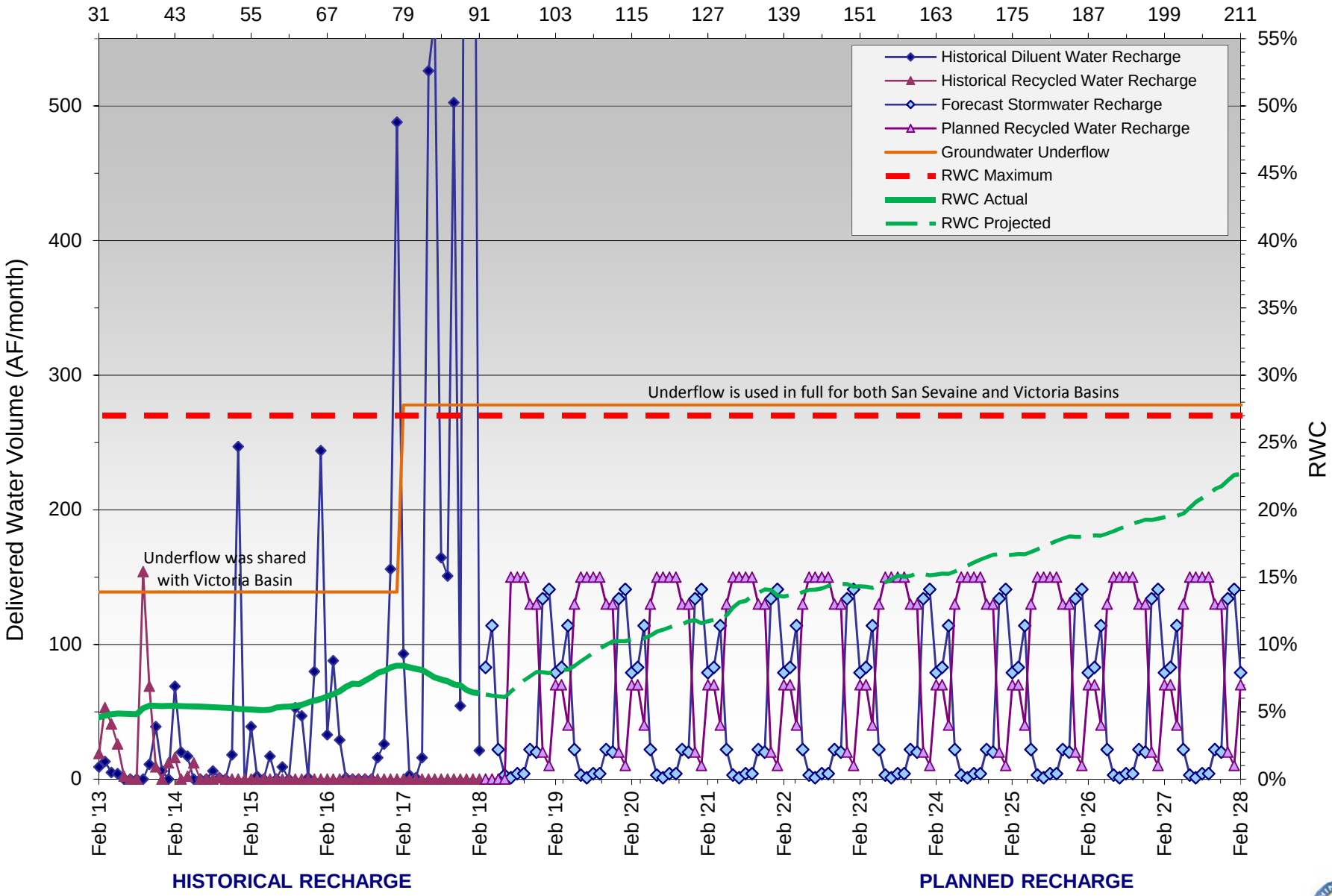
RW = Recycled Water

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



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
2012/13	Jul '12	72	83	0	67	150	12,734	0	893	13,628	7%	HISTORICAL
	Aug '12	73	36	0	67	103	12,838	0	893	13,731	7%	
	Sep '12	74	31	0	67	98	12,936	0	893	13,829	6%	
	Oct '12	75	61	0	67	128	13,064	0	893	13,958	6%	
	Nov '12	76	61	0	67	128	13,183	0	893	14,076	6%	
	Dec '12	77	290	0	67	357	13,509	0	893	14,403	6%	
	Jan '13	78	149	0	67	216	13,726	0	893	14,619	6%	
	Feb '13	79	116	0	67	183	13,879	26	919	14,799	6%	
	Mar '13	80	48	0	67	115	13,962	21	940	14,903	6%	
	Apr '13	81	0	0	67	67	13,992	0	940	14,932	6%	
	May '13	82	0	0	67	67	14,007	0	940	14,947	6%	
	Jun '13	83	0	0	67	67	14,074	0	940	15,015	6%	
2013/14	Jul '13	84	0	0	67	67	14,142	0	940	15,082	6%	
	Aug '13	85	0	0	67	67	14,209	0	940	15,149	6%	
	Sep '13	86	0	0	67	67	14,276	0	940	15,216	6%	
	Oct '13	87	0	0	67	67	14,343	0	940	15,284	6%	
	Nov '13	88	0	0	67	67	14,411	0	940	15,351	6%	
	Dec '13	89	72	0	67	139	14,550	174	1,114	15,664	7%	
	Jan '14	90	45	0	67	112	14,662	102	1,216	15,879	8%	
	Feb '14	91	94	0	67	161	14,824	70	1,286	16,110	8%	
	Mar '14	92	63	0	67	130	14,954	20	1,306	16,260	8%	
	Apr '14	93	61	0	67	128	15,082	105	1,411	16,493	9%	
	May '14	94	21	0	67	88	15,170	136	1,547	16,718	9%	
	Jun '14	95	23	0	67	90	15,261	32	1,579	16,840	9%	
2014/15	Jul '14	96	0	0	67	67	15,328	0	1,579	16,907	9%	
	Aug '14	97	76	0	67	143	15,471	205	1,784	17,255	10%	
	Sep '14	98	54	0	67	121	15,592	128	1,912	17,505	11%	
	Oct '14	99	39	0	67	106	15,638	63	1,975	17,614	11%	
	Nov '14	100	108	0	67	175	15,683	58	2,033	17,716	11%	
	Dec '14	101	255	0	67	322	15,839	2	2,035	17,875	11%	
	Jan '15	102	117	0	67	184	15,927	0	2,035	17,962	11%	
	Feb '15	103	93	0	67	160	16,000	60	2,095	18,095	12%	
	Mar '15	104	52	0	67	119	16,054	143	2,238	18,292	12%	
	Apr '15	105	0	0	67	67	16,121	0	2,238	18,359	12%	
	May '15	106	0	0	67	67	16,188	0	2,238	18,426	12%	
	Jun '15	107	0	0	67	67	16,255	0	2,238	18,493	12%	
2015/16	Jul '15	108	0	0	67	67	16,322	0	2,238	18,560	12%	
	Aug '15	109	1	0	67	68	16,390	0	2,238	18,629	12%	
	Sep '15	110	120	0	67	187	16,488	145	2,383	18,872	13%	
	Oct '15	111	98	0	67	165	16,558	238	2,621	19,180	14%	
	Nov '15	112	45	0	67	112	16,492	79	2,700	19,193	14%	
	Dec '15	113	105	0	67	172	16,305	224	2,924	19,230	15%	
	Jan '16	114	269	0	67	336	16,380	102	3,026	19,406	16%	
	Feb '16	115	51	0	67	118	16,346	198	3,224	19,570	16%	
	Mar '16	116	165	0	67	232	16,152	161	3,385	19,537	17%	
	Apr '16	117	19	0	67	86	15,848	128	3,513	19,362	18%	
	May '16	118	38	0	67	105	15,857	156	3,669	19,526	19%	
	Jun '16	119	5	0	67	72	15,918	159	3,828	19,746	19%	
2016/17	Jul '16	120	4	0	67	71	15,926	89	3,895	19,821	20%	
	Aug '16	121	22	0	67	89	15,995	52	3,834	19,829	19%	
	Sep '16	122	18	0	67	85	15,974	40	3,760	19,733	19%	
	Oct '16	123	38	0	67	105	15,915	104	3,864	19,778	20%	
	Nov '16	124	68	16	67	152	16,037	12	3,876	19,913	19%	
	Dec '16	125	239	0	67	306	16,313	71	3,843	20,157	19%	
	Jan '17	126	233	0	67	300	16,586	0	3,773	20,359	19%	
	Feb '17	127	130	0	67	197	16,769	66	3,795	20,563	18%	
	Mar '17	128	14	0	67	81	16,824	139	3,877	20,701	19%	
	Apr '17	129	9	0	67	76	16,895	110	3,973	20,868	19%	
	May '17	130	6	0	67	73	16,957	56	3,950	20,907	19%	
	Jun '17	131	3	0	67	70	17,026	90	4,037	21,063	19%	
2017/18	Jul '17	132	3	0	67	70	17,092	156	4,193	21,285	20%	
	Aug '17	133	3	0	67	70	17,125	43	4,236	21,361	20%	
	Sep '17	134	2	0	67	69	17,190	70	4,306	21,496	20%	
	Oct '17	135	3	0	67	70	17,198	234	4,540	21,738	21%	
	Nov '17	136	3	0	67	70	17,172	147	4,687	21,859	21%	
	Dec '17	137	1	0	67	68	17,025	156	4,843	21,868	22%	
	Jan '18	138	37	0	67	104	16,819	26	4,869	21,688	22%	
	Feb '18	139	19	0	67	87	16,654	0	4,869	21,523	23%	
	Mar '18	140	131		67	198	16,836	0	4,869	21,704	22%	
	Apr '18	141	114		67	181	17,003	0	4,869	21,872	22%	
	May '18	142	51		67	118	16,978	40	4,909	21,887	22%	
	Jun '18	143	22		67	89	17,056	70	4,979	22,035	23%	

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
2018/19	Jul '18	144	14		67	81	17,131	80	5,059	22,190	23%	PLANNED
	Aug '18	145	24		67	91	17,219	70	5,129	22,348	23%	
	Sep '18	146	48		67	115	17,207	40	5,169	22,376	23%	
	Oct '18	147	57		67	124	17,252	30	5,171	22,422	23%	
	Nov '18	148	80		67	147	17,318	10	5,151	22,469	23%	
	Dec '18	149	220		67	287	17,261	0	5,151	22,412	23%	
	Jan '19	150	167		67	234	17,466	0	5,151	22,617	23%	
	Feb '19	151	169		67	236	17,358	0	5,151	22,509	23%	
	Mar '19	152	131		67	198	17,509	0	5,151	22,660	23%	
	Apr '19	153	114		67	181	17,679	0	5,151	22,830	23%	
	May '19	154	51		67	118	17,780	40	5,161	22,940	22%	
	Jun '19	155	22		67	89	17,792	70	5,222	23,014	23%	
2019/20	Jul '19	156	14		67	81	17,841	0	5,222	23,063	23%	
	Aug '19	157	24		67	91	17,913	0	5,202	23,115	23%	
	Sep '19	158	48		67	115	18,001	0	5,184	23,184	22%	
	Oct '19	159	57		67	124	17,978	0	5,184	23,161	22%	
	Nov '19	160	80		67	147	18,009	0	5,184	23,192	22%	
	Dec '19	161	220		67	287	17,828	0	5,184	23,011	23%	
	Jan '20	162	167		67	234	17,701	0	5,184	22,884	23%	
	Feb '20	163	169		67	236	17,540	0	5,184	22,723	23%	
	Mar '20	164	131		67	198	17,637	0	5,184	22,820	23%	
	Apr '20	165	114		67	181	17,593	0	5,184	22,776	23%	
	May '20	166	51		67	118	17,606	0	5,184	22,789	23%	
	Jun '20	167	22		67	89	17,628	0	5,184	22,811	23%	
2020/21	Jul '20	168	14		67	81	17,619	0	5,184	22,802	23%	
	Aug '20	169	24		67	91	17,590	0	5,176	22,765	23%	
	Sep '20	170	48		67	115	17,581	0	5,176	22,756	23%	
	Oct '20	171	57		67	124	17,548	0	5,176	22,723	23%	
	Nov '20	172	80		67	147	17,463	0	5,176	22,638	23%	
	Dec '20	173	220		67	287	17,318	0	5,176	22,493	23%	
	Jan '21	174	167		67	234	17,295	0	5,176	22,470	23%	
	Feb '21	175	169		67	236	17,231	0	5,176	22,406	23%	
	Mar '21	176	131		67	198	17,098	0	5,176	22,273	23%	
	Apr '21	177	114		67	181	16,879	0	5,176	22,054	23%	
	May '21	178	51		67	118	16,749	0	5,176	21,924	24%	
	Jun '21	179	22		67	89	16,681	0	5,176	21,856	24%	
2021/22	Jul '21	180	14		67	81	16,679	0	5,176	21,854	24%	
	Aug '21	181	24		67	91	16,681	0	5,176	21,856	24%	
	Sep '21	182	48		67	115	16,727	0	5,176	21,902	24%	
	Oct '21	183	57		67	124	16,784	0	5,176	21,959	24%	
	Nov '21	184	80		67	147	16,783	0	5,135	21,917	23%	
	Dec '21	185	220		67	287	16,915	0	5,075	21,989	23%	
	Jan '22	186	167		67	234	16,936	0	5,046	21,981	23%	
	Feb '22	187	169		67	236	16,884	0	5,046	21,929	23%	
	Mar '22	188	131		67	198	16,720	0	5,046	21,765	23%	
	Apr '22	189	114		67	181	16,576	0	5,046	21,621	23%	
	May '22	190	51		67	118	16,613	0	5,046	21,658	23%	
	Jun '22	191	22		67	89	16,615	0	5,046	21,660	23%	
2022/23	Jul '22	192	14		67	81	16,546	0	5,046	21,591	23%	
	Aug '22	193	24		67	91	16,534	0	5,046	21,579	23%	
	Sep '22	194	48		67	115	16,551	0	5,046	21,596	23%	
	Oct '22	195	57		67	124	16,547	0	5,046	21,592	23%	
	Nov '22	196	80		67	147	16,566	0	5,046	21,611	23%	
	Dec '22	197	220		67	287	16,496	0	5,046	21,541	23%	
	Jan '23	198	167		67	234	16,514	0	5,046	21,559	23%	
	Feb '23	199	169		67	236	16,567	0	5,020	21,586	23%	
	Mar '23	200	131		67	198	16,650	0	4,999	21,648	23%	
	Apr '23	201	114		67	181	16,764	0	4,999	21,762	23%	
	May '23	202	51		67	118	16,815	0	4,999	21,813	23%	
	Jun '23	203	22		67	89	16,837	0	4,999	21,835	23%	
2023/24	Jul '23	204	14		67	81	16,851	160	5,159	22,009	23%	
	Aug '23	205	24		67	91	16,875	140	5,299	22,173	24%	
	Sep '23	206	48		67	115	16,923	80	5,379	22,301	24%	
	Oct '23	207	57		67	124	16,980	60	5,439	22,418	24%	
	Nov '23	208	80		67	147	17,060	20	5,459	22,518	24%	
	Dec '23	209	220		67	287	17,208	0	5,285	22,492	23%	
	Jan '24	210	167		67	234	17,330	0	5,183	22,512	23%	
	Feb '24	211	169		67	236	17,405	0	5,113	22,517	23%	
	Mar '24	212	131		67	198	17,473	0	5,093	22,565	23%	
	Apr '24	213	114		67	181	17,526	0	4,988	22,513	22%	
	May '24	214	51		67	118	17,556	80	4,932	22,487	22%	
	Jun '24	215	22		67	89	17,555	140	5,040	22,594	22%	

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
2024/25	Jul '24	216	14		67	81	17,569	160	5,200	22,768	23%	PLANNED
	Aug '24	217	24		67	91	17,517	140	5,135	22,651	23%	
	Sep '24	218	48		67	115	17,511	80	5,087	22,597	23%	
	Oct '24	219	57		67	124	17,529	60	5,084	22,612	22%	
	Nov '24	220	80		67	147	17,501	20	5,046	22,546	22%	
	Dec '24	221	220		67	287	17,466	0	5,044	22,509	22%	
	Jan '25	222	167		67	234	17,516	0	5,044	22,559	22%	
	Feb '25	223	169		67	236	17,592	0	4,984	22,575	22%	
	Mar '25	224	131		67	198	17,671	0	4,841	22,511	22%	
	Apr '25	225	114		67	181	17,785	0	4,841	22,625	21%	
	May '25	226	51		67	118	17,836	80	4,921	22,756	22%	
	Jun '25	227	22		67	89	17,858	140	5,061	22,918	22%	
2025/26	Jul '25	228	14		67	81	17,872	160	5,221	23,092	23%	
	Aug '25	229	24		67	91	17,895	140	5,361	23,255	23%	
	Sep '25	230	48		67	115	17,823	80	5,296	23,118	23%	
	Oct '25	231	57		67	124	17,782	60	5,118	22,899	22%	
	Nov '25	232	80		67	147	17,817	20	5,059	22,875	22%	
	Dec '25	233	220		67	287	17,932	0	4,835	22,766	21%	
	Jan '26	234	167		67	234	17,830	0	4,733	22,562	21%	
	Feb '26	235	169		67	236	17,948	0	4,535	22,482	20%	
	Mar '26	236	131		67	198	17,914	0	4,374	22,287	20%	
	Apr '26	237	114		67	181	18,009	0	4,246	22,254	19%	
	May '26	238	51		67	118	18,022	80	4,170	22,191	19%	
	Jun '26	239	22		67	89	18,039	140	4,151	22,189	19%	
2026/27	Jul '26	240	14		67	81	18,049	160	4,222	22,270	19%	
	Aug '26	241	24		67	91	18,051	140	4,310	22,360	19%	
	Sep '26	242	48		67	115	18,081	80	4,350	22,430	19%	
	Oct '26	243	57		67	124	18,100	60	4,306	22,405	19%	
	Nov '26	244	80		67	147	18,095	20	4,314	22,409	19%	
	Dec '26	245	220		67	287	18,076	0	4,243	22,319	19%	
	Jan '27	246	167		67	234	18,010	0	4,243	22,253	19%	
	Feb '27	247	169		67	236	18,049	0	4,177	22,226	19%	
	Mar '27	248	131		67	198	18,166	0	4,038	22,204	18%	
	Apr '27	249	114		67	181	18,271	0	3,928	22,199	18%	
	May '27	250	51		67	118	18,316	80	3,952	22,268	18%	
	Jun '27	251	22		67	89	18,335	140	4,002	22,337	18%	
2027/28	Jul '27	252	14		67	81	18,346	160	4,006	22,352	18%	
	Aug '27	253	24		67	91	18,367	140	4,103	22,470	18%	
	Sep '27	254	48		67	115	18,413	80	4,113	22,526	18%	
	Oct '27	255	57		67	124	18,467	60	3,939	22,406	18%	
	Nov '27	256	80		67	147	18,544	20	3,812	22,356	17%	
	Dec '27	257	220		67	287	18,764	0	3,656	22,420	16%	
	Jan '28	258	167		67	234	18,894	0	3,630	22,524	16%	
	Feb '28	259	169		67	236	19,043	0	3,630	22,673	16%	
	Mar '28	260	131		67	198	19,043	0	3,630	22,673	16%	
	Apr '28	261	114		67	181	19,043	0	3,630	22,673	16%	
	May '28	262	51		67	118	19,043	80	3,670	22,713	16%	
	Jun '28	263	22		67	89	19,043	140	3,740	22,783	16%	

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.

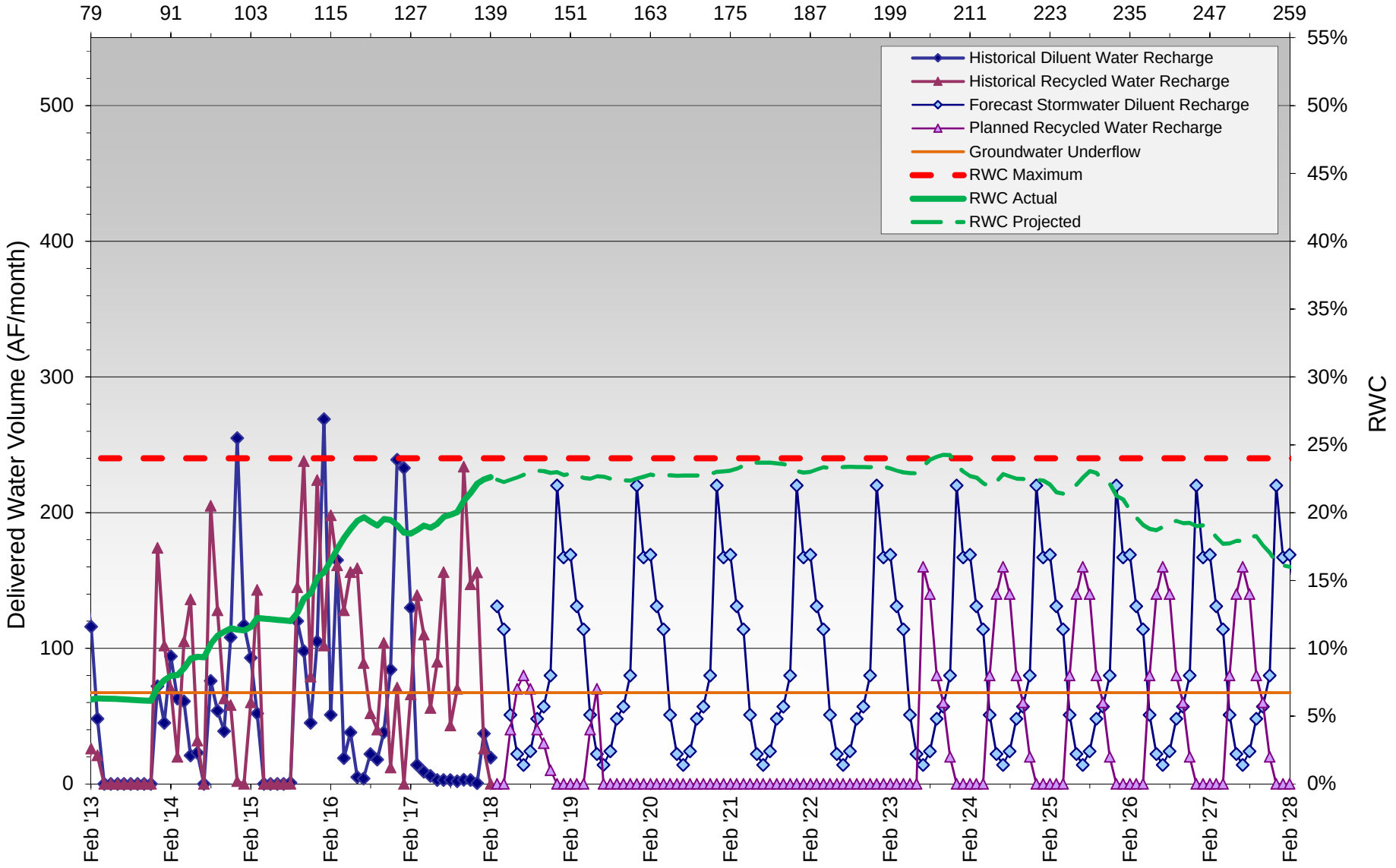
RW = Recycled Water

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



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 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
2012/13	Jul '12	72	25	0	60	85	7,149	51	2,045	9,193	22%	HISTORICAL
	Aug '12	73	36	0	60	96	7,245	35	2,080	9,324	22%	
	Sep '12	74	31	0	60	91	7,335	24	2,104	9,439	22%	
	Oct '12	75	22	0	60	82	7,417	9	2,113	9,530	22%	
	Nov '12	76	30	0	60	90	7,507	5	2,118	9,624	22%	
	Dec '12	77	47	0	60	107	7,614	5	2,123	9,736	22%	
	Jan '13	78	15	0	60	75	7,688	0	2,123	9,811	22%	
	Feb '13	79	25	0	60	85	7,773	0	2,123	9,896	21%	
	Mar '13	80	14	0	60	74	7,847	0	2,123	9,969	21%	
	Apr '13	81	0	0	60	60	7,907	0	2,123	10,029	21%	
	May '13	82	0	0	60	60	7,966	0	2,123	10,089	21%	
	Jun '13	83	0	0	60	60	8,026	0	2,123	10,149	21%	
2013/14	Jul '13	84	0	0	60	60	8,086	0	2,123	10,208	21%	
	Aug '13	85	0	0	60	60	8,146	0	2,123	10,268	21%	
	Sep '13	86	24	0	60	84	8,229	107	2,230	10,459	21%	
	Oct '13	87	20	0	60	80	8,309	117	2,347	10,656	22%	
	Nov '13	88	17	0	60	77	8,386	89	2,436	10,821	23%	
	Dec '13	89	5	0	60	65	8,451	85	2,521	10,971	23%	
	Jan '14	90	16	0	60	76	8,526	139	2,660	11,186	24%	
	Feb '14	91	62	0	60	122	8,648	120	2,780	11,428	24%	
	Mar '14	92	50	0	60	110	8,758	47	2,827	11,584	24%	
	Apr '14	93	0	0	60	60	8,817	0	2,827	11,644	24%	
	May '14	94	23	0	60	83	8,900	168	2,995	11,895	25%	
	Jun '14	95	12	0	60	72	8,972	54	3,049	12,021	25%	
2014/15	Jul '14	96	11	0	60	71	9,043	0	3,049	12,091	25%	
	Aug '14	97	0	0	60	60	9,102	0	3,049	12,151	25%	
	Sep '14	98	0	0	60	60	9,162	0	3,049	12,211	25%	
	Oct '14	99	0	0	60	60	9,101	0	3,049	12,150	25%	
	Nov '14	100	0	0	60	60	9,033	0	3,049	12,081	25%	
	Dec '14	101	348	0	60	408	9,223	0	3,049	12,271	25%	
	Jan '15	102	4	0	60	64	9,029	0	3,049	12,078	25%	
	Feb '15	103	65	0	60	125	8,922	53	3,102	12,023	26%	
	Mar '15	104	71	0	60	131	8,878	155	3,257	12,135	27%	
	Apr '15	105	39	0	60	99	8,977	0	3,257	12,233	27%	
	May '15	106	0	0	60	60	9,036	0	3,257	12,293	26%	
	Jun '15	107	2	0	60	62	9,098	81	3,338	12,435	27%	
2015/16	Jul '15	108	87	0	60	147	9,245	85	3,423	12,667	27%	
	Aug '15	109	15	0	60	75	9,319	163	3,586	12,905	28%	
	Sep '15	110	74	0	60	134	9,453	51	3,637	13,090	28%	
	Oct '15	111	64	0	60	124	9,577	65	3,702	13,278	28%	
	Nov '15	112	44	0	60	104	9,681	3	3,705	13,385	28%	
	Dec '15	113	144	0	60	204	9,760	1	3,706	13,466	28%	
	Jan '16	114	82	0	60	142	9,827	0	3,706	13,533	27%	
	Feb '16	115	41	0	60	101	9,857	0	3,706	13,563	27%	
	Mar '16	116	47	0	60	107	9,792	0	3,706	13,498	27%	
	Apr '16	117	49	0	60	109	9,641	0	3,706	13,346	28%	
	May '16	118	33	0	60	93	9,661	0	3,706	13,367	28%	
	Jun '16	119	20	0	60	80	9,654	0	3,706	13,360	28%	
2016/17	Jul '16	120	15	0	60	75	9,699	0	3,568	13,266	27%	
	Aug '16	121	1	0	60	61	9,726	0	3,333	13,058	26%	
	Sep '16	122	0	0	60	60	9,763	0	3,293	13,056	25%	
	Oct '16	123	1	0	60	61	9,759	0	3,293	13,052	25%	
	Nov '16	124	0	0	60	60	9,803	0	3,293	13,096	25%	
	Dec '16	125	316	0	60	376	10,165	0	3,227	13,392	24%	
	Jan '17	126	298	0	60	358	10,513	0	3,196	13,709	23%	
	Feb '17	127	171	0	60	231	10,735	8	3,183	13,918	23%	
	Mar '17	128	34	0	60	94	10,824	165	3,332	14,156	24%	
	Apr '17	129	23	0	60	83	10,904	99	3,423	14,327	24%	
	May '17	130	16	0	60	76	10,972	125	3,491	14,463	24%	
	Jun '17	131	8	274	60	341	11,303	10	3,501	14,804	24%	
2017/18	Jul '17	132	10	220	60	290	11,592	0	3,501	15,093	23%	
	Aug '17	133	21	79	60	160	11,742	13	3,514	15,256	23%	
	Sep '17	134	16	0	60	76	11,806	51	3,565	15,371	23%	
	Oct '17	135	1	0	60	60	11,863	4	3,569	15,432	23%	
	Nov '17	136	4	0	60	64	11,861	0	3,569	15,430	23%	
	Dec '17	137	2	0	60	61	11,860	0	3,569	15,429	23%	
	Jan '18	138	116	0	60	175	11,893	0	3,569	15,462	23%	
	Feb '18	139	75	0	60	134	12,018	13	3,582	15,600	23%	
	Mar '18	140	69		60	129	12,147	50	3,632	15,779	23%	
	Apr '18	141	44		60	104	12,246	80	3,712	15,959	23%	
	May '18	142	20		60	80	12,288	100	3,812	16,101	24%	
	Jun '18	143	19		60	79	12,339	100	3,912	16,251	24%	

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
2018/19	Jul '18	144	21		60	81	12,416	100	4,012	16,428	24%	PLANNED
	Aug '18	145	14		60	74	12,484	110	4,122	16,607	25%	
	Sep '18	146	20		60	80	12,550	100	4,222	16,773	25%	
	Oct '18	147	30		60	90	12,603	90	4,246	16,849	25%	
	Nov '18	148	34		60	94	12,661	90	4,328	16,989	25%	
	Dec '18	149	120		60	180	12,790	0	4,328	17,119	25%	
	Jan '19	150	88		60	148	12,928	30	4,358	17,287	25%	
	Feb '19	151	84		60	144	13,004	40	4,398	17,402	25%	
	Mar '19	152	69		60	129	13,123	50	4,448	17,571	25%	
	Apr '19	153	44		60	104	13,224	80	4,528	17,753	26%	
	May '19	154	20		60	80	13,303	100	4,628	17,932	26%	
	Jun '19	155	19		60	79	13,382	100	4,728	18,110	26%	
2019/2020	Jul '19	156	21		60	81	13,463	100	4,828	18,291	26%	
	Aug '19	157	14		60	74	13,536	110	4,938	18,475	27%	
	Sep '19	158	20		60	80	13,616	100	5,038	18,655	27%	
	Oct '19	159	30		60	90	13,646	90	5,128	18,775	27%	
	Nov '19	160	34		60	94	13,677	90	5,218	18,896	28%	
	Dec '19	161	120		60	180	13,699	0	5,155	18,855	27%	
	Jan '20	162	88		60	148	13,602	30	5,058	18,661	27%	
	Feb '20	163	84		60	144	13,511	40	5,098	18,610	27%	
	Mar '20	164	69		60	129	13,466	50	5,104	18,571	27%	
	Apr '20	165	44		60	104	13,427	80	5,169	18,597	28%	
	May '20	166	20		60	80	13,420	100	5,199	18,620	28%	
	Jun '20	167	19		60	79	13,364	100	5,259	18,624	28%	
2020/21	Jul '20	168	21		60	81	13,290	100	5,353	18,644	29%	
	Aug '20	169	14		60	74	13,220	110	5,441	18,662	29%	
	Sep '20	170	20		60	80	13,186	100	5,524	18,711	30%	
	Oct '20	171	30		60	90	13,161	90	5,614	18,776	30%	
	Nov '20	172	34		60	94	13,156	90	5,704	18,861	30%	
	Dec '20	173	120		60	180	13,115	0	5,704	18,820	30%	
	Jan '21	174	88		60	148	13,202	30	5,734	18,937	30%	
	Feb '21	175	84		60	144	13,236	40	5,774	19,011	30%	
	Mar '21	176	69		60	129	13,256	50	5,824	19,081	31%	
	Apr '21	177	44		60	104	13,300	80	5,904	19,205	31%	
	May '21	178	20		60	80	13,320	100	6,004	19,325	31%	
	Jun '21	179	19		60	79	13,339	100	6,104	19,444	31%	
2021/22	Jul '21	180	21		60	81	13,360	100	6,204	19,565	32%	
	Aug '21	181	14		60	74	13,317	110	6,307	19,624	32%	
	Sep '21	182	20		60	80	13,151	100	6,221	19,372	32%	
	Oct '21	183	30		60	90	13,118	90	6,088	19,206	32%	
	Nov '21	184	34		60	94	13,086	90	6,082	19,168	32%	
	Dec '21	185	120		60	180	13,137	0	6,030	19,167	31%	
	Jan '22	186	88		60	148	13,139	30	5,988	19,127	31%	
	Feb '22	187	84		60	144	13,114	40	5,931	19,045	31%	
	Mar '22	188	69		60	129	13,057	50	5,946	19,003	31%	
	Apr '22	189	44		60	104	13,013	80	6,011	19,024	32%	
	May '22	190	20		60	80	12,993	100	6,055	19,048	32%	
	Jun '22	191	19		60	79	12,987	100	6,090	19,077	32%	
2022/23	Jul '22	192	21		60	81	12,983	100	6,139	19,122	32%	
	Aug '22	193	14		60	74	12,961	110	6,214	19,175	32%	
	Sep '22	194	20		60	80	12,950	100	6,290	19,240	33%	
	Oct '22	195	30		60	90	12,958	90	6,371	19,329	33%	
	Nov '22	196	34		60	94	12,962	90	6,456	19,418	33%	
	Dec '22	197	120		60	180	13,035	0	6,451	19,486	33%	
	Jan '23	198	88		60	148	13,108	30	6,481	19,589	33%	
	Feb '23	199	84		60	144	13,167	40	6,521	19,688	33%	
	Mar '23	200	69		60	129	13,222	50	6,571	19,793	33%	
	Apr '23	201	44		60	104	13,266	80	6,651	19,917	33%	
	May '23	202	20		60	80	13,286	100	6,751	20,037	34%	
	Jun '23	203	19		60	79	13,305	100	6,851	20,156	34%	
2023/24	Jul '23	204	21		60	81	13,326	100	6,951	20,277	34%	
	Aug '23	205	14		60	74	13,340	110	7,061	20,401	35%	
	Sep '23	206	20		60	80	13,336	100	7,054	20,390	35%	
	Oct '23	207	30		60	90	13,346	90	7,027	20,373	34%	
	Nov '23	208	34		60	94	13,363	90	7,028	20,391	34%	
	Dec '23	209	120		60	180	13,478	0	6,943	20,421	34%	
	Jan '24	210	88		60	148	13,550	30	6,834	20,384	34%	
	Feb '24	211	84		60	144	13,572	40	6,754	20,326	33%	
	Mar '24	212	69		60	129	13,591	50	6,757	20,348	33%	
	Apr '24	213	44		60	104	13,635	80	6,837	20,472	33%	
	May '24	214	20		60	80	13,632	100	6,769	20,401	33%	
	Jun '24	215	19		60	79	13,639	100	6,815	20,454	33%	

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
2024/25	Jul '24	216	21		60	81	13,649	100	6,915	20,564	34%	PLANNED
	Aug '24	217	14		60	74	13,663	110	7,025	20,688	34%	
	Sep '24	218	20		60	80	13,683	100	7,125	20,808	34%	
	Oct '24	219	30		60	90	13,713	90	7,215	20,928	34%	
	Nov '24	220	34		60	94	13,747	90	7,305	21,052	35%	
	Dec '24	221	120		60	180	13,519	0	7,305	20,824	35%	
	Jan '25	222	88		60	148	13,603	30	7,335	20,938	35%	
	Feb '25	223	84		60	144	13,622	40	7,322	20,944	35%	
	Mar '25	224	69		60	129	13,620	50	7,217	20,837	35%	
	Apr '25	225	44		60	104	13,625	80	7,297	20,922	35%	
	May '25	226	20		60	80	13,645	100	7,397	21,042	35%	
	Jun '25	227	19		60	79	13,662	100	7,416	21,078	35%	
2025/26	Jul '25	228	21		60	81	13,596	100	7,431	21,027	35%	
	Aug '25	229	14		60	74	13,595	110	7,378	20,973	35%	
	Sep '25	230	20		60	80	13,541	100	7,427	20,968	35%	
	Oct '25	231	30		60	90	13,507	90	7,452	20,959	36%	
	Nov '25	232	34		60	94	13,497	90	7,539	21,036	36%	
	Dec '25	233	120		60	180	13,473	0	7,538	21,011	36%	
	Jan '26	234	88		60	148	13,479	30	7,568	21,047	36%	
	Feb '26	235	84		60	144	13,522	40	7,608	21,130	36%	
	Mar '26	236	69		60	129	13,544	50	7,658	21,202	36%	
	Apr '26	237	44		60	104	13,539	80	7,738	21,277	36%	
	May '26	238	20		60	80	13,526	100	7,838	21,364	37%	
	Jun '26	239	19		60	79	13,525	100	7,938	21,463	37%	
2026/27	Jul '26	240	21		60	81	13,531	100	8,038	21,569	37%	
	Aug '26	241	14		60	74	13,544	110	8,148	21,692	38%	
	Sep '26	242	20		60	80	13,564	100	8,248	21,812	38%	
	Oct '26	243	30		60	90	13,593	90	8,338	21,931	38%	
	Nov '26	244	34		60	94	13,627	90	8,428	22,055	38%	
	Dec '26	245	120		60	180	13,431	0	8,428	21,859	39%	
	Jan '27	246	88		60	148	13,221	30	8,458	21,679	39%	
	Feb '27	247	84		60	144	13,134	40	8,490	21,624	39%	
	Mar '27	248	69		60	129	13,169	50	8,375	21,544	39%	
	Apr '27	249	44		60	104	13,190	80	8,356	21,546	39%	
	May '27	250	20		60	80	13,194	100	8,331	21,525	39%	
	Jun '27	251	19		60	79	12,931	100	8,421	21,353	39%	
2027/28	Jul '27	252	21		60	81	12,722	100	8,521	21,244	40%	
	Aug '27	253	14		60	74	12,636	110	8,618	21,255	41%	
	Sep '27	254	20		60	80	12,640	100	8,667	21,308	41%	
	Oct '27	255	30		60	90	12,670	90	8,753	21,423	41%	
	Nov '27	256	34		60	94	12,700	90	8,843	21,543	41%	
	Dec '27	257	120		60	180	12,818	0	8,843	21,661	41%	
	Jan '28	258	88		60	148	12,790	30	8,873	21,664	41%	
	Feb '28	259	84		60	144	12,800	40	8,900	21,700	41%	
	Mar '28	260	69		60	129	12,800	50	8,900	21,700	41%	
	Apr '28	261	44		60	104	12,800	80	8,900	21,700	41%	
	May '28	262	20		60	80	12,800	100	8,900	21,700	41%	
	Jun '28	263	19		60	79	12,800	100	8,900	21,700	41%	

Notes:

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

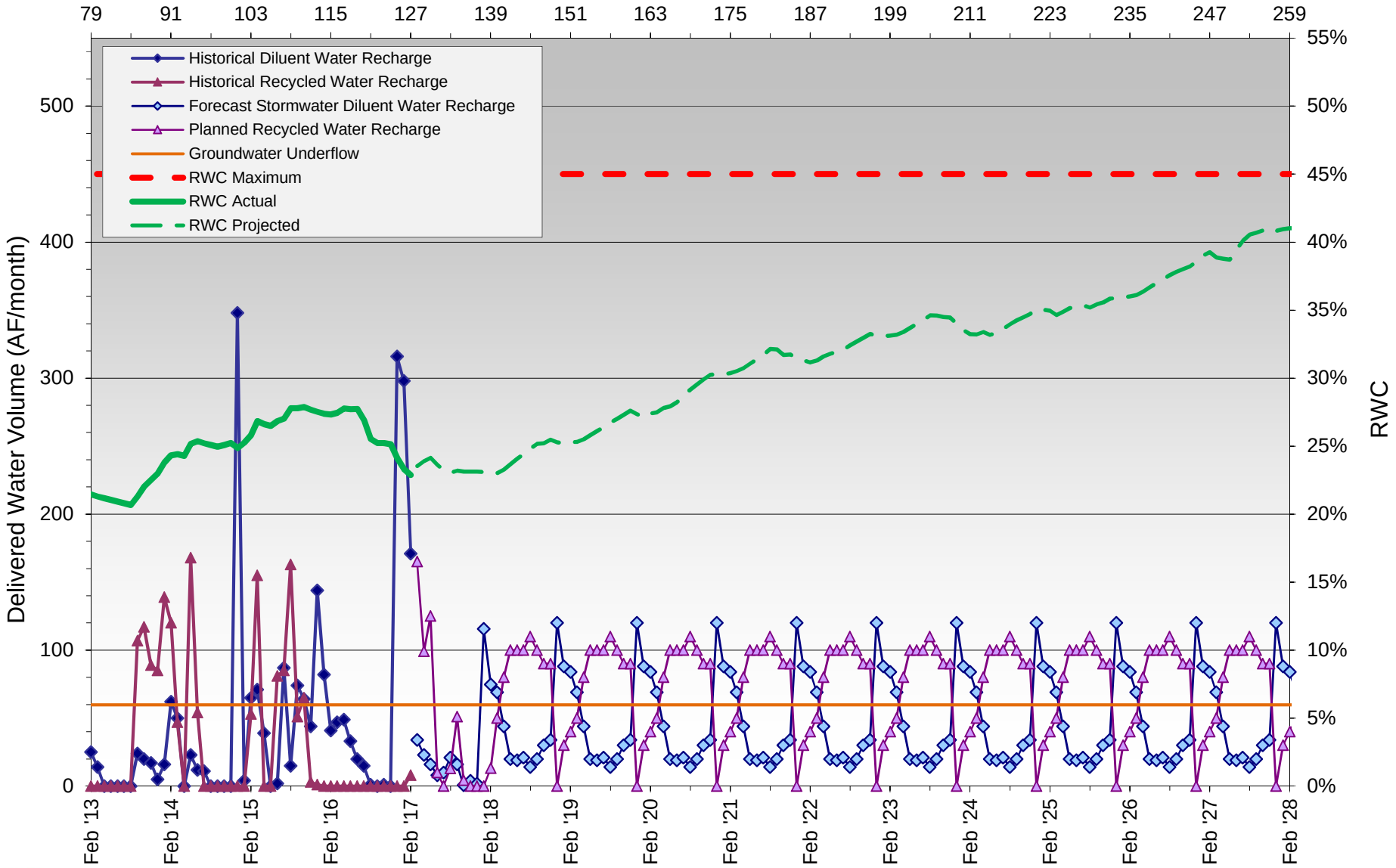
RW = Recycled Water

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

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

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

RWC Management Plan - Turner Basin Cells 3 & 4



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
2012/13	Jul '12	22	3	0	139	142	5,957	94	1,532	7,489	20%	
	Aug '12	23	5	0	139	144	6,101	118	1,650	7,751	21%	
	Sep '12	24	1	0	139	140	6,241	55	1,705	7,946	21%	
	Oct '12	25	1	0	139	140	6,381	131	1,836	8,217	22%	
	Nov '12	26	6	0	139	145	6,526	71	1,907	8,433	23%	
	Dec '12	27	19	0	139	158	6,684	21	1,928	8,612	22%	
	Jan '13	28	35	0	139	174	6,858	12	1,940	8,798	22%	
	Feb '13	29	10	0	139	149	7,007	10	1,950	8,957	22%	
	Mar '13	30	7	0	139	146	7,153	57	2,007	9,160	22%	
	Apr '13	31	1	0	139	140	7,293	98	2,105	9,398	22%	
	May '13	32	5	0	139	144	7,437	93	2,198	9,635	23%	
	Jun '13	33	1	0	139	140	7,577	82	2,280	9,857	23%	
2013/14	Jul '13	34	2	0	139	141	7,718	74	2,354	10,072	23%	HISTORICAL
	Aug '13	35	2	0	139	141	7,858	42	2,396	10,254	23%	
	Sep '13	36	2	0	139	141	7,999	46	2,442	10,441	23%	
	Oct '13	37	7	0	139	146	8,145	0	2,442	10,587	23%	
	Nov '13	38	12	0	139	151	8,296	0	2,442	10,738	23%	
	Dec '13	39	10	0	139	149	8,445	118	2,560	11,005	23%	
	Jan '14	40	2	0	139	141	8,586	158	2,718	11,304	24%	
	Feb '14	41	37	0	139	176	8,762	191	2,909	11,671	25%	
	Mar '14	42	99	0	139	238	9,000	142	3,051	12,051	25%	
	Apr '14	43	15	0	139	154	9,154	250	3,301	12,455	27%	
	May '14	44	2	0	139	141	9,295	214	3,515	12,810	27%	
	Jun '14	45	2	0	139	141	9,436	144	3,659	13,095	28%	
2014/15	Jul '14	46	2	0	139	141	9,577	91	3,750	13,327	28%	
	Aug '14	47	5	0	139	144	9,721	107	3,857	13,578	28%	
	Sep '14	48	2	0	139	141	9,862	155	4,012	13,874	29%	
	Oct '14	49	3	0	139	142	10,004	75	4,087	14,091	29%	
	Nov '14	50	57	0	139	196	10,200	4	4,091	14,291	29%	
	Dec '14	51	153	0	139	292	10,492	0	4,091	14,583	28%	
	Jan '15	52	18	0	139	157	10,649	63	4,154	14,803	28%	
	Feb '15	53	40	0	139	179	10,828	57	4,211	15,039	28%	
	Mar '15	54	12	0	139	151	10,979	79	4,290	15,269	28%	
	Apr '15	55	0	0	139	139	11,059	127	4,417	15,476	29%	
	May '15	56	13	0	139	152	11,184	141	4,558	15,742	29%	
	Jun '15	57	1	0	139	140	11,312	32	4,590	15,902	29%	
2015/16	Jul '15	58	4	0	139	143	11,455	139	4,729	16,184	29%	
	Aug '15	59	1	0	139	140	11,595	165	4,894	16,489	30%	
	Sep '15	60	37	0	139	176	11,771	136	5,030	16,801	30%	
	Oct '15	61	35	0	139	174	11,896	101	5,131	17,027	30%	
	Nov '15	62	0	0	139	139	12,035	34	5,165	17,200	30%	
	Dec '15	63	86	0	139	225	12,251	60	5,225	17,476	30%	
	Jan '16	64	87	0	139	226	12,451	0	5,225	17,676	30%	
	Feb '16	65	10	0	139	149	12,557	0	5,225	17,782	29%	
	Mar '16	66	79	0	139	218	12,665	0	5,225	17,890	29%	
	Apr '16	67	1	0	139	140	12,747	0	5,225	17,972	29%	
	May '16	68	2	0	139	141	12,859	0	5,225	18,084	29%	
	Jun '16	69	3	0	139	142	12,989	0	5,225	18,214	29%	
2016/17	Jul '16	70	0	0	139	139	13,119	0	5,225	18,344	28%	
	Aug '16	71	0	0	139	139	13,255	0	5,225	18,480	28%	
	Sep '16	72	0	0	139	139	13,391	53	5,278	18,669	28%	
	Oct '16	73	10	0	139	149	13,532	142	5,420	18,952	29%	
	Nov '16	74	24	7	139	170	13,698	218	5,638	19,336	29%	
	Dec '16	75	185	0	139	324	13,933	106	5,744	19,677	29%	
	Jan '17	76	327	0	278	605	14,523	0	5,744	20,267	28%	
	Feb '17	77	65	0	278	343	14,796	53	5,797	20,593	28%	
	Mar '17	78	18	0	278	296	15,084	219	6,016	21,100	29%	
	Apr '17	79	0	0	278	278	15,327	317	6,333	21,660	29%	
	May '17	80	13	0	278	291	15,611	312	6,645	22,256	30%	
	Jun '17	81	0	121	278	399	16,001	201	6,846	22,847	30%	
2017/18	Jul '17	82	0	235	278	513	16,515	140	6,986	23,501	30%	
	Aug '17	83	4	20	278	302	16,817	239	7,225	24,042	30%	
	Sep '17	84	0	130	278	408	17,220	167	7,392	24,612	30%	
	Oct '17	85	0	150	278	428	17,639	43	7,435	25,075	30%	
	Nov '17	86	0	0	278	278	17,868	40	7,476	25,344	29%	
	Dec '17	87	0	4	278	282	18,084	99	7,574	25,659	30%	
	Jan '18	88	57	35	278	370	18,275	7	7,581	25,856	29%	
	Feb '18	89	9	0	278	287	18,500	33	7,614	26,115	29%	
	Mar '18	90	35		278	313	18,811	160	7,774	26,586	29%	
	Apr '18	91	20		278	298	19,102	170	7,944	27,047	29%	
	May '18	92	12		278	290	19,346	180	8,124	27,471	30%	
	Jun '18	93	3		278	281	19,624	190	8,314	27,939	30%	

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
2018/19	Jul '18	94	2		278	280	19,901	190	8,504	28,406	30%	
	Aug '18	95	2		278	280	20,178	190	8,694	28,873	30%	
	Sep '18	96	4		278	282	20,458	190	8,884	29,343	30%	
	Oct '18	97	16		278	294	20,748	170	9,054	29,803	30%	
	Nov '18	98	20		278	298	21,011	170	9,224	30,236	31%	
	Dec '18	99	79		278	357	21,294	110	9,334	30,629	30%	
	Jan '19	100	73		278	351	21,630	120	9,454	31,085	30%	
	Feb '19	101	53		278	331	21,866	140	9,594	31,461	30%	
	Mar '19	102	35		278	313	22,166	160	9,754	31,921	31%	
	Apr '19	103	20		278	298	22,461	170	9,924	32,386	31%	
	May '19	104	12		278	290	22,748	180	10,104	32,853	31%	
	Jun '19	105	3		278	281	23,029	190	10,294	33,324	31%	
2019/20	Jul '19	106	2		278	280	23,308	190	10,484	33,793	31%	
	Aug '19	107	2		278	280	23,588	190	10,674	34,263	31%	
	Sep '19	108	4		278	282	23,870	190	10,864	34,735	31%	
	Oct '19	109	16		278	294	24,125	170	11,034	35,160	31%	
	Nov '19	110	20		278	298	24,404	170	11,204	35,609	31%	
	Dec '19	111	79		278	357	24,672	110	11,314	35,987	31%	
	Jan '20	112	73		278	351	24,870	120	11,434	36,305	31%	
	Feb '20	113	53		278	331	25,027	140	11,574	36,602	32%	
	Mar '20	114	35		278	313	25,340	160	11,734	37,075	32%	PLANNED
	Apr '20	115	20		278	298	25,618	170	11,904	37,523	32%	
	May '20	116	12		278	290	25,908	180	12,084	37,993	32%	
	Jun '20	117	3		278	281	26,188	190	12,274	38,463	32%	
2020/21	Jul '20	118	2		278	280	26,465	190	12,464	38,930	32%	
	Aug '20	119	2		278	280	26,743	190	12,654	39,398	32%	
	Sep '20	120	4		278	282	27,023	190	12,777	39,801	32%	
	Oct '20	121	16		278	294	27,163	170	12,794	39,958	32%	
	Nov '20	122	20		278	298	27,288	170	12,847	40,136	32%	
	Dec '20	123	79		278	357	27,264	110	12,915	40,180	32%	
	Jan '21	124	73		278	351	27,458	120	12,949	40,408	32%	
	Feb '21	125	53		278	331	27,579	140	13,022	40,601	32%	
	Mar '21	126	35		278	313	27,694	160	13,143	40,837	32%	
	Apr '21	127	20		278	298	27,848	170	13,313	41,161	32%	
	May '21	128	12		278	290	27,924	180	13,352	41,276	32%	
	Jun '21	129	3		278	281	28,063	190	13,481	41,544	32%	
2021/22	Jul '21	130	2		278	280	28,200	190	13,609	41,809	33%	
	Aug '21	131	2		278	280	28,217	190	13,747	41,965	33%	
	Sep '21	132	4		278	282	28,202	190	13,937	42,139	33%	
	Oct '21	133	16		278	294	28,327	170	14,107	42,434	33%	
	Nov '21	134	20		278	298	28,461	170	14,262	42,724	33%	
	Dec '21	135	79		278	357	28,670	110	14,347	43,018	33%	
	Jan '22	136	73		278	351	28,871	120	14,467	43,339	33%	
	Feb '22	137	53		278	331	29,059	140	14,607	43,667	33%	
	Mar '22	138	35		278	313	29,215	160	14,767	43,983	34%	
	Apr '22	139	20		278	298	29,278	170	14,919	44,198	34%	
	May '22	140	12		278	290	29,409	180	14,828	44,238	34%	
	Jun '22	141	3		278	281	29,549	190	14,796	44,345	33%	
2022/23	Jul '22	142	2		278	280	29,687	190	14,892	44,579	33%	
	Aug '22	143	2		278	280	29,823	190	14,964	44,787	33%	
	Sep '22	144	4		278	282	29,965	190	15,099	45,064	34%	
	Oct '22	145	16		278	294	30,119	170	15,138	45,257	33%	
	Nov '22	146	20		278	298	30,272	170	15,237	45,509	33%	
	Dec '22	147	79		278	357	30,471	110	15,326	45,797	33%	
	Jan '23	148	73		278	351	30,648	120	15,434	46,082	33%	
	Feb '23	149	53		278	331	30,830	140	15,564	46,394	34%	
	Mar '23	150	35		278	313	30,997	160	15,667	46,664	34%	
	Apr '23	151	20		278	298	31,155	170	15,739	46,894	34%	
	May '23	152	12		278	290	31,301	180	15,826	47,127	34%	
	Jun '23	153	3		278	281	31,442	190	15,934	47,376	34%	
2023/24	Jul '23	154	2		278	280	31,581	190	16,050	47,632	34%	
	Aug '23	155	2		278	280	31,720	190	16,198	47,919	34%	
	Sep '23	156	4		278	282	31,861	190	16,342	48,204	34%	
	Oct '23	157	16		278	294	32,009	170	16,512	48,522	34%	
	Nov '23	158	20		278	298	32,156	170	16,682	48,839	34%	
	Dec '23	159	79		278	357	32,364	110	16,674	49,039	34%	
	Jan '24	160	73		278	351	32,574	120	16,636	49,211	34%	
	Feb '24	161	53		278	331	32,729	140	16,585	49,315	34%	
	Mar '24	162	35		278	313	32,805	160	16,603	49,408	34%	
	Apr '24	163	20		278	298	32,949	170	16,523	49,472	33%	
	May '24	164	12		278	290	33,098	180	16,489	49,587	33%	
	Jun '24	165	3		278	281	33,238	190	16,535	49,773	33%	

RWC Management Plan for Victoria Basin

(120-month averaging period)

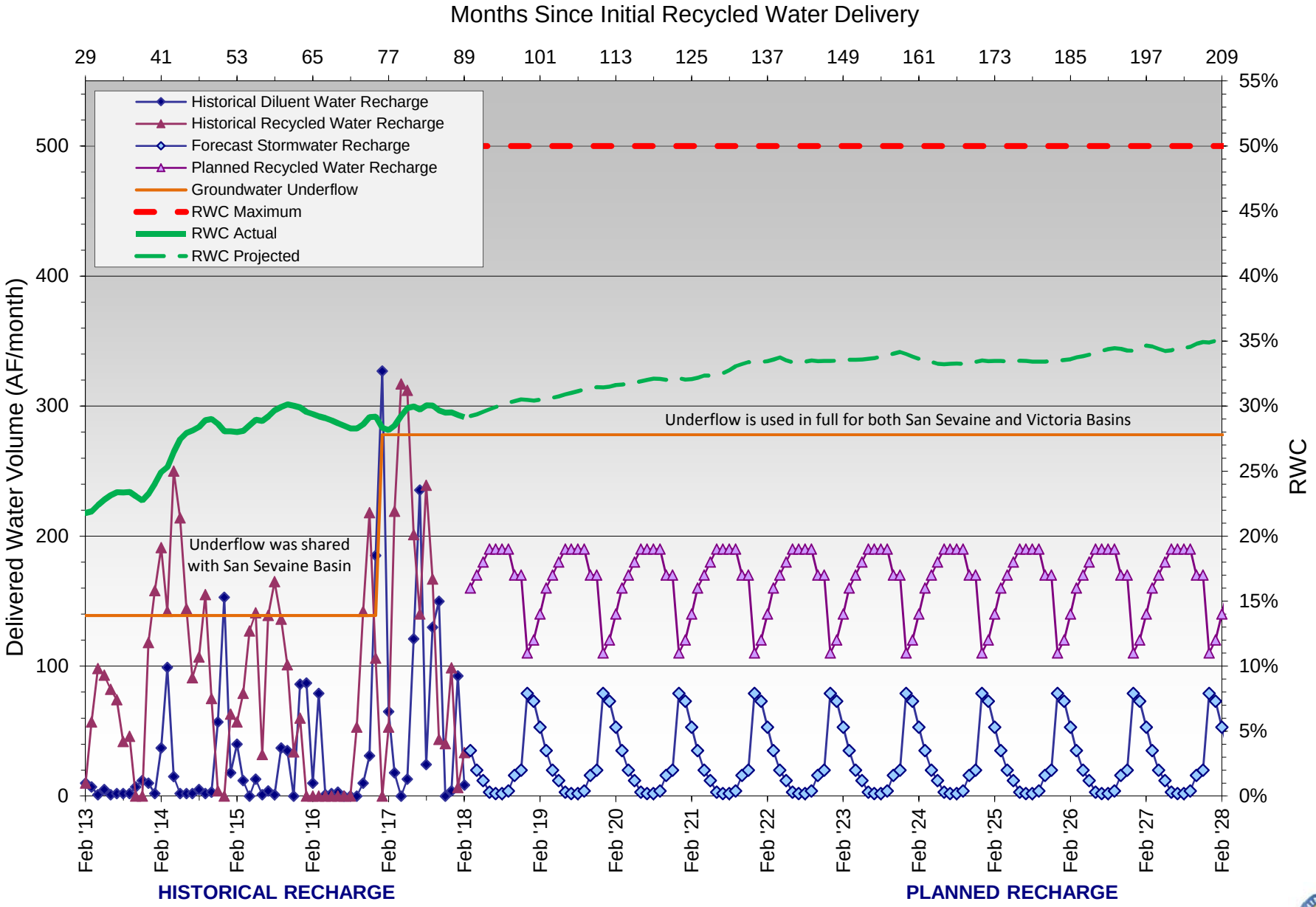
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

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
2024/25	Jul '24	166	2		278	280	33,377	190	16,634	50,011	33%	PLANNED
	Aug '24	167	2		278	280	33,513	190	16,717	50,230	33%	
	Sep '24	168	4		278	282	33,654	190	16,752	50,406	33%	
	Oct '24	169	16		278	294	33,806	170	16,847	50,653	33%	
	Nov '24	170	20		278	298	33,908	170	17,013	50,921	33%	
	Dec '24	171	79		278	357	33,973	110	17,123	51,096	34%	
	Jan '25	172	73		278	351	34,167	120	17,180	51,347	33%	
	Feb '25	173	53		278	331	34,319	140	17,263	51,582	33%	
	Mar '25	174	35		278	313	34,481	160	17,344	51,825	33%	
	Apr '25	175	20		278	298	34,640	170	17,387	52,028	33%	
	May '25	176	12		278	290	34,778	180	17,426	52,205	33%	
	Jun '25	177	3		278	281	34,919	190	17,584	52,504	33%	
2025/26	Jul '25	178	2		278	280	35,056	190	17,635	52,692	33%	
	Aug '25	179	2		278	280	35,196	190	17,660	52,857	33%	
	Sep '25	180	4		278	282	35,302	190	17,714	53,017	33%	
	Oct '25	181	16		278	294	35,422	170	17,783	53,206	33%	
	Nov '25	182	20		278	298	35,582	170	17,919	53,501	33%	
	Dec '25	183	79		278	357	35,714	110	17,969	53,683	33%	
	Jan '26	184	73		278	351	35,839	120	18,089	53,928	34%	
	Feb '26	185	53		278	331	36,021	140	18,229	54,250	34%	
	Mar '26	186	35		278	313	36,116	160	18,389	54,505	34%	
	Apr '26	187	20		278	298	36,274	170	18,559	54,833	34%	
	May '26	188	12		278	290	36,423	180	18,739	55,162	34%	
	Jun '26	189	3		278	281	36,562	190	18,929	55,491	34%	
2026/27	Jul '26	190	2		278	280	36,703	190	19,119	55,822	34%	
	Aug '26	191	2		278	280	36,844	190	19,309	56,153	34%	
	Sep '26	192	4		278	282	36,987	190	19,446	56,433	34%	
	Oct '26	193	16		278	294	37,132	170	19,474	56,606	34%	
	Nov '26	194	20		278	298	37,260	170	19,426	56,686	34%	
	Dec '26	195	79		278	357	37,293	110	19,430	56,724	34%	
	Jan '27	196	73		278	351	37,039	120	19,550	56,590	35%	
	Feb '27	197	53		278	331	37,027	140	19,637	56,665	35%	
	Mar '27	198	35		278	313	37,044	160	19,578	56,623	35%	
	Apr '27	199	20		278	298	37,064	170	19,431	56,496	34%	
	May '27	200	12		278	290	37,063	180	19,299	56,363	34%	
	Jun '27	201	3		278	281	36,945	190	19,288	56,234	34%	
2027/28	Jul '27	202	2		278	280	36,712	190	19,338	56,050	35%	
	Aug '27	203	2		278	280	36,689	190	19,289	55,979	34%	
	Sep '27	204	4		278	282	36,564	190	19,312	55,876	35%	
	Oct '27	205	16		278	294	36,430	170	19,439	55,869	35%	
	Nov '27	206	20		278	298	36,450	170	19,568	56,018	35%	
	Dec '27	207	79		278	357	36,525	110	19,580	56,105	35%	
	Jan '28	208	73		278	351	36,506	120	19,693	56,199	35%	
	Feb '28	209	53		278	331	36,550	140	19,800	56,350	35%	
	Mar '28	210	35		278	313	36,550	160	19,800	56,350	35%	
	Apr '28	211	20		278	298	36,550	170	19,800	56,350	35%	
	May '28	212	12		278	290	36,550	180	19,800	56,350	35%	
	Jun '28	213	3		278	281	36,550	190	19,800	56,350	35%	

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

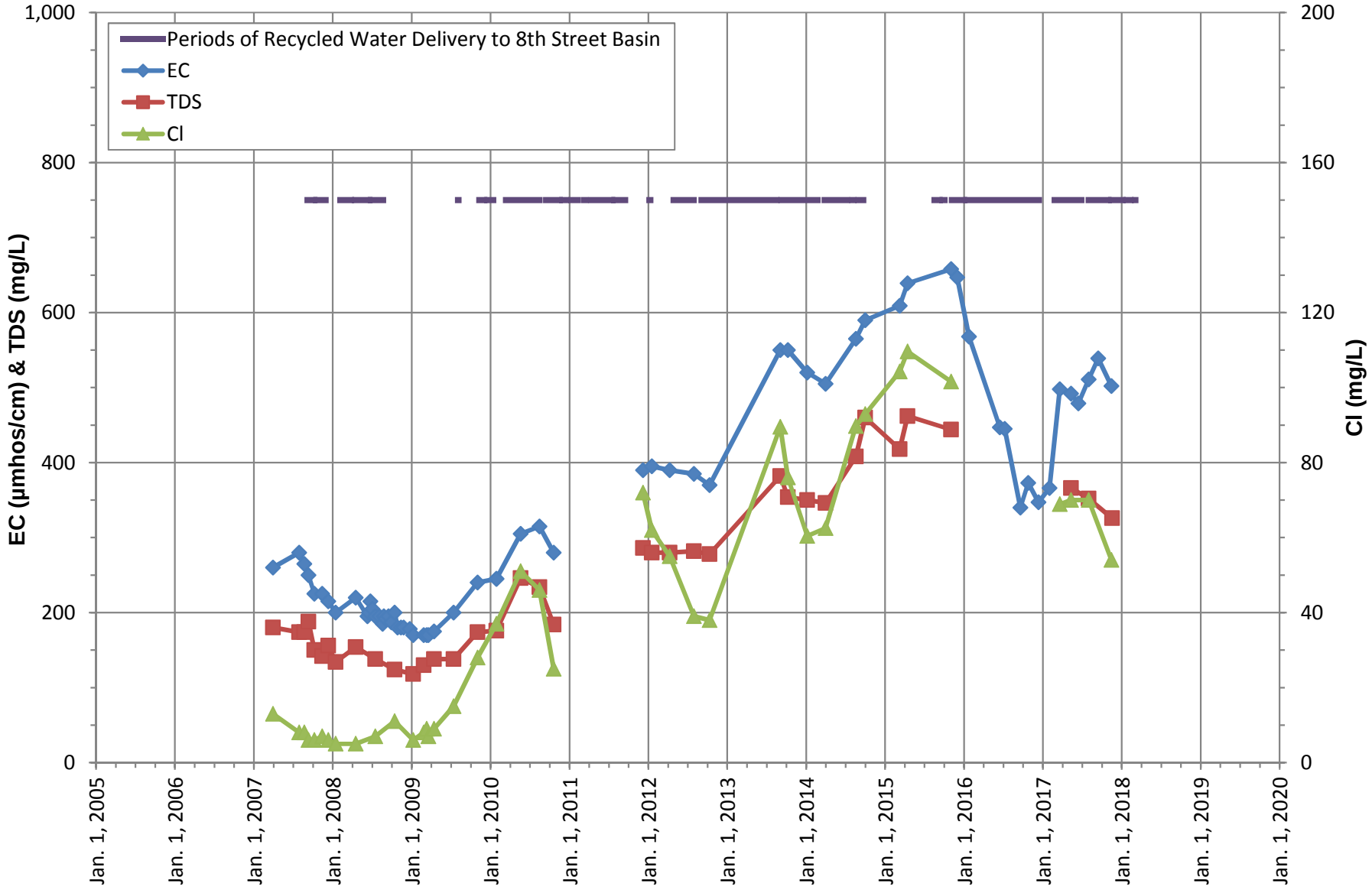
RWC Management Plan - Victoria Basin



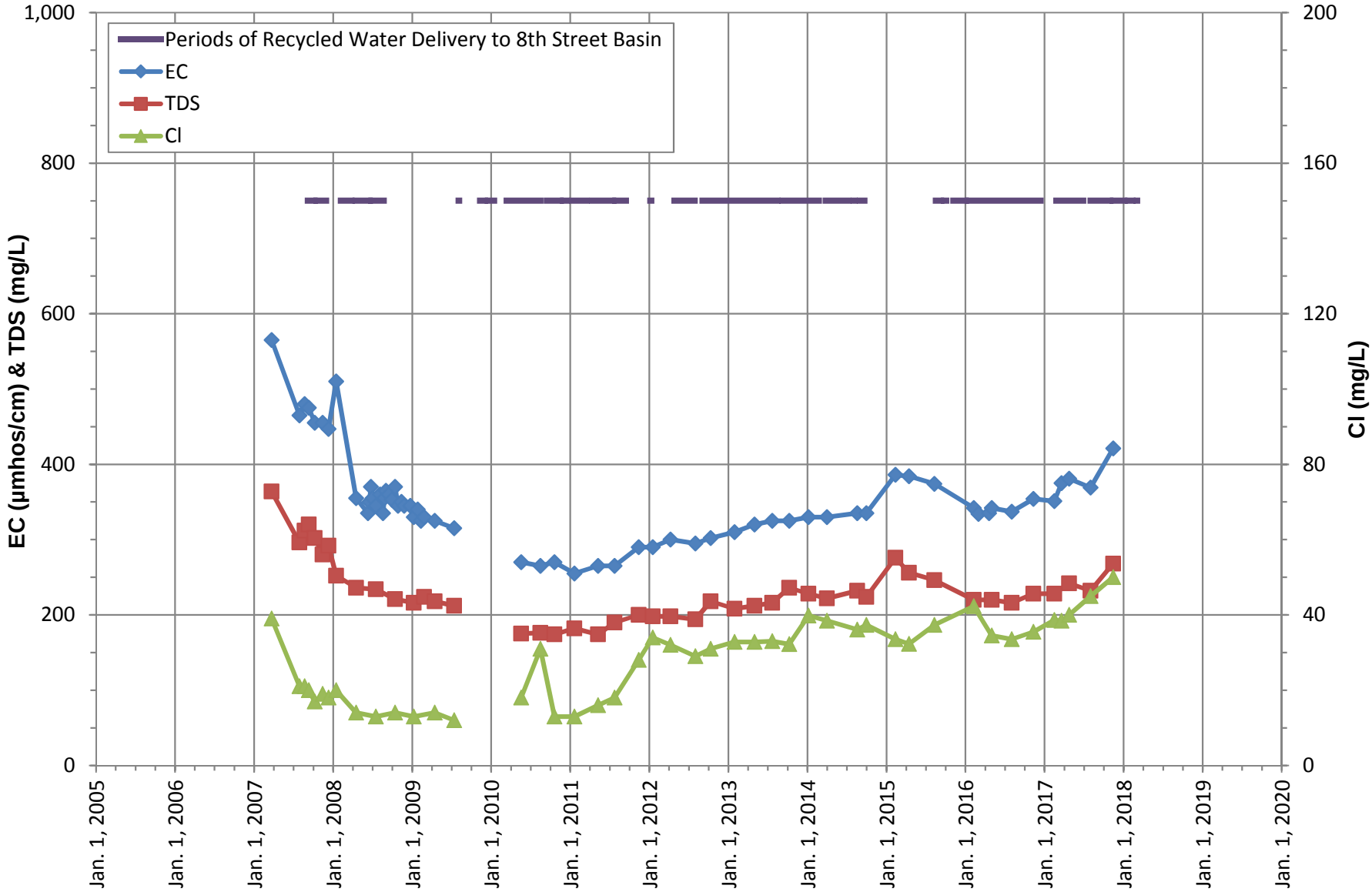
APPENDIX C

EVIDENCE FOR BLENDING:

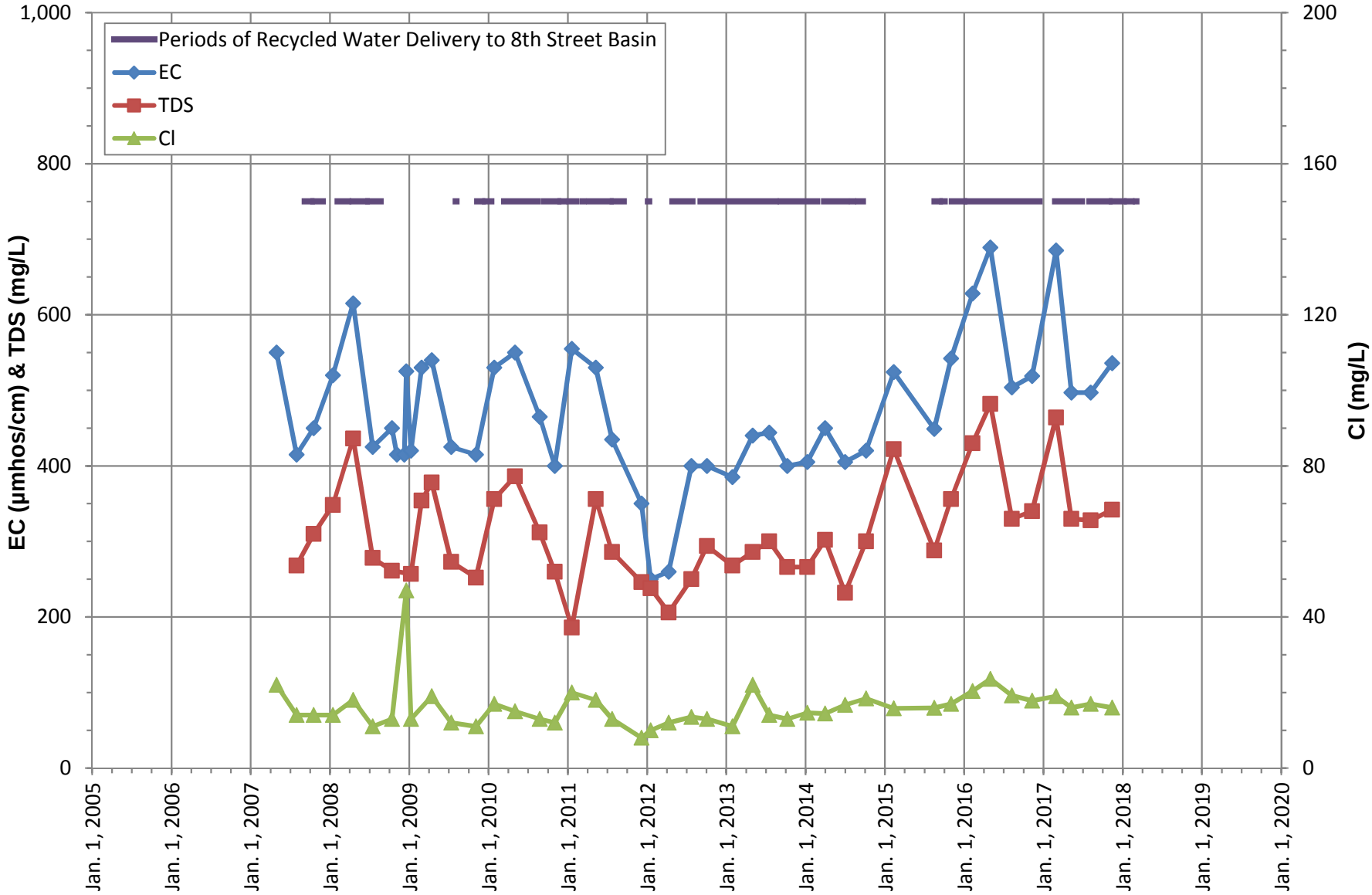
EC, TDS, CHLORIDE TIME-SERIES GRAPHS



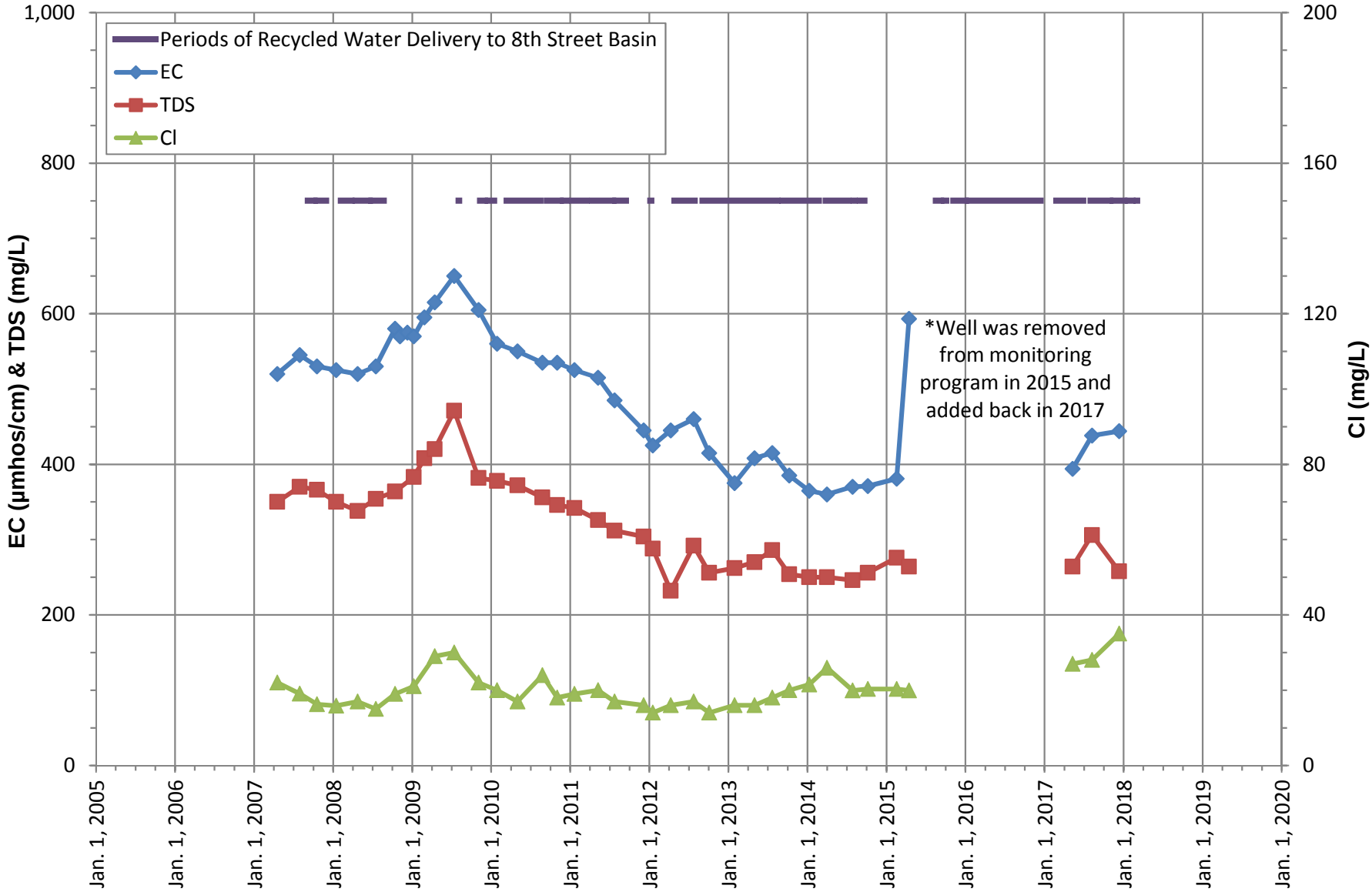
EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/1



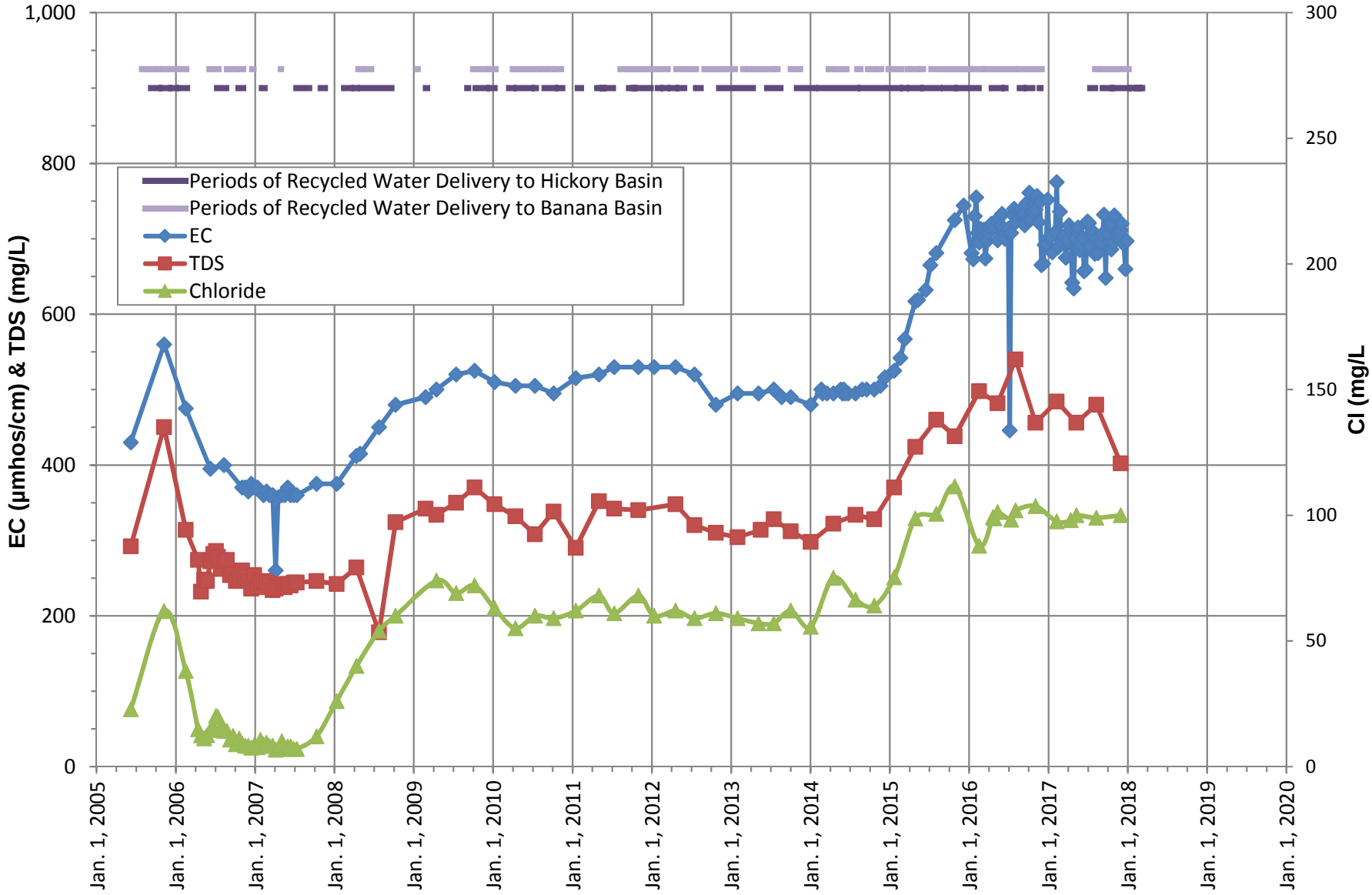
EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-1/2



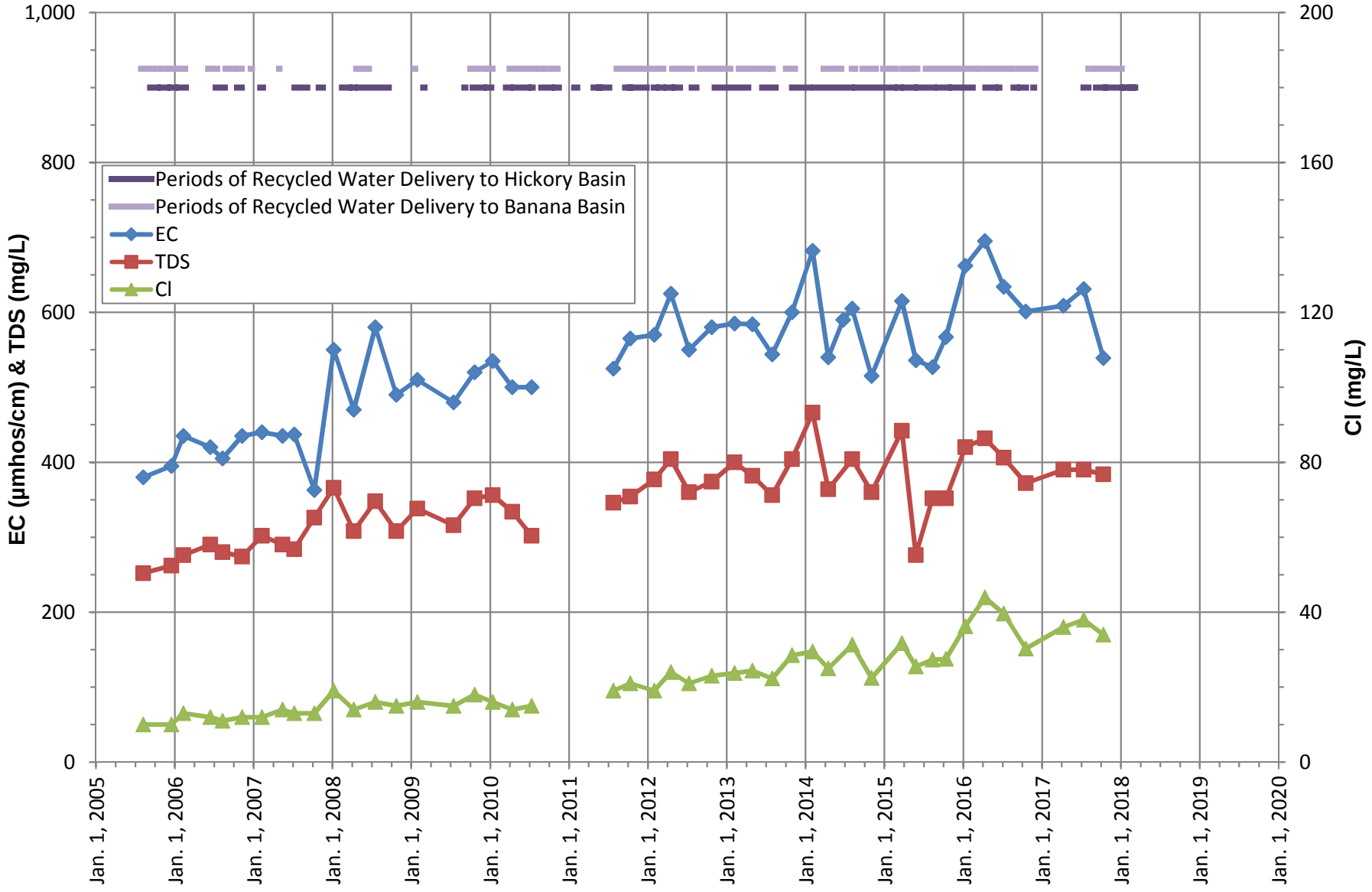
EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/1



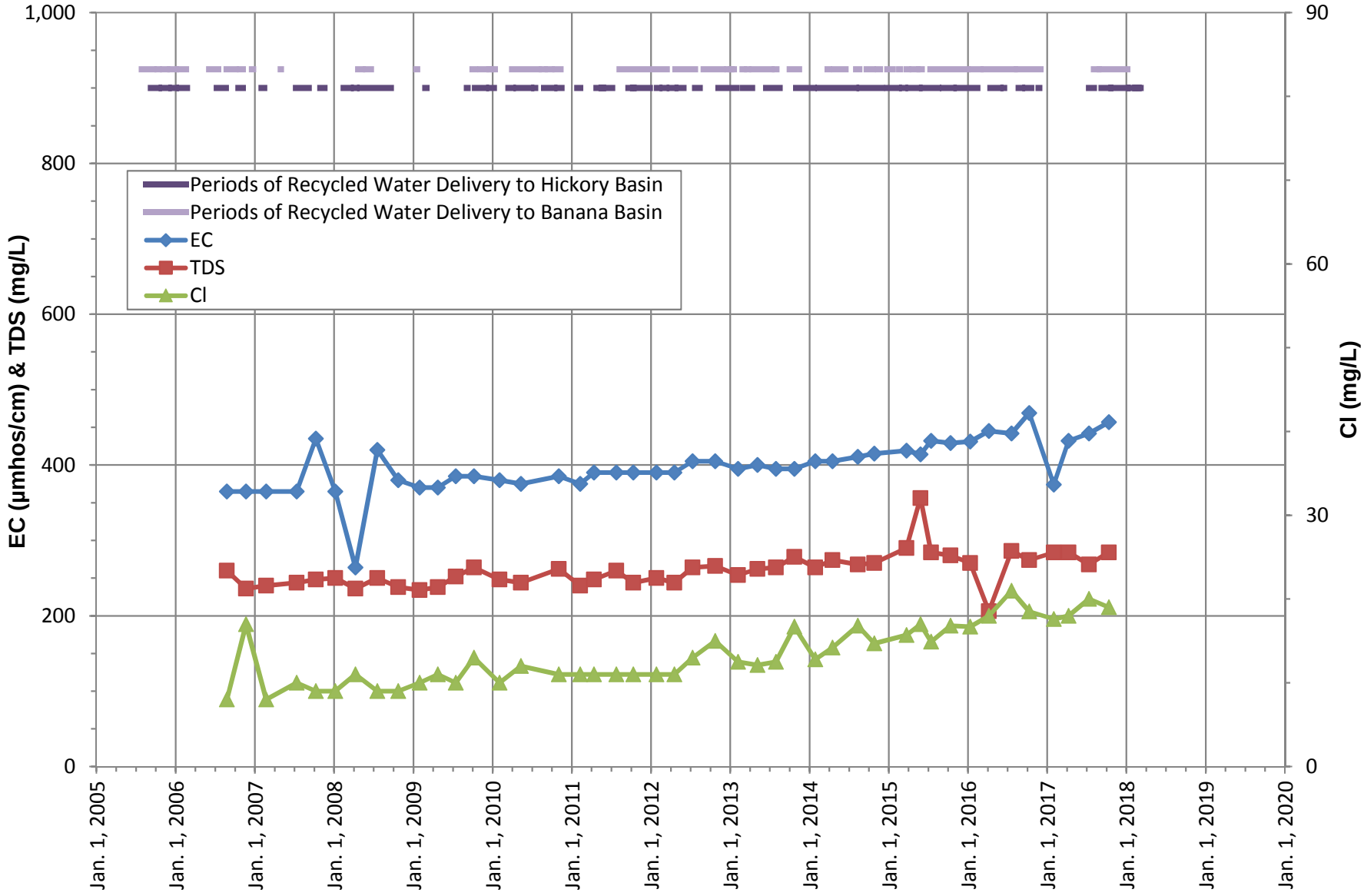
EC, TDS, CHLORIDE TRENDS
8TH STREET BASIN
MW 8TH-2/2



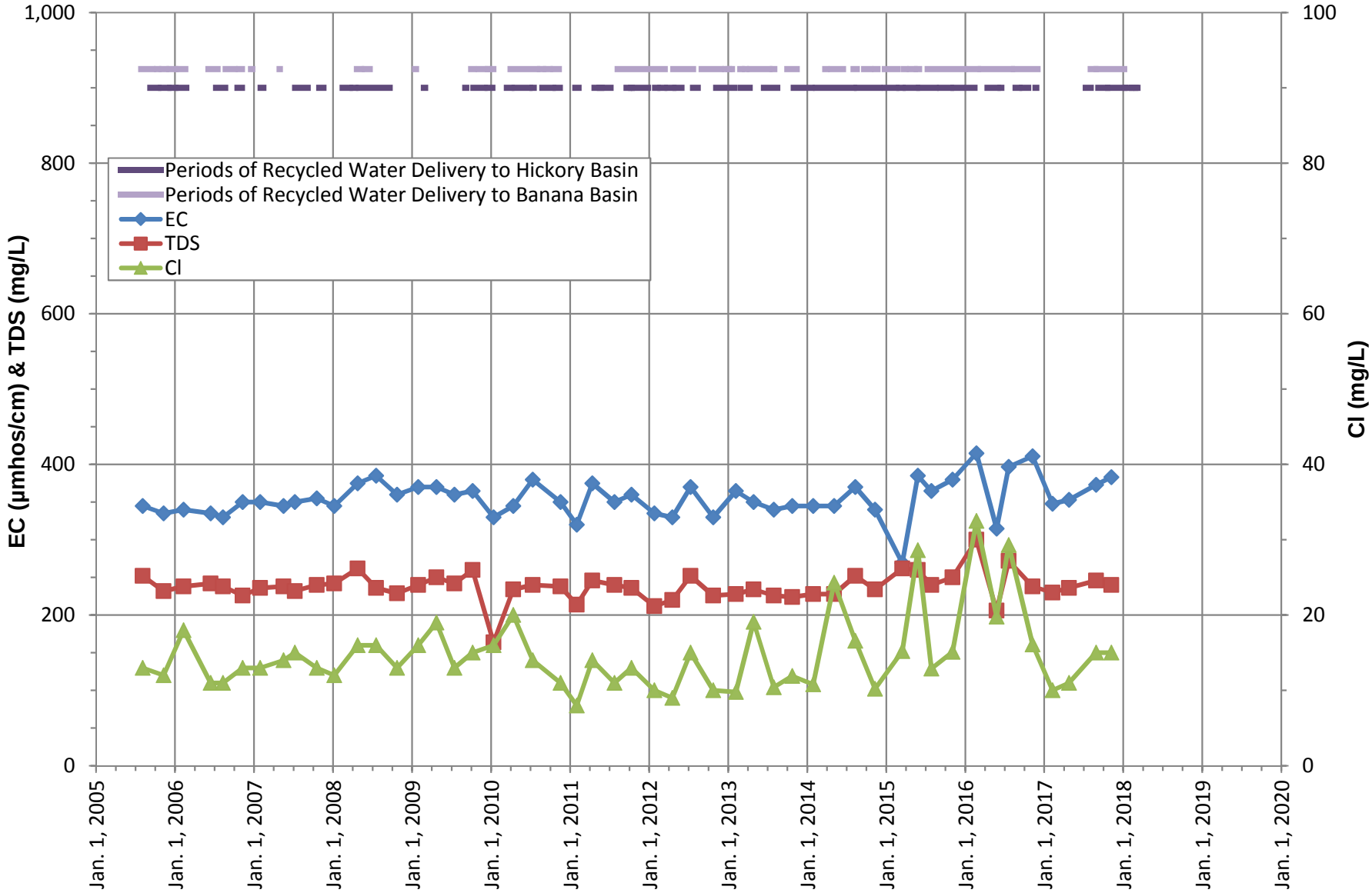
EC, TDS, CHLORIDE TRENDS
HICKORY BANANA BASINS
MW BH-1/2



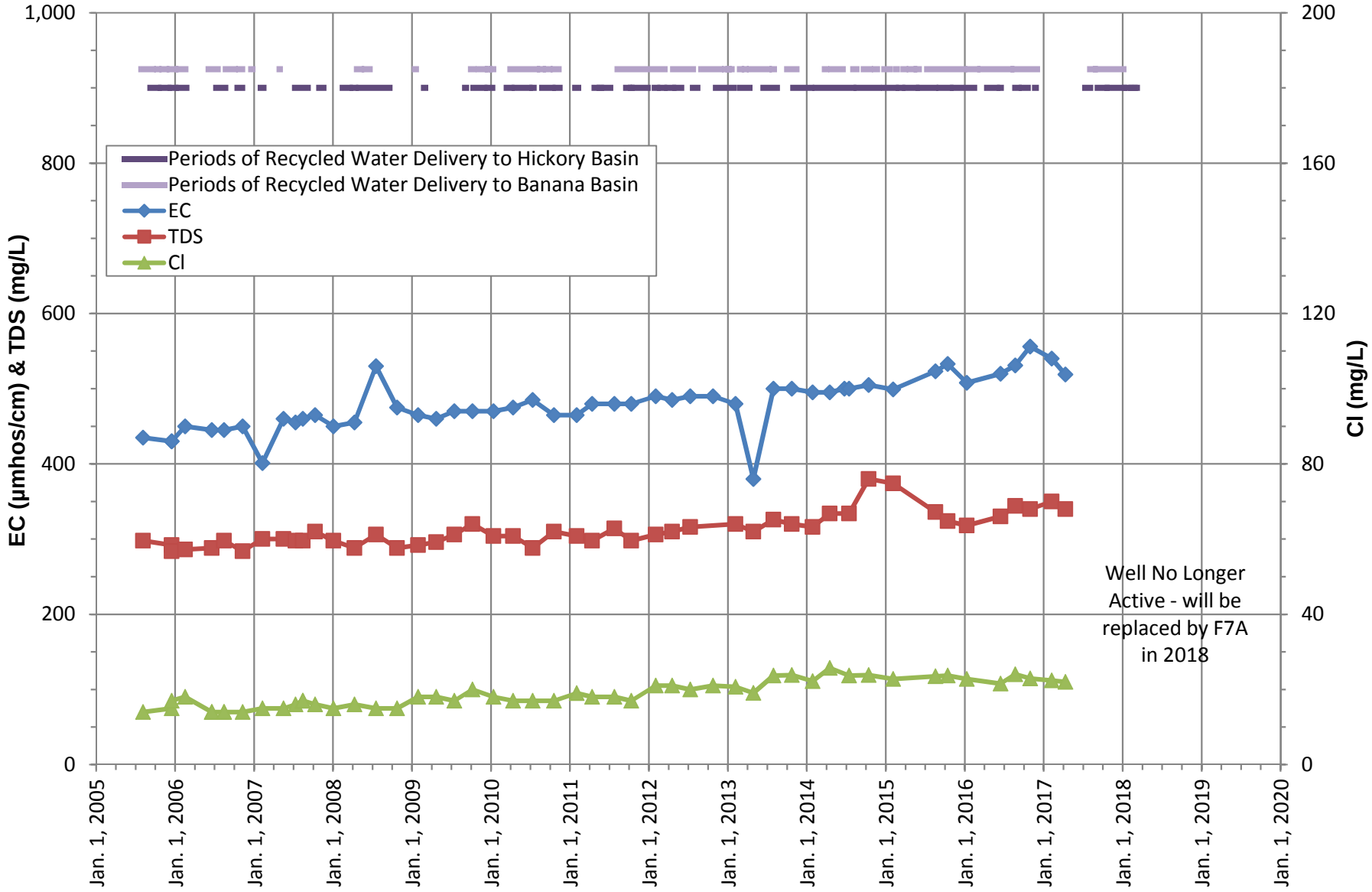
EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY INFIELD WELL



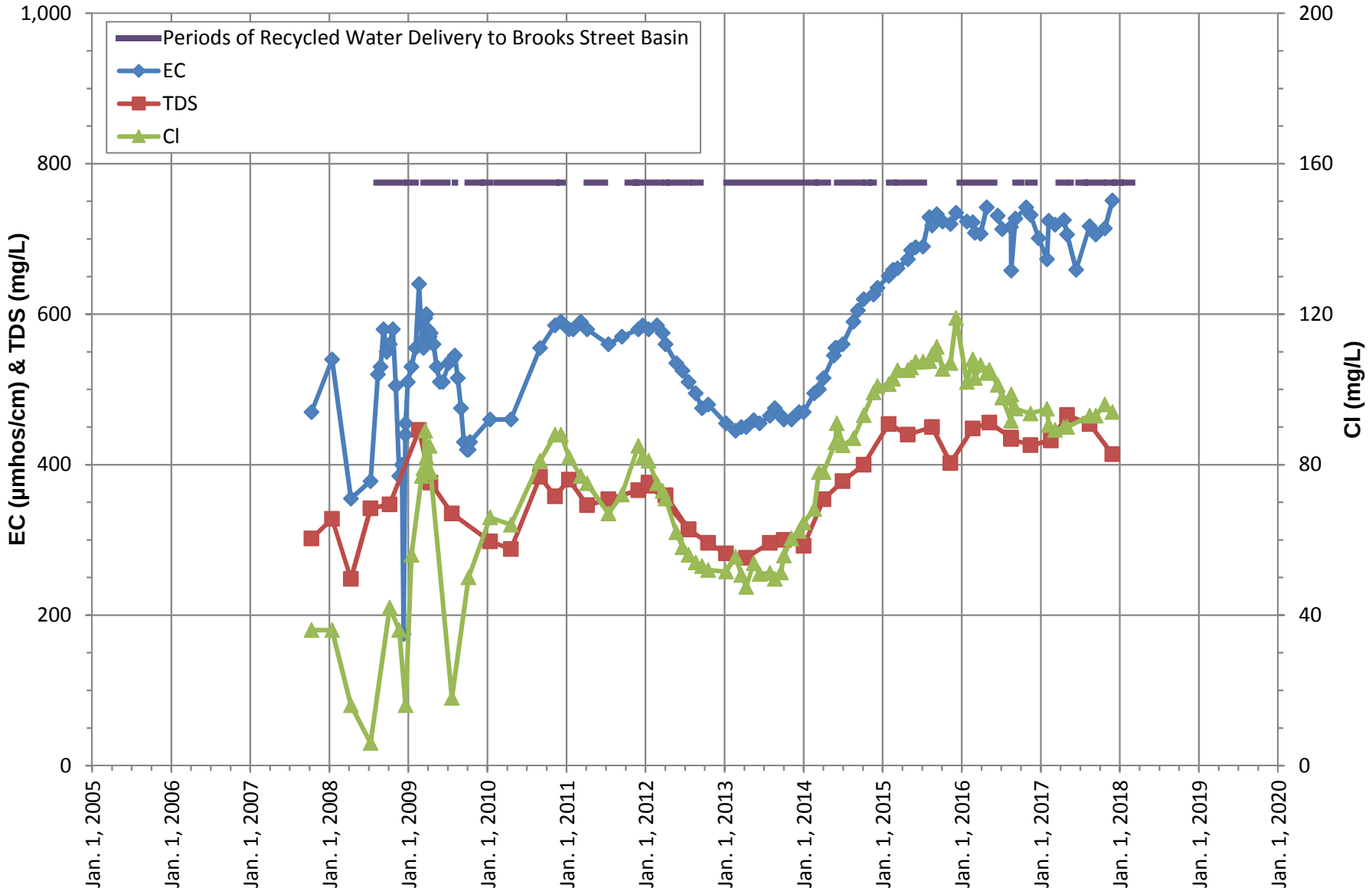
EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
CALIFORNIA SPEEDWAY NO. 2



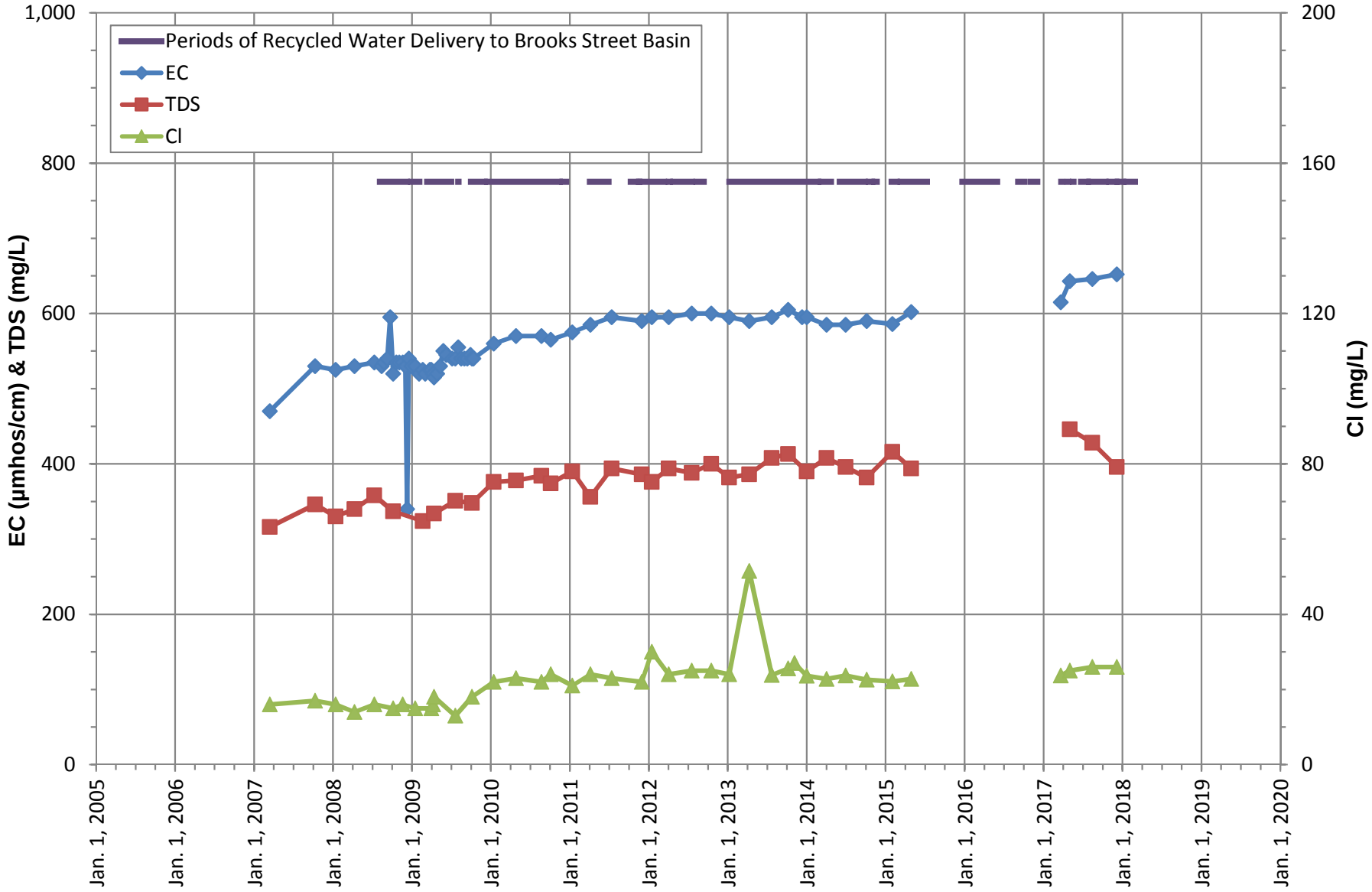
EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
RELIANT EAST WELL



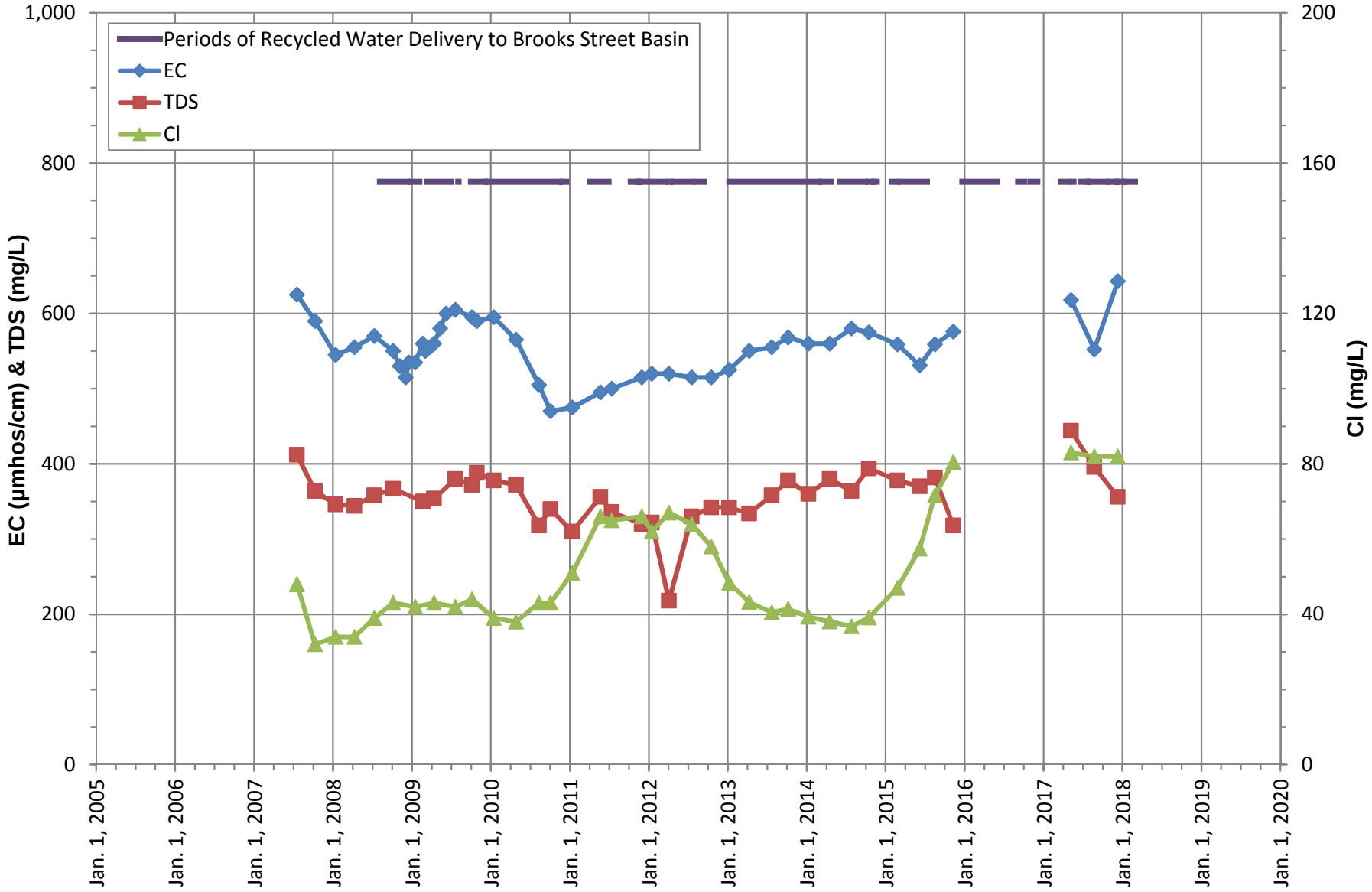
EC, TDS, CHLORIDE TRENDS
BANANA-HICKORY BASINS
FONTANA WATER CO. 37A



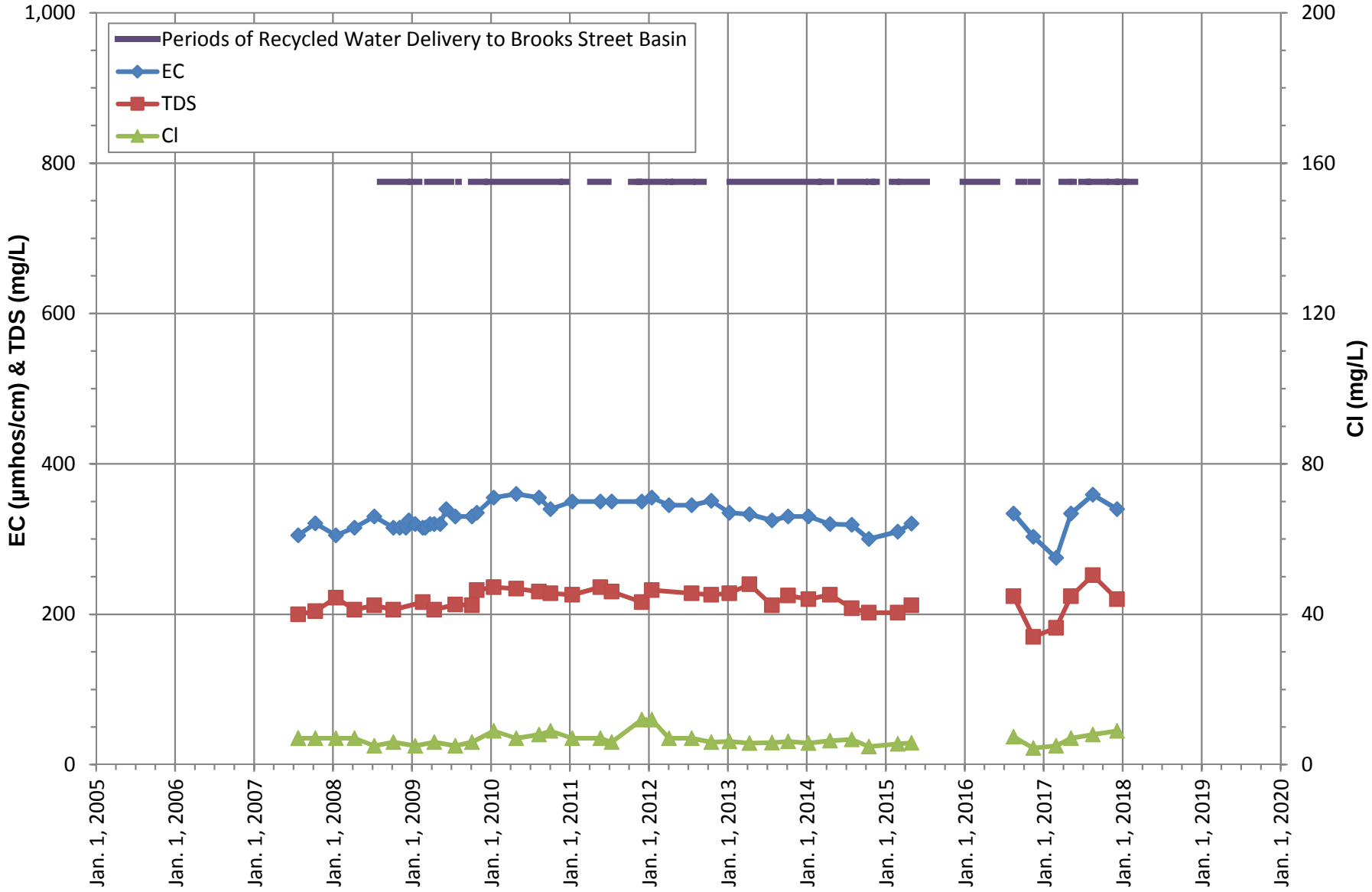
EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-1/1



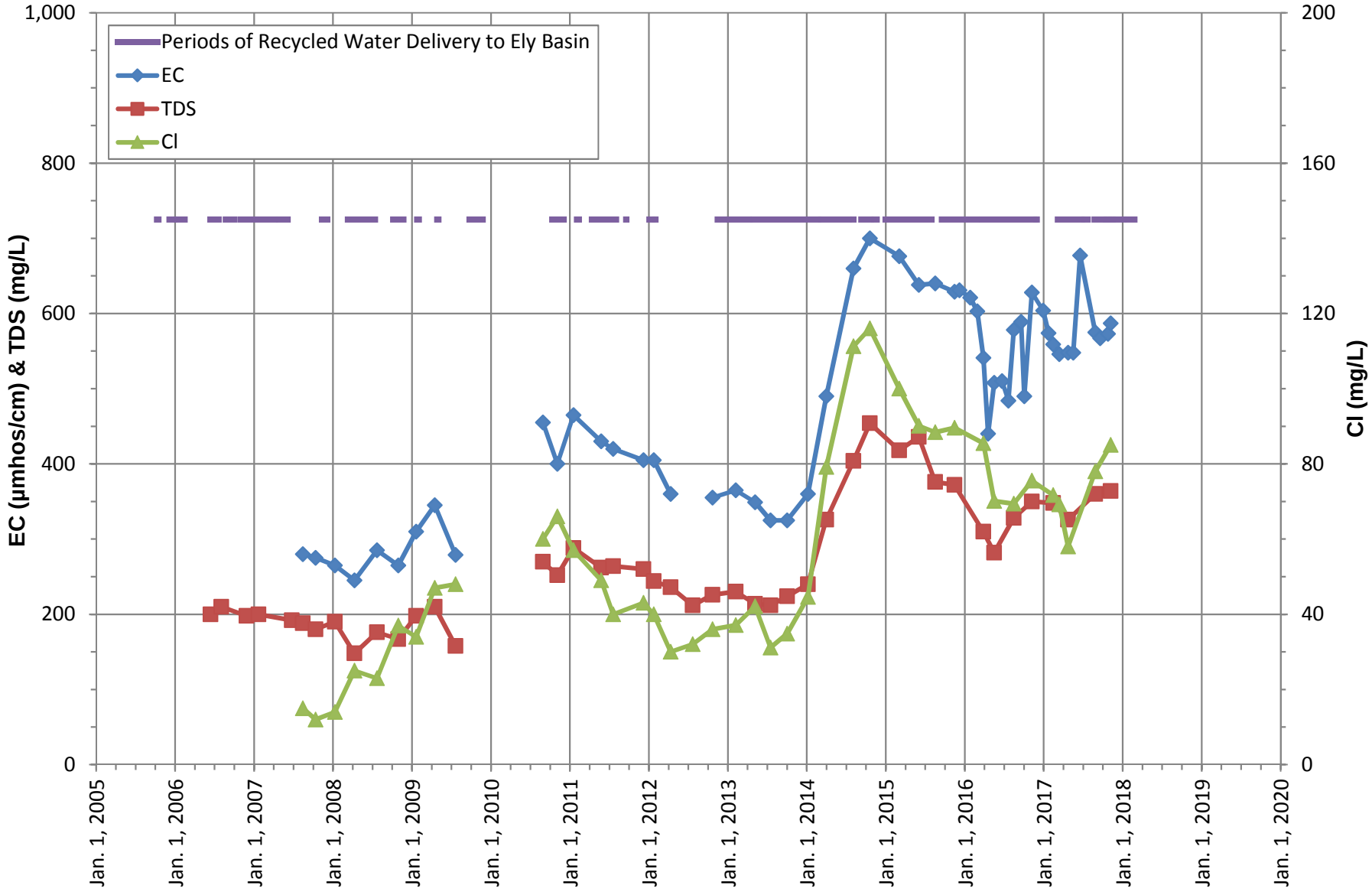
EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-1/2



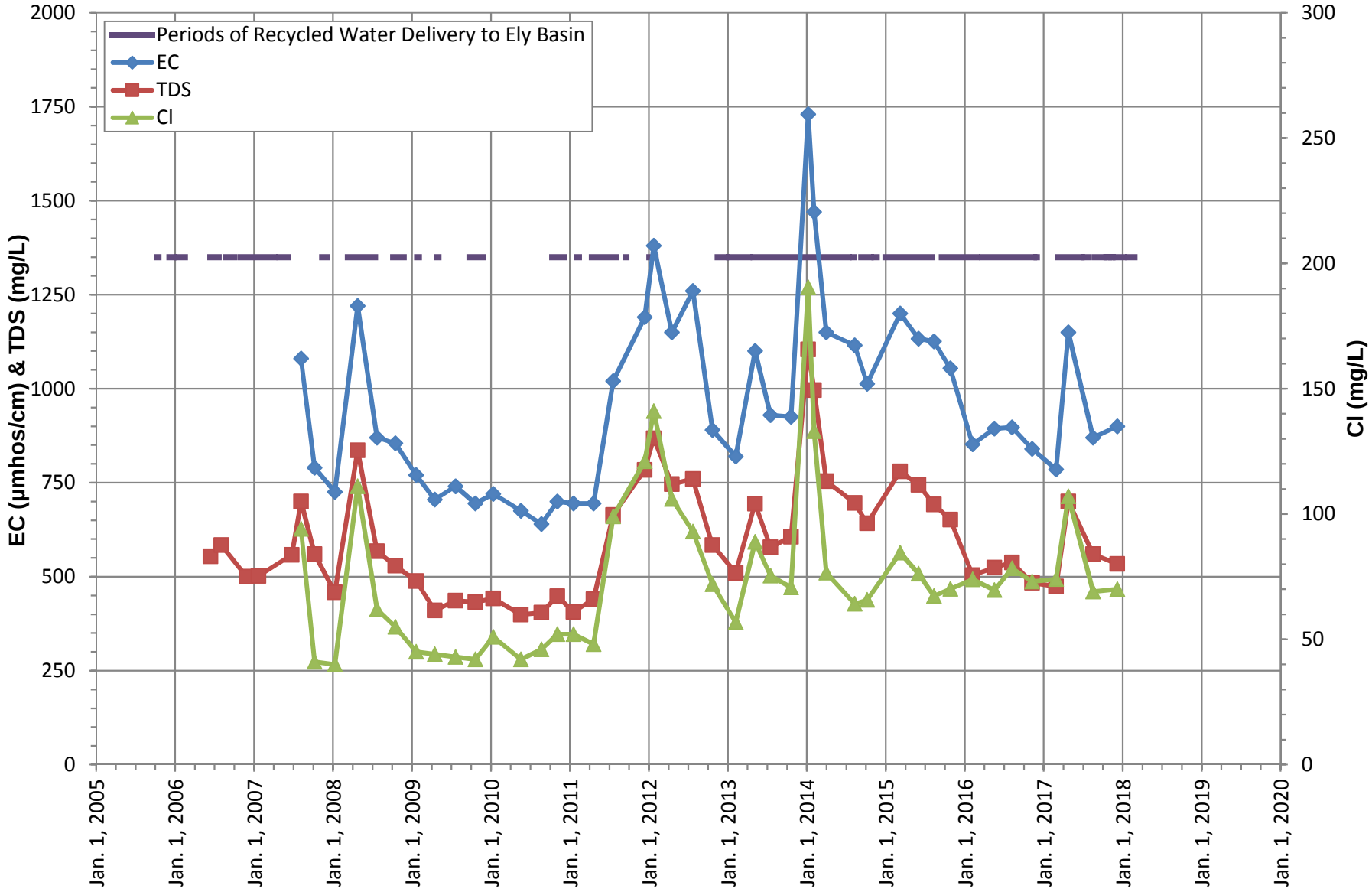
EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-2/1



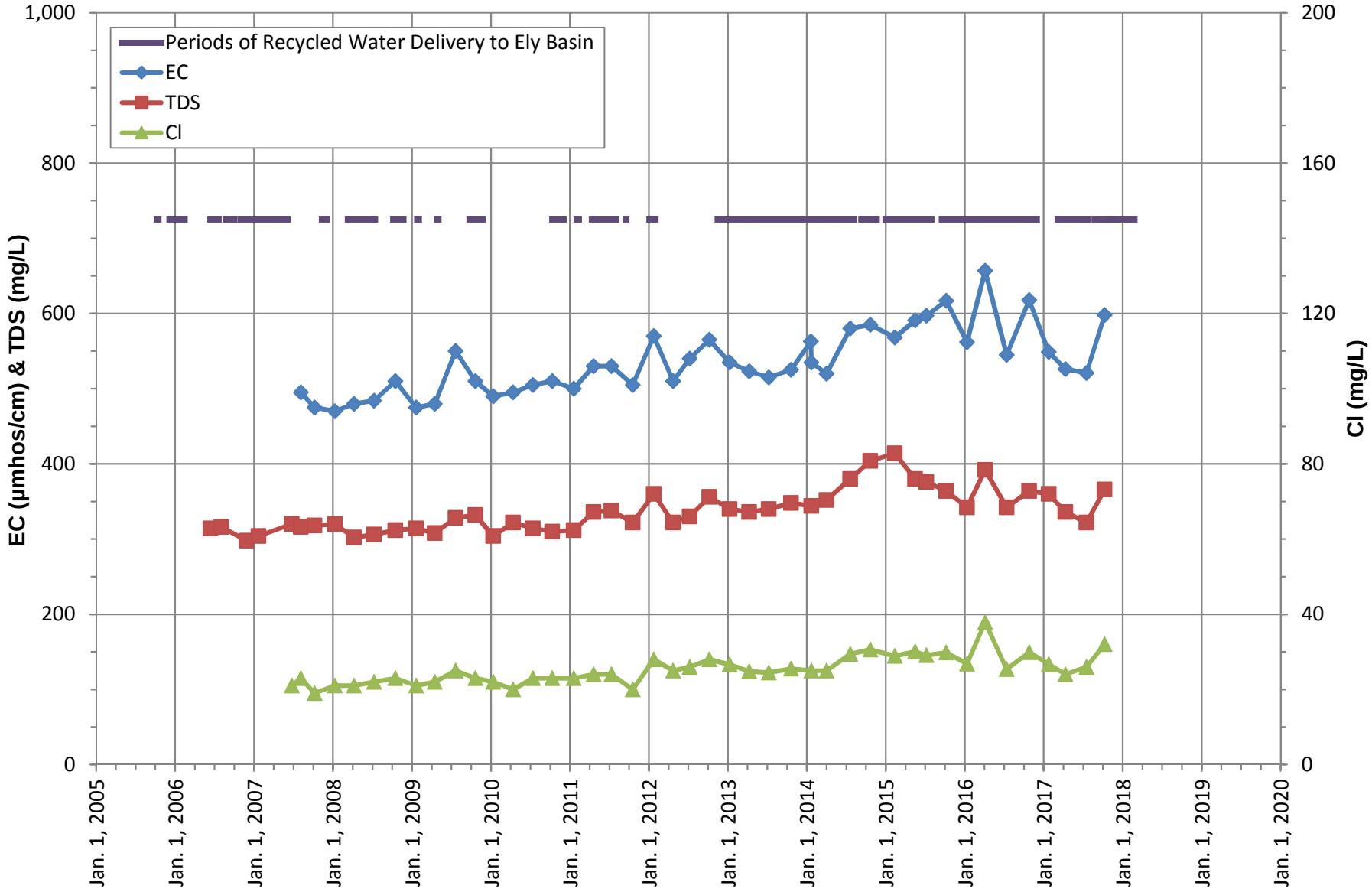
EC, TDS, CHLORIDE TRENDS
BROOKS STREET BASIN
MW BRK-2/2



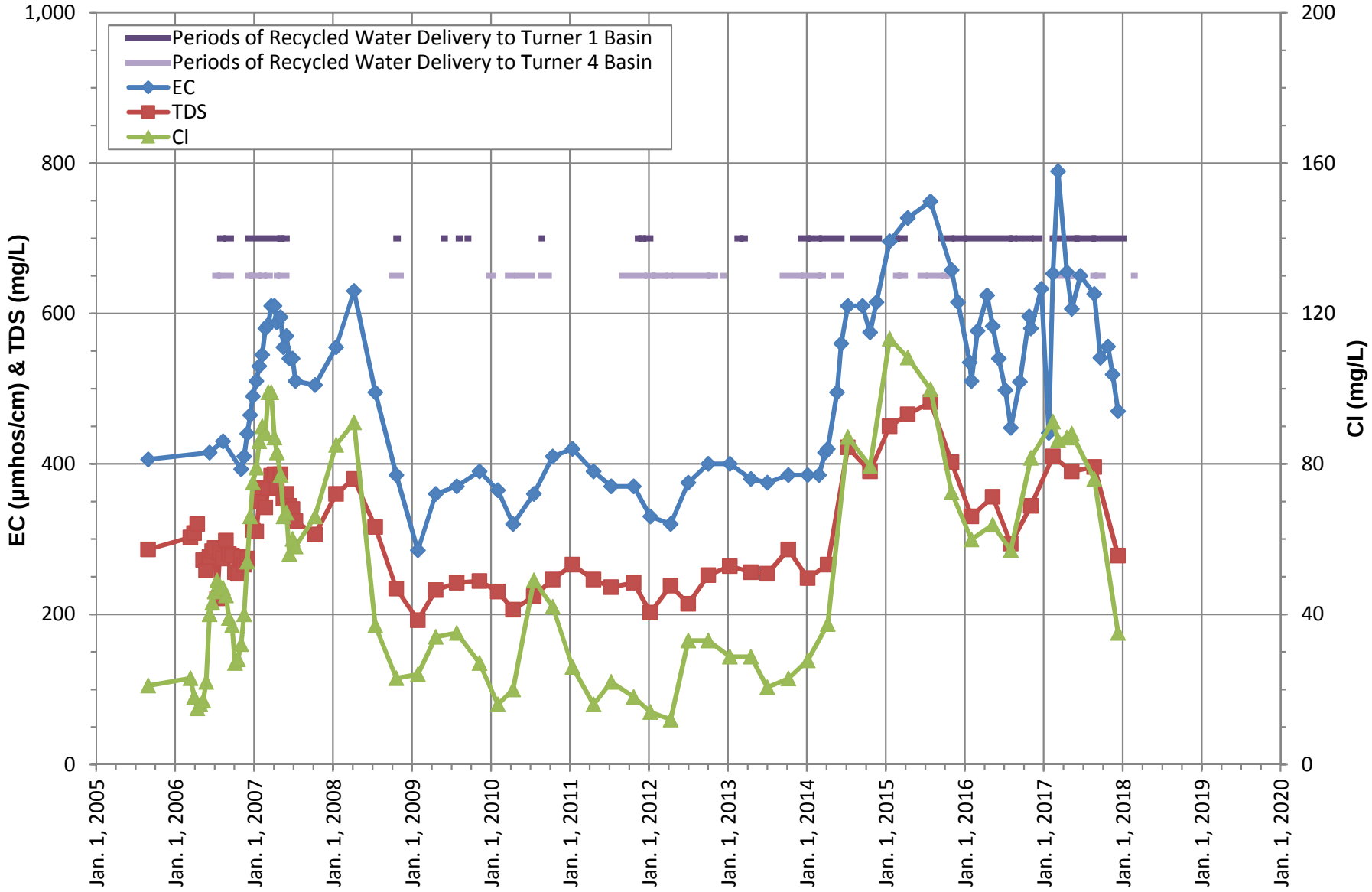
EC, TDS, CHLORIDE TRENDS
ELY BASIN
PHILADELPHIA WELL



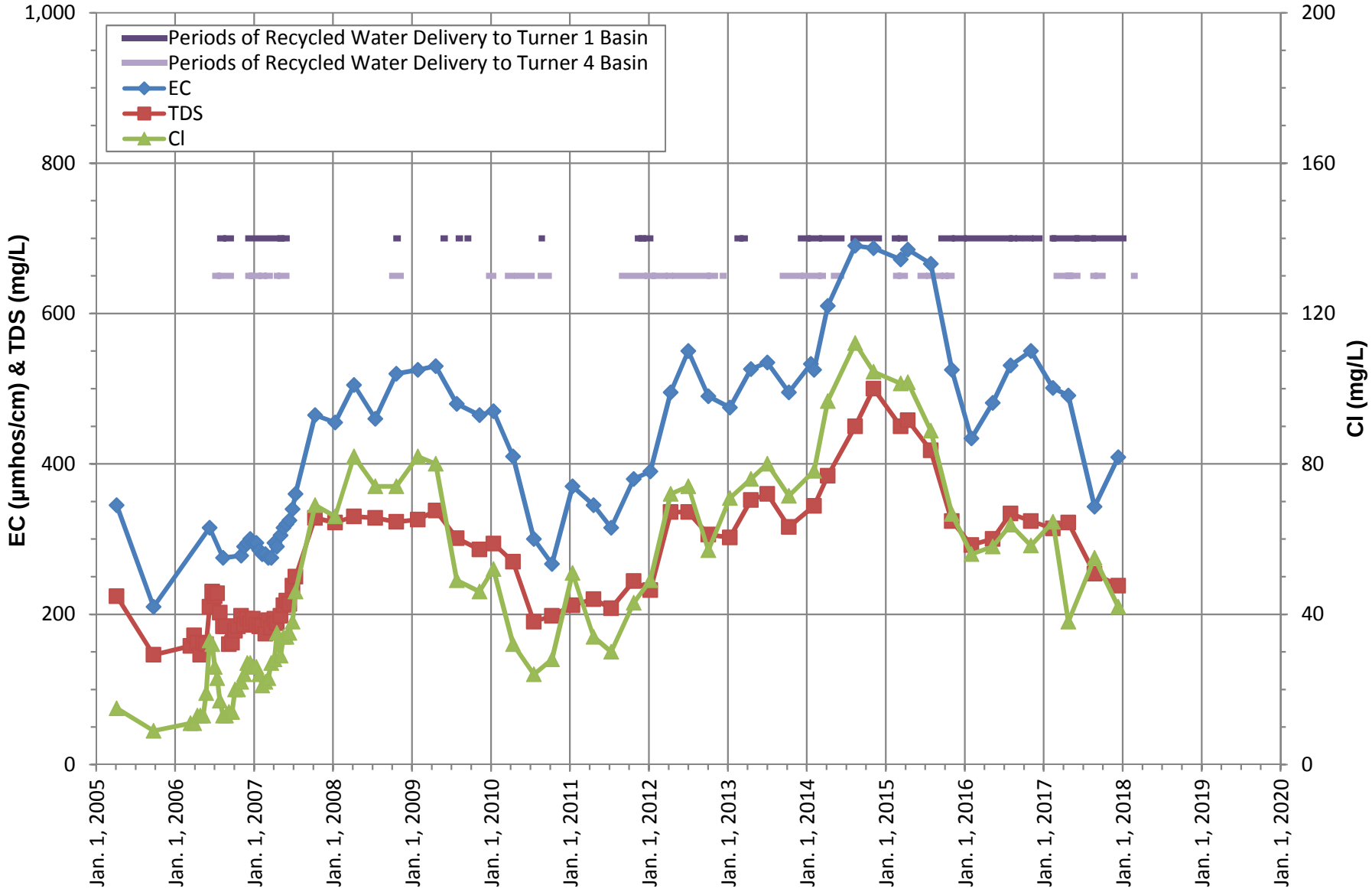
EC, TDS, CHLORIDE TRENDS
ELY BASIN
WALNUT WELL



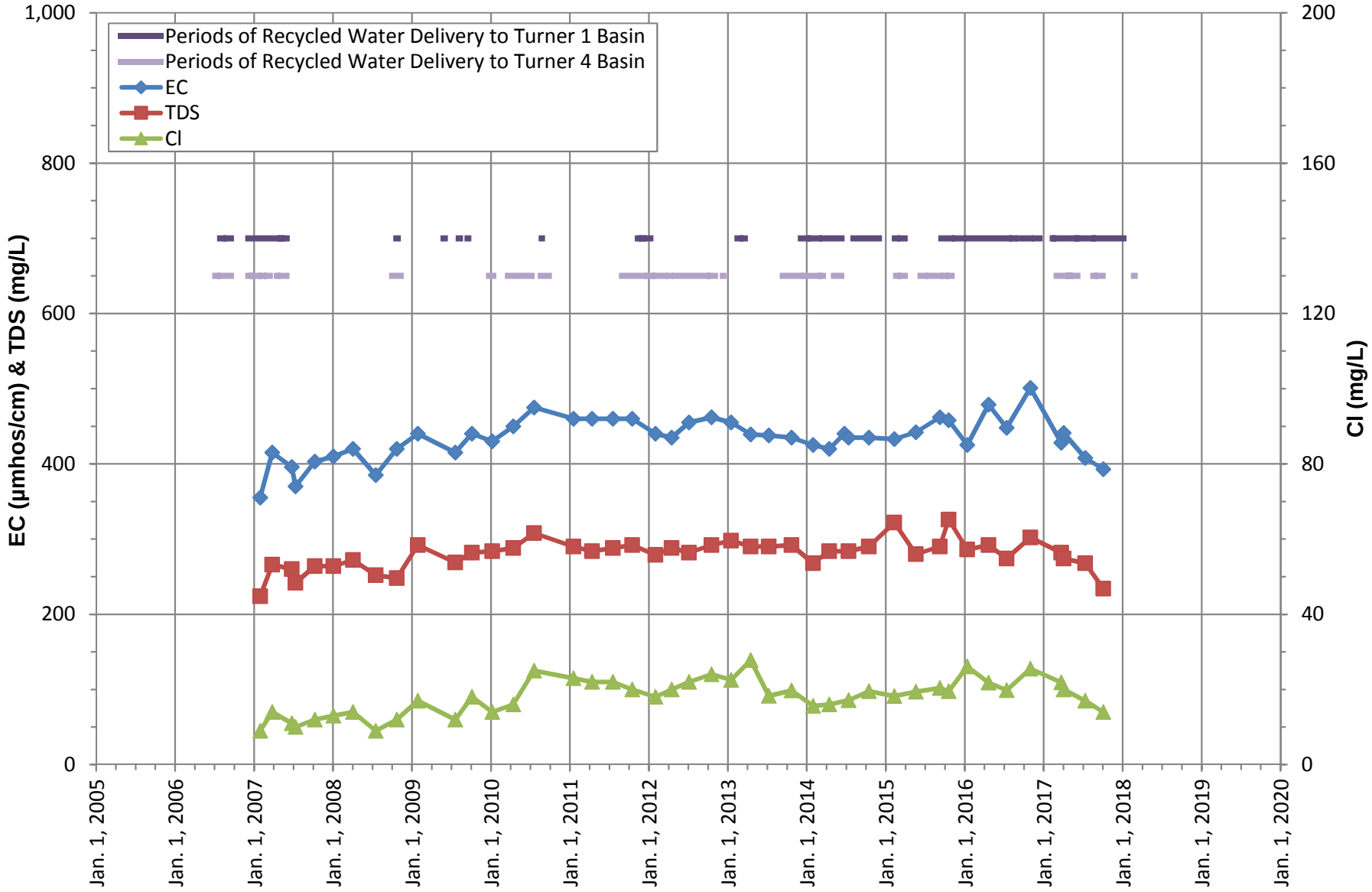
EC, TDS, CHLORIDE TRENDS
ELY BASIN
RIVERSIDE WELL



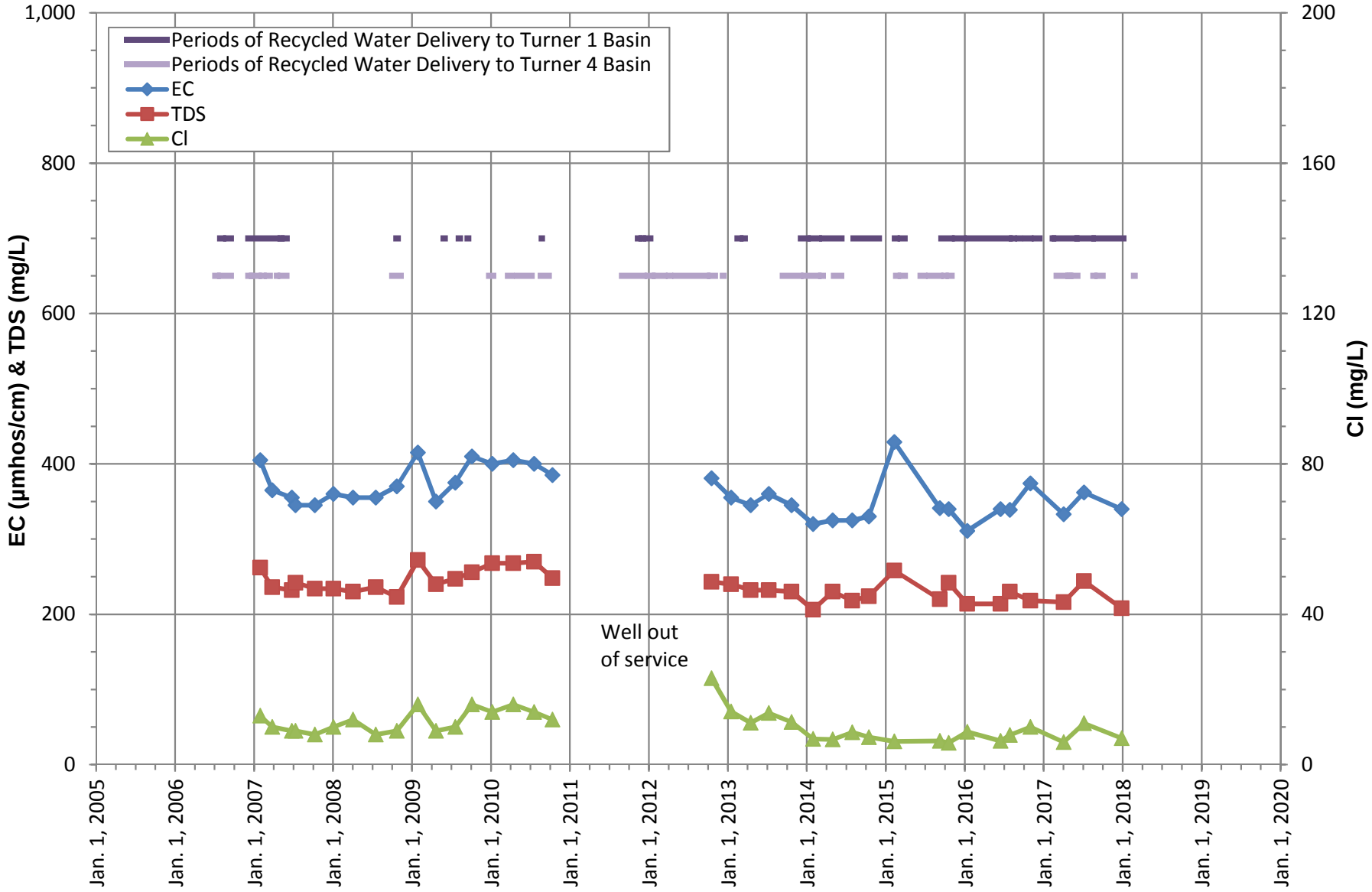
EC, TDS, CHLORIDE TRENDS
TURNER BASINS
MW TRN-1/2



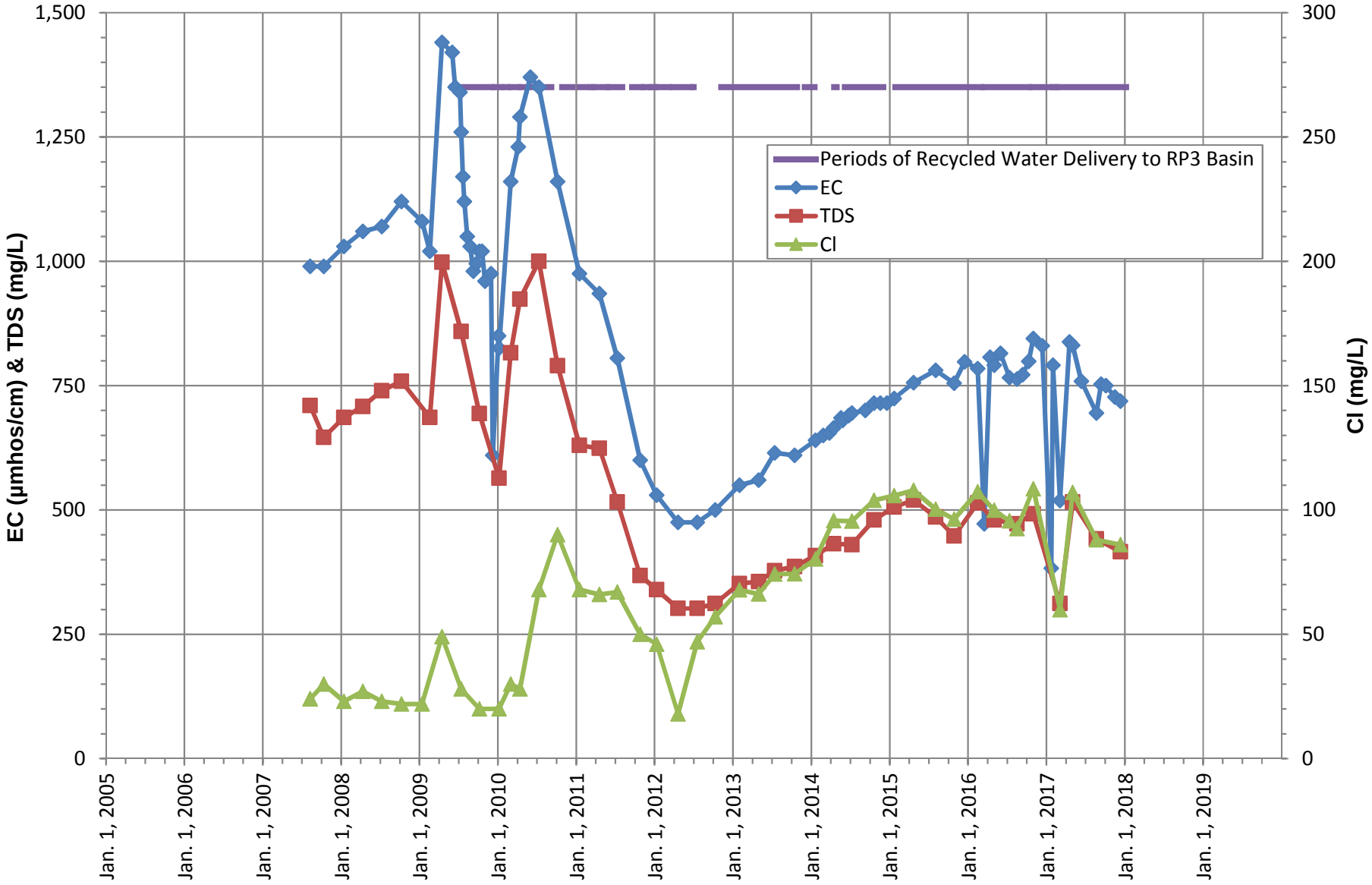
EC, TDS, CHLORIDE TRENDS
TURNER BASINS
MW TRN-2/2



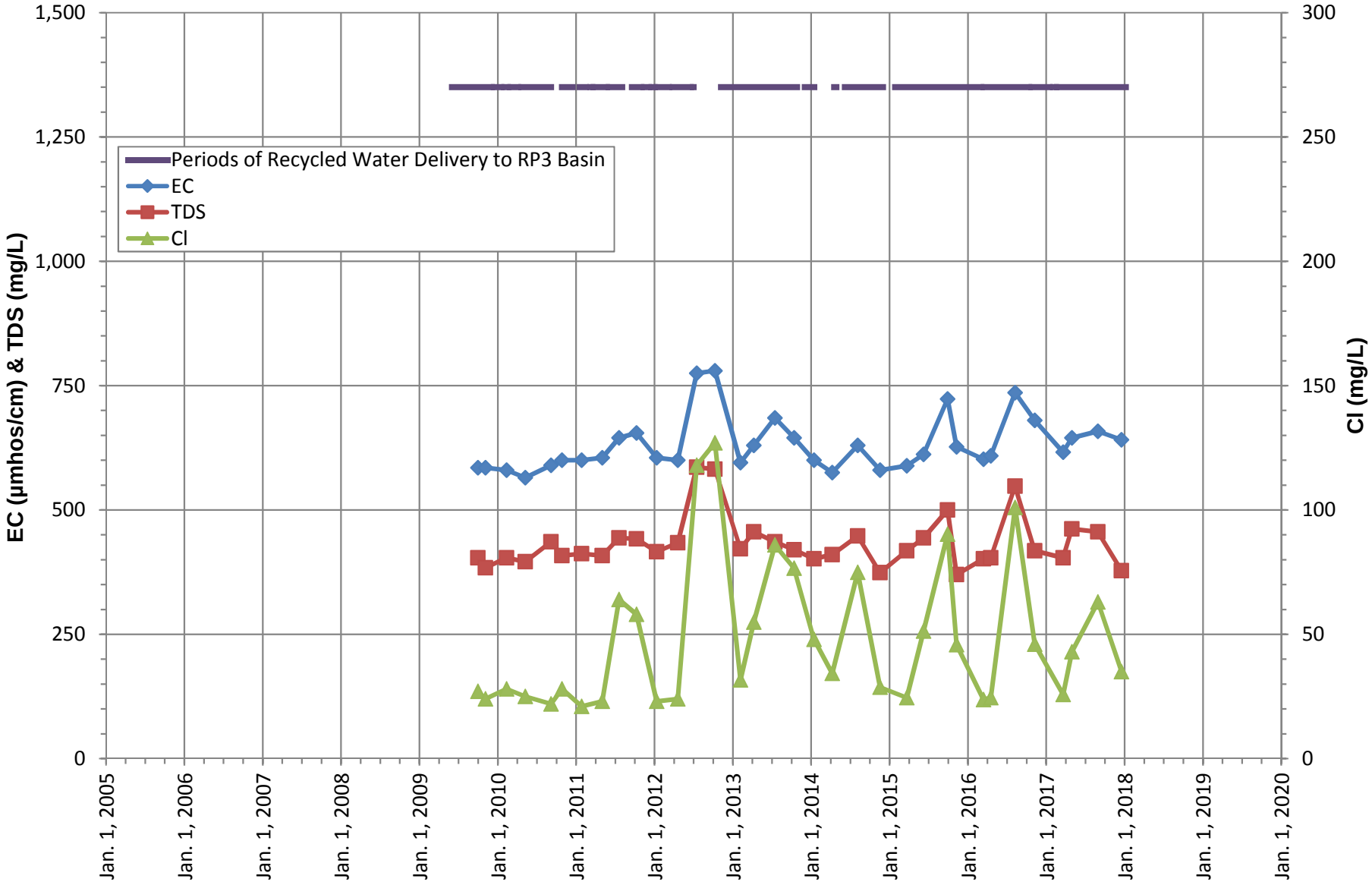
EC, TDS, CHLORIDE TRENDS
TURNER BASINS
ONTARIO NO. 25



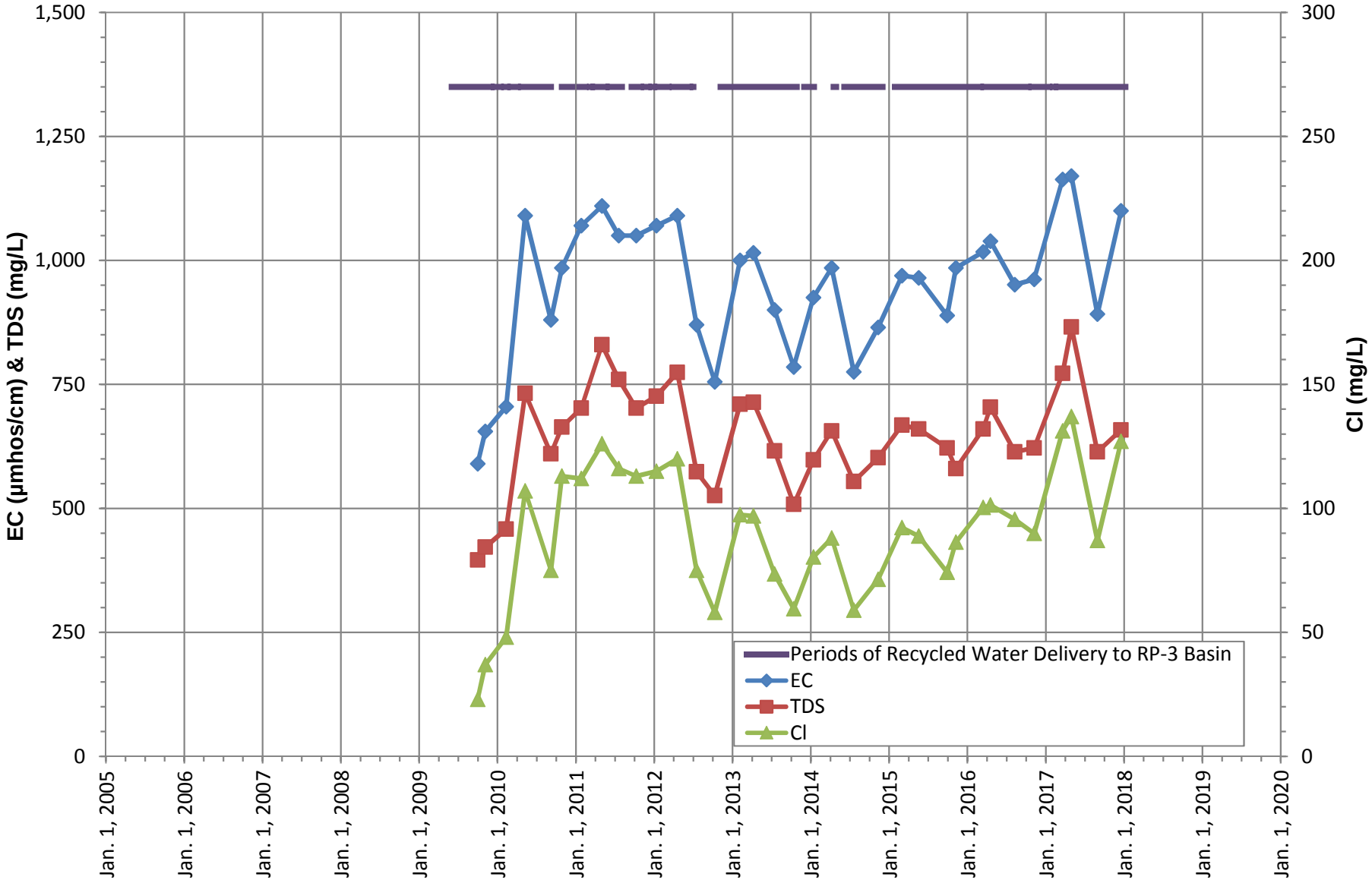
EC, TDS, CHLORIDE TRENDS
TURNER BASINS
ONTARIO NO. 29



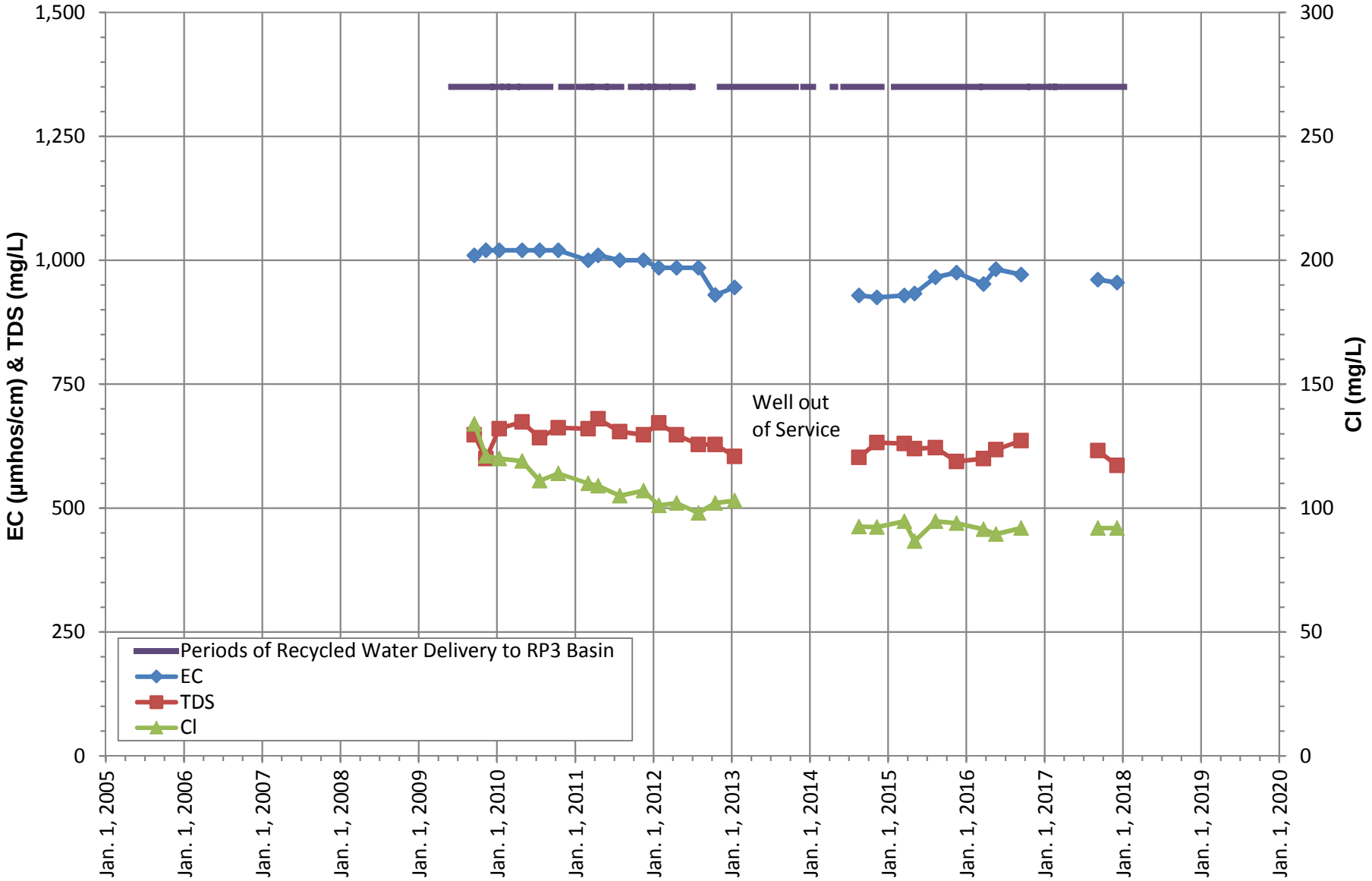
EC, TDS, CHLORIDE TRENDS
RP3 BASINS
RP3-1/1



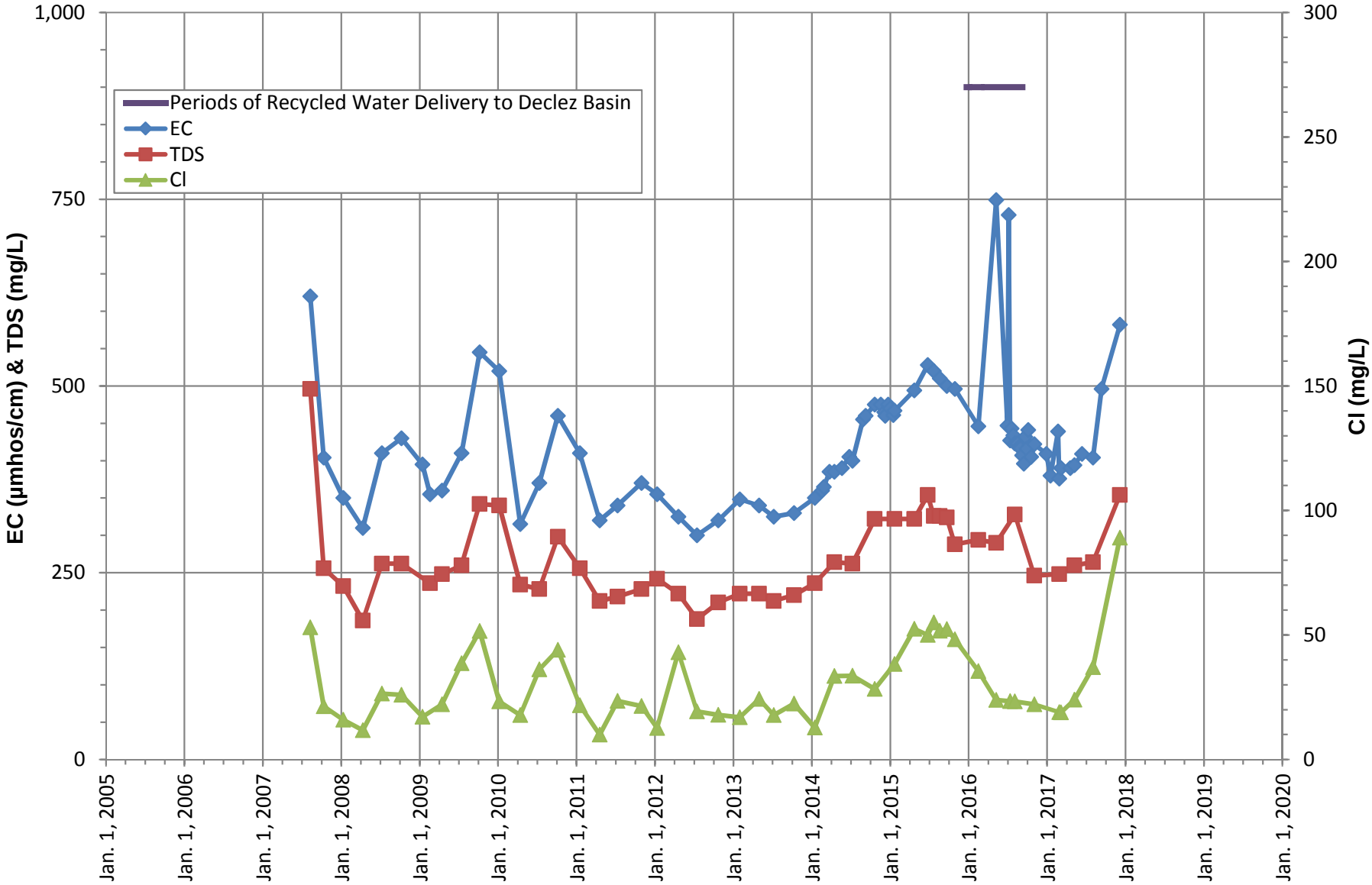
EC, TDS, CHLORIDE TRENDS
RP3 BASINS
ALCOA MW-1



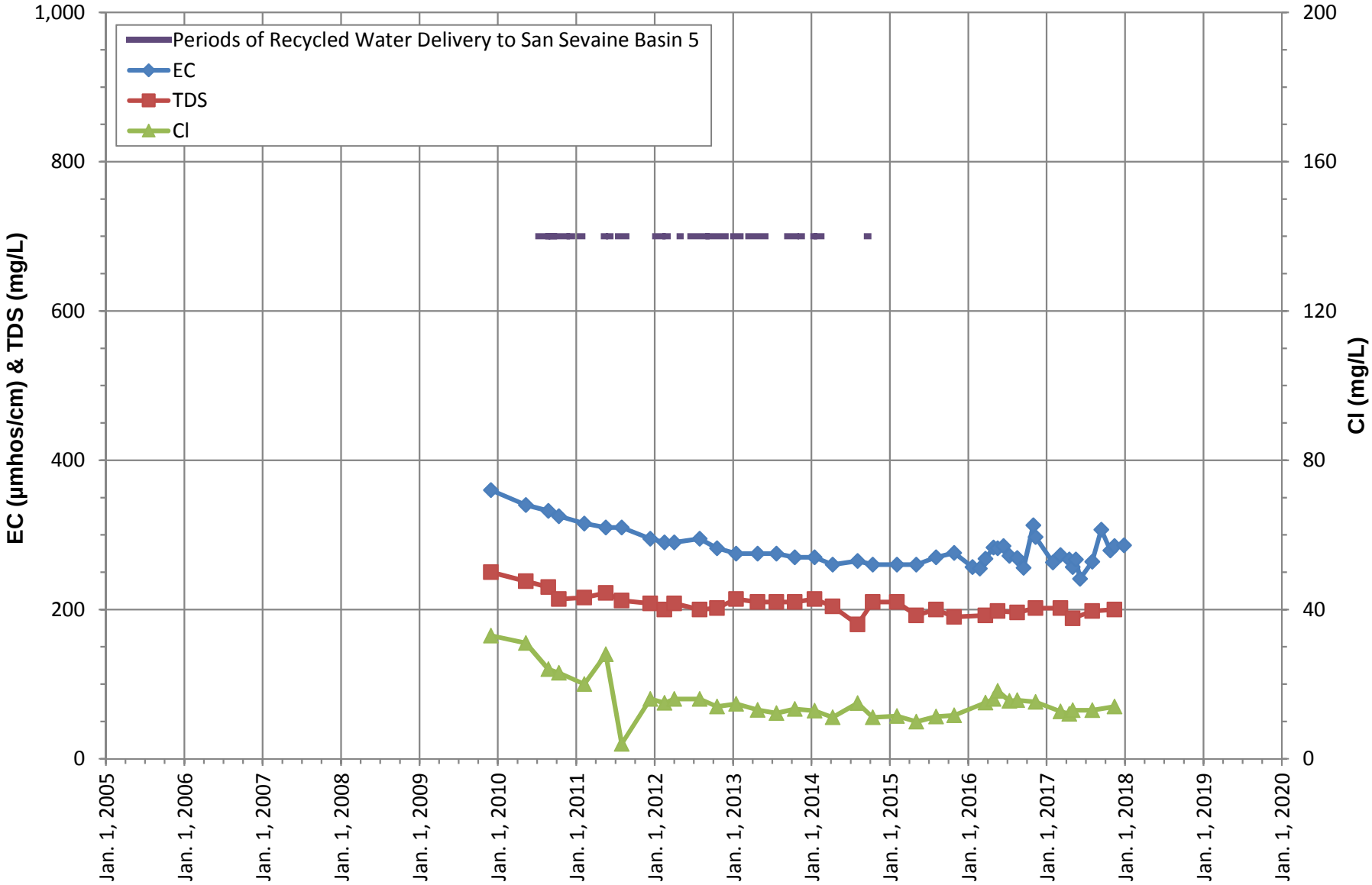
EC, TDS, CHLORIDE TRENDS
RP3 BASINS
ALCOA MW-3



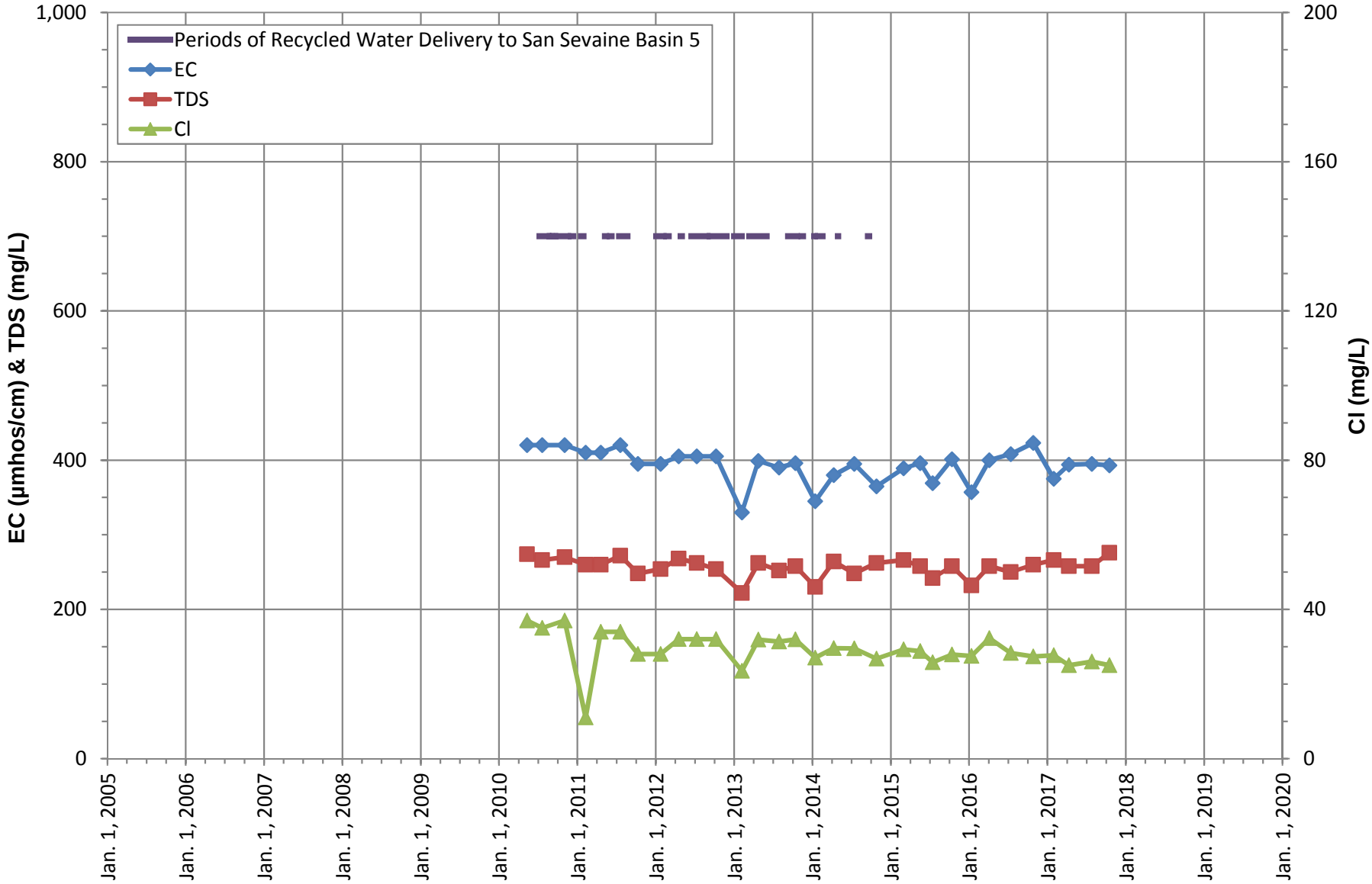
EC, TDS, CHLORIDE TRENDS
RP3 BASINS
Southridge JHS Well



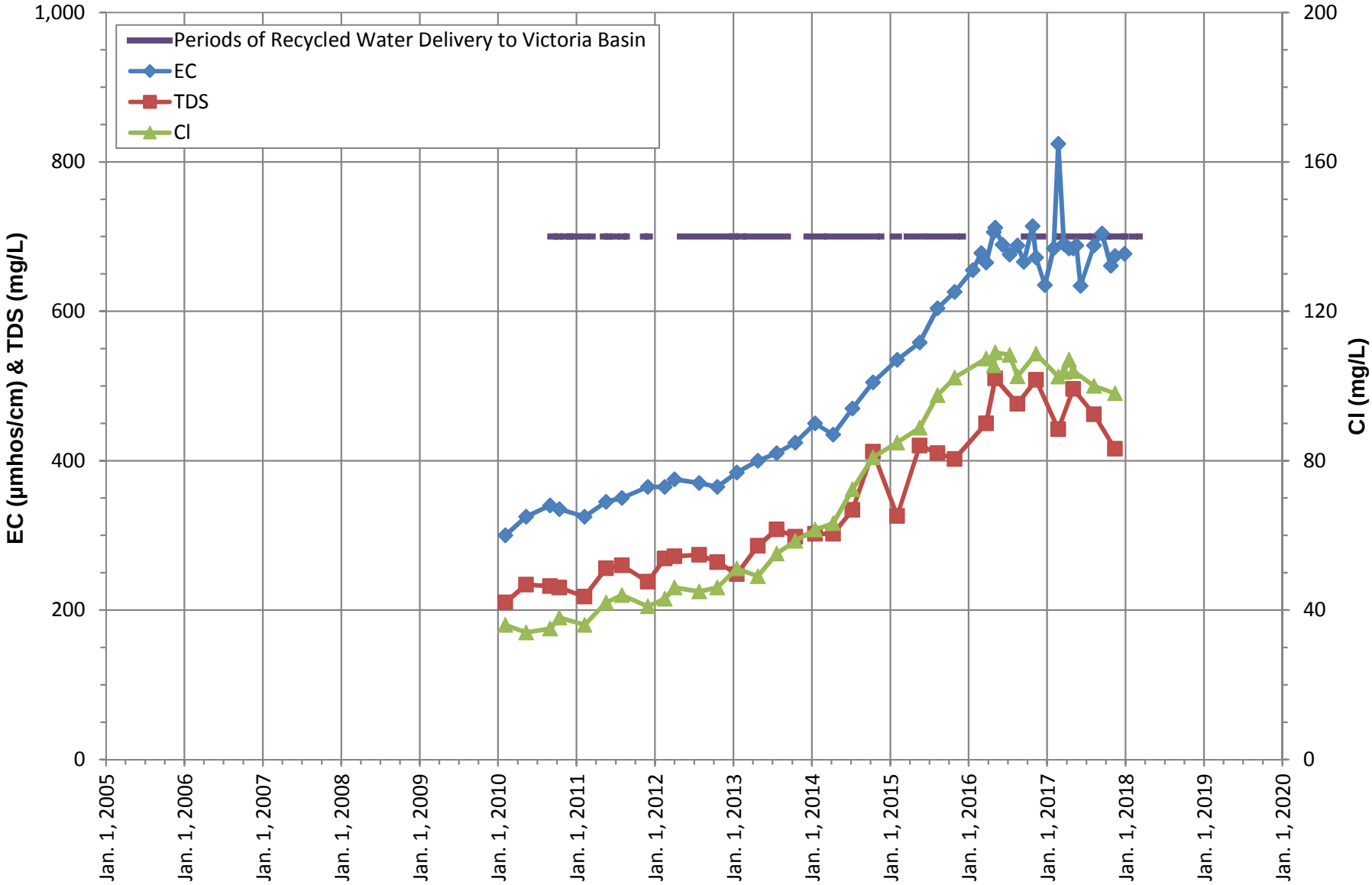
EC, TDS, CHLORIDE TRENDS
DECLEZ BASIN
DCZ-1/1



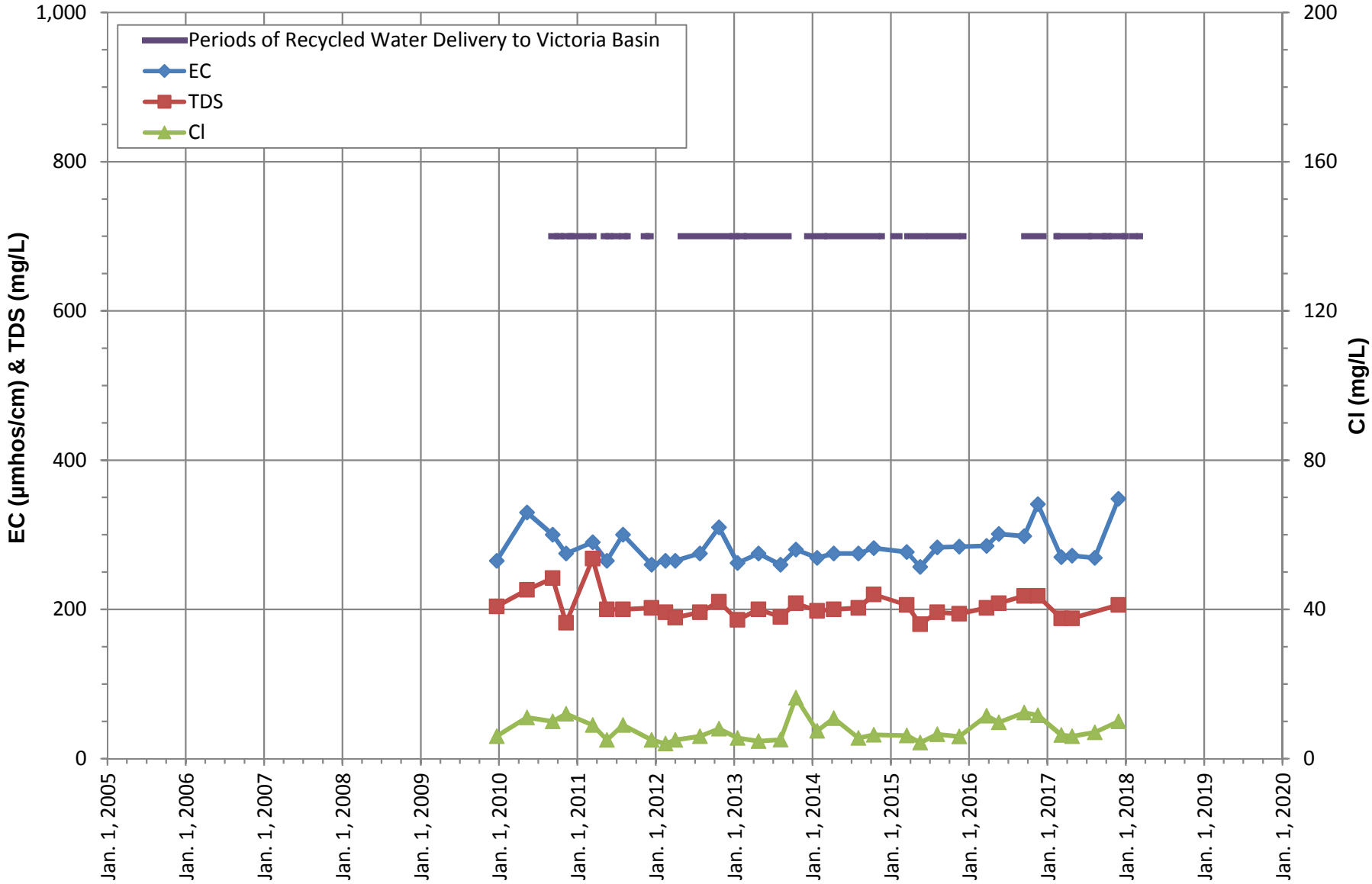
EC, TDS, CHLORIDE TRENDS
SAN SEVAINE BASINS
SS-1/1



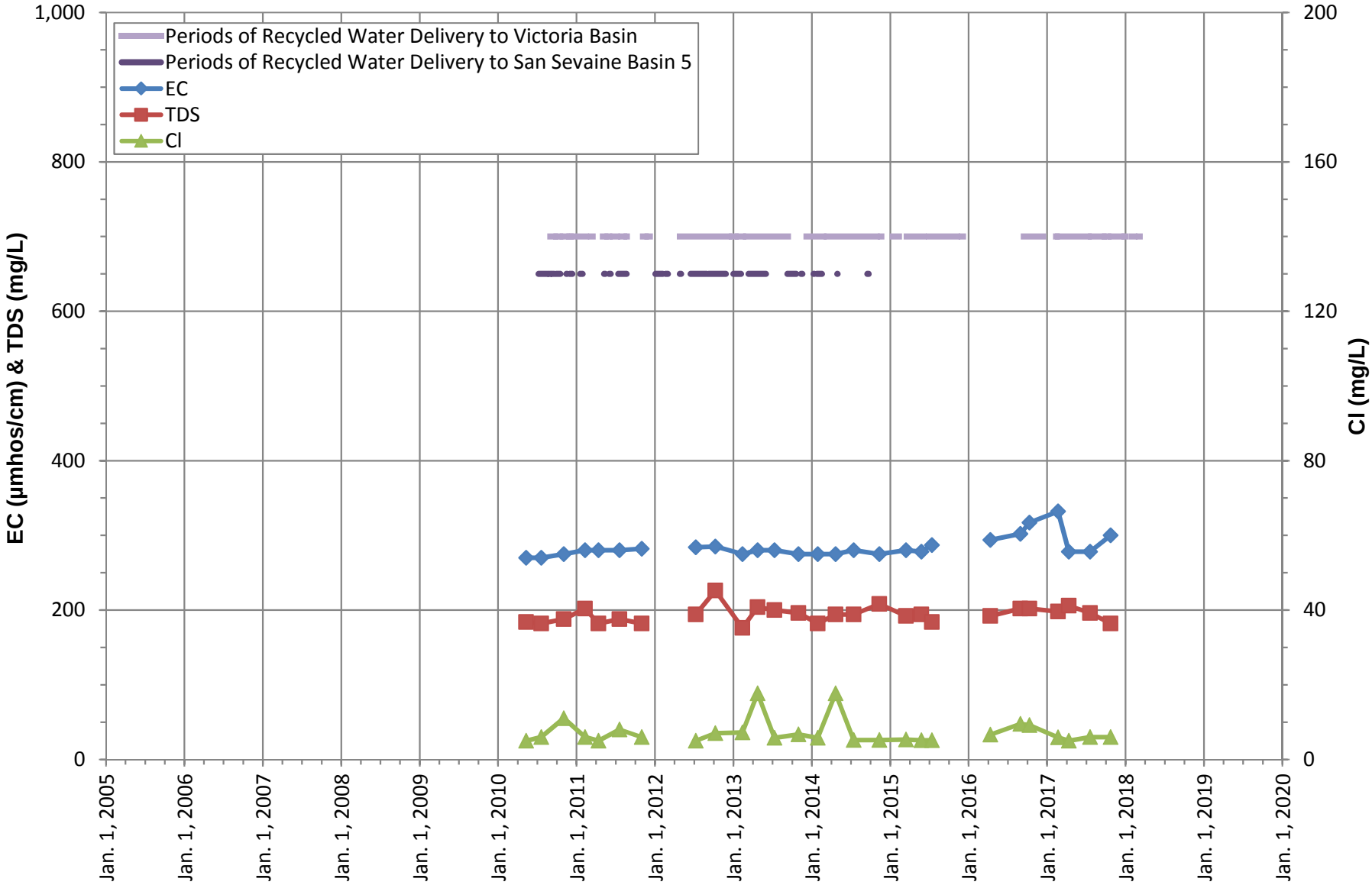
EC, TDS, CHLORIDE TRENDS
SAN SEVAINE BASINS
Unitex 91090



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



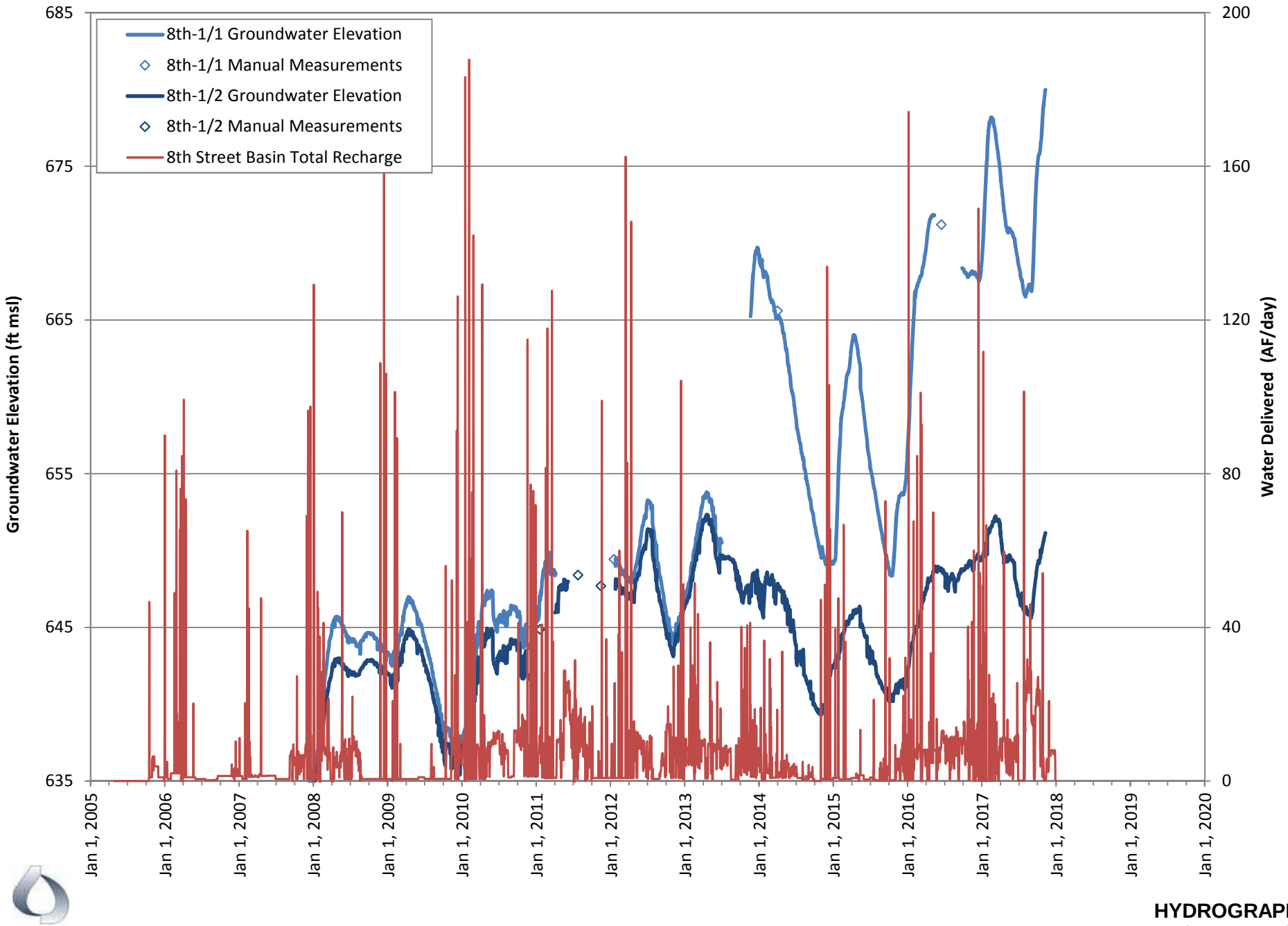
EC, TDS, CHLORIDE TRENDS
VICTORIA BASIN
VCT-2/2



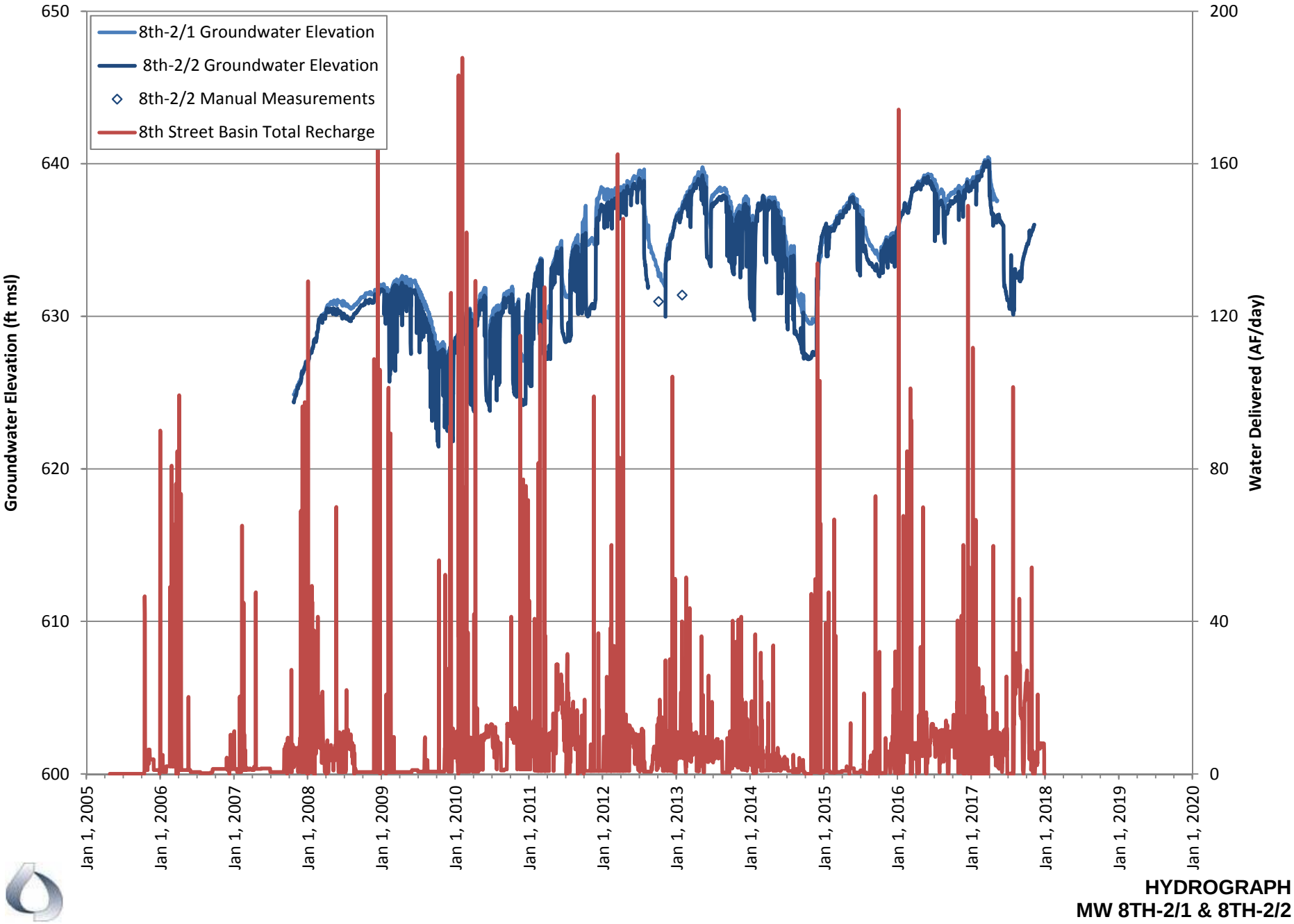
EC, TDS, CHLORIDE TRENDS
SAN SEVAINE & VICTORIA BASINS
CVWD Well No. 39

APPENDIX D

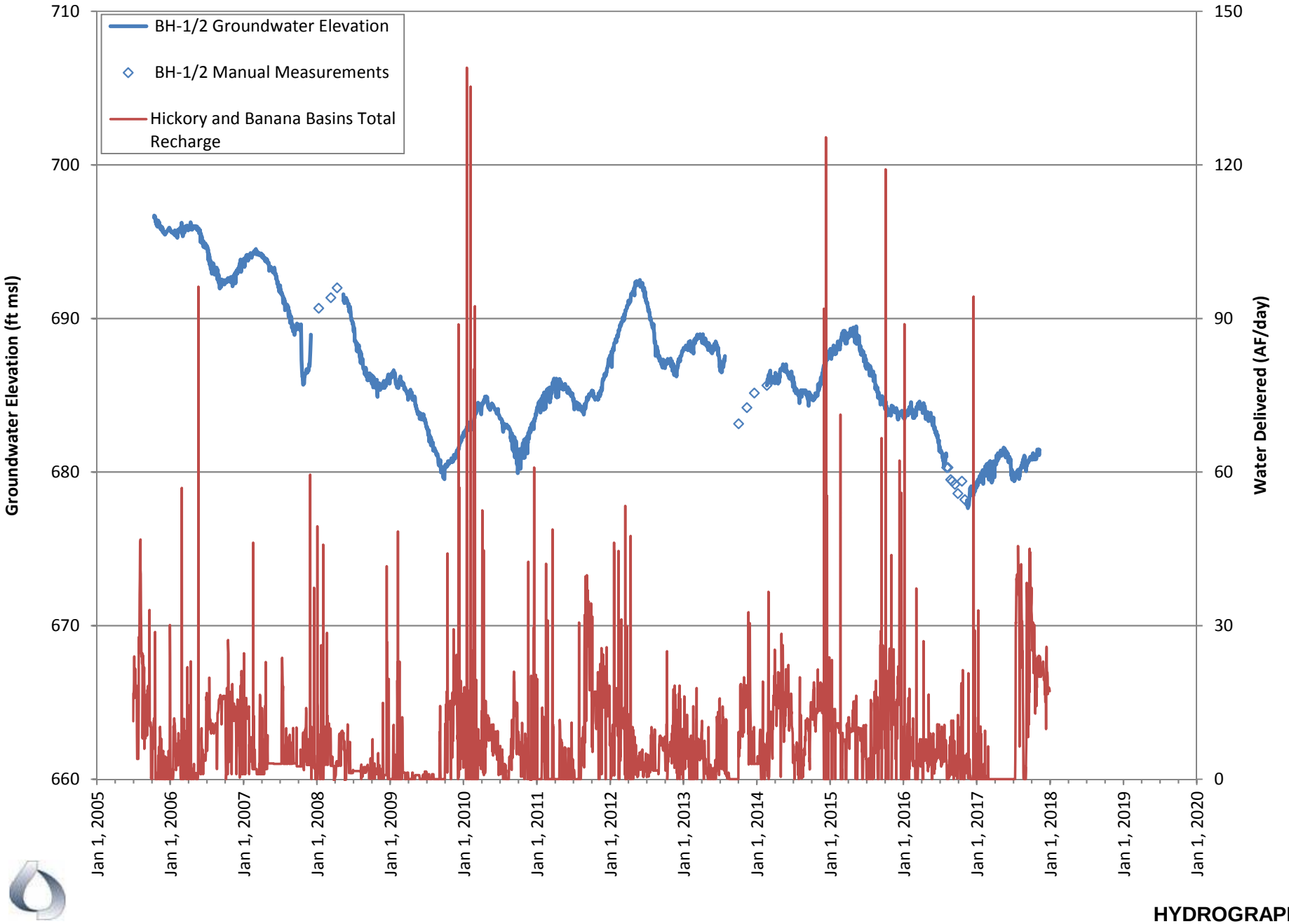
MONITORING WELL HYDROGRAPHS



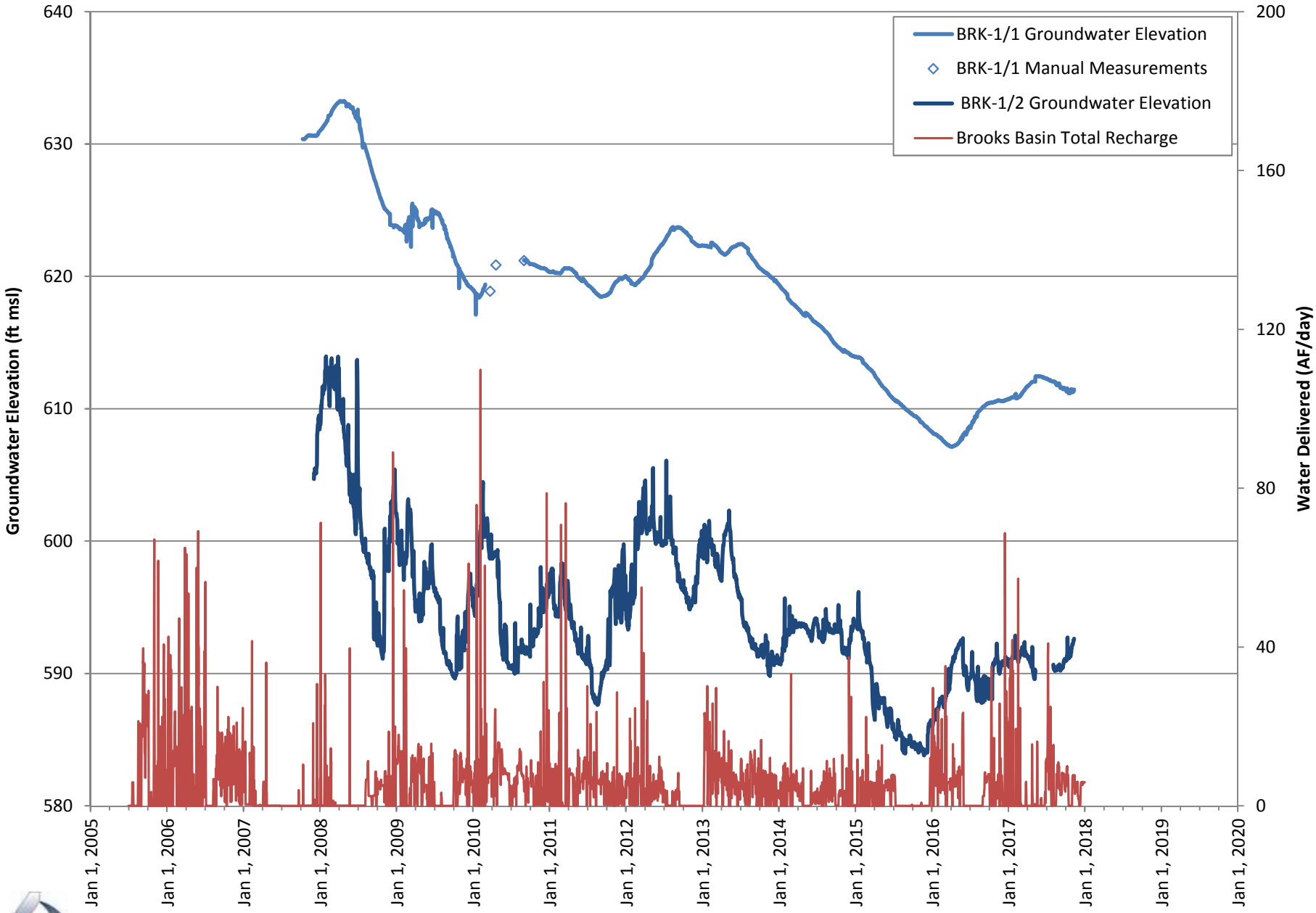
HYDROGRAPH
MW 8TH-1/1 & 8TH-1/2



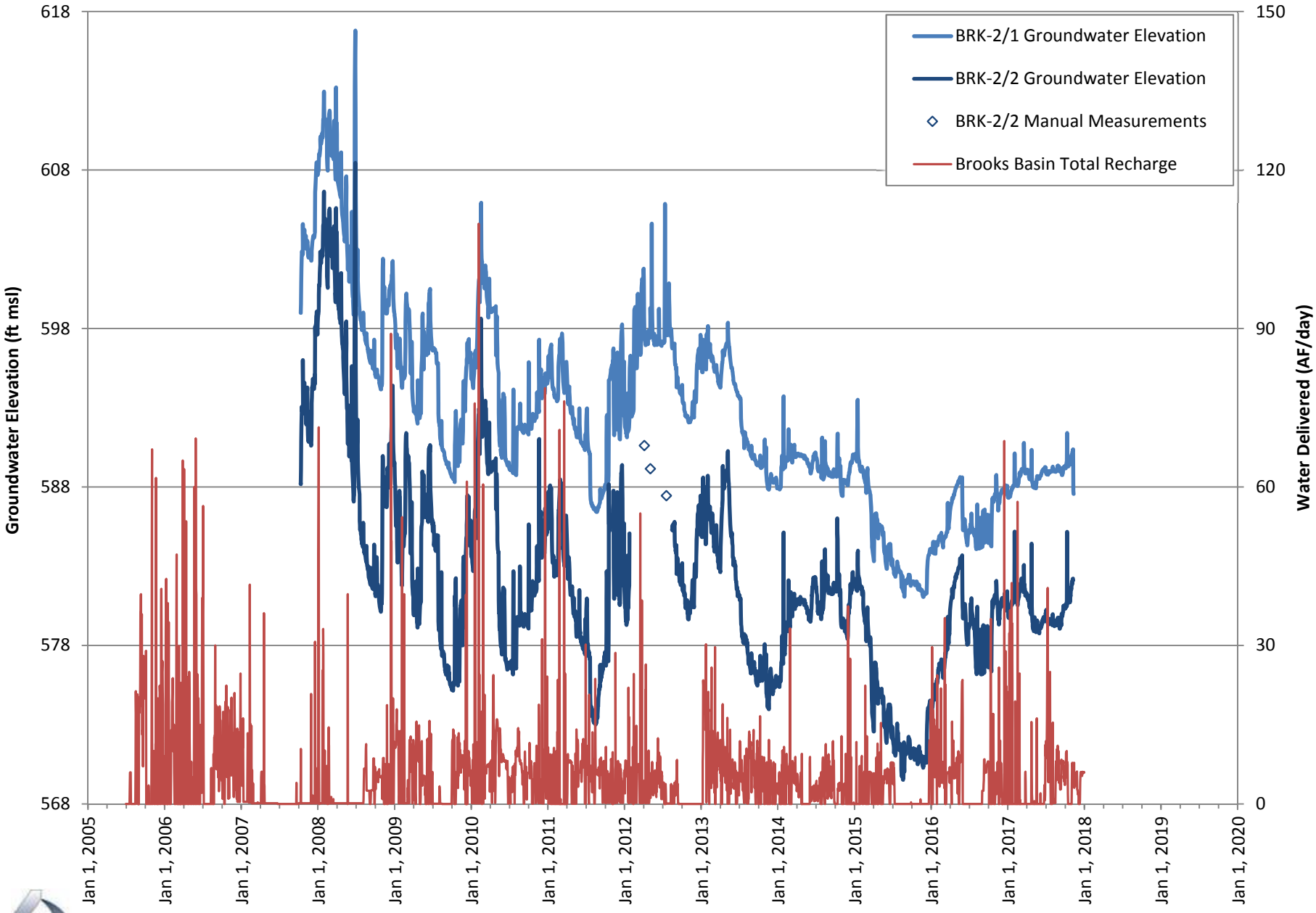
HYDROGRAPH
MW 8TH-2/1 & 8TH-2/2



HYDROGRAPH
MW BH-1/2



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



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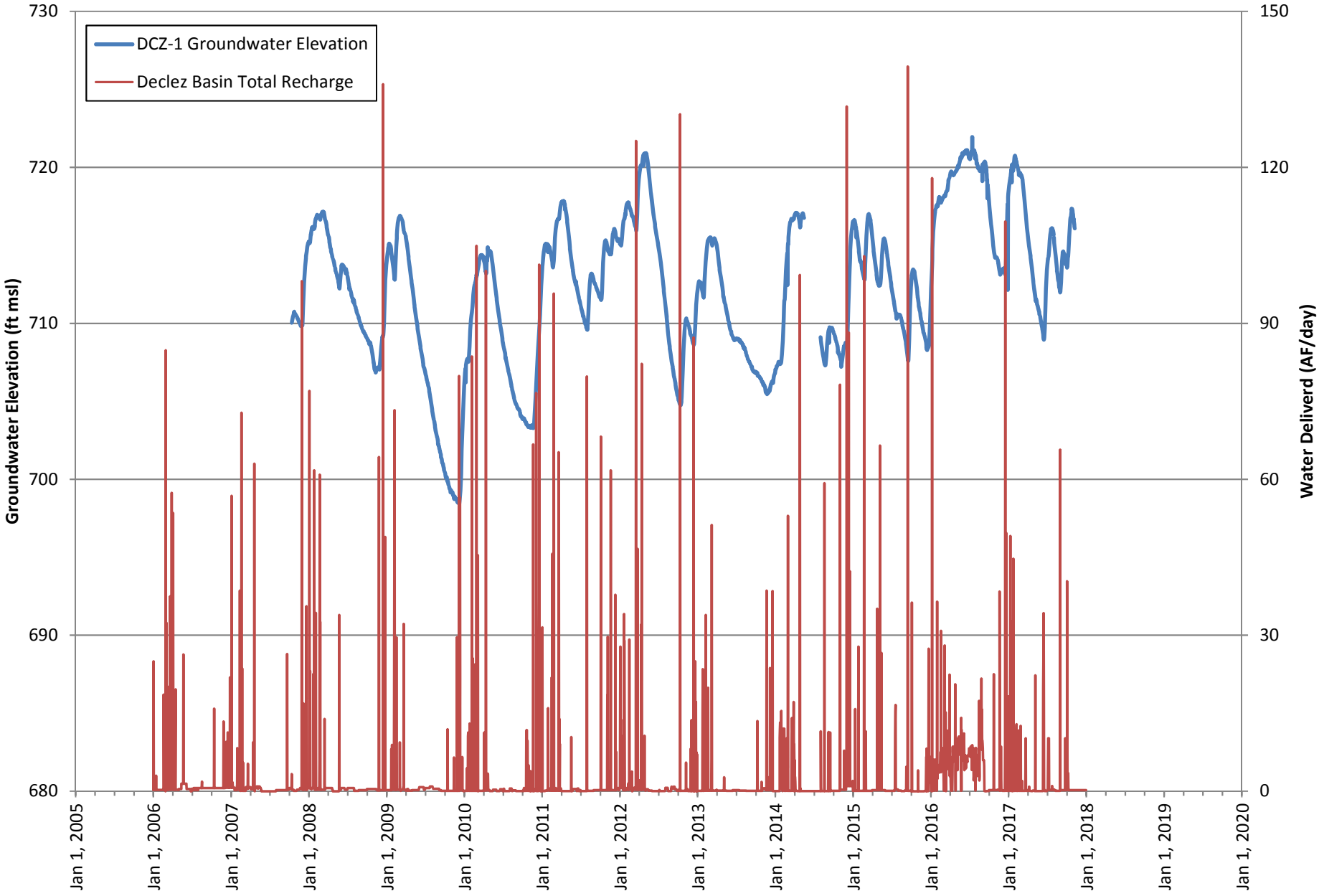
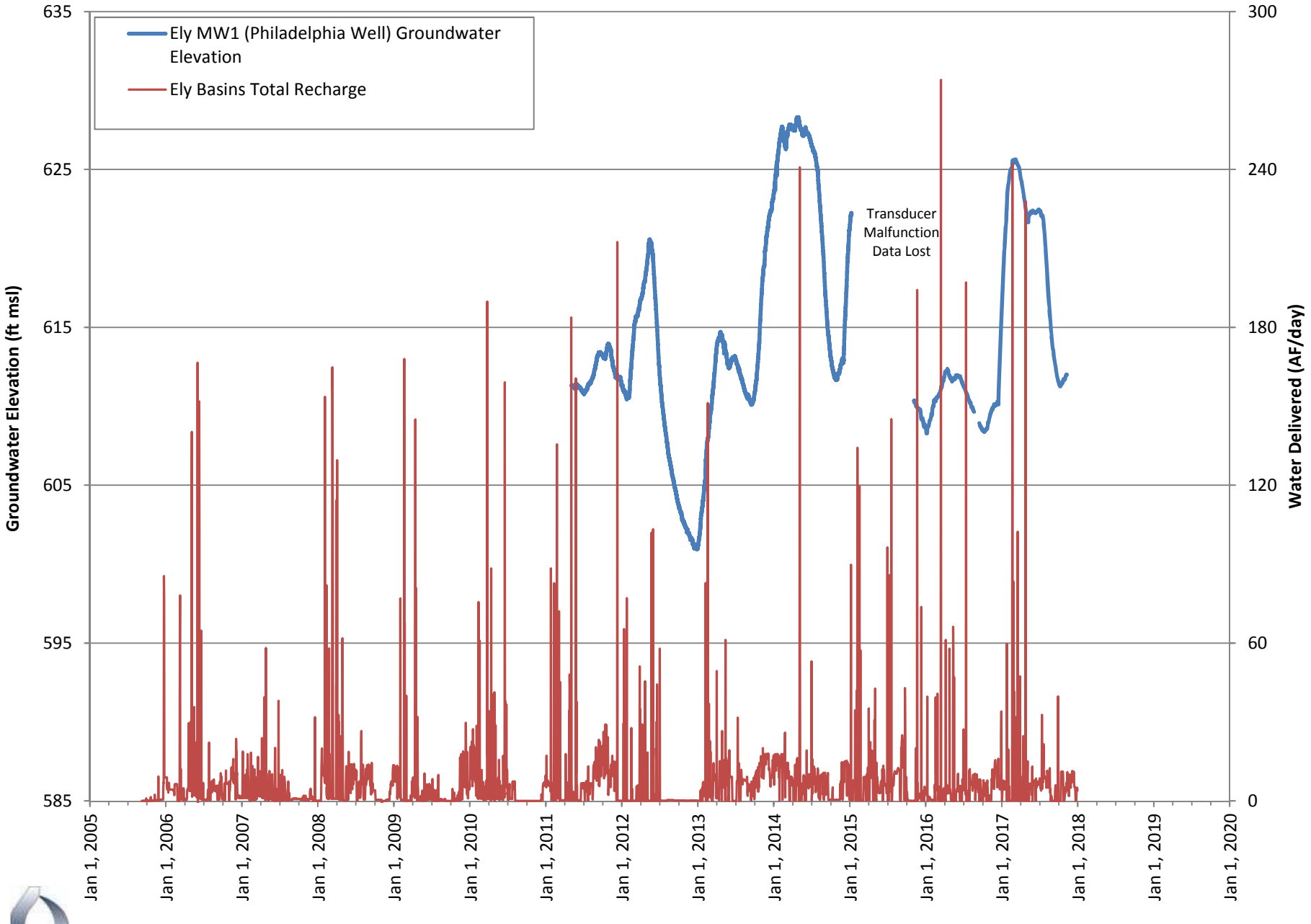
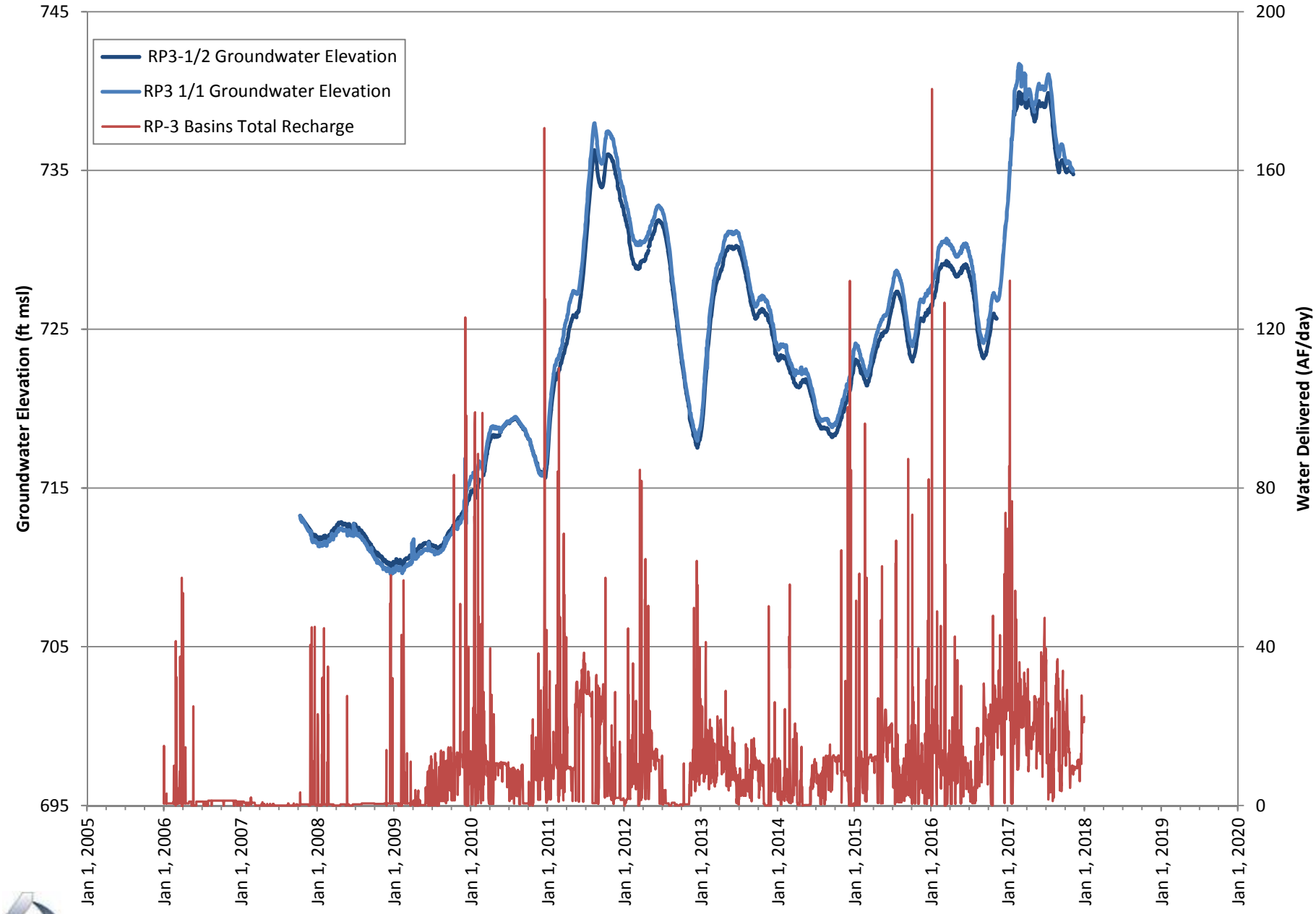
MW BRK-2/1 & BRK-2/2



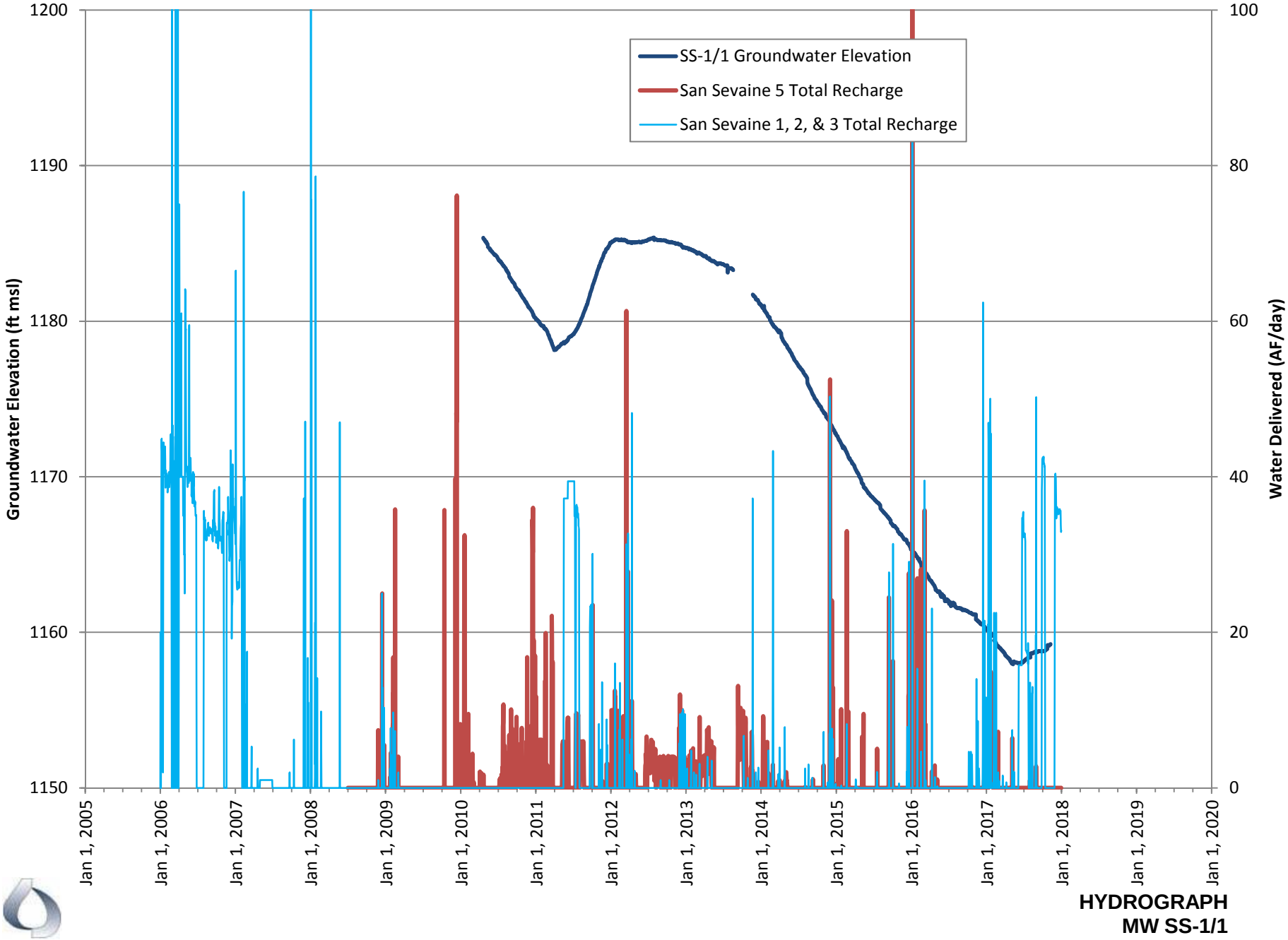
HYDROGRAPH
MW DCZ-1



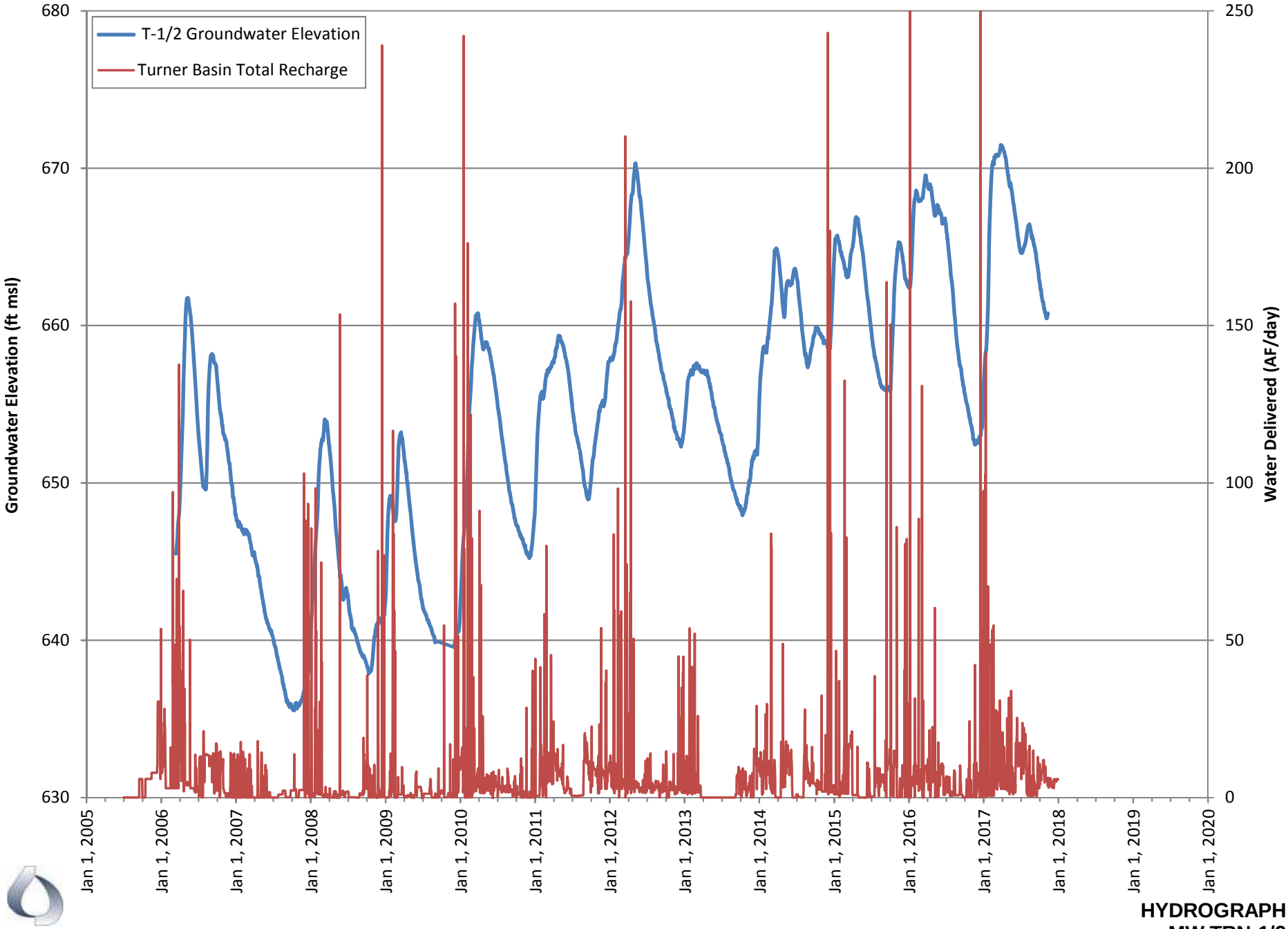
HYDROGRAPH
Ely MW1 (Philadelphia Well)



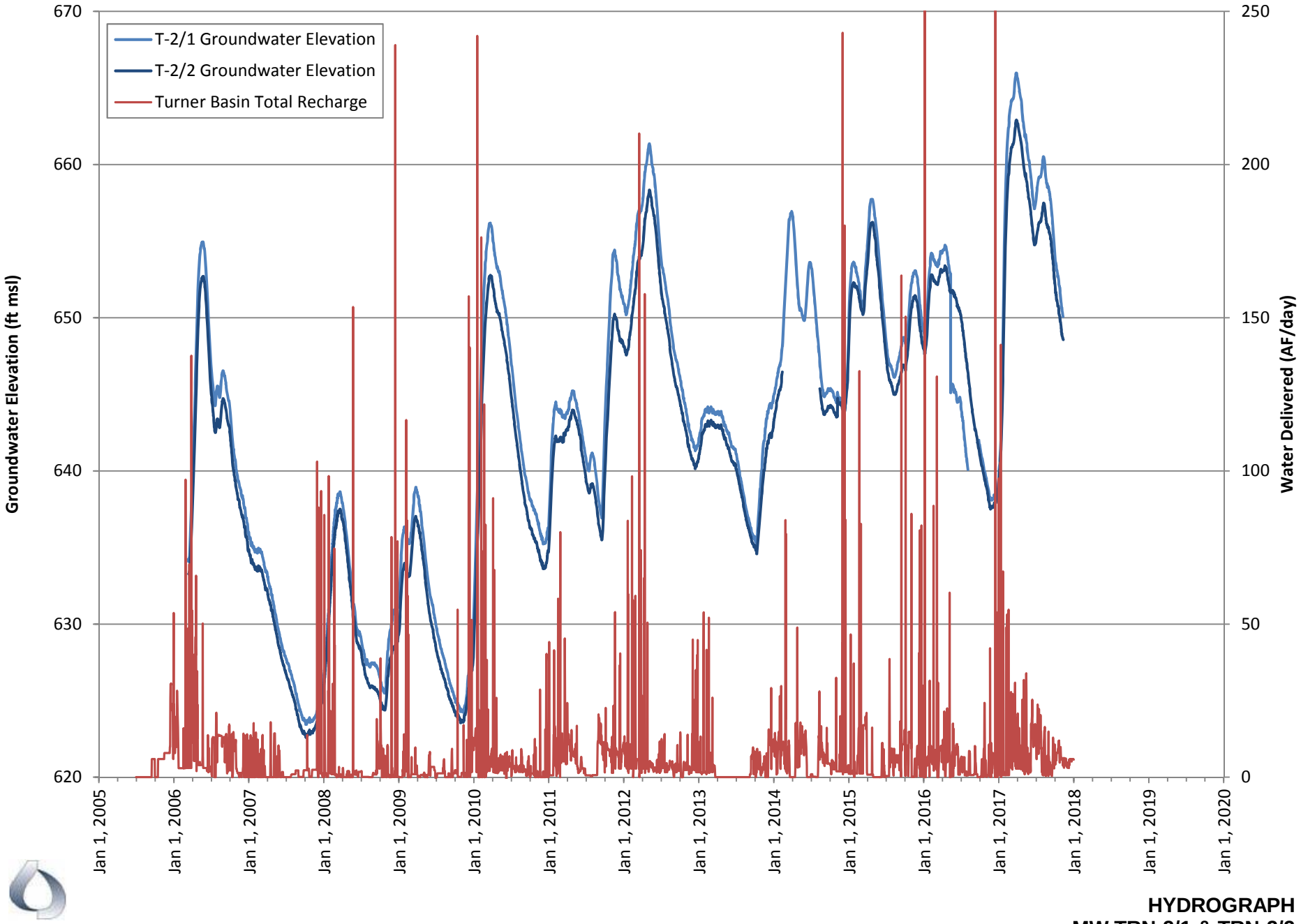
HYDROGRAPH
MW RP3-1/1 & RP3-1/2



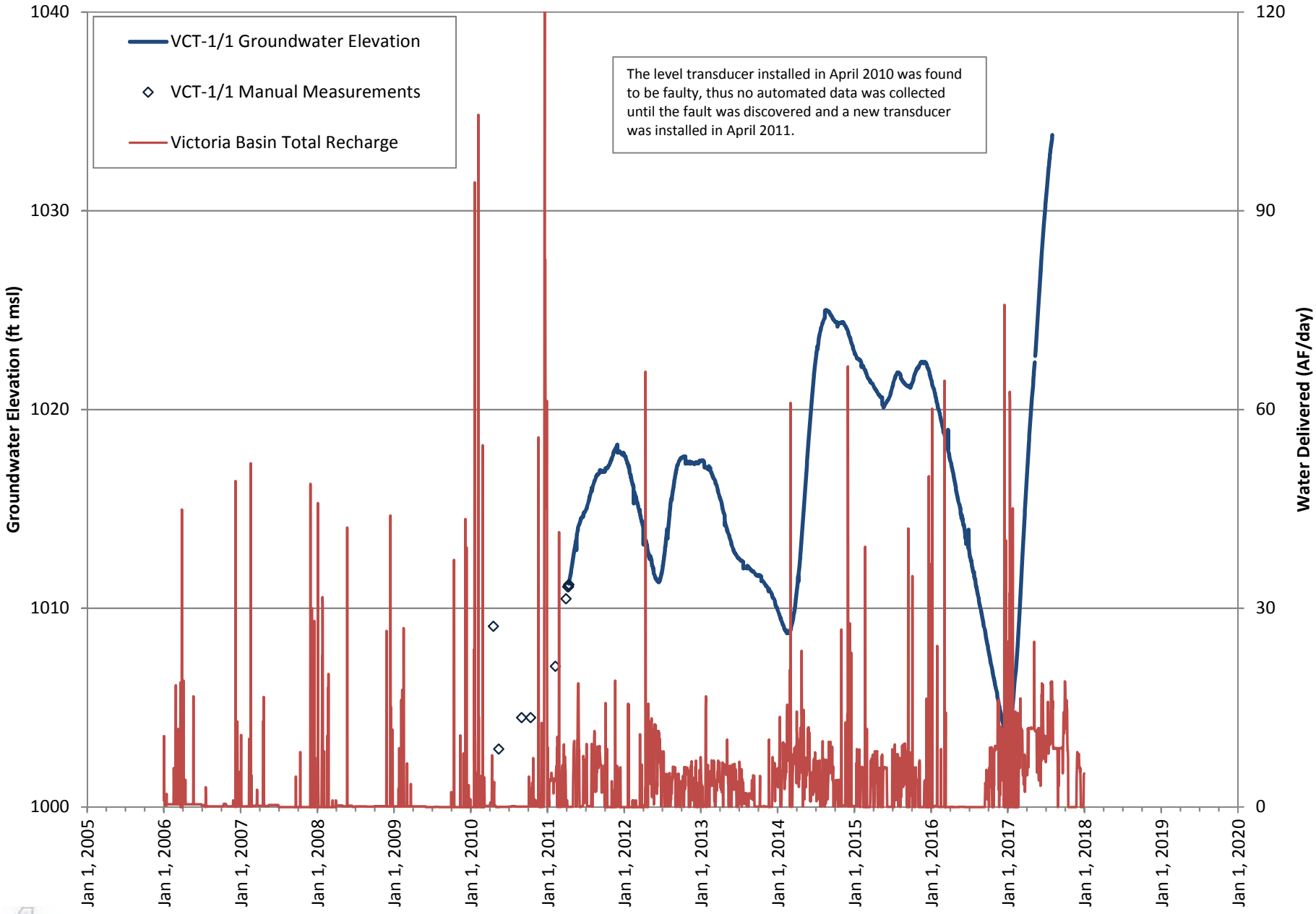
HYDROGRAPH
MW SS-1/1



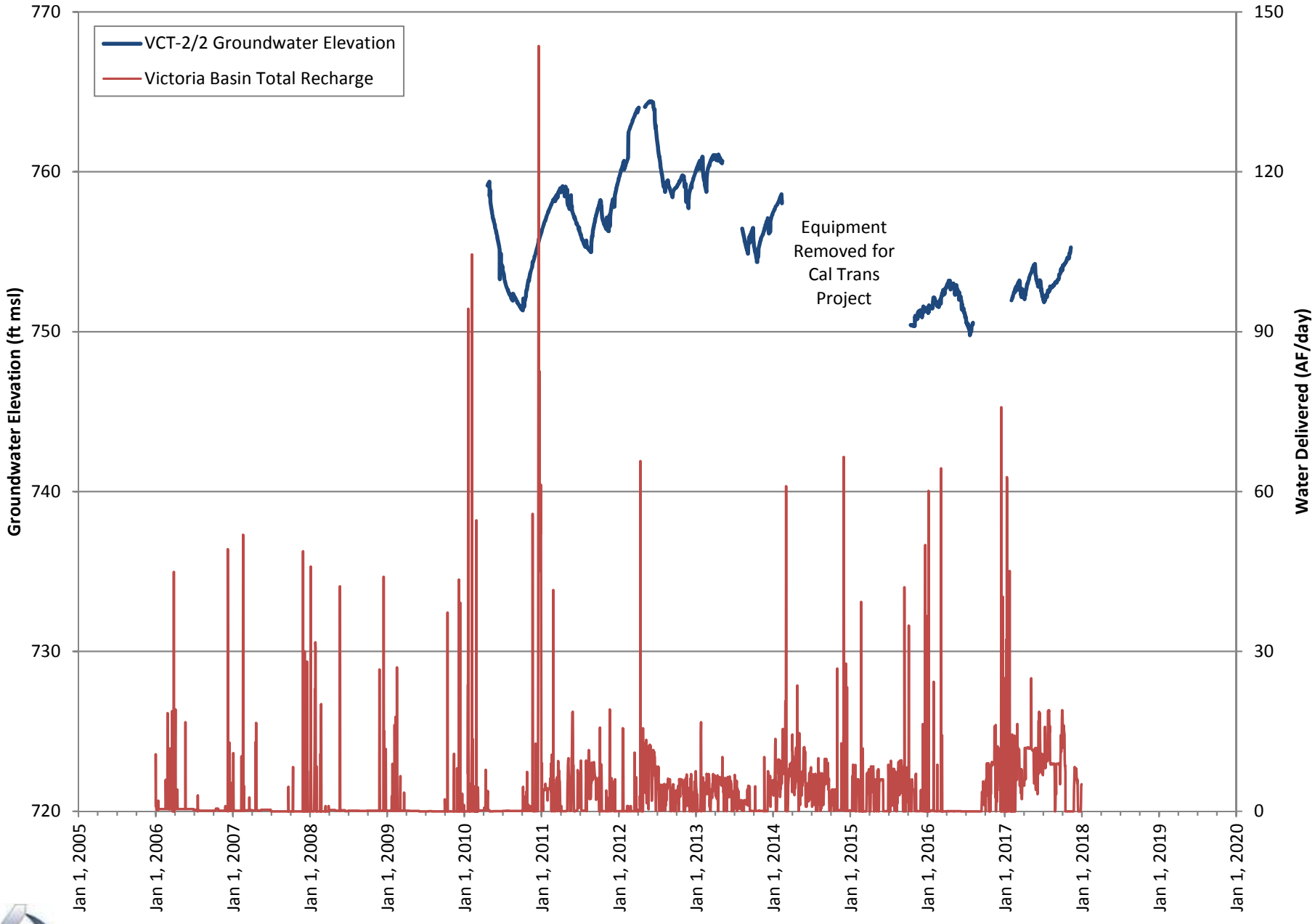
HYDROGRAPH
MW TRN-1/2



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



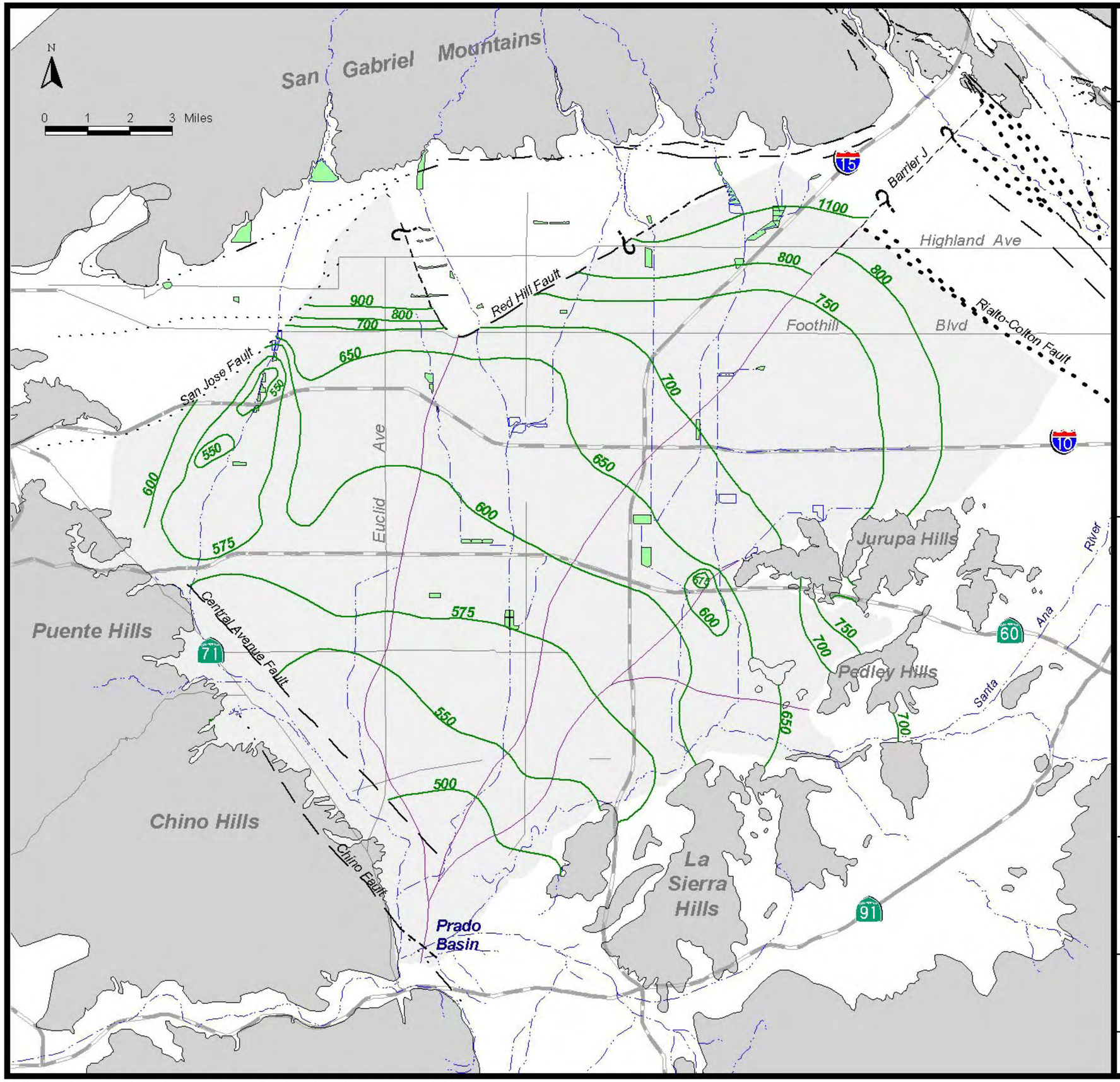
HYDROGRAPH
MW VCT-1/1



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

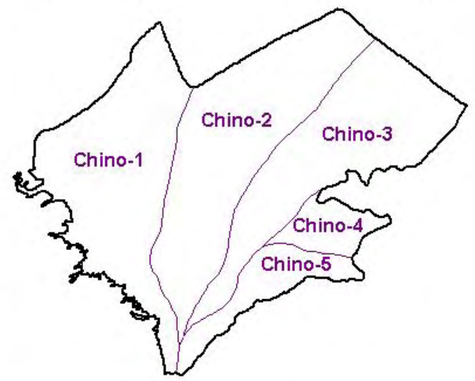


Figure 2-19
Fall 1997
Groundwater Elevation Map

WE WILDERMUTH ENVIRONMENTAL, INC.

Date: August 19, 1999

s:\clients\cbwm\obmp\task order 2\obmp documents\section 2\figures\figure 2-19.apr

117°40'0"W

117°20'0"W

34°0'0"N

Main Features

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

Geology

Water-Bearing Sediments

- Quaternary Alluvium

Consolidated Bedrock

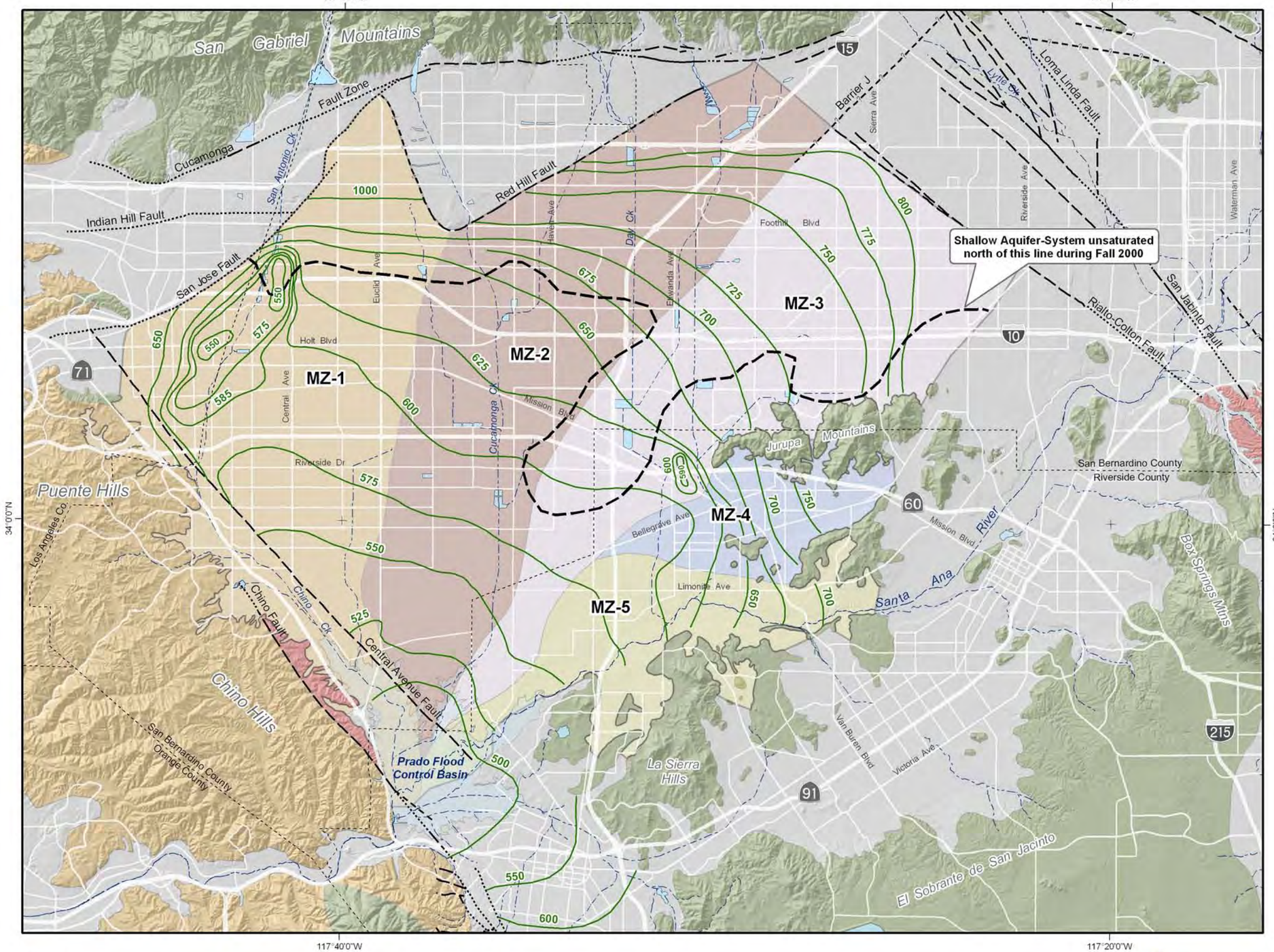
- Plio-Pleistocene Sedimentary Rocks
- Cretaceous to Miocene Sedimentary Rocks
- Pre-Tertiary Igneous and Metamorphic Rocks

Faults

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

Other Features

- Flood Control and Conservation Basins



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

0 1 2 3 4 Miles
0 2 4 6 KM

Inland Empire Utilities Agency

Phase II Recycled Water Groundwater Recharge Project

Groundwater Elevation Map Fall 2000

Figure 8-3

117°40'0"W

117°20'0"W

34°0'0"N

San Gabriel Mountains

Cucamonga Fault Zone

Red Hill Fault

Indian Hill Fault

San Jose Fault

Puente Hills

LA County

Chino Hills

Chino Fault

San Bernardino County
Orange County

Prado Flood Control Basin

La Sierra Hills

El Sobrante de San Jacinto

Jurupa Mountains

San Bernardino County
Riverside County

Box Springs Mtns

Barrier J

Barrier H

Barrier G

San Andreas Fault

Lona Linda Fault

San Jacinto Fault

Rialto-Colton Fault

Foothill Blvd

Holt Blvd

Mission Blvd

Riverside Dr

Bellegrave Ave

Limonite Ave

Van Buren Blvd

Victoria Ave

6th St

Main St

Sierra Ave

Riverside Ave

Waterman Ave

Central Ave

Euclid Ave

Haven Ave

Etiwanda Ave

15

10

60

91

215

1000
800
775
750
725
700
675
650
625
600
590
575
560
550
540
530
525
500

Main Features

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

Chino-I Desalter Well

Chino Basin Hydrologic Boundary

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults & Groundwater Divides

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

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File: Figure_3-6.mxd

0 1 2 3 4 Miles
0 2 4 6 KM

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

Groundwater Elevation Contours
Fall 2003 -- Chino Basin

Figure 3-6

117°40'0"W

117°20'0"W

34°0'0"N

San Gabriel Mountains

Fault Zone

Cucamonga Basin

Claremont Basin

Pomona Basin

Rialto-Colton Basin

Riverside Basins

Arlington Basin

Temescal Basin

Puente Hills

Chino Hills

La Sierra Hills

Jurupa Mountains

El Sobrante de San Jacinto

Prado Flood Control Basin

Cucamonga

Indian Hill Fault

San Jose Fault

Red Hill Fault

Barrier J

Lytle Ck

Loma Linda Fault

San Jacinto Fault

Rialto-Colton Fault

Chino Fault

San Antonio Ck

Day Ck

Cucamonga Ck

Chino Ck

Santa Ana River

Los Angeles Co.

San Bernardino County

Orange County

Riverside County

Foothill Blvd

Holt Blvd

Mission Blvd

Riverside Dr

Limonite Ave

Van Buren Blvd

Victoria Ave

Sierra Ave

Riverside Ave

Central Ave

Euclid Ave

Etiwanda Ave

Haven Ave

Beketgrave Ave

1100

1000

800

775

725

700

650

600

575

550

525

500

750

625

15

10

60

71

91

210

215

Groundwater Elevation Contours
(feet above mean sea-level)

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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Date: 20070511

File: Figure_3-18.mxd

0 1 2 3 4 5 Miles

0 2 4 6 8 KM

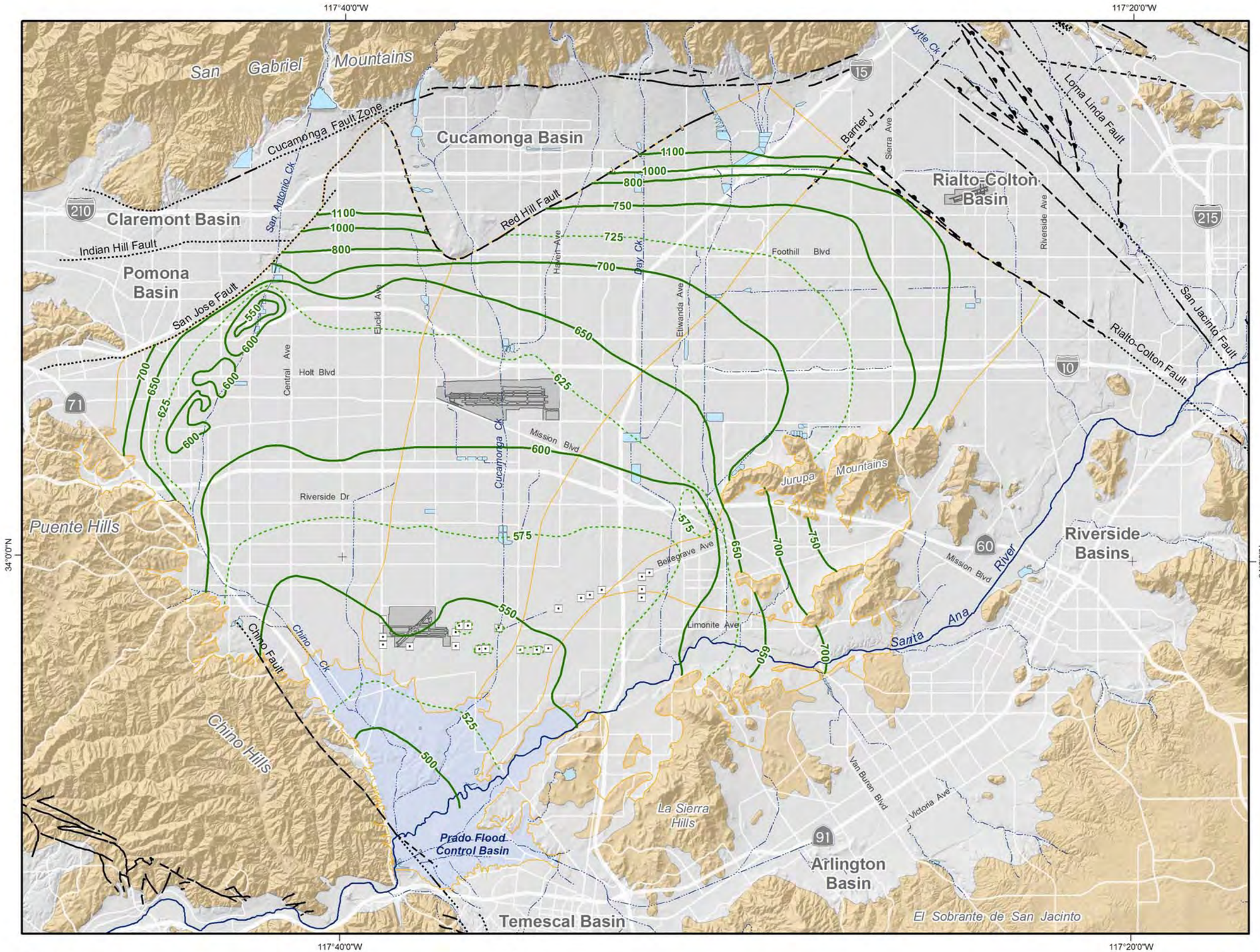
DRAFT - 2007 CBWM Groundwater Model Documentation and Evaluation of the Peace II Project Description

Hydrogeologic Setting

Groundwater Elevation Contours

Fall 2006 -- Chino Basin

Figure 2-7a



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

Other Features

Management Zone Boundary (1, 2, 3, Chino East, Chino South)

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

Groundwater Elevation Contours

Fall 2008 -- Chino Basin

Figure 3-19

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Author: ETL/CML

Date: 20090401

File: Figure_3-19.mxd

0 1 2 3 4 5 Miles

0 2 4 6 8 KM

2008 State of the Basin Report

Groundwater Levels

117°40'0"W

117°20'0"W

34°0'0"N

San Gabriel Mountains

Cucamonga Fault Zone

Cucamonga Basin

Claremont Basin

Pomona Basin

Rialto-Colton Basin

Puente Hills

Chino Hills

Jurupa Mountains

Riverside Basins

Temescal Basin

El Sobrante de San Jacinto

Prado Flood Control Basin

San Bernardino County

Riverside County

Orange County

Indian Hill Fault

San Jose Fault

Red Hill Fault

Barrier J

Lytle Ck

Loma Linda Fault

San Jacinto Fault

Rialto-Colton Fault

Chino Fault

San Antonio Ck

Euclid Ave

Haven Ave

Day Ck

Etiwanda Ave

San Sevaine Ck

Cucamonga Ck

Central Ave

Riverside Dr

Foothill Blvd

Holt Blvd

Mission Blvd

Limonite Ave

Bellegrave Ave

Sierra Ave

Riverside Ave

Chino Ck

Santa Ana River

750

700

650

600

550

625

675

725

775

800

825

575

525

F-30A

F35A

CVWD CB-5

CVWD CB-3

MVWD-10

O-17

O-16

P-11

C-10

Offsite MW3

Mil M-03

Mil M-06B

CH-16

CH-15A

XRef 404

XRef 425

JCSD-10

FC-932A2

XRef 4503

HCMP-9

SARWC-07

SARWC 11

HCMP-8

HCMP-2

HCMP-7

Archibald 1

15

210

71

10

215

60

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.

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

Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)

Well used for Time History Analysis (Exhibits 16 through 20)

OBMP Management Zones

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

Approximate Location of Groundwater Barrier

Location Concealed

Location Uncertain

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Author: TCR

Date: 20111027

File: Exhibit_22.mxd

0 1 2 3 4 5 Miles

0 2 4 6 8 KM

2010 State of the Basin
Groundwater Levels

Groundwater Elevation Contours

Spring 2010

Exhibit 22

117°40'0"W

117°20'0"W

34°0'0"N

San Gabriel Mountains

Cucamonga Basin

Claremont Basin

Pomona Basin

Rialto-Colton Basin

Riverside Basins

Puente Hills

Chino Hills

Temescal Basin

Prado Flood Control Basin

Cucamonga Fault Zone

Red Hill Fault

Indian Hill Fault

San Jose Fault

Barrier J

Lytle Cr

Loma Linda Fault

San Jacinto Fault

Rialto-Colton Fault

Jurupa Mountains

San Bernardino County

Riverside County

Orange County

Santa Ana River

Chino Creek

San Antonio Cr

Cucamonga Cr

San Sevaine Cr

Day Cr

Etiwanda Ave

Hellman Ave

Euclid Ave

Sierra Ave

Riverside Ave

Central Ave

Foothill Blvd

Holt Blvd

Riverside Dr

Mission Blvd

Limonite Ave

Pine Ave

CVWD-5

CVWD-3

F-30A

F-3A

MVWD-19

O-24

O-29

P-11

C-10

OW11

MIL M-06B

Offsite MW4

JCSD-14

JCSD-10

FC-752A2

FC-932A2

XRef 404

XRef 425

XRef 4513

XRef 4802

CH-16

CH-15A

HCMP-9/1

HCMP-8/1

HCMP-2

HCMP-7/1

SARWC-07

SARWC-11

Archibald 1

71

210

15

10

215

60

Groundwater Elevation Contours (feet above mean sea-level)

Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of water level data)

Well With a Water-Level Time History Plotted on Exhibits 24 through 28.

OBMP Management Zones

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

Location Certain

Location Approximate

Approximate Location of Groundwater Barrier

Location Concealed

Location Uncertain

This map displays contours of equal groundwater elevation across the Chino Basin during the spring of 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

0 1 2 3 4 5 Miles

0 2 4 6 8 KM

2012 State of the Basin
Groundwater Levels

Groundwater Elevation Contours in Spring 2012

Shallow Aquifer System

Exhibit 18

117°40'0"W

117°20'0"W

34°0'0"N

San Gabriel Mountains

Cucamonga Fault Zone

Cucamonga Basin

Claremont Basin

Pomona Basin

Rialto-Colton Basin

Indian Hill Fault

San Jose Fault

Red Hill Fault

Barrier J

Loma Linda Fault

San Jacinto Fault

Rialto-Colton Fault

Lytle Ck

San Antonio Ck

Euclid Ave

Haven Ave

Day Ck

Etiwanda Ave

Sierra Ave

Riverside Ave

Foothill Blvd

Holt Blvd

Riverside Dr

Central Ave

Cucamonga Ck

San Sevaine Ck

Mission Blvd

Limonite Ave

Chino Ck

Chino Fault

Prado Flood Control Basin

Puente Hills

Chino Hills

La Sierra Hills

Jurupa Mountains

Temescal Basin

Arlington Basin

Riverside Basins

El Sobrante de San Jacinto

San Bernardino County

Orange County

Riverside County

Santa Ana River

Van Buren Blvd

Victoria Ave

700 675 650 625 600 575 550 525 500 750 725 775 800 825

F-30A

F-3A

CVWD-5

CVWD-3

MVWD-10

O-24

O-29

P-11

Offsite MW4

C-10

OW-11

MIL M-06B

CH-16

XRef 404

XRef 425

JCSD-14

JCSD-10

FC-752A2

FC-932A2

CH-15A

XRef 4513

HCMP-9/1

XRef 4802

SARWC-07

HCMP-8/1

SARWC-11

HCMP-2

HCMP-7/1

Archibald 1

15 210 71 10 215 60 91

Legend

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

Boundry of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater level data)

Well With a Water-Level Time History Plotted on Exhibits 24 through 28

1 2 3 4 5 — OBMP Management Zones

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Approximate Location of Groundwater Barrier
- Location Concealed
- Location Uncertain

Groundwater Elevation Contours in Spring 2014

Shallow Aquifer System

Exhibit 18

Prepared by:
WEI
Wildermuth Environmental, Inc.
23692 Birtcher Drive
Lake Forest, CA 92630
949.420.3030
www.weiwater.com

Author: amalone

Date: 4/3/2015

Document Name: 20150403_Exhibit_18_sp2014_copyfor IEUA_Draft

0 1 2 3 4 5 Miles

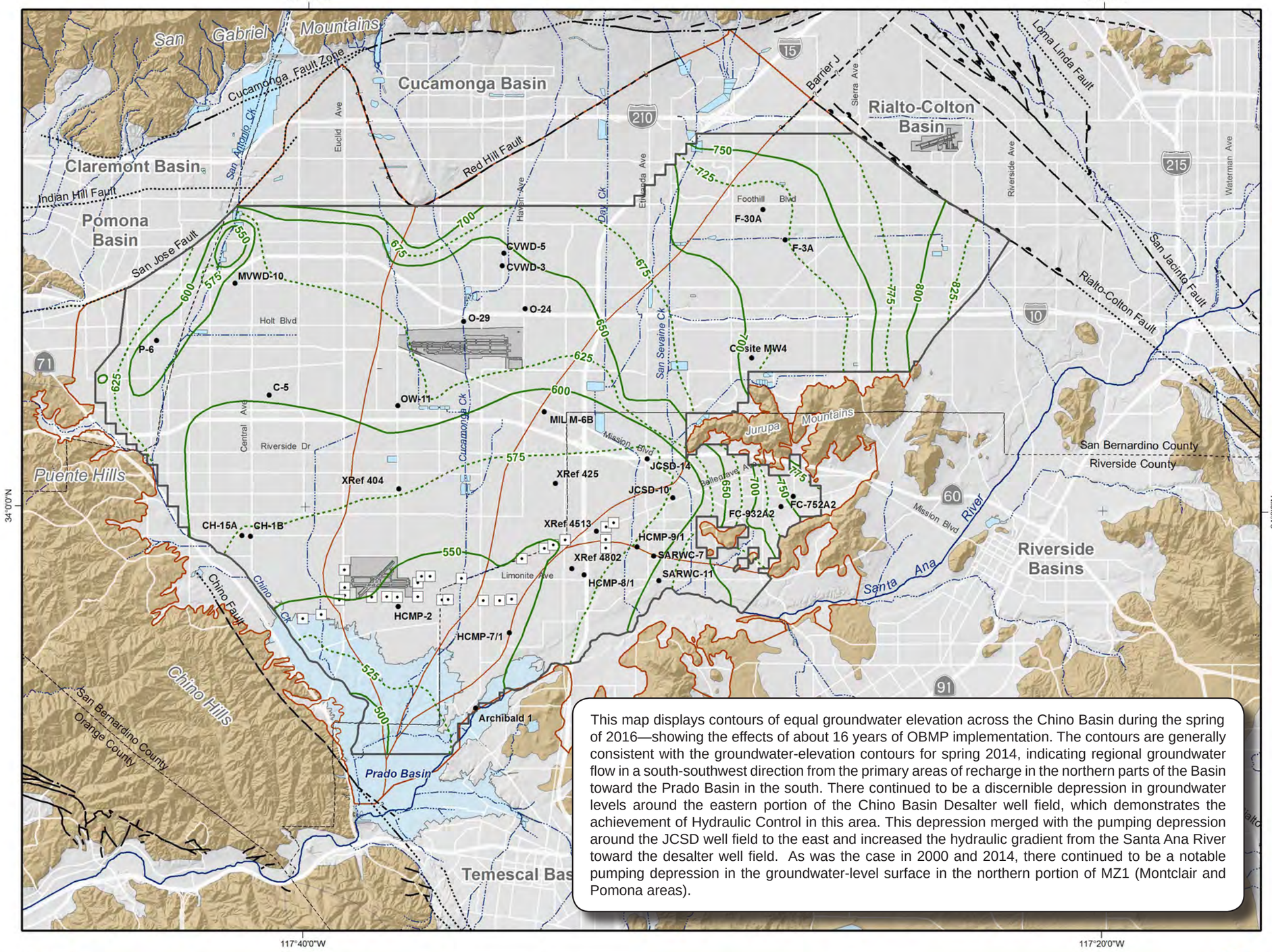
0 2 4 6 8 KM

DRAFT

Chino Basin Watermaster — Partners in Basin Management

2014 State of the Basin DRAFT

Groundwater Levels



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

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

Boundary of Contoured Area (contours are not shown outside of this boundary due to lack of groundwater-level data)

Well with a Groundwater-Level Time History Plotted on Exhibits 4-10 through 4-14

OBMP Management Zones

Chino Basin Desalter Well

Streams & Flood Control Channels

Flood Control & Conservation Basins

Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks

Faults

- Location Certain
- Location Approximate
- Approximate Location of Groundwater Barrier
- Location Concealed
- Location Uncertain

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Document Name: Exhibit_4-4_sp2016

0 1 2 3 4 5 Miles
0 2 4 6 8 KM

2016 State of the Basin
Groundwater Levels

Groundwater-Elevation Contours in Spring 2016

Shallow Aquifer System

Exhibit 4-4