CHINO BASIN
RECYCLED WATER GROUNDWATER RECHARGE PROGRAM

START-UP PERIOD REPORT FOR 8TH STREET BASIN

May 23, 2011

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May 23, 2011

Regional Water Quality Control Board, Santa Ana Region
Attention: Mr. Kurt V. Berchtold
3737 Main Street, Suite 500
Riverside, California 92501-3348

Subject: Transmittal of the Start-Up Report for 8th Street Basin
Chino Basin Recycled Water Groundwater Recharge Program

Dear Mr. Berchtold:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) hereby submit the *Start-Up Report for 8th Street Basins* for the *Recycled Water Groundwater Recharge Program* being implemented by IEUA and CBWM. This document is submitted pursuant to requirements in the following documents:

- 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, June 29, 2007,
- California Regional Water Quality Control Board, Santa Ana Region, 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,
- IEUA and Wildermuth Environmental, Inc., 2007, Start-Up Protocol Plan for 8th Street Basin, June 4, 2007

The following items highlight the findings of the 8th Street Basin Start-Up Report:

- The Start-Up Period for 8th Street Basin is unusual in that is was extended to allow for significant data collection lasting from September 2007 through December 2010. An initial Start-Up Period of recycled water delivery to 8th Street Basin began on September 7, 2007 and continued to March 7, 2008. The Start-Up Period was extended another 6 months through October 2008 due to winter storm water influences and to resolve total organic carbon (TOC) data from the lysimeters that were uncharacteristic of start-up

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periods of other basins. These anomalously high and varied TOC results from the lysimeters led to the construction and testing of soil-aquifer treatment (SAT) using soil columns of 8th Street Basin sediments and silica sand.

- Soil column testing occurred between August 2009 and February 2010 following a period of experimenting with flow rate adjustment and control. TOC was observed to be steadily and consistently removed with length along the soil columns for 8th Street Basin sediments and for a parallel silica sand soil column. At the 30-foot length, analogous to a 30 foot soil depth, TOC was reduced in the final nine (weekly) samples to an average of 1.80 mg/L for the 8th Street Basin sediments and 2.51 mg/L for the silica sand.
- Additional lysimeter data collected during basin operations from October 2009 through December 2010 provided TOC data that were useful for evaluation. The anomalously high and variable TOC data may have decreased and become more regular due to continued basin operations.
- Estimated infiltration rates of the 8th Street Basin cells range from 0.2 and 1.0 feet per day.
- Electrical conductivity (EC) is generally an effective tracer of recycled water in samples collected from the shallower lysimeters, and is useful for estimating travel times to the lysimeter depths.
- All lysimeters at 8th Street Basin ultimately receive recharged water. At 8th Street Basin, recharge water moves downward over a period of approximately 2 to 4 weeks to the 35-foot deep lysimeter.
- For the 35-foot lysimeter at the 8th Street Basin, there is no significant difference in the range of observed SAT efficiencies when the percent recycled water is between 50 and 100%. Under these conditions and at these depths, SAT efficiency for TOC generally ranges between 50% and 80% and averages 64%. Under these conditions and at these depths, SAT efficiency for total nitrogen (TN) generally ranges between 50% and 100% and averages 75%.
- SAT at the basin was effective at removing TOC and TN in the upper 35 feet of sediment despite a source of TOC that was not recycled water. Further reductions in TOC and TN concentrations are likely with increasing depth. With regular operation, 8th Street Basin can achieve 64-percent reduction in TOC of its source water through SAT at the 35-foot lysimeter. At the end of the Start-Up Period, the 20-sample average TOC concentration at the 35-foot lysimeter was 2.60 mg/L.
- The soil column data support a recycled water contribution (RWC) limit of 28%. However, the soil column results were not repeatable at the lysimeters due to the occurrence of anomalously high and variable TOC observed at the basin. As such, an alternative monitoring plan is proposed for 8th Street Basin to gather additional data and to monitor TOC occurrence in the basin and the health of the SAT at the basin.

- The proposed first-year monitoring plan is an alternative monitoring plan and includes monthly sampling of the 35-foot lysimeter and surface water during all months for all recharge sources. The samples collected will be analyzed for EC, TOC, and TN.
- For both TOC and TN, the monthly sampling will serve to confirm that a similar level of SAT is maintained at the basin as was observed during the Start-Up Period, such that a 28% RWC limit may also be maintained. TOC and TN compliance will be demonstrated using the pipeline sampling and applying a 59% correction factor for TOC SAT removal efficiency (observed from the soil column testing) and a 75% correction factor for TN SAT removal efficiency (observed from the lysimeter testing).
- The Start-Up Period Report includes a RWC Management Plan for 8th Street Basin. The RWC Management Plan forecasts 120 months of recharge of diluent water and recycled water to maintain compliance with a 28% RWC. The 8th Street Basin RWC Management Plan will be included in the Recycled Water Groundwater Recharge Annual Report where it will be updated with the most recent data.

If you have any questions, please do not hesitate to call us.

Best regards,

Patrick Sheilds
Executive Manager of Operations

Desi Alvarez
Chief Executive Officer

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1. Introduction

Inland Empire Utilities Agency (IEUA) and Chino Basin Watermaster (CBWM) are co-permit holders for the Chino Basin Recycled Water Groundwater Recharge Program. IEUA and CBWM maintain and operate the program's recharge facilities together with Chino Basin Water Conservation District and San Bernardino County Flood Control District. The recharge program is an integral part of CBWM's Optimum Basin Management Plan (OBMP), and has the goals of enhancing water supply reliability and improving groundwater quality in Chino Basin drinking water wells. The goals are to be met by increasing the recharge of stormwater, imported water, and recycled water.

The report documents soil-aquifer treatment (SAT) at 8th Street Basin and in soil column tests for the removal of total organic carbon (TOC) and total nitrogen (TN), and the subsequent determination of the maximum recycled water contribution (RWC) limit associated with the reduced TOC concentrations at a compliance point (e.g. a selected depth lysimeter). The location of 8th Street Basin (comprised of two adjacent excavations) is shown in Figure 1-1. Although these two excavations were permitted in name as 7th and 8th Street Basins, they are referred to by SBCFCD as 8th Street 1 and 8th Street 2. On a hydrogeological scale they are two cells of one larger basin. For this report, the two halve of the basins are referred to as 7th Street Basin and 8th Street Basin. The 7th and 8th Street Basins were modified under the Chino Basin Facilities Improvement Project following the release of the Chino Basin Phase II Recycled Water Recharge Project Title 22 Engineering Report (CH2MHill, 2003).IEUA and CBWM have modified the site with hardened berms and flow control gates to be able to hold water in the north and south halves of 8th Street Basin and 7th Street Basin. Recycled water is plumbed into the north half of 8th Street Basin and is the main subject of this report. The 7th and 8th Street basins generally receive the same storm water as water flows through the basins from north to south in West Cucamonga Creek.

IEUA has initiated groundwater recharge using recycled water at permitted recharge sites by following initial protocols and reporting on a 6-month Start-Up Period of intensive recycled water delivery and testing. Certain basins have had their Start-Up Period length extended due to conditions at the basins, and when collected data indicate it necessary for further evaluation. Although it was later extended, the initial 8th Street Basin Start-Up Period was conducted by IEUA in accordance with the protocols approved by California Department of Health Services (CDHS) [sic, now the California Department of Public Health (CDPH)] set forth in the *Start-Up Protocol Plan for Eighth Street Basins* (IEUA and Wildermuth Environment, Inc (WEI), 2007). Following discussions with CDPH staff regarding the highly variable TOC results of the 8th Street Basin lysimeter samples, IEUA was allowed to extend the start-up period to allow first for the evaluation of highly variable TOC results from field sampling and second to conduct an evaluation TOC removal of basin sediments in constructed soil columns (flow cells). Recharge with recycled water was again initiated at 8th Street Basin following both positive preliminary soil column results (used to guide RWC targets) and the approval of a program permit amendment to allow for a 120-month rolling RWC average and to have underflow credited as diluent water. The positive results of the continued recharge after the permit amendment (i.e.

lysimeter TOC results are no longer highly variable) are included in this report as an important verification of the findings of the soil column testing.

1.1 Requirements of Order No. R8-2007-0039

The Chino Basin Recycled Water Groundwater Recharge Program is subject to the following requirements of the Regional Water Quality Control Board Santa Ana Region (RWQCB):

- 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, June 29, 2007, and
- 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.
- Order No. R8-2009-0057 Amending 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

Recharge using recycled water was initiated at 8th Street Basin under the original recharge permit (Order No. R8-2005-0033). However, 8th Street Basin became permitted by an update of Order R8-2007-0039 which covers both Phase I and Phase II recharge sites. Recharge permit conditions were also amended at the time that the soil column testing was ending, and allow RWC compliance to follow a 120-month averaging period and allow the inclusion of underflow as diluent water in the RWC calculation.

Order R8-2007-0039 Section F.4 has the original requirements of the Start-Up Period Report:

> The Start-Up Period report shall include: site specific determinations of percolation rates, soil aquifer treatment efficiency and optimum depths and locations of lysimeters to obtain representative compliance samples of recycled water after soil aquifer treatment. The report shall specify the date that the Start-Up Period ended. The report shall make recommendations for final compliance lysimeter placement and the monitoring plan to be employed during the initial year of operation, the initial year maximum average RWC and corresponding TOC limit, and generalized method that will be used to track recharge water in the vadose zone. The analytical results from weekly lysimeter samples shall be evaluated and reported along with conclusions regarding soil aquifer treatment (SAT) performance. This report is subject to approval by the CDHS [sic, now CDPH] and the Regional Board Executive Officer. The report recommendations shall be implemented upon approval.

1.2 Organization of the Start-Up Report

Section 2 of this report describes the installation of lysimeters used for collection of water samples from beneath the basin. Section 3 details the recharge operations during the extended Start-Up Period. Section 4 discusses lysimeter sampling and the monitoring data for both the initial Start-Up Period and the continued recycled water recharge operations. Section 5 discusses soil column flow cell construction and testing, and presents the collected data. Section 6 is an evaluation of SAT efficiencies (for TOC and TN) identified from both the lysimeters and soil column monitoring. Section 7 describes the determination of the Start-Up Period and recommendation of the future compliance point. Section 8 discusses the determination of the recharge site's maximum RWC limit and the development of the site's RWC Management Plan. Section 9 is a proposed water quality monitoring plan for the site based on the start-up period findings. Section 10 is a list of cited references.

2. Lysimeter Installation

A cluster of lysimeters at 8th Street Basin were constructed in July-August 2007. Figure 2-1 shows the locations of the 8th Street Basin lysimeter cluster and the general configuration of the 8th Street and 7th Street Basins. Figure 2-1 also shows water inflow locations of West Cucamonga Creek, the City of Upland's 8th Street storm drain, and IEUA's recycled water turnout to the basin. Figure 2-1 also shows the location of the on-site nested monitoring wells used for quarterly groundwater monitoring. The lysimeter cluster is comprised of five individual lysimeters at 5-, 10-, 15-, 25-, and 35-feet below ground surface (bgs), with ground surface being the bottom of the 8th Street Basin. The 8th Street Basin lysimeter construction drawings are documented in Appendix A of this report. The construction process is summarized in the *Start-Up Protocol Plan for 8th Street Basin (*IEUA and WEI, 2007). Appendix A of this report contains the construction drawings for the monitoring wells used for compliance monitoring of groundwater for the 8th Street Basin recharge site.

Throughout the report text, tables, and figures, water samples from the lysimeters at 8th Street Basin are referred to as 8TH-xx, where xx equals the nominal depth of the porous tip of the lysimeter. Depending on context, the surface water samples collected at each lysimeter are referred to as a 0-depth sample or surface water sample. These samples represent the surface water in the area of the lysimeters.

3. Recharge Operations

3.1 Volume of Historical Diluent Water Recharged

Diluent water recharge includes captured storm flows, local dry weather flows, and imported water. Recharge in 8th Street Basin since July 2005 has been estimated from field observations and operations records. Table 3-1 lists the calculated diluent water recharge by month for the 8th Street Basins. Annual diluent water recharge since July 2005 has ranged from 640 to 1,720 acre-feet (AF). Pre-2005 annual average recharge (prior to basin improvements) had been estimated by CBWM to be approximately 120 AF, and is much less than that of post-2005 recharge operations as 8th Street Basins were historically operated for flood control and not water conservation.

3.2 Recharge Operations during the Start-Up Period

Water delivered to 8th Street Basins includes local runoff, stormwater, and recycled water. An imported water diversion was not available for the 8th Street basin until turnout CB20 was constructed in 2009. Due to the recent drought conditions, CB20 has not been in use other than for testing of the newly constructed turnout and for when MWD drained its own pipeline for maintenance. Recycled water is delivered into the 8th Street Basin from a transmission pipeline in 8th Street, and comingles in the basin with local dry weather flows originating from West Cucamonga Creek and the 8th Street storm drain. Dry weather flows are very difficult to measure due to inaccessibility of a flow measurement point on their drop structures into the basin. IEUA has periodically estimated these dry weather flows and found them to generally range from 0.3 to 1.2 cubic feet per second (cfs). Stormwater recharge to the basin was estimated from storage curves, increases in water elevation, and infiltration rates. Table 3-2 lists the daily water deliveries captured at 8th Street Basin. Table 3-3 lists the monthly deliveries during the Start-Up Period and the 120-month running average percent recycled water of total recharge (starting July 2005), as will be required for RWC limit compliance.

3.3 Estimated Infiltration Rates

Infiltration rates at 8th Street Basin were estimated and ranged from 0.2 to 1.0 foot per day depending on water depth and basin maintenance. Table 3-4 contains observed infiltration rates and data used to make these estimates. These data are graphed on Figure 3-1. Unless noted in the table, infiltration rates were calculated with 8th Street Basin north and south cells in hydraulic connection (flow gate open between cells). Infiltration rates can however vary by individual cell due to water depth and seasonal impacts. Deeper water can cover higher infiltration rate soils not yet adversely impacted by fine-grained sediment introduced by stormwater. Rates in Table 3-4 are not adjusted for dry weather inflow that may have occurred during the period of measurement. Therefore individual infiltration rates may be underestimated by about 0.05 foot per day.

4. Lysimeter and Surface Water Sampling Results

The monitoring schedule from the CDPH-approved *Start-Up Protocol Plan for 8th Street Basin* (IEUA and WEI, 2007) includes weekly sampling at 8th Street Basin for surface water and lysimeter water, and analyses for:

- EC,
- TOC,
- Nitrate-Nitrogen (NO_3-N), Nitrite-Nitrogen (NO_2-N), Ammonia-Nitrogen (NH_3-N), Total Kjeldahl Nitrogen (TKN), and TN.

During the Start-Up period erratic TOC values at the lysimeters led IEUA to conduct soil column testing and later continuation of lysimeter sampling with the recharge permit amendment extending RWC compliance to 120 months. The lysimeters data are compiled in Tables 4-1 through 4-4, respectively, and include data collected during the initial Start-Up Period, extended Start-Up Period, and the continuation of recycled water recharge from October 2009 through December 2010. Soil column data are presented and discussed separately in Section 5.

All non-detect results for nitrogen speciation are summed for TN at half the species detection limit. TN results that are non-detect (<0.6 mg/L) are graphed and averaged at half the detection limit. If not all nitrogen species results are non-detect and the sum of their concentrations is less than 0.6 mg/L and greater than 0.3 mg/L, then TN is reported as <0.6 mg/L but graphed and averaged with the summed value. If there is insufficient sample to analyze for TKN, then NH_3-N is substituted for TKN into the calculation of TN. This is done as the other components of TKN (e.g. organic nitrogen and NH_3-N) are typically removed during the wastewater treatment process. If there is insufficient sample to analyze for NO_3-N, TKN, or NH_3-N, then TN is not calculated. Table 4-4 is a summary of just the TN data as was presented with the nitrogen speciation of Table 4-3.

The percent recycled water in the sample was calculated (as discussed in Section 6.1) by comparing the EC values of diluent water and recycled water. These estimates were made for this lysimeter depth (35 feet) as it was determined (as discussed in Section 7.2) to respond most readily and consistently to operational changes in the 8th Street Basin.

Time-series graphs of the collected and tabularized data are presented in this section, but are interpreted and discussed in Sections 6 and 7. Time-series graphs of EC, TOC, and TN from 8th Street Basin lysimeters are presented in Figures 4-1 through 4-3, respectively. Parallel to the x-axis of these graphs, horizontal bars denote periods when various sources of water were captured at the 8th Street Basins.

During the initial 8th Street Basin Start-Up Period (September 2007 to March 2008), TOC results of the lysimeter sampling fluctuated weekly in many cases exceeding 30 mg/L and occasionally 100 mg/L. The TOC of IEUA's recycled water is generally less than 10 mg/L. To further evaluate the anomalous TOC results, IEUA continued recharging recycled water and sampling the basin's lysimeters beyond the typical 6-month start-up period. During the subsequent 10 months of sampling (March to December 2008), TOC values remained anomalously high but were much less erratic. Potential sources of the higher TOC and the erratic nature of the TOC

were contemplated and included dry weather flows into the basin, a large water fowl population, decaying vegetation, and soil conditions not favorable to SAT.

To address the possibility that local dry weather flows and/or water fowl were creating anomalously high TOC in the surface water, dry weather flows and surface water were sampled for several weeks at multiple locations. Neither was identified as a source of anomalous TOC. The dry weather flow TOC samples ranged from 6 to 8 mg/L and were within the expected TOC range of the recycled water delivered to the basin. Surface water sampling at various locations in the basin did not point to any anomalous areas of the basin with surface water having anomalous TOC sources. To address the possibility that decaying vegetation and anomalous soil conditions, IEUA developed bench-scale soil-column experiments that would eliminate the potential influence of each suspected source.

Section 5 discusses the design, operation, monitoring, data, and findings of the soil column testing. Section 6 and Section 7 evaluate the lysimeter data and the soil column findings for determination of SAT efficiency and RWC compliance monitoring.

5. Soil Column Flow Cell Testing

For reasons described in Section 4, the soil column flow cells were designed and constructed to evaluate TOC changes in water moving through the 8th Street Basin soil in a more controlled environment. Soil column testing was initiated following anomalously high and variable sampling results from the initial start-up period and extension together totaling nearly 17 months. This section describes the flow cell construction, test protocols, and the collected data.

5.1 Design and Construction

Soil columns were designed as a series of connected flow cells that would allow for sampling at approximate 5-foot intervals mimicking the 5-foot sampling depths at the basin lysimeters. The soil column flow cells were generally constructed using 5-foot lengths of 2-inch diameter PVC and miscellaneous PVC fittings. Each flow cell was filled with sediment through which recycled water would flow at a rate nearly that of the observed basin infiltration rates (less than 1 foot per day). The bottom of each 5-foot long flow cell was connected to the top of the next 5-foot long flow cell using 3/4-inch diameter PVC (not filled with soil) and miscellaneous sampling valves and fittings. As these sections of pipe were not filled with sediment and would thus not contribute to SAT removal of TOC, the length of these connections was not considered as part of the sample's flow path length through the soil columns. The vertical pipe without sediment also served as a sample reservoir that was gravity drained during water sampling. The configuration of the soil column flow cells is shown on Figure 5-1. Each vertical section of flow cell was vented at the top to allow any entrapped air (and air entering during sampling) to escape. The flow cells were housed and operated inside a store room at IEUA's RP-1 facility where recycled water and municipal water sources were available for use.

Two 30-foot long trains of soil column flow cells were constructed. One was filled with sediment collected from about 6 inches below the basin floor of 8th Street Basin and the other was filled with silica sand purchased from a home improvement store. Thus, two trains of soil columns were created each connected to the same water supply. The silica sand train would be used to benchmark potential anomalous results of the 8th Street basin sediments train. The silica train was referred to as Train 1 and the 8th Street Basin sediments are referred to as Train 2.

Both sediment sources were washed with the municipal water source prior to installation in the flow cells to remove very fine sediment grains (to prevent clogging) and visible organic debris (to control this as a possible TOC source). The sediments were installed wet into the vertical columns and the sediments were compacted by regularly tapping the columns with a hammer during soil addition. A common 5-gallon reservoir was installed above and piped to each flow cell to provide the head to push water through the soil columns. The reservoir remained full using a float switch connected to the water supply in use.

A municipal water supply was first utilized to break in the soil columns beginning on May 23, 2009. The break-in period allowed air to be purged from the columns. Flow rate during this purge period was approximately 5 gallons per day and about 1 week in duration. After the break-in period, flow rates in each train were adjusted daily in an attempt to achieve a flow rate of approximately 1 gallon per day. Flow rates were initially set by measuring the minutes

needed to fill a 100-mL cylinder and then measuring the time needed to fill a few gallons of a 5-gallon bucket over approximately 24 hours.

Following initial flow rate adjustment, a bacteria broth was introduced into the feed-water 5-gallon reservoir over several days. The addition of bacteria to the flow cells in this manner was suggested by Dr. Jörg Drewes and a means of obtaining a bacterial population in a reasonable testing time frame. The broth also provided each flow train (of difference sediment sources) with a similar bacteria population for testing TOC removal. The bacteria broth was created by mixing basin soils with the municipal water and allowing the soil to settle out for several days before decanting the broth into the reservoir.

Flow control adjustments remained very difficult using the PVC ball valve on the final outlet of each train. Following the bacteria introduction, flow rates through the soil columns were even more difficult to maintain at near constant rates. In many instances, flows would stop entirely. Minor flow rate adjustment would often gradually accelerate overnight to a flow rate exceeding the capacity of the end of system flow measurement reservoir. Several smaller diameter (brass) and style (drip irrigation) valves were installed without success at maintaining a near constant flow rate.

On August 3, 2009, after 10 weeks of observing system performance and adjusting flow rates using the municipal water, the feed water was switched to recycled water from IEUA's Regional Plant 1. With recycled water flow through the soil columns, flow rate adjustment to reach a constant flow rate continued to be problematic. On October 10, 2009, after 20 weeks of attempting to obtain a continuous control flow, a batch flow method was implemented that allowed each train's flow rate to be equal to the volume of water removed during weekly sampling. Batch flow control was implemented by closing off outflow and only opening selected valves to remove a set volume of water (during purging and sampling) over a set period of time (1 week). The batch flow method was set to create a total residence time at the end of train sample point that approximated a 1.0 foot per day infiltration rate at the 30-foot length of the soil columns. Flow rates to the shorter lengths sample points were faster (than the longer) as more water is pulled past them during sampling of the longer length samples. To obtain the desired flow rates, the 15- and 25-foot sampling locations were discontinued for batch sampling.

5.2 Data Collection and Monitoring

During purging and testing, IEUA collected and tested water from flow path lengths of 3, 5, 10, 15, 20, 25, and 30 feet on each soil column train. Water samples from these depths were monitored weekly for EC, TOC, TN, dissolved oxygen (DO) and temperature. In the data tables and on the figures, the silica sand flow cell and 8th Street Basin sediment flow cell are referred to as FC-1 and FC-2, respectively. A source water sample is shown on tables and figures as FC-00. Each sample location along the flow cell train is referred to by its length in feet along the flow cells filled with sediment. The soil column data from FC-1 (silica sand) and FC-2 (8th Street sediment) are listed in Tables 5.1 and 5.2, respectively. The EC data of FC-1 and FC-2 are graphed on Figures 5-2A and 5-2B. The TOC data of FC-1 and FC-2 are graphed on Figures 5-3A and 5-3B. The TN data of FC-1 and FC-2 are shown on Figures 5-4A and 5-4B. TKN testing was not part of the sampling protocol of the municipal supply due to its test cost and it not being expected to occur in municipal water supply. TN calculation for the municipal water

supply was made assuming a 0.0 mg/L TKN value. Dissolved oxygen and temperature data of the water samples of FC-1 and FC-2 are listed in Table 5-4 and Table 5-5, respectively. Dissolved oxygen data of FC-1 and FC-2 samples are graphed on Figures 5-5A and 5-5B, respectively. Water temperature data of FC-1 and FC-2 samples are graphed on Figures 5-6A and 5-6B, respectively.

5.3 Data Analysis

While all the collected soil column water chemistry data of Tables 5-1 through 5-3 are graphed on Figures 5-2 through 5-4, the data evaluated include only those having the recycled water source and collected during batch flow control. The purpose of the data analyses is to verify the ability and efficiency of SAT of IEUA's recycled water in 8th Street Basin sediments once relatively stabilized conditions were obtained.

EC was monitored mainly to determine the occurrence of each water supply source at each soil columns sample point. Figures 5-2, the time-series graphs of soil column EC, demonstrates both the occurrence of recycled water in the soil columns and an approximate travel time of approximately 1.0 foot per day (30 days to travel 30 feet of soil column). During testing, the EC of the municipal supply generally ranged from 300 to 370 uS/cm and the EC of the recycled water generally ranged from 700 to 850 uS/cm. The 300-to 400-uS/cm difference in EC provided an effective means of identifying each water source. The small weekly variations in EC allowed for the estimation of flow rates by correlation of the delay of EC trends in the source water through the various sampling distances along each train.

Figures 5-3A and 5-3B, the time-series graphs of soil column TOC, show that TOC removal occurred in both the silica sand and 8th Street Basin sediment flow cells. TOC of the recycled water source ranged from approximately 3.0 to 5.0 mg/L through the test period. Upon establishment of the batch flow control, TOC was observed to be steadily and consistently removed with length along the soil columns for both sediment sources. At the 30-foot length, analogous to a 30 foot soil depth, TOC was reduced from an average of 4.43 mg/L in the recycled water source to an average of 2.51 mg/L for the silica sand and 1.80 mg/L for the 8th Street Basin sediments. The results used in the averages are the final nine (weekly) samples December 10, 2009 to February 17, 2010. TOC removal thus averaged 59% for the 8th Street basin sediments soil column.

Figures 5-4A and 5-4B, the time-series graphs to soil column TN, show that TN was not significantly removed by the soil column design. This may be attributed to a relative lack of a significant denitrifying bacterial population under the test conditions. This lack may be attributed to competition for resources in the soil columns, such as available dissolved oxygen. That TN was not observed to be reduced in the soil column does not cause an issue for correlation with conditions at the recharge basin as the main objective of the soil column flow cell testing was to determine if the 8th Street Basin sediments and IEUA recycled water TOC are compatible with the SAT process of reducing TOC. As discussed in the following section, continued testing at the basin shows both TOC and TN removal is occurring at the basin. TN variations of source to sample point were useful in monitoring flow rates through the system. They indicate an approximate 28 day travel time to 30 feet. Flow rates to the shorter lengths

sample points are faster (than the longer) as more water flowed past them during sampling at intermediate lengths.

Figure 5-5A and 5-5B, the time series graphs of soil column DO, show a steady decrease in DO along the flow cell path. Conditions in the flow cells were never anoxic (0%), and remained higher than 30%. The recycled water source water DO was generally 80 to 90%. The 8th Street Basin sediment flow cell train showed greater reduction in DO along the flow path than the silica sand flow cell train. This is consistent with a slightly more robust bacterial population and the observed greater removal of TOC in the 8th Street sediment train. Verbal communications with Dr. Jörg Drewes, an expert in SAT with the Colorado School of Mines, indicates that the population of soil bacteria will become optimized to survive at various soil-water DO levels and continue to metabolize the available TOC. While the DO concentrations in the soil column flow cell trains may not match that of the 8th Street Basin lysimeters depths, the test configuration is valid in that it shows the degree to which TOC in IEUA's recycled water is biologically degradable organic carbon (BDOC).

Figure 5-6A and 5-6B, the time series graphs of soil column temperature, show the water temperature varied week to week ranging from 13 to 23 °C during the batch flow test period. Due to the low flow rate, the source water reservoir is assumed to be nearly that of the test sites room's ambient temperature. Temperatures were higher during summer months and cooler during winter months. These temperatures are documented purely as background to the test conditions. Variations are not thought to have significant influence on the test results.

6. Soil-Aquifer Treatment Efficiency: TOC & TN Removal

SAT is natural biodegradation occurring beneath a recharge basin where TOC and TN concentrations are decreased as recharge water flows though shallow soil. As allowed in Order R8-2007-0039, SAT reduction in TOC concentration ultimately allows for a greater maximum RWC limit based on the formula:

$$TOC_{average} = \frac{0.5 mg/L}{RWC_{average}}$$

Figure 6-1 is a graph of average TOC concentrations as a function of increasing depth at 8th Street Basin and in the two soil column flow cells. Figure 6-2 is a similar graph for TN. The 0-feet depth sample represents the surface water grab sample and the flow cell source water. The other depths correspond to the lysimeter depth and the length of soil column. For the lysimeters, the average data are for the 20 samples from June 9, 2010 through October 27, 2010 and are listed at the bottom of Table 4-2 for TOC and at the bottom of Table 4-4 for TN. For the flow cells, the average data are from the final 9 weeks of samples collected from December 22, 2009 through February 24, 2010 and are listed at the bottom of Table 4-2 for TOC and at the bottom of Table 4-4 for TN. The 5- and 10-foot lysimeter data are not shown on Figures 6-1 and 6-2 as these lysimeters failed several months into testing and thus end of test data were not collected for these depths. The later time data for the lysimeters no longer show the anomalous values that had occurred during the initial start-up period. On the profile, there are no 15- and 25-foot data from the soil columns as these sampling points were discontinued for batch flow rate control.

Under the soil column experimental conditions, **the TOC in IEUA recycled water can be reduced by 8th Street Basin sediments to at least 1.80 mg/L (30 foot depth)**. In comparison, TOC reduction observed at the lysimeters (35 foot depth) indicates TOC may be reduced by SAT to 2.60 mg/L. The 0.8-mg/L difference between the field and laboratory tests suggests that there is about 0.8-mg/L of more recalcitrant TOC in the basin that may be naturally occurring in the soils underlying the basin or is related to the local runoff. Given the basin surface water TOC was on average 5 mg/L greater than the soil column source water, reduction of anomalous TOC to 0.8 mg/L indicates SAT at the basin is effective in the first 35 feet. For the lysimeters, Figures 6-1 and 6-2 show a decrease in average TOC and TN concentrations with increased depth and suggest that SAT reduction in TOC and TN concentration continues to at least 35-feet bgs and may continue with percolation to greater depths down to the water table. Depth to groundwater at 8th Street Basin during the Start-Up Period was approximately 485 feet bgs as measured in the monitoring well south of 7th Street Basin (IEUA, 2010). At 35 feet, the 20-sample average for TOC was 2.60 mg/L and for TN was 1.2 mg/L. For the soil column flow cells, Figures 6-1 and 6-2 show a decrease in average TOC concentrations with increased depth but not for TN concentrations. Average TN concentrations are largely unchanged. At the 30-foot soil column flow cell length, the average TOC for the last 9 samples was 2.52 mg/L and 1.80 mg/L for the silica sand and 8th Street Basin sediments, respectively. At the 30-foot soil column flow cell length, the average TN for the last 9 samples was 5.2 mg/L and 4.6 mg/L for the silica sand and 8th Street Basin sediments, respectively.

At 8th Street Basin, SAT removal of TOC and TN continues over time and generates fairly consistent concentrations with depth. Some surface water trends in TOC and TN concentration variations can be observed to a lesser degree with depth. Figure 4-2 is a time-series graphs of TOC from the surface water and lysimeter samples from 8th Street Basin. Data for the figure comes from Table 4-2. Parallel the x-axis of these graphs, horizontal bars denote periods when various sources of water were diverted into the corresponding 8th Street Basins. Note that lower TOC concentrations with depth are generally consistent over time. Figure 4-3 is a time-series graph of TN from the surface water and lysimeter samples from 8th Street Basin. Data for these two figures come from Table 4-4. Decreases in TN concentrations from the lysimeter samples are generally consistent with depth and over time. While TN concentration reduction by SAT does not increase the volume of recycled water that can be recharged under Order R8-2007-0039, it does assist in meeting the lower Phase I/II TN compliance metric of 5 mg/L (formerly 10 mg/L).

SAT efficiency was estimated for individual samples by comparing surface water TOC and TN with lysimeter sample TOC and TN once an offset had been made for travel time. Estimating the travel time offset from the surface to a lysimeter depth can be made through correlation of the trends in EC shown on Figure 4-1. Correlation of the EC of the surface water and the EC of water at the 35 foot depth shows a travel time of approximately 14 days when EC concentration is lowered (due to storm inflows) and about 28 days when EC concentration is rising (adding recycled water following a storm). The difference makes sense when considering that storms fill the basin rapidly with a much larger quantity of water than the rate at which recycled water is delivered following a storm. For estimating SAT efficiencies, a universal 21-day average offset to 35 feet was used. The time offset data were then used to pair TOC and TN values of surface and lysimeter water. The result of this pairing provides the basis for SAT efficiency calculation by individual samples. Table 6-1 and Table 6-2 show the SAT efficiencies for TOC and TN, respectively, using an approximate 21-day offset (by choosing the lysimeter result closest in time to 21 days after the surface water result) of the lysimeter results from the earlier surface water result. On these tables, periodic coloring or data pairs are used to illustrate which data were paired for the removal efficiency evaluation. The first colored value for surface water correlates with the colored value 21 days later for the lysimeter samples.

SAT efficiency is correlated with percent recycled water. Table 6-1 and Table 6-2 both contain a column showing an estimated percentage of recycled water. The estimate was made using a relative proportion of EC of recycled water and storm water. Water with EC of 700 µS/cm or greater was considered 100% recycled water. Water with EC of 200 µS/cm or lower was considered 0% recycled water. A sensitivity analyses indicated that the exact values of EC used in the calculation is less important than the absolute difference between the two sources (recycled water and diluent water). In general, EC used in the evaluation had a 500 µS/cm difference.

Figure 6-3 and Figure 6-4 are graphs of SAT efficiency vs. percent recycled water for TOC and TN, respectively. The data graphed on these figures are post February 1, 2008 and represent the more stabilized data following the first 6-month period of data collection. The evaluation indicates that **when the percent recycled water is greater than 50% at 8th Street Basin (35-foot deep), the SAT efficiency for TOC ranges generally between 50% and 80%.** The

evaluation also indicates that when the percent recycled water in 8th Street Basins is greater than 50%, the SAT efficiency for TN is generally 50% to 100%. Comparison of SAT efficiencies for both TOC and TN removal over the range of percent recycled water at the 35-foot lysimeter indicates **there is no significant difference in the SAT efficiency range with a recycled water percent between 50% and 100%**. **At 8th Street Basin, SAT efficiency for TOC and TN removal from recycled water averaged 64% and 75%, respectively**, as is shown at the bottoms of Table 6-1 and Table 6-2 for various data ranges.

7. Start-Up Period and Recommended Compliance Monitoring

7.1 Determination of the Start-Up Period

Order R8-2007-0039 establishes a Start-Up Period for each recharge basin in the Chino Basin Recycled Water Groundwater Recharge Program (Finding 11, page 4):

> . . . a Start-Up Period will be used at the outset of recycled water recharge operations. The purposes of each Start-Up Period are to establish site characteristics, including percolation rates, the physical characteristics of the vadose zone and soil aquifer treatment efficiency, and to establish a sampling regime, based on these characteristics, that is representative of recycled water following soil aquifer treatment. The length of the Start-Up Period at each basin will be contingent on site characteristics, including percolation rates and recycled water transit time in the subsurface. The Start-up Period shall last up to 180 days following commencement of recharge of recycled water to each basin, except if recharge of recycled water at that basin is significantly interrupted, for example due to storm event(s). . . . This Order requires IEUA to submit for CDHS [sic, now CDPH] and Regional Board approval a proposed Start-Up Period protocol at least two weeks prior to beginning each Start-Up Period. A Start–Up Period report will be prepared at the close of each Start-Up Period and will include recommendations for the optimum depths and locations for placement of lysimeters that will be used to measure compliance, and for a compliance-monitoring program. The report will also include recommendations for the maximum running monthly average Recycled Water Contribution and maximum running average Total Organic Carbon (TOC) limit for the initial year of recharge operations following the Start-Up Period.

The Start-Up Period for each basin will be long enough to demonstrate effective TOC removal. As long as TOC concentrations continue to decline over time, the basin is still deemed to be in the Start-Up Period unless interrupted. **The 8th Street Basin Start-Up Period experienced several starts and stops due to storms, anomalous TOC results, recharge permit changes, and bench-scale soil column experiments. In total, the various portions of the 8th Start-Up Period spanned from September 2007 through October 2010.**

The Start-Up Period of recycled water delivery to 8th Street Basin began on September 7, 2007 and continued through into December 2007 before being interrupted for three months by storms. Following the end of the storms, the start-up period was resumed in February and March 2008 with intermittent recycled water deliveries. The 6-month time point after the initiation was March 7, 2008. Due to the anomalous TOC values of samples collected during the initial 6 months and the interruptions from the 2007-08 storm season, the start-up period was continued for another 6 months from April through October 2008. Nearly continuous recycled water recharge occurred during the 6-month extension. While the TOC lysimeters samples collected from April through October 2008 continued to have anomalous results, they were not as high and irregular as the samples from the initial period of September 2007 through February 2008. As the 8th Street Basin Start-Up Period had not yielded satisfactory results similar to the start-up periods at other recycled water basins, IEUA initiated the design, construction, and testing of soil columns to create testing protocols isolated from potential causes of the observed TOC anomalies. Soil column testing was initiated in May 2009. However, due to flow control issues and the time needed to develop a useful flow control methodology, the primary flow cell monitoring period began on August 3, 2009 and was concluded on February 24, 2010. During soil column testing, IEUA received an amendment to its recharge permit on October 29, 2009 which allows compliance with RWC limits to be extended from 60 months to 120 months and also allows the inclusion of groundwater underflow in the volume-based RWC calculation. With the permit amendment alleviating short term concerns at 8th Street Basin for RWC compliance,

recycled water was again initiated in November 2009 to gather more lysimeter data in parallel with the soil column testing. Testing was extended to October 27, 2010 and concluded at the initiation of the 2010 storm season.

7.2 Compliance Point Selection

Section B.6 of Order R8-2007-0039 allows lysimeters or an "alternative-monitoring plan" be used to demonstrate SAT and for compliance with requirements of the order. However, the compliance point may be any point prior to groundwater that is predominately recycled water. Order R8-2007-0039 states in Section B6:

> . . . An alternative-monitoring plan may be approved upon submission of sampling results that demonstrate that an equal level of public health protection is achieved. (See also Provision G.8 and G.9.) Upon development of a soil-aquifer treatment factor using recharge demonstration studies, lysimeter based compliance monitoring may be replaced with recycled water measurements leaving the treatment plant and the application of the treatment factor with prior approval by the CDHS[sic] and the Regional Board Executive Officer.

The need for an alternate monitoring plan is evidenced by 1) TOC concentrations of 8th Street Basin water greater than that of delivered recycled water, 2) the potential for future anomalous TOC in 8th Street Basin surface water, 3) TOC concentrations at the deepest 8th Street Basin lysimeter being influenced by higher TOC of surface water despite stabilized SAT results, and 4) successful results of soil column testing indicating the 8th Street Basin soils can provide superior SAT efficiency than observed at the basin's lysimeters. IEUA and CBWM therefore propose an alternative sampling plan for monitoring recycled water recharge at 8th Street Basin.

As discussed in Section 6, SAT is effective to the observed depth of 35 feet and likely continues to some degree as recharge migrates downward to groundwater depths of 450 feet at the basin. Thus, the deepest lysimeter would provide the best lysimeter sampling results for TOC removal. However, this sampling depth remains influenced by surface water TOC greater than the delivered recycled water and does not reflect the TOC removal potential of IEUA recycled water as observed during soil column testing and a similar flow length. Soil column testing showed TOC removal efficiency of SAT to be able to reduce IEUA recycled water to 1.80 mg/L

IEUA and CBWM are recommending that the compliance sampling point be the 35-foot lysimeter, but that TOC sampling results be used only to document the continued health of the SAT process at the basin. The TN results would be used for compliance. Due to the extensive data set of the extended Start-Up Period, IEUA and CBWM are recommending that the monitoring frequency be monthly regardless of the water source delivered.

This alternative sampling plan will greatly simplify sampling and data evaluation by eliminating the need to account for potential impacts on TOC and TN from diluent water recharged with recycled water.

7.3 Maximum RWC Determination

The maximum RWC is determined as specified within Order R8-2007-0039. Finding 12 of the Order states:

> This Order does not establish maximum average recycled water contributions (RWC) at each basin, but requires the users to determine the maximum average RWC through the Start-Up Period for each recharge basin. The determined RWC must be approved by CDHS [sic, now CDPH] and the Regional Board.

Recycled Water Quality Specification Section A.10 states,

> At each recharge basin, the monthly average TOC concentration of the recycled water prior to reaching the regional groundwater table shall not exceed the average TOC value calculated from the following formula:
>
> $TOC_{Average} = 0.5 \text{ mg/L} \div RWC_{Average}$

Section B.6 of Order R8-2007-0039 states:

> Compliance with average TOC concentration limits specified in Recycled Water Quality Specifications A.11., above, shall be determined based on a lysimeter-based monitoring program performed at each individual recharge basin and allowing for recycled water percolation to the lysimeters to demonstrate soil aquifer treatment efficiency, unless recycled water TOC compliance can be demonstrated prior to recharge. Compliance shall be based on the running average of the most recent 20 lysimeter sample test results representative of recycled water samples.

The 20-sample rolling average TOC concentrations at the end of October 2010 for the 8th Street Basin lysimeters are shown at the bottom of Table 4-2. These running averages are for data with a recycled water percentage greater than 50% as determined from EC at the 35-foot lysimeter with consistent sample retrieval.

California Draft Groundwater Recharge Regulations and Order R8-2007-0039 limit maximum RWC by basin to 50% for recycled water produced by tertiary treatment. **A maximum RWC limit of 28% can be theoretically justified using the soil column test results.** At the end of October 2010, the 35-foot lysimeters at 8th Street Basin had a 20-sample rolling average TOC of 2.60 mg/L, while the average TOC from the 30-foot length of 8th Street Basin sediment soil column was 1.80 mg/L.

The column study was conducted using native soils from the 8th Street Basin and the same recycled water that is delivered to the basin. It can be postulated that the 0.8 mg/L difference in the TOC found in the 35-foot lysimeter and the equivalent sample from the column is a result of recalcitrant TOC from either the local runoff or from the native souls in the basin. The TOC concentrations at the 35-foot lysimeter have continued to decline over the course of the extended start-up period and we suspect that they may continue to decrease – perhaps approaching the column study concentrations. Continued TOC reduction in the soil column is expected to continue as water moves from the observed 35-foot depth down to the water table. Therefore, an RWC of 28 percent is conservative and appropriate for the 8th Street Basin. Continued TOC monitoring will be report in the recharge program's quarterly reports.

8. RWC Limit and RWC Management Plan

RWC management is needed to keep a basin's volume-based RWC within the maximum RWC limit determined by the 20-sample rolling average TOC. A basin's volume-based RWC is determined by a 120-month rolling average ratio of recycled water volume to total recharge volume. Total recharge volume is recharge from all sources including stormwater, local runoff, imported water, and recycled water. Per Order R8-2007-0039 and Order R8-2009-0057, during the Start-Up Period and up to 120-months of recharge after the initiation of recharge, the volume-based RWC may exceed the maximum RWC limit, but must be within the limit by month 120.

Order R8-2009-0057 modifies Order R8-2007-0039 Section F.20 as follows:

> The Discharger shall submit a RWC Management Plan to the CDPH and the Regional Board that includes estimates of future average RWCs based on anticipated recharge operations over the first 120 months of recycled water recharge at each recharge site. The RWC Management Plan shall be submitted with the Start-Up Period Report and updated with IEUA's annual report to the Regional Board during the first 120 months and shall clearly identify the plan to achieve compliance with the maximum recycled water contribution by the 120th month at each recharge site. IEUA shall update the basin-specific RWC plans annually to reflect the estimated diluent water and recycled water contributions for the upcoming year. For the purpose of the diluent water projections, implementation of a weighted averaging should be considered when it is known that imported water supplies will not be available for purposes of recharging the aquifer. The Chino Basin is a large groundwater aquifer and that depth to groundwater can be up to 250-300 feet; however, the quantity of the underflow in the basin has not been utilized in the calculations for diluent water by IEUA. CDPH may consider crediting a fraction of the flow as diluent water, which would be dependent on the accuracy of the method used to measure the flow, its distribution, and the ability to meet the other diluent water criteria in the draft regulation. Therefore, IEUA may find it beneficial to quantify the underflow when calculating RWCs for compliance; especially during an extended RWC averaging period.

Order R8-2009-0057 modifies Order R8-2007-0039 Section B.7 as follows:

> Calculation of the running monthly average RWC shall commence after 30 months of operation and shall be based on the total volume of the recycled water and diluent water recharged over the preceding months. For each recharge basin, compliance with the current approved maximum average RWC shall be achieved no later than upon the completion of 120 months of operation after the start-up period. The average RWC shall be calculated by dividing the total volume of recycled water applied to the spreading area during the preceding 120 calendar months by the sum of the total recycled water applied to the spreading area and the diluent water applied during that 120-month period.

An RWC Management Plan is developed for a recharge site by preparing a history of past recharge and then determining future recharge that will keep the volume-based RWC within the maximum RWC limit. Future recharge must be estimated. Future diluent water is estimated based on past availability of the various sources of diluent water and is expressed as monthly averages for the recharge sites historical recharge. Recycled water recharge is then added to the plan at regular intervals to keep the RWC in compliance. The RWC Management Plan generally has five distinct time periods: 1) Historical Diluent, 2) Start-Up Period, 3) Short-Term Compliance, 4) Start-Up Period Roll Off, and 5) Long-Term Stability.

Historical Diluent Recharge is the period of diluent water recharge prior to initiation of recharge using recycled water. Start-Up Period Recharge is the approximately 6 months of predominately recycled water recharge during the start-up period when a rapid rise in the volume-based RWC may occur. Short-Term Compliance (Interval 3) is the period when the volume-based RWC is brought to within the RWC compliance limit by month 120. Start-Up Period Roll Off (Interval

4) is an approximately 6-month long period when the recharge for the start-up period drops off from the rolling-average RWC and is characterized by a potentially rapid decrease in the volume-based RWC. Long-Term Stability (Interval 5) is the period after the first 120 months of recharge using recycled water when a long-term average diluent water history is available and recycled water deliveries can be regularly scheduled to maintain RWC limit compliance. Intervals 3, 4, and 5 had the potential for more rapid changes in RWC until the 2009 permit amendment (RWQCB, 2009) allowed underflow as diluent water in the 120-month RWC calculation.

The initial RWC Management Plan for 8th Street Basin is presented in Table 8-1. The available 26 months of historical data are shown on Figure 8-1 as solid lines while the following 120 months of planned deliveries are shown as dashed lines. The 8th Street Basin RWC Management Plan will be updated with each annual report of the Recycled Water Groundwater Recharge Program to show current actual recharge and revised planned deliveries.

9. Water Quality Monitoring Plan

Start-up period report requirements include development of an initial year monitoring plan. The extensive 8th Street Basin Start-Up Period was initiated in July 2007 and concluded in December 2010. During this time, significant monitoring data was collected for all available basin lysimeters. Development of a first year monitoring program takes into consideration the observations of the start-up period.

As discussed in the prior sections and as shown in the tables and graphs included in this report, SAT provides significant reduction of both TOC and TN. TN compliance criteria are met consistently at the 25- and 35-foot lysimeters depths, with only four samples in three years from the shallower lysimeters exceeding the 5 mg/L TN limit for recycled water recharge. For TOC, all the lysimeters at 8th Street Basin are impacted to some degree by a TOC source not present in IEUA's recycled water. As such, the lysimeters alone are only able to document TOC removal in a relative sense, and cannot be used to provide an absolute TOC compliance monitoring point. As such an alternative monitoring plan is recommend.

During the first year of monitoring (following the start-up period reporting), IEUA and CBWM recommend the 35-foot lysimeter be monitored monthly along with surface water to demonstrate the persistence of SAT activity at the basin. Such monitoring results will provide an indication that SAT is continuing to occur at a similar level to that observed during the start-up period. The 35-foot lysimeter was selected as the monitoring point as it was shown to receive recycled water and has demonstrated TOC and TN removal. The monthly sampling of surface water and the 35-foot lysimeter is to include TOC, TN, and EC.

Additionally, IEUA will conduct weekly recycled water monitoring during recycled water deliveries to the basin utilizing the sampling station located on the recycled water pipeline turnout at the GenOn Energy (formerly Reliant Energy) cooling water storage pond immediately north of IEUA's Regional Plant No. 4 (RP-4) in Fontana. This is the same sampling point that is used for quarterly and annual sampling of recycled water. It is a preferred sampling location as it is a common central location for sampling that can be used for other recharge sites, and the location generally has daily recycled water flow (based on non-recharge customer demands from RP-1 and RP-4) in proportions consistent with supply to groundwater recharge sites. The EC, TOC, and TN results from the pipeline will be used to demonstrate the recharged water is consistent with that delivered during the start-up period. TOC and TN compliance will be demonstrated using the pipeline sampling and applying a 59% correction factor for TOC SAT removal efficiency (observed from the soil column testing) and a 75% correction factor for TN SAT removal efficiency (observed from the lysimeter testing).

10. References

California Regional Water Quality Control Board, Santa Ana Region. 2005. Order No. R8-2005-0033, Water Recycling Requirements for Inland Empire Utilities Agency and Chino Basin Watermaster, Phase 1 Chino Basin Recycled Water Groundwater Recharge Project, San Bernardino County, April 15, 2005.

California Regional Water Quality Control Board, Santa Ana Region, 2007a, 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, June 29, 2007.

California Regional Water Quality Control Board, Santa Ana Region, 2007b, 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.

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IEUA and WEI, 2007, Start-Up Protocol Plan for 8th Street Basin, June 4, 2007.

Wildermuth Environmental, Inc., 1999, Chino Basin Optimum Basin Management Program, Phase 1 Report, Prepared for the Chino Basin Watermaster, 1999.

TABLES

Table 3-1
8th Street Basin Historical Diluent Water Recharge
(acre-feet)

Fiscal Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2005/06	0.0	0.0	60.0	132.6	60.0	60.0	116.0	242.4	325.9	229.5	50.2	15.0	1291.6
2006/07	11.9	6.2	22.0	40.3	42.0	79.8	58.8	167.4	38.3	89.0	42.0	42.0	639.7
2007/08	16.0	16.0	17.0	42.0	81.0	224.0	335.0	98.0	21.0	11.0	90.0	15.0	966.0
2008/09	29.0	15.0	15.0	16.0	137.0	352.0	35.0	458.0	21.0	15.0	16.0	0.0	1109.0
2009/10	19.0	33.0	18.0	74.0	93.0	303.0	387.0	477.0	73.0	206.0	34.0	0.0	1717.0
2010/11	30.0	28.0	36.0	89.0	187.0	499.0	110.0	276.0					

Notes:

1) Groundwater underflow is also credited as diluent water in the 120-month running average RWC calculation. For 8th Street Basin, the groundwater underflow was estimated at 3,722 AFY (310 AF per month) using a Darcian calculation and conservative limits identified by an expert panel (Appendix G of IEUA, 2010)

2) Table 7-1 contains a breakdown of stormwater and imported water diluent recharged at 8th Street Basin

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
09/01/07	No connection			0.5	0.0	0.5	0.0	0.0	0.0
09/02/07				0.5	0.0	0.5	0.0	0.0	0.0
09/03/07				0.5	0.0	0.5	0.0	0.0	0.0
09/04/07				0.5	0.0	0.5	0.0	0.0	0.0
09/05/07				0.5	0.0	0.5	0.0	0.0	0.0
09/06/07				0.5	0.0	0.5	0.0	0.0	0.0
09/07/07				0.5	0.0	0.5	1.2	0.0	1.2
09/08/07				0.5	0.0	0.5	6.1	0.0	6.1
09/09/07				0.5	0.0	0.5	6.1	0.0	6.1
09/10/07				0.5	0.0	0.5	6.1	0.0	6.1
09/11/07				0.5	0.0	0.5	6.1	0.0	6.1
09/12/07				0.5	0.0	0.5	6.1	0.0	6.1
09/13/07				0.5	0.0	0.5	6.8	0.0	6.8
09/14/07				0.5	0.0	0.5	6.8	0.0	6.8
09/15/07				0.5	0.0	0.5	6.8	0.0	6.8
09/16/07				0.5	0.0	0.5	6.6	0.0	6.6
09/17/07				0.5	0.0	0.5	7.5	0.0	7.5
09/18/07				0.5	0.0	0.5	7.2	0.0	7.2
09/19/07				0.5	0.0	0.5	7.2	0.0	7.2
09/20/07				0.5	0.0	0.5	5.0	0.0	5.0
09/21/07				0.5	0.0	0.5	0.0	0.0	0.0
09/22/07				2.3	0.0	2.3	0.0	0.0	0.0
09/23/07				0.0	0.0	0.0	0.0	0.0	0.0
09/24/07				0.5	0.0	0.5	4.6	0.0	4.6
09/25/07				0.5	0.0	0.5	8.3	0.0	8.3
09/26/07				0.5	0.0	0.5	9.0	0.0	9.0
09/27/07				0.5	0.0	0.5	6.2	0.0	6.2
09/28/07				0.5	0.0	0.5	5.5	0.0	5.5
09/29/07				0.5	0.0	0.5	5.5	0.0	5.5
09/30/07				0.5	0.0	0.5	3.7	0.0	3.7
10/01/07				0.5	0.0	0.5	5.5	0.0	5.5
10/02/07				0.5	0.0	0.5	5.5	0.0	5.5
10/03/07				0.5	0.0	0.5	5.5	0.0	5.5
10/04/07				0.5	0.0	0.5	5.5	0.0	5.5
10/05/07				0.5	0.0	0.5	5.5	0.0	5.5
10/06/07				0.5	0.0	0.5	5.5	0.0	5.5
10/07/07				0.5	0.0	0.5	5.5	0.0	5.5
10/08/07				0.5	0.0	0.5	3.4	0.0	3.4
10/09/07				0.5	0.0	0.5	0.0	0.0	0.0
10/10/07				0.5	0.0	0.5	0.0	0.0	0.0
10/11/07				0.5	0.0	0.5	0.0	0.0	0.0
10/12/07				0.5	0.0	0.5	0.0	0.0	0.0
10/13/07				10.3	17.0	27.3	0.0	0.0	0.0
10/14/07				0.5	0.0	0.5	0.0	0.0	0.0
10/15/07				0.5	0.0	0.5	0.0	0.0	0.0
10/16/07				0.5	0.0	0.5	0.0	0.0	0.0
10/17/07				0.5	0.0	0.5	2.5	0.0	2.5
10/18/07				0.5	0.0	0.5	5.1	0.0	5.1
10/19/07				0.5	0.0	0.5	4.9	0.0	4.9
10/20/07				0.5	0.0	0.5	7.2	0.0	7.2
10/21/07				0.5	0.0	0.5	5.0	0.0	5.0
10/22/07				0.5	0.0	0.5	5.1	0.0	5.1
10/23/07				0.5	0.0	0.5	5.3	0.0	5.3
10/24/07				0.5	0.0	0.5	3.2	0.0	3.2
10/25/07				0.5	0.0	0.5	2.5	0.0	2.5
10/26/07				0.5	0.0	0.5	1.3	0.0	1.3
10/27/07				0.5	0.0	0.5	2.6	0.0	2.6
10/28/07				0.5	0.0	0.5	6.4	0.0	6.4
10/29/07				0.5	0.0	0.5	5.3	0.0	5.3
10/30/07				0.5	0.0	0.5	5.2	0.0	5.2
10/31/07				0.5	0.0	0.5	5.0	0.0	5.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
11/01/07	No connection			0.5	0.0	0.5	2.5	0.0	2.5
11/02/07				0.5	0.0	0.5	1.9	0.0	1.9
11/03/07				0.5	0.0	0.5	2.9	0.0	2.9
11/04/07				0.5	0.0	0.5	3.1	0.0	3.1
11/05/07				0.5	0.0	0.5	4.0	0.0	4.0
11/06/07				0.5	0.0	0.5	6.1	0.0	6.1
11/07/07				0.5	0.0	0.5	5.4	0.0	5.4
11/08/07				0.5	0.0	0.5	5.9	0.0	5.9
11/09/07				0.5	0.0	0.5	5.6	0.0	5.6
11/10/07				0.5	0.0	0.5	6.1	0.0	6.1
11/11/07				0.5	0.0	0.5	6.3	0.0	6.3
11/12/07				0.5	0.0	0.5	5.9	0.0	5.9
11/13/07				0.5	0.0	0.5	5.9	0.0	5.9
11/14/07				0.5	0.0	0.5	6.0	0.0	6.0
11/15/07				0.5	0.0	0.5	3.8	0.0	3.8
11/16/07				0.5	0.0	0.5	0.0	0.0	0.0
11/17/07				0.5	0.0	0.5	0.0	0.0	0.0
11/18/07				0.5	0.0	0.5	4.4	0.0	4.4
11/19/07				0.5	0.0	0.5	6.4	0.0	6.4
11/20/07				0.5	0.0	0.5	5.9	0.0	5.9
11/21/07				0.5	0.0	0.5	5.9	0.0	5.9
11/22/07				0.5	0.0	0.5	6.2	0.0	6.2
11/23/07				0.5	0.0	0.5	6.1	0.0	6.1
11/24/07				0.5	0.0	0.5	7.9	0.0	7.9
11/25/07				0.5	0.0	0.5	8.9	0.0	8.9
11/26/07				0.5	0.0	0.5	9.2	0.0	9.2
11/27/07				0.5	0.0	0.5	9.0	0.0	9.0
11/28/07				0.5	0.0	0.5	8.7	0.0	8.7
11/29/07				0.5	0.0	0.5	8.2	0.0	8.2
11/30/07				13.6	52.5	66.1	2.9	0.0	2.9
12/01/07				0.5	0.0	0.5	0.0	0.0	0.0
12/02/07				0.5	0.0	0.5	0.0	0.0	0.0
12/03/07				0.5	0.0	0.5	0.0	0.0	0.0
12/04/07				0.5	0.0	0.5	0.0	0.0	0.0
12/05/07				0.5	0.0	0.5	0.0	0.0	0.0
12/06/07				0.5	0.0	0.5	0.0	0.0	0.0
12/07/07				68.1	28.3	96.4	0.0	0.0	0.0
12/08/07				2.6	0.0	2.6	0.0	0.0	0.0
12/09/07				2.6	0.0	2.6	0.0	0.0	0.0
12/10/07				0.5	0.0	0.5	0.0	0.0	0.0
12/11/07				0.5	0.0	0.5	0.0	0.0	0.0
12/12/07				0.5	0.0	0.5	0.0	0.0	0.0
12/13/07				0.5	0.0	0.5	0.0	0.0	0.0
12/14/07				0.5	0.0	0.5	0.0	0.0	0.0
12/15/07				0.5	0.0	0.5	0.0	0.0	0.0
12/16/07				0.5	0.0	0.5	0.0	0.0	0.0
12/17/07				0.5	0.0	0.5	0.0	0.0	0.0
12/18/07				0.5	0.0	0.5	0.0	0.0	0.0
12/19/07				70.0	27.5	97.5	0.0	0.0	0.0
12/20/07				0.5	0.0	0.5	0.0	0.0	0.0
12/21/07				10.1	1.9	12.0	0.0	0.0	0.0
12/22/07				0.5	0.0	0.5	0.0	0.0	0.0
12/23/07				0.5	0.0	0.5	0.0	0.0	0.0
12/24/07				0.5	0.0	0.5	0.0	0.0	0.0
12/25/07				0.5	0.0	0.5	0.0	0.0	0.0
12/26/07				0.5	0.0	0.5	0.0	0.0	0.0
12/27/07				0.5	0.0	0.5	0.0	0.0	0.0
12/28/07				0.5	0.0	0.5	0.0	0.0	0.0
12/29/07				0.5	0.0	0.5	0.0	0.0	0.0
12/30/07				0.5	0.0	0.5	0.0	0.0	0.0
12/31/07				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
01/01/08	No connection			0.5	0.0	0.5	0.0	0.0	0.0
01/02/08				-3.9	0.0	-3.9	0.0	0.0	0.0
01/03/08				0.5	0.0	0.5	0.0	0.0	0.0
01/04/08				77.2	52.0	129.2	0.0	0.0	0.0
01/05/08				4.9	6.5	11.4	0.0	0.0	0.0
01/06/08				15.8	6.5	22.3	0.0	0.0	0.0
01/07/08				2.9	1.9	4.8	0.0	0.0	0.0
01/08/08				0.5	0.0	0.5	0.0	0.0	0.0
01/09/08				0.5	0.0	0.5	0.0	0.0	0.0
01/10/08				0.5	0.0	0.5	0.0	0.0	0.0
01/11/08				0.5	0.0	0.5	0.0	0.0	0.0
01/12/08				0.5	0.0	0.5	0.0	0.0	0.0
01/13/08				0.5	0.0	0.5	0.0	0.0	0.0
01/14/08				0.5	0.0	0.5	1.1	0.0	1.1
01/15/08				0.5	0.0	0.5	0.0	0.0	0.0
01/16/08				0.5	0.0	0.5	0.0	0.0	0.0
01/17/08				0.5	0.0	0.5	0.0	0.0	0.0
01/18/08				0.5	0.0	0.5	0.0	0.0	0.0
01/19/08				0.5	0.0	0.5	0.0	0.0	0.0
01/20/08				0.5	0.0	0.5	0.0	0.0	0.0
01/21/08				0.5	0.0	0.5	0.0	0.0	0.0
01/22/08				0.5	0.0	0.5	0.0	0.0	0.0
01/23/08				48.0	1.3	49.3	0.0	0.0	0.0
01/24/08				31.4	1.9	33.3	0.0	0.0	0.0
01/25/08				1.6	43.5	45.1	0.0	0.0	0.0
01/26/08				0.5	0.0	0.5	0.0	0.0	0.0
01/27/08				15.3	8.6	23.9	0.0	0.0	0.0
01/28/08				6.4	2.3	8.7	0.0	0.0	0.0
01/29/08				0.5	0.0	0.5	0.0	0.0	0.0
01/30/08				0.5	0.0	0.5	0.0	0.0	0.0
01/31/08				0.5	0.0	0.5	0.0	0.0	0.0
02/01/08				0.5	0.0	0.5	0.0	0.0	0.0
02/02/08				0.5	0.0	0.5	0.0	0.0	0.0
02/03/08				37.0	0.6	37.6	0.0	0.0	0.0
02/04/08				0.5	0.0	0.5	0.0	0.0	0.0
02/05/08				-50.0	20.0	-30.0	0.0	0.0	0.0
02/06/08				0.5	0.0	0.5	0.9	3.4	4.3
02/07/08				0.5	0.0	0.5	1.8	7.1	8.9
02/08/08				0.5	0.0	0.5	1.7	6.9	8.7
02/09/08				0.5	0.0	0.5	1.6	6.4	8.0
02/10/08				0.5	0.0	0.5	1.8	7.2	9.0
02/11/08				0.5	0.0	0.5	1.1	4.5	5.6
02/12/08				0.5	0.0	0.5	4.7	0.0	4.7
02/13/08				0.5	0.0	0.5	6.9	0.0	6.9
02/14/08				6.8	4.2	11.0	1.9	7.8	9.7
02/15/08				0.5	0.5	1.0	7.7	0.0	7.7
02/16/08				0.5	0.0	0.5	7.5	0.0	7.5
02/17/08				0.5	0.0	0.5	8.6	0.0	8.6
02/18/08				0.5	0.0	0.5	8.7	0.0	8.7
02/19/08				0.5	0.0	0.5	8.8	0.0	8.8
02/20/08				6.0	4.2	10.2	4.6	4.6	9.1
02/21/08				8.7	18.5	27.2	0.0	7.0	7.0
02/22/08				9.3	4.6	13.9	0.0	0.0	0.0
02/23/08				3.5	4.6	8.1	0.0	0.0	0.0
02/24/08				4.6	4.6	9.2	0.0	0.0	0.0
02/25/08				0.5	0.0	0.5	2.8	2.8	5.6
02/26/08				0.5	0.0	0.5	6.8	0.0	6.8
02/27/08				0.5	0.0	0.5	6.5	0.0	6.5
02/28/08				0.5	0.0	0.5	7.1	0.0	7.1
02/29/08				0.5	0.0	0.5	7.2	0.0	7.2

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
03/01/08	No connection			0.5	0.0	0.5	8.0	0.0	8.0
03/02/08				0.5	0.0	0.5	6.9	0.0	6.9
03/03/08				0.5	0.0	0.5	6.7	0.0	6.7
03/04/08				0.5	0.0	0.5	6.3	0.0	6.3
03/05/08				0.5	0.0	0.5	6.5	0.0	6.5
03/06/08				0.5	0.0	0.5	7.3	0.0	7.3
03/07/08				0.5	0.0	0.5	6.9	0.0	6.9
03/08/08				0.5	0.0	0.5	6.1	0.0	6.1
03/09/08				0.5	0.0	0.5	6.2	0.0	6.2
03/10/08				0.5	0.0	0.5	7.2	0.0	7.2
03/11/08				0.5	0.0	0.5	-15.0	17.5	2.5
03/12/08				0.5	0.0	0.5	2.4	0.0	2.4
03/13/08				0.5	0.0	0.5	7.6	0.0	7.6
03/14/08				0.5	0.0	0.5	8.9	0.0	8.9
03/15/08				5.8	0.0	5.8	2.0	6.2	8.2
03/16/08				-1.8	1.8	0.0	-7.0	14.3	7.3
03/17/08				0.5	0.0	0.5	0.0	7.4	7.4
03/18/08				0.5	0.0	0.5	5.3	2.0	7.3
03/19/08				0.5	0.0	0.5	7.1	0.0	7.1
03/20/08				0.5	0.0	0.5	5.0	0.0	5.0
03/21/08				0.5	0.0	0.5	5.1	0.0	5.1
03/22/08				0.5	0.0	0.5	5.4	0.0	5.4
03/23/08				0.5	0.0	0.5	5.8	0.0	5.8
03/24/08				0.5	0.0	0.5	5.8	0.0	5.8
03/25/08				0.5	0.0	0.5	6.9	0.0	6.9
03/26/08				0.5	0.0	0.5	3.0	0.0	3.0
03/27/08				0.5	0.0	0.5	0.0	0.0	0.0
03/28/08				0.5	0.0	0.5	0.0	0.0	0.0
03/29/08				0.5	0.0	0.5	0.0	0.0	0.0
03/30/08				0.8	0.0	0.8	0.0	0.0	0.0
03/31/08				0.5	0.0	0.5	0.0	0.0	0.0
04/01/08				0.5	0.0	0.5	0.0	0.0	0.0
04/02/08				0.5	0.0	0.5	0.0	0.0	0.0
04/03/08				0.5	0.0	0.5	0.0	0.0	0.0
04/04/08				0.5	0.0	0.5	0.0	0.0	0.0
04/05/08				0.0	-3.7	-3.7	0.0	0.0	0.0
04/06/08				0.0	0.5	0.5	0.0	0.0	0.0
04/07/08				0.0	0.5	0.5	0.0	0.0	0.0
04/08/08				0.5	0.0	0.5	6.9	0.0	6.9
04/09/08				0.5	0.0	0.5	8.3	0.0	8.3
04/10/08				0.5	0.0	0.5	0.0	0.0	0.0
04/11/08				0.5	0.0	0.5	0.0	0.0	0.0
04/12/08				0.5	0.0	0.5	0.0	0.0	0.0
04/13/08				0.5	0.0	0.5	0.0	0.0	0.0
04/14/08				0.5	0.0	0.5	0.0	0.0	0.0
04/15/08				0.5	0.0	0.5	4.2	0.0	4.2
04/16/08				0.5	0.0	0.5	4.3	0.0	4.3
04/17/08				0.5	0.0	0.5	3.3	0.0	3.3
04/18/08				0.5	0.0	0.5	4.8	0.0	4.8
04/19/08				0.5	0.0	0.5	5.8	0.0	5.8
04/20/08				0.5	0.0	0.5	5.6	0.0	5.6
04/21/08				0.5	0.0	0.5	3.6	0.0	3.6
04/22/08				0.5	0.0	0.5	3.1	0.0	3.1
04/23/08				0.5	0.0	0.5	3.8	0.0	3.8
04/24/08				0.5	0.0	0.5	5.2	0.0	5.2
04/25/08				0.5	0.0	0.5	6.7	0.0	6.7
04/26/08				0.5	0.0	0.5	7.1	0.0	7.1
04/27/08				0.5	0.0	0.5	5.8	0.0	5.8
04/28/08				0.5	0.0	0.5	3.0	0.0	3.0
04/29/08				0.5	0.0	0.5	4.0	0.0	4.0
04/30/08				0.5	0.0	0.5	4.4	0.0	4.4

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
05/01/08	No connection			0.5	0.0	0.5	4.0	0.0	4.0
05/02/08				0.5	0.0	0.5	3.8	0.0	3.8
05/03/08				0.5	0.0	0.5	3.8	0.0	3.8
05/04/08				0.5	0.0	0.5	4.0	0.0	4.0
05/05/08				0.5	0.0	0.5	4.1	0.0	4.1
05/06/08				0.5	0.0	0.5	4.1	0.0	4.1
05/07/08				0.5	0.0	0.5	3.9	0.0	3.9
05/08/08				0.5	0.0	0.5	3.3	0.0	3.3
05/09/08				0.5	0.0	0.5	0.4	0.0	0.4
05/10/08				0.5	0.0	0.5	4.2	0.0	4.2
05/11/08				0.5	0.0	0.5	4.0	0.0	4.0
05/12/08				2.5	0.0	2.5	4.2	0.0	4.2
05/13/08				0.5	0.0	0.5	4.4	0.0	4.4
05/14/08				0.5	0.0	0.5	4.3	0.0	4.3
05/15/08				0.5	0.0	0.5	3.0	0.0	3.0
05/16/08				0.5	0.0	0.5	5.5	0.0	5.5
05/17/08				0.5	0.0	0.5	7.1	0.0	7.1
05/18/08				0.5	0.0	0.5	6.8	0.0	6.8
05/19/08				0.5	0.0	0.5	4.5	0.0	4.5
05/20/08				0.5	0.0	0.5	5.9	0.0	5.9
05/21/08				0.5	0.0	0.5	6.2	0.0	6.2
05/22/08				-1.0	3.0	2.0	-10.0	9.7	-0.3
05/23/08				18.0	47.0	65.0	5.0	2.0	7.0
05/24/08				-10.0	16.0	6.0	-6.0	11.0	5.0
05/25/08				0.5	0.0	0.5	7.2	0.0	7.2
05/26/08				0.5	0.0	0.5	9.9	0.0	9.9
05/27/08				0.5	0.0	0.5	6.6	0.0	6.6
05/28/08				0.5	0.0	0.5	7.7	0.0	7.7
05/29/08				0.5	0.0	0.5	7.5	0.0	7.5
05/30/08				0.5	0.0	0.5	7.3	0.0	7.3
05/31/08				0.5	0.0	0.5	8.3	0.0	8.3
06/01/08				0.5	0.0	0.5	7.2	0.0	7.2
06/02/08				0.5	0.0	0.5	2.3	0.0	2.3
06/03/08				0.5	0.0	0.5	0.0	0.0	0.0
06/04/08				0.5	0.0	0.5	0.0	0.0	0.0
06/05/08				0.5	0.0	0.5	0.0	0.0	0.0
06/06/08				0.5	0.0	0.5	3.4	0.0	3.4
06/07/08				0.4	0.1	0.5	5.2	2.6	7.8
06/08/08				0.5	0.0	0.5	2.5	0.0	2.5
06/09/08				0.5	0.0	0.5	5.1	0.0	5.1
06/10/08				0.5	0.0	0.5	3.1	0.0	3.1
06/11/08				0.5	0.0	0.5	7.6	0.0	7.6
06/12/08				0.5	0.0	0.5	8.0	0.0	8.0
06/13/08				0.5	0.0	0.5	2.7	0.0	2.7
06/14/08				0.5	0.0	0.5	0.0	0.0	0.0
06/15/08				0.5	0.0	0.5	0.0	0.0	0.0
06/16/08				0.5	0.0	0.5	4.0	0.0	4.0
06/17/08				0.5	0.0	0.5	5.4	0.0	5.4
06/18/08				0.5	0.0	0.5	5.8	0.0	5.8
06/19/08				0.5	0.0	0.5	4.9	0.0	4.9
06/20/08				0.5	0.0	0.5	0.0	0.0	0.0
06/21/08				0.5	0.0	0.5	0.0	0.0	0.0
06/22/08				0.5	0.0	0.5	0.0	0.0	0.0
06/23/08				0.5	0.0	0.5	0.0	0.0	0.0
06/24/08				0.0	0.5	0.5	-1.5	1.5	0.0
06/25/08				0.5	0.0	0.5	0.0	0.0	0.0
06/26/08				0.5	0.0	0.5	3.1	0.0	3.1
06/27/08				0.3	0.2	0.5	6.4	2.1	8.5
06/28/08				0.5	0.0	0.5	0.0	0.0	0.0
06/29/08				0.5	0.0	0.5	0.0	0.0	0.0
06/30/08				0.5	0.0	0.5	5.0	0.0	5.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
07/01/08	No connection			0.5	0.0	0.5	5.6	0.0	5.6
07/02/08				0.5	0.0	0.5	7.0	0.0	7.0
07/03/08				0.5	0.0	0.5	6.3	0.0	6.3
07/04/08				0.5	0.0	0.5	6.8	0.0	6.8
07/05/08				0.5	0.0	0.5	5.2	0.0	5.2
07/06/08				0.5	0.0	0.5	8.6	0.0	8.6
07/07/08				0.5	0.0	0.5	2.5	0.0	2.5
07/08/08				0.5	0.0	0.5	0.0	0.0	0.0
07/09/08				0.5	0.0	0.5	0.9	0.0	0.9
07/10/08				0.5	0.0	0.5	0.7	0.0	0.7
07/11/08				0.5	0.0	0.5	9.9	0.0	9.9
07/12/08				13.7	0.0	13.7	8.3	0.0	8.3
07/13/08				0.5	0.0	0.5	8.5	0.0	8.5
07/14/08				-0.1	0.6	0.5	5.3	1.9	7.2
07/15/08				0.5	0.0	0.5	8.6	0.0	8.6
07/16/08				0.5	0.0	0.5	8.6	0.0	8.6
07/17/08				0.5	0.0	0.5	9.8	0.0	9.8
07/18/08				0.5	0.0	0.5	9.8	0.0	9.8
07/19/08				0.5	0.0	0.5	11.2	0.0	11.2
07/20/08				0.5	0.0	0.5	8.1	0.0	8.1
07/21/08				0.5	0.0	0.5	9.9	0.0	9.9
07/22/08				0.5	0.0	0.5	9.5	0.0	9.5
07/23/08				0.5	0.0	0.5	8.4	0.0	8.4
07/24/08				0.5	0.0	0.5	9.2	0.0	9.2
07/25/08				0.5	0.0	0.5	7.6	0.0	7.6
07/26/08				0.5	0.0	0.5	8.5	0.0	8.5
07/27/08				0.5	0.0	0.5	9.3	0.0	9.3
07/28/08				0.5	0.0	0.5	6.0	0.0	6.0
07/29/08				-1.8	2.3	0.5	-14.0	20.7	6.7
07/30/08				0.5	0.0	0.5	7.6	0.0	7.6
07/31/08				0.5	0.0	0.5	7.5	0.0	7.5
08/01/08				0.5	0.0	0.5	9.4	0.0	9.4
08/02/08				0.5	0.0	0.5	9.9	0.0	9.9
08/03/08				0.5	0.0	0.5	8.5	0.0	8.5
08/04/08				-0.6	1.1	0.5	-10.9	17.8	6.9
08/05/08				0.5	0.0	0.5	5.8	0.0	5.8
08/06/08				0.5	0.0	0.5	7.0	0.0	7.0
08/07/08				0.5	0.0	0.5	6.3	0.0	6.3
08/08/08				0.5	0.0	0.5	7.8	0.0	7.8
08/09/08				0.5	0.0	0.5	3.9	0.0	3.9
08/10/08				0.5	0.0	0.5	7.5	0.0	7.5
08/11/08				0.5	0.0	0.5	5.2	0.0	5.2
08/12/08				-0.3	0.8	0.5	-0.5	7.3	6.8
08/13/08				0.5	0.0	0.5	2.1	0.0	2.1
08/14/08				0.5	0.0	0.5	4.7	0.0	4.7
08/15/08				0.5	0.0	0.5	4.7	0.0	4.7
08/16/08				0.5	0.0	0.5	6.7	0.0	6.7
08/17/08				0.5	0.0	0.5	7.0	0.0	7.0
08/18/08				0.5	0.0	0.5	6.9	0.0	6.9
08/19/08				0.5	0.0	0.5	3.8	0.0	3.8
08/20/08				-1.1	1.1	0.0	-9.5	9.5	0.0
08/21/08				0.2	0.3	0.5	4.9	0.0	4.9
08/22/08				0.5	0.0	0.5	0.9	0.0	0.9
08/23/08				0.5	0.0	0.5	0.0	0.0	0.0
08/24/08				0.5	0.0	0.5	0.0	0.0	0.0
08/25/08				0.5	0.0	0.5	0.0	0.0	0.0
08/26/08				0.5	0.0	0.5	0.9	0.0	0.9
08/27/08				0.5	0.0	0.5	0.0	0.0	0.0
08/28/08				0.5	0.0	0.5	0.0	0.0	0.0
08/29/08				0.5	0.0	0.5	0.0	0.0	0.0
08/30/08				0.5	0.0	0.5	0.0	0.0	0.0
08/31/08				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
09/01/08	No connection			0.5	0.0	0.5	0.0	0.0	0.0
09/02/08				0.5	0.0	0.5	0.0	0.0	0.0
09/03/08				0.5	0.0	0.5	0.0	0.0	0.0
09/04/08				0.5	0.0	0.5	0.0	0.0	0.0
09/05/08				0.5	0.0	0.5	0.0	0.0	0.0
09/06/08				0.5	0.0	0.5	0.0	0.0	0.0
09/07/08				0.5	0.0	0.5	0.0	0.0	0.0
09/08/08				0.5	0.0	0.5	0.0	0.0	0.0
09/09/08				0.5	0.0	0.5	0.0	0.0	0.0
09/10/08				0.5	0.0	0.5	0.0	0.0	0.0
09/11/08				0.5	0.0	0.5	0.0	0.0	0.0
09/12/08				0.5	0.0	0.5	0.0	0.0	0.0
09/13/08				0.5	0.0	0.5	0.0	0.0	0.0
09/14/08				0.5	0.0	0.5	0.0	0.0	0.0
09/15/08				0.5	0.0	0.5	0.0	0.0	0.0
09/16/08				0.5	0.0	0.5	0.0	0.0	0.0
09/17/08				0.5	0.0	0.5	0.0	0.0	0.0
09/18/08				0.5	0.0	0.5	0.0	0.0	0.0
09/19/08				0.5	0.0	0.5	0.0	0.0	0.0
09/20/08				0.5	0.0	0.5	0.0	0.0	0.0
09/21/08				0.5	0.0	0.5	0.0	0.0	0.0
09/22/08				0.5	0.0	0.5	0.0	0.0	0.0
09/23/08				0.5	0.0	0.5	0.0	0.0	0.0
09/24/08				0.5	0.0	0.5	0.0	0.0	0.0
09/25/08				0.5	0.0	0.5	0.0	0.0	0.0
09/26/08				0.5	0.0	0.5	0.0	0.0	0.0
09/27/08				0.5	0.0	0.5	0.0	0.0	0.0
09/28/08				0.5	0.0	0.5	0.0	0.0	0.0
09/29/08				0.5	0.0	0.5	0.0	0.0	0.0
09/30/08				0.5	0.0	0.5	0.0	0.0	0.0
10/01/08				0.5	0.0	0.5	0.0	0.0	0.0
10/02/08				0.5	0.0	0.5	0.0	0.0	0.0
10/03/08				0.5	0.0	0.5	0.0	0.0	0.0
10/04/08				0.5	0.0	0.5	0.0	0.0	0.0
10/05/08				0.5	0.0	0.5	0.0	0.0	0.0
10/06/08				0.5	0.0	0.5	0.0	0.0	0.0
10/07/08				0.5	0.0	0.5	0.0	0.0	0.0
10/08/08				0.5	0.0	0.5	0.0	0.0	0.0
10/09/08				0.5	0.0	0.5	0.0	0.0	0.0
10/10/08				0.5	0.0	0.5	0.0	0.0	0.0
10/11/08				0.5	0.0	0.5	0.0	0.0	0.0
10/12/08				0.5	0.0	0.5	0.0	0.0	0.0
10/13/08				0.5	0.0	0.5	0.0	0.0	0.0
10/14/08				0.5	0.0	0.5	0.0	0.0	0.0
10/15/08				0.5	0.0	0.5	0.0	0.0	0.0
10/16/08				0.5	0.0	0.5	0.0	0.0	0.0
10/17/08				0.5	0.0	0.5	0.0	0.0	0.0
10/18/08				0.5	0.0	0.5	0.0	0.0	0.0
10/19/08				0.5	0.0	0.5	0.0	0.0	0.0
10/20/08				0.5	0.0	0.5	0.0	0.0	0.0
10/21/08				0.5	0.0	0.5	0.0	0.0	0.0
10/22/08				0.5	0.0	0.5	0.0	0.0	0.0
10/23/08				0.5	0.0	0.5	0.0	0.0	0.0
10/24/08				0.5	0.0	0.5	0.0	0.0	0.0
10/25/08				0.5	0.0	0.5	0.0	0.0	0.0
10/26/08				0.5	0.0	0.5	0.0	0.0	0.0
10/27/08				0.5	0.0	0.5	0.0	0.0	0.0
10/28/08				0.5	0.0	0.5	0.0	0.0	0.0
10/29/08				0.5	0.0	0.5	0.0	0.0	0.0
10/30/08				0.5	0.0	0.5	0.0	0.0	0.0
10/31/08				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
11/01/08	No connection			0.5	0.0	0.5	0.0	0.0	0.0
11/02/08				0.5	0.0	0.5	0.0	0.0	0.0
11/03/08				0.5	0.0	0.5	0.0	0.0	0.0
11/04/08				0.5	0.0	0.5	0.0	0.0	0.0
11/05/08				0.5	0.0	0.5	0.0	0.0	0.0
11/06/08				0.5	0.0	0.5	0.0	0.0	0.0
11/07/08				0.5	0.0	0.5	0.0	0.0	0.0
11/08/08				0.5	0.0	0.5	0.0	0.0	0.0
11/09/08				0.5	0.0	0.5	0.0	0.0	0.0
11/10/08				0.5	0.0	0.5	0.0	0.0	0.0
11/11/08				0.5	0.0	0.5	0.0	0.0	0.0
11/12/08				0.5	0.0	0.5	0.0	0.0	0.0
11/13/08				0.5	0.0	0.5	0.0	0.0	0.0
11/14/08				0.5	0.0	0.5	0.0	0.0	0.0
11/15/08				0.5	0.0	0.5	0.0	0.0	0.0
11/16/08				0.5	0.0	0.5	0.0	0.0	0.0
11/17/08				0.5	0.0	0.5	0.0	0.0	0.0
11/18/08				0.5	0.0	0.5	0.0	0.0	0.0
11/19/08				0.5	0.0	0.5	0.0	0.0	0.0
11/20/08				0.5	0.0	0.5	0.0	0.0	0.0
11/21/08				0.5	0.0	0.5	0.0	0.0	0.0
11/22/08				0.5	0.0	0.5	0.0	0.0	0.0
11/23/08				0.5	0.0	0.5	0.0	0.0	0.0
11/24/08				0.5	0.0	0.5	0.0	0.0	0.0
11/25/08				0.5	0.0	0.5	0.0	0.0	0.0
11/26/08				108.8	0.0	108.8	0.0	0.0	0.0
11/27/08				14.5	0.0	14.5	0.0	0.0	0.0
11/28/08				0.5	0.0	0.5	0.0	0.0	0.0
11/29/08				0.5	0.0	0.5	0.0	0.0	0.0
11/30/08				0.5	0.0	0.5	0.0	0.0	0.0
12/01/08				0.5	0.0	0.5	0.0	0.0	0.0
12/02/08				0.5	0.0	0.5	0.0	0.0	0.0
12/03/08				0.5	0.0	0.5	0.0	0.0	0.0
12/04/08				0.5	0.0	0.5	0.0	0.0	0.0
12/05/08				0.5	0.0	0.5	0.0	0.0	0.0
12/06/08				0.5	0.0	0.5	0.0	0.0	0.0
12/07/08				0.5	0.0	0.5	0.0	0.0	0.0
12/08/08				0.5	0.0	0.5	0.0	0.0	0.0
12/09/08				0.5	0.0	0.5	0.0	0.0	0.0
12/10/08				0.5	0.0	0.5	0.0	0.0	0.0
12/11/08				0.5	0.0	0.5	0.0	0.0	0.0
12/12/08				0.5	0.0	0.5	0.0	0.0	0.0
12/13/08				0.5	0.0	0.5	0.0	0.0	0.0
12/14/08				0.5	0.0	0.5	0.0	0.0	0.0
12/15/08				126.0	57.0	183.0	0.0	0.0	0.0
12/16/08				0.5	0.0	0.5	0.0	0.0	0.0
12/17/08				28.7	21.0	49.7	0.0	0.0	0.0
12/18/08				0.5	0.0	0.5	0.0	0.0	0.0
12/19/08				0.5	0.0	0.5	0.0	0.0	0.0
12/20/08				0.5	0.0	0.5	0.0	0.0	0.0
12/21/08				0.5	0.0	0.5	0.0	0.0	0.0
12/22/08				0.5	0.0	0.5	0.0	0.0	0.0
12/23/08				0.5	0.0	0.5	0.0	0.0	0.0
12/24/08				0.5	0.0	0.5	0.0	0.0	0.0
12/25/08				84.6	21.4	106.0	0.0	0.0	0.0
12/26/08				0.5	0.0	0.5	0.0	0.0	0.0
12/27/08				0.5	0.0	0.5	0.0	0.0	0.0
12/28/08				0.5	0.0	0.5	0.0	0.0	0.0
12/29/08				0.5	0.0	0.5	0.0	0.0	0.0
12/30/08				0.5	0.0	0.5	0.0	0.0	0.0
12/31/08				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
01/01/09	No connection			0.3	0.2	0.5	0.0	0.0	0.0
01/02/09				0.3	0.2	0.5	0.0	0.0	0.0
01/03/09				0.3	0.2	0.5	0.0	0.0	0.0
01/04/09				0.3	0.2	0.5	0.0	0.0	0.0
01/05/09				0.3	0.2	0.5	0.0	0.0	0.0
01/06/09				0.3	0.2	0.5	0.0	0.0	0.0
01/07/09				0.3	0.2	0.5	0.0	0.0	0.0
01/08/09				0.3	0.2	0.5	0.0	0.0	0.0
01/09/09				0.3	0.2	0.5	0.0	0.0	0.0
01/10/09				0.3	0.2	0.5	0.0	0.0	0.0
01/11/09				0.3	0.2	0.5	0.0	0.0	0.0
01/12/09				0.3	0.2	0.5	0.0	0.0	0.0
01/13/09				0.3	0.2	0.5	0.0	0.0	0.0
01/14/09				0.3	0.2	0.5	0.0	0.0	0.0
01/15/09				0.3	0.2	0.5	0.0	0.0	0.0
01/16/09				0.3	0.2	0.5	0.0	0.0	0.0
01/17/09				0.3	0.2	0.5	0.0	0.0	0.0
01/18/09				0.3	0.2	0.5	0.0	0.0	0.0
01/19/09				0.3	0.2	0.5	0.0	0.0	0.0
01/20/09				0.3	0.2	0.5	0.0	0.0	0.0
01/21/09				0.3	0.2	0.5	0.0	0.0	0.0
01/22/09				0.5	0.0	0.5	0.0	0.0	0.0
01/23/09				0.0	0.0	0.0	0.0	0.0	0.0
01/24/09				0.5	0.0	0.5	0.0	0.0	0.0
01/25/09				0.5	0.0	0.5	0.0	0.0	0.0
01/26/09				16.6	4.2	20.8	0.0	0.0	0.0
01/27/09				0.5	0.0	0.5	0.0	0.0	0.0
01/28/09				0.5	0.0	0.5	0.0	0.0	0.0
01/29/09				0.5	0.0	0.5	0.0	0.0	0.0
01/30/09				0.5	0.0	0.5	0.0	0.0	0.0
01/31/09				0.5	0.0	0.5	0.0	0.0	0.0
02/01/09				0.5	0.0	0.5	0.0	0.0	0.0
02/02/09				0.5	0.0	0.5	0.0	0.0	0.0
02/03/09				0.5	0.0	0.5	0.0	0.0	0.0
02/04/09				0.5	0.0	0.5	0.0	0.0	0.0
02/05/09				87.2	0.0	87.2	0.0	0.0	0.0
02/06/09				41.8	59.5	101.3	0.0	0.0	0.0
02/07/09				2.8	2.2	5.0	0.0	0.0	0.0
02/08/09				0.5	0.0	0.5	0.0	0.0	0.0
02/09/09				32.1	25.6	57.7	0.0	0.0	0.0
02/10/09				0.5	0.0	0.5	0.0	0.0	0.0
02/11/09				0.5	0.0	0.5	0.0	0.0	0.0
02/12/09				0.5	0.0	0.5	0.0	0.0	0.0
02/13/09				52.8	1.7	54.5	0.0	0.0	0.0
02/14/09				0.5	0.0	0.5	0.0	0.0	0.0
02/15/09				0.5	0.0	0.5	0.0	0.0	0.0
02/16/09				75.1	14.2	89.3	0.0	0.0	0.0
02/17/09				35.6	16.7	52.3	0.0	0.0	0.0
02/18/09				0.5	0.0	0.5	0.0	0.0	0.0
02/19/09				0.5	0.0	0.5	0.0	0.0	0.0
02/20/09				0.5	0.0	0.5	0.0	0.0	0.0
02/21/09				0.5	0.0	0.5	0.0	0.0	0.0
02/22/09				0.5	0.0	0.5	0.0	0.0	0.0
02/23/09				0.5	0.0	0.5	0.0	0.0	0.0
02/24/09				0.5	0.0	0.5	0.0	0.0	0.0
02/25/09				0.5	0.0	0.5	0.0	0.0	0.0
02/26/09				0.5	0.0	0.5	0.0	0.0	0.0
02/27/09				0.5	0.0	0.5	0.0	0.0	0.0
02/28/09				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2

8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
03/01/09	No connection			0.5	0.0	0.5	0.0	0.0	0.0
03/02/09				0.5	0.0	0.5	0.0	0.0	0.0
03/03/09				0.5	0.0	0.5	0.0	0.0	0.0
03/04/09				4.8	4.9	9.7	0.0	0.0	0.0
03/05/09				0.5	0.0	0.5	0.0	0.0	0.0
03/06/09				0.5	0.0	0.5	0.0	0.0	0.0
03/07/09				0.5	0.0	0.5	0.0	0.0	0.0
03/08/09				0.5	0.0	0.5	0.0	0.0	0.0
03/09/09				0.5	0.0	0.5	0.0	0.0	0.0
03/10/09				0.5	0.0	0.5	0.0	0.0	0.0
03/11/09				0.5	0.0	0.5	0.0	0.0	0.0
03/12/09				0.5	0.0	0.5	0.0	0.0	0.0
03/13/09				0.5	0.0	0.5	0.0	0.0	0.0
03/14/09				0.5	0.0	0.5	0.0	0.0	0.0
03/15/09				0.5	0.0	0.5	0.0	0.0	0.0
03/16/09				0.5	0.0	0.5	0.0	0.0	0.0
03/17/09				0.5	0.0	0.5	0.0	0.0	0.0
03/18/09				0.5	0.0	0.5	0.0	0.0	0.0
03/19/09				0.5	0.0	0.5	0.0	0.0	0.0
03/20/09				0.5	0.0	0.5	0.0	0.0	0.0
03/21/09				0.5	0.0	0.5	0.0	0.0	0.0
03/22/09				0.5	0.0	0.5	0.0	0.0	0.0
03/23/09				0.5	0.0	0.5	0.0	0.0	0.0
03/24/09				0.5	0.0	0.5	0.0	0.0	0.0
03/25/09				0.5	0.0	0.5	0.0	0.0	0.0
03/26/09				0.5	0.0	0.5	0.0	0.0	0.0
03/27/09				0.5	0.0	0.5	0.0	0.0	0.0
03/28/09				0.5	0.0	0.5	0.0	0.0	0.0
03/29/09				0.5	0.0	0.5	0.0	0.0	0.0
03/30/09				0.5	0.0	0.5	0.0	0.0	0.0
03/31/09				0.5	0.0	0.5	0.0	0.0	0.0
04/01/09				0.5	0.0	0.5	0.0	0.0	0.0
04/02/09				0.5	0.0	0.5	0.0	0.0	0.0
04/03/09				0.5	0.0	0.5	0.0	0.0	0.0
04/04/09				0.5	0.0	0.5	0.0	0.0	0.0
04/05/09				0.5	0.0	0.5	0.0	0.0	0.0
04/06/09				0.5	0.0	0.5	0.0	0.0	0.0
04/07/09				0.5	0.0	0.5	0.0	0.0	0.0
04/08/09				0.5	0.0	0.5	0.0	0.0	0.0
04/09/09				0.5	0.0	0.5	0.0	0.0	0.0
04/10/09				0.5	0.0	0.5	0.0	0.0	0.0
04/11/09				0.5	0.0	0.5	0.0	0.0	0.0
04/12/09				0.5	0.0	0.5	0.0	0.0	0.0
04/13/09				0.5	0.0	0.5	0.0	0.0	0.0
04/14/09				0.5	0.0	0.5	0.0	0.0	0.0
04/15/09				0.5	0.0	0.5	0.0	0.0	0.0
04/16/09				0.5	0.0	0.5	0.0	0.0	0.0
04/17/09				0.5	0.0	0.5	0.0	0.0	0.0
04/18/09				0.5	0.0	0.5	0.0	0.0	0.0
04/19/09				0.5	0.0	0.5	0.0	0.0	0.0
04/20/09				0.5	0.0	0.5	0.0	0.0	0.0
04/21/09				0.5	0.0	0.5	0.0	0.0	0.0
04/22/09				0.5	0.0	0.5	0.0	0.0	0.0
04/23/09				0.5	0.0	0.5	0.0	0.0	0.0
04/24/09				0.5	0.0	0.5	0.0	0.0	0.0
04/25/09				0.5	0.0	0.5	0.0	0.0	0.0
04/26/09				0.5	0.0	0.5	0.0	0.0	0.0
04/27/09				0.5	0.0	0.5	0.0	0.0	0.0
04/28/09				0.5	0.0	0.5	0.0	0.0	0.0
04/29/09				0.5	0.0	0.5	0.0	0.0	0.0
04/30/09				0.5	0.0	0.5	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
05/01/09	No connection			0.5	0.0	0.5	0.0	0.0	0.0
05/02/09				0.5	0.0	0.5	0.0	0.0	0.0
05/03/09				0.5	0.0	0.5	0.0	0.0	0.0
05/04/09				0.5	0.0	0.5	0.0	0.0	0.0
05/05/09				0.5	0.0	0.5	0.0	0.0	0.0
05/06/09				0.5	0.0	0.5	0.0	0.0	0.0
05/07/09				0.5	0.0	0.5	0.0	0.0	0.0
05/08/09				0.5	0.0	0.5	0.0	0.0	0.0
05/09/09				0.5	0.0	0.5	0.0	0.0	0.0
05/10/09				0.5	0.0	0.5	0.0	0.0	0.0
05/11/09				0.5	0.0	0.5	0.0	0.0	0.0
05/12/09				0.5	0.0	0.5	0.0	0.0	0.0
05/13/09				0.5	0.0	0.5	0.0	0.0	0.0
05/14/09				0.5	0.0	0.5	0.0	0.0	0.0
05/15/09				0.5	0.0	0.5	0.0	0.0	0.0
05/16/09				0.5	0.0	0.5	0.0	0.0	0.0
05/17/09				0.5	0.0	0.5	0.0	0.0	0.0
05/18/09				0.5	0.0	0.5	0.0	0.0	0.0
05/19/09				0.5	0.0	0.5	0.0	0.0	0.0
05/20/09				0.5	0.0	0.5	0.0	0.0	0.0
05/21/09				0.5	0.0	0.5	0.0	0.0	0.0
05/22/09				0.5	0.0	0.5	0.0	0.0	0.0
05/23/09				0.5	0.0	0.5	0.0	0.0	0.0
05/24/09				0.5	0.0	0.5	0.0	0.0	0.0
05/25/09				0.5	0.0	0.5	0.0	0.0	0.0
05/26/09				0.5	0.0	0.5	0.0	0.0	0.0
05/27/09				0.5	0.0	0.5	0.0	0.0	0.0
05/28/09				0.5	0.0	0.5	0.0	0.0	0.0
05/29/09				0.5	0.0	0.5	0.0	0.0	0.0
05/30/09				0.5	0.0	0.5	0.0	0.0	0.0
05/31/09				0.5	0.0	0.5	0.0	0.0	0.0
06/01/09				1.0	0.0	1.0	0.0	0.0	0.0
06/02/09				1.0	0.0	1.0	0.0	0.0	0.0
06/03/09				1.0	0.0	1.0	0.0	0.0	0.0
06/04/09				1.0	0.0	1.0	0.0	0.0	0.0
06/05/09				1.0	0.0	1.0	0.0	0.0	0.0
06/06/09				1.0	0.0	1.0	0.0	0.0	0.0
06/07/09				1.0	0.0	1.0	0.0	0.0	0.0
06/08/09				1.0	0.0	1.0	0.0	0.0	0.0
06/09/09				1.0	0.0	1.0	0.0	0.0	0.0
06/10/09				1.0	0.0	1.0	0.0	0.0	0.0
06/11/09				1.0	0.0	1.0	0.0	0.0	0.0
06/12/09				1.0	0.0	1.0	0.0	0.0	0.0
06/13/09				1.0	0.0	1.0	0.0	0.0	0.0
06/14/09				1.0	0.0	1.0	0.0	0.0	0.0
06/15/09				1.0	0.0	1.0	0.0	0.0	0.0
06/16/09				1.0	0.0	1.0	0.0	0.0	0.0
06/17/09				1.0	0.0	1.0	0.0	0.0	0.0
06/18/09				1.0	0.0	1.0	0.0	0.0	0.0
06/19/09				1.0	0.0	1.0	0.0	0.0	0.0
06/20/09				1.0	0.0	1.0	0.0	0.0	0.0
06/21/09				1.0	0.0	1.0	0.0	0.0	0.0
06/22/09				1.0	0.0	1.0	0.0	0.0	0.0
06/23/09				1.0	0.0	1.0	0.0	0.0	0.0
06/24/09				1.0	0.0	1.0	0.0	0.0	0.0
06/25/09				1.0	0.0	1.0	0.0	0.0	0.0
06/26/09				1.0	0.0	1.0	0.0	0.0	0.0
06/27/09				1.0	0.0	1.0	0.0	0.0	0.0
06/28/09				1.0	0.0	1.0	0.0	0.0	0.0
06/29/09				1.0	0.0	1.0	0.0	0.0	0.0
06/30/09				1.0	0.0	1.0	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
07/01/09	No connection			0.6	0.0	0.6	0.0	0.0	0.0
07/02/09				0.6	0.0	0.6	0.0	0.0	0.0
07/03/09				0.6	0.0	0.6	0.0	0.0	0.0
07/04/09				0.6	0.0	0.6	0.0	0.0	0.0
07/05/09				0.6	0.0	0.6	0.0	0.0	0.0
07/06/09				0.6	0.0	0.6	0.0	0.0	0.0
07/07/09				0.6	0.0	0.6	0.0	0.0	0.0
07/08/09				0.6	0.0	0.6	0.0	0.0	0.0
07/09/09				0.6	0.0	0.6	0.0	0.0	0.0
07/10/09				0.6	0.0	0.6	0.0	0.0	0.0
07/11/09				0.6	0.0	0.6	0.0	0.0	0.0
07/12/09				0.6	0.0	0.6	0.0	0.0	0.0
07/13/09				0.6	0.0	0.6	0.0	0.0	0.0
07/14/09				0.6	0.0	0.6	0.0	0.0	0.0
07/15/09				0.6	0.0	0.6	0.0	0.0	0.0
07/16/09				0.6	0.0	0.6	0.0	0.0	0.0
07/17/09				0.6	0.0	0.6	0.0	0.0	0.0
07/18/09				0.6	0.0	0.6	0.0	0.0	0.0
07/19/09				0.6	0.0	0.6	0.0	0.0	0.0
07/20/09				0.6	0.0	0.6	0.0	0.0	0.0
07/21/09				0.6	0.0	0.6	0.0	0.0	0.0
07/22/09				0.6	0.0	0.6	0.0	0.0	0.0
07/23/09				0.6	0.0	0.6	0.0	0.0	0.0
07/24/09				0.6	0.0	0.6	0.0	0.0	0.0
07/25/09				0.6	0.0	0.6	0.0	0.0	0.0
07/26/09				0.6	0.0	0.6	0.0	0.0	0.0
07/27/09				0.6	0.0	0.6	0.0	0.0	0.0
07/28/09				0.6	0.0	0.6	0.0	0.0	0.0
07/29/09				0.6	0.0	0.6	0.0	0.0	0.0
07/30/09				0.6	0.0	0.6	0.0	0.0	0.0
07/31/09				0.6	0.0	0.6	0.0	0.0	0.0
08/01/09				0.6	0.0	0.6	0.0	0.0	0.0
08/02/09				0.6	0.0	0.6	0.0	0.0	0.0
08/03/09				0.6	0.0	0.6	3.9	0.0	3.9
08/04/09				0.6	0.0	0.6	8.4	0.0	8.4
08/05/09				0.8	0.0	0.8	8.9	0.0	8.9
08/06/09				1.5	0.0	1.5	2.4	0.0	2.4
08/07/09				1.5	0.0	1.5	0.0	0.0	0.0
08/08/09				1.5	0.0	1.5	0.0	0.0	0.0
08/09/09				1.5	0.0	1.5	0.0	0.0	0.0
08/10/09				0.8	0.0	0.8	0.0	0.0	0.0
08/11/09				0.6	0.0	0.6	0.0	0.0	0.0
08/12/09				0.6	0.0	0.6	0.0	0.0	0.0
08/13/09				0.6	0.0	0.6	0.0	0.0	0.0
08/14/09				2.7	0.0	2.7	0.0	0.0	0.0
08/15/09				3.6	0.0	3.6	0.0	0.0	0.0
08/16/09				2.9	0.0	2.9	0.0	0.0	0.0
08/17/09				3.7	0.0	3.7	0.0	0.0	0.0
08/18/09				0.6	0.0	0.6	0.0	0.0	0.0
08/19/09				0.6	0.0	0.6	0.0	0.0	0.0
08/20/09				0.6	0.0	0.6	0.0	0.0	0.0
08/21/09				0.6	0.0	0.6	0.0	0.0	0.0
08/22/09				0.6	0.0	0.6	0.0	0.0	0.0
08/23/09				0.6	0.0	0.6	0.0	0.0	0.0
08/24/09				0.6	0.0	0.6	0.0	0.0	0.0
08/25/09				0.6	0.0	0.6	0.0	0.0	0.0
08/26/09				0.6	0.0	0.6	0.0	0.0	0.0
08/27/09				0.6	0.0	0.6	0.0	0.0	0.0
08/28/09				0.6	0.0	0.6	0.0	0.0	0.0
08/29/09				0.6	0.0	0.6	0.0	0.0	0.0
08/30/09				0.6	0.0	0.6	0.0	0.0	0.0
08/31/09				0.6	0.0	0.6	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
09/01/09	No connection			0.6	0.0	0.6	0.0	0.0	0.0
09/02/09				0.6	0.0	0.6	0.0	0.0	0.0
09/03/09				0.6	0.0	0.6	0.0	0.0	0.0
09/04/09				0.6	0.0	0.6	0.0	0.0	0.0
09/05/09				0.6	0.0	0.6	0.0	0.0	0.0
09/06/09				0.6	0.0	0.6	0.0	0.0	0.0
09/07/09				0.6	0.0	0.6	0.0	0.0	0.0
09/08/09				0.6	0.0	0.6	0.0	0.0	0.0
09/09/09				0.6	0.0	0.6	0.0	0.0	0.0
09/10/09				0.6	0.0	0.6	0.0	0.0	0.0
09/11/09				0.6	0.0	0.6	0.0	0.0	0.0
09/12/09				0.6	0.0	0.6	0.0	0.0	0.0
09/13/09				0.6	0.0	0.6	0.0	0.0	0.0
09/14/09				0.6	0.0	0.6	0.0	0.0	0.0
09/15/09				0.6	0.0	0.6	0.0	0.0	0.0
09/16/09				0.6	0.0	0.6	0.0	0.0	0.0
09/17/09				0.6	0.0	0.6	0.0	0.0	0.0
09/18/09				0.6	0.0	0.6	0.0	0.0	0.0
09/19/09				0.6	0.0	0.6	0.0	0.0	0.0
09/20/09				0.6	0.0	0.6	0.0	0.0	0.0
09/21/09				0.6	0.0	0.6	0.0	0.0	0.0
09/22/09				0.6	0.0	0.6	0.0	0.0	0.0
09/23/09				0.6	0.0	0.6	0.0	0.0	0.0
09/24/09				0.6	0.0	0.6	0.0	0.0	0.0
09/25/09				0.6	0.0	0.6	0.0	0.0	0.0
09/26/09				0.6	0.0	0.6	0.0	0.0	0.0
09/27/09				0.6	0.0	0.6	0.0	0.0	0.0
09/28/09				0.6	0.0	0.6	0.0	0.0	0.0
09/29/09				0.6	0.0	0.6	0.0	0.0	0.0
09/30/09				0.6	0.0	0.6	0.0	0.0	0.0
10/01/09				0.6	0.0	0.6	0.0	0.0	0.0
10/02/09				0.6	0.0	0.6	0.0	0.0	0.0
10/03/09				0.6	0.0	0.6	0.0	0.0	0.0
10/04/09				0.6	0.0	0.6	0.0	0.0	0.0
10/05/09				0.6	0.0	0.6	0.0	0.0	0.0
10/06/09				0.6	0.0	0.6	0.0	0.0	0.0
10/07/09				0.6	0.0	0.6	0.0	0.0	0.0
10/08/09				0.6	0.0	0.6	0.0	0.0	0.0
10/09/09				0.6	0.0	0.6	0.0	0.0	0.0
10/10/09				0.6	0.0	0.6	0.0	0.0	0.0
10/11/09				0.6	0.0	0.6	0.0	0.0	0.0
10/12/09				0.6	0.0	0.6	0.0	0.0	0.0
10/13/09				0.6	0.0	0.6	0.0	0.0	0.0
10/14/09				56.0	0.0	56.0	0.0	0.0	0.0
10/15/09				0.6	0.0	0.6	0.0	0.0	0.0
10/16/09				0.6	0.0	0.6	0.0	0.0	0.0
10/17/09				0.6	0.0	0.6	0.0	0.0	0.0
10/18/09				0.6	0.0	0.6	0.0	0.0	0.0
10/19/09				0.6	0.0	0.6	0.0	0.0	0.0
10/20/09				0.6	0.0	0.6	0.0	0.0	0.0
10/21/09				0.6	0.0	0.6	0.0	0.0	0.0
10/22/09				0.6	0.0	0.6	0.0	0.0	0.0
10/23/09				0.6	0.0	0.6	0.0	0.0	0.0
10/24/09				0.6	0.0	0.6	0.0	0.0	0.0
10/25/09				0.6	0.0	0.6	0.0	0.0	0.0
10/26/09				0.6	0.0	0.6	0.0	0.0	0.0
10/27/09				0.6	0.0	0.6	0.0	0.0	0.0
10/28/09				0.6	0.0	0.6	0.0	0.0	0.0
10/29/09				0.6	0.0	0.6	0.0	0.0	0.0
10/30/09				0.6	0.0	0.6	0.0	0.0	0.0
10/31/09				0.6	0.0	0.6	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
11/01/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/02/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/03/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/04/09	2.9	0.0	2.9	0.6	0.0	0.6	0.0	0.0	0.0
11/05/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/06/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/07/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/08/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/09/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/10/09	0.0	0.0	0.0	0.6	0.0	0.6	2.5	0.0	2.5
11/11/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/12/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/13/09	0.0	0.0	0.0	45.9	0.0	45.9	6.3	0.0	6.3
11/14/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/15/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/16/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/17/09	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
11/18/09	0.0	0.0	0.0	0.6	0.0	0.6	7.0	0.0	7.0
11/19/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/20/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/21/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/22/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/23/09	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
11/24/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/25/09	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
11/26/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/27/09	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
11/28/09	0.0	0.0	0.0	27.6	0.0	27.6	0.0	0.0	0.0
11/29/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
11/30/09	0.0	0.0	0.0	0.6	0.0	0.6	7.8	0.0	7.8
12/01/09	0.0	0.0	0.0	0.6	0.0	0.6	6.2	0.0	6.2
12/02/09	0.0	0.0	0.0	0.6	0.0	0.6	0.4	0.0	0.4
12/03/09	0.0	0.0	0.0	0.6	0.0	0.6	2.6	0.0	2.6
12/04/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/05/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/06/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/07/09	0.0	0.0	0.0	91.3	0.0	91.3	0.0	0.0	0.0
12/08/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/09/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/10/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/11/09	0.0	0.0	0.0	50.3	0.4	50.7	0.0	0.0	0.0
12/12/09	0.0	0.0	0.0	75.9	50.3	126.2	0.0	0.0	0.0
12/13/09	0.0	0.0	0.0	4.5	3.2	7.7	0.0	0.0	0.0
12/14/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/15/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/16/09	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
12/17/09	0.0	0.0	0.0	0.6	0.0	0.6	4.4	0.0	4.4
12/18/09	0.0	0.0	0.0	0.6	0.0	0.6	7.8	0.0	7.8
12/19/09	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
12/20/09	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
12/21/09	0.0	0.0	0.0	0.6	0.0	0.6	5.5	0.0	5.5
12/22/09	0.0	0.0	0.0	9.7	0.0	9.7	2.2	0.0	2.2
12/23/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/24/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/25/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/26/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/27/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/28/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/29/09	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
12/30/09	0.0	0.0	0.0	2.5	0.0	2.5	2.5	0.0	2.5
12/31/09	0.0	0.0	0.0	0.6	0.0	0.6	3.7	0.0	3.7

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
01/01/10	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
01/02/10	0.0	0.0	0.0	0.6	0.0	0.6	5.8	0.0	5.8
01/03/10	0.0	0.0	0.0	0.6	0.0	0.6	6.0	0.0	6.0
01/04/10	0.0	0.0	0.0	0.6	0.0	0.6	6.8	0.0	6.8
01/05/10	0.0	0.0	0.0	0.6	0.0	0.6	7.4	0.0	7.4
01/06/10	0.0	0.0	0.0	0.6	0.0	0.6	8.3	0.0	8.3
01/07/10	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
01/08/10	0.0	0.0	0.0	0.6	0.0	0.6	10.0	0.0	10.0
01/09/10	0.0	0.0	0.0	0.6	0.0	0.6	10.6	0.0	10.6
01/10/10	0.0	0.0	0.0	0.6	0.0	0.6	10.4	0.0	10.4
01/11/10	0.0	0.0	0.0	0.6	0.0	0.6	9.5	0.0	9.5
01/12/10	0.0	0.0	0.0	0.6	0.0	0.6	7.3	0.0	7.3
01/13/10	0.0	0.0	0.0	0.3	0.3	0.6	0.6	2.0	2.6
01/14/10	0.0	0.0	0.0	0.3	0.6	0.9	1.5	2.0	3.5
01/15/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/16/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/17/10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/18/10	0.0	0.0	0.0	129.8	53.4	183.2	0.0	0.0	0.0
01/19/10	0.0	0.0	0.0	28.6	12.8	41.4	0.0	0.0	0.0
01/20/10	0.0	0.0	0.0	25.9	10.1	36.0	0.0	0.0	0.0
01/21/10	0.0	0.0	0.0	31.5	9.8	41.3	0.0	0.0	0.0
01/22/10	0.0	0.0	0.0	22.8	6.1	28.9	0.0	0.0	0.0
01/23/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/24/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/25/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/26/10	0.0	0.0	0.0	41.4	0.0	41.4	0.0	0.0	0.0
01/27/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/28/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/29/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/30/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
01/31/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/01/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/02/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/03/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/04/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/05/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/06/10	0.0	0.0	0.0	137.7	50.1	187.8	0.0	0.0	0.0
02/07/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/08/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/09/10	0.0	3.0	3.0	34.6	20.5	55.1	0.0	0.0	0.0
02/10/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/11/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/12/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/13/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/14/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/15/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/16/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/17/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/18/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/19/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/20/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/21/10	0.0	0.0	0.0	74.2	1.0	75.2	0.0	0.0	0.0
02/22/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/23/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/24/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/25/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/26/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
02/27/10	0.0	0.0	0.0	105.3	36.7	142.0	0.0	0.0	0.0
02/28/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
03/01/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/02/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/03/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/04/10	0.0	0.0	0.0	8.5	6.7	15.2	0.0	0.0	0.0
03/05/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/06/10	0.0	0.0	0.0	36.4	0.7	37.1	0.0	0.0	0.0
03/07/10	0.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0
03/08/10	0.0	0.0	0.0	-16.4	17.0	0.6	0.0	0.0	0.0
03/09/10	0.0	0.0	0.0	-11.6	12.2	0.6	0.0	0.0	0.0
03/10/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/11/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/12/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/13/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/14/10	0.0	0.0	0.0	0.6	0.0	0.6	4.5	0.0	4.5
03/15/10	0.0	0.0	0.0	0.6	0.0	0.6	6.5	0.0	6.5
03/16/10	0.0	0.0	0.0	0.6	0.0	0.6	7.7	0.0	7.7
03/17/10	0.0	0.0	0.0	0.6	0.0	0.6	8.9	0.0	8.9
03/18/10	0.0	0.0	0.0	0.6	0.0	0.6	8.9	0.0	8.9
03/19/10	0.0	0.0	0.0	0.6	0.0	0.6	9.0	0.0	9.0
03/20/10	0.0	0.0	0.0	0.6	0.0	0.6	8.9	0.0	8.9
03/21/10	0.0	0.0	0.0	0.6	0.0	0.6	8.7	0.0	8.7
03/22/10	0.0	0.0	0.0	0.6	0.0	0.6	8.1	0.0	8.1
03/23/10	0.0	0.0	0.0	0.6	0.0	0.6	7.7	0.0	7.7
03/24/10	0.0	0.0	0.0	0.6	0.0	0.6	8.0	0.0	8.0
03/25/10	0.0	0.0	0.0	0.6	0.0	0.6	8.0	0.0	8.0
03/26/10	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
03/27/10	0.0	0.0	0.0	0.6	0.0	0.6	7.9	0.0	7.9
03/28/10	0.0	0.0	0.0	0.6	0.0	0.6	2.8	0.0	2.8
03/29/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/30/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
03/31/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/01/10	0.0	0.0	0.0	0.6	0.0	0.6	3.5	0.0	3.5
04/02/10	0.0	0.0	0.0	0.6	0.0	0.6	5.9	0.0	5.9
04/03/10	0.0	0.0	0.0	0.6	0.0	0.6	6.1	0.0	6.1
04/04/10	0.0	0.0	0.0	0.6	0.0	0.6	5.9	0.0	5.9
04/05/10	0.0	0.0	0.0	40.7	0.0	40.7	1.2	0.0	1.2
04/06/10	0.0	0.0	0.0	0.6	0.0	0.6	3.3	0.0	3.3
04/07/10	0.0	0.0	0.0	0.6	0.0	0.6	2.8	0.0	2.8
04/08/10	0.0	0.0	0.0	0.6	0.0	0.6	2.8	0.0	2.8
04/09/10	0.0	0.0	0.0	0.6	0.0	0.6	2.9	0.0	2.9
04/10/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/11/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/12/10	0.0	0.0	0.0	48.7	80.6	129.3	0.0	0.0	0.0
04/13/10	0.0	0.0	0.0	0.6	0.0	0.6	0.8	5.1	5.9
04/14/10	0.0	0.0	0.0	0.6	0.0	0.6	2.0	4.0	6.0
04/15/10	0.0	0.0	0.0	0.6	0.0	0.6	2.7	6.3	9.0
04/16/10	0.0	0.0	0.0	0.6	0.0	0.6	4.0	0.0	4.0
04/17/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/18/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/19/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/20/10	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0
04/21/10	0.0	0.0	0.0	4.0	10.3	14.3	0.7	2.2	2.9
04/22/10	0.0	0.0	0.0	2.0	4.3	6.3	1.5	4.4	5.9
04/23/10	0.0	0.0	0.0	0.2	0.4	0.6	1.5	4.5	6.0
04/24/10	0.0	0.0	0.0	0.2	0.4	0.6	1.5	4.4	5.9
04/25/10	0.0	0.0	0.0	0.2	0.4	0.6	1.0	2.9	3.8
04/26/10	0.0	0.0	0.0	0.2	0.4	0.6	0.0	0.0	0.0
04/27/10	0.0	0.0	0.0	0.2	0.4	0.6	0.4	1.1	1.4
04/28/10	0.0	0.0	0.0	0.2	0.4	0.6	1.5	4.5	5.9
04/29/10	0.0	0.0	0.0	0.2	0.4	0.6	1.5	4.4	5.9
04/30/10	0.0	0.0	0.0	0.2	0.4	0.6	0.8	2.3	3.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
05/01/10	0.0	0.0	0.0	0.6	0.6	1.1	0.0	0.0	0.0
05/02/10	0.0	0.0	0.0	0.4	0.7	1.1	0.0	0.0	0.0
05/03/10	0.0	0.0	0.0	0.6	0.6	1.1	0.0	0.0	0.0
05/04/10	0.0	0.0	0.0	1.1	0.0	1.1	3.9	0.0	3.9
05/05/10	0.0	0.0	0.0	1.1	0.0	1.1	7.5	0.0	7.5
05/06/10	0.0	0.0	0.0	1.1	0.0	1.1	7.0	0.0	7.0
05/07/10	0.0	0.0	0.0	1.1	0.0	1.1	7.1	0.0	7.1
05/08/10	0.0	0.0	0.0	1.1	0.0	1.1	7.9	0.0	7.9
05/09/10	0.0	0.0	0.0	1.1	0.0	1.1	8.3	0.0	8.3
05/10/10	0.0	0.0	0.0	1.1	0.0	1.1	8.5	0.0	8.5
05/11/10	0.0	0.0	0.0	1.1	0.0	1.1	9.0	0.0	9.0
05/12/10	0.0	0.0	0.0	1.1	0.0	1.1	5.9	0.0	5.9
05/13/10	0.0	0.0	0.0	0.6	0.6	1.1	1.3	4.0	5.3
05/14/10	0.0	0.0	0.0	0.6	0.6	1.1	1.0	3.1	4.1
05/15/10	0.0	0.0	0.0	0.6	0.6	1.1	1.8	5.5	7.4
05/16/10	0.0	0.0	0.0	0.6	0.6	1.1	1.8	5.3	7.1
05/17/10	0.0	0.0	0.0	0.8	0.3	1.1	0.0	0.0	0.0
05/18/10	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0
05/19/10	0.0	0.0	0.0	1.1	0.0	1.1	3.4	0.0	3.4
05/20/10	0.0	0.0	0.0	1.1	0.0	1.1	8.1	0.0	8.1
05/21/10	0.0	0.0	0.0	1.1	0.0	1.1	8.2	0.0	8.2
05/22/10	0.0	0.0	0.0	1.1	0.0	1.1	8.4	0.0	8.4
05/23/10	0.0	0.0	0.0	1.1	0.0	1.1	9.3	0.0	9.3
05/24/10	0.0	0.0	0.0	1.1	0.0	1.1	7.7	0.0	7.7
05/25/10	0.0	0.0	0.0	1.1	0.0	1.1	9.2	0.0	9.2
05/26/10	0.0	0.0	0.0	1.1	0.0	1.1	9.2	0.0	9.2
05/27/10	0.0	0.0	0.0	1.1	0.0	1.1	8.8	0.0	8.8
05/28/10	0.0	0.0	0.0	1.1	0.0	1.1	8.9	0.0	8.9
05/29/10	0.0	0.0	0.0	1.1	0.0	1.1	9.3	0.0	9.3
05/30/10	0.0	0.0	0.0	1.1	0.0	1.1	9.4	0.0	9.4
05/31/10	0.0	0.0	0.0	1.1	0.0	1.1	9.6	0.0	9.6
06/01/10	0.0	0.0	0.0	1.1	0.0	1.1	9.2	0.0	9.2
06/02/10	0.0	0.0	0.0	1.1	0.0	1.1	9.0	0.0	9.0
06/03/10	0.0	0.0	0.0	1.1	0.0	1.1	8.4	0.0	8.4
06/04/10	0.0	0.0	0.0	1.1	0.0	1.1	8.6	0.0	8.6
06/05/10	0.0	0.0	0.0	1.1	0.0	1.1	9.3	0.0	9.3
06/06/10	0.0	0.0	0.0	1.1	0.0	1.1	11.6	0.0	11.6
06/07/10	0.0	0.0	0.0	1.1	0.0	1.1	9.4	0.0	9.4
06/08/10	0.0	0.0	0.0	1.1	0.0	1.1	8.6	0.0	8.6
06/09/10	0.0	0.0	0.0	1.1	0.0	1.1	8.9	0.0	8.9
06/10/10	0.0	0.0	0.0	1.1	0.0	1.1	9.9	0.0	9.9
06/11/10	0.0	0.0	0.0	1.1	0.0	1.1	9.3	0.0	9.3
06/12/10	0.0	0.0	0.0	1.1	0.0	1.1	8.8	0.0	8.8
06/13/10	0.0	0.0	0.0	1.1	0.0	1.1	9.0	0.0	9.0
06/14/10	0.0	0.0	0.0	1.1	0.0	1.1	8.9	0.0	8.9
06/15/10	0.0	0.0	0.0	1.1	0.0	1.1	8.9	0.0	8.9
06/16/10	0.0	0.0	0.0	1.1	0.0	1.1	8.6	0.0	8.6
06/17/10	0.0	0.0	0.0	1.1	0.0	1.1	9.7	0.0	9.7
06/18/10	0.0	0.0	0.0	1.1	0.0	1.1	11.4	0.0	11.4
06/19/10	0.0	0.0	0.0	1.1	0.0	1.1	11.4	0.0	11.4
06/20/10	0.0	0.0	0.0	1.1	0.0	1.1	11.4	0.0	11.4
06/21/10	0.0	0.0	0.0	1.1	0.0	1.1	11.4	0.0	11.4
06/22/10	0.0	0.0	0.0	1.1	0.0	1.1	11.0	0.0	11.0
06/23/10	0.0	0.0	0.0	1.1	0.0	1.1	10.6	0.0	10.6
06/24/10	0.0	0.0	0.0	1.1	0.0	1.1	11.0	0.0	11.0
06/25/10	0.0	0.0	0.0	1.1	0.0	1.1	10.2	0.0	10.2
06/26/10	0.0	0.0	0.0	1.1	0.0	1.1	10.0	0.0	10.0
06/27/10	0.0	0.0	0.0	1.1	0.0	1.1	11.8	0.0	11.8
06/28/10	0.0	0.0	0.0	1.1	0.0	1.1	11.8	0.0	11.8
06/29/10	0.0	0.0	0.0	1.1	0.0	1.1	12.0	0.0	12.0
06/30/10	0.0	0.0	0.0	1.1	0.0	1.1	11.8	0.0	11.8

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
07/01/10	0.0	0.0	0.0	0.9	0.0	0.9	10.9	0.0	10.9
07/02/10	0.0	0.0	0.0	0.9	0.0	0.9	11.5	0.0	11.5
07/03/10	0.0	0.0	0.0	0.9	0.0	0.9	11.9	0.0	11.9
07/04/10	0.0	0.0	0.0	0.9	0.0	0.9	12.0	0.0	12.0
07/05/10	0.0	0.0	0.0	0.9	0.0	0.9	11.9	0.0	11.9
07/06/10	0.0	0.0	0.0	0.6	0.3	0.9	6.5	1.9	8.4
07/07/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.1	6.1
07/08/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.0	6.0
07/09/10	0.0	0.0	0.0	0.3	0.6	0.9	1.9	4.0	5.9
07/10/10	0.0	0.0	0.0	0.3	0.6	0.9	1.9	4.0	5.9
07/11/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.0	6.0
07/12/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.0	6.0
07/13/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.0	6.0
07/14/10	0.0	0.0	0.0	0.3	0.6	0.9	2.2	4.6	6.8
07/15/10	0.0	0.0	0.0	0.3	0.6	0.9	1.1	2.3	3.4
07/16/10	0.0	0.0	0.0	0.3	0.6	0.9	1.8	3.7	5.5
07/17/10	0.0	0.0	0.0	0.3	0.6	0.9	2.8	5.8	8.6
07/18/10	0.0	0.0	0.0	0.3	0.6	0.9	2.9	6.0	8.9
07/19/10	0.0	0.0	0.0	0.3	0.6	0.9	3.8	7.6	11.4
07/20/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.1	6.1
07/21/10	0.0	0.0	0.0	0.3	0.6	0.9	2.1	4.4	6.5
07/22/10	0.0	0.0	0.0	0.3	0.6	0.9	2.1	4.4	6.5
07/23/10	0.0	0.0	0.0	0.3	0.6	0.9	2.1	4.3	6.4
07/24/10	0.0	0.0	0.0	0.4	0.8	1.2	2.1	4.2	6.3
07/25/10	0.0	0.0	0.0	0.4	0.8	1.2	2.1	4.2	6.3
07/26/10	0.0	0.0	0.0	0.4	0.8	1.2	1.1	2.3	3.4
07/27/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
07/28/10	0.0	0.0	0.0	0.4	0.8	1.2	1.5	3.1	4.6
07/29/10	0.0	0.0	0.0	0.4	0.8	1.2	2.9	5.8	8.7
07/30/10	0.0	0.0	0.0	0.4	0.8	1.2	1.9	3.9	5.8
07/31/10	0.0	0.0	0.0	0.4	0.8	1.2	1.5	2.9	4.4
08/01/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.0	6.0
08/02/10	0.0	0.0	0.0	0.3	0.6	0.9	2.6	5.2	7.8
08/03/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.2	6.2
08/04/10	0.0	0.0	0.0	0.3	0.6	0.9	2.2	4.5	6.7
08/05/10	0.0	0.0	0.0	0.3	0.6	0.9	2.3	4.6	6.9
08/06/10	0.0	0.0	0.0	0.3	0.6	0.9	2.4	4.9	7.3
08/07/10	0.0	0.0	0.0	0.3	0.6	0.9	2.3	4.8	7.1
08/08/10	0.0	0.0	0.0	0.3	0.6	0.9	2.2	4.6	6.8
08/09/10	0.0	0.0	0.0	0.3	0.6	0.9	2.0	4.2	6.2
08/10/10	0.0	0.0	0.0	0.3	0.6	0.9	2.1	4.3	6.4
08/11/10	0.0	0.0	0.0	0.3	0.6	0.9	2.2	4.6	6.8
08/12/10	0.0	0.0	0.0	0.3	0.6	0.9	2.3	4.6	6.9
08/13/10	0.0	0.0	0.0	0.3	0.6	0.9	2.3	4.7	7.0
08/14/10	0.0	0.0	0.0	0.3	0.6	0.9	2.4	4.8	7.2
08/15/10	0.0	0.0	0.0	0.3	0.6	0.9	2.3	4.8	7.1
08/16/10	0.0	0.0	0.0	0.3	0.6	0.9	1.4	2.7	4.1
08/17/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/18/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/19/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/20/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/21/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/22/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/23/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/24/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/25/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/26/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/27/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/28/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/29/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/30/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0
08/31/10	0.0	0.0	0.0	0.3	0.6	0.9	0.0	0.0	0.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
09/01/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/02/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/03/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/04/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/05/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/06/10	0.0	0.0	0.0	0.4	0.8	1.2	0.0	0.0	0.0
09/07/10	0.0	0.0	0.0	0.9	0.3	1.2	0.0	0.0	0.0
09/08/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/09/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/10/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/11/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/12/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/13/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/14/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
09/15/10	0.0	0.0	0.0	1.2	0.0	1.2	3.9	0.0	3.9
09/16/10	0.0	0.0	0.0	1.2	0.0	1.2	12.0	0.0	12.0
09/17/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/18/10	0.0	0.0	0.0	1.2	0.0	1.2	11.7	0.0	11.7
09/19/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/20/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/21/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/22/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/23/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/24/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/25/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/26/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/27/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/28/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
09/29/10	0.0	0.0	0.0	1.2	0.0	1.2	8.8	0.0	8.8
09/30/10	0.0	0.0	0.0	1.2	0.0	1.2	10.2	0.0	10.2
10/01/10	0.0	0.0	0.0	1.2	0.0	1.2	10.2	0.0	10.2
10/02/10	0.0	0.0	0.0	1.2	0.0	1.2	10.7	0.0	10.7
10/03/10	0.0	0.0	0.0	1.2	0.0	1.2	11.1	0.0	11.1
10/04/10	0.0	0.0	0.0	1.2	0.0	1.2	10.9	0.0	10.9
10/05/10	0.0	0.0	0.0	1.2	0.0	1.2	10.6	0.0	10.6
10/06/10	0.0	0.0	0.0	25.6	3.7	29.3	11.9	0.0	11.9
10/07/10	0.0	0.0	0.0	1.2	0.0	1.2	12.2	0.0	12.2
10/08/10	0.0	0.0	0.0	1.2	0.0	1.2	12.4	0.0	12.4
10/09/10	0.0	0.0	0.0	1.2	0.0	1.2	11.9	0.0	11.9
10/10/10	0.0	0.0	0.0	1.2	0.0	1.2	10.6	0.0	10.6
10/11/10	0.0	0.0	0.0	1.2	0.0	1.2	9.1	0.0	9.1
10/12/10	0.0	0.0	0.0	1.2	0.0	1.2	7.9	0.0	7.9
10/13/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/14/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/15/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/16/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/17/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/18/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/19/10	0.0	0.0	0.0	4.0	0.0	4.0	5.0	0.0	5.0
10/20/10	0.0	0.0	0.0	1.2	0.0	1.2	6.9	0.0	6.9
10/21/10	0.0	0.0	0.0	4.0	0.0	4.0	10.0	0.0	10.0
10/22/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
10/23/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
10/24/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
10/25/10	0.0	0.0	0.0	7.3	0.0	7.3	10.0	0.0	10.0
10/26/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
10/27/10	0.0	0.0	0.0	1.2	0.0	1.2	9.5	0.0	9.5
10/28/10	0.0	0.0	0.0	1.2	0.0	1.2	7.9	0.0	7.9
10/29/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
10/30/10	0.0	0.0	0.0	12.8	0.0	12.8	3.6	0.0	3.6
10/31/10	0.0	0.0	0.0	1.2	0.0	1.2	10.0	0.0	10.0

Table 3-2
8th Street Basin Volume of Diluent and Recycled Water Recharged

Date	MWD Imported (AF)			Dry Weather and Storm Water (AF)			Recycled Water (AF)		
	8th	7th	Total	8th Str	7th Str	Total	8th Str	7th Str	Total
11/01/10	0.0	0.0	0.0	1.2	0.0	1.2	9.6	0.0	9.6
11/02/10	0.0	0.0	0.0	1.2	0.0	1.2	10.3	0.0	10.3
11/03/10	0.0	0.0	0.0	1.2	0.0	1.2	10.6	0.0	10.6
11/04/10	0.0	0.0	0.0	1.2	0.0	1.2	7.5	0.0	7.5
11/05/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/06/10	0.0	0.0	0.0	1.2	0.0	1.2	2.8	0.0	2.8
11/07/10	0.0	0.0	0.0	1.2	0.0	1.2	10.1	0.0	10.1
11/08/10	0.0	0.0	0.0	5.7	0.0	5.7	10.0	0.0	10.0
11/09/10	0.0	0.0	0.0	1.2	0.0	1.2	10.1	0.0	10.1
11/10/10	0.0	0.0	0.0	1.2	0.0	1.2	10.2	0.0	10.2
11/11/10	0.0	0.0	0.0	1.2	0.0	1.2	8.1	0.0	8.1
11/12/10	0.0	0.0	0.0	1.2	0.0	1.2	7.9	0.0	7.9
11/13/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
11/14/10	0.0	0.0	0.0	1.2	0.0	1.2	8.2	0.0	8.2
11/15/10	0.0	0.0	0.0	1.2	0.0	1.2	10.0	0.0	10.0
11/16/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
11/17/10	0.0	0.0	0.0	1.2	0.0	1.2	9.9	0.0	9.9
11/18/10	0.0	0.0	0.0	1.2	0.0	1.2	6.4	0.0	6.4
11/19/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/20/10	0.0	0.0	0.0	112.3	2.6	114.9	0.0	0.0	0.0
11/21/10	0.0	0.0	0.0	11.1	21.0	32.1	0.0	0.0	0.0
11/22/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/23/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/24/10	0.0	0.0	0.0	2.2	0.0	2.2	0.0	0.0	0.0
11/25/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/26/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/27/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/28/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
11/29/10	0.0	0.0	0.0	1.2	0.0	1.2	5.0	0.0	5.0
11/30/10	0.0	0.0	0.0	1.2	0.0	1.2	8.0	0.0	8.0
12/01/10	0.0	0.0	0.0	1.2	0.0	1.2	4.4	0.0	4.4
12/02/10	0.0	0.0	0.0	1.2	0.0	1.2	4.4	0.0	4.4
12/03/10	0.0	0.0	0.0	1.2	0.0	1.2	4.8	0.0	4.8
12/04/10	0.0	0.0	0.0	1.2	0.0	1.2	4.7	0.0	4.7
12/05/10	0.0	0.0	0.0	74.0	1.3	75.3	1.9	0.0	1.9
12/06/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/07/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/08/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/09/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/10/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/11/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/12/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/13/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/14/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/15/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/16/10	0.0	0.0	0.0	40.6	0.0	40.6	0.0	0.0	0.0
12/17/10	0.0	0.0	0.0	26.9	0.3	27.2	0.0	0.0	0.0
12/18/10	0.0	0.0	0.0	67.4	8.1	75.5	0.0	0.0	0.0
12/19/10	0.0	0.0	0.0	27.1	45.8	72.9	0.0	0.0	0.0
12/20/10	0.0	0.0	0.0	19.4	3.8	23.2	0.0	0.0	0.0
12/21/10	0.0	0.0	0.0	15.6	3.8	19.4	0.0	0.0	0.0
12/22/10	0.0	0.0	0.0	14.3	2.9	17.2	0.0	0.0	0.0
12/23/10	0.0	0.0	0.0	6.1	0.0	6.1	0.0	0.0	0.0
12/24/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/25/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/26/10	0.0	0.0	0.0	33.7	11.1	44.8	0.0	0.0	0.0
12/27/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/28/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/29/10	0.0	0.0	0.0	53.4	18.4	71.8	0.0	0.0	0.0
12/30/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0
12/31/10	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0

Table 3-3
8th Street Basin: Recycled Water Contribution
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	Source
2005/06	Jul '05	-26	0.	0.		0.						
	Aug '05	-25	0.	0.		0.						
	Sep '05	-24	60.	0.		60.						MEASURED
	Oct '05	-23	132.6	0.		132.6						
	Nov '05	-22	60.	0.		60.						
	Dec '05	-21	60.	0.		60.						
	Jan '06	-20	116.	0.		116.						
	Feb '06	-19	242.4	0.		242.4						
	Mar '06	-18	325.9	0.		325.9						
	Apr '06	-17	229.5	0.		229.5						
	May '06	-16	50.2	0.		50.2						
	Jun '06	-15	15.	0.		15.						
2006/07	Jul '06	-14	11.9	0.		11.9						
	Aug '06	-13	6.2	0.		6.2						
	Sep '06	-12	22.	0.		22.						HISTORICAL
	Oct '06	-11	40.3	0.		40.3						
	Nov '06	-10	42.	0.		42.						
	Dec '06	-9	79.8	0.		79.8						
	Jan '07	-8	58.8	0.		58.8						
	Feb '07	-7	167.4	0.		167.4						
	Mar '07	-6	38.3	0.		38.3						
	Apr '07	-5	89.	0.		89.						
	May '07	-4	42.	0.		42.						
	Jun '07	-3	42.	0.		42.						
2007/08	Jul '07	-2	16.	0.		16.						
	Aug '07	-1	16.	0.		16.	1,963	0.	0	1963	0%	START-UP
	Sep '07	1	17.	0.		17.	1,980	128.1	128	2108	6%	
	Oct '07	2	42.	0.		42.	2,022	109.	237	2259	10%	
	Nov '07	3	81.	0.		81.	2,103	161.	398	2501	16%	
	Dec '07	4	224.	0.		224.	2,327	0.	398	2725	15%	
	Jan '08	5	335.	0.		335.	2,662	1.	399	3061	13%	
	Feb '08	6	98.	0.		98.	2,760	157.	556	3316	17%	
	Mar '08	7	21.	0.		21.	2,781	164.	720	3501	21%	
	Apr '08	8	11.	0.		11.	2,792	90.	810	3602	22%	
	May '08	9	90.	0.		90.	2,882	158.	968	3850	25%	
	Jun '08	10	15.	0.		15.	2,897	86.	1,054	3951	27%	
2008/09	Jul '08	11	29.	0.		29.	2,926	224.	1,278	4204	30%	EXTEND
	Aug '08	12	15.	0.		15.	2,941	128.	1,406	4347	32%	
	Sep '08	13	15.	0.		15.	2,956	0.	1,406	4362	32%	
	Oct '08	14	16.	0.		16.	2,972	0.	1,406	4378	32%	
	Nov '08	15	137.	0.		137.	3,109	0.	1,406	4515	31%	
	Dec '08	16	352.	0.		352.	3,461	0.	1,406	4867	29%	
	Jan '09	17	35.	0.		35.	3,496	0.	1,406	4902	29%	
	Feb '09	18	458.	0.		458.	3,954	0.	1,406	5360	26%	
	Mar '09	19	21.	0.		21.	3,975	0.	1,406	5381	26%	
	Apr '09	20	15.	0.		15.	3,990	0.	1,406	5396	26%	
	May '09	21	16.	0.		16.	4,006	0.	1,406	5412	26%	
	Jun '09	22	0.	0.		0.	4,006	0.	1,406	5412	26%	
2009/10	Jul '09	23	19.	0.		19.	4,025	0.	1,406	5431	26%	
	Aug '09	24	33.	0.		33.	4,058	24.	1,430	5488	26%	
	Sep '09	25	18.	0.		18.	4,076	0.	1,430	5506	26%	
	Oct '09	26	74.	0.	310.2	384.2	4,461	0.	1,430	5891	24%	ADDED SUP DATA
	Nov '09	27	93.	0.	310.2	403.2	4,864	133.	1,563	6427	24%	
	Dec '09	28	303.	0.	310.2	613.2	5,477	93.	1,656	7133	23%	
	Jan '10	29	387.	0.	310.2	697.2	6,174	102.	1,758	7932	22%	
	Feb '10	30	477.	3.	310.2	790.2	6,964	0.	1,758	8722	20%	
	Mar '10	31	73.	0.	310.2	383.2	7,348	114.	1,872	9220	20%	
	Apr '10	32	206.	0.	310.2	516.2	7,864	100.	1,972	9836	20%	
	May '10	33	34.	0.	310.2	344.2	8,208	199.	2,171	10379	21%	
	Jun '10	34	0.	0.	310.2	310.2	8,518	302.	2,473	10991	23%	
2010/11	Jul '10	35	30.	0.	310.2	340.2	8,858	218.	2,691	11550	23%	
	Aug '10	36	28.	0.	310.2	338.2	9,197	106.	2,797	11994	23%	
	Sep '10	37	36.	0.	310.2	346.2	9,543	177.	2,974	12517	24%	
	Oct '10	38	89.	0.	310.2	399.2	9,942	288.	3,262	13204	25%	
	Nov '10	39	187.	0.	310.2	497.2	10,439	163.	3,425	13864	25%	
	Dec '10	40	499.	0.	310.2	809.2	11,248	20.	3,445	14694	23%	
	Jan '11	41	110.	0.	310.2	420.2	11,669	167.	3,612	15281	24%	
	Feb '11	42	276.	0.	310.2	586.2	12,255	83.	3,695	15950	23%	
	Mar '11											
	Apr '11											
	May '11											
	Jun '11											

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

Table 3-4
8th Street Basin: Infiltration Rate Measurements

Basin	Start Date/Time	LT Water Depth, H (feet)	End Date/Time	LT Water Depth, H (feet)	dT (days)	dH (feet)	Infiltration Rate (feet/day)
8th Street	6/3/10 15:55	1.00	6/7/10 22:56	0.50	4.29	0.50	0.12
8th Street	5/31/10 22:29	1.50	6/3/10 15:55	1.00	2.73	0.50	0.18
8th-1 North	10/8/07 19:11	1.77	10/11/07 16:32	0.63	2.89	1.14	0.39
8th-1N	8/19/09 7:28	2.01	8/23/09 22:30	0.99	4.63	1.02	0.22
8th Street	5/30/10 4:28	2.02	5/31/10 22:29	1.50	1.75	0.52	0.30
8th Street	12/30/08 17:20	2.30	1/6/09 11:13	1.50	6.75	0.80	0.12
8th-1 North	11/16/07 8:03	2.40	11/18/07 8:20	1.70	2.01	0.70	0.35
8th Street	3/30/10 0:02	2.45	4/1/10 8:17	1.57	2.34	0.88	0.38
8th Street	2/27/09 19:44	2.50	3/2/09 9:56	2.00	2.59	0.50	0.19
8th-1 North	11/15/07 15:01	2.77	11/16/07 8:03	2.40	0.71	0.37	0.52
8th Street N	6/5/08 19:35	3.00	6/6/08 13:15	2.83	0.74	0.17	0.23
8th Street N	6/15/08 0:25	3.00	6/16/08 6:25	2.73	1.25	0.27	0.22
8th Street	2/17/10 16:30	3.00	2/19/10 17:31	1.99	2.04	1.01	0.49
8th Street	5/27/10 17:28	3.00	5/30/10 4:28	2.02	2.46	0.98	0.40
8th Street	5/23/08 23:02	3.03	5/24/08 15:02	2.83	0.67	0.20	0.30
8th Street N	6/13/08 13:25	3.42	6/15/08 0:25	3.00	1.46	0.42	0.29
8th Street	2/1/08 21:05	3.50	2/2/08 22:05	3.00	1.04	0.50	0.48
8th Street N	6/4/08 5:02	3.50	6/5/08 19:35	3.00	1.61	0.50	0.31
8th Street	2/24/09 8:02	3.51	2/27/09 19:44	2.50	3.49	1.01	0.29
8th Street	5/26/10 11:27	3.64	5/27/10 17:28	3.00	1.25	0.64	0.51
8th Street	12/10/07 16:14	3.99	12/12/07 10:14	2.99	1.75	1.00	0.57
8th Street N	7/7/08 21:51	3.99	7/9/08 8:51	3.51	1.46	0.48	0.33
8th Street	1/31/08 23:05	4.00	2/1/08 21:05	3.50	0.92	0.50	0.55
8th Street	2/15/10 22:03	4.00	2/17/10 16:30	3.00	1.77	1.00	0.57
8th Street N	6/3/08 0:02	4.01	6/4/08 5:02	3.50	1.21	0.51	0.42
8th Street N	7/7/08 8:51	4.25	7/7/08 21:51	3.99	0.54	0.26	0.48
8th Street N	6/2/08 10:02	4.35	6/3/08 0:02	4.01	0.58	0.34	0.58
8th Street	1/31/08 3:18	4.51	1/31/08 23:05	4.00	0.82	0.51	0.62
8th Street	2/21/09 21:01	4.51	2/24/09 8:02	3.51	2.46	1.00	0.41
8th Street	3/8/10 17:29	4.67	3/9/10 19:29	4.44	1.08	0.23	0.21
8th-1 North	10/18/05 14:15	4.81	10/19/05 11:10	4.28	0.87	0.53	0.61
8th Street	12/22/08 12:49	4.96	12/24/08 3:49	4.08	1.63	0.88	0.54
8th Street	11/26/10 10:57	4.96	11/27/10 14:17	3.99	1.14	0.97	0.85
8th Street	1/30/08 10:18	4.99	1/31/08 3:18	4.51	0.71	0.48	0.68
8th Street	2/14/10 16:02	4.99	2/15/10 22:03	4.00	1.25	0.99	0.79
8th Street	12/9/07 7:12	5.00	12/10/07 16:14	3.99	1.38	1.01	0.73
8th Street	12/27/08 2:50	5.01	12/29/08 6:50	4.00	2.17	1.01	0.47
8th Street	1/29/08 17:18	5.49	1/30/08 10:18	4.99	0.71	0.50	0.71
8th Street	2/3/08 21:05	5.50	2/4/08 14:40	5.06	0.73	0.44	0.60
8th Street	2/14/09 23:05	5.50	2/15/09 15:30	5.01	0.68	0.49	0.72
8th Street	2/20/09 5:01	5.50	2/21/09 21:01	4.51	1.67	0.99	0.59
8th Street	1/8/08 4:42	5.51	1/8/08 23:42	5.01	0.79	0.50	0.63
8th Street	2/3/08 21:05	5.51	2/4/08 14:05	5.08	0.71	0.43	0.61
8th Street	12/8/07 6:12	5.58	12/8/07 22:12	5.00	0.67	0.58	0.87
8th Street	1/25/08 20:04	5.99	1/26/08 17:04	5.47	0.88	0.52	0.59
8th Street	12/20/08 23:52	5.99	12/22/08 8:52	4.97	1.38	1.02	0.74
8th Street	2/13/10 13:02	6.00	2/14/10 16:02	4.99	1.13	1.01	0.90
8th Street	12/7/07 12:59	6.01	12/8/07 3:12	5.48	0.59	0.53	0.89
8th Street	2/11/09 21:13	6.01	2/13/09 12:40	4.99	1.64	1.02	0.62
8th Street	11/25/10 7:36	6.01	11/26/10 10:57	4.96	1.14	1.05	0.92
8th Street	1/7/08 10:14	6.04	1/8/08 4:42	5.51	0.77	0.53	0.69
8th Street	2/19/09 10:32	6.49	2/20/09 5:01	5.50	0.77	0.99	1.29
8th Street	2/14/09 4:30	6.50	2/14/09 23:05	5.50	0.77	1.00	1.29
8th Street	2/11/09 2:31	7.00	2/11/09 21:13	6.01	0.78	0.99	1.27
8th Street	2/12/10 13:02	7.00	2/13/10 13:02	6.00	1.00	1.00	1.00
8th Street	11/24/10 4:15	7.00	11/25/10 7:36	6.01	1.14	0.99	0.87
8th Street	12/19/08 20:52	7.01	12/20/08 23:52	5.99	1.13	1.02	0.91
8th Street	2/22/10 18:31	7.02	2/23/10 9:32	6.51	0.63	0.51	0.82
8th Street	2/22/10 6:31	7.46	2/22/10 18:31	7.02	0.50	0.44	0.88
8th Street	12/28/10 13:36	7.49	12/29/10 2:41	7.00	0.55	0.49	0.90
8th Street	2/18/09 17:10	7.51	2/19/09 10:32	6.49	0.72	1.02	1.41
8th Street	3/1/10 18:38	7.52	3/2/10 9:29	7.00	0.62	0.52	0.84
8th Street	2/8/09 11:02	7.97	2/8/09 21:34	7.49	0.44	0.48	1.09
8th Street	2/11/10 15:01	8.00	2/12/10 13:02	7.00	0.92	1.00	1.09
8th Street	11/23/10 2:56	8.00	11/24/10 4:15	7.00	1.05	1.00	0.95

Table 4-1
8th Street Basin Surface Water and Lysimeter Results
Electrical Conductivity
(µS/cm)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
08/06/07	500	1460	1110	NS	NS	1120
08/09/07	NS	NS	NS	470	3800	NS
08/14/07	625	775	1200	570	3230	1180
08/21/07	565	I0	1240		2110	980
08/28/07	520	730	1150		2300	905
09/04/07	575	765	915	610	1700	800
09/11/07	785	735	635	625	3820	820
09/18/07	810	735	750	675	2550	855
09/25/07	680	760	590	645	1640	775
10/02/07	790	755	555	520	1040	510
10/09/07	780	600	600	625	1635	725
10/16/07	235	710	610	670	1380	680
10/23/07	815	740	535	660	1080	615
10/30/07	835	655	520	605	1190	535
11/06/07	800	660	655	665	1180	640
11/13/07	805	715	715	715	1070	690
11/20/07	820	700	1760	740	745	745
11/27/07	835	745	NS	1060	775	795
12/04/07	175	735	790	1070	780	810
12/11/07	110	522		830	705	813
12/18/07	192	360		735	710	780
12/27/07	465	360		140	270	140
01/03/08	295	240		710	465	400
01/08/08	44.5	235		490	220	380
01/15/08	105	230		485	220	310
01/23/08	425	220		650	330	300
01/29/08	480	220		470	225	285
02/05/08	60	230		405	215	260
02/12/08	700	210		670	205	270
02/20/08	730	235		705	240	260
02/26/08	543	380		770	430	250
03/04/08	760	395		560	480	365
03/11/08	735	495		620	625	425
03/19/08	740	575		605	710	575
03/26/08	760	660		600	750	690
04/01/08	730	720		760	765	720
04/08/08	690	670		715	710	765
04/15/08	530	690		645	560	770
04/22/08	820	930		655	880	780
04/29/08	915	945		755	965	750
05/06/08	800	935		760	1160	925
05/13/08	775	815		700	905	920
05/20/08	735	775		695	835	860
05/28/08	560	710		580	805	830
06/03/08	780	725		605	740	780
06/10/08	730	715		670	740	675
06/17/08	760	770		695	780	745
06/24/08	790	835		750	830	810
07/02/08	845	725		660	735	790
07/08/08	795	825		720	865	780
07/15/08	705	835		690	845	795
07/22/08	770	785		695	800	785
07/30/08	740	710		650	740	720
08/05/08	810	780		700	805	800
08/13/08	750	825		725	815	820
08/19/08	765	780		710	820	820
08/26/08	750	740		690	780	815
09/03/08	620	780		730	760	900
09/09/08	645	705		590	705	825
09/16/08	635	640		555	680	805
09/23/08	645	685		575	720	815
09/30/08	530	755		590	680	810

Table 4-1
8th Street Basin Surface Water and Lysimeter Results
Electrical Conductivity
(µS/cm)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
10/07/08	675	1020		705	790	830
10/14/08	615	925		640	775	800
10/21/08	650	810		560	680	835
10/28/08	640	725		545	665	830
11/04/08	590	720		545	625	815
11/12/08	420	715		550	575	820
11/18/08	530	750		560	610	820
11/25/08	440	820		570	650	810
12/02/08	120	620		445	545	810
12/10/08	200	405		300	330	680
12/16/08	53	340		295	330	540
12/23/08	72	153		229	217	412
12/30/08	85	165		225	180	320
01/06/09	360	155		240	175	275
11/10/09	NS	690		355	425	525
11/17/09	390	430		395	385	430
11/24/09	760	NS		640	625	505
12/01/09	650	NS		545	510	600
12/09/09	55	NS		420	550	665
12/15/09	66	295		173	200	525
12/22/09	585	NS		370	200	360
12/30/09	690	NS		560	480	250
01/05/10	740	NS		610	600	400
01/12/10	755	NS		740	700	575
03/09/10	47	420		220	215	230
03/16/10	630			150	150	150
03/24/10	675			240	370	140
03/30/10	665			405	535	250
04/07/10	235			515	595	460
04/15/10	215			470	440	580
04/21/10	465			310	295	520
04/29/10	625			350	395	395
05/04/10	435			370	410	400
05/11/10	700			435	525	435
05/19/10	715			575	640	485
05/25/10	705			670	655	580
06/02/10	695			680	650	655
06/09/10	705			690	655	660
06/15/10	690			645	660	655
06/22/10	710			670	640	650
06/29/10	705			675	665	655
07/07/10	735			590	675	650
07/14/10	710			690	710	675
07/20/10	730			715	705	690
07/27/10	670			815	670	710
08/05/10	680			1010	890	770
08/10/10	705			860	825	805
08/18/10	685			800	695	825
08/24/10	713			724	768	797
08/31/10	925			760	795	795
09/14/10	565			805	730	810
09/21/10	715			730	715	845
09/28/10	700			725	690	805
10/05/10	705			700	665	690
10/12/10	684			575	501	658
10/19/10	720			700	630	550
10/27/10	630			655	605	615

Table 4-2
8th Street Basin Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
08/06/07	10.93	12.03	86.90	30.91	117.00	45.45
08/09/07	NS	NS	NS	11.86	17.37	NS
08/14/07	44.24	10.81	19.70	8.05	24.75	8.89
08/21/07	21.23	8.27	14.32	14.06	22.79	5.40
08/28/07	7.61	7.34	16.25	10.82	29.93	4.48
09/04/07	9.11	7.09	12.71	23.33	9.09	3.92
09/11/07	6.55	12.38	14.71	6.68	8.46	4.57
09/18/07	5.86	47.85	65.75	9.96	15.04	4.13
09/25/07	17.55	80.80	38.22	19.13	8.22	4.57
10/02/07	8.18	59.41	19.51	14.83	7.93	6.39
10/09/07	34.09	19.56	18.20	12.04	7.01	4.84
10/16/07	50.12	35.57	93.71	13.02	8.93	71.23
10/23/07	21.53	9.97	12.43	11.98	6.55	3.64
10/30/07	6.29	12.77	10.14	14.37	4.55	4.05
11/06/07	6.23	9.93	64.90	11.84	4.60	3.33
11/13/07	5.23	10.06	24.06	10.26	3.67	3.41
11/20/07	5.07	3.77	115.56	23.59	11.00	14.85
11/27/07	6.09	2.86	NS	4.88	8.99	9.93
12/04/07	19.49	3.47	6.87	4.57	6.90	8.04
12/11/07	10.06	3.84		22.55	10.58	10.28
12/18/07	10.15	3.95		10.89	7.28	7.10
12/27/07	24.53	6.37		10.26	3.41	9.16
01/03/08	6.67	3.50		17.86	6.99	18.14
01/08/08	4.60	3.18		8.27	6.10	22.68
01/15/08	6.78	2.61		2.68	3.68	18.28
01/23/08	9.38	2.47		8.18	8.21	44.25
01/29/08	2.71	2.07		6.34	3.00	9.39
02/05/08	4.47	1.90		4.41	3.59	8.44
02/12/08	6.53	1.71			3.03	3.27
02/20/08	8.56	1.68		2.20	3.64	5.45
02/26/08	6.44	1.46		2.39	3.04	5.57
03/04/08	5.36	1.46		1.99	2.55	2.33
03/11/08	6.07	2.14		3.76	2.74	3.10
03/19/08	6.94	2.37		3.23	3.35	1.89
03/26/08	6.45	2.49		3.76	3.29	2.72
04/01/08	8.98	3.60		3.44	3.67	3.17
04/08/08	13.91	3.14		2.54	3.05	3.10
04/15/08	15.32	2.60		2.45	3.51	3.21
04/22/08	6.86	3.60		3.93	3.70	5.24
04/29/08	6.10	3.69		3.12	3.12	3.31

Table 4-2
8th Street Basin Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
05/06/08	7.17	3.62		3.48	3.16	2.75
05/13/08	8.36	3.85		3.48	4.30	3.71
05/20/08	7.43	4.35		4.42	4.89	5.07
05/28/08	6.29	4.85		5.54	5.42	3.20
06/03/08	6.66	4.46		3.74	4.53	7.03
06/10/08	6.66	4.31		3.97	4.68	4.90
06/17/08	7.25	4.36		3.69	4.32	3.47
06/24/08	8.57	4.60		3.79	4.10	3.55
07/02/08	6.78	4.54		3.37	6.14	3.68
07/08/08	6.11	4.33		2.95	3.29	4.77
07/15/08	23.07	4.40		6.78	4.99	3.75
07/22/08	7.10	6.11		6.51	8.11	4.39
07/30/08	5.90	6.29		3.76	5.69	5.63
08/05/08	5.76	4.69		3.00	4.78	4.66
08/13/08	6.94	4.69		2.10	2.73	2.75
08/19/08	5.40	3.38		2.15	2.35	3.37
08/26/08	9.09	3.69		2.29	2.91	3.20
09/03/08	10.59	3.62		2.45	3.47	3.09
09/09/08	12.31	3.87		2.66	2.95	3.09
09/16/08	10.58	4.23		2.45	2.49	3.02
09/23/08	11.06	3.47		2.06	2.40	2.95
09/30/08	10.54	3.29		2.68	2.85	3.06
10/07/08	33.44	3.84		3.82	2.56	2.78
10/14/08	55.56	12.48		14.18	12.57	2.96
10/21/08	39.53	18.38		21.18	18.00	3.51
10/28/08	28.24	18.88		20.20	9.51	5.70
11/04/08	21.27	17.45		15.54	11.58	7.94
11/12/08	26.30	14.08		10.68	6.33	8.56
11/18/08	9.60	11.53		8.04	7.03	8.88
11/25/08	16.50	8.48		6.00	6.70	8.19
12/02/08	16.01	6.65		5.94	7.13	8.05
12/10/08	13.51	6.67		6.42	7.37	6.04
12/16/08	9.87	6.19		4.77	5.99	5.74
12/23/08	4.97	3.37		3.55	4.17	5.27
12/30/08	8.40	3.34		3.20	3.41	4.13
01/06/09	7.26	3.15		2.45	3.46	3.56
11/10/09	NS	5.01		4.18	4.81	3.43
11/17/09	15.70	8.51		7.79	7.50	4.29
11/24/09	5.81	NS		5.02	4.65	3.93
12/01/09	7.16	NS		5.71	5.42	3.51
12/09/09	9.28	NS		4.44	4.11	2.98
12/15/09	6.44	3.87		3.89	4.61	3.25
12/22/09	5.64	NS		3.36	3.58	3.06
12/30/09	5.42	NS		3.52	3.44	2.29

Table 4-2
8th Street Basin Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
01/05/10	4.91	NS		3.81	3.68	2.49
01/12/10	5.11	NS		4.09	3.68	2.78
03/09/10	4.52	2.53		1.96	3.19	1.86
03/16/10	5.58			1.67	2.89	2.23
03/24/10	5.54			1.17	2.14	2.26
03/30/10	10.27			1.63	2.94	1.85
04/07/10	9.97			1.13	2.04	2.04
04/15/10	6.93			3.40	3.49	2.48
04/21/10	4.45			1.94	2.89	2.69
04/29/10	8.03			1.49	2.20	2.43
05/04/10	4.21			1.25	2.00	2.26
05/11/10	5.70			1.12	2.04	2.09
05/19/10	7.42			1.79	2.85	2.18
05/25/10	6.42			1.45	2.73	2.11
06/02/10	7.57			2.75	3.40	2.42
06/09/10	7.39			3.34	3.56	2.58
06/15/10	8.28			2.93	3.88	3.04
06/22/10	6.74			3.28	3.61	2.67
06/29/10	5.51			3.30	3.72	2.72
07/07/10	5.17			2.26	3.53	2.76
07/14/10	7.05			1.91	3.52	2.81
07/20/10	7.22			1.68	2.71	2.47
07/27/10	12.09			2.23	2.51	2.37
08/05/10	8.87			2.18	2.66	2.50
08/10/10	9.12			1.59	2.13	2.50
08/18/10	9.45			2.28	2.48	2.50
08/24/10	17.59			2.39	2.51	2.53
08/31/10	37.28			4.18	1.97	2.31
09/14/10	12.84			1.64	1.70	2.17
09/21/10	4.38			2.97	2.82	2.28
09/28/10	4.53			2.90	2.75	2.62
10/05/10	6.86			3.46	3.24	2.26
10/12/10	7.58			5.51	5.34	2.71
10/19/10	4.99			3.49	3.41	3.29
10/27/10	5.67			4.15	3.93	2.86
Depth:	0	5	10	15	25	35
20-Sample Avg:	9.43			2.88	3.10	2.60

Period: June 9, 2010 through October 27, 2010

Table 4-3
8th Street Basin Surface Water and Lysimeter Results
Nitrogen Speciation
(mg/L)

Date	Surface Water					Lysimeter Depth (ft bgs)																					
	0					5					10					15					25					35				
	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN
08/06/07	0.1	<0.1	<0.01	1.6	1.7	0.3	5.1	<0.01	1.5	6.6	1.6	2.6	<0.01	1.5	4.1						0.9			2.6	2.6	0.3	3.1	0.01	1.0	4.1
08/09/07																0.3	1.6	0.35	0.6	2.6	0.6	1.9	<0.01	1.2	3.1					
08/14/07	0.8	<0.1	<0.01	10.9	11.0	<0.1	<0.1	<0.01	1.5	1.6	0.5	2.5	<0.56	1.5	4.3	<0.1	0.5	0.14	0.6	1.3	0.3	1.8	0.07	1.0	2.9	0.4	<0.1	0.11	0.6	0.7
08/21/07	0.1	<0.1	<0.01	7.2	7.2	<0.1	<0.1	<0.01	<0.5	0.3	0.5	1.7	0.48	<0.5	2.4						0.4	2.4	0.11	1.0	3.5	0.1	3.7	0.09	0.6	4.4
08/28/07	0.2	<0.1	<0.01	1.4	1.4	<0.1	<0.1	<0.01	0.8	0.9	0.4	1.3	0.31	0.8	2.4						0.2	2.8	0.08	1.0	3.8	<0.1	4.5	0.04	0.6	5.2
09/04/07	0.8	<0.1	<0.01	4.8	4.9	<0.1	<0.1	<0.01	0.7	0.8	0.1	1.0	0.20	<0.5	1.4	<0.1	1.4	0.05	<0.5	1.7	0.2	3.6	0.04	<0.5	3.8	<0.1	5.2	0.02	0.5	5.7
09/11/07	<0.1	2.9	0.02	1.5	4.4	<0.1	<0.1	<0.01	0.9	0.9	<0.1	1.0	0.17	0.9	2.0	<0.1	1.6	0.04	<0.5	1.9	0.1	3.5	<0.01	1.0	4.4	<0.1	6.7	<0.01	0.6	7.3
09/18/07	<0.1	2.5	0.01	0.7	3.2	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.8	0.22	0.6	1.7	0.2	1.4	0.24	0.6	2.2	0.1	2.6	0.01	0.8	3.4	<0.1	1.9	0.21	<0.5	2.4
09/25/07	0.7	3.4	0.05	2.0	5.4	<0.1	<0.1	<0.01	<0.5	0.3	0.2	0.4	0.04	0.7	1.1	<0.5	1.8	0.14	1.1	3.0	0.2	2.5	0.14	<0.5	2.9	<0.1	1.5	0.02	<0.5	1.8
10/02/07	0.3	3.9	0.04	5.3	9.3	<0.1	<0.1	<0.01	0.7	0.8	<0.1	<0.1	<0.01	0.6	0.6	<0.1	0.2	0.03	0.5	0.7	0.1	2.1	0.10	0.6	2.8	<0.1	1.4	0.32	0.8	2.5
10/09/07	<0.1	1.8	0.09	14.6	16.6	<0.1	0.7	0.05	0.6	1.3	<0.1	0.4	0.11	<0.5	0.7	<0.1	0.2	0.03	<0.5	0.5	0.1	1.6	0.15	0.5	2.3	<0.1	0.9	0.07	<0.5	1.2
10/16/07	1.0	0.4	0.10	10.4	10.9	<0.1	<0.1	<0.01	0.8	0.8	<0.1	<0.1	0.34	1.4	1.8	<0.1	0.6	0.02	0.7	1.3	0.3	2.0	0.09	<0.5	2.3	0.3	0.2	0.12	12.6	12.9
10/23/07	1.6	2.4	0.08	7.7	10.1	0.3	<0.1	<0.01	<0.5	0.3	<0.1	0.1	0.06	<0.5	0.4	<0.1	0.2	<0.01	<0.5	0.4	0.1	1.5	0.02	<0.5	1.8	<0.1	1.7	<0.01	<0.5	2.0
10/30/07	0.2	1.5	0.02	0.6	2.2	0.5	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	0.06	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.7	0.01	<0.5	1.0	0.2	0.8	<0.01	<0.5	1.0
11/06/07	<0.1	2.5	0.04	1.4	3.9	<0.1	<0.1	<0.01	0.6	0.7	<0.1	<0.1	<0.01	2.4	2.5	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.5	0.06	<0.5	0.8	<0.1	<0.1	0.06	<0.5	0.4
11/13/07	<0.1	4.8	0.04	0.9	5.7	<0.1	<0.1	<0.01	2.2	2.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.9	0.06	<0.5	1.2	<0.1	<0.1	0.04	<0.5	0.3
11/20/07	0.1	2.5	<0.01	1.3	3.8	<0.1	0.6	<0.15	<0.5	0.9		0.4	<0.01		0.4	<0.1	0.5	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	0.6	0.6
11/27/07	<0.1	3.0	<0.01	1.2	4.2	0.1	0.9	<0.01	1.4	2.4						<0.1	1.7	0.04	<0.5	2.0	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
12/04/07	1.4	<0.1	0.08	0.8	0.9	<0.1	0.8	0.17	<0.5	1.2	<0.1	1.4	0.09	<0.5	1.8	<0.1	1.7	0.05	<0.5	2.0	<0.1	<0.1	<0.17	<0.5	0.4	<0.1	<0.1	0.04	<0.5	0.3
12/11/07	<0.1	0.6	0.06	1.2	1.8	<0.1	0.7	0.08	0.6	1.3						<0.1	1.3	0.03	<0.5	1.6	<0.1	0.3	0.06	1.3	1.6	<0.1	<0.1	0.05	<0.5	0.3
12/18/07	0.7	<0.1	0.07	2.1	2.2	<0.1	0.5	0.11	<0.5	0.9						<0.1	0.4	0.05	<0.5	0.7	<0.1	0.2	<0.1	<0.5	0.5	<0.1	<0.1	0.04	<0.5	0.3
12/27/07	0.5	<0.1	0.10	<0.5	0.4	0.5	<0.1	0.11	<0.5	0.4						0.5	0.1	0.06	<0.5	0.4	0.6	0.1	0.11	<0.5	0.5	1.0	<0.1	0.09	1.5	1.6
01/03/08	1.2	<0.1	0.10	1.8	1.9	0.6	<0.1	0.09	<0.5	0.4						<0.1	<0.1	0.05	<0.5	0.3	<0.1	0.1	0.08	<0.5	0.4	<0.1	<0.1	0.10	<0.5	0.4
01/08/08	<0.1	0.2	0.01	0.9	1.1	<0.1	0.2	<0.11	<0.5	0.5						<0.1	0.3	0.02	<0.5	0.6	<0.1	0.2	<0.14	<0.5	0.5	<0.1	<0.1	0.06	<0.5	0.4
01/15/08	<0.1	0.3	0.03	1.2	1.6	<0.1	1.0	<0.12	<0.5	1.3						<0.1	0.3	0.03	<0.5	0.6	<0.1	0.1	<0.14	0.7	0.8	<0.1	<0.1	0.06	<0.5	0.4
01/23/08	0.7	<0.1	0.03	2.1	2.2	<0.1	0.3	<0.15	<0.5	0.6						<0.1	0.2	<0.13	<0.5	0.5	<0.1	<0.1	0.03	<0.5	0.3	<0.1	<0.1	0.07	<0.5	0.4
01/29/08	<0.1	0.2	0.04	<0.5	0.4	<0.1	0.7	0.07	<0.5	1.0						<0.1	0.4	0.06	<0.5	0.7	<0.1	0.2	0.09	1.3	1.6	<0.1	<0.1	0.10	<0.5	0.4
02/05/08	<0.1	0.2	0.04	0.7	1.0	<0.1	1.1	0.07	<0.5	1.5						<0.1	0.3	<0.1	<0.5	0.6	<0.1	<0.1	0.07	<0.5	0.4	<0.1	<0.1	0.08	0.6	0.7
02/12/08	<0.1	1.5	<0.1	1.4	2.9	<0.1	0.3	<0.19	0.6	1.0						<0.1	0.1	<0.11	<0.5	0.4	<0.1	<0.1	0.07	0.5	0.7	<0.1	0.2	<0.01	0.6	0.9
02/20/08	0.3	4.9	0.03	1.5	6.4	<0.1	0.4	<0.17	<0.5	0.7						<0.1	0.8	0.04	<0.5	1.1	<0.1	0.1	0.06	<0.5	0.4	<0.1	<0.1	0.08	0.5	0.7
02/26/08	<0.1	1.8	0.02	1.0	2.9	<0.1	0.5	<0.01	0.5	1.0						<0.1	0.8	<0.01	<0.5	1.1	<0.1	0.4	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3
03/04/08	<0.1	2.5	<0.01	1.0	3.5	<0.1	0.8	<0.17	<0.5	1.1						<0.1	0.4	0.04	<0.5	0.7	<0.1	0.2	0.02	<0.5	0.5	<0.1	<0.1	0.04	<0.5	0.3
03/11/08	<0.1	1.4	0.07	2.2	3.6	<0.1	0.4	<0.01	<0.5	0.6						<0.1	0.3	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
03/19/08	0.1	1.9	0.04	0.6	2.5	<0.1	0.4	0.01	<0.5	0.6						<0.1	0.4	0.02	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
03/26/08	0.2	0.5	<0.01	0.6	1.1	<0.1	0.3	<0.01	<0.5	0.6						<0.1	0.1	0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
04/01/08	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
04/08/08	<0.1	<0.1	<0.01	1.4	1.4	<0.1	0.1	<0.01	<0.5	0.4						<0.1	0.3	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
04/15/08	<0.1	<0.1	<0.01	1.6	1.6	<0.1	0.5	<0.01	<0.5	0.8						<0.1	0.8	<0.01	<0.5	1.0	<0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
04/22/08	<0.1	0.8	<0.01	1.0	1.7	<0.1	2.2	<0.01	<0.5	2.5						<0.1	1.4	<0.01	<0.5	1.6	<0.1	0.5	<0.01	<0.5	0.8	<0.1	<0.1	<0.01	<0.5	0.3
04/29/08	<0.1	1.1	0.02	<0.5	1.4	<0.1	0.4	0.01	<0.5	0.7						<0.1	0.4	<0.01	<0.5	0.6	<0.1	0.2	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
05/06/08	<0.1	0.7	0.04	1.0	1.7	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.4	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
05/13/08	0.2	1.8	0.08	5.6	7.4	0.2	<0.1	<0.01	<0.5	0.3						<0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
05/20/08	0.1	2.0	0.02	0.6	2.6	<0.1	<0.1	<0.01	<0.5	0.3						0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
05/28/08	0.3	4.2	0.06	1.2	5.5	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.4	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3

Table 4-3
8th Street Basin Surface Water and Lysimeter Results
Nitrogen Speciation
(mg/L)

Date	Surface Water					Lysimeter Depth (ft bgs)																					
	0					5					10					15					25					35				
	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN
06/03/08	<0.1	2.7	0.02	1.5	4.2	<0.1	<0.1	<0.01	0.8	0.9						0.1	0.3	<0.01	0.8	1.1	<0.1	<0.1	<0.01	0.8	0.9	<0.1	<0.1	<0.01	0.9	1.0
06/10/08	0.2	3.2	0.05	0.9	4.2	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.2	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	0.5	0.6	<0.1	<0.1	<0.01	0.5	0.6
06/17/08	1.8	1.8	<0.11	0.8	2.7	0.3	<0.1	<0.01	<0.5	0.3						0.1	0.7	0.05	8.6	9.3	<0.1	0.3	0.04	0.6	0.9	<0.1	<0.1	<0.01	0.5	0.6
06/24/08	0.1	0.6	0.04	0.9	1.5	0.2	<0.1	<0.01	<0.5	0.3						0.1	0.5	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
07/02/08	0.2	5.5	0.26	1.8	7.6	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.8	<0.01	<0.5	1.1	<0.1	0.2	<0.01	<0.5	0.4	0.1	<0.1	<0.01	<0.5	0.3
07/08/08	<0.1	3.4	0.07	1.0	4.5	<0.1	<0.1	<0.01	<0.5	0.3						0.3	2.2	<0.01	<0.5	2.5	0.2	2.4	0.03	<0.5	2.7	0.1	<0.1	<0.01	<0.5	0.3
07/15/08	0.5	2.7	0.63	2.8	6.2	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.4	<0.01	<0.5	0.6	<0.1	0.2	<0.01	<0.5	0.5	<0.1	<0.1	<0.01	<0.5	0.3
07/22/08	7.0	4.0	0.02	2.1	6.2	<0.1	<0.1	<0.01	0.7	0.8						<0.1	<0.1	<0.01	<0.5	0.3	0.5	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
07/30/08	0.1	5.3	0.05	1.4	6.8	<0.1	<0.1	<0.01	0.5	0.6						<0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
08/05/08	0.1	3.1	0.10	3.2	6.4	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
08/13/08	<0.1	1.1	0.02	3.0	4.1	<0.1	<0.1	<0.01	0.6	0.7						<0.1	0.5	<0.01	<0.5	0.7	<0.1	0.3	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3
08/19/08	<0.1	1.9	0.02	1.2	3.1	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.3	<0.01	<0.5	0.6	<0.1	0.2	<0.01	<0.5	0.4	0.2	<0.1	<0.01	<0.5	0.3
08/26/08	<0.1	<0.1	<0.01	0.9	0.9	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.2	<0.01	<0.5	0.5	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
09/03/08	<0.1	<0.1	<0.01	1.9	1.9	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.4	<0.01	<0.5	0.6	1.2	0.2	<0.01	<0.5	0.5	<0.1	<0.1	<0.01	<0.5	0.3
09/09/08	<0.1	<0.1	<0.01	3.2	3.2	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.3	<0.01	<0.5	0.5	<0.1	0.2	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
09/16/08	<0.1	<0.1	<0.01	1.0	1.0	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	0.6	<0.01	<0.5	0.8	<0.1	0.3	<0.01	<0.5	0.5	<0.1	<0.1	<0.01	<0.5	0.3
09/23/08	<0.1	<0.1	<0.01	1.1	1.1	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	1.2	<0.01	<0.5	1.5	<0.1	0.3	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3
09/30/08	<0.1	<0.1	<0.01	0.8	0.8	<0.1	2.2	0.03	<0.5	2.5						<0.1	2.1	<0.01	<0.5	2.4	<0.1	0.5	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	0.3
10/07/08	0.1	<0.1	<0.01	1.7	1.8	0.3	10.5	<0.01	<0.5	10.8						<0.1	2.5	<0.01	<0.5	2.7	<0.1	2.1	<0.01	<0.5	2.4	<0.1	<0.1	<0.01	<0.5	0.3
10/14/08	0.5	<0.1	<0.01	4.6	4.7	<0.1	3.2	0.06	<0.5	3.5						<0.1	0.9	<0.01	0.6	1.5	<0.1	0.4	<0.01	<0.5	0.7	<0.1	0.2	<0.01	<0.5	0.5
10/21/08	5.8	<0.1	<0.01	3.2	3.3	0.3	0.2	0.03	0.8	1.0						0.3	<0.1	0.02	0.8	0.9	<0.1	<0.1	0.01	1.0	1.0	<0.1	0.5	0.03	<0.5	0.8
10/28/08	0.2	<0.1	<0.01	1.4	1.5	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
11/04/08	0.5	<0.1	<0.01	2.6	2.7	<0.1	<0.1	<0.01	0.5	0.6						<0.1	<0.1	<0.01	1.4	1.5	<0.1	<0.1	0.02	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
11/12/08	2.4	4.7	0.40	3.7	8.8	<0.1	<0.1	<0.01	1.0	1.0						0.2	0.1	<0.01	0.7	0.8	<0.1	0.3	0.02	<0.5	0.5	<0.1	<0.1	<0.01	1.5	1.5
11/18/08	2.4	0.2	<0.01	4.5	4.7	<0.1	<0.1	<0.01	<0.5	0.3						0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.2	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
11/25/08	<0.1	<0.1	<0.01	5.0	5.0	<0.1	0.1	<0.01	<0.5	0.4						<0.1	0.2	<0.01	<0.5	0.5	<0.1	0.2	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
12/02/08	0.2	<0.1	0.04	1.7	1.8	<0.1	0.6	0.01	<0.5	0.9						<0.1	0.5	0.01	<0.5	0.8	0.1	0.2	0.01	<0.5	0.4	<0.1	<0.1	<0.01	3.8	3.8
12/10/08	<0.1	<0.1	<0.1	1.6	1.7	<0.1	<0.1	<0.01	<0.5	0.3						<0.1	<0.1	0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
12/16/08	0.3	0.5	0.01	0.9	1.3	<0.1	<0.1	<0.01	2.8	2.9						<0.1	<0.1	<0.01	0.5	0.6	<0.1	<0.1	<0.01	1.0	1.1	<0.1	<0.1	<0.01	<0.5	0.3
12/23/08	<0.1	0.3	0.01	0.5	0.8	<0.1	<0.1	0.02	<0.5	0.3						<0.1	<0.1	0.03	<0.5	0.3	<0.1	<0.1	0.04	<0.5	0.3	<0.1	<0.1	<0.01	0.7	0.7
12/30/08	<0.1	<0.1	0.04	3.4	3.4	<0.1	<0.1	0.06	0.5	0.6						<0.1	<0.1	0.04	1.0	1.1	<0.1	<0.1	0.05	1.4	1.5	<0.1	<0.1	0.03	0.7	0.8
01/06/09	0.2	<0.1	<0.01	1.5	1.6	<0.1	<0.1	0.04	<0.5	0.3						<0.1	<0.1	0.04	<0.5	0.3	<0.1	0.4	0.04	<0.5	0.7	<0.1	<0.1	0.04	0.8	0.9
11/10/09																					<0.1	4.0	0.11	<0.5	4.1	<0.1	1.7	0.10	<0.5	1.8
11/17/09	0.6	0.6	0.33	2.1	3.0	<0.1	2.6	<0.01	<0.5	2.6						<0.1	0.9	<0.01	<0.5	1.1	<0.1	0.9	<0.01	<0.5	0.9	<0.1	0.4	0.11	<0.5	0.7
11/24/09	<0.1	1.8	0.03	0.9	2.8											<0.1	0.3	0.02	0.6	0.9	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.8	0.06	<0.5	0.9
12/01/09	<0.1	<0.1	0.03	1.6	4.2											<0.1	0.2	<0.01	<0.5	0.4	<0.1	0.1	<0.01	<0.5	0.4	<0.1	<0.1	<0.01	<0.5	0.3
12/09/09	<0.1	<0.1	0.04	0.7	1.1											<0.1	<0.1	0.02	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
12/15/09	<0.1	0.3	0.03	0.9	1.2											<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
12/22/09	<0.1	0.9	<0.01	0.8	1.8											<0.1	<0.1	0.03	<0.5	0.3	<0.1	<0.1	0.04	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
12/30/09	<0.1	<0.1	<0.01	1.0	1.2											<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	0.05	<0.5	0.3
01/05/10	<0.1	0.4	<0.01	1.4	1.7											<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3
01/12/10	<0.1	<0.1	<0.01	2.0	2.9											<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	0.3

Table 4-3
8th Street Basin Surface Water and Lysimeter Results
Nitrogen Speciation
(mg/L)

Date	Surface Water					Lysimeter Depth (ft bgs)																					
	0					5					10					15					25					35				
	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN	NH_3-N	NO_3-N	NO_2-N	TKN	TN
03/09/10	<0.1	0.4	0.04	0.6	1.0		0.4	<0.01								<0.1	0.3	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3	0.1	<0.1	<0.01	<0.5	0.3
03/16/10	0.3	2.0	<0.01	1.1	3.0											<0.5	0.4	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	0.3	0.3	<0.1	<0.01	<0.5	0.3
03/24/10	<0.1	1.6	<0.01	1.0	2.6											<0.1	2.4	<0.01	<0.5	2.6	<0.1	0.3	<0.01	<0.5	0.5	<0.1	<0.1	<0.01	<0.5	0.3
03/30/10	0.2	0.2	0.02	2.5	2.7											<0.1	1.0	<0.01	<0.5	1.3	<0.1	<0.1	<0.01	<0.5	0.3	<0.1	0.2	0.02	<0.5	0.5
4/7/2010	0.21	0.985	0.064	1.38	2.4											<0.1	0.585	<0.01	<0.5	0.8	<0.1	0.212	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6
4/15/2010	0.34	0.425	<0.01	<0.5	<0.6											<0.1	0.343	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6
4/21/2010	<0.1	5.022	0.155	2.0	7.2											<0.1	0.302	0.136	<0.5	0.7	<0.1	0.1	0.121	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6
4/29/2010	0.13	0.687	0.072	1.1	1.9											<0.1	0.575	0.064	0.6	1.2	<0.1	0.173	0.079	<0.5	<0.6	<0.1	<0.1	0.075	<0.5	<0.6
5/4/2010	0.5	0.8	0.01	3.1	3.9											<0.1	1.1	0.01	<0.5	0.8	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6
5/11/2010	0.3	1.0	0.08	1.2	2.3											<0.1	1.9	0.09	<0.5	0.6	<0.1	0.3	0.08	<0.5	<0.6	<0.1	0.14	0.1	<0.5	<0.6
5/19/2010	0.8	<0.1	0.06	1.5	1.5											<0.1	0.7	0.07	<0.5	0.7	<0.1	<0.1	0.06	<0.5	<0.6	<0.1	<0.1	0.1	<0.5	<0.6
5/25/2010	<0.1	0.9	0.07	0.9	1.8											<0.1	1.5	0.06	<0.5	1.2	<0.1	0.1	0.05	<0.5	<0.6	<0.1	<0.1	0.1	<0.5	<0.6
6/2/2010	0.2	1.2	0.24	1.7	3.1											<0.1	0.9	0.22	<0.5	1.4	<0.1	<0.1	0.22	<0.5	<0.6	<0.1	<0.1	0.2	<0.5	<0.6
6/9/2010	<0.1	0.6	0.15	2.2	2.9											<0.1	0.2	0.18	<0.5	2.2	<0.1	<0.1	0.29	<0.5	<0.6	<0.1	<0.1	0.2	<0.5	<0.6
6/15/2010	<0.1	<0.1	0.19	2.0	2.1											<0.1	0.2	0.19	<0.5	1.0	<0.1	<0.1	0.21	0.5	0.7	<0.1	<0.1	0.2	<0.5	<0.6
6/22/2010	<0.1	2.4	0.20	2.0	4.6											<0.1	0.1	0.21	<0.5	1.8	<0.1	<0.1	0.21	<0.5	<0.6	<0.1	<0.1	0.2	<0.5	<0.6
6/29/2010	<0.1	2.0	0.03	1.4	3.5											0.1	<0.1	0.32	<0.5	1.4	<0.1	<0.1	0.33	<0.5	<0.6	<0.1	<0.1	0.3	<0.5	<0.6
7/7/2010	0.1	2.9	0.21	1.6	4.7											<0.1	0.4	0.19	<0.5	0.6	<0.1	<0.1	0.21	<0.5	<0.6	<0.1	<0.1	0.2	<0.5	<0.6
7/14/2010	0.3	0.6	0.32	2.0	3.0											<0.1	1.4	0.20	<0.5	0.6	<0.1	1.1	0.19	<0.5	1.3	<0.1	<0.1	0.2	<0.5	<0.6
7/20/2010	<0.1	2.2	0.30	1.4	3.8											<0.1	4.4	0.23	<0.5	0.6	<0.1	2.6	0.21	<0.5	2.8	<0.1	0.13	0.2	1.9	2.2
7/27/2010	<0.1	<0.1	<0.01	7.2	7.2											<0.1	2.3	0.01	0.8	0.6	<0.1	1.2	<0.01	<0.5	1.2	<0.1	<0.1	<0.01	<0.5	<0.6
8/5/2010	<0.1	0.4	0.02	2.7	3.1											<0.1	2.0	0.01	0.5	0.8	<0.1	2.6	<0.01	0.6	3.2	<0.1	<0.1	<0.01	0.8	0.8
8/10/2010	<0.1	1.0	0.22	3.0	4.2											<0.1	2.0	0.22	<0.5	1.8	<0.1	4.1	0.18	<0.5	4.3	<0.1	0.16	0.2	<0.5	<0.6
8/18/2010	0.4	0.1	0.31	2.9	3.4											<0.1	1.2	0.24	<0.5	4.9	<0.1	2.7	0.17	0.9	3.8	<0.1	<0.1	0.2	0.6	0.8
8/24/2010	0.2	0.5	0.10	3.5	4.1											<0.1	1.1	0.22	<0.5	3.1	<0.1	1.5	0.18	<0.5	1.6	<0.1	<0.1	0.2	<0.5	<0.6
8/31/2010	2.9	<0.1	0.16	17.4	17.5											0.1	<0.1	0.25	<0.5	<0.6	<0.1	0.9	0.22	<0.5	1.2	<0.1	1.29	0.3	<0.5	1.5
9/14/2010	<0.1	0.3	0.21	1.5	2.0											<0.1	2.3	0.28	<0.5	2.5	<0.1	1.1	0.20	<0.5	1.3	<0.1	<0.1	0.3	<0.5	<0.6
9/21/2010	<0.1	4.1	0.20	0.9	5.2											<0.1	4.1	0.22	0.7	1.7	<0.1	3.2	0.21	<0.5	3.4	<0.1	0.78	0.3	<0.5	1.1
9/28/2010	<0.1	2.8	0.13	1.4	4.4											<0.1	3.9	0.20	0.6	1.6	<0.1	3.1	0.23	0.5	3.8	<0.1	2.30	0.2	<0.5	2.5
10/5/2010	<0.1	4.5	0.22	1.8	6.5											<0.1	3.4	0.26	0.9	0.5	<0.1	4.0	0.22	0.8	5.1	<0.1	2.55	0.2	<0.5	2.8
10/12/2010	0.2	3.0	0.23	1.9	5.1											<0.1	0.4	0.19	0.8	2.9	<0.1	0.7	0.16	0.5	1.4	<0.1	2.94	0.2	0.5	3.6
10/19/2010	0.1	3.1	0.21	1.5	4.8											<0.1	0.8	0.23	0.7	5.0	<0.1	1.8	0.21	0.6	2.6	<0.1	1.16	0.2	0.5	1.8
10/27/2010	0.1	3.9	0.04	1.1	5.1											<0.1	0.6	0.04	<0.5	4.6	<0.1	1.8	0.07	1.2	3.1	<0.1	1.69	0.0	0.5	2.2

Table 4-4
8th Street Basin Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
08/06/07	1.7	6.6	4.1	NS	2.6	4.1
08/09/07	NS	NS	NS	2.6	3.1	NS
08/14/07	11.0	1.6	4.3	1.3	2.9	0.7
08/21/07	7.2	<0.6	2.4		3.5	4.4
08/28/07	1.4	0.9	2.4		3.8	5.2
09/04/07	4.9	0.8	1.4	1.7	3.8	5.7
09/11/07	4.4	0.9	2.0	1.9	4.4	7.3
09/18/07	3.2	<0.6	1.7	2.2	3.4	2.4
09/25/07	5.4	<0.6	1.1	3.0	2.9	1.8
10/02/07	9.3	0.8	0.6	0.7	2.8	2.5
10/09/07	16.6	1.3	0.7	<0.6	2.3	1.2
10/16/07	10.9	0.8	1.8	1.3	2.3	12.9
10/23/07	10.1	<0.6	<0.6	<0.6	1.8	2.0
10/30/07	2.2	<0.6	<0.6	<0.6	1.0	1.0
11/06/07	3.9	0.7	2.5	<0.6	0.8	<0.6
11/13/07	5.7	2.3	<0.6	<0.6	1.2	<0.6
11/20/07	3.8	0.9	<0.6	0.7	<0.6	0.6
11/27/07	4.2	2.4	NS	2.0	<0.6	<0.6
12/04/07	0.9	1.2	1.8	2.0	<0.6	<0.6
12/11/07	1.8	1.3		1.6	1.6	<0.6
12/18/07	2.2	0.9		0.7	<0.6	<0.6
12/27/07	<0.6	<0.6		<0.6	<0.6	1.6
01/03/08	1.9	<0.6		<0.6	<0.6	<0.6
01/08/08	1.1	<0.6		<0.6	<0.6	<0.6
01/15/08	1.6	1.3		0.6	0.8	<0.6
01/23/08	2.2	0.6		<0.6	<0.6	<0.6
01/29/08	<0.6	1.0		0.7	1.6	<0.6
02/05/08	1.0	1.5		<0.6	<0.6	0.7
02/12/08	2.9	1.0		<0.6	0.7	0.9
02/20/08	6.4	0.7		1.1	<0.6	0.7
02/26/08	2.9	1.0		1.1	0.6	<0.6
03/04/08	3.5	1.1		0.7	<0.6	<0.6
03/11/08	3.6	0.6		0.6	<0.6	<0.6
03/19/08	2.5	0.6		0.7	<0.6	<0.6
03/26/08	1.1	0.6		<0.6	<0.6	<0.6
04/01/08	<0.6	<0.6		<0.6	<0.6	<0.6
04/08/08	1.4	<0.6		0.6	<0.6	<0.6
04/15/08	1.6	0.8		1.0	<0.6	<0.6
04/22/08	1.7	2.5		1.6	0.8	<0.6
04/29/08	1.4	0.7		0.6	<0.6	<0.6

Table 4-4
8th Street Basin Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
05/06/08	1.7	<0.6		0.7	<0.6	<0.6
05/13/08	7.4	<0.6		<0.6	<0.6	<0.6
05/20/08	2.6	<0.6		<0.6	<0.6	<0.6
05/28/08	5.5	<0.6		0.7	<0.6	<0.6
06/03/08	4.2	0.9		1.1	0.9	1.0
06/10/08	4.2	<0.6		<0.6	0.6	0.6
06/17/08	2.7	<0.6		9.3	0.9	0.6
06/24/08	1.5	<0.6		0.7	<0.6	<0.6
07/02/08	7.6	<0.6		1.1	<0.6	<0.6
07/08/08	4.5	<0.6		2.5	2.7	<0.6
07/15/08	6.2	<0.6		0.6	<0.6	<0.6
07/22/08	6.2	0.8		<0.6	<0.6	<0.6
07/30/08	6.8	0.6		<0.6	<0.6	<0.6
08/05/08	6.4	<0.6		<0.6	<0.6	<0.6
08/13/08	4.1	0.7		0.7	0.6	<0.6
08/19/08	3.1	<0.6		0.6	<0.6	<0.6
08/26/08	0.9	<0.6		<0.6	<0.6	<0.6
09/03/08	1.9	<0.6		0.6	<0.6	<0.6
09/09/08	3.2	<0.6		<0.6	<0.6	<0.6
09/16/08	1.0	<0.6		0.8	<0.6	<0.6
09/23/08	1.1	<0.6		1.5	0.6	<0.6
09/30/08	0.8	2.5		2.4	0.7	<0.6
10/07/08	1.8	10.8		2.7	2.4	<0.6
10/14/08	4.7	3.5		1.5	0.7	<0.6
10/21/08	3.3	1.0		0.9	1.0	0.8
10/28/08	1.5	<0.6		<0.6	<0.6	<0.6
11/04/08	2.7	0.6		1.5	<0.6	<0.6
11/12/08	8.8	1.0		0.8	<0.6	1.5
11/18/08	4.7	<0.6		<0.6	<0.6	<0.6
11/25/08	5.0	<0.6		<0.6	<0.6	<0.6
12/02/08	1.8	0.9		0.8	<0.6	3.8
12/10/08	1.7	<0.6		<0.6	<0.6	<0.6
12/16/08	1.3	2.9		0.6	1.1	<0.6
12/23/08	0.8	<0.6		<0.6	<0.6	0.7
12/30/08	3.4	0.6		1.1	1.5	0.8
01/06/09	1.6	<0.6		<0.6	0.7	0.9
11/10/09	NS				4.1	1.8
11/17/09	3.0			1.1	0.9	0.7
11/24/09	2.8			0.9	<0.6	0.9
12/01/09	4.2			<0.6	<0.6	<0.6

Table 4-4
8th Street Basin Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)				
	0	5	10	15	25	35
12/09/09	1.1			<0.6	<0.6	<0.6
12/15/09	1.2			<0.6	<0.6	<0.6
12/22/09	1.8			<0.6	<0.6	<0.6
12/30/09	1.2			<0.6	<0.6	<0.6
01/05/10	1.7			<0.6	<0.6	<0.6
01/12/10	2.9			<0.6	<0.6	<0.6
03/09/10	1.0			0.6	<0.6	<0.6
03/16/10	3.0			0.6	<0.6	<0.6
03/24/10	2.6			2.6	<0.6	<0.6
03/30/10	2.7			1.3	<0.6	<0.6
04/07/10	2.4			0.8	<0.6	<0.6
04/15/10	<0.6			<0.6	<0.6	<0.6
04/21/10	7.2			0.7	<0.6	<0.6
04/29/10	1.9			1.2	<0.6	<0.6
05/04/10	3.9			0.8	<0.6	<0.6
05/11/10	2.3			0.6	<0.6	<0.6
05/19/10	1.5			0.7	<0.6	<0.6
05/25/10	1.8			0.6	<0.6	<0.6
06/02/10	3.1			1.4	<0.6	<0.6
06/09/10	2.9			2.2	<0.6	<0.6
06/15/10	2.1			1.0	0.7	<0.6
06/22/10	4.6			1.8	<0.6	<0.6
06/29/10	3.5			1.4	<0.6	<0.6
07/07/10	4.7			0.6	<0.6	<0.6
07/14/10	3.0			0.6	1.3	<0.6
07/20/10	3.8			0.6	2.8	2.2
07/27/10	7.2			0.6	1.2	<0.6
08/05/10	3.1			0.8	3.2	0.8
08/10/10	4.2			1.8	4.3	0.6
08/18/10	3.4			4.9	3.8	0.8
08/24/10	4.1			3.1	1.6	<0.6
08/31/10	17.5			<0.6	1.2	1.5
09/14/10	2.0			2.5	1.3	<0.6
09/21/10	5.2			1.7	3.4	1.1
09/28/10	4.4			1.6	3.8	2.5
10/05/10	6.5			<0.6	5.1	2.8
10/12/10	5.1			2.9	1.4	3.6
10/19/10	4.8			5.0	2.6	1.8
10/27/10	5.1			4.6	3.1	2.2
Depth:	0			15	25	35
20-Sample Avg:	4.9			2.0	2.1	1.2

Period: June 9, 2010 through October 27, 2010

Table 5-1
Soil Column Source Water Results
EC, TOC, and TN

Source Water	FC0-00 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN [1] (mg/L)	TOC (mg/L)	NO2+NO3 (mg/L)	TN [2] (mg/L)
Municipal Water	05/27/09	345	<0.1	0.1	3.4	<0.5	0.27	3.5	3.8
	06/03/09	340	<0.1	0.12	2.8	NS	0.27	2.9	2.9
	06/10/09	330	<0.1	0.11	2.4	NS	0.23	2.5	2.5
	06/17/09	315	<0.1	0.12	2.0	NS	0.05	2.1	2.1
	06/24/09	305	<0.1	<0.01	1.7	NS	0.05	1.7	1.7
	07/01/09	320	<0.1	0.11	1.7	NS	0.63	1.8	1.8
	07/08/09	320	<0.1	0.11	2.4	NS	0.76	2.5	2.5
	07/15/09	360	<0.1	0.08	2.2	NS	2.83	2.3	2.3
	07/22/09	330	<0.1	0.07	2.4	NS	0.38	2.5	2.5
	07/29/09	330	<0.1	<0.01	3.0	NS	0.82	3.0	3.0
Recycled Water	08/05/09	795	0.20	0.08	3.1	<1.2	2.89	3.2	3.8
	08/12/09	765	0.12	0.07	3.2	<1.2	3.20	3.3	3.9
	08/19/09	772	<0.1	0.07	3.3	<1.2	3.07	3.4	4.0
	08/26/09	770	<0.1	0.07	3.7	<1.2	2.72	3.8	4.4
	09/02/09	775	<0.1	0.04	2.7	<1.2	2.78	2.7	3.3
	09/09/09	800	<0.1	0.03	2.6	2.1	4.28	2.6	4.7
	09/16/09	NS	<0.1	NS	NS	1.5	3.95	NS	NS
	09/23/09	770	<0.1	<0.01	2.4	1.1	4.53	2.4	3.5
	09/30/09	760	<0.1	<0.01	3.0	1.7	3.74	3.0	4.7
	10/07/09	780	<0.1	0.06	4.9	<1.2	4.77	5.0	5.5
	10/15/09	780	<0.1	<0.01	4.2	1.4	4.17	4.2	5.6
	10/23/09	795	<0.1	<0.01	3.3	0.8	4.60	3.3	4.1
	10/28/09	810	<0.1	<0.01	3.9	1.0	3.89	3.9	4.9
	11/05/09	820	<0.1	0.03	3.5	1.0	4.09	3.5	4.5
	11/11/09	820	<0.1	0.03	4.4	0.9	4.08	4.5	5.4
	11/18/09	835	<0.1	0.03	4.0	0.6	4.86	4.0	4.5
	11/25/09	840	<0.1	<0.01	5.6	0.8	4.55	5.6	6.4
	12/02/09	830	<0.1	<0.01	5.8	1.0	4.40	5.8	6.9
	12/09/09	815	<0.1	<0.01	5.2	1.1	3.96	5.2	6.3
	12/22/09	800	<0.1	<0.01	4.0	1.0	4.52	4.0	5.0
	12/30/09	820	<0.1	<0.01	4.9	1.2	4.88	4.9	6.1
	01/06/10	810	<0.1	<0.01	5.3	0.8	4.93	5.3	6.1
	01/13/10	815	0.1	<0.01	5.3	1.7	5.16	5.3	7.0
	01/28/10	735	<0.1	<0.01	2.8	0.6	4.10	2.8	3.4
	02/04/10	730	<0.1	<0.01	3.3	0.6	3.27	3.3	3.9
	02/10/10	745	0.1	<0.01	4.1	1.7	5.03	4.1	5.8
	02/17/10	710	<0.1	<0.01	4.3	1.0	4.19	4.3	5.3
	02/24/10	710	<0.1	<0.01	4.3	0.8	3.77	4.3	5.1

NS: Not sampled.

1) TKN was not sampled for the municipal supply due to cost and it not being expected in this source.

2) TN calculation for the for the municipal water supply assumed a 0.0 mg/L TKN value.

Table 5-2
Silica Sand Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC1-03 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	FC1-05 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	350	<0.1	0.1	3.4	<0.5	0.37	3.5	3.8	05/27/09	350	<0.1	0.105	3.4	<0.5	0.32	3.5	3.8
	06/03/09	335	<0.1	0.11	2.8	NS	0.25	2.9	2.9	06/03/09	335	<0.1	0.11	2.7	NS	0.17	2.8	2.8
	06/10/09	330	<0.1	0.11	2.4	NS	0.52	2.5	2.5	06/10/09	330	<0.1	0.11	2.4	NS	0.29	2.5	2.5
	06/17/09	320	<0.1	0.11	2.0	NS	<0.1	2.1	2.1	06/17/09	320	<0.1	0.11	2.0	NS	<0.1	2.1	2.1
	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	0.10	1.7	1.7
	07/01/09	320	<0.1	0.12	1.7	NS	0.72	1.8	1.8	07/01/09	320	<0.1	0.12	1.8	NS	0.58	1.9	1.9
	07/08/09	320	<0.1	0.11	2.1	NS	0.79	2.2	2.2	07/08/09	320	<0.1	0.12	2.2	NS	0.65	2.3	2.3
	07/15/09	360	<0.1	0.15	2.0	NS	1.06	2.2	2.2	07/15/09	330	<0.1	0.13	2.0	NS	0.56	2.1	2.1
	07/22/09	330	<0.1	0.15	1.5	NS	0.71	1.6	1.6	07/22/09	345	<0.1	0.42	0.6	NS	2.01	1.0	1.0
	07/29/09	335	<0.1	<0.01	2.7	NS	0.89	2.7	2.7	07/29/09	335	<0.1	<0.01	2.7	NS	1.00	2.8	2.8
Recycled Water	08/05/09	760	<0.1	0.06	3.1	0.6	2.20	3.2	3.8	08/05/09	785	<0.1	0.06	3.3	<1.2	2.45	3.4	4.0
	08/12/09	765	<0.1	0.07	3.3	<1.2	3.30	3.4	4.0	08/12/09	765	<0.1	0.07	3.3	<1.2	2.81	3.4	4.0
	08/19/09	770	<0.1	0.06	3.4	<1.2	2.99	3.5	4.1	08/19/09	771	<0.1	0.06	3.4	<1.2	2.87	3.5	4.1
	08/26/09	765	<0.2	0.06	3.8	<1.3	2.60	3.9	4.5	08/26/09	765	<0.1	0.07	3.9	<1.2	2.52	4.0	4.6
	09/02/09	780	<0.3	0.05	2.6	<1.4	2.63	2.7	3.4	09/02/09	780	<0.1	0.04	2.6	<1.2	2.52	2.6	3.2
	09/09/09	790	<0.1	<0.01	2.8	1.4	2.99	2.8	4.2	09/09/09	785	<0.1	<0.01	2.9	1.1	2.63	2.9	4.0
	09/23/09	765	<0.1	<0.01	2.3	1.1	4.27	2.3	3.5	09/23/09	760	0.2	<0.01	2.4	1.4	3.57	2.4	3.8
	09/30/09	765	<0.1	<0.01	3.3	1.8	3.83	3.3	5.1	09/30/09	780	<0.1	0.47	7.0	1.0	3.77	7.4	8.5
	10/07/09	780	<0.1	0.06	6.1	<1.0	4.88	6.1	6.6	10/07/09	770	<0.1	0.06	5.5	<1.0	4.09	5.6	6.1
	10/15/09	770	<0.1	<0.01	3.9	1	4.47	3.9	4.9	10/15/09	785	0.2	0.06	3.6	1.5	4.45	3.7	5.2
	10/23/09	790	<0.1	0.02	3.4	0.8	4.3	3.4	4.2	10/23/09	795	<0.1	0.2	3.5	0.7	3.89	3.7	4.4
	10/28/09	795	<0.1	<0.01	3.5	0.8	3.97	3.5	4.3	10/28/09	790	<0.1	<0.01	3.5	0.7	3.7	3.5	4.2
	11/05/09	805	<0.1	0.03	3.7	0.9	3.82	3.8	4.6	11/05/09	805	<0.1	<0.01	3.7	0.6	3.51	3.7	4.3
	11/11/09	800	<0.1	0.04	3.6	0.7	3.93	3.7	4.4	11/11/09	810	<0.1	<0.01	3.9	0.7	3.78	3.9	4.6
	11/18/09	820	<0.1	0.02	3.5	<0.5	4.35	3.6	3.8	11/18/09	820	<0.1	<0.01	3.8	<0.5	3.89	3.8	4.0
	11/25/09	830	<0.1	<0.01	4.8	0.7	4.29	4.8	5.6	11/25/09	835	<0.1	<0.01	4.6	0.7	3.94	4.6	5.3
	12/02/09	825	<0.1	<0.01	5.8	0.8	4.14	5.8	6.6	12/02/09	830	<0.1	<0.01	5.7	0.8	3.69	5.7	6.5
	12/09/09	815	<0.1	<0.01	5.4	1.0	3.85	5.4	6.4	12/09/09	820	<0.1	<0.01	5.7	1.0	3.45	5.7	6.7
	12/22/09	785	<0.1	<0.01	3.6	0.7	3.59	3.6	4.2	12/22/09	790	<0.1	<0.01	3.9	0.7	3.17	3.9	4.7
	12/30/09	805	<0.1	0.06	4.3	0.7	4.03	4.3	5.1	12/30/09	805	<0.1	<0.01	4.1	<0.5	3.31	4.1	4.4
	01/06/10	800	<0.1	<0.01	5.2	<0.5	4.32	5.2	5.5	01/06/10	805	<0.1	<0.01	5.2	0.5	3.79	5.2	5.7
	01/13/10	790	<0.1	<0.01	5.2	0.9	4.09	5.2	6.1	01/13/10	800	<0.1	<0.01	5.3	0.9	3.69	5.3	6.2
	01/28/10	745	<0.1	<0.01	3.4	<0.5	3.64	3.4	3.7	01/28/10	805	<0.1	<0.01	4.1	<0.5	3.72	4.1	4.4
	02/04/10	720	<0.1	<0.01	3.3	<0.5	3.21	3.3	3.5	02/04/10	725	<0.1	<0.01	3.2	0.6	3.16	3.2	3.8
	02/10/10	760	0.1	<0.01	4.2	0.9	4.32	4.2	5.1	02/10/10	750	<0.1	<0.01	4.0	1.8	3.22	4.0	5.8
	02/17/10	710	<0.1	<0.01	4.3	0.9	3.75	4.3	5.2	02/17/10	725	<0.1	<0.01	4.3	0.7	3.28	4.3	5.0
	02/24/10	705	<0.1	<0.01	4.9	0.55	3.47	4.9	5.4	02/24/10	710	<0.1	<0.01	4.9	0.66	3.04	5.0	5.6

NS: No Sample

NS: No Sample

Averaging Period:	Dec. 22, 2009 through February 24, 2010	
Depth:	0.00	2.5
Sample Avg. TOC:	4.43	3.82
Sample Avg. TN:	5.29	4.87

Depth:	5
Sample Avg. TOC:	3.38
Sample Avg. TN:	5.07

Table 5-2
Silica Sand Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC1-10 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	FC1-15 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	350	<0.1	0.11	3.4	<0.5	0.45	3.5	3.8	05/27/09	350	<0.1	0.11	3.4	<0.5	0.47	3.5	3.8
	06/03/09	335	<0.1	0.11	2.7	NS	0.17	2.8	2.8	06/03/09	340	<0.1	0.11	2.7	NS	0.14	2.8	2.8
	06/10/09	330	<0.1	0.11	2.4	NS	0.29	2.5	2.5	06/10/09	335	<0.1	0.11	2.4	NS	0.48	2.5	2.5
	06/17/09	320	<0.1	0.11	2.1	NS	0.16	2.2	2.2	06/17/09	320	<0.1	0.11	2.1	NS	<0.1	2.2	2.2
	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7
	07/01/09	320	<0.1	0.12	1.7	NS	0.71	1.8	1.8	07/01/09	320	<0.1	0.12	1.8	NS	0.62	1.9	1.9
	07/08/09	320	<0.1	0.11	2.1	NS	0.69	2.2	2.2	07/08/09	320	<0.1	0.12	2.0	NS	0.69	2.1	2.1
	07/15/09	320	<0.1	0.11	3.1	NS	0.30	3.2	3.2	07/15/09	330	<0.1	0.2	1.6	NS	0.73	1.8	1.8
	07/22/09	360	<0.1	0.34	0.9	NS	2.24	1.2	1.2	22-Jul-09	375	<0.1	0.32	0.8	NS	2.37	1.2	1.2
	07/29/09	330	<0.1	0.09	2.7	NS	0.89	2.7	2.7	29-Jul-09	330	<0.1	0.08	2.4	NS	0.87	2.4	2.4
Recycled Water	08/05/09	765	<0.1	0.06	3.4	<1.2	2.61	3.5	4.1	05-Aug-09	760	<0.1	0.06	3.4	<1.2	2.52	3.5	4.1
	08/12/09	760	<0.1	0.07	3.3	<1.2	3.01	3.4	4.0	12-Aug-09	765	<0.1	0.06	3.3	<1.2	2.80	3.4	4.0
	08/19/09	773	<0.1	0.05	3.4	<1.2	2.82	3.5	4.1	19-Aug-09	774	<0.1	0.05	3.4	<1.2	3.16	3.5	4.1
	08/26/09	765	<0.1	0.06	3.9	1.5	2.52	4.0	5.5	26-Aug-09	770	<0.1	0.05	4.0	<1.2	2.45	4.1	4.7
	09/02/09	780	<0.1	0.04	2.6	1.2	2.75	2.6	3.8	2-Sep-09	780	<0.1	0.05	2.6	<1.2	2.83	2.7	3.3
	09/09/09	790	0.2	0.04	3.0	1.1	2.76	3.0	4.1	09-Sep-09	790	<0.1	0.05	3.0	1.2	2.88	3.1	4.2
	09/23/09	745	<0.1	<0.01	2.5	1.3	3.25	2.5	3.8	23-Sep-09	745	0.2	<0.01	2.9	1.4	2.92	2.9	4.2
	09/30/09	790	<0.1	<0.01	4.1	1.4	3.59	4.1	5.5	30-Sep-09	795	<0.1	<0.01	4.2	1.9	3.56	4.2	6.1
	10/07/09	780	<0.1	0.07	4.8	<1.0	3.89	4.9	5.4	07-Oct-09	780	<0.1	0.06	4.6	<1.0	3.78	4.7	5.2
	10/15/09	800	0.2	0.14	3.6	1.3	3.77	3.7	5.0									
	10/23/09	790	0.2	0.04	3.8	0.9	3.84	3.9	4.8	Sampling stopped at this depth for batch flow control.								
	10/28/09	780	<0.1	<0.01	3.4	0.9	3.7	3.4	4.3									
	11/05/09	795	<0.1	<0.01	3.4	0.7	3.3	3.5	4.2									
	11/11/09	805	<0.1	<0.01	3.7	<0.5	3.47	3.7	4.0									
	11/18/09	815	<0.1	<0.01	4.0	<0.5	3.53	4.0	4.2									
	11/25/09	830	<0.1	<0.01	4.3	1.6	3.44	4.3	5.9									
	12/02/09	840	<0.1	<0.01	5.6	0.7	3.38	5.6	6.3									
	12/09/09	825	<0.1	<0.01	5.8	0.9	3.29	5.8	6.7									
	12/22/09	805	<0.1	<0.01	4.5	0.8	2.94	4.5	5.3									
	12/30/09	790	<0.1	<0.01	4.0	<0.5	2.82	4.0	4.3									
	01/06/10	810	<0.1	<0.01	4.7	0.7	3.34	4.7	5.4									
	01/13/10	805	<0.1	<0.01	5.4	0.8	3.12	5.4	6.2									
	01/28/10	880	<0.1	<0.01	5.3	<0.5	3.58	5.3	5.5									
	02/04/10	745	<0.1	<0.01	3.5	<0.5	2.80	3.5	3.8									
	02/10/10	735	<0.1	<0.01	3.6	0.5	2.71	3.6	4.1									
	02/17/10	745	<0.1	<0.01	4.3	0.6	2.91	4.3	4.9									
	02/24/10	725	<0.1	<0.01	4.6	0.5	2.79	4.7	5.2									

NS: No Sample

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	10
Sample Avg. TOC:	3.00
Sample Avg. TN:	4.95

Table 5-2
Silica Sand Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC1-20 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	FC1-25 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	350	<0.1	0.11	3.4	<0.5	0.26	3.5	3.8	05/27/09	350	<0.1	0.11	3.4	<0.5	0.21	3.5	3.8
	06/03/09	340	<0.1	0.12	2.8	NS	0.14	2.9	2.9	06/03/09	340	<0.1	0.12	2.8	NS	0.15	2.9	2.9
	06/10/09	335	<0.1	0.11	2.4	NS	0.26	2.5	2.5	06/10/09	335	<0.1	0.12	2.5	NS	0.38	2.6	2.6
	06/17/09	320	<0.1	0.11	2.1	NS	<0.1	2.2	2.2	06/17/09	320	<0.1	0.11	2.1	NS	0.10	2.2	2.2
	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7
	07/01/09	330	<0.1	0.12	1.8	NS	0.75	1.9	1.9	07/01/09	335	<0.1	0.12	1.7	NS	0.83	1.8	1.8
	07/08/09	320	<0.1	0.12	2.0	NS	0.68	2.1	2.1	07/08/09	320	<0.1	0.12	1.9	NS	0.62	2.0	2.0
	07/15/09	330	<0.1	0.16	1.6	NS	0.60	1.8	1.8	07/15/09	330	<0.1	0.12	1.7	NS	0.43	1.8	1.8
	07/22/09	360	<0.1	0.40	0.5	NS	2.22	0.9	0.9	07/22/09	340	<0.1	0.57	0.1	NS	1.57	0.7	0.7
	07/29/09	330	<0.1	0.15	1.6	NS	1.33	1.8	1.8	07/29/09	335	<0.1	0.20	1.1	NS	1.43	1.3	1.3
Recycled Water	08/05/09	700	<0.1	0.07	3.4	<1.2	2.03	3.5	4.1	08/05/09	440	<0.1	0.09	2.8	<1.2	0.69	2.9	3.5
	08/12/09	775	<0.1	0.06	3.3	<1.2	3.09	3.4	4.0	08/12/09	775	<0.1	0.06	3.3	<1.2	2.76	3.4	4.0
	08/19/09	775	<0.1	0.05	3.2	<1.2	3.00	3.3	3.9	08/19/09	772	<0.1	0.05	3.1	<1.2	3.12	3.2	3.8
	08/26/09	770	<0.1	0.05	4.2	<1.2	2.44	4.3	4.9	08/26/09	770	<0.1	0.05	4.2	<1.2	2.41	4.3	4.9
	09/02/09	780	<0.1	0.06	2.6	<1.2	2.75	2.7	3.3	09/02/09	775	<0.1	0.06	2.6	<1.2	2.73	2.7	3.3
	09/09/09	795	<0.1	0.04	3.0	1.1	2.76	3.1	4.2	09/09/09	800	<0.1	0.04	2.9	1.2	2.98	3.0	4.2
	09/23/09	750	0.2	<0.01	3.4	1.0	3.04	3.4	4.4	09/23/09	760	<0.1	<0.01	3.4	1.3	3.13	3.4	4.7
	09/30/09	790	<0.1	<0.01	4.7	1.9	3.44	4.8	6.7	09/30/09	790	<0.1	<0.01	4.9	1.4	3.27	4.9	6.3
	10/07/09	785	<0.1	0.06	5.0	<1.0	3.71	5.0	5.5	10/07/09	785	<0.1	0.06	5.2	<1.0	3.69	5.2	5.7
	10/15/09	790	<0.1	<0.01	5.2	1.1	3.23	5.2	6.3									
	10/23/09	810	<0.1	<0.01	4.6	0.7	3.32	4.6	5.3	Sampling stopped at this depth for batch flow control.								
	10/28/09	805	<0.1	<0.01	3.8	0.9	3.57	3.8	4.7									
	11/05/09	800	<0.1	<0.01	3.2	0.6	3.67	3.2	3.8									
	11/11/09	790	<0.1	<0.01	3.3	<0.5	3.10	3.3	3.6									
	11/18/09	810	<0.1	<0.01	3.7	<0.5	3.47	3.8	4.0									
	11/25/09	815	<0.1	<0.01	4.0	0.5	2.98	4.0	4.5									
	12/02/09	830	<0.1	<0.01	4.2	0.6	2.90	4.2	4.7									
	12/09/09	835	<0.1	<0.01	4.8	0.8	2.85	4.8	5.6									
	12/22/09	825	<0.1	<0.01	5.6	<0.5	3.15	5.6	5.9									
	12/30/09	810	<0.1	<0.01	5.0	<0.5	2.63	5.0	5.3									
	01/06/10	795	<0.1	<0.01	4.3	<0.5	2.68	4.3	4.5									
	01/13/10	800	<0.1	<0.01	4.4	<0.5	2.51	4.4	4.6									
	01/28/10	815	<0.1	<0.01	5.4	2.5	2.85	5.4	7.9									
	02/04/10	805	<0.1	<0.01	5.3	<0.5	2.77	5.3	5.5									
	02/10/10	770	<0.1	<0.01	4.2	0.6	2.57	4.2	4.8									
	02/17/10	735	<0.1	<0.01	3.6	<0.5	2.31	3.6	3.8									
	02/24/10	750	<0.1	<0.01	3.9	<0.5	2.40	4.0	4.2									

NS: No Sample

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	20
Sample Avg. TOC:	2.65
Sample Avg. TN:	5.17

Table 5-2
Silica Sand Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC1-30 Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	345	<0.1	0.11	3.4	<0.5	0.22	3.5	3.8
	06/03/09	340	<0.1	0.11	2.7	NS	0.27	2.8	2.8
	06/10/09	335	<0.1	0.12	2.4	NS	0.36	2.5	2.5
	06/17/09	325	<0.1	0.11	2.1	NS	<0.1	2.2	2.2
	06/24/09	305	<0.1	<0.01	1.7	NS	<0.1	1.7	1.7
	07/01/09	345	<0.1	0.12	1.7	NS	0.94	1.8	1.8
	07/08/09	320	<0.1	0.12	1.9	NS	0.69	2.0	2.0
	07/15/09	335	<0.1	0.10	1.6	NS	0.20	1.7	1.7
	07/22/09	350	<0.1	0.14	0.8	NS	1.04	0.9	0.9
	07/29/09	345	<0.1	0.18	0.8	NS	1.36	1.0	1.0
Recycled Water	08/05/09	340	<0.1	0.10	2.4	<1.2	0.39	2.5	3.1
	08/12/09	775	<0.1	0.06	3.4	<1.2	2.73	3.5	4.1
	08/19/09	773	<0.1	0.05	3.1	<1.2	2.82	3.2	3.8
	08/26/09	775	<0.1	0.05	4.2	<1.2	2.43	4.3	4.9
	09/02/09	775	<0.1	0.06	2.6	1.9	2.64	2.7	4.6
	09/09/09	805	<0.1	0.04	3.0	1.1	2.83	3.0	4.1
	09/23/09	760	<0.1	<0.01	2.7	1.1	4.37	2.7	3.9
	09/30/09	780	<0.1	<0.01	4.2	1.7	3.39	4.2	5.8
	10/07/09	780	<0.1	0.06	5.0	<1.0	4.01	5.0	5.5
	10/15/09	790	<0.1	<0.01	4.5	1	3.96	4.5	5.5
	10/23/09	800	<0.1	<0.01	4.5	0.8	5.69	4.5	5.4
	10/28/09	800	<0.1	<0.01	4.3	0.8	4.03	4.3	5.2
	11/05/09	810	<0.1	<0.01	4.1	0.8	6.11	4.2	4.9
	11/11/09	800	<0.1	<0.01	3.5	<0.5	2.92	3.5	3.8
	11/18/09	800	<0.1	<0.01	3.5	<0.5	2.88	3.5	3.7
	11/25/09	795	<0.1	<0.01	3.5	<0.5	2.59	3.6	3.8
	12/02/09	815	<0.1	<0.01	4.0	<0.5	2.50	4.0	4.2
	12/09/09	825	<0.1	<0.01	3.9	0.5	2.45	3.9	4.5
	12/22/09	845	1.0	<0.01	5.0	0.8	2.73	5.0	5.8
	12/30/09	825	<0.1	<0.01	5.5	<0.5	2.60	5.5	5.7
	01/06/10	815	<0.1	<0.01	5.3	<0.5	2.77	5.4	5.6
	01/13/10	800	<0.1	<0.01	4.7	<0.5	2.60	4.7	4.9
	01/28/10	815	<0.1	<0.01	4.5	<0.5	2.39	4.6	4.8
	02/04/10	805	<0.1	<0.01	5.0	<0.5	2.36	5.1	5.3
	02/10/10	805	<0.1	<0.01	5.3	<0.5	2.38	5.3	5.6
	02/17/10	790	<0.1	<0.01	4.7	<0.5	2.32	4.7	5.0
	02/24/10	760	<0.1	<0.01	3.9	<0.5	2.16	3.9	4.2

NS: No Sample

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	30
Sample Avg. TOC:	2.51
Sample Avg. TN:	5.25

Table 5-3
8th Street Basin Sediment Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC2-03									FC2-05								
	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	355	0.1	0.13	3.3	<0.5	0.88	3.4	3.7	05/27/09	350	<0.1	0.11	3.2	<0.5	0.66	3.3	3.6
	06/03/09	345	<0.1	0.12	2.6	NS	0.40	2.7	2.7	06/03/09	345	<0.1	0.13	2.7	NS	0.54	2.8	2.8
	06/10/09	330	<0.1	0.11	2.4	NS	0.81	2.5	2.5	06/10/09	330	<0.1	0.11	2.4	NS	0.72	2.5	2.5
	06/17/09	320	<0.1	0.11	2	NS	0.05	2.1	2.1	06/17/09	315	<0.1	0.11	2	NS	0.14	2.1	2.1
	06/24/09	305	<0.1	<0.01	1.7	NS	0.38	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	0.10	1.7	1.7
	07/01/09	320	<0.1	0.12	1.7	NS	0.73	1.8	1.8	07/01/09	315	<0.1	0.12	1.8	NS	0.67	1.9	1.9
	07/08/09	320	<0.1	0.11	2.2	NS	0.73	2.3	2.3	07/08/09	325	<0.1	0.11	2.2	NS	0.73	2.3	2.3
	07/15/09	375	<0.1	0.18	1.7	NS	1.13	1.9	1.9	07/15/09	345	<0.1	0.16	1.5	NS	0.56	1.7	1.7
	07/22/09	340	<0.1	0.12	1.9	NS	0.99	2.0	2.0	07/22/09	340	<0.1	0.16	1.1	NS	1.34	1.3	1.3
	07/29/09	330	<0.1	0.09	2.7	NS	0.39	2.7	2.7	07/29/09	335	<0.1	0.12	2.1	NS	0.54	2.2	2.2
Recycled Water	08/05/09	795	<0.1	0.06	3.2	<1.2	2.33	3.3	3.9	08/05/09	800	<0.1	0.06	3.2	<1.2	2.19	3.3	3.9
	08/12/09	770	<0.1	0.06	3.3	<1.2	2.95	3.4	4.0	08/12/09	775	<0.1	0.07	3.2	1.24	2.68	3.3	4.5
	08/19/09	771	<0.1	0.05	3.5	<1.2	2.82	3.6	4.2	08/19/09	778	<0.1	0.05	3.5	<1.2	2.74	3.6	4.2
	08/26/09	785	<0.1	0.25	2.0	<1.2	2.65	2.3	2.9	08/26/09	785	<0.1	0.12	2.5	<1.2	2.95	2.6	3.2
	09/02/09	780	<0.1	0.07	2.1	1.6	2.92	2.2	3.8	09/02/09	780	<0.1	0.06	2.6	1.8	2.64	2.7	4.5
	09/09/09	780	<0.1	<0.01	2.8	1.5	2.92	2.8	4.3	09/09/09	775	<0.1	<0.01	2.9	1.0	2.63	2.9	3.9
	09/23/09	780	0.1	0.06	1.9	<1.0	3.62	2.0	2.5	09/23/09	775	<0.1	<0.01	2.4	<1.0	3.02	2.4	2.9
	09/30/09	775	<0.1	0.04	3.5	1.9	3.02	3.5	5.5	09/30/09	780	<0.1	0.05	2.9	1.3	2.86	3.0	4.3
	10/07/09	785	0.2	0.06	5.6	<1.0	3.92	5.6	6.1	10/07/09	785	0.1	0.06	6.1	<1.0	3.68	6.1	6.6
	10/15/09	800	0.1	<0.01	3.3	2.1	3.63	3.3	5.4	10/15/09	805	<0.1	<0.01	2.5	1.6	3.62	2.5	4.1
	10/23/09	790	<0.1	<0.01	3.4	0.8	3.73	3.4	4.2	10/23/09	795	<0.1	<0.01	3.5	0.6	3.27	3.5	4.1
	10/28/09	790	<0.1	<0.01	2.8	0.6	3.23	2.8	3.4	10/28/09	790	<0.1	<0.01	3.0	0.8	3.18	3.0	3.8
	11/05/09	800	<0.1	<0.01	3.8	0.6	3.26	3.8	4.3	11/05/09	795	<0.1	<0.01	3.6	<0.5	3.13	3.6	3.8
	11/11/09	805	<0.1	<0.01	3.4	<0.5	3.36	3.4	3.7	11/11/09	805	<0.1	<0.01	3.7	0.6	3.08	3.7	4.3
	11/18/09	830	<0.1	<0.01	3.2	<0.5	3.67	3.2	3.5	11/18/09	820	<0.1	<0.01	3.6	<0.5	3.27	3.6	3.8
	11/25/09	840	<0.1	<0.01	4.6	0.8	3.46	4.6	5.4	11/25/09	835	<0.1	<0.01	4.5	0.5	3.16	4.5	5.1
	12/02/09	820	<0.1	<0.01	5.3	0.5	3.52	5.3	5.9	12/02/09	835	<0.1	<0.01	5.4	0.5	3.32	5.4	6.0
	12/09/09	825	<0.1	<0.01	5.3	0.5	2.99	5.4	5.9	12/09/09	825	<0.1	<0.01	5.5	0.5	2.98	5.5	6.0
	12/22/09	795	<0.1	<0.01	3.7	0.7	3.03	3.7	4.3	12/22/09	795	<0.1	<0.01	3.9	0.9	2.98	3.9	4.7
	12/30/09	815	<0.1	<0.01	4.1	0.9	3.43	4.1	5.0	12/30/09	815	<0.1	<0.01	4.2	<0.5	2.84	4.2	4.4
	01/06/10	815	<0.1	<0.01	5.2	0.9	3.49	5.2	6.1	01/06/10	820	<0.1	<0.01	5.1	0.7	3.11	5.1	5.8
	01/13/10	805	<0.1	<0.01	5.0	0.7	3.29	5.0	5.7	01/13/10	810	<0.1	<0.01	5.1	0.6	2.98	5.1	5.7
	01/28/10	740	0.1	<0.01	3.5	<0.5	3.01	3.5	3.7	01/28/10	765	<0.1	<0.01	3.9	<0.5	3.06	3.9	4.2
	02/04/10	735	0.1	<0.01	3.4	<0.5	2.72	3.4	3.7	02/04/10	735	<0.1	<0.01	3.2	<0.5	2.53	3.2	3.5
	02/10/10	770	0.1	<0.01	4.4	<0.5	3.48	4.4	4.6	02/10/10	760	<0.1	<0.01	4.1	<0.5	2.83	4.1	4.3
	02/17/10	715	0.1	0.02	4.2	0.6	3.00	4.2	4.8	02/17/10	725	<0.1	<0.01	4.2	<0.5	2.61	4.2	4.5
	02/24/10	715	<0.1	<0.01	4.7	<0.5	2.75	4.7	5.2	02/24/10	715	<0.1	<0.01	4.9	<0.5	2.63	4.9	5.3

Averaging Period:	Dec. 22, 2009 through February 24, 2010			
Depth:	0.00	2.5	Depth:	5
Sample Avg. TOC:	4.43	3.13	Sample Avg. TOC:	2.84
Sample Avg. TN:	5.29	4.80	Sample Avg. TN:	4.71

Table 5-3
8th Street Basin Sediment Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

	FC2-10									FC2-15								
Source Water	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	355	<0.1	0.12	3.2	<0.5	0.89	3.3	3.6	05/27/09	355	<0.1	0.13	2.9	<0.5	1.35	3.0	3.3
	06/03/09	340	<0.1	0.11	2.8	NS	0.80	2.9	2.9	06/03/09	340	<0.1	0.11	2.8	NS	0.46	2.9	2.9
	06/10/09	330	<0.1	0.11	2.4	NS	0.46	2.5	2.5	06/10/09	330	<0.1	0.11	2.5	NS	0.72	2.6	2.6
	06/17/09	320	<0.1	0.11	2.1	NS	0.18	2.2	2.2	06/17/09	320	<0.1	0.1	2.1	NS	0.30	2.2	2.2
	06/24/09	305	<0.1	<0.01	1.7	NS	0.60	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	0.21	1.7	1.7
	07/01/09	320	<0.1	0.12	1.8	NS	0.85	1.9	1.9	07/01/09	320	<0.1	0.12	1.8	NS	0.78	1.9	1.9
	07/08/09	320	<0.1	0.11	2.2	NS	0.72	2.3	2.3	07/08/09	325	<0.1	0.11	2.1	NS	0.71	2.2	2.2
	07/15/09	340	<0.1	0.2	1.1	NS	0.59	1.3	1.3	07/15/09	345	<0.1	0.23	0.6	NS	0.76	0.8	0.8
	07/22/09	350	<0.1	0.15	0.6	NS	1.63	0.8	0.8	07/22/09	350	<0.1	0.15	0.1	NS	1.87	0.2	0.2
	07/29/09	340	<0.1	0.13	1.3	NS	0.81	1.4	1.4	07/29/09	340	<0.1	0.15	0.8	NS	1.06	1.0	1.0
Recycled Water	08/05/09	800	<0.1	0.07	3.2	<1.2	2.44	3.3	3.9	08/05/09	790	<0.1	0.08	3.1	<1.2	2.27	3.2	3.8
	08/12/09	780	<0.1	0.06	3.3	<1.2	2.69	3.4	4.0	08/12/09	790	<0.1	0.06	3.3	<1.2	2.65	3.4	4.0
	08/19/09	783	<0.1	0.06	3.3	<1.2	2.58	3.4	4.0	08/19/09	785	<0.1	0.07	3.1	<1.2	2.63	3.2	3.8
	08/26/09	785	<0.1	0.13	2.2	1.2	2.59	2.3	3.5	08/26/09	785	<0.1	0.10	2.3	<1.2	2.81	2.4	3.0
	09/02/09	790	<0.1	0.05	2.3	1.2	2.61	2.4	3.6	09/02/09	785	<0.1	0.04	2.2	<1.2	2.67	2.2	2.8
	09/09/09	785	<0.1	<0.01	2.9	<1.0	2.48	2.9	3.4	09/09/09	790	<0.1	<0.01	3.0	<1.2	2.52	3.0	3.6
	09/23/09	770	0.2	<0.01	2.7	1.0	2.88	2.7	3.7	09/23/09	770	<0.1	<0.01	3.1	1.2	2.60	3.1	4.3
	09/30/09	795	<0.1	0.02	2.7	1.5	2.62	2.7	4.2	09/30/09	810	<0.1	<0.01	2.8	2.0	2.63	2.8	4.7
	10/07/09	785	<0.1	0.05	5.2	<1.0	3.45	5.2	5.7	10/07/09	790	<0.1	0.06	4.7	<1.0	3.49	4.8	5.3
	10/15/09	810	<0.1	<0.01	3.3	1.6	2.94	3.3	4.9									
	10/23/09	815	<0.1	<0.01	2.8	<0.5	3.08	2.8	3.0	Sampling stopped at this depth for batch flow control.								
	10/28/09	800	<0.1	<0.01	2.2	0.6	3.09	2.2	2.9									
	11/05/09	800	<0.1	<0.01	2.8	<0.5	2.82	2.8	3.0									
	11/11/09	805	<0.1	<0.01	3.5	0.6	2.76	3.5	4.1									
	11/18/09	820	<0.1	<0.01	3.5	<0.5	2.80	3.5	3.7									
	11/25/09	835	<0.1	<0.01	3.9	<0.5	2.72	3.9	4.2									
	12/02/09	835	<0.1	<0.01	5.1	0.5	2.89	5.1	5.7									
	12/09/09	830	<0.1	<0.01	5.5	<0.5	2.46	5.5	5.7									
	12/22/09	805	<0.1	<0.01	4.1	0.6	2.24	4.2	4.8									
	12/30/09	800	<0.1	<0.01	3.9	<0.5	2.28	3.9	4.2									
	01/06/10	830	<0.1	<0.01	5.0	<0.5	2.58	5.0	5.2									
	01/13/10	815	<0.1	<0.01	5.2	<0.5	2.52	5.2	5.5									
	01/28/10	795	<0.1	<0.01	4.6	0.8	2.84	4.6	5.4									
	02/04/10	745	<0.1	<0.01	3.4	<0.5	2.48	3.4	3.6									
	02/10/10	745	<0.1	<0.01	3.7	<0.5	2.18	3.7	4.0									
	02/17/10	745	<0.1	<0.01	4.4	<0.5	2.43	4.4	4.6									
	02/24/10	720	<0.1	<0.01	4.6	0.56	2.14	4.6	5.2									

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	10
Sample Avg. TOC:	2.41
Sample Avg. TN:	4.71

Table 5-3
8th Street Basin Sediment Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

	FC2-20									FC2-25								
Source Water	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	360	<0.1	0.11	2.8	<0.5	1.23	2.9	3.2	05/27/09	370	<0.1	0.12	2.4	<0.5	1.44	2.5	2.8
	06/03/09	340	<0.1	0.12	2.8	NS	0.55	2.9	2.9	06/03/09	340	<0.1	0.13	2.6	NS	0.69	2.7	2.7
	06/10/09	325	<0.1	0.11	2.5	NS	0.62	2.6	2.6	06/10/09	330	<0.1	0.11	2.5	NS	0.49	2.6	2.6
	06/17/09	320	<0.1	0.11	2.1	NS	0.22	2.2	2.2	06/17/09	320	<0.1	0.11	2.2	NS	0.25	2.3	2.3
	06/24/09	305	<0.1	<0.01	1.7	NS	0.49	1.7	1.7	06/24/09	305	<0.1	<0.01	1.7	NS	0.36	1.7	1.7
	07/01/09	325	<0.1	0.12	1.9	NS	0.76	2.0	2.0	07/01/09	325	<0.1	0.12	1.9	NS	0.86	2.0	2.0
	07/08/09	325	<0.1	0.11	2.1	NS	0.77	2.2	2.2	07/08/09	320	<0.1	0.11	2.1	NS	0.73	2.2	2.2
	07/15/09	340	<0.1	0.20	0.7	NS	0.79	0.9	0.9	07/15/09	340	<0.1	0.18	0.8	NS	0.81	1.0	1.0
	07/22/09	360	<0.1	0.10	0.0	NS	1.97	0.1	0.1	07/22/09	360	<0.1	0.09	0.0	NS	2.16	0.1	0.1
	07/29/09	335	<0.1	0.14	0.7	NS	0.88	0.8	0.8	07/29/09	335	<0.1	0.14	0.4	NS	1.23	0.6	0.6
Recycled Water	08/05/09	780	<0.1	0.09	3.2	<1.2	2.29	3.3	3.9	08/05/09	780	<0.1	0.10	3.2	<1.2	3.00	3.3	3.9
	08/12/09	790	<0.1	0.07	3.3	<1.2	2.46	3.4	4.0	08/12/09	795	<0.1	0.08	3.2	<1.2	3.49	3.3	3.9
	08/19/09	786	<0.1	0.07	2.7	<1.2	2.62	2.8	3.4	08/19/09	785	<0.1	0.08	2.7	<1.2	2.55	2.8	3.4
	08/26/09	785	<0.1	0.09	2.5	<1.2	2.46	2.6	3.2	08/26/09	785	<0.1	0.09	2.9	<1.2	2.57	3.0	3.6
	09/02/09	810	<0.1	<0.01	2.0	1.5	2.62	2.0	3.5	09/02/09	805	<0.1	<0.01	1.5	1.4	2.58	1.5	2.9
	09/09/09	795	<0.1	<0.01	3.0	<1.0	2.59	3.0	3.5	09/09/09	800	<0.1	<0.01	3.0	1.2	2.53	3.0	4.2
	09/23/09	780	0.1	<0.01	3.4	1.5	2.63	3.4	4.9	09/23/09	790	<0.1	<0.01	3.3	<1.0	2.77	3.3	3.8
	09/30/09	815	0.1	<0.01	2.5	1.6	2.76	2.5	4.1	09/30/09	820	<0.1	0.02	2.3	2.3	2.59	2.3	4.6
	10/07/09	790	<0.1	0.07	4.7	<1.0	3.46	4.8	5.3	10/07/09	795	<0.1	0.06	5.1	1.2	3.30	5.2	6.4
	10/15/09	820	<0.1	<0.01	5.1	1.4	2.54	5.1	6.5	Sampling stopped at this depth for batch flow control.								
	10/23/09	835	<0.1	<0.01	4.4	0.6	2.58	4.5	5.0									
	10/28/09	840	<0.1	<0.01	3.7	0.9	2.55	3.7	4.6									
	11/05/09	825	<0.1	<0.01	1.7	0.9	2.48	1.7	2.6									
	11/11/09	810	<0.1	<0.01	2.1	<0.5	2.38	2.1	2.4									
	11/18/09	825	<0.1	<0.01	3.0	<0.5	2.17	3.0	3.2									
	11/25/09	830	<0.1	<0.01	3.4	<0.5	2.15	3.4	3.6									
	12/02/09	850	<0.1	<0.01	3.7	<0.5	2.36	3.7	4.0									
	12/09/09	840	<0.1	<0.01	4.8	0.6	1.94	4.8	5.3									
	12/22/09	840	<0.1	<0.01	5.4	0.6	2.00	5.4	6.0									
	12/30/09	820	<0.1	<0.01	4.6	<0.5	1.96	4.6	4.8									
	01/06/10	810	<0.1	<0.01	4.1	<0.5	1.98	4.1	4.3									
	01/13/10	830	<0.1	<0.01	4.5	<0.5	1.93	4.5	4.7									
	01/28/10	820	<0.1	<0.01	5.1	<0.5	2.09	5.1	5.4									
	02/04/10	815	<0.1	<0.01	4.8	<0.5	2.00	4.8	5.0									
	02/10/10	775	<0.1	<0.01	3.7	<0.5	1.91	3.8	4.0									
	02/17/10	770	<0.1	<0.01	3.9	<0.5	1.88	3.9	4.1									
	02/24/10	770	<0.1	<0.01	4.3	<0.5	1.98	4.3	4.8									

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	20
Sample Avg. TOC:	1.97
Sample Avg. TN:	4.80

Table 5-3
8th Street Basin Sediment Train Results
Electrical Conductivity, Total Organic Carbon, and Total Nitrogen

Source Water	FC2-30								
	Sample Date	EC (uS/cm)	NH3-N (mg/L)	NO2-N (mg/L)	NO3-N (mg/L)	TKN (mg/L)	TOC (mg/L)	NO2+ NO3 (mg/L)	TN (mg/L)
Municipal Water	05/27/09	375	<0.1	0.12	1.7	<0.5	1.77	1.8	2.1
	06/03/09	340	<0.1	0.12	2.7	NS	0.78	2.8	2.8
	06/10/09	330	<0.1	0.11	2.6	NS	0.66	2.7	2.7
	06/17/09	315	<0.1	0.11	2.2	NS	0.39	2.3	2.3
	06/24/09	305	<0.1	<0.01	1.8	NS	0.76	1.8	1.8
	07/01/09	325	<0.1	0.12	1.9	NS	0.88	2.0	2.0
	07/08/09	320	<0.1	0.11	2.2	NS	0.77	2.3	2.3
	07/15/09	360	<0.1	0.15	1.5	NS	0.82	1.7	1.7
	07/22/09	370	<0.1	0.08	0.0	NS	2.19	0.1	0.1
	07/29/09	340	<0.1	0.10	0.0	NS	1.41	0.1	0.1
Recycled Water	08/05/09	765	<0.1	0.10	3.2	<1.2	2.23	3.3	3.9
	08/12/09	800	<0.1	0.09	3.0	<1.2	2.57	3.1	3.7
	08/19/09	785	<0.1	0.07	2.4	<1.2	2.67	2.5	3.1
	08/26/09	790	<0.1	0.10	2.8	<1.2	2.36	2.9	3.5
	09/02/09	800	<0.1	<0.01	0.8	<1.0	2.71	0.8	0.8
	09/09/09	800	<0.1	<0.01	3.0	1.3	2.52	3.0	3.0
	09/23/09	785	<0.1	<0.01	2.5	<1.0	3.68	2.5	2.5
	09/30/09	810	0.1	<0.01	2.1	1.8	3.08	2.1	2.1
	10/07/09	800	<0.1	0.06	5.4	<1.0	3.17	5.4	5.4
	10/15/09	820	<0.1	<0.01	4.9	<1.0	4.95	4.9	4.9
	10/23/09	830	<0.1	<0.01	4.0	<0.5	4.46	4.0	4.0
	10/28/09	845	<0.1	<0.01	4.0	0.8	8.15	4.0	4.0
	11/05/09	850	<0.1	<0.01	3.4	0.7	7.95	3.4	3.4
	11/11/09	845	<0.1	<0.01	2.5	<0.5	2.16	2.5	2.5
	11/18/09	835	<0.1	<0.01	1.8	<0.5	1.98	1.8	1.8
	11/25/09	830	<0.1	<0.01	2.1	<0.5	1.97	2.1	2.1
	12/02/09	830	<0.1	<0.01	2.8	<0.5	2.14	2.9	2.9
	12/09/09	845	<0.1	<0.01	3.2	<0.5	1.72	3.2	3.2
	12/22/09	860	<0.1	<0.01	4.6	0.5	1.88	4.6	4.6
	12/30/09	850	<0.1	<0.01	5.2	<0.5	1.90	5.2	5.2
	01/06/10	840	<0.1	<0.01	5.1	<0.5	1.90	5.2	5.2
	01/13/10	830	<0.1	<0.01	4.4	<0.5	1.76	4.4	4.4
	01/28/10	825	<0.1	<0.01	4.5	<0.5	1.94	4.5	4.5
	02/04/10	830	<0.1	<0.01	4.9	<0.5	1.71	4.9	4.9
	02/10/10	835	<0.1	<0.01	5.1	<0.5	1.67	5.1	5.1
	02/17/10	795	<0.1	<0.01	4.0	<0.5	1.71	4.0	4.0
	02/24/10	775	<0.1	<0.01	3.7	<0.5	1.57	3.7	3.7

Averaging Period:	Dec. 22, 2009 through February 24, 2010
Depth:	30
Sample Avg. TOC:	1.80
Sample Avg. TN:	4.57

Table 5-4
Silica Sand Train Results
Dissolved Oxygen and Temperature

Source Water	Sample Date	FC1-00			FC1-03			FC1-05			FC1-10			FC1-15			FC1-20			FC1-25			FC1-30		
		DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)
Municipal Water	07/01/09	6.60	84.2	25.9	6.19	78.8	25.8	6.14	77.7	25.5	6.52	82.4	25.4	3.82	48.3	25.4	3.26	41.3	25.5	2.70	34.3	25.7	2.52	32.1	25.7
	07/08/09	7.02	87.5	24.8	5.57	69.4	24.8	5.91	73.6	24.7	4.53	56.3	24.7	3.76	46.8	24.7	3.43	42.8	24.8	2.89	36.1	25.0	2.85	35.7	25.0
	07/15/09	6.08	79.5	27.5	5.20	68.0	27.5	4.08	53.0	27.1	3.48	45.0	26.9	1.61	20.9	26.8	1.50	19.3	26.9	1.59	20.7	27.1	4.93	63.9	27.0
	07/22/09	6.05	82.2	29.6																					
	07/29/09	3.34		26.1	3.23		25.9	1.99		25.5	1.65		25.4	1.51		25.4	0.70		25.4	0.73		25.5	0.67		25.6
Recycled Water	08/05/09	4.41	58.5	28.2	3.97	52.4	28.0	3.50	45.9	27.7	2.56	33.4	27.5	2.59	33.8	27.4	1.54	20.2	27.5	0.87	11.4	27.6	1.52	19.9	27.7
	08/12/09	5.51	69.4	25.5	4.85	61.1	25.5	4.78	60.0	25.3	4.58	57.6	25.5	3.73	46.8	25.3	3.02	38.0	25.2	2.95	37.2	25.4	2.84	35.8	25.5
	08/19/09	4.39	54.6	23.8	4.44	54.3	23.7	3.84	46.7	23.4	3.47	42.0	23.2	2.61	31.6	23.1	2.42	29.3	23.1	2.27	27.6	23.1	2.47	30.0	23.4
	08/26/09	4.94	63.9	27.0	4.20	54.0	26.6	3.77	48.5	26.5	4.10	52.6	26.4	2.24	28.8	26.4	2.16	27.8	26.7	1.87	24.1	26.8	1.87	24.2	26.8
	09/02/09	4.56	62.3	29.8	2.84	38.6	29.6	1.18	15.9	29.2	1.24	16.8	29.2	2.05	27.7	29.3	1.50	20.4	29.4	2.29	31.3	29.8	1.44	19.6	29.4
	09/09/09	5.71	76.1	28.4	5.22	68.5	27.6	5.05	66.3	27.6	4.60	60.6	27.8	2.15	28.5	28.0	2.44	32.4	28.1	2.31	30.7	28.3	1.87	24.8	28.2
	09/16/09	7.14	87.3	23.9																			3.07	37.4	23.7
	09/23/09	6.98	92.8	28.3	6.76	88.4	27.4	6.39	83.2	27.2	5.16	67.2	27.2	5.42	70.9	27.4	4.87	63.8	27.6	4.46	58.7	27.8	4.49	59.2	27.8
	09/30/09	6.95	85.9	24.4	6.84	83.4	23.7	6.66	80.5	23.2	5.47	66.3	23.4	5.05	61.2	23.4	4.72	57.2	23.4	4.53	55.0	23.5	4.43	53.8	23.5
	10/07/09	7.50	88.6	22.0	7.38	86.8	21.7	7.16	83.7	21.4	6.17	72.0	21.3	5.70	66.7	21.4	5.56	65.2	21.6	5.42	63.8	21.8	5.23	61.4	21.6
	10/15/09	7.56	90.1	22.5	6.28	75.1	22.4	4.83	57.4	22.3	1.90	23.3	22.4				2.17	29.7	22.2				6.48	77.4	22.6
	10/23/09	7.48	89.4	22.7	6.82	81.5	22.7	5.66	67.7	22.7	2.29	27.4	22.8				1.11	13.3	22.8				5.64	67.5	22.8
	10/28/09	7.34	84.8	20.6	6.72	77.0	20.2	3.33	38.2	20.2	1.65	18.9	20.3				2.19	25.1	20.2				4.54	52.1	20.2
	11/05/09	7.09	81.6	21.0	5.82	66.8	20.8	2.93	33.5	20.6	1.33	15.1	20.4				1.43	16.3	20.4				4.40	49.7	20.0
	11/11/09	7.35	87.8	22.5	6.75	80.7	22.6	4.74	56.5	22.4	2.11	25.1	22.4				1.75	21.0	22.7				6.12	73.2	22.6
	11/18/09	7.35	80.7	18.4	7.03	77.1	18.3	5.16	56.4	18.1	2.61	28.5	18.1				2.66	29.2	18.3				6.44	70.5	18.3
	11/25/09	7.59	83.2	18.5	7.02	77.1	18.5	4.91	53.9	18.6	2.78	30.5	18.6				3.20	35.2	18.7				6.62	73.0	18.7
	12/02/09	7.39	82.0	18.8	6.97	77.5	18.9	5.05	56.2	18.9	3.19	35.6	19.0				3.14	35.0	19.1				6.66	74.4	19.1
	12/09/09	8.34	83.3	14.1	7.51	75.2	14.2	5.88	59.0	14.3	3.75	37.6	14.2				3.85	38.7	14.4				7.55	76.0	14.5
	12/30/09	8.23	84.3	15.5	7.59	77.7	15.5	6.47	66.1	15.3	6.38	65.1	15.3				4.72	48.2	15.2				7.34	75.2	15.4
	01/06/10	8.37	89.7	17.4	6.94	74.6	17.5	5.48	59.4	17.5	4.11	44.2	17.6				4.63	50.0	17.8				7.33	79.2	17.8
	01/28/10	8.40	90.0	17.2	8.16	87.5	17.3	6.43	68.8	17.1	4.84	51.7	17.1				3.83	41.1	17.4				7.95	85.4	17.3
	02/04/10	8.43	89.6	16.8	7.99	85.2	17.0	7.15	76.2	16.9	5.73	61.0	16.9				4.42	47.2	17.0				7.76	83.1	17.1
	02/10/10	8.41	83.4	13.7	7.60	75.5	13.8	6.11	60.5	13.7	5.41	53.7	13.7				5.80	57.7	13.9				8.31	82.7	13.9
	02/17/10	8.02	91.7	20.4	7.04	80.6	20.5	6.18	70.4	20.2	4.18	47.6	20.2				4.22	48.2	20.3				6.95	79.5	20.4
	02/24/10	7.64	79.8	16.4	8.18	85.0	16.2	5.89	61.4	16.4	5.12	53.3	16.3				4.86	50.7	16.4				7.82	81.5	16.3
	03/03/10	8.16	85.5	16.3	7.69	81.0	16.6	5.91	62.1	16.5	4.52	47.5	16.5				4.17	43.9	16.5				6.98	73.5	16.6

Table 5-5
8th Street Basin Sediment Train Results
Dissolved Oxygen and Temperature

Source Water	Sample Date	FC2-00			FC2-03			FC2-05			FC2-10			FC2-15			FC2-20			FC2-25			FC2-30		
		DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)	DO (mg/L)	DO%	Temp. (°C)
Municipal Water	07/01/09	6.60	84.2	25.9	5.42	69.1	25.8	5.82	74.1	25.8	5.26	66.7	25.6	3.76	47.7	25.5	3.03	38.3	25.5	2.86	36.2	25.4	3.78	47.7	25.3
	07/08/09	7.02	87.5	24.8	5.52	69.0	25.0	5.53	69.1	25.0	5.06	63.2	24.9	4.26	53.2	24.8	3.89	48.4	24.8	3.56	44.3	24.7	4.52	56.1	24.6
	07/15/09	6.08	79.5	27.5	3.51	45.7	27.3	3.37	43.8	27.1	1.96	25.5	27.1	1.11	14.3	27.0	1.22	15.7	26.8	1.18	15.3	26.8	2.04	26.3	26.7
	07/22/09	6.05	82.2	29.6																					
	07/29/09	3.34		26.1	2.13		25.9	1.60		25.7	0.81		25.5	0.64		25.4	0.75		25.3	0.69		25.1	0.51		24.9
Recycled Water	08/05/09	4.41	58.5	28.2	3.21	42.4	28.0	3.18	41.9	27.8	1.66	21.9	27.8	1.89	24.8	27.8	0.96	12.6	27.8	0.98	12.9	27.9	0.87	11.4	27.7
	08/12/09	5.51	69.4	25.5	4.14	52.2	25.6	3.79	47.8	25.6	2.67	33.7	25.6	1.80	22.7	25.7	1.41	17.8	25.8	1.20	15.2	25.8	1.12	14.1	25.5
	08/19/09	4.39	54.6	23.8	3.63	44.3	23.5	2.50	30.4	23.5	1.33	16.2	23.4	1.67	20.2	23.4	1.56	18.8	23.1	2.20	26.6	23.1	1.66	20.0	22.9
	08/26/09	4.94	63.9	27.0	2.93	37.8	26.8	2.28	29.5	27.0	1.63	21.2	27.1	1.10	14.3	27.1	1.53	19.8	27.1	1.70	22.2	27.3	1.98	25.7	27.0
	09/02/09	4.56	62.3	29.8	2.04	27.9	29.8	1.12	15.3	29.9	1.32	18.2	30.1	2.07	28.6	30.3	2.11	29.2	30.4	2.02	28.0	30.6	1.50	20.7	30.2
	09/09/09	5.71	76.1	28.4	5.15	68.1	27.9	4.18	55.5	28.2	2.64	35.2	28.4	1.93	25.8	28.6	1.66	22.2	28.4	1.39	18.7	28.7	2.67	35.6	28.4
	09/16/09	7.14	87.3	23.9																			1.39	17.0	23.7
	09/23/09	6.98	92.8	28.3	5.37	70.4	27.6	5.03	66.2	27.9	3.93	51.9	28.0	3.84	50.8	28.0	2.62	34.7	28.0	2.51	33.3	28.2	2.56	33.9	28.1
	09/30/09	6.95	85.9	24.4	5.60	67.9	23.4	2.87	34.9	23.5	1.60	19.5	23.6	1.79	21.8	23.5	1.80	27.9	23.5	1.60	19.4	23.5	1.89	22.9	23.5
	10/07/09	7.50	88.6	22.0	6.62	77.8	21.6	6.04	71.2	21.8	5.21	61.6	22.0	4.74	56.2	22.0	4.63	54.8	22.1	4.33	51.3	22.1	5.36	63.3	21.8
	10/15/09	7.56	90.1	22.5	3.38	40.7	23.0	3.02	36.5	23.2	1.91	23.1	23.3				3.35	40.6	23.4				3.94	47.8	23.3
	10/23/09	7.48	89.4	22.7	4.38	52.5	22.8	3.05	36.6	22.9	1.91	23.0	22.9				1.62	19.4	22.9				2.40	28.7	22.9
	10/28/09	7.34	84.8	20.6	5.58	64.2	20.4	2.89	33.3	20.4	2.39	27.4	20.3				2.91	33.2	20.1				2.92	33.2	19.9
	11/05/09	7.09	81.6	21.0	4.93	56.5	20.8	2.79	32.0	20.8	2.11	24.2	20.7				1.61	18.4	20.6				1.87	21.4	20.5
	11/11/09	7.35	87.8	22.5	5.33	64.0	22.7	3.08	37.2	23.0	1.40	16.9	23.1				1.75	21.2	23.2				4.10	49.4	22.9
	11/18/09	7.35	80.7	18.4	5.67	62.7	18.7	2.87	31.7	18.6	1.98	21.8	18.5				2.67	29.3	18.4				4.70	51.4	18.1
	11/25/09	7.59	83.2	18.5	6.07	67.2	19.0	3.26	36.1	18.9	2.52	27.8	18.9				2.64	29.2	18.8				4.89	53.8	18.6
	12/02/09	7.39	82.0	18.8	6.09	68.3	19.1	3.38	37.9	19.3	2.31	25.9	19.2				2.92	32.7	19.2				5.14	57.2	19.0
	12/09/09	8.34	83.3	14.1	6.84	69.0	14.6	4.06	41.1	14.7	3.34	33.8	14.7				3.66	37.0	14.6				6.09	61.1	14.3
	12/30/09	8.23	84.3	15.5	6.85	70.5	15.0	5.03	56.2	15.2	3.43	34.9	15.1				2.46	27.4	14.9				5.77	58.0	14.6
	01/06/10	8.37	89.7	17.4	6.65	72.0	17.9	3.95	43.0	18.1	3.31	36.0	18.2				2.55	27.7	18.2				6.11	66.3	18.0
	01/28/10	8.40	90.0	17.2	7.18	77.5	17.5	4.67	50.5	17.7	3.88	42.1	17.8				4.40	47.8	17.8				6.50	70.3	17.6
	02/04/10	8.43	89.6	16.8	7.47	80.2	17.2	4.36	47.9	17.4	2.86	30.9	17.5				3.94	42.5	17.5				6.42	69.1	17.3
	02/10/10	8.41	83.4	13.7	5.26	52.4	13.9	5.18	51.5	13.8	3.62	35.8	13.6				3.15	31.1	13.6				7.60	74.7	13.3
	02/17/10	8.02	91.7	20.4	6.30	74.2	20.7	3.82	44.0	20.6	2.37	27.2	20.7				1.80	20.7	20.6				6.38	73.0	20.4
	02/24/10	7.64	79.8	16.4	6.44	67.8	16.8	3.89	40.8	16.6	3.15	33.1	16.6				3.34	35.0	16.6				6.78	70.8	16.3
	03/03/10	8.16	85.5	16.3	6.66	70.9	17.1	3.72	39.5	17.0	2.88	30.5	16.8				2.60	27.5	16.7				6.89	72.5	16.5

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
08/01/07					
08/02/07					
08/03/07					
08/04/07					
08/05/07					
08/06/07	10.93	45.45			21
08/07/07					
08/08/07					
08/09/07					
08/10/07					
08/11/07					
08/12/07					
08/13/07					
08/14/07	44.24	8.89			21
08/15/07					
08/16/07					
08/17/07					
08/18/07					
08/19/07					
08/20/07					
08/21/07	21.23	5.40			21
08/22/07					
08/23/07					
08/24/07					
08/25/07					
08/26/07					
08/27/07					
08/28/07	7.61	4.48		59%	21
08/29/07					
08/30/07					
08/31/07					
09/01/07					
09/02/07					
09/03/07					
09/04/07	9.11	3.92	100%	91%	21
09/05/07					
09/06/07					
09/07/07					
09/08/07					
09/09/07					
09/10/07					
09/11/07	6.55	4.57	100%	78%	21
09/12/07					
09/13/07					
09/14/07					
09/15/07					
09/16/07					
09/17/07					
09/18/07	5.86	4.13	100%	46%	21
09/19/07					
09/20/07					
09/21/07					
09/22/07					
09/23/07					
09/24/07					
09/25/07	17.55	4.57	100%	50%	21
09/26/07					
09/27/07					
09/28/07					
09/29/07					
09/30/07					
10/01/07					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
10/02/07	8.18	6.39	62%	2%	21
10/03/07					
10/04/07					
10/05/07					
10/06/07					
10/07/07					
10/08/07					
10/09/07	34.09	4.84	100%	17%	21
10/10/07					
10/11/07					
10/12/07					
10/13/07					
10/14/07					
10/15/07					
10/16/07	50.12	71.23	96%	-306%	21
10/17/07					
10/18/07					
10/19/07					
10/20/07					
10/21/07					
10/22/07					
10/23/07	21.53	3.64	83%	56%	21
10/24/07					
10/25/07					
10/26/07					
10/27/07					
10/28/07					
10/29/07					
10/30/07	6.29	4.05	67%	88%	21
10/31/07					
11/01/07					
11/02/07					
11/03/07					
11/04/07					
11/05/07					
11/06/07	6.23	3.33	88%	93%	21
11/07/07					
11/08/07					
11/09/07					
11/10/07					
11/11/07					
11/12/07					
11/13/07	5.23	3.41	98%	84%	21
11/14/07					
11/15/07					
11/16/07					
11/17/07					
11/18/07					
11/19/07					
11/20/07	5.07	14.85	100%	-136%	21
11/21/07					
11/22/07					
11/23/07					
11/24/07					
11/25/07					
11/26/07					
11/27/07	6.09	9.93	100%	-59%	21
11/28/07					
11/29/07					
11/30/07					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
12/01/07					
12/02/07					
12/03/07					
12/04/07	19.49	8.04	100%	-54%	21
12/05/07					
12/06/07					
12/07/07					
12/08/07					
12/09/07					
12/10/07					
12/11/07	10.06	10.28	100%	-103%	21
12/12/07					
12/13/07					
12/14/07					
12/15/07					
12/16/07					
12/17/07					
12/18/07	10.15	7.10	100%	-17%	21
12/19/07					
12/20/07					
12/21/07					
12/22/07					
12/23/07					
12/24/07					
12/25/07					
12/26/07					
12/27/07	24.53	9.16	0%	53%	21
12/28/07					
12/29/07					
12/30/07					
12/31/07					
01/01/08					
01/02/08					
01/03/08	6.67	18.14	40%	-80%	21
01/04/08					
01/05/08					
01/06/08					
01/07/08					
01/08/08	4.60	22.68	36%	-123%	21
01/09/08					
01/10/08					
01/11/08					
01/12/08					
01/13/08					
01/14/08					
01/15/08	6.78	18.28	22%	25%	21
01/16/08					
01/17/08					
01/18/08					
01/19/08					
01/20/08					
01/21/08					
01/22/08					
01/23/08	9.38	44.25	20%	-563%	21
01/24/08					
01/25/08					
01/26/08					
01/27/08					
01/28/08					
01/29/08	2.71	9.39	17%	-104%	21
01/30/08					
01/31/08					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
02/01/08					
02/02/08					
02/03/08					
02/04/08					
02/05/08	4.47	8.44	12%	-24%	21
02/06/08					
02/07/08					
02/08/08					
02/09/08					
02/10/08					
02/11/08					
02/12/08	6.53	3.27	14%	65%	21
02/13/08					
02/14/08					
02/15/08					
02/16/08					
02/17/08					
02/18/08					
02/19/08					
02/20/08	8.56	5.45	12%	-101%	21
02/21/08					
02/22/08					
02/23/08					
02/24/08					
02/25/08					
02/26/08	6.44	5.57	10%	-25%	21
02/27/08					
02/28/08					
02/29/08					
03/01/08					
03/02/08					
03/03/08					
03/04/08	5.36	2.33	33%	64%	21
03/05/08					
03/06/08					
03/07/08					
03/08/08					
03/09/08					
03/10/08					
03/11/08	6.07	3.10	45%	64%	21
03/12/08					
03/13/08					
03/14/08					
03/15/08					
03/16/08					
03/17/08					
03/18/08					
03/19/08	6.94	1.89	75%	71%	21
03/20/08	6.81		75%	100%	21
03/21/08					
03/22/08					
03/23/08					
03/24/08					
03/25/08					
03/26/08	6.45	2.72	98%	49%	21
03/27/08					
03/28/08					
03/29/08					
03/30/08					
03/31/08					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
04/01/08	8.98	3.17	100%	48%	21
04/02/08					
04/03/08					
04/04/08					
04/05/08					
04/06/08					
04/07/08					
04/08/08	13.91	3.10	100%	55%	21
04/09/08					
04/10/08					
04/11/08					
04/12/08					
04/13/08					
04/14/08					
04/15/08	15.32	3.21	100%	50%	21
04/16/08					
04/17/08					
04/18/08					
04/19/08					
04/20/08					
04/21/08					
04/22/08	6.86	5.24	100%	42%	21
04/23/08					
04/24/08					
04/25/08					
04/26/08					
04/27/08					
04/28/08					
04/29/08	6.10	3.31	100%	76%	21
04/30/08					
05/01/08					
05/02/08					
05/03/08					
05/04/08					
05/05/08					
05/06/08	7.17	2.75	100%	82%	21
05/07/08					
05/08/08					
05/09/08					
05/10/08					
05/11/08					
05/12/08					
05/13/08	8.36	3.71	100%	46%	21
05/14/08					
05/15/08					
05/16/08					
05/17/08					
05/18/08					
05/19/08					
05/20/08	7.43	5.07	100%	17%	21
05/21/08					
05/22/08					
05/23/08					
05/24/08					
05/25/08					
05/26/08					
05/27/08					
05/28/08	6.29	3.20	100%	55%	21
05/29/08					
05/30/08					
05/31/08					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
06/01/08					
06/02/08					
06/03/08	6.66	7.03	100%	16%	21
06/04/08					
06/05/08					
06/06/08					
06/07/08					
06/08/08					
06/09/08					
06/10/08	6.66	4.90	95%	34%	21
06/11/08					
06/12/08					
06/13/08					
06/14/08					
06/15/08					
06/16/08					
06/17/08	7.25	3.47	100%	45%	21
06/18/08					
06/19/08					
06/20/08					
06/21/08					
06/22/08					
06/23/08					
06/24/08	8.57	3.55	100%	47%	21
06/25/08					
06/26/08					
06/27/08					
06/28/08					
06/29/08					
06/30/08					
07/01/08					
07/02/08	6.78	3.68	100%	45%	21
07/03/08					
07/04/08					
07/05/08					
07/06/08					
07/07/08					
07/08/08	6.11	4.77	100%	34%	21
07/09/08					
07/10/08					
07/11/08					
07/12/08					
07/13/08					
07/14/08					
07/15/08	23.07	3.75	100%	56%	21
07/16/08					
07/17/08					
07/18/08					
07/19/08					
07/20/08					
07/21/08					
07/22/08	7.10	4.39	100%	35%	21
07/23/08					
07/24/08					
07/25/08					
07/26/08					
07/27/08					
07/28/08					
07/29/08					
07/30/08	5.90	5.63	100%	8%	21
07/31/08					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
08/01/08					
08/02/08					
08/03/08					
08/04/08					
08/05/08	5.76	4.66	100%	80%	21
08/06/08					
08/07/08					
08/08/08					
08/09/08					
08/10/08					
08/11/08					
08/12/08					
08/13/08	6.94	2.75	100%	61%	21
08/14/08					
08/15/08					
08/16/08					
08/17/08					
08/18/08					
08/19/08	5.40	3.37	100%	43%	21
08/20/08					
08/21/08					
08/22/08					
08/23/08					
08/24/08					
08/25/08					
08/26/08	9.09	3.20	100%	44%	21
08/27/08					
08/28/08					
08/29/08					
08/30/08					
08/31/08					
09/01/08					
09/02/08					
09/03/08	10.59	3.09	100%	55%	21
09/04/08					
09/05/08					
09/06/08					
09/07/08					
09/08/08					
09/09/08	12.31	3.09	100%	43%	21
09/10/08					
09/11/08					
09/12/08					
09/13/08					
09/14/08					
09/15/08					
09/16/08	10.58	3.02	100%	67%	21
09/17/08					
09/18/08					
09/19/08					
09/20/08					
09/21/08					
09/22/08					
09/23/08	11.06	2.95	100%	72%	21
09/24/08					
09/25/08					
09/26/08					
09/27/08					
09/28/08					
09/29/08					
09/30/08	10.54	3.06	100%	75%	21

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
10/01/08					
10/02/08					
10/03/08					
10/04/08					
10/05/08					
10/06/08					
10/07/08	33.44	2.78	100%	74%	21
10/08/08					
10/09/08					
10/10/08					
10/11/08					
10/12/08					
10/13/08					
10/14/08	55.56	2.96	100%	73%	21
10/15/08					
10/16/08					
10/17/08					
10/18/08					
10/19/08					
10/20/08					
10/21/08	39.53	3.51	100%	67%	21
10/22/08					
10/23/08					
10/24/08					
10/25/08					
10/26/08					
10/27/08					
10/28/08	28.24	5.70	100%	83%	21
10/29/08					
10/30/08					
10/31/08					
11/01/08					
11/02/08					
11/03/08					
11/04/08	21.27	7.94	100%	86%	21
11/05/08					
11/06/08					
11/07/08					
11/08/08					
11/09/08					
11/10/08					
11/11/08					
11/12/08	26.30	8.56	100%	78%	21
11/13/08					
11/14/08					
11/15/08					
11/16/08					
11/17/08					
11/18/08	9.60	8.88	100%	69%	21
11/19/08					
11/20/08					
11/21/08					
11/22/08					
11/23/08					
11/24/08					
11/25/08	16.50	8.19	100%	61%	21
11/26/08					
11/27/08					
11/28/08					
11/29/08					
11/30/08					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
12/01/08					
12/02/08	16.01	8.05	100%	69%	21
12/03/08					
12/04/08					
12/05/08					
12/06/08					
12/07/08					
12/08/08					
12/09/08					
12/10/08	13.51	6.04	96%	37%	21
12/11/08					
12/12/08					
12/13/08					
12/14/08					
12/15/08					
12/16/08	9.87	5.74	68%	65%	21
12/17/08					
12/18/08					
12/19/08					
12/20/08					
12/21/08					
12/22/08					
12/23/08	4.97	5.27	42%	67%	21
12/24/08					
12/25/08					
12/26/08					
12/27/08					
12/28/08					
12/29/08					
12/30/08	8.40	4.13	24%	69%	21
12/31/08					
01/01/09					
01/02/09					
01/03/09					
01/04/09					
01/05/09					
01/06/09	7.26	3.56	15%	64%	21
01/07/09					
11/10/09		3.43			
11/11/09					
11/12/09					
11/13/09					
11/14/09					
11/15/09					
11/16/09					
11/17/09	15.70	4.29	46%		21
11/18/09					
11/19/09					
11/20/09					
11/21/09					
11/22/09					
11/23/09					
11/24/09	5.81	3.93	61%		21
11/25/09					
11/26/09					
11/27/09					
11/28/09					
11/29/09					
11/30/09					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
12/01/09	7.16	3.51	80%		21
12/02/09					
12/03/09					
12/04/09					
12/05/09					
12/06/09					
12/07/09					
12/08/09					
12/09/09	9.28	2.98	93%	81%	21
12/10/09					
12/11/09					
12/12/09					
12/13/09					
12/14/09					
12/15/09	6.44	3.25	65%	44%	21
12/16/09					
12/17/09					
12/18/09					
12/19/09					
12/20/09					
12/21/09					
12/22/09	5.64	3.06	32%	57%	21
12/23/09					
12/24/09					
12/25/09					
12/26/09					
12/27/09					
12/28/09					
12/29/09					
12/30/09	5.42	2.29	10%	75%	21
12/31/09					
01/01/10					
01/02/10					
01/03/10					
01/04/10					
01/05/10	4.91	2.49	40%	61%	21
01/06/10					
01/07/10					
01/08/10					
01/09/10					
01/10/10					
01/11/10					
01/12/10	5.11	2.78	75%	51%	21
01/13/10					
01/14/10					
01/15/10					
01/16/10					
01/17/10					
01/18/10					
01/19/10					
01/20/10					
01/21/10					
01/22/10					
01/23/10					
01/24/10					
01/25/10					
01/26/10					
01/27/10					
01/28/10					
01/29/10					
01/30/10					
01/31/10					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
02/01/10					
02/02/10					
02/03/10					
02/04/10					
02/05/10					
02/06/10					
02/07/10					
02/08/10					
02/09/10					
02/10/10					
02/11/10					
02/12/10					
02/13/10					
02/14/10					
02/15/10					
02/16/10					
02/17/10					
02/18/10					
02/19/10					
02/20/10					
02/21/10					
02/22/10					
02/23/10					
02/24/10					
02/25/10					
02/26/10					
02/27/10					
02/28/10					
03/01/10					
03/02/10					
03/03/10					
03/04/10					
03/05/10					
03/06/10					
03/07/10					
03/08/10					
03/09/10	4.52	1.86	6%		21
03/10/10					
03/11/10					
03/12/10					
03/13/10					
03/14/10					
03/15/10					
03/16/10	5.58	2.23	0%		21
03/17/10					
03/18/10					
03/19/10					
03/20/10					
03/21/10					
03/22/10					
03/23/10					
03/24/10	5.54	2.26	0%		21
03/25/10					
03/26/10					
03/27/10					
03/28/10					
03/29/10					
03/30/10	10.27	1.85	10%	59%	21
03/31/10					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
04/01/10					
04/02/10					
04/03/10					
04/04/10					
04/05/10					
04/06/10					
04/07/10	9.97	2.04	52%	63%	21
04/08/10					
04/09/10					
04/10/10					
04/11/10					
04/12/10					
04/13/10					
04/14/10					
04/15/10	6.93	2.48	76%	55%	21
04/16/10					
04/17/10					
04/18/10					
04/19/10					
04/20/10					
04/21/10	4.45	2.69	64%	74%	21
04/22/10					
04/23/10					
04/24/10					
04/25/10					
04/26/10					
04/27/10					
04/28/10					
04/29/10	8.03	2.43	39%	76%	21
04/30/10					
05/01/10					
05/02/10					
05/03/10					
05/04/10	4.21	2.26	40%	67%	21
05/05/10					
05/06/10					
05/07/10					
05/08/10					
05/09/10					
05/10/10					
05/11/10	5.70	2.09	47%	53%	21
05/12/10					
05/13/10					
05/14/10					
05/15/10					
05/16/10					
05/17/10					
05/18/10					
05/19/10	7.42	2.18	57%	73%	21
05/20/10					
05/21/10					
05/22/10					
05/23/10					
05/24/10					
05/25/10	6.42	2.11	76%	50%	21
05/26/10					
05/27/10					
05/28/10					
05/29/10					
05/30/10					
05/31/10					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
06/01/10					
06/02/10	7.57	2.42	91%	58%	21
06/03/10					
06/04/10					
06/05/10					
06/06/10					
06/07/10					
06/08/10					
06/09/10	7.39	2.58	92%	65%	21
06/10/10					
06/11/10					
06/12/10					
06/13/10					
06/14/10					
06/15/10	8.28	3.04	91%	53%	21
06/16/10					
06/17/10					
06/18/10					
06/19/10					
06/20/10					
06/21/10					
06/22/10	6.74	2.67	90%	65%	21
06/23/10					
06/24/10					
06/25/10					
06/26/10					
06/27/10					
06/28/10					
06/29/10	5.51	2.72	91%	63%	21
06/30/10					
07/01/10					
07/02/10					
07/03/10					
07/04/10					
07/05/10					
07/06/10					
07/07/10	5.17	2.76	90%	67%	21
07/08/10					
07/09/10					
07/10/10					
07/11/10					
07/12/10					
07/13/10					
07/14/10	7.05	2.81	95%	58%	21
07/15/10					
07/16/10					
07/17/10					
07/18/10					
07/19/10					
07/20/10	7.22	2.47	98%	55%	21
07/21/10					
07/22/10					
07/23/10					
07/24/10					
07/25/10					
07/26/10					
07/27/10	12.09	2.37	100%	54%	21
07/28/10					
07/29/10					
07/30/10					
07/31/10					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
08/01/10					
08/02/10					
08/03/10					
08/04/10					
08/05/10	8.87	2.50	100%	65%	21
08/06/10					
08/07/10					
08/08/10					
08/09/10					
08/10/10	9.12	2.50	100%	65%	21
08/11/10					
08/12/10					
08/13/10					
08/14/10					
08/15/10					
08/16/10					
08/17/10					
08/18/10	9.45	2.50	100%	79%	21
08/19/10					
08/20/10					
08/21/10					
08/22/10					
08/23/10					
08/24/10	17.59	2.53	100%	71%	21
08/25/10					
08/26/10					
08/27/10					
08/28/10					
08/29/10					
08/30/10					
08/31/10	37.28	2.31	100%	75%	21
09/01/10					
09/02/10					
09/03/10					
09/04/10					
09/05/10					
09/06/10					
09/07/10					
09/08/10					
09/09/10					
09/10/10					
09/11/10					
09/12/10					
09/13/10					
09/14/10	12.84	2.17	100%	88%	21
09/15/10					
09/16/10					
09/17/10					
09/18/10					
09/19/10					
09/20/10					
09/21/10	4.38	2.28	100%	94%	21
09/22/10					
09/23/10					
09/24/10					
09/25/10					
09/26/10					
09/27/10					
09/28/10	4.53	2.62	100%	NS	21
09/29/10					
09/30/10					

Table 6-1
8th Street Basin: Total Organic Carbon Removal Efficiency

Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TOC Removal	Travel Time Offset (days)
10/01/10					
10/02/10					
10/03/10					
10/04/10					
10/05/10	6.86	2.26	98%	82%	21
10/06/10					
10/07/10					
10/08/10					
10/09/10					
10/10/10					
10/11/10					
10/12/10	7.58	2.71	92%	38%	21
10/13/10					
10/14/10					
10/15/10					
10/16/10					
10/17/10					
10/18/10					
10/19/10	4.99	3.29	70%	27%	21
10/20/10					
10/21/10					
10/22/10					
10/23/10					
10/24/10					
10/25/10					
10/26/10					
10/27/10	5.67	2.86	83%	58%	21
10/28/10					
10/29/10					
10/30/10					
10/31/10					
			Average: Of data after	56% February 1, 2008	
			Average: Of data after	64% 1-Aug-08	
			Average: Of data after	63% November 1, 2009	

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
08/01/07					
08/02/07					
08/03/07					
08/04/07					
08/05/07					
08/06/07	1.7	4.1			21
08/07/07					
08/08/07					
08/09/07					
08/10/07					
08/11/07					
08/12/07					
08/13/07					
08/14/07	11.0	0.7			21
08/15/07					
08/16/07					
08/17/07					
08/18/07					
08/19/07					
08/20/07					
08/21/07	7.2	4.4			21
08/22/07					
08/23/07					
08/24/07					
08/25/07					
08/26/07					
08/27/07					
08/28/07	1.4	5.2		-212%	21
08/29/07					
08/30/07					
08/31/07					
09/01/07					
09/02/07					
09/03/07					
09/04/07	4.9	5.7	100%	48%	21
09/05/07					
09/06/07					
09/07/07					
09/08/07					
09/09/07					
09/10/07					
09/11/07	4.4	7.3	100%	-1%	21
09/12/07					
09/13/07					
09/14/07					
09/15/07					
09/16/07					
09/17/07					
09/18/07	3.2	2.4	100%	-66%	21
09/19/07					
09/20/07					
09/21/07					
09/22/07					
09/23/07					
09/24/07					
09/25/07	5.4	1.8	100%	64%	21
09/26/07					
09/27/07					
09/28/07					
09/29/07					
09/30/07					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
10/01/07					
10/02/07	9.3	2.5	62%	43%	21
10/03/07					
10/04/07					
10/05/07					
10/06/07					
10/07/07					
10/08/07					
10/09/07	16.6	1.2	100%	62%	21
10/10/07					
10/11/07					
10/12/07					
10/13/07					
10/14/07					
10/15/07					
10/16/07	10.9	12.9	96%	-138%	21
10/17/07					
10/18/07					
10/19/07					
10/20/07					
10/21/07					
10/22/07					
10/23/07	10.1	2.0	83%	79%	21
10/24/07					
10/25/07					
10/26/07					
10/27/07					
10/28/07					
10/29/07					
10/30/07	2.2	1.0	67%	94%	21
10/31/07					
11/01/07					
11/02/07					
11/03/07					
11/04/07					
11/05/07					
11/06/07	3.9	<0.6	88%	97%	21
11/07/07					
11/08/07					
11/09/07					
11/10/07					
11/11/07					
11/12/07					
11/13/07	5.7	<0.6	98%	97%	21
11/14/07					
11/15/07					
11/16/07					
11/17/07					
11/18/07					
11/19/07					
11/20/07	3.8	0.6	100%	71%	21
11/21/07					
11/22/07					
11/23/07					
11/24/07					
11/25/07					
11/26/07					
11/27/07	4.2	<0.6	100%	92%	21
11/28/07					
11/29/07					
11/30/07					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
12/01/07					
12/02/07					
12/03/07					
12/04/07	0.9	<0.6	100%	95%	21
12/05/07					
12/06/07					
12/07/07					
12/08/07					
12/09/07					
12/10/07					
12/11/07	1.8	<0.6	100%	92%	21
12/12/07					
12/13/07					
12/14/07					
12/15/07					
12/16/07					
12/17/07					
12/18/07	2.2	<0.6	100%	93%	21
12/19/07					
12/20/07					
12/21/07					
12/22/07					
12/23/07					
12/24/07					
12/25/07					
12/26/07					
12/27/07	<0.6	1.6	0%	-74%	21
12/28/07					
12/29/07					
12/30/07					
12/31/07					
01/01/08					
01/02/08					
01/03/08	1.9	<0.6	40%	78%	21
01/04/08					
01/05/08					
01/06/08					
01/07/08					
01/08/08	1.1	<0.6	36%	84%	21
01/09/08					
01/10/08					
01/11/08					
01/12/08					
01/13/08					
01/14/08					
01/15/08	1.6	<0.6	22%	9%	21
01/16/08					
01/17/08					
01/18/08					
01/19/08					
01/20/08					
01/21/08					
01/22/08					
01/23/08	2.2	<0.6	20%	81%	21
01/24/08					
01/25/08					
01/26/08					
01/27/08					
01/28/08					
01/29/08	<0.6	<0.6	17%	64%	21
01/30/08					
01/31/08					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
02/01/08					
02/02/08					
02/03/08					
02/04/08					
02/05/08	1.0	0.7	12%	57%	21
02/06/08					
02/07/08					
02/08/08					
02/09/08					
02/10/08					
02/11/08					
02/12/08	2.9	0.9	14%	61%	21
02/13/08					
02/14/08					
02/15/08					
02/16/08					
02/17/08					
02/18/08					
02/19/08					
02/20/08	6.4	0.7	12%	-48%	21
02/21/08					
02/22/08					
02/23/08					
02/24/08					
02/25/08					
02/26/08	2.9	<0.6	10%	69%	21
02/27/08					
02/28/08					
02/29/08					
03/01/08					
03/02/08					
03/03/08					
03/04/08	3.5	<0.6	33%	90%	21
03/05/08					
03/06/08					
03/07/08					
03/08/08					
03/09/08					
03/10/08					
03/11/08	3.6	<0.6	45%	95%	21
03/12/08					
03/13/08					
03/14/08					
03/15/08					
03/16/08					
03/17/08					
03/18/08					
03/19/08	2.5	<0.6	75%	90%	21
03/20/08	1.5		75%	100%	21
03/21/08					
03/22/08					
03/23/08					
03/24/08					
03/25/08					
03/26/08	1.1	<0.6	98%	91%	21
03/27/08					
03/28/08					
03/29/08					
03/30/08					
03/31/08					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
04/01/08	<0.6	<0.6	100%	92%	21
04/02/08					
04/03/08					
04/04/08					
04/05/08					
04/06/08					
04/07/08					
04/08/08	1.4	<0.6	100%	88%	21
04/09/08					
04/10/08					
04/11/08					
04/12/08					
04/13/08					
04/14/08					
04/15/08	1.6	<0.6	100%	73%	21
04/16/08					
04/17/08					
04/18/08					
04/19/08					
04/20/08					
04/21/08					
04/22/08	1.7	<0.6	100%	2%	21
04/23/08					
04/24/08					
04/25/08					
04/26/08					
04/27/08					
04/28/08					
04/29/08	1.4	<0.6	100%	79%	21
04/30/08					
05/01/08					
05/02/08					
05/03/08					
05/04/08					
05/05/08					
05/06/08	1.7	<0.6	100%	82%	21
05/07/08					
05/08/08					
05/09/08					
05/10/08					
05/11/08					
05/12/08					
05/13/08	7.4	<0.6	100%	83%	21
05/14/08					
05/15/08					
05/16/08					
05/17/08					
05/18/08					
05/19/08					
05/20/08	2.6	<0.6	100%	79%	21
05/21/08					
05/22/08					
05/23/08					
05/24/08					
05/25/08					
05/26/08					
05/27/08					
05/28/08	5.5	<0.6	100%	83%	21
05/29/08					
05/30/08					
05/31/08					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
06/01/08					
06/02/08					
06/03/08	4.2	1.0	100%	87%	21
06/04/08					
06/05/08					
06/06/08					
06/07/08					
06/08/08					
06/09/08					
06/10/08	4.2	<0.6	95%	79%	21
06/11/08					
06/12/08					
06/13/08					
06/14/08					
06/15/08					
06/16/08					
06/17/08	2.7	<0.6	100%	90%	21
06/18/08					
06/19/08					
06/20/08					
06/21/08					
06/22/08					
06/23/08					
06/24/08	1.5	<0.6	100%	93%	21
06/25/08					
06/26/08					
06/27/08					
06/28/08					
06/29/08					
06/30/08					
07/01/08					
07/02/08	7.6	<0.6	100%	93%	21
07/03/08					
07/04/08					
07/05/08					
07/06/08					
07/07/08					
07/08/08	4.5	<0.6	100%	89%	21
07/09/08					
07/10/08					
07/11/08					
07/12/08					
07/13/08					
07/14/08					
07/15/08	6.2	<0.6	100%	80%	21
07/16/08					
07/17/08					
07/18/08					
07/19/08					
07/20/08					
07/21/08					
07/22/08	6.2	<0.6	100%	96%	21
07/23/08					
07/24/08					
07/25/08					
07/26/08					
07/27/08					
07/28/08					
07/29/08					
07/30/08	6.8	<0.6	100%	93%	21
07/31/08					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
08/01/08					
08/02/08					
08/03/08					
08/04/08					
08/05/08	6.4	<0.6	100%	95%	21
08/06/08					
08/07/08					
08/08/08					
08/09/08					
08/10/08					
08/11/08					
08/12/08					
08/13/08	4.1	<0.6	100%	95%	21
08/14/08					
08/15/08					
08/16/08					
08/17/08					
08/18/08					
08/19/08	3.1	<0.6	100%	96%	21
08/20/08					
08/21/08					
08/22/08					
08/23/08					
08/24/08					
08/25/08					
08/26/08	0.9	<0.6	100%	95%	21
08/27/08					
08/28/08					
08/29/08					
08/30/08					
08/31/08					
09/01/08					
09/02/08					
09/03/08	1.9	<0.6	100%	93%	21
09/04/08					
09/05/08					
09/06/08					
09/07/08					
09/08/08					
09/09/08	3.2	<0.6	100%	90%	21
09/10/08					
09/11/08					
09/12/08					
09/13/08					
09/14/08					
09/15/08					
09/16/08	1.0	<0.6	100%	68%	21
09/17/08					
09/18/08					
09/19/08					
09/20/08					
09/21/08					
09/22/08					
09/23/08	1.1	<0.6	100%	84%	21
09/24/08					
09/25/08					
09/26/08					
09/27/08					
09/28/08					
09/29/08					
09/30/08	0.8	<0.6	100%	91%	21

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
10/01/08					
10/02/08					
10/03/08					
10/04/08					
10/05/08					
10/06/08					
10/07/08	1.8	<0.6	100%	71%	21
10/08/08					
10/09/08					
10/10/08					
10/11/08					
10/12/08					
10/13/08					
10/14/08	4.7	<0.6	100%	58%	21
10/15/08					
10/16/08					
10/17/08					
10/18/08					
10/19/08					
10/20/08					
10/21/08	3.3	0.8	100%	5%	21
10/22/08					
10/23/08					
10/24/08					
10/25/08					
10/26/08					
10/27/08					
10/28/08	1.5	<0.6	100%	83%	21
10/29/08					
10/30/08					
10/31/08					
11/01/08					
11/02/08					
11/03/08					
11/04/08	2.7	<0.6	100%	94%	21
11/05/08					
11/06/08					
11/07/08					
11/08/08					
11/09/08					
11/10/08					
11/11/08					
11/12/08	8.8	1.5	100%	54%	21
11/13/08					
11/14/08					
11/15/08					
11/16/08					
11/17/08					
11/18/08	4.7	<0.6	100%	79%	21
11/19/08					
11/20/08					
11/21/08					
11/22/08					
11/23/08					
11/24/08					
11/25/08	5.0	<0.6	100%	89%	21
11/26/08					
11/27/08					
11/28/08					
11/29/08					
11/30/08					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
12/01/08					
12/02/08	1.8	3.8	100%	56%	21
12/03/08					
12/04/08					
12/05/08					
12/06/08					
12/07/08					
12/08/08					
12/09/08					
12/10/08	1.7	<0.6	96%	94%	21
12/11/08					
12/12/08					
12/13/08					
12/14/08					
12/15/08					
12/16/08	1.3	<0.6	68%	94%	21
12/17/08					
12/18/08					
12/19/08					
12/20/08					
12/21/08					
12/22/08					
12/23/08	0.8	0.7	42%	60%	21
12/24/08					
12/25/08					
12/26/08					
12/27/08					
12/28/08					
12/29/08					
12/30/08	3.4	0.8	24%	54%	21
12/31/08					
01/01/09					
01/02/09					
01/03/09					
01/04/09					
01/05/09					
01/06/09	1.6	0.9	15%	34%	21
01/07/09					
11/10/09		1.8			
11/11/09					
11/12/09					
11/13/09					
11/14/09					
11/15/09					
11/16/09					
11/17/09	3.0	0.7	46%		21
11/18/09					
11/19/09					
11/20/09					
11/21/09					
11/22/09					
11/23/09					
11/24/09	2.8	0.9	61%		21
11/25/09					
11/26/09					
11/27/09					
11/28/09					
11/29/09					
11/30/09					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
12/01/09	4.2	<0.6	80%		21
12/02/09					
12/03/09					
12/04/09					
12/05/09					
12/06/09					
12/07/09					
12/08/09					
12/09/09	1.1	<0.6	93%	90%	21
12/10/09					
12/11/09					
12/12/09					
12/13/09					
12/14/09					
12/15/09	1.2	<0.6	65%	89%	21
12/16/09					
12/17/09					
12/18/09					
12/19/09					
12/20/09					
12/21/09					
12/22/09	1.8	<0.6	32%	93%	21
12/23/09					
12/24/09					
12/25/09					
12/26/09					
12/27/09					
12/28/09					
12/29/09					
12/30/09	1.2	<0.6	10%	74%	21
12/31/09					
01/01/10					
01/02/10					
01/03/10					
01/04/10					
01/05/10	1.7	<0.6	40%	75%	21
01/06/10					
01/07/10					
01/08/10					
01/09/10					
01/10/10					
01/11/10					
01/12/10	2.9	<0.6	75%	83%	21
01/13/10					
01/14/10					
01/15/10					
01/16/10					
01/17/10					
01/18/10					
01/19/10					
01/20/10					
01/21/10					
01/22/10					
01/23/10					
01/24/10					
01/25/10					
01/26/10					
01/27/10					
01/28/10					
01/29/10					
01/30/10					
01/31/10					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
02/01/10					
02/02/10					
02/03/10					
02/04/10					
02/05/10					
02/06/10					
02/07/10					
02/08/10					
02/09/10					
02/10/10					
02/11/10					
02/12/10					
02/13/10					
02/14/10					
02/15/10					
02/16/10					
02/17/10					
02/18/10					
02/19/10					
02/20/10					
02/21/10					
02/22/10					
02/23/10					
02/24/10					
02/25/10					
02/26/10					
02/27/10					
02/28/10					
03/01/10					
03/02/10					
03/03/10					
03/04/10					
03/05/10					
03/06/10					
03/07/10					
03/08/10					
03/09/10	1.0	<0.6	6%		21
03/10/10					
03/11/10					
03/12/10					
03/13/10					
03/14/10					
03/15/10					
03/16/10	3.0	<0.6	0%		21
03/17/10					
03/18/10					
03/19/10					
03/20/10					
03/21/10					
03/22/10					
03/23/10					
03/24/10	2.6	<0.6	0%		21
03/25/10					
03/26/10					
03/27/10					
03/28/10					
03/29/10					
03/30/10	2.7	<0.6	10%	56%	21
03/31/10					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
04/01/10					
04/02/10					
04/03/10					
04/04/10					
04/05/10					
04/06/10					
04/07/10	2.4	<0.6	52%	90%	21
04/08/10					
04/09/10					
04/10/10					
04/11/10					
04/12/10					
04/13/10					
04/14/10					
04/15/10	0.7	<0.6	76%	88%	21
04/16/10					
04/17/10					
04/18/10					
04/19/10					
04/20/10					
04/21/10	7.2	<0.6	64%	89%	21
04/22/10					
04/23/10					
04/24/10					
04/25/10					
04/26/10					
04/27/10					
04/28/10					
04/29/10	1.9	<0.6	39%	85%	21
04/30/10					
05/01/10					
05/02/10					
05/03/10					
05/04/10	3.9	<0.6	40%	55%	21
05/05/10					
05/06/10					
05/07/10					
05/08/10					
05/09/10					
05/10/10					
05/11/10	2.3	<0.6	47%	93%	21
05/12/10					
05/13/10					
05/14/10					
05/15/10					
05/16/10					
05/17/10					
05/18/10					
05/19/10	1.5	<0.6	57%	80%	21
05/20/10					
05/21/10					
05/22/10					
05/23/10					
05/24/10					
05/25/10	1.8	<0.6	76%	90%	21
05/26/10					
05/27/10					
05/28/10					
05/29/10					
05/30/10					
05/31/10					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
06/01/10					
06/02/10	3.1	<0.6	91%	76%	21
06/03/10					
06/04/10					
06/05/10					
06/06/10					
06/07/10					
06/08/10					
06/09/10	2.9	<0.6	92%	68%	21
06/10/10					
06/11/10					
06/12/10					
06/13/10					
06/14/10					
06/15/10	2.1	<0.6	91%	72%	21
06/16/10					
06/17/10					
06/18/10					
06/19/10					
06/20/10					
06/21/10					
06/22/10	4.6	<0.6	90%	84%	21
06/23/10					
06/24/10					
06/25/10					
06/26/10					
06/27/10					
06/28/10					
06/29/10	3.5	<0.6	91%	79%	21
06/30/10					
07/01/10					
07/02/10					
07/03/10					
07/04/10					
07/05/10					
07/06/10					
07/07/10	4.7	<0.6	90%	76%	21
07/08/10					
07/09/10					
07/10/10					
07/11/10					
07/12/10					
07/13/10					
07/14/10	3.0	<0.6	95%	89%	21
07/15/10					
07/16/10					
07/17/10					
07/18/10					
07/19/10					
07/20/10	3.8	2.2	98%	36%	21
07/21/10					
07/22/10					
07/23/10					
07/24/10					
07/25/10					
07/26/10					
07/27/10	7.2	<0.6	100%	94%	21
07/28/10					
07/29/10					
07/30/10					
07/31/10					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
08/01/10					
08/02/10					
08/03/10					
08/04/10					
08/05/10	3.1	0.8	100%	74%	21
08/06/10					
08/07/10					
08/08/10					
08/09/10					
08/10/10	4.2	0.6	100%	83%	21
08/11/10					
08/12/10					
08/13/10					
08/14/10					
08/15/10					
08/16/10					
08/17/10					
08/18/10	3.4	0.8	100%	89%	21
08/19/10					
08/20/10					
08/21/10					
08/22/10					
08/23/10					
08/24/10	4.1	<0.6	100%	83%	21
08/25/10					
08/26/10					
08/27/10					
08/28/10					
08/29/10					
08/30/10					
08/31/10	17.5	1.5	100%	63%	21
09/01/10					
09/02/10					
09/03/10					
09/04/10					
09/05/10					
09/06/10					
09/07/10					
09/08/10					
09/09/10					
09/10/10					
09/11/10					
09/12/10					
09/13/10					
09/14/10	2.0	<0.6	100%	86%	21
09/15/10					
09/16/10					
09/17/10					
09/18/10					
09/19/10					
09/20/10					
09/21/10	5.2	1.1	100%	94%	21
09/22/10					
09/23/10					
09/24/10					
09/25/10					
09/26/10					
09/27/10					
09/28/10	4.4	2.5	100%	NS	21
09/29/10					
09/30/10					

Table 6-2
8th Street Basin: Total Nitrogen Removal Efficiency

Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 35	% RW at 35-ft bgs Lysimeter	% TN Removal	Travel Time Offset (days)
10/01/10					
10/02/10					
10/03/10					
10/04/10					
10/05/10	6.5	2.8	98%	-36%	21
10/06/10					
10/07/10					
10/08/10					
10/09/10					
10/10/10					
10/11/10					
10/12/10	5.1	3.6	92%	30%	21
10/13/10					
10/14/10					
10/15/10					
10/16/10					
10/17/10					
10/18/10					
10/19/10	4.8	1.8	70%	58%	21
10/20/10					
10/21/10					
10/22/10					
10/23/10					
10/24/10					
10/25/10					
10/26/10					
10/27/10	5.1	2.2	83%	66%	21
10/28/10					
10/29/10					
10/30/10					
10/31/10					
			Average: Of data after	75% February 1, 2008	
			Average: Of data after	75% 1-Aug-08	
			Average: Of data after	74% November 1, 2009	

Table 8-1
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	Source
2004/05	Jul '04											NO DATA
	Aug '04											
	Sep '04											
	Oct '04											
	Nov '04											
	Dec '04											
	Jan '05											
	Feb '05											
	Mar '05											
	Apr '05											
	May '05											
	Jun '05											
2005/06	Jul '05	-26	0.	0.		0.						MEASURED
	Aug '05	-25	0.	0.		0.						
	Sep '05	-24	60.	0.		60.						
	Oct '05	-23	132.6	0.		132.6						
	Nov '05	-22	60.	0.		60.						
	Dec '05	-21	60.	0.		60.						
	Jan '06	-20	116.	0.		116.						
	Feb '06	-19	242.4	0.		242.4						
	Mar '06	-18	325.9	0.		325.9						
	Apr '06	-17	229.5	0.		229.5						
	May '06	-16	50.2	0.		50.2						
	Jun '06	-15	15.	0.		15.						
2006/07	Jul '06	-14	11.9	0.		11.9						HISTORICAL
	Aug '06	-13	6.2	0.		6.2						
	Sep '06	-12	22.	0.		22.						
	Oct '06	-11	40.3	0.		40.3						
	Nov '06	-10	42.	0.		42.						
	Dec '06	-9	79.8	0.		79.8						
	Jan '07	-8	58.8	0.		58.8						
	Feb '07	-7	167.4	0.		167.4						
	Mar '07	-6	38.3	0.		38.3						
	Apr '07	-5	89.	0.		89.						
	May '07	-4	42.	0.		42.						
	Jun '07	-3	42.	0.		42.						
2007/08	Jul '07	-2	16.	0.		16.						
	Aug '07	-1	16.	0.		16.	1,963	0.	0	1963	0%	EXTEND START-UP
	Sep '07	1	17.	0.		17.	1,980	128.1	128	2108	6%	
	Oct '07	2	42.	0.		42.	2,022	109.	237	2259	10%	
	Nov '07	3	81.	0.		81.	2,103	161.	398	2501	16%	
	Dec '07	4	224.	0.		224.	2,327	0.	398	2725	15%	
	Jan '08	5	335.	0.		335.	2,662	1.	399	3061	13%	
	Feb '08	6	98.	0.		98.	2,760	157.	556	3316	17%	
	Mar '08	7	21.	0.		21.	2,781	164.	720	3501	21%	
	Apr '08	8	11.	0.		11.	2,792	90.	810	3602	22%	
	May '08	9	90.	0.		90.	2,882	158.	968	3850	25%	
	Jun '08	10	15.	0.		15.	2,897	86.	1,054	3951	27%	
2008/09	Jul '08	11	29.	0.		29.	2,926	224.	1,278	4204	30%	
	Aug '08	12	15.	0.		15.	2,941	128.	1,406	4347	32%	
	Sep '08	13	15.	0.		15.	2,956	0.	1,406	4362	32%	
	Oct '08	14	16.	0.		16.	2,972	0.	1,406	4378	32%	
	Nov '08	15	137.	0.		137.	3,109	0.	1,406	4515	31%	
	Dec '08	16	352.	0.		352.	3,461	0.	1,406	4867	29%	
	Jan '09	17	35.	0.		35.	3,496	0.	1,406	4902	29%	
	Feb '09	18	458.	0.		458.	3,954	0.	1,406	5360	26%	
	Mar '09	19	21.	0.		21.	3,975	0.	1,406	5381	26%	
	Apr '09	20	15.	0.		15.	3,990	0.	1,406	5396	26%	
	May '09	21	16.	0.		16.	4,006	0.	1,406	5412	26%	
	Jun '09	22	0.	0.		0.	4,006	0.	1,406	5412	26%	
2009/10	Jul '09	23	19.	0.		19.	4,025	0.	1,406	5431	26%	
	Aug '09	24	33.	0.		33.	4,058	24.	1,430	5488	26%	
	Sep '09	25	18.	0.		18.	4,076	0.	1,430	5506	26%	
	Oct '09	26	74.	0.	310.2	384.2	4,461	0.	1,430	5891	24%	SUP DATA
	Nov '09	27	93.	0.	310.2	403.2	4,864	133.	1,563	6427	24%	
	Dec '09	28	303.	0.	310.2	613.2	5,477	93.	1,656	7133	23%	
	Jan '10	29	387.	0.	310.2	697.2	6,174	102.	1,758	7932	22%	
	Feb '10	30	477.	3.	310.2	790.2	6,964	0.	1,758	8722	20%	
	Mar '10	31	73.	0.	310.2	383.2	7,348	114.	1,872	9220	20%	
	Apr '10	32	206.	0.	310.2	516.2	7,864	100.	1,972	9836	20%	
	May '10	33	34.	0.	310.2	344.2	8,208	199.	2,171	10379	21%	
	Jun '10	34	0.	0.	310.2	310.2	8,518	302.	2,473	10991	23%	

Table 8-1
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	Source
2010/11	Jul '10	35	30.	0.	310.2	340.2	8,858	218.	2,691	11550	23%	ADDED
	Aug '10	36	28.	0.	310.2	338.2	9,197	106.	2,797	11994	23%	
	Sep '10	37	36.	0.	310.2	346.2	9,543	177.	2,974	12517	24%	
	Oct '10	38	89.	0.	310.2	399.2	9,942	288.	3,262	13204	25%	
	Nov '10	39	187.	0.	310.2	497.2	10,439	163.	3,425	13864	25%	
	Dec '10	40	499.	0.	310.2	809.2	11,248	20.	3,445	14694	23%	
	Jan '11	41	110.	0.	310.2	420.2	11,669	167.	3,612	15281	24%	
	Feb '11	42	276.	0.	310.2	586.2	12,255	83.	3,695	15950	23%	
	Mar '11	43	96.		310.2	406.2	12,661	100.	3,795	16456	23%	PLANNED
	Apr '11	44	110.		310.2	420.2	13,081	150.	3,945	17026	23%	
	May '11	45	46.		310.2	356.2	13,437	150.	4,095	17533	23%	
	Jun '11	46	14.		310.2	324.2	13,762	50.	4,145	17907	23%	
2011/12	Jul '11	47	18.		310.2	328.2	14,090	220.	4,365	18455	24%	
	Aug '11	48	16.		310.2	326.2	14,416	220.	4,585	19001	24%	
	Sep '11	49	28.		310.2	338.2	14,754	220.	4,805	19559	25%	
	Oct '11	50	66.		310.2	376.2	15,131	200.	5,005	20136	25%	
	Nov '11	51	100.		310.2	410.2	15,541	100.	5,105	20646	25%	
	Dec '11	52	253.		310.2	563.2	16,104	0.	5,105	21209	24%	
	Jan '12	53	174.		310.2	484.2	16,588	50.	5,155	21743	24%	
	Feb '12	54	286.		310.2	596.2	17,184	0.	5,155	22339	23%	
	Mar '12	55	96.		310.2	406.2	17,591	100.	5,255	22846	23%	
	Apr '12	56	110.		310.2	420.2	18,011	150.	5,405	23416	23%	
	May '12	57	46.		310.2	356.2	18,367	150.	5,555	23922	23%	
	Jun '12	58	14.		310.2	324.2	18,691	50.	5,605	24296	23%	
2012/13	Jul '12	59	18.		310.2	328.2	19,019	220.	5,825	24845	23%	
	Aug '12	60	16.		310.2	326.2	19,346	220.	6,045	25391	24%	
	Sep '12	61	28.		310.2	338.2	19,684	220.	6,265	25949	24%	
	Oct '12	62	66.		310.2	376.2	20,060	200.	6,465	26525	24%	
	Nov '12	63	100.		310.2	410.2	20,470	100.	6,565	27035	24%	
	Dec '12	64	253.		310.2	563.2	21,033	0.	6,565	27599	24%	
	Jan '13	65	174.		310.2	484.2	21,518	50.	6,615	28133	24%	
	Feb '13	66	286.		310.2	596.2	22,114	0.	6,615	28729	23%	
	Mar '13	67	96.		310.2	406.2	22,520	100.	6,715	29235	23%	
	Apr '13	68	110.		310.2	420.2	22,940	150.	6,865	29805	23%	
	May '13	69	46.		310.2	356.2	23,296	150.	7,015	30312	23%	
	Jun '13	70	14.		310.2	324.2	23,621	50.	7,065	30686	23%	
2013/14	Jul '13	71	18.		310.2	328.2	23,949	220.	7,285	31234	23%	
	Aug '13	72	16.		310.2	326.2	24,275	220.	7,505	31780	24%	
	Sep '13	73	28.		310.2	338.2	24,613	220.	7,725	32338	24%	
	Oct '13	74	66.		310.2	376.2	24,990	200.	7,925	32915	24%	
	Nov '13	75	100.		310.2	410.2	25,400	100.	8,025	33425	24%	
	Dec '13	76	253.		310.2	563.2	25,963	0.	8,025	33988	24%	
	Jan '14	77	174.		310.2	484.2	26,447	50.	8,075	34522	23%	
	Feb '14	78	286.		310.2	596.2	27,043	0.	8,075	35118	23%	
	Mar '14	79	96.		310.2	406.2	27,450	100.	8,175	35625	23%	
	Apr '14	80	110.		310.2	420.2	27,870	150.	8,325	36195	23%	
	May '14	81	46.		310.2	356.2	28,226	150.	8,475	36701	23%	
	Jun '14	82	14.		310.2	324.2	28,550	50.	8,525	37075	23%	
2014/15	Jul '14	83	18.		310.2	328.2	28,878	220.	8,745	37624	23%	
	Aug '14	84	16.		310.2	326.2	29,205	220.	8,965	38170	23%	
	Sep '14	85	28.		310.2	338.2	29,543	220.	9,185	38728	24%	
	Oct '14	86	66.		310.2	376.2	29,919	200.	9,385	39304	24%	
	Nov '14	87	100.		310.2	410.2	30,329	100.	9,485	39814	24%	
	Dec '14	88	253.		310.2	563.2	30,892	0.	9,485	40378	23%	
	Jan '15	89	174.		310.2	484.2	31,377	50.	9,535	40912	23%	
	Feb '15	90	286.		310.2	596.2	31,973	0.	9,535	41508	23%	
	Mar '15	91	96.		310.2	406.2	32,379	100.	9,635	42014	23%	
	Apr '15	92	110.		310.2	420.2	32,799	150.	9,785	42584	23%	
	May '15	93	46.		310.2	356.2	33,155	150.	9,935	43091	23%	
	Jun '15	94	14.		310.2	324.2	33,480	50.	9,985	43465	23%	
2015/16	Jul '15	95	18.		310.2	328.2	33,808	220.	10,205	44013	23%	
	Aug '15	96	16.		310.2	326.2	34,134	220.	10,425	44559	23%	
	Sep '15	97	28.		310.2	338.2	34,412	220.	10,645	45057	24%	
	Oct '15	98	66.		310.2	376.2	34,656	200.	10,845	45501	24%	
	Nov '15	99	100.		310.2	410.2	35,006	100.	10,945	45951	24%	
	Dec '15	100	253.		310.2	563.2	35,509	0.	10,945	46454	24%	
	Jan '16	101	174.		310.2	484.2	35,878	50.	10,995	46873	23%	
	Feb '16	102	286.		310.2	596.2	36,231	0.	10,995	47226	23%	
	Mar '16	103	96.		310.2	406.2	36,312	100.	11,095	47407	23%	
	Apr '16	104	110.		310.2	420.2	36,502	150.	11,245	47747	24%	
	May '16	105	46.		310.2	356.2	36,808	150.	11,395	48204	24%	
	Jun '16	106	14.		310.2	324.2	37,118	50.	11,445	48563	24%	

Table 8-1
RWC Management Plan for 8th Street Basins
(120-month averaging period)

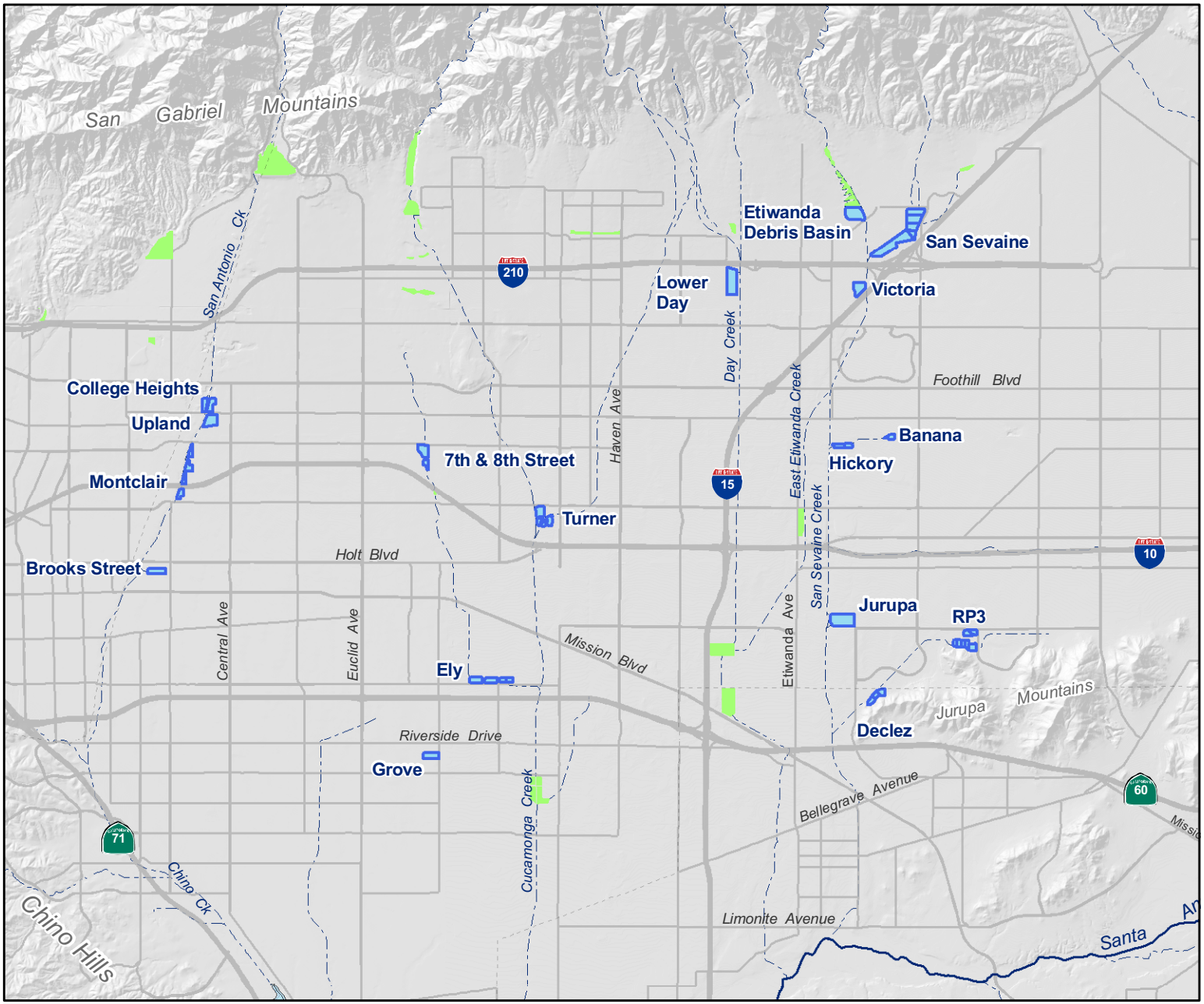
Calculation of Recycled Water Contribution (RWC) from Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

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	Source
2016/17	Jul '16	107	18.		310.2	328.2	37,434	220.	11,665	49099	24%	
	Aug '16	108	16.		310.2	326.2	37,754	220.	11,885	49639	24%	
	Sep '16	109	28.		310.2	338.2	38,070	220.	12,105	50175	24%	PLANNED
	Oct '16	110	66.		310.2	376.2	38,406	200.	12,305	50711	24%	
	Nov '16	111	100.		310.2	410.2	38,774	100.	12,405	51179	24%	
	Dec '16	112	253.		310.2	563.2	39,258	0.	12,405	51663	24%	
	Jan '17	113	174.		310.2	484.2	39,683	50.	12,455	52138	24%	
	Feb '17	114	286.		310.2	596.2	40,112	0.	12,455	52567	24%	
	Mar '17	115	96.		310.2	406.2	40,480	100.	12,555	53035	24%	
	Apr '17	116	110.		310.2	420.2	40,811	150.	12,705	53516	24%	
	May '17	117	46.		310.2	356.2	41,125	150.	12,855	53980	24%	
	Jun '17	118	14.		310.2	324.2	41,407	50.	12,905	54313	24%	
2017/18	Jul '17	119	18.		310.2	328.2	41,720	220.	13,125	54845	24%	
	Aug '17	120	16.		310.2	326.2	42,030	220.	13,345	55375	24%	
	Sep '17	121	28.		310.2	338.2	42,351	220.	13,437	55788	24%	
	Oct '17	122	66.		310.2	376.2	42,685	200.	13,528	56213	24%	
	Nov '17	123	100.		310.2	410.2	43,014	100.	13,467	56481	24%	
	Dec '17	124	253.		310.2	563.2	43,354	0.	13,467	56821	24%	
	Jan '18	125	174.		310.2	484.2	43,503	50.	13,516	57019	24%	
	Feb '18	126	286.		310.2	596.2	44,001	0.	13,359	57360	23%	
	Mar '18	127	96.		310.2	406.2	44,386	100.	13,295	57681	23%	
	Apr '18	128	110.		310.2	420.2	44,795	150.	13,355	58150	23%	
	May '18	129	46.		310.2	356.2	45,062	150.	13,347	58409	23%	
	Jun '18	130	14.		310.2	324.2	45,371	50.	13,311	58682	23%	
2018/19	Jul '18	131	18.		310.2	328.2	45,670	220.	13,307	58977	23%	
	Aug '18	132	16.		310.2	326.2	45,981	220.	13,399	59380	23%	
	Sep '18	133	28.		310.2	338.2	46,304	220.	13,619	59923	23%	
	Oct '18	134	66.		310.2	376.2	46,665	200.	13,819	60484	23%	
	Nov '18	135	100.		310.2	410.2	46,938	100.	13,919	60857	23%	
	Dec '18	136	253.		310.2	563.2	47,149	0.	13,919	61068	23%	
	Jan '19	137	174.		310.2	484.2	47,598	50.	13,969	61567	23%	
	Feb '19	138	286.		310.2	596.2	47,737	0.	13,969	61706	23%	
	Mar '19	139	96.		310.2	406.2	48,122	100.	14,069	62191	23%	
	Apr '19	140	110.		310.2	420.2	48,527	150.	14,219	62746	23%	
	May '19	141	46.		310.2	356.2	48,867	150.	14,369	63236	23%	
	Jun '19	142	14.		310.2	324.2	49,191	50.	14,419	63610	23%	
2019/20	Jul '19	143	18.		310.2	328.2	49,501	220.	14,639	64140	23%	
	Aug '19	144	16.		310.2	326.2	49,794	220.	14,835	64629	23%	
	Sep '19	145	28.		310.2	338.2	50,114	220.	15,055	65169	23%	
	Oct '19	146	66.		310.2	376.2	50,106	200.	15,255	65361	23%	
	Nov '19	147	100.		310.2	410.2	50,113	100.	15,222	65335	23%	
	Dec '19	148	253.		310.2	563.2	50,063	0.	15,129	65192	23%	
	Jan '20	149	174.		310.2	484.2	49,850	50.	15,077	64927	23%	
	Feb '20	150	286.		310.2	596.2	49,656	0.	15,077	64733	23%	
	Mar '20	151	96.		310.2	406.2	49,679	100.	15,063	64742	23%	
	Apr '20	152	110.		310.2	420.2	49,583	150.	15,113	64696	23%	
	May '20	153	46.		310.2	356.2	49,595	150.	15,064	64659	23%	PLANNED
	Jun '20	154	14.		310.2	324.2	49,609	50.	14,812	64421	23%	
2020/21	Jul '20	155	18.		310.2	328.2	49,597	220.	14,814	64411	23%	
	Aug '20	156	16.		310.2	326.2	49,585	220.	14,928	64513	23%	
	Sep '20	157	28.		310.2	338.2	49,577	220.	14,971	64548	23%	
	Oct '20	158	66.		310.2	376.2	49,554	200.	14,883	64437	23%	
	Nov '20	159	100.		310.2	410.2	49,467	100.	14,820	64287	23%	
	Dec '20	160	253.		310.2	563.2	49,221	0.	14,800	64021	23%	
	Jan '21	161	174.		310.2	484.2	49,285	50.	14,683	63968	23%	
	Feb '21	162	286.		310.2	596.2	49,295	0.	14,600	63895	23%	
	Mar '21	163	96.		310.2	406.2	49,295	100.	14,600	63895	23%	
	Apr '21	164	110.		310.2	420.2	49,295	150.	14,600	63895	23%	
	May '21	165	46.		310.2	356.2	49,295	150.	14,600	63895	23%	
	Jun '21	166	14.		310.2	324.2	49,295	50.	14,600	63895	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.
RWC maximum = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC) determined from a recharge site's start-up period

FIGURES



Main Map Features

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

N S

0 2 4 Miles

0 4 8 Kilometers

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Chino Basin Recycled Water Groundwater Recharge Programs

Basin Locations

Figure 1-1

Figure 2-1
Location of Facilities at 8th Street Basin

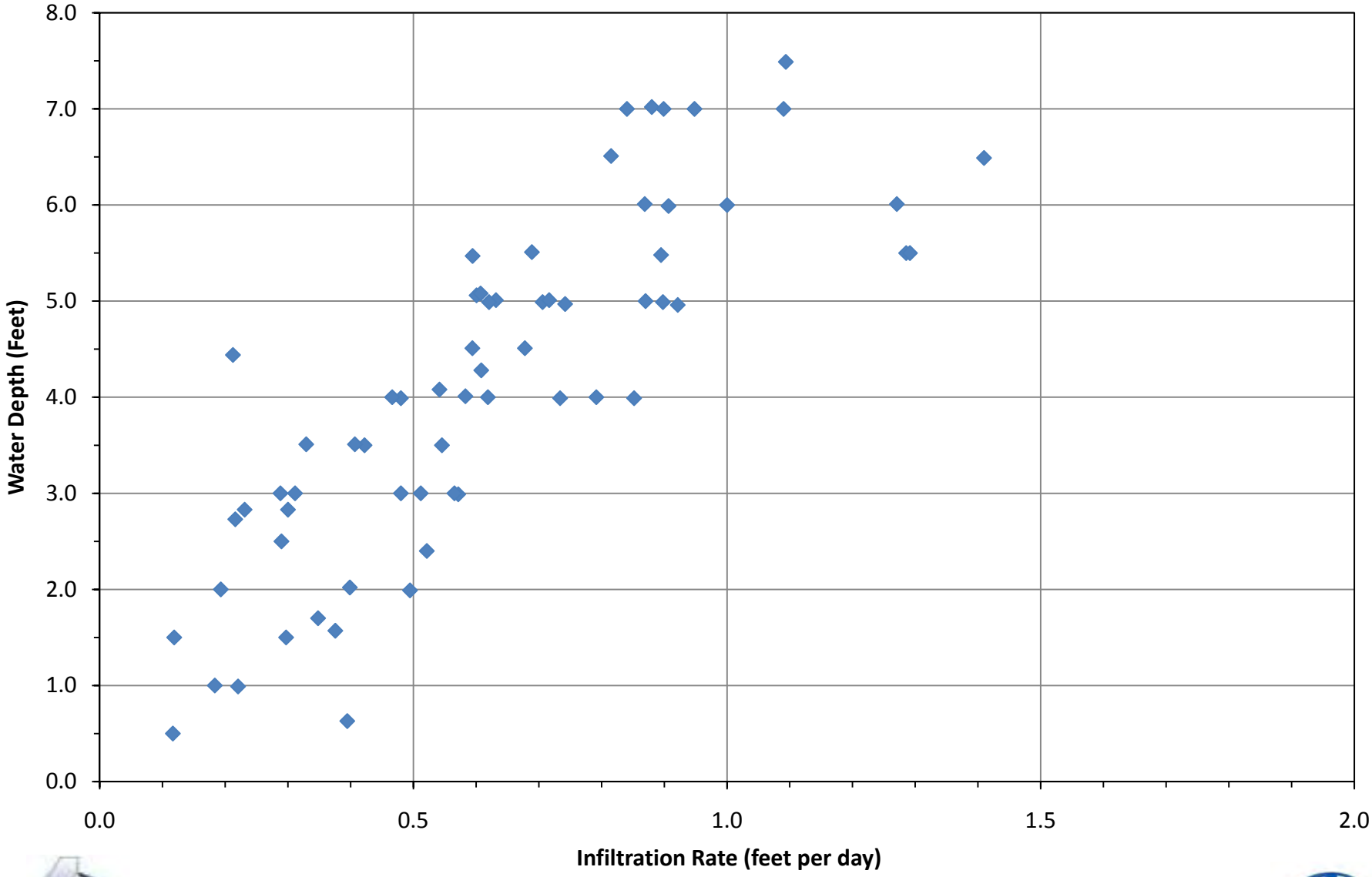


FIGURE 3-1
8TH STREET BASIN
INFILTRATION RATE VS. WATER DEPTH

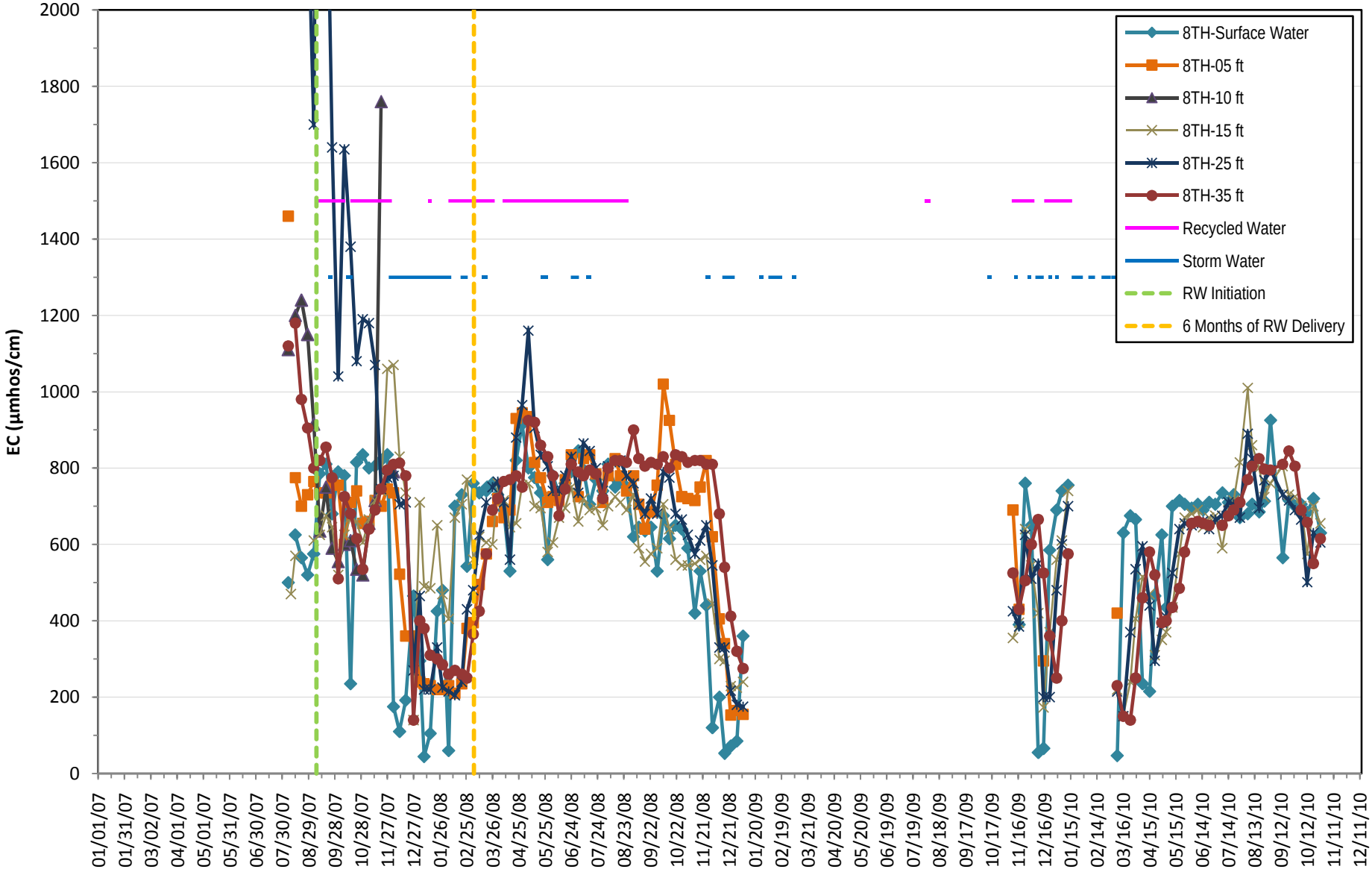


FIGURE 4-1
8TH STREET BASIN LYSIMETERS:
ELECTRICAL CONDUCTIVITY TIME HISTORY

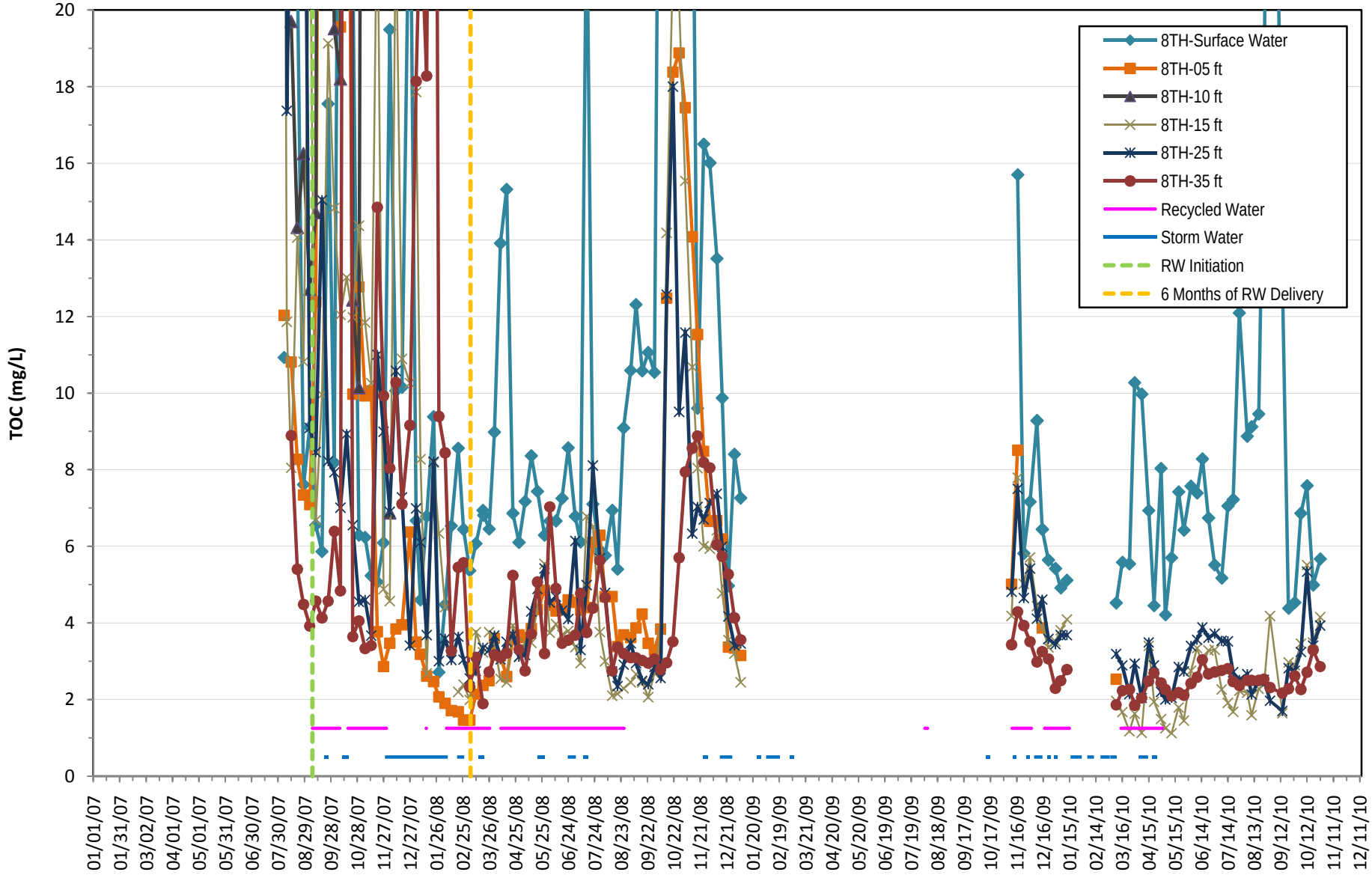


FIGURE 4-2
8TH STREET BASIN LYSIMETERS:
TOTAL ORGANIC CARBON TIME HISTORY

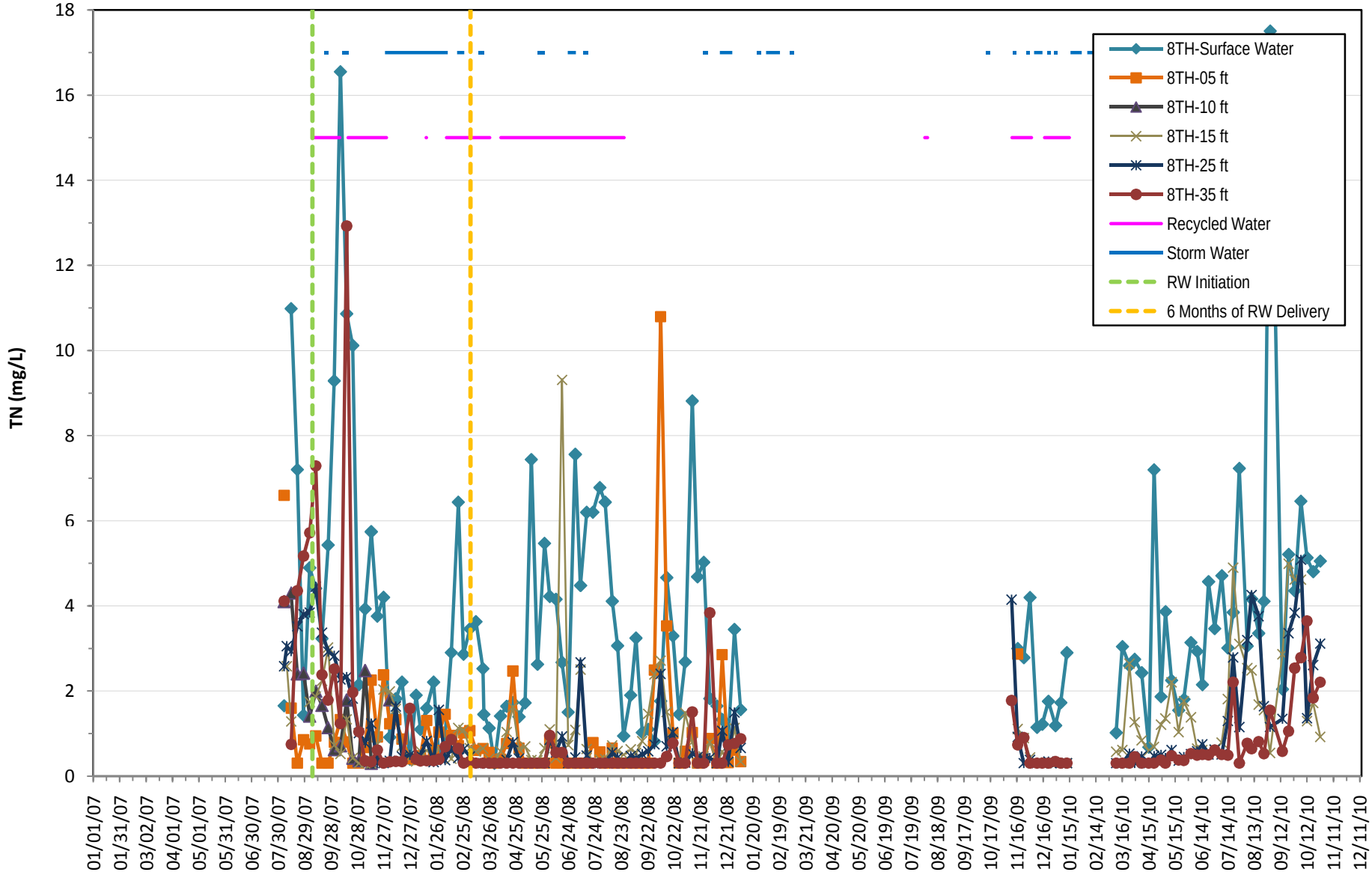


FIGURE 4-3
8TH STREET BASIN LYSIMETERS:
TOTAL NITROGEN TIME HISTORY

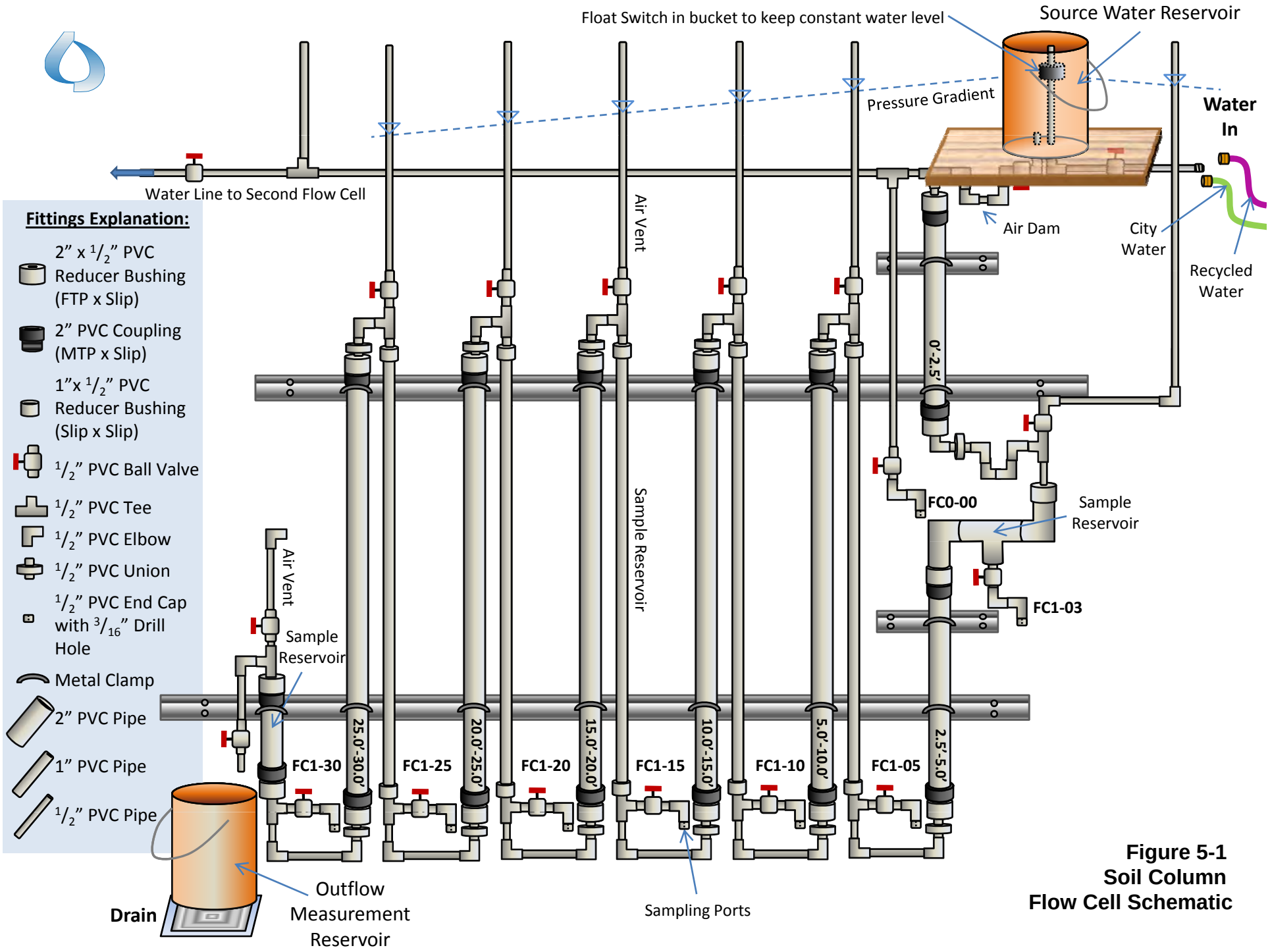


Figure 5-1
Soil Column
Flow Cell Schematic

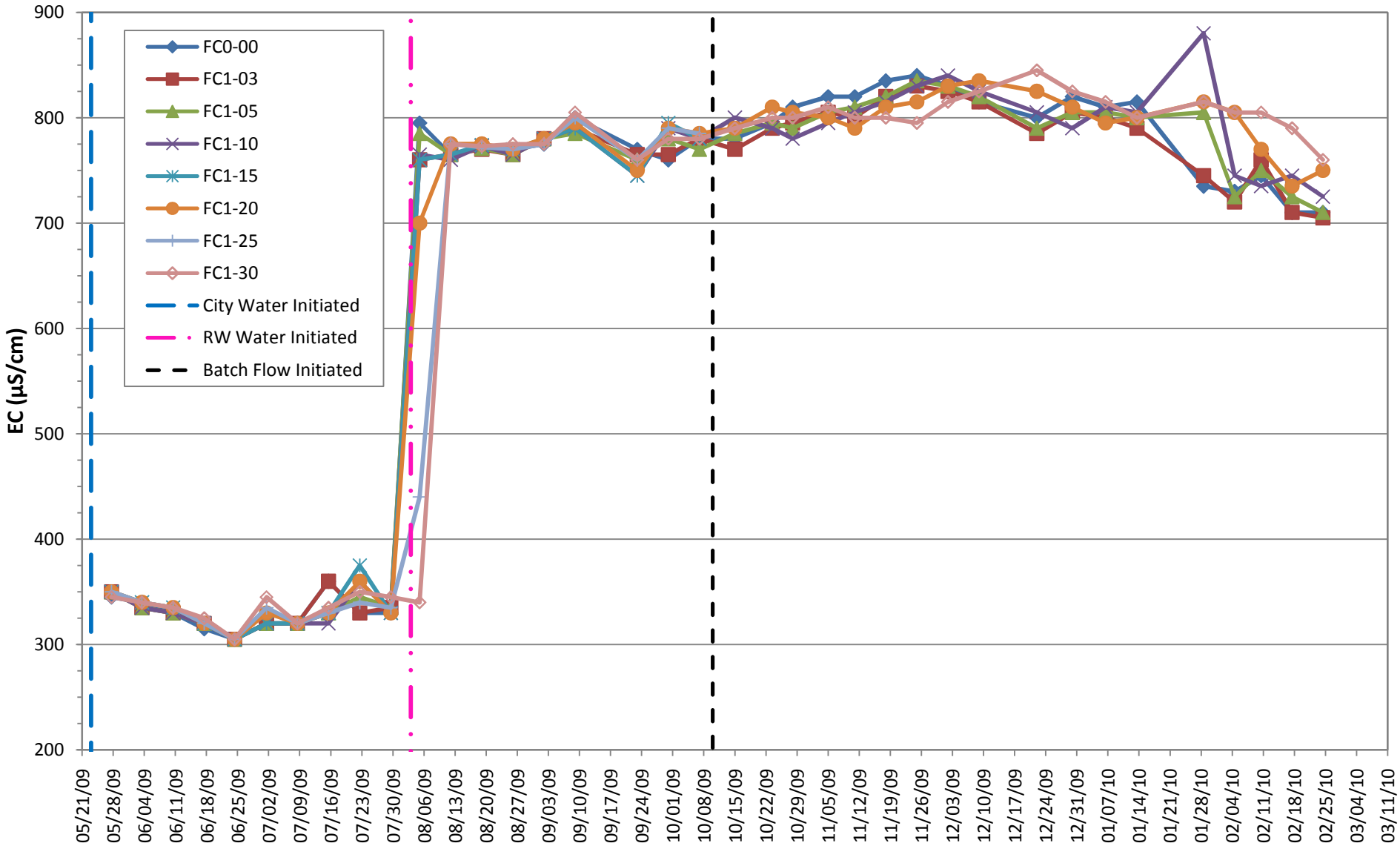


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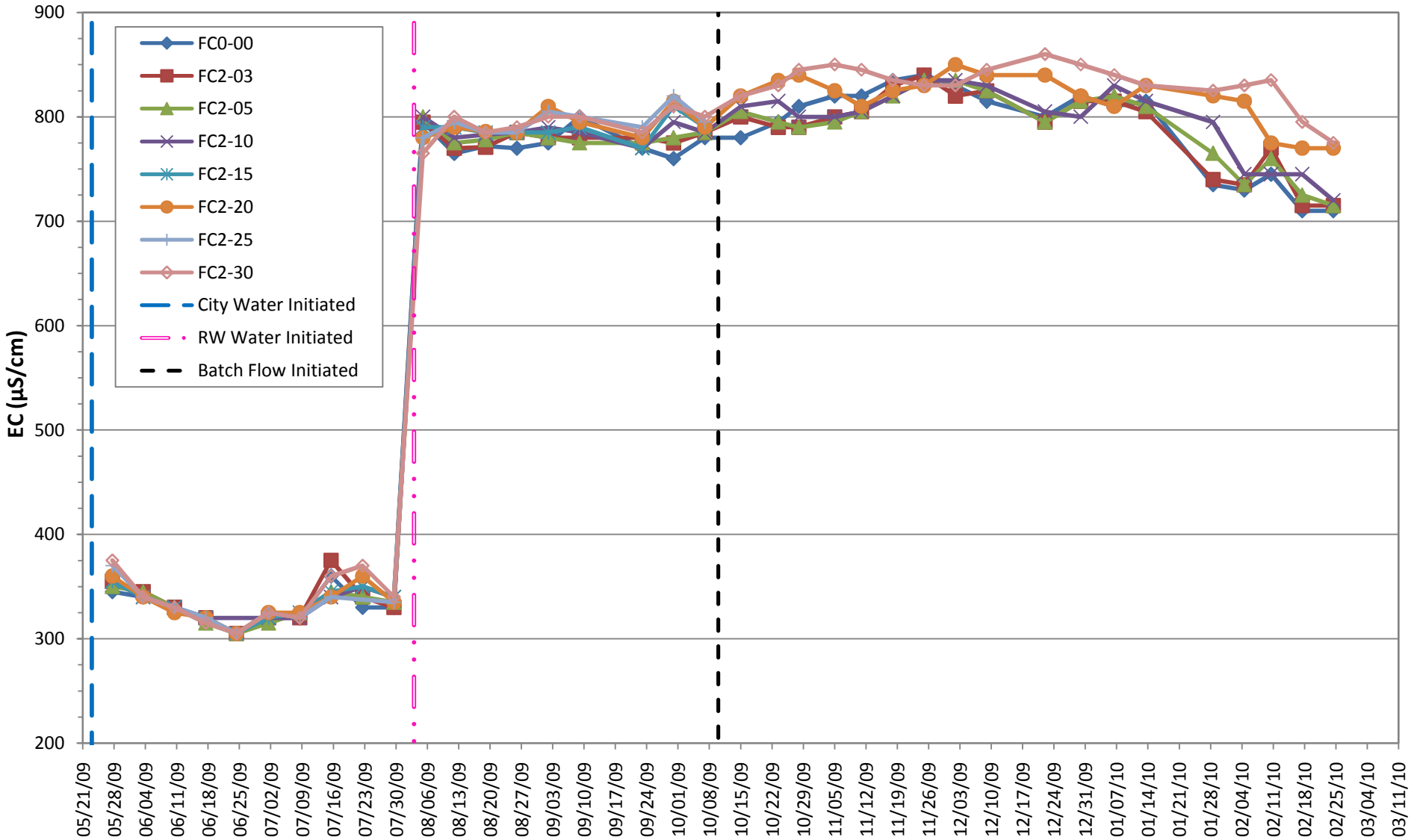
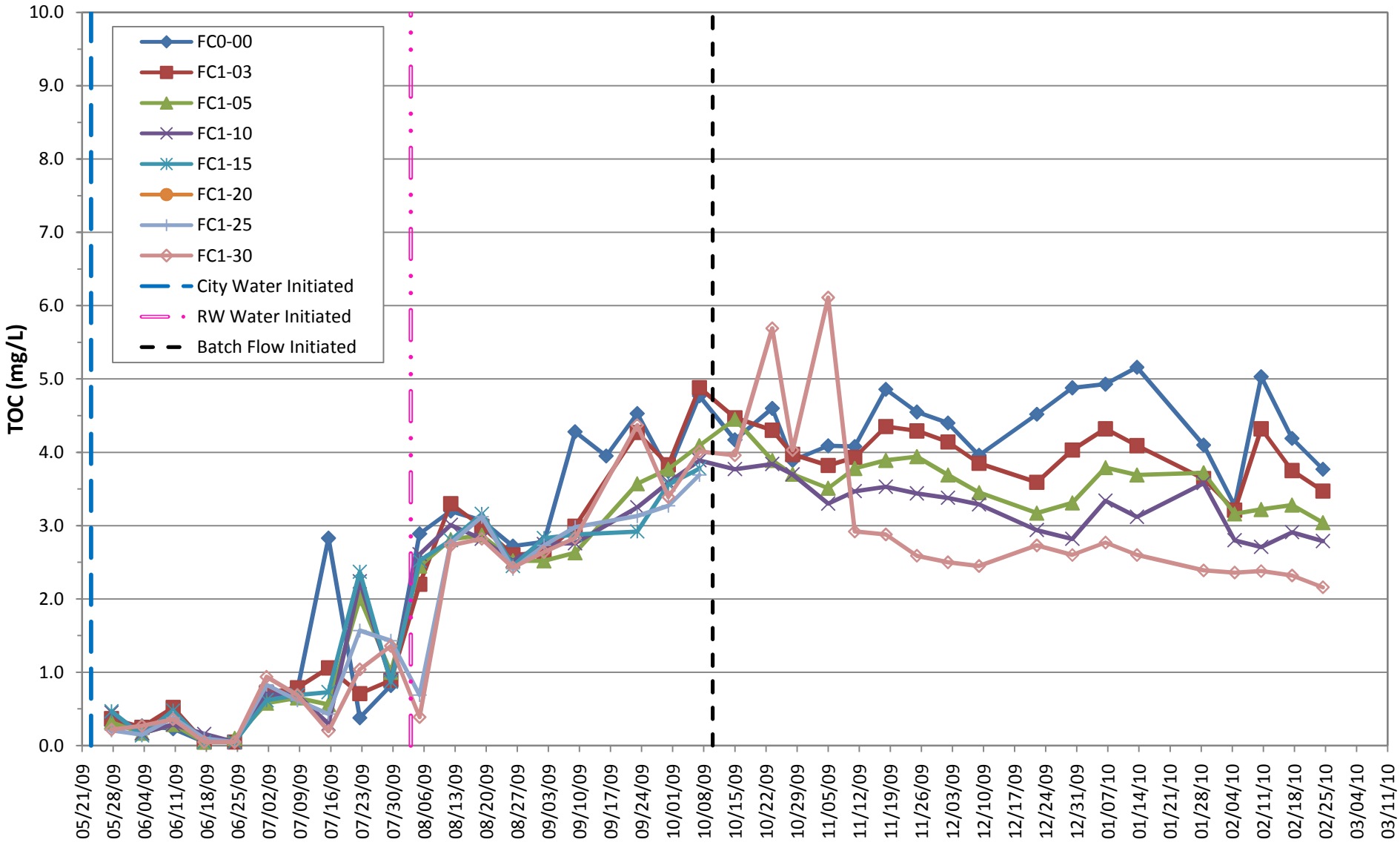
FIGURE 5-2A
Silica Sand Train
Electrical Conductivity Time Series



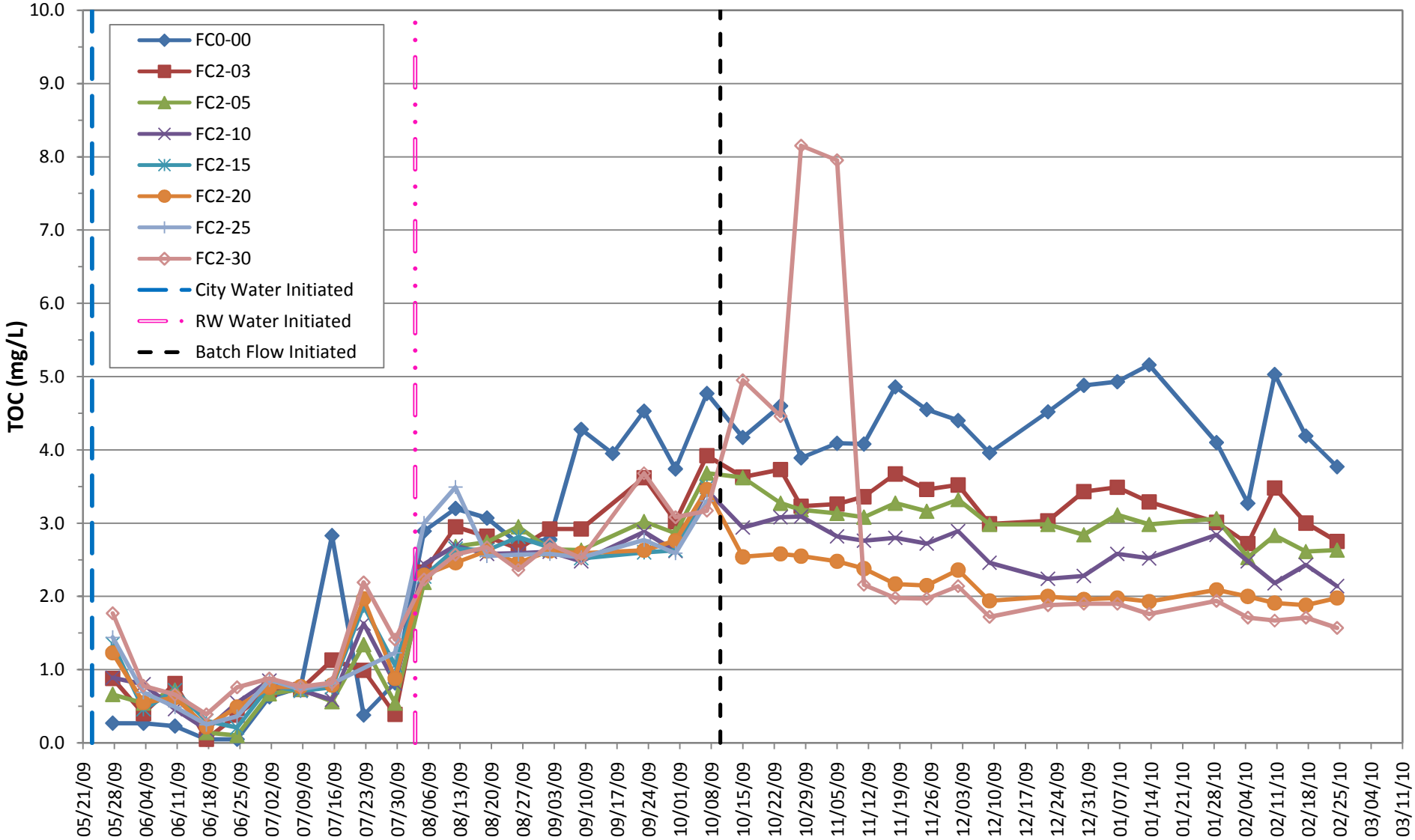
Inland Empire UTILITIES AGENCY

FIGURE 5-2B
8th Street Basin Sediment Train
Electrical Conductivity Time Series



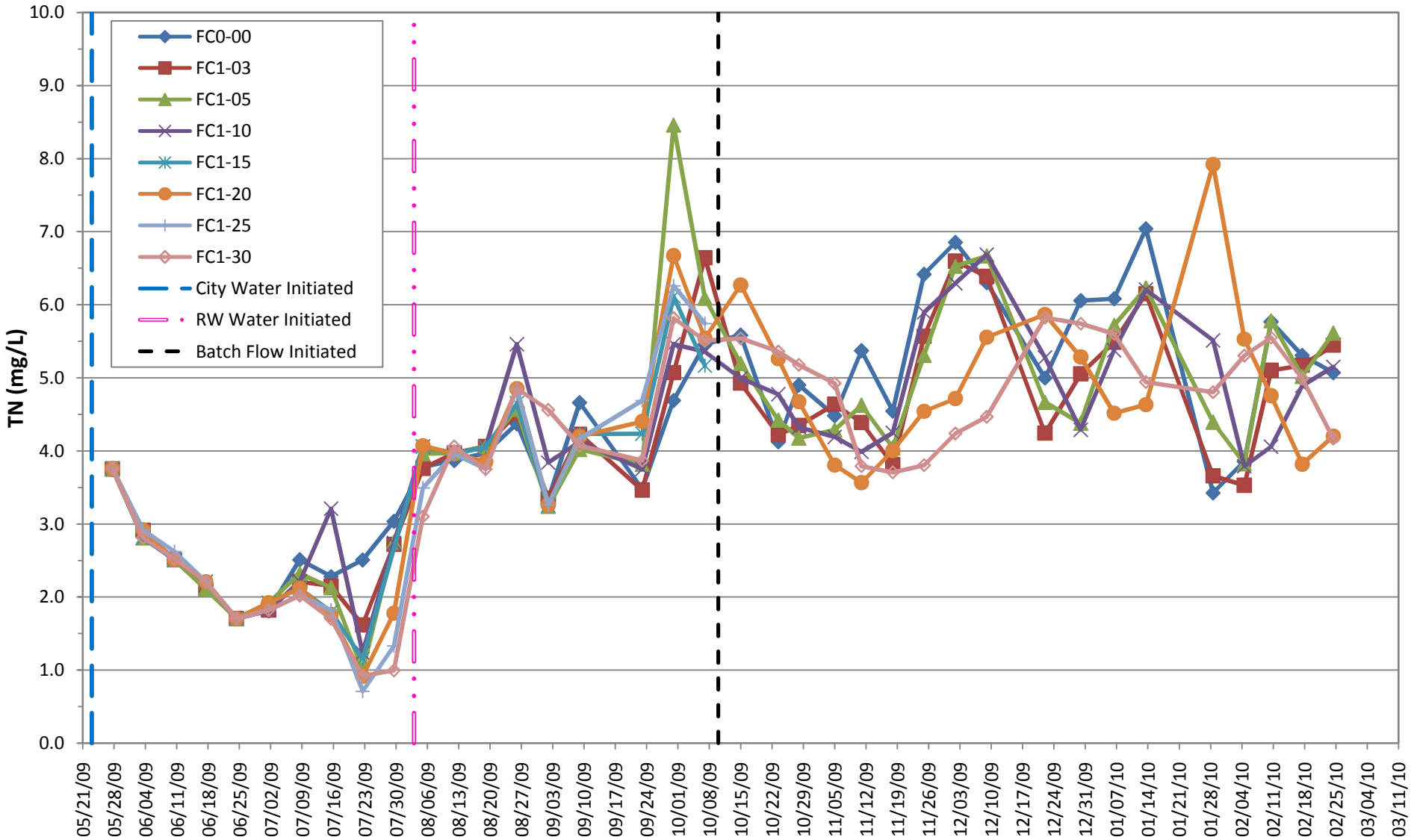
Inland Empire Utilities Agency

FIGURE 5-3A
Silica Sand Train
Total Organic Carbon Time Series



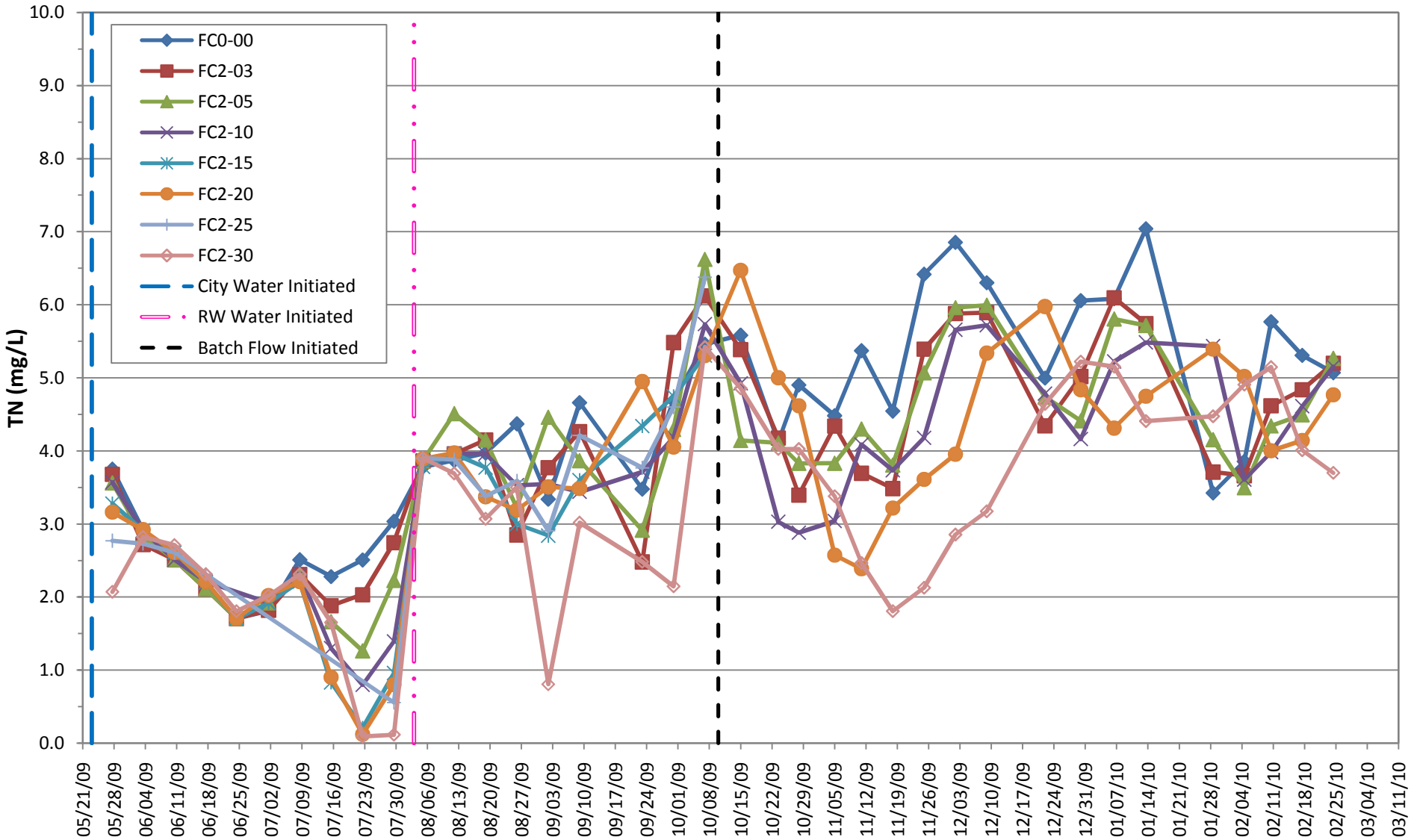
Inland Empire UTILITIES AGENCY

FIGURE 5-3B
8th Street Basin Sediment Train
Total Organic Carbon Time Series



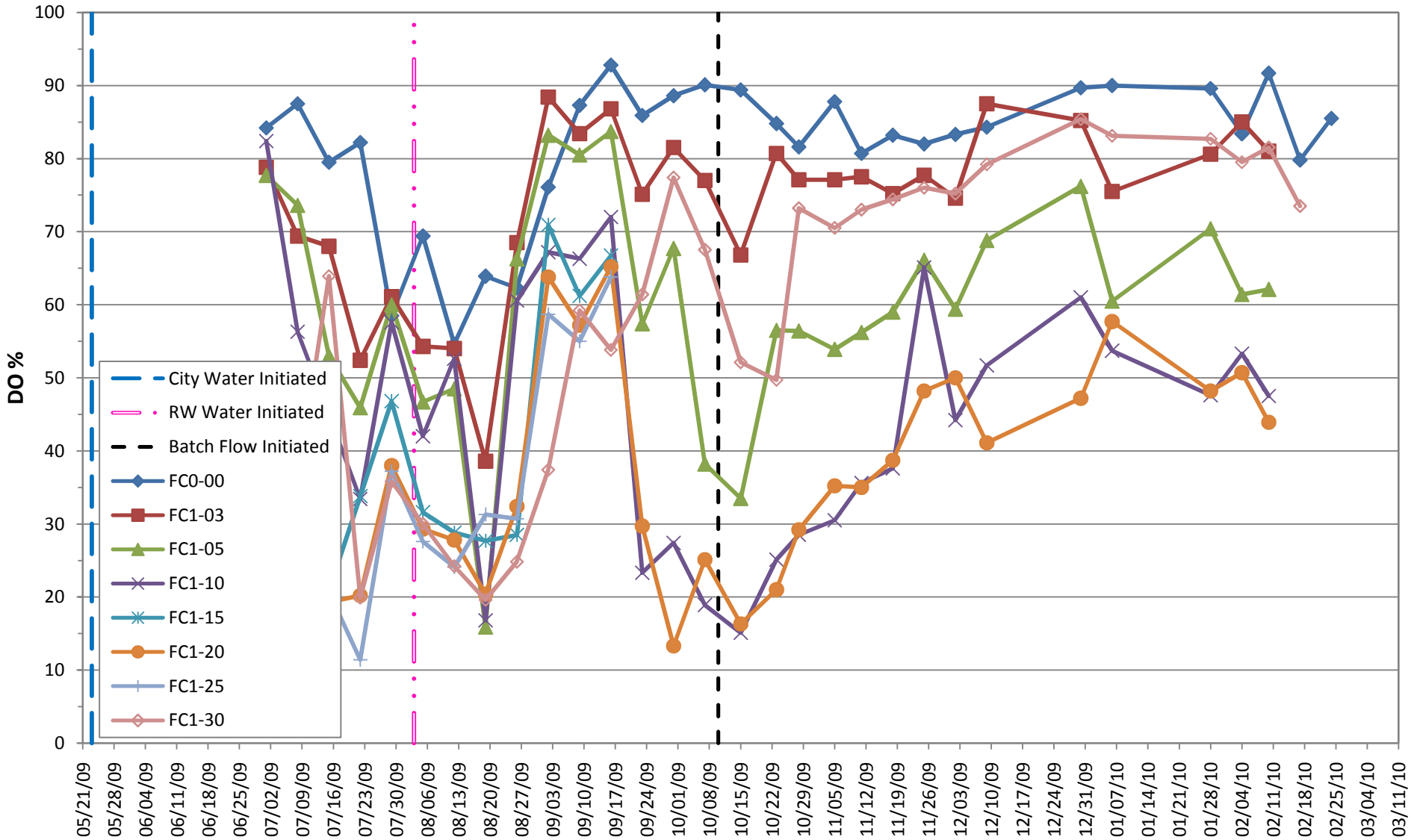
Inland Empire UTILITIES AGENCY

FIGURE 5-4A
Silica Sand Train
Total Nitrogen Time Series



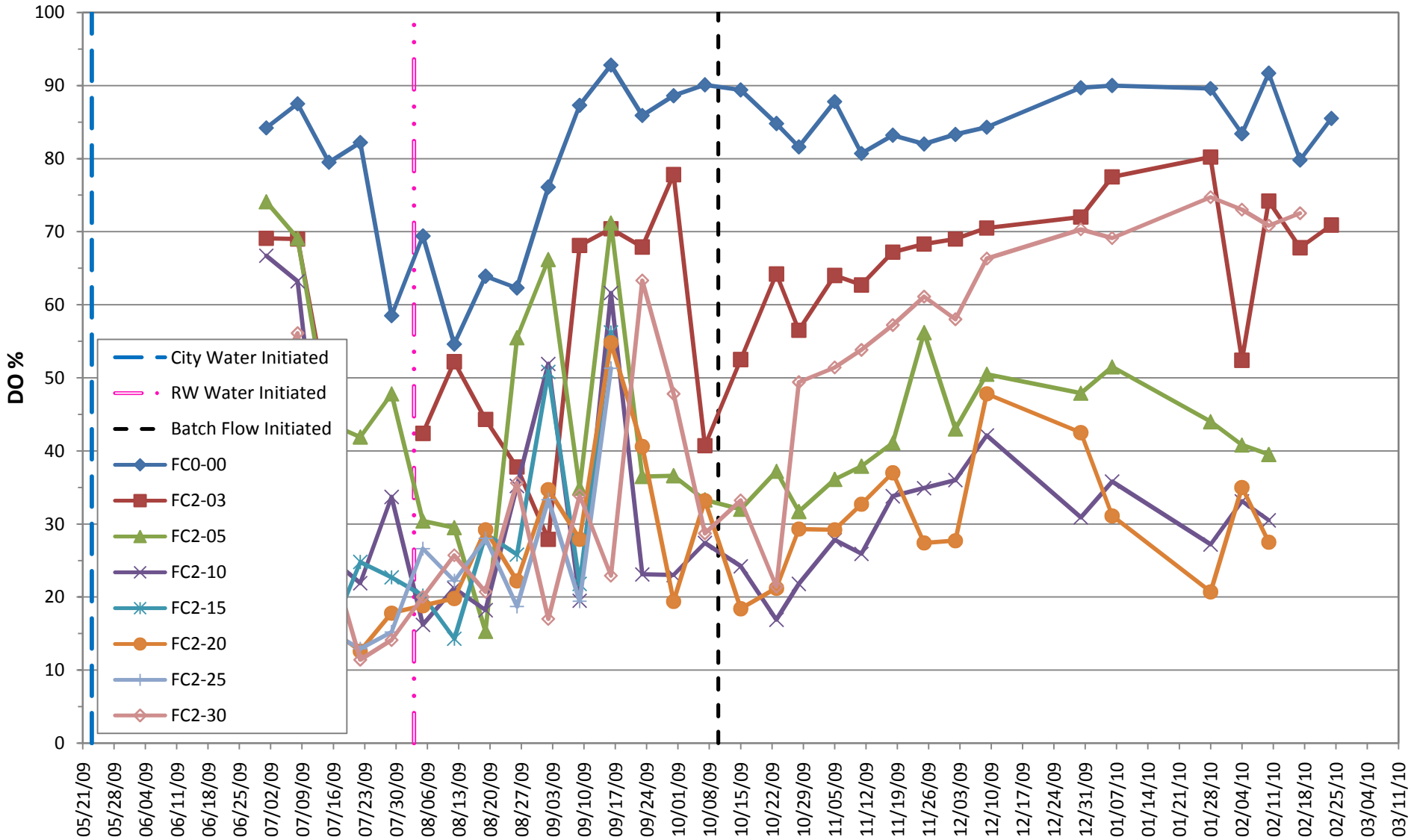
Inland Empire UTILITIES AGENCY

FIGURE 5-4B
8th Street Basin Sediment Train
Total Nitrogen Time Series



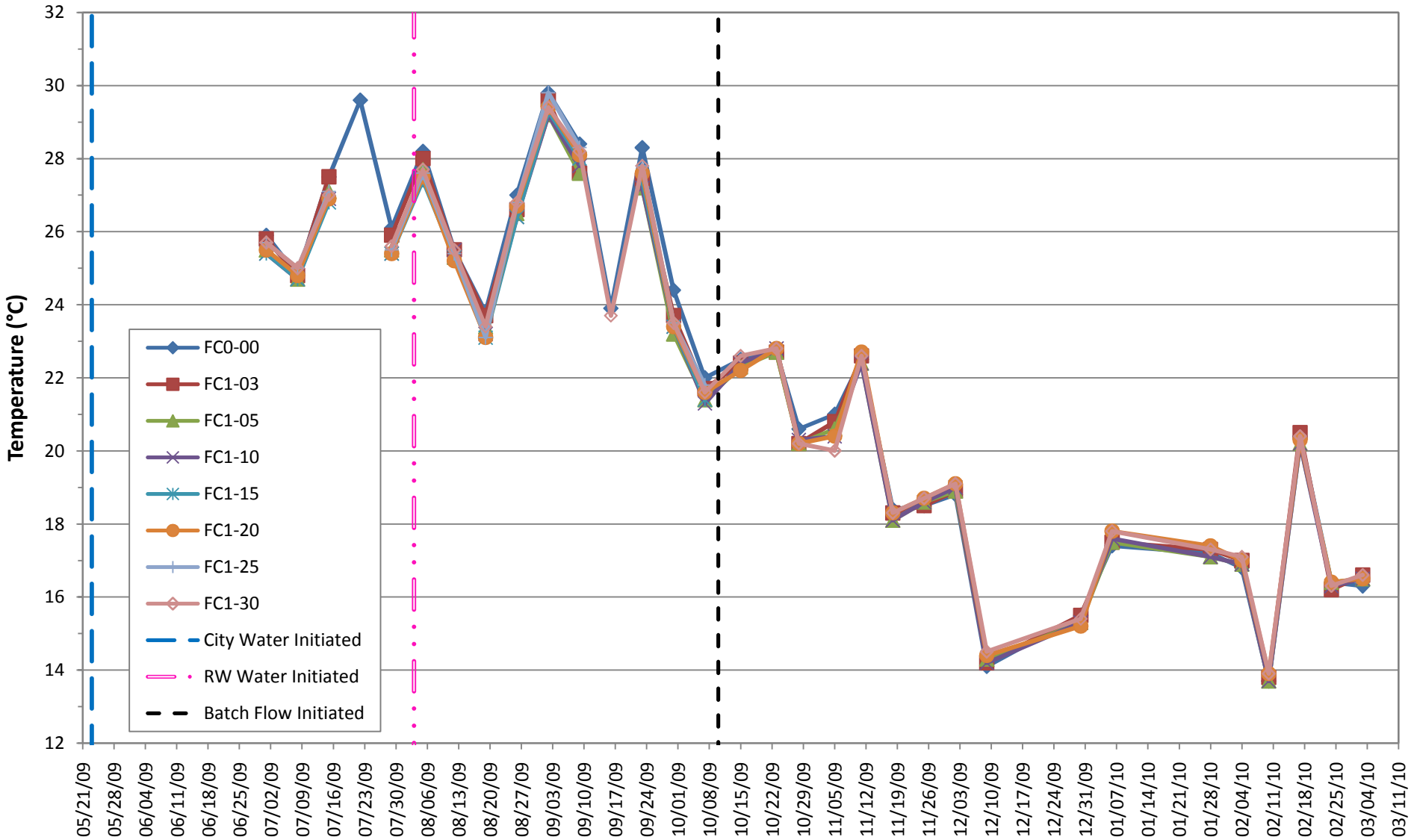
Inland Empire UTILITIES AGENCY

FIGURE 5-5A
Silica Sand Train
Dissolved Oxygen Time Series



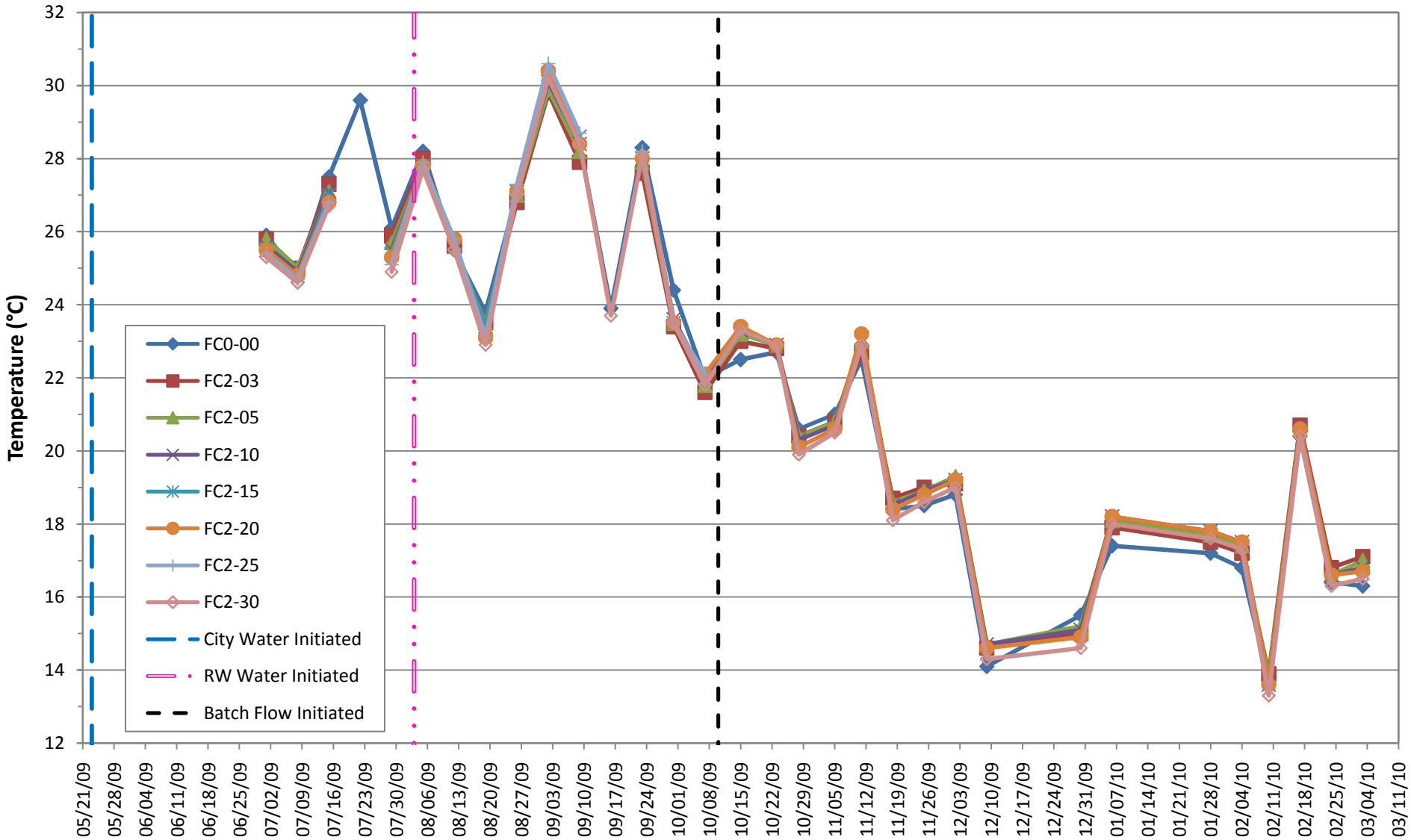
Inland Empire UTILITIES AGENCY

FIGURE 5-5B
8th Street Basin Sediment Train
Dissolved Oxygen Time Series



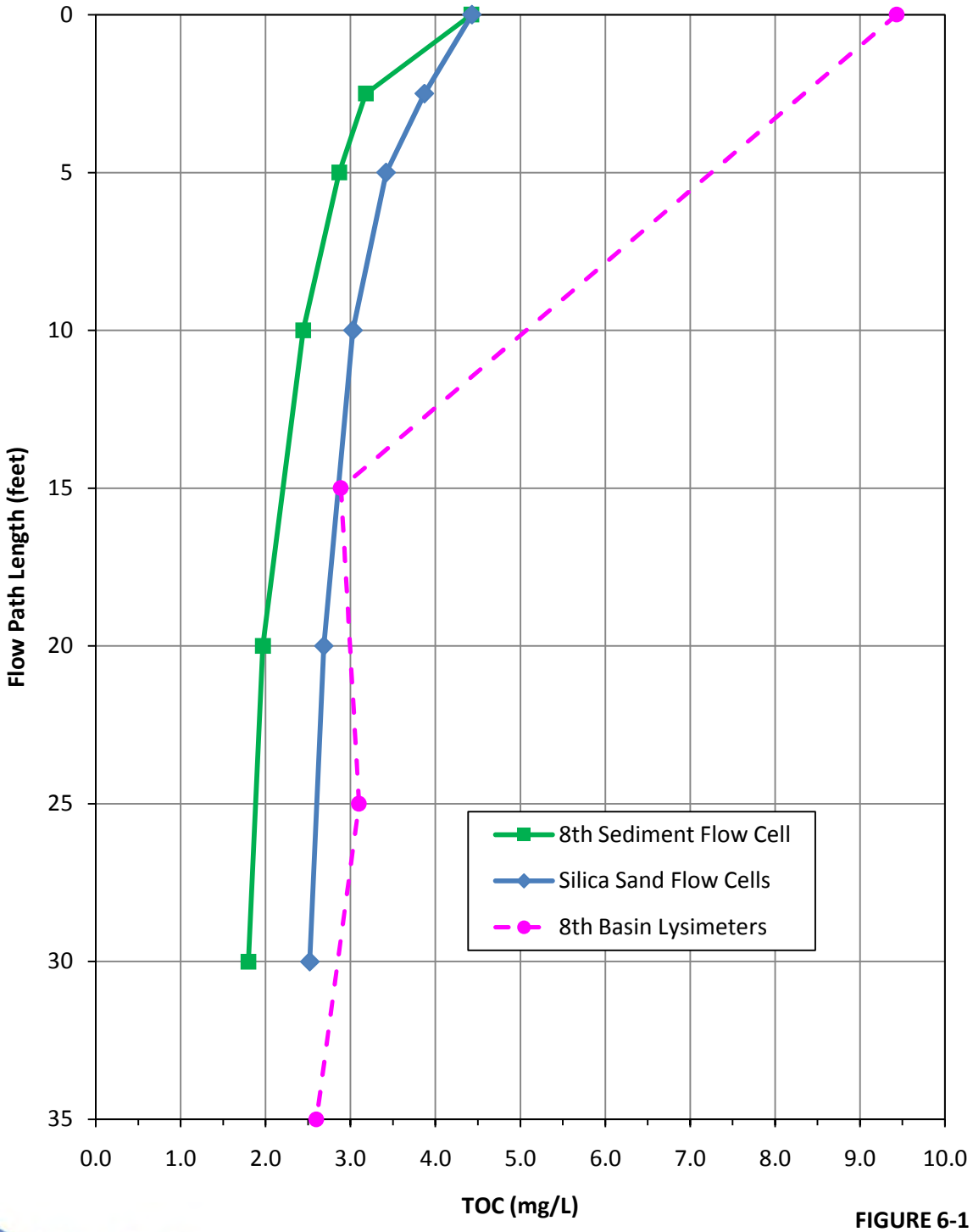
Inland Empire UTILITIES AGENCY

FIGURE 5-6A
Silica Sand Train
Temperature Time Series



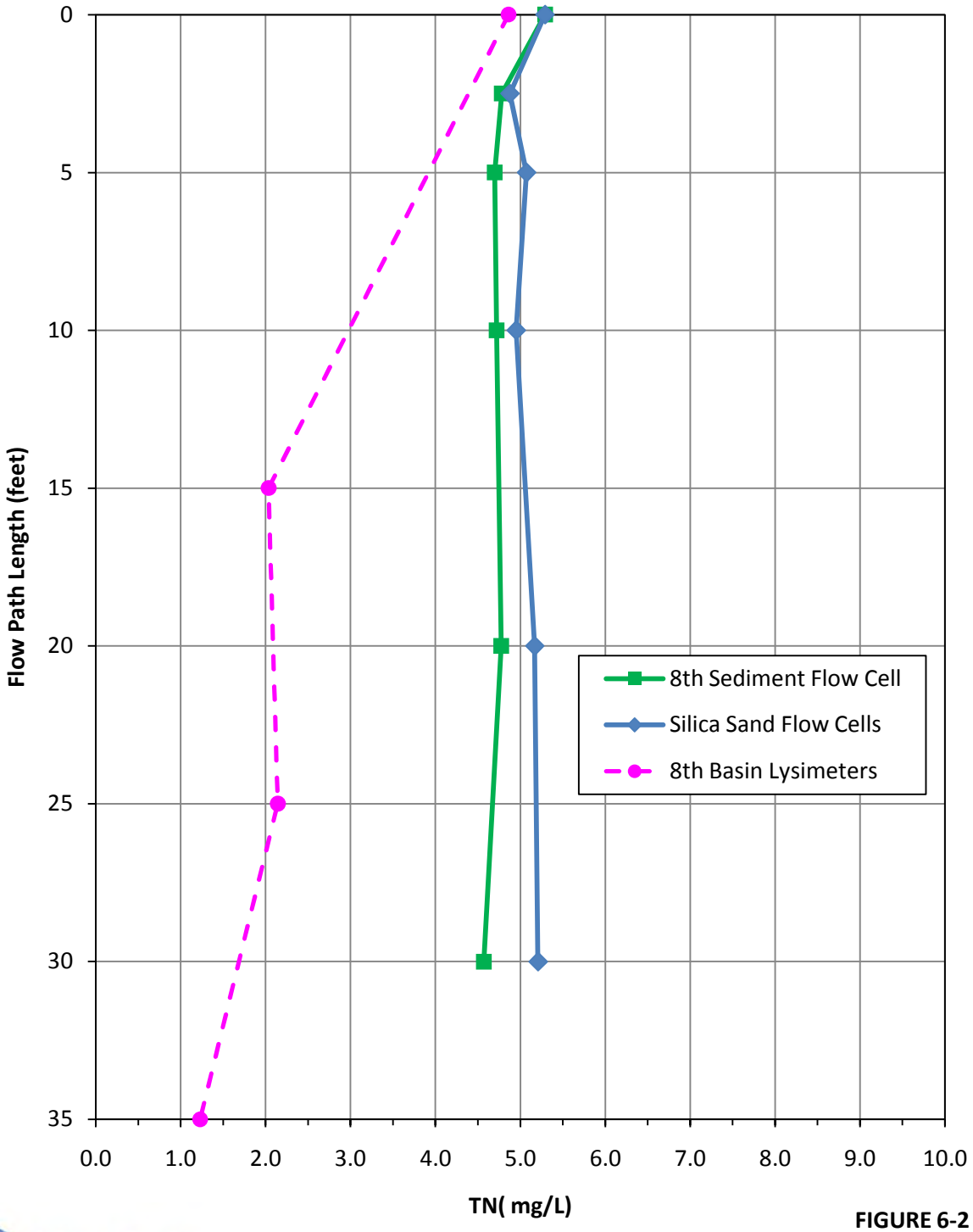
Inland Empire UTILITIES AGENCY

FIGURE 5-6B
8th Street Basin Sediment Train
Temperature Time Series



Inland Empire UTILITIES AGENCY

FIGURE 6-1
Soil Columns and Lysimeters
Depth Profile of Average TOC



Inland Empire UTILITIES AGENCY

FIGURE 6-2
Soil Columns and Lysimeters
Depth Profile of Average TN

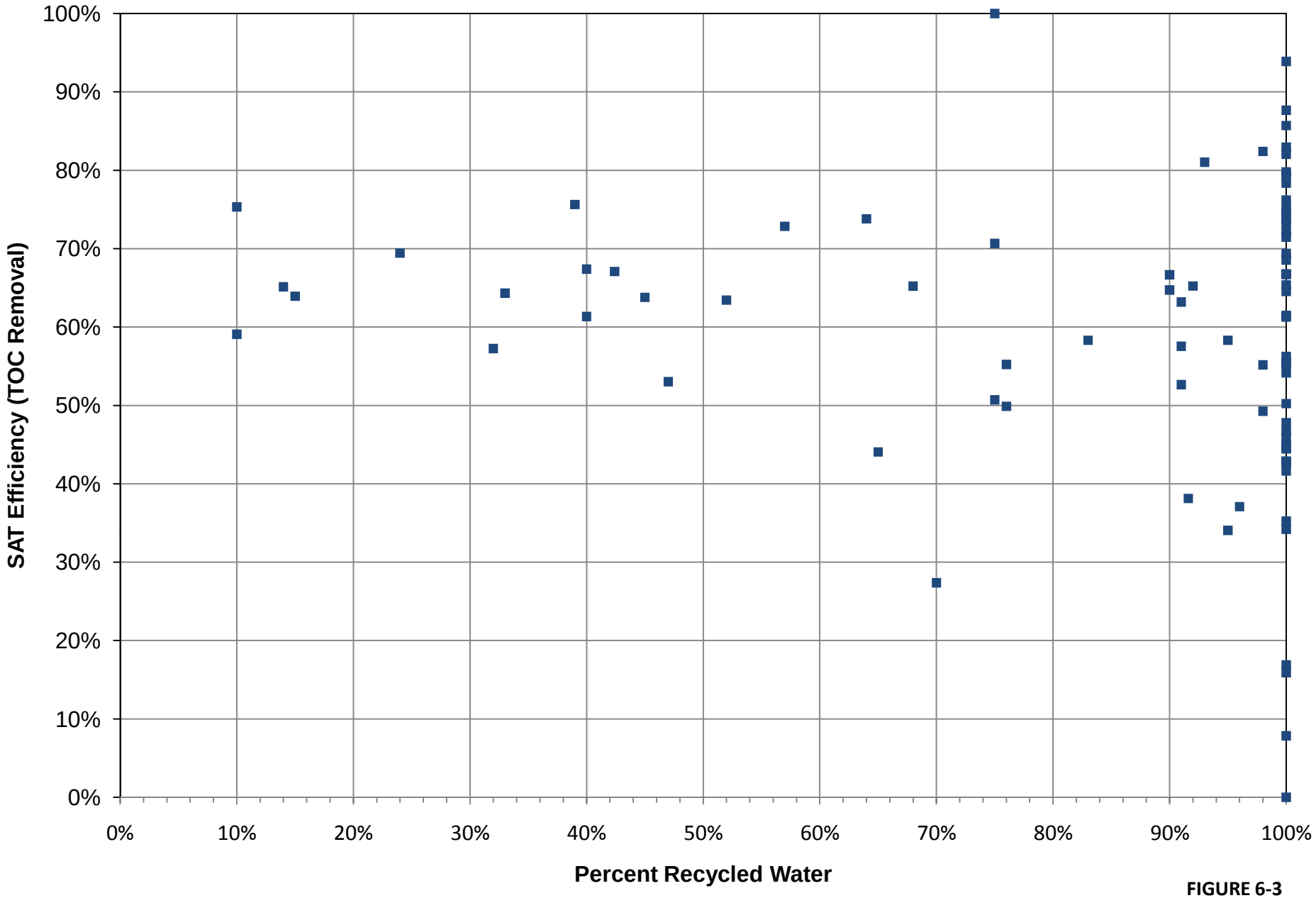


FIGURE 6-3
8TH STREET BASIN: 35-FOOT LYSIMETER
PERCENT RECYCLED WATER VS TOC REMOVAL

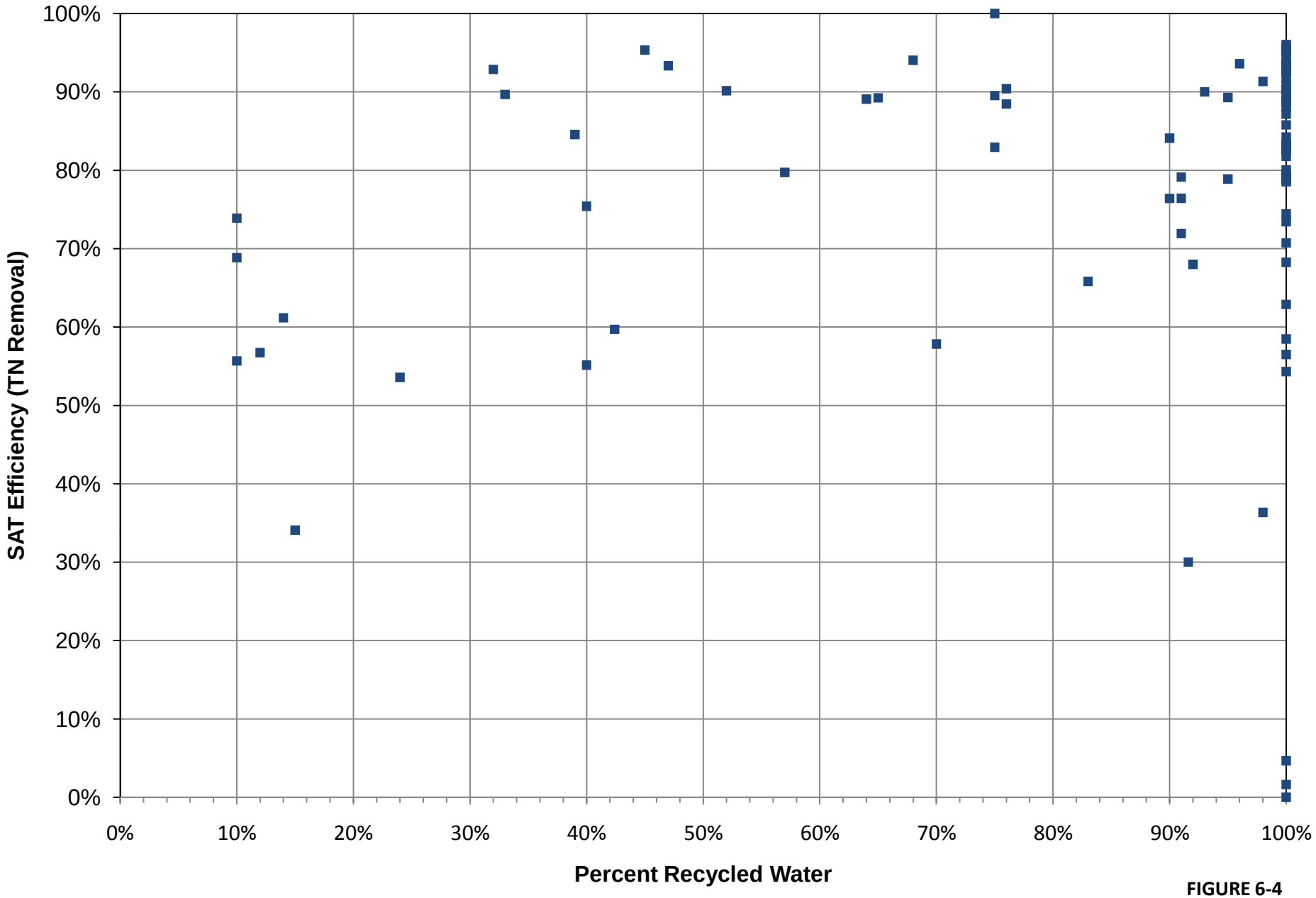


FIGURE 6-4
8TH STREET BASIN: 35-FOOT LYSIMETER
PERCENT RECYCLED WATER VS TN REMOVAL

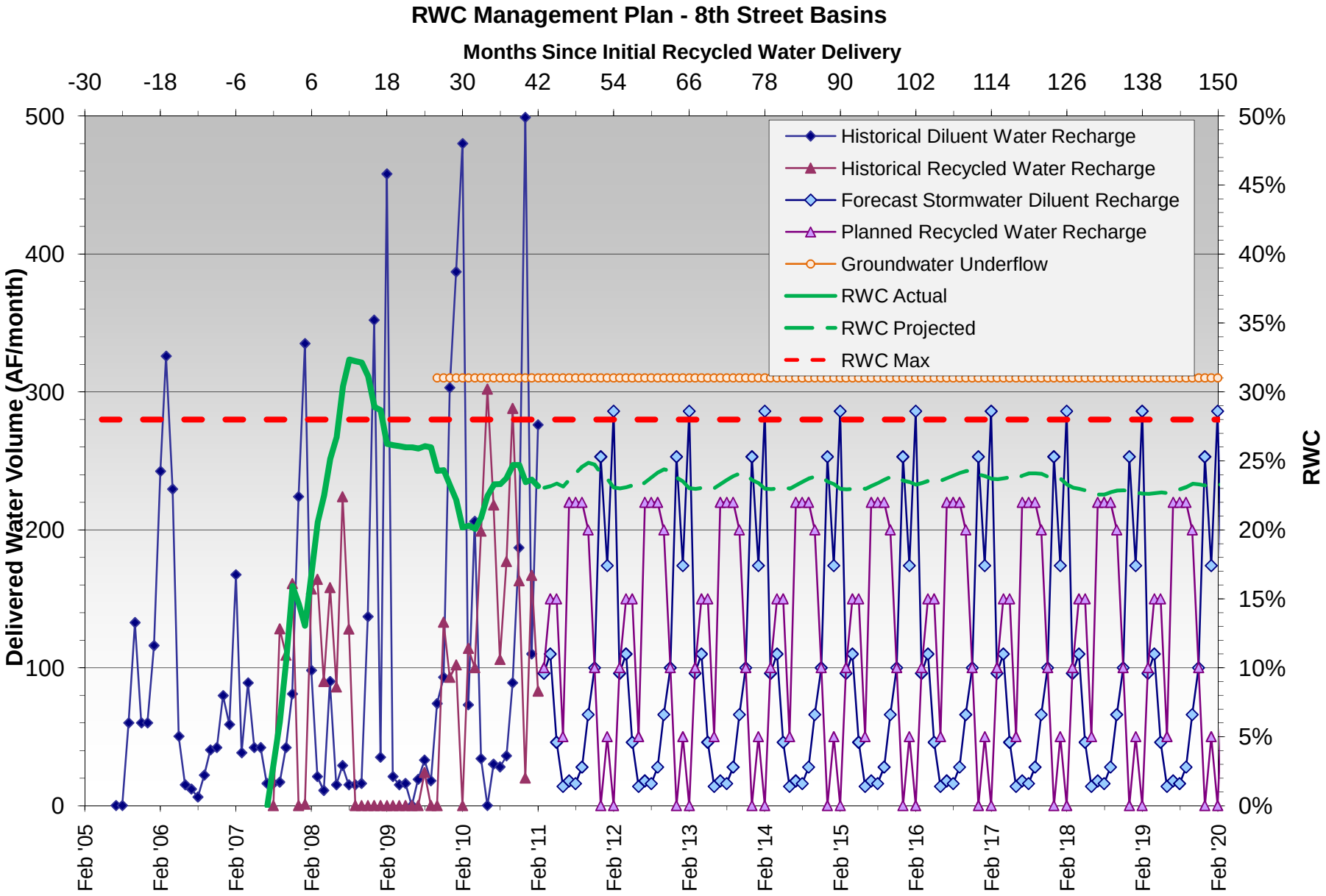


FIGURE 8-1
8TH STREET BASIN
RECYCLED WATER MANAGEMENT PLAN