CHINO BASIN
RECYCLED WATER GROUNDWATER RECHARGE PROGRAM

START-UP PERIOD REPORT FOR TURNER BASIN

July 3, 2008

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July 3, 2008

Regional Water Quality Control Board, Santa Ana Region
Attention: Mr. Gerard Thibeault
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Subject: Transmittal of the Start-Up Report for Turner Basin
Chino Basin Recycled Water Groundwater Recharge Program

Dear Mr. Thibeault:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) hereby submit the *Start-Up Report for Turner Basin* 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., 2006a, Start-Up Protocol Plan for Turner Basin, February 2006, and
- IEUA, 2006, Responses to CDHS [sic now CDPH] Comments to Turner Startup Protocol, July 14, 2006.

The following items highlight the findings of the Tuner Basin Start-Up Report:

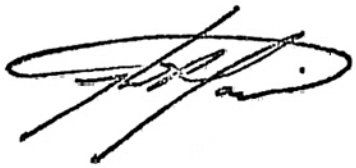
- After a brief period of recycled water recharge in July and August 2006 and a 3-month delay due to unscheduled maintenance, the Start-Up Period for Turner Basin was December 2006 through May 2007.
- Estimated infiltration rates of the Turner Basin cells range from 0.2 and 1.4 feet per day,
- Electrical 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.
- For Turner Basin cell 1 - 25-foot lysimeter and cell 4 - 15-foot lysimeter, there is no significant difference in the range of observed SAT efficiencies when the percent

recycled water is between 50 and 100 percent. Under these conditions and at these depths, SAT efficiency for TOC ranges between 55 and 80 percent and averaged 87 percent for both cells.

- All lysimeters at Turner Basin ultimately receive recharged water. At Turner cell 1, recharge water moves downward over a period of approximately 4 weeks to and past the 25- and 35-foot deep lysimeters, but is difficult to track surface water recharge to 35 feet due to low sample return from 35 feet. At Turner cell 4, recharge moves downward over a period of approximately 4 weeks to the 15-foot deep lysimeter, but then becomes more difficult to track towards the 25- and 35-foot deep lysimeters due to low sample return volume and slow replacement of initially higher EC of pretest pore water at these depths.
- The SAT treatment was very effective at removing TOC and TN in the upper 35 feet of sediment. Further reductions in TOC and TN concentrations are likely with depth. With regular operation, Turner Basin cells 1 and cell 4 can achieve 75 and 85-percent reduction in TOC through SAT, respectively. Based on the 20-sample rolling average TOC concentrations of 2.1 mg/L and 1.1 mg/L for cell 1 and cell 4, respectively, maximum RWC limits of 24 and 45 percent, respectively, are possible for these cells.
- Due to slow travel times and deep lysimeter sample volume limitations, a monitoring plan with continued lysimeter monitoring is not practical as it would require extended periods and large volumes of recycled water to detect and quantify TOC removal. As such, an alternative monitoring plan is proposed for Turner Basin.
- The proposed alternative monitoring plan includes sampling recycled water from the delivery pipeline and reducing the TOC results by 70 percent for that delivered to cells 1 & 2 and 85 percent for that delivered to cells 3 & 4. TN results would be reduced 87 percent for all cells. The percent reduction factor originate from the 20-sample running average TOC removal and the average TN removal for the 35-foot lysimeters at both Turner cell 1 and cell 4. The TOC and TN data once adjusted for SAT efficiency would be used for compliance with TN and the maximum RWC limit.
- The Start-Up Period Report includes two RWC Management Plans, one for Turner cells 1 & 2 and another for Turner cells 3 & 4. The RWC Management Plans forecast 60 months of recharge of diluent water and recycled water to maintain compliance with a 24 percent RWC (cells 1 & 2) and a 45 percent (cells 3 &4) RWC. The Turner 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 no hesitate to call us.

Best regards,



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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.

IEUA initiates groundwater recharge using recycled water at permitted recharge sites by following and reporting on a 6-month Start-Up Period of intensive recycled water delivery and testing. This report documents the Start-Up Period for Turner Basin. The location of Turner Basin (comprised of four cells) is shown in Figure 1-1. The report documents soil-aquifer treatment (SAT) at Turner Basin 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 depth (e.g. a compliance point lysimeter).

The 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 Turner Basin* (IEUA and Wildermuth Environment, Inc (WEI), 2006a) and *Responses to CDHS [sic, now CDPH] Comments to Turner Startup Protocol* (IEUA, 2006)

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.

Recharge using recycled water was initiated at Turner Basin under the original recharge permit (Order No. R8-2005-0033). However, Turner Basin became permitted by an update of the order, Order R8-2007-0039, which covers both Phase I and Phase II recharge sites. Order R8-2007-0039 describes the requirements for the Start-Up Period Report in Section F.4:

> 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. Section 3 details the recharge operations during the Start-Up Period. Sections 4 and 5 discuss the lysimeter sampling and monitoring results and the SAT efficiency in terms of TOC and TN removal. Section 6 describes the determination of the Start-Up Period and recommendation of the compliance point. Section 7 discusses the determination of the basin's maximum RWC limit and a RWC Management Plan to ensure that the RWC limit is not exceeded in the future. Section 8 is a proposed water quality monitoring plan for the first year after the Start-Up Period, and Section 9 includes cited references.

2. Lysimeter Installation

Two clusters of lysimeters are located at Turner Basin (at cell 1 and at cell 4) and were constructed in October and November 2005. Figure 2-1 shows the locations of the Turner Basin lysimeter clusters and the general configuration of the four Turner Basin recharge cells. The Turner basins are constructed such that cell 1 and cell 2 would receive the same water blends. As such, the lysimeter in cell 1 is representative for cells 1 & 2. Likewise, cell 3 and cell 4 receive the same water blend. As such, the lysimeter in cell 4 is representative for cells 3 & 4. Each lysimeter cluster is comprised of five individually cased lysimeters at 5-, 10-, 15-, 25-, and 35-feet deep. The Turner Basin lysimeter construction process and as-built drawings are documented in the *2005 Annual Report of the Chino Basin Recycled Water Groundwater Recharge Program* (IEUA and WEI, 2006b) and were summarized again in the *Start-Up Protocol Plan for Turner Basin (*IEUA and WEI, 2006a). Also shown on Figure 2-1 are the basin diversions from Cucamonga and Deer Creeks and the two on-site nested monitoring wells used for quarterly groundwater monitoring at Turner Basin.

Throughout the report text, tables, and figures, water samples from the lysimeters at Turner cell 1 are referred to as TRN1-xx, where xx equals the nominal depth of the porous tip of the lysimeter. Likewise, water samples from the lysimeter at Turner cell 4 are referred to as TRN4-xx. Depending on context, the surface water samples collected at each lysimeter are referred to as a 0-depth sample or surface water sample. These are labeled with both the cell designation prefix and the suffix ”SW” for surface water.

3. Recharge Operations

3.1 Volume of Historical Diluent Water Recharged

Recharge in Turner Basin prior to the Start-Up Period was estimated from field observations, operations records, and modeling of historical rainfall. Pre-2005 recharge estimates are less than current as Turner Basin was historically operated for flood control not water conservation. Modeling was conducted for this early period when no regular historical measurements of inflow, outflow, or water surface elevation exist to make direct calculations. Estimates were made using the rainfall-runoff simulation model, WLAM, developed for SAWPA. The model generates runoff data from historical rainfall data, simulates routing flows through the basin, and then estimates recharge volumes using infiltration rates. Table 3-1 lists the diluent water recharge at Turner Basin for July 1998 through May 2008. Prior to basin improvements, modeled Turner Basin recharge totaled 733 AF from July 1998 to June 2004. From July 2004 to May 2008, Turner Basin recharge totaled 6,883.3 AF as measured stormwater and metered imported water.

3.2 Recharge Operations during the Start-Up Period

Water delivered to Turner Basin includes SWP water (pre-Start-Up Period diluent water), local runoff, stormwater, and recycled water. Both recycled water and imported water are delivered in Deer Creek and comingle with local runoff in the lined channel prior to entering Turner Basin. Stormwater recharge was estimated from storage curves, increases in water elevation, and infiltration rates. Table 3-2a and 3-2b list daily water deliveries to Turner cells 1 & 2 and Turner cells 3 & 4, respectively. Percent recycled water of the surface water (Table 3-2a and 3-2b) is calculated from the cumulative ratio of water deliveries to the cell minus an infiltrated volume at the previous days percent recycled water. Table 3-3 lists the monthly deliveries during the Start-Up Period and the 60-month running average percent recycled water of total recharge, as will ultimately be required for RWC limit compliance.

During the Turner Basin Start-Up Period, IEUA needed to perform unplanned maintenance on a pipeline used to deliver recycled water to Turner Basin. This test interruption occurred between September 17, 2006 and December 5, 2006. During this time, imported water was added to the recharge basin to maintain the recharge program goals. The impact of the basin downtime was 87 days of inoperation and a minimum two week delay before recycled water percentage of the basin surface water reached greater than 50 percent.

3.3 Estimated Infiltration Rates

Infiltration rates of Turner Basin cells were estimated and ranged from 0.2 to 1.4 feet per day. Table 3-4 contains observed infiltration rates and data used to make these estimates. Rates were calculated with Turner cell 1 and cell 2 in hydraulic connection (flow gate open between cells), as was also so for Turner cell 3 and cell 4. 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 storm water. Rates in Table 3-4 are not adjusted for inflow that may have occurred during the period of measurement. Therefore individual rates may be underestimated by about 0.1 to as much as 0.2 foot per day.

4. Surface Water and Lysimeter Sampling Results

The monitoring schedule from the CDPH-approved *Start-Up Protocol Plan for Turner Basin* (IEUA and WEI, 2006a) includes weekly sampling at Turner cell 1 and Turner cell 4 for surface water and lysimeter water, and analyses for:

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

These data are summarized in Tables 4-1 through 4-3, respectively. All non-detect results for nitrogen speciation are summed for TN as half the species detection limit. TN results that are non-detect (<0.6 mg/L) are graphed and averaged at half the detection limit. Should not all nitrogen species results be non-detect and their concentration sum be less than 0.6 and greater than 0.3 mg/L, then TN is reported as <0.6 mg/L and graphed and averaged at the summed value. Should there be insufficient sample to analyze for TKN, then NH3-N is substituted in the calculation of TN. Should there be insufficient sample to analyze for nitrate, or TKN, or ammonia, then TN is not calculated.

Table 4-4 is a summary of the TN data presented in Table 4-3. There is a column in both Table 4-2 and Table 4-4 that provides the percentage of recycled water in the sample from the 25-foot bgs lysimeter for Turner cell 1 and 15-foot lysimeter for Turner cell 4. The percent recycled water in the sample was calculated (as discussed in Section 5.1) by comparing the EC values of diluent water and recycled water. These estimates were made for these two lysimeters depths as they were determined (as discussed in Section 6.2) to respond most readily and consistently to operational changes in the Turner Basin cells.

Time-series graphs of the collected and tabularized data are presented in this section, but are interpreted and discussed in Sections 5 and 6. Time series graphs of EC from Turner cell 1 and cell 4 are presented on Figure 4-1a and Figure 4-1b, respectively. Time series graphs of TOC from Turner cell 1 and cell 4 are presented on Figure 4-2a and Figure 4-2b, respectively. Time series graphs of TN from Turner cell 1 and cell 4 are presented on Figure 4-3a and Figure 4-3b, respectively. In the upper part of these graphs, horizontal bars denote periods when various sources of water were diverted into the corresponding Turner Basin cells.

5. 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 reductions in TOC concentration ultimately allow for a greater maximum RWC limit based on the formula:

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

Figure 5-1a and Figure 5-1b are graphs of average TOC and TN concentrations as a function of increasing depth at Turner cell 1 and cell 4, respectively. Data for these two graphs come from Table 4-2a and Table 4-4a for cell 1 and from Table 4-2 and Table 4-4b for cell 4. The 0-feet depth sample represents the surface water grab sample, while the other depths correspond to the lysimeter depth in feet. The TOC values plotted are final 20-sample rolling average values. The TN values are results from February through August 2007, after the resumption of the start-up period had indicated greater than 50 percent recycled water. These figures show a decrease in average TOC concentration with increased depth and suggest that SAT reduction in TOC concentration continues to at least 35-feet bgs and may continue at greater depths. Depth to groundwater at Turner Basin during the Start-Up Period ranged from 330 to 360 feet bgs as measured in two on-site monitoring wells (IEUA, 2008).

At Turner Basin, SAT removal of TOC and TN continues over time and generates fairly consistent concentrations with depth despite concentration variations in the surface water. Figure 4-2a and Figure 4-2b are time-series graphs of TOC from the surface water and lysimeter samples from Turner cell 1 and cell 4, respectively. Data for these two figures come from Table 4-2a and Table 4-2b, respectively. In the upper part of these graphs, horizontal bars denote periods when various sources of water were diverted into the corresponding Turner Basin cells. Note that lower TOC concentrations with depth are generally consistent over time. Figure 4-3a and Figure 4-3b are time-series graphs of TN from the surface water and lysimeter samples from Turner cell 1 and cell 4, respectively. Data for these two figures come from Table 4-4a and Table 4-4b, respectively. 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 time-series trends of percent recycled water in the surface water and percent recycled water at the lysimeter. Percent recycled water in the surface water is calculated based on water deliveries to the cell minus an infiltration volume based on the cell storage volume changes (an infiltrated water volume was removed from storage at the previous days recycled water percentage). Data from Table 3-2a and Table 3-2b were used to calculate the daily percent recycled water in surface water of cells 1 and 4, respectively. Table 4-2a and Table 4-2b contain percent recycled water data derived from these earlier recharge volume tables paired with contemporary weekly

lysimeter samples. Percent recycled water at the lysimeters is estimated from variations in the EC sampled at depth from the EC of the source waters (recycled, imported, and local runoff). 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 300 µmhos/cm difference (corresponding approximately with 700 µmhos/cm for recycled water and 400 µmhos/cm for local runoff and imported water).

Figures 5-2a and Figure 5-2b show the correlation of percent recycled water trends for Turner cell 1 and cell 4, respectively. The cell 1-25-foot and the cell 4-15-foot lysimeters are used for correlation as they are have the most complete dataset and their complete trends are more readily matched. Correlations of times of high and low EC are readily observable and are indicated on these two figures with arrows and time offset in days. These figures indicate that travel time was not uniform during the Start-Up Period, but slowed as the period progressed. Initial travel time to the cell 1 25-foot and the cell 4 15-foot lysimeters was approximately 3 days and 14 days, respectively. The travel times to the lysimeters generally lengthened to over 35 days following 3 months of recharge and continued to increase through the start-up period. The slowing is likely due to changes in saturation, gradual basin clogging, and variations in water delivery rates.

The time offset data from the trends correlation 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 5-1 and Table 5-2 list the results of the SAT efficiency estimates for individual correlation of samples. For ease of comparison in these tables, the offset periods of surface water to lysimeter depth are color coded. The first value in a color for surface water correlates with the first value in the same color for the lysimeter samples.

This evaluation indicates that **when the percent recycled water is greater than 50 percent at Turner Basin cell 1 (25-foot deep) and cell 4 (15-foot deep), the SAT efficiency for TOC ranges between 55 and 80 percent. This is a narrower range than that for TOC removal for diluent water (20 to 90 percent) due to the lower initial** TOC of diluent water. This relationship is illustrated on Figure 5-3a and Figure 5-3b for Turner cell 1 and cell 4, respectively. Comparison of SAT efficiencies for TOC removal over the range of percent recycled water at the lysimeter indicates **there is also no significant difference in the SAT efficiency range with a recycled water percent between 50 and 100 percent**.

This evaluation also indicates that when the percent recycled water in Turner Basins is greater than 50 percent, the SAT efficiency for TN is generally 70 to 95 percent. This is a narrower range than that for TN removal for diluent water (35 to 95 percent), due to the lower initial TOC of diluent water. This relationship is illustrated on Figure 5-4a and Figure 5-4b for Turner cell 1 and cell 4, respectively. **SAT efficiency for TN removal from recycled water averaged 87 percent for both cell 1 and cell 4 individually (Table 5-2).** The average SAT efficiency for TN removal from diluent water was 58 percent and 67 percent for cells 1 and cell 4, respectively.

6. Start-Up Period

6.1 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, up to 180 days unless interrupted.

Recycled water delivery for the Start-Up Period, began on July 28, 2006 and July 6, 2006 for Turner cell 1 and cell 4, respectively. During the Turner Basin Start-Up Period, IEUA was required to perform unplanned maintenance to the pipeline used to deliver recycled water to Turner Basin. This interruption occurred between September 17, 2006 and December 5, 2006. During this time, imported water was added to the recharge basin to maintain the recharge program goals. The Start-Up Period was restarted on December 6, 2006 and continued for approximately 174 days until June 1, 2007. Although recycled water delivery was halted at that time, lysimeter sampling was continued through August as the recycled water percentage therein remained greater than 50 percent. Thus, **after a brief period of recycled water recharge in July and August 2006, and a 3-month delay due to unscheduled maintenance, the actual Start-Up Period for Turner Basin cell 1 and cell 4 was December 2006 through May 2007.**

6.2 Compliance Point Selection

Section B.6 of Order R8-2007-00039 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 of an alternate monitoring plan is evidenced by 1) the significant and increasing time delay between delivery of water to the Turner Basin and percolation to the deeper lysimeters, 2) sample volume restrictions of the deeper lysimeters, and 3) perennial flows in Deer Creek that can impact TOC and TN concentrations in the water delivered to the basin. IEUA and CBWM therefore propose an alterative sampling plan for monitoring recycled water recharge at Turner Basin. As discussed in Section 5, the SAT is quite effective to the observed depth of 35 feet and likely continues to some degree as recharge migrates downward to groundwater depths of 330 to 360 feet at the basin. Thus if practical, the deepest lysimeter would provide the best sampling results for TOC removal. However, due to the large number of days of vertical travel time to this depth (35 days with 3 months of continual recharge), the variable infiltration rate of the Turner Basin, sample volume limitations, and the long retention times of recycled water in the basin, lysimeter monitoring is not practical at this depth.

IEUA and CBWM are recommending that the compliance sampling point be the recycled water delivery pipeline and that the sample result from the pipeline be reported with a correction factor adjustment to TOC and TN concentrations based on the SAT efficiencies observed during the Start-Up Period.

The alternative monitoring plan will provide results comparable to SAT at the 35-foot lysimeters. Given the long travel times from surface water to the 35-foot depths, direct comparison of time-offset pairs of surface water samples and 35-foot depth lysimeter samples could not be used to determine average SAT efficiencies for TOC removal. However, the SAT efficiency at 35 feet can be calculated from the known rolling average TOC at the 35-foot and shallower depths and the known average SAT efficiency at shallower depths. The below matrix summarizes these data for the cell 1 25-foot and the cell 4-15-foot lysimeters, as previously presented in Tables 4-2a and 4-2b and Table 5-1. From these data, the average surface water TOC concentration can first be estimated and then used to estimate SAT efficiency at 35 feet deep. For example in cell 4 at 15 feet, to obtain an rolling average TOC of 1.8 mg/L after an average SAT efficiency of 75 percent, the initial surface water TOC would have initially been 7.2 mg/L. Then to realize the average 1.1 mg/L TOC at 35 feet from the initial average surface water TOC of 7.2 mg/L, the average SAT efficiency would be 85 percent. The average TOC removal efficiencies for the cell 1 and cell 4 35-foot lysimeters are calculated in this manner as 70 percent and 85 percent, respectively. The average TN removal efficiency for both the cell 1 25-foot and cell 4 15-foot lysimeters is 96 percent as listed in Table 5-2 and is sufficiently high to not require further adjustment for depth.

Source	TOC 20-Sample Running Average (mg/L)	Average SAT Efficiency for TOC	Average Surface Water TOC (mg/L)
TRN1-25	2.1	70%	7.0
TRN1-35	2.1	70% (calculated)	
TRN4-15	1.8	75%	7.2
TRN4-35	1.1	85% (calculated)	

The alternative monitoring plan would use adjustments to TOC and TN analyses of recycled water sampled from the delivery pipeline to determine compliance. The adjustment would be based on the basin cell receive the recharge and would be the SAT efficiencies for TOC and TN removal demonstrated during the start-up period. **For Turner cells 1 & 2, the TOC and TN adjustments would be 70 percent and 87 percent, respectively. For Turner cells 3 & 4, the TOC and TN adjustments would be 85 percent and 87 percent, respectively.** The adjusted TOC values would then be used to determine the 20-sample rolling TOC average for RWC compliance. The adjusted TN would be used for TN compliance. The alternative monitoring plan will be supplemented with the quarterly groundwater monitoring of EC, TOC, and TN at monitoring wells TRN1 and TRN2 located at Turner Basin. Recycled water has reached these wells as was documented in the recharge program's 2007 Annual Report (IEUA, 2008). The quarterly monitoring will provide the "equal level of public protection" required in an alternative monitoring plan by verifying continued TOC removal with depth. Historical monitoring and quarterly compliance reporting of wells TRN-1 and TRN-2 has demonstrated TOC concentrations of less than or equal to 1.0 mg/L with recycled water present.

This alternative sampling plan will greatly simplify sampling and data evaluation by 1) eliminating the need to account for potential impacts on TOC and TN from diluent water recharged with recycled water, and 2) eliminating the need to offset sampling events at depth from water delivery time to the basin by the progressively changing underground travel-time.

6.3 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:
>
> TOCaverage = 0.5 mg/L ÷ RWCaverage

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 rolling TOC concentrations for all lysimeters depths at the end of August 2007 are shown at the bottom of Table 4-2a and Table 4-2b for Turner basin cells 1 and cell 4, respectively. These running averages are for data with a recycled water percentage greater than 50 percent as determined from EC at the deepest lysimeter with consistent sample retrieval (25 feet at cell 1 and 15 feet at cell 4).

At the end of the Start-Up Period, the two 35-foot lysimeters at Turner Basin cell 1 and cell 4 have 20-day rolling average TOC of 2.1 mg/L and 1.1 mg/L, respectively. **The maximum RWC limit is thus calculated as 24 percent and 45 percent for Turner cell 1 and cell 4, respectively.** California Draft Groundwater Recharge Regulations and Order R8-2007-0039 limit maximum RWC by basin to 50 percent for recycled water produced by tertiary treatment.

7. RWC Management Plan

RWC management is needed to keep a basin's volume-based RWC within the maximum RWC limited determined by the 20-sample rolling average TOC. A basin's volume-based RWC is determined by a 60-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, during the Start-Up Period and up to 60-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 60.

Order R8-2007-0039, Section F.20

> The Discharger shall submit a RWC Management Plan to the CDHS [sic, now CDPH] and the Regional Board that includes estimates of future average RWCs based on anticipated recharge operations over the first 60 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 60 months and shall clearly identify the plan to achieve compliance with the maximum recycled water contribution by the 60th month at each recharge site.

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 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 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 that period of diluent only 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 were a rapid rise in the volume-based RWC may occur. Short-Term Compliance is the approximately 54 month period when the volume-based RWC is brought to within compliance by month 60. Start-Up Period Roll Off is an approximately 6-month long period when the Start-Up Period recharge drops off from the 60-month rolling-average RWC and is characterized by a potentially rapid drop in volume-based RWC. Long-Term Stability is the period after the first 5 years 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.

Based on the differences in the SAT efficiencies and the 20-sample rolling averages, IEUA and CBWM are recommending separate RWC Monitoring Plans for Turner cells 1 & 2 and Turner Cells 3 & 4. The initial RWC Management Plans for Turner Basin are presented in Table 7-1a and Table 7-1b. The first 72 months of the management plan and 60 months of diluent history are represented graphically on Figure 7-1a and Figure 7-1b. These RWC Management Plans will be updated with each annual report of the Recycled Water Groundwater Recharge Program and will then show a 60-month period of recharge and 60-month period of planned recharge.

8. Initial Year Monitoring Plan

Start-up period report requirements include an initial year monitoring plan. As discussed in the prior sections and as shown in the tables and graphs included in this report, TN compliance criteria are met consistently at all lysimeters deeper than 5 feet, and the TOC is reduced 70 percent or more by SAT at depths of 35 feet. **Due to these outstanding results and trends seen in the lysimeter data, IEUA recommends a first year monitoring plan consisting of weekly sampling of TOC, TN, and EC from the recycled water delivery pipeline during active delivery of recycled water to the Turner Basin recharge site.** This plan is consistent with the alternative monitoring plan presented in Section 6 wherein a TN and TOC correction factor will be applied based on SAT efficiency observed during the completed Start-Up Period. The first year of operation is defined herein to be the 365 days beginning with the resumption of recycled water recharge following submission of the Start-Up Period Report. The sampling location will be the sampling port on recycled water pipeline turnout at the Reliant Energy cooling water storage pond immediately north of IEUA Regional Plant 4 (RP-4) in Fontana. This is the same sampling point that is used for quarterly and annual sampling. 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 RP1 and RP4) in proportions consistent with supply to groundwater recharge sites.

9. References

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Metropolitan Water District of Southern California, 2005, Table D Monthly Analyses of the District Water Supplies – July through December 2005.

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Table 3-1
Turner Basin Historical Diluent Water Recharge
(acre-feet)

Turner Cells 1 and 2

Fiscal Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1998/99	0.0	0.5	2.4	0.0	6.1	10.2	17.9	23.7	6.4	32.9	0.5	0.0	100.6
1999/00	0.0	0.0	0.0	0.0	0.0	0.0	6.2	90.5	51.1	25.4	0.0	0.0	173.2
2000/01	0.0	0.0	0.0	4.6	1.4	0.0	34.5	56.7	40.9	28.9	0.0	0.0	167.0
2001/02	0.0	0.0	0.0	0.0	19.9	18.7	19.6	24.1	13.1	3.0	1.6	0.0	100.0
2002/03	0.0	0.0	0.0	0.0	10.0	30.6	0.0	29.4	32.2	37.7	52.3	0.0	192.2
2003/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004/05	0.0	0.0	0.0	60.5	131.0	165.5	96.4	87.7	65.5	0.0	0.5	0.0	607.1
2005/06	0.0	0.0	89.3	95.2	178.5	359.0	261.9	152.0	426.5	389.8	97.1	11.0	2,060.3
2006/07	63.0	20.8	106.7	164.4	29.0	30.3	27.1	11.7	25.7	5.0	12.0	1.0	496.8
2007/08	4.0	38.0	4.0	62.0	96.0	215.0	311.0	251.0	17.0	14.0	143.0		

Turner Cells 3 and 4

Fiscal Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1998/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001/02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002/03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004/05	0.0	0.0	0.0	120.8	128.2	217.9	257.4	232.0	174.4	0.0	0.5	0.0	1,131.1
2005/06	0.0	0.0	0.0	0.0	0.0	124.0	74.9	71.0	171.3	260.4	72.1	87.0	860.7
2006/07	30.3	33.4	22.1	64.9	16.0	13.6	10.0	9.0	4.0	3.0	7.9	10.0	224.2
2007/08	1.0	10.0	12.0	3.0	66.0	62.0	143.0	9.0	0.0	4.0	38.0		

Notes

Fiscal Year 1998/99 through 2003/04 data are modeled for Turner Basin Cell 1 only (pre Chino Basin Facilities Improvement Project).
During Fiscal Year 2003/04, Turner Basin was not operated for recharge due to reconstruction.
Fiscal Year 2004/05 data are from CBWM records of stormwater capture and CB11 imported water purchases.
Data from April 2005 to January 2008 are measured volumes from operational data.

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
01/01/06	0.0	7.9	7.9	0.0	0%
01/02/06	0.0	19.8	19.8	0.0	0%
01/03/06	0.0	7.9	7.9	0.0	0%
01/04/06	0.0	7.9	7.9	0.0	0%
01/05/06	0.0	7.9	7.9	0.0	0%
01/06/06	0.0	7.9	7.9	0.0	0%
01/07/06	0.0	7.9	7.9	0.0	0%
01/08/06	0.0	7.9	7.9	0.0	0%
01/09/06	0.0	7.9	7.9	0.0	0%
01/10/06	0.0	7.9	7.9	0.0	0%
01/11/06	0.0	7.9	7.9	0.0	0%
01/12/06	0.0	7.9	7.9	0.0	0%
01/13/06	0.0	7.9	7.9	0.0	0%
01/14/06	0.0	13.9	13.9	0.0	0%
01/15/06	0.0	7.9	7.9	0.0	0%
01/16/06	4.9	6.0	10.8	0.0	0%
01/17/06	10.2	6.0	16.1	0.0	0%
01/18/06	9.4	4.0	13.3	0.0	0%
01/19/06	8.8	4.0	12.8	0.0	0%
01/20/06	8.9	2.0	10.9	0.0	0%
01/21/06	11.4	4.0	15.4	0.0	0%
01/22/06	11.3	3.0	14.3	0.0	0%
01/23/06	4.8	3.0	7.8	0.0	0%
01/24/06	0.0	3.0	3.0	0.0	0%
01/25/06	0.0	3.0	3.0	0.0	0%
01/26/06	0.0	3.0	3.0	0.0	0%
01/27/06	0.0	3.0	3.0	0.0	0%
01/28/06	0.0	3.0	3.0	0.0	0%
01/29/06	0.0	3.0	3.0	0.0	0%
01/30/06	0.0	3.0	3.0	0.0	0%
01/31/06	0.0	3.0	3.0	0.0	0%
02/01/06	0.0	3.0	3.0	0.0	0%
02/02/06	0.0	3.0	3.0	0.0	0%
02/03/06	0.0	3.0	3.0	0.0	0%
02/04/06	0.0	3.0	3.0	0.0	0%
02/05/06	0.0	3.0	3.0	0.0	0%
02/06/06	0.0	3.0	3.0	0.0	0%
02/07/06	0.0	3.0	3.0	0.0	0%
02/08/06	0.0	3.0	3.0	0.0	0%
02/09/06	0.0	3.0	3.0	0.0	0%
02/10/06	0.0	3.0	3.0	0.0	0%
02/11/06	0.0	3.0	3.0	0.0	0%
02/12/06	0.0	3.0	3.0	0.0	0%
02/13/06	0.0	3.0	3.0	0.0	0%
02/14/06	0.0	3.0	3.0	0.0	0%
02/15/06	0.0	3.0	3.0	0.0	0%
02/16/06	0.0	3.0	3.0	0.0	0%
02/17/06	0.0	16.0	16.0	0.0	0%
02/18/06	0.0	3.0	3.0	0.0	0%
02/19/06	0.0	3.0	3.0	0.0	0%
02/20/06	0.0	3.0	3.0	0.0	0%
02/21/06	0.0	3.0	3.0	0.0	0%
02/22/06	0.0	3.0	3.0	0.0	0%
02/23/06	0.0	3.0	3.0	0.0	0%
02/24/06	0.0	3.0	3.0	0.0	0%
02/25/06	0.0	3.0	3.0	0.0	0%
02/26/06	0.0	1.0	1.0	0.0	0%
02/27/06	0.0	43.8	43.8	0.0	0%
02/28/06	0.0	19.8	19.8	0.0	0%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
03/01/06	0.0	38.0	38.0	0.0	0%
03/02/06	0.0	2.0	2.0	0.0	0%
03/03/06	0.0	23.8	23.8	0.0	0%
03/04/06	0.0	2.0	2.0	0.0	0%
03/05/06	0.0	2.0	2.0	0.0	0%
03/06/06	0.0	2.0	2.0	0.0	0%
03/07/06	0.0	13.6	13.6	0.0	0%
03/08/06	0.0	2.0	2.0	0.0	0%
03/09/06	0.0	2.0	2.0	0.0	0%
03/10/06	0.0	2.0	2.0	0.0	0%
03/11/06	0.0	28.9	28.9	0.0	0%
03/12/06	0.0	2.0	2.0	0.0	0%
03/13/06	0.0	2.0	2.0	0.0	0%
03/14/06	0.0	2.0	2.0	0.0	0%
03/15/06	0.0	2.0	2.0	0.0	0%
03/16/06	0.0	2.0	2.0	0.0	0%
03/17/06	0.0	39.6	39.6	0.0	0%
03/18/06	0.0	48.3	48.3	0.0	0%
03/19/06	0.0	6.4	6.4	0.0	0%
03/20/06	0.0	26.7	26.7	0.0	0%
03/21/06	0.0	4.5	4.5	0.0	0%
03/22/06	0.0	2.0	2.0	0.0	0%
03/23/06	0.0	2.0	2.0	0.0	0%
03/24/06	0.0	2.0	2.0	0.0	0%
03/25/06	0.0	2.0	2.0	0.0	0%
03/26/06	0.0	2.0	2.0	0.0	0%
03/27/06	0.0	2.0	2.0	0.0	0%
03/28/06	0.0	121.1	121.1	0.0	0%
03/29/06	0.0	6.9	6.9	0.0	0%
03/30/06	0.0	18.1	18.1	0.0	0%
03/31/06	0.0	14.6	14.6	0.0	0%
04/01/06	0.0	34.5	34.5	0.0	0%
04/02/06	0.0	3.4	3.4	0.0	0%
04/03/06	0.0	3.7	3.7	0.0	0%
04/04/06	0.0	9.1	9.1	0.0	0%
04/05/06	0.0	5.0	5.0	0.0	0%
04/06/06	0.0	11.0	11.0	0.0	0%
04/07/06	0.0	22.0	22.0	0.0	0%
04/08/06	0.0	38.0	38.0	0.0	0%
04/09/06	0.0	3.3	3.3	0.0	0%
04/10/06	0.0	3.3	3.3	0.0	0%
04/11/06	0.0	29.9	29.9	0.0	0%
04/12/06	0.0	18.9	18.9	0.0	0%
04/13/06	0.0	17.7	17.7	0.0	0%
04/14/06	0.0	27.0	27.0	0.0	0%
04/15/06	0.0	3.6	3.6	0.0	0%
04/16/06	0.0	1.2	1.2	0.0	0%
04/17/06	0.0	38.0	38.0	0.0	0%
04/18/06	0.0	30.7	30.7	0.0	0%
04/19/06	0.0	26.9	26.9	0.0	0%
04/20/06	0.0	16.9	16.9	0.0	0%
04/21/06	0.0	0.0	0.0	0.0	0%
04/22/06	0.0	0.0	0.0	0.0	0%
04/23/06	0.0	3.5	3.5	0.0	0%
04/24/06	0.0	3.8	3.8	0.0	0%
04/25/06	0.0	24.8	24.8	0.0	0%
04/26/06	0.0	3.0	3.0	0.0	0%
04/27/06	0.0	2.6	2.6	0.0	0%
04/28/06	0.0	2.7	2.7	0.0	0%
04/29/06	0.0	2.7	2.7	0.0	0%
04/30/06	0.0	2.7	2.7	0.0	0%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
05/01/06	0.0	2.0	2.0	0.0	0%
05/02/06	0.0	2.0	2.0	0.0	0%
05/03/06	0.0	2.0	2.0	0.0	0%
05/04/06	0.0	2.0	2.0	0.0	0%
05/05/06	0.0	2.0	2.0	0.0	0%
05/06/06	0.0	2.0	2.0	0.0	0%
05/07/06	0.0	2.0	2.0	0.0	0%
05/08/06	0.0	2.0	2.0	0.0	0%
05/09/06	0.0	2.0	2.0	0.0	0%
05/10/06	0.0	2.0	2.0	0.0	0%
05/11/06	0.0	2.0	2.0	0.0	0%
05/12/06	0.0	2.0	2.0	0.0	0%
05/13/06	0.0	2.0	2.0	0.0	0%
05/14/06	0.0	2.0	2.0	0.0	0%
05/15/06	0.0	2.0	2.0	0.0	0%
05/16/06	0.0	2.0	2.0	0.0	0%
05/17/06	0.0	2.0	2.0	0.0	0%
05/18/06	0.0	2.0	2.0	0.0	0%
05/19/06	0.0	2.0	2.0	0.0	0%
05/20/06	0.0	2.0	2.0	0.0	0%
05/21/06	0.0	5.0	5.0	0.0	0%
05/22/06	0.0	39.1	39.1	0.0	0%
05/23/06	0.0	5.0	5.0	0.0	0%
05/24/06	0.0	1.0	1.0	0.0	0%
05/25/06	0.0	1.0	1.0	0.0	0%
05/26/06	0.0	1.0	1.0	0.0	0%
05/27/06	0.0	1.0	1.0	0.0	0%
05/28/06	0.0	1.0	1.0	0.0	0%
05/29/06	0.0	1.0	1.0	0.0	0%
05/30/06	0.0	1.0	1.0	0.0	0%
05/31/06	0.0	1.0	1.0	0.0	0%
06/01/06	0.0	1.0	1.0	0.0	0%
06/02/06	0.0	1.0	1.0	0.0	0%
06/03/06	0.0	1.0	1.0	0.0	0%
06/04/06	0.0	1.0	1.0	0.0	0%
06/05/06	0.0	1.0	1.0	0.0	0%
06/06/06	0.0	1.0	1.0	0.0	0%
06/07/06	0.0	1.0	1.0	0.0	0%
06/08/06	0.0	1.0	1.0	0.0	0%
06/09/06	0.0	1.0	1.0	0.0	0%
06/10/06	0.0	1.0	1.0	0.0	0%
06/11/06	0.0	1.0	1.0	0.0	0%
06/12/06	0.0	0.0	0.0	0.0	0%
06/13/06	0.0	0.0	0.0	0.0	0%
06/14/06	0.0	0.0	0.0	0.0	0%
06/15/06	0.0	0.0	0.0	0.0	0%
06/16/06	0.0	0.0	0.0	0.0	0%
06/17/06	0.0	0.0	0.0	0.0	0%
06/18/06	0.0	0.0	0.0	0.0	0%
06/19/06	0.0	0.0	0.0	0.0	0%
06/20/06	0.0	0.0	0.0	0.0	0%
06/21/06	0.0	0.0	0.0	0.0	0%
06/22/06	0.0	0.0	0.0	0.0	0%
06/23/06	0.0	0.0	0.0	0.0	0%
06/24/06	0.0	0.0	0.0	0.0	0%
06/25/06	0.0	0.0	0.0	0.0	0%
06/26/06	0.0	0.0	0.0	0.0	0%
06/27/06	0.0	0.0	0.0	0.0	0%
06/28/06	0.0	0.0	0.0	0.0	0%
06/29/06	0.0	0.0	0.0	0.0	0%
06/30/06	0.0	0.0	0.0	0.0	0%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
07/01/06	0.0	0.0	0.0	0.0	0%
07/02/06	0.0	0.0	0.0	0.0	0%
07/03/06	0.0	0.0	0.0	0.0	0%
07/04/06	0.0	0.0	0.0	0.0	0%
07/05/06	0.0	0.0	0.0	0.0	0%
07/06/06	0.0	0.0	0.0	0.0	0%
07/07/06	0.0	0.0	0.0	0.0	0%
07/08/06	0.0	0.0	0.0	0.0	0%
07/09/06	0.0	0.0	0.0	0.0	0%
07/10/06	0.0	0.0	0.0	0.0	0%
07/11/06	0.0	0.0	0.0	0.0	0%
07/12/06	0.0	0.0	0.0	0.0	0%
07/13/06	0.0	0.0	0.0	0.0	0%
07/14/06	0.0	0.0	0.0	0.0	0%
07/15/06	0.0	0.0	0.0	0.0	0%
07/16/06	0.0	0.0	0.0	0.0	0%
07/17/06	0.0	0.0	0.0	0.0	0%
07/18/06	0.0	0.0	0.0	0.0	0%
07/19/06	0.0	0.0	0.0	0.0	0%
07/20/06	0.0	0.0	0.0	0.0	0%
07/21/06	0.0	0.0	0.0	0.0	0%
07/22/06	0.0	0.0	0.0	0.0	0%
07/23/06	0.0	0.0	0.0	0.0	0%
07/24/06	0.0	0.0	0.0	0.0	0%
07/25/06	9.9	0.3	10.2	0.0	0%
07/26/06	20.6	0.4	21.0	0.0	0%
07/27/06	20.7	0.4	21.1	0.0	0%
07/28/06	8.8	0.4	9.2	4.3	9%
07/29/06	0.0	0.4	0.4	7.5	21%
07/30/06	0.0	0.4	0.4	8.0	32%
07/31/06	0.0	0.4	0.4	2.5	35%
08/01/06	0.0	0.4	0.4	0.0	35%
08/02/06	0.0	1.3	1.3	7.1	42%
08/03/06	0.0	0.4	0.4	0.0	42%
08/04/06	0.0	0.4	0.4	0.0	41%
08/05/06	0.0	1.4	1.4	7.9	49%
08/06/06	0.0	1.9	1.9	11.9	58%
08/07/06	0.0	1.9	1.9	11.9	64%
08/08/06	0.0	1.9	1.9	11.9	68%
08/09/06	0.0	1.8	1.8	11.9	71%
08/10/06	0.0	1.2	1.2	6.9	72%
08/11/06	0.0	0.3	0.3	0.0	72%
08/12/06	0.0	0.3	0.3	0.0	72%
08/13/06	0.0	0.2	0.2	0.0	71%
08/14/06	0.0	0.2	0.2	0.0	71%
08/15/06	0.0	0.1	0.1	0.0	71%
08/16/06	0.0	0.1	0.1	0.0	71%
08/17/06	0.0	0.1	0.1	0.0	71%
08/18/06	0.0	0.1	0.1	0.0	71%
08/19/06	0.0	0.1	0.1	0.0	71%
08/20/06	0.0	0.1	0.1	0.0	70%
08/21/06	0.0	0.1	0.1	0.0	70%
08/22/06	0.0	0.1	0.1	0.0	70%
08/23/06	0.0	0.1	0.1	0.0	70%
08/24/06	0.0	0.1	0.1	0.0	69%
08/25/06	0.0	0.7	0.7	6.1	75%
08/26/06	0.0	1.6	1.6	11.3	81%
08/27/06	0.0	1.6	1.6	11.3	83%
08/28/06	0.0	1.6	1.6	11.5	84%
08/29/06	0.0	0.7	0.7	3.3	84%
08/30/06	0.0	0.1	0.1	0.0	84%
08/31/06	0.0	0.1	0.1	0.0	84%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
09/01/06	0.0	1.2	1.2	4.8	83%
09/02/06	0.0	0.1	0.1	6.7	86%
09/03/06	0.0	0.9	0.9	11.5	88%
09/04/06	0.0	0.4	0.4	3.8	88%
09/05/06	0.0	0.3	0.3	2.4	88%
09/06/06	0.0	0.5	0.5	3.6	88%
09/07/06	0.0	0.9	0.9	4.0	87%
09/08/06	0.0	0.9	0.9	5.8	87%
09/09/06	0.0	0.9	0.9	11.7	89%
09/10/06	0.0	0.9	0.9	11.7	90%
09/11/06	0.0	0.9	0.9	11.5	91%
09/12/06	0.0	2.2	2.2	11.9	89%
09/13/06	0.0	2.2	2.2	11.9	88%
09/14/06	0.0	1.3	1.3	6.9	88%
09/15/06	0.0	0.8	0.8	4.1	88%
09/16/06	0.0	1.6	1.6	2.0	86%
09/17/06	0.0	1.3	1.3	0.0	84%
09/18/06	0.0	1.3	1.3	0.0	83%
09/19/06	0.0	1.9	1.9	0.0	80%
09/20/06	0.0	1.9	1.9	0.0	77%
09/21/06	0.0	1.9	1.9	0.0	74%
09/22/06	0.0	2.1	2.1	0.0	70%
09/23/06	0.0	2.1	2.1	0.0	67%
09/24/06	0.0	2.8	2.8	0.0	62%
09/25/06	5.0	3.8	8.8	0.0	48%
09/26/06	9.1	2.9	12.1	0.0	36%
09/27/06	3.9	1.7	5.6	0.0	31%
09/28/06	13.1	3.8	16.9	0.0	22%
09/29/06	13.1	3.8	16.9	0.0	17%
09/30/06	11.1	3.8	14.9	0.0	13%
10/01/06	10.4	2.8	13.2	0.0	11%
10/02/06	1.4	1.1	2.5	0.0	11%
10/03/06	0.0	1.5	1.5	0.0	11%
10/04/06	0.0	2.2	2.2	0.0	10%
10/05/06	0.0	2.2	2.2	0.0	10%
10/06/06	0.0	2.2	2.2	0.0	10%
10/07/06	0.0	2.2	2.2	0.0	9%
10/08/06	0.0	2.2	2.2	0.0	9%
10/09/06	0.0	2.2	2.2	0.0	9%
10/10/06	8.5	2.2	10.7	0.0	7%
10/11/06	12.0	2.2	14.2	0.0	6%
10/12/06	2.2	0.6	2.8	0.0	6%
10/13/06	0.0	0.0	0.0	0.0	6%
10/14/06	0.0	0.0	0.0	0.0	6%
10/15/06	0.0	0.0	0.0	0.0	6%
10/16/06	0.0	0.4	0.4	0.0	6%
10/17/06	3.2	0.6	3.8	0.0	5%
10/18/06	3.4	0.5	3.9	0.0	5%
10/19/06	13.1	1.3	14.4	0.0	4%
10/20/06	10.8	1.3	12.1	0.0	3%
10/21/06	9.3	1.3	10.6	0.0	3%
10/22/06	9.5	1.3	10.8	0.0	2%
10/23/06	8.9	1.3	10.2	0.0	2%
10/24/06	9.0	1.3	10.3	0.0	2%
10/25/06	2.4	0.4	2.8	0.0	2%
10/26/06	0.0	0.4	0.4	0.0	2%
10/27/06	4.1	0.4	4.5	0.0	2%
10/28/06	9.0	0.4	9.4	0.0	1%
10/29/06	3.3	1.3	4.6	0.0	1%
10/30/06	4.3	0.4	4.7	0.0	1%
10/31/06	3.2	0.4	3.5	0.0	1%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
11/01/06	0.0	1.4	1.4	0.0	1%
11/02/06	0.0	1.4	1.4	0.0	1%
11/03/06	0.0	1.4	1.4	0.0	1%
11/04/06	0.0	1.0	1.0	0.0	1%
11/05/06	0.0	1.0	1.0	0.0	1%
11/06/06	0.0	1.0	1.0	0.0	1%
11/07/06	0.0	0.7	0.7	0.0	1%
11/08/06	0.0	0.7	0.7	0.0	1%
11/09/06	0.0	1.4	1.4	0.0	1%
11/10/06	0.0	1.4	1.4	0.0	1%
11/11/06	0.0	1.4	1.4	0.0	1%
11/12/06	0.0	1.4	1.4	0.0	1%
11/13/06	0.0	1.4	1.4	0.0	1%
11/14/06	0.0	0.5	0.5	0.0	1%
11/15/06	0.0	0.0	0.0	0.0	1%
11/16/06	0.0	1.4	1.4	0.0	1%
11/17/06	0.0	1.4	1.4	0.0	1%
11/18/06	0.0	1.4	1.4	0.0	1%
11/19/06	0.0	1.4	1.4	0.0	1%
11/20/06	0.0	0.6	0.6	0.0	1%
11/21/06	0.0	0.0	0.0	0.0	1%
11/22/06	0.0	0.0	0.0	0.0	1%
11/23/06	0.0	0.0	0.0	0.0	1%
11/24/06	0.0	0.0	0.0	0.0	1%
11/25/06	0.0	0.8	0.8	0.0	1%
11/26/06	0.0	0.0	0.0	0.0	1%
11/27/06	0.0	1.4	1.4	0.0	1%
11/28/06	0.0	1.4	1.4	0.0	1%
11/29/06	0.0	1.4	1.4	0.0	1%
11/30/06	0.0	1.4	1.4	0.0	1%
12/01/06	0.0	1.4	1.4	0.0	1%
12/02/06	0.0	1.4	1.4	0.0	1%
12/03/06	0.0	1.4	1.4	0.0	1%
12/04/06	0.0	2.9	2.9	0.0	1%
12/05/06	0.0	3.5	3.5	0.0	1%
12/06/06	0.0	2.7	2.7	10.5	19%
12/07/06	0.0	0.4	0.4	3.6	24%
12/08/06	0.0	0.7	0.7	6.0	31%
12/09/06	0.0	0.7	0.7	4.1	35%
12/10/06	0.0	0.0	0.0	0.0	35%
12/11/06	0.0	0.4	0.4	3.3	39%
12/12/06	0.0	1.2	1.2	5.7	44%
12/13/06	0.0	0.0	0.0	6.3	49%
12/14/06	0.0	0.0	0.0	0.0	49%
12/15/06	0.0	0.0	0.0	0.0	49%
12/16/06	0.0	0.0	0.0	0.0	49%
12/17/06	0.0	0.0	0.0	0.0	49%
12/18/06	0.0	0.0	0.0	0.0	49%
12/19/06	0.0	0.0	0.0	0.0	49%
12/20/06	0.0	0.0	0.0	0.0	49%
12/21/06	0.0	1.3	1.3	1.5	49%
12/22/06	0.0	2.1	2.1	9.9	57%
12/23/06	0.0	1.4	1.4	7.9	62%
12/24/06	0.0	0.5	0.5	2.7	63%
12/25/06	0.0	2.1	2.1	10.9	67%
12/26/06	0.0	1.8	1.8	7.6	69%
12/27/06	0.0	0.0	0.0	0.0	69%
12/28/06	0.0	0.0	0.0	2.8	70%
12/29/06	0.0	1.3	1.3	6.2	72%
12/30/06	0.0	2.1	2.1	9.9	73%
12/31/06	0.0	0.9	0.9	4.1	74%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
01/01/07	0.0	1.7	1.7	8.1	75%
01/02/07	0.0	0.0	0.0	0.0	75%
01/03/07	0.0	0.0	0.0	0.0	75%
01/04/07	0.0	0.0	0.0	0.0	75%
01/05/07	0.0	0.0	0.0	0.0	75%
01/06/07	0.0	0.0	0.0	0.0	75%
01/07/07	0.0	1.4	1.4	6.9	76%
01/08/07	0.0	2.0	2.0	9.9	77%
01/09/07	0.0	0.7	0.7	3.3	77%
01/10/07	0.0	0.0	0.0	0.0	77%
01/11/07	0.0	1.0	1.0	2.7	77%
01/12/07	0.0	0.0	0.0	0.0	77%
01/13/07	0.0	0.0	0.0	0.0	77%
01/14/07	0.0	0.0	0.0	0.0	77%
01/15/07	0.0	1.2	1.2	4.4	77%
01/16/07	0.0	2.4	2.4	10.4	78%
01/17/07	0.0	1.0	1.0	7.0	79%
01/18/07	0.0	0.5	0.5	2.3	79%
01/19/07	0.0	0.0	0.0	0.0	79%
01/20/07	0.0	0.0	0.0	0.0	79%
01/21/07	0.0	0.0	0.0	0.0	79%
01/22/07	0.0	0.0	0.0	0.0	79%
01/23/07	0.0	0.5	0.5	4.7	79%
01/24/07	0.0	3.3	3.3	4.5	77%
01/25/07	0.0	11.4	11.4	6.3	70%
01/26/07	0.0	0.5	0.5	0.0	70%
01/27/07	0.0	0.0	0.0	0.0	70%
01/28/07	0.0	0.0	0.0	0.0	70%
01/29/07	0.0	0.0	0.0	0.0	70%
01/30/07	0.0	0.0	0.0	0.0	70%
01/31/07	0.0	0.0	0.0	0.0	70%
02/01/07	0.0	0.0	0.0	0.0	70%
02/02/07	0.0	0.0	0.0	0.0	70%
02/03/07	0.0	0.2	0.2	1.5	70%
02/04/07	0.0	1.1	1.1	10.0	73%
02/05/07	3.4	1.1	4.5	9.9	72%
02/06/07	0.0	0.4	0.4	3.3	73%
02/07/07	0.0	0.0	0.0	0.0	73%
02/08/07	0.0	1.0	1.0	0.8	72%
02/09/07	0.0	0.0	0.0	0.0	72%
02/10/07	0.0	0.0	0.0	0.0	72%
02/11/07	0.0	0.0	0.0	0.0	72%
02/12/07	0.0	0.0	0.0	0.0	72%
02/13/07	0.0	0.4	0.4	2.5	73%
02/14/07	0.0	1.2	1.2	5.0	73%
02/15/07	0.0	0.8	0.8	2.9	74%
02/16/07	0.0	0.0	0.0	0.0	74%
02/17/07	0.0	0.0	0.0	0.0	74%
02/18/07	0.0	0.0	0.0	0.0	74%
02/19/07	0.0	1.1	1.1	0.0	73%
02/20/07	0.0	0.7	0.7	6.9	74%
02/21/07	0.0	0.4	0.4	1.4	74%
02/22/07	0.0	0.0	0.0	0.0	74%
02/23/07	0.0	0.0	0.0	0.0	74%
02/24/07	0.0	0.0	0.0	0.0	74%
02/25/07	0.0	0.0	0.0	0.0	74%
02/26/07	0.0	0.0	0.0	0.0	74%
02/27/07	0.0	0.0	0.0	0.0	74%
02/28/07	0.0	0.0	0.0	0.0	74%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
03/01/07	0.0	0.0	0.0	3.5	75%
03/02/07	0.0	0.4	0.4	8.9	78%
03/03/07	0.0	0.2	0.2	1.3	78%
03/04/07	0.0	0.0	0.0	0.0	78%
03/05/07	0.0	0.0	0.0	0.0	78%
03/06/07	0.0	0.0	0.0	0.0	78%
03/07/07	0.0	1.0	1.0	5.9	79%
03/08/07	0.0	2.1	2.1	11.0	80%
03/09/07	0.0	1.6	1.6	8.8	80%
03/10/07	0.0	1.1	1.1	5.7	81%
03/11/07	0.0	0.5	0.5	2.4	81%
03/12/07	0.0	0.0	0.0	0.0	81%
03/13/07	0.0	0.0	0.0	0.0	81%
03/14/07	0.0	0.8	0.8	5.4	81%
03/15/07	0.0	1.1	1.1	3.4	81%
03/16/07	0.0	3.1	3.1	0.0	78%
03/17/07	0.0	3.1	3.1	0.0	75%
03/18/07	0.0	3.1	3.1	0.0	73%
03/19/07	0.0	3.1	3.1	0.0	70%
03/20/07	0.0	3.3	3.3	0.2	67%
03/21/07	0.0	0.7	0.7	0.3	67%
03/22/07	0.0	0.0	0.0	0.0	67%
03/23/07	0.0	0.0	0.0	0.0	67%
03/24/07	0.0	0.0	0.0	0.0	67%
03/25/07	0.0	0.0	0.0	0.0	67%
03/26/07	0.0	0.0	0.0	0.0	67%
03/27/07	0.0	0.0	0.0	0.0	67%
03/28/07	0.0	0.0	0.0	0.0	67%
03/29/07	0.0	0.0	0.0	0.0	67%
03/30/07	0.0	0.0	0.0	0.0	67%
03/31/07	0.0	0.0	0.0	0.0	67%
04/01/07	0.0	0.0	0.0	0.0	67%
04/02/07	0.0	0.0	0.0	0.0	67%
04/03/07	0.0	0.0	0.0	0.0	67%
04/04/07	0.0	0.0	0.0	0.0	67%
04/05/07	0.0	0.0	0.0	0.0	67%
04/06/07	0.0	0.0	0.0	0.0	67%
04/07/07	0.0	0.0	0.0	0.0	67%
04/08/07	0.0	0.0	0.0	0.0	67%
04/09/07	0.0	0.0	0.0	0.0	67%
04/10/07	0.0	0.0	0.0	0.0	67%
04/11/07	0.0	0.0	0.0	0.0	67%
04/12/07	0.0	0.0	0.0	0.0	67%
04/13/07	0.0	0.0	0.0	0.0	67%
04/14/07	0.0	0.0	0.0	0.0	67%
04/15/07	0.0	0.0	0.0	0.0	67%
04/16/07	0.0	0.0	0.0	0.0	67%
04/17/07	0.0	0.0	0.0	0.0	67%
04/18/07	0.0	3.3	3.3	8.8	69%
04/19/07	0.0	2.1	2.1	5.5	69%
04/20/07	0.0	0.0	0.0	0.0	69%
04/21/07	0.0	0.0	0.0	0.0	69%
04/22/07	0.0	0.0	0.0	0.0	69%
04/23/07	0.0	0.0	0.0	0.0	69%
04/24/07	0.0	0.0	0.0	0.0	69%
04/25/07	0.0	0.0	0.0	0.0	69%
04/26/07	0.0	0.0	0.0	0.0	69%
04/27/07	0.0	0.0	0.0	0.0	69%
04/28/07	0.0	0.0	0.0	0.0	69%
04/29/07	0.0	0.0	0.0	0.0	69%
04/30/07	0.0	0.0	0.0	0.0	69%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
05/01/07	0.0	0.0	0.0	0.0	69%
05/02/07	0.0	0.0	0.0	0.0	69%
05/03/07	0.0	0.0	0.0	0.0	69%
05/04/07	0.0	1.4	1.4	6.5	72%
05/05/07	0.0	1.6	1.6	11.0	76%
05/06/07	0.0	1.1	1.1	7.7	78%
05/07/07	0.0	1.1	1.1	7.7	79%
05/08/07	0.0	1.1	1.1	7.7	80%
05/09/07	0.0	0.6	0.6	4.5	81%
05/10/07	0.0	0.0	0.0	0.0	81%
05/11/07	0.0	0.0	0.0	0.0	81%
05/12/07	0.0	0.0	0.0	0.0	81%
05/13/07	0.0	0.0	0.0	0.0	81%
05/14/07	0.0	0.0	0.0	0.0	81%
05/15/07	0.0	0.0	0.0	0.0	81%
05/16/07	0.0	0.0	0.0	0.0	81%
05/17/07	0.0	0.0	0.0	0.0	81%
05/18/07	0.0	0.3	0.3	0.0	81%
05/19/07	0.0	0.5	0.5	1.3	80%
05/20/07	0.0	0.8	0.8	2.9	80%
05/21/07	0.0	0.6	0.6	2.5	80%
05/22/07	0.0	0.0	0.0	0.0	80%
05/23/07	0.0	0.0	0.0	0.0	80%
05/24/07	0.0	0.4	0.4	0.0	80%
05/25/07	0.0	0.5	0.5	2.0	80%
05/26/07	0.0	0.4	0.4	5.8	81%
05/27/07	0.0	0.3	0.3	3.9	82%
05/28/07	0.0	0.3	0.3	3.9	83%
05/29/07	0.0	0.3	0.3	3.8	83%
05/30/07	0.0	0.3	0.3	4.0	84%
05/31/07	0.0	0.3	0.3	4.3	84%
06/01/07	0.0	0.0	0.0	2.3	85%
06/02/07	0.0	0.0	0.0	0.0	85%
06/03/07	0.0	0.0	0.0	0.0	85%
06/04/07	0.0	0.0	0.0	0.0	85%
06/05/07	0.0	0.0	0.0	0.0	85%
06/06/07	0.0	0.0	0.0	0.0	85%
06/07/07	0.0	0.0	0.0	0.0	85%
06/08/07	0.0	0.0	0.0	0.0	85%
06/09/07	0.0	0.0	0.0	0.0	85%
06/10/07	0.0	0.0	0.0	0.0	85%
06/11/07	0.0	0.1	0.1	0.0	85%
06/12/07	0.0	0.2	0.2	0.0	84%
06/13/07	0.0	0.2	0.2	0.0	84%
06/14/07	0.0	0.2	0.2	0.0	84%
06/15/07	0.0	0.2	0.2	0.0	83%
06/16/07	0.0	0.2	0.2	0.0	83%
06/17/07	0.0	0.2	0.2	0.0	83%
06/18/07	0.0	0.1	0.1	0.0	83%
06/19/07	0.0	0.0	0.0	0.0	83%
06/20/07	0.0	0.0	0.0	0.0	83%
06/21/07	0.0	0.0	0.0	0.0	83%
06/22/07	0.0	0.0	0.0	0.0	83%
06/23/07	0.0	0.0	0.0	0.0	83%
06/24/07	0.0	0.0	0.0	0.0	83%
06/25/07	0.0	0.0	0.0	0.0	83%
06/26/07	0.0	0.0	0.0	0.0	83%
06/27/07	0.0	0.0	0.0	0.0	83%
06/28/07	0.0	0.0	0.0	0.0	83%
06/29/07	0.0	0.0	0.0	0.0	83%
06/30/07	0.0	0.0	0.0	0.0	83%

Table 3-2a
Turner Cells 1 & 2
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
07/01/07	0.0	0.0	0.0	0.0	83%
07/02/07	0.0	0.0	0.0	0.0	83%
07/03/07	0.0	0.0	0.0	0.0	83%
07/04/07	0.0	0.0	0.0	0.0	83%
07/05/07	0.0	0.0	0.0	0.0	83%
07/06/07	0.0	0.0	0.0	0.0	83%
07/07/07	0.0	0.0	0.0	0.0	83%
07/08/07	0.0	0.0	0.0	0.0	83%
07/09/07	0.0	0.0	0.0	0.0	83%
07/10/07	0.0	0.0	0.0	0.0	83%
07/11/07	0.0	0.0	0.0	0.0	83%
07/12/07	0.0	0.0	0.0	0.0	83%
07/13/07	0.0	0.0	0.0	0.0	83%
07/14/07	0.0	0.0	0.0	0.0	83%
07/15/07	0.0	0.0	0.0	0.0	83%
07/16/07	0.0	0.0	0.0	0.0	83%
07/17/07	0.0	0.0	0.0	0.0	83%
07/18/07	0.0	0.0	0.0	0.0	83%
07/19/07	0.0	0.0	0.0	0.0	83%
07/20/07	0.0	0.0	0.0	0.0	83%
07/21/07	0.0	0.0	0.0	0.0	83%
07/22/07	0.0	0.0	0.0	0.0	83%
07/23/07	0.0	0.0	0.0	0.0	83%
07/24/07	0.0	0.0	0.0	0.0	83%
07/25/07	0.0	0.0	0.0	0.0	83%
07/26/07	0.0	0.0	0.0	0.0	83%
07/27/07	0.0	0.5	0.5	0.0	81%
07/28/07	0.0	0.9	0.9	0.0	77%
07/29/07	0.0	0.9	0.9	0.0	74%
07/30/07	0.0	0.9	0.9	0.0	72%
07/31/07	0.0	0.9	0.9	0.0	69%
08/01/07	0.0	1.0	1.0	0.0	66%
08/02/07	0.0	1.0	1.0	0.0	63%
08/03/07	0.0	1.0	1.0	0.0	61%
08/04/07	0.0	1.0	1.0	0.0	58%
08/05/07	0.0	1.0	1.0	0.0	56%
08/06/07	0.0	1.0	1.0	0.0	53%
08/07/07	0.0	1.0	1.0	0.0	51%
08/08/07	0.0	0.4	0.4	0.0	50%
08/09/07	0.0	0.1	0.1	0.0	50%
08/10/07	0.0	0.0	0.0	0.0	50%
08/11/07	0.0	0.0	0.0	0.0	50%
08/12/07	0.0	0.0	0.0	0.0	50%
08/13/07	0.0	0.0	0.0	0.0	50%
08/14/07	0.0	0.0	0.0	0.0	50%
08/15/07	0.0	0.0	0.0	0.0	50%
08/16/07	0.0	0.0	0.0	0.0	50%
08/17/07	0.0	0.2	0.2	0.0	49%
08/18/07	0.0	2.2	2.2	0.0	43%
08/19/07	0.0	2.2	2.2	0.0	37%
08/20/07	0.0	2.2	2.2	0.0	33%
08/21/07	0.0	2.2	2.2	0.0	29%
08/22/07	0.0	2.2	2.2	0.0	26%
08/23/07	0.0	2.2	2.2	0.0	23%
08/24/07	0.0	2.2	2.2	0.0	21%
08/25/07	0.0	2.2	2.2	0.0	19%
08/26/07	0.0	2.2	2.2	0.0	18%
08/27/07	0.0	2.2	2.2	0.0	16%
08/28/07	0.0	2.2	2.2	0.0	15%
08/29/07	0.0	2.2	2.2	0.0	14%
08/30/07	0.0	2.2	2.2	0.0	13%
08/31/07	0.0	1.3	1.3	0.0	12%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
01/01/06	0.0	2.0	2.0	0.0	0%
01/02/06	0.0	4.0	4.0	0.0	0%
01/03/06	0.0	0.0	0.0	0.0	0%
01/04/06	0.0	0.0	0.0	0.0	0%
01/05/06	0.0	0.0	0.0	0.0	0%
01/06/06	0.0	0.0	0.0	0.0	0%
01/07/06	0.0	0.0	0.0	0.0	0%
01/08/06	0.0	2.0	2.0	0.0	0%
01/09/06	0.0	2.0	2.0	0.0	0%
01/10/06	0.0	2.0	2.0	0.0	0%
01/11/06	0.0	2.0	2.0	0.0	0%
01/12/06	0.0	2.0	2.0	0.0	0%
01/13/06	0.0	2.0	2.0	0.0	0%
01/14/06	0.0	6.0	6.0	0.0	0%
01/15/06	0.0	2.0	2.0	0.0	0%
01/16/06	4.9	2.0	6.8	0.0	0%
01/17/06	10.2	2.0	12.1	0.0	0%
01/18/06	9.4	2.0	11.3	0.0	0%
01/19/06	8.8	2.0	10.8	0.0	0%
01/20/06	5.9	2.0	7.9	0.0	0%
01/21/06	0.0	0.0	0.0	0.0	0%
01/22/06	0.0	0.0	0.0	0.0	0%
01/23/06	0.0	0.0	0.0	0.0	0%
01/24/06	0.0	0.0	0.0	0.0	0%
01/25/06	0.0	0.0	0.0	0.0	0%
01/26/06	0.0	0.0	0.0	0.0	0%
01/27/06	0.0	0.0	0.0	0.0	0%
01/28/06	0.0	0.0	0.0	0.0	0%
01/29/06	0.0	0.0	0.0	0.0	0%
01/30/06	0.0	0.0	0.0	0.0	0%
01/31/06	0.0	0.0	0.0	0.0	0%
02/01/06	0.0	0.0	0.0	0.0	0%
02/02/06	0.0	0.0	0.0	0.0	0%
02/03/06	0.0	0.0	0.0	0.0	0%
02/04/06	0.0	0.0	0.0	0.0	0%
02/05/06	0.0	0.0	0.0	0.0	0%
02/06/06	0.0	0.0	0.0	0.0	0%
02/07/06	0.0	0.0	0.0	0.0	0%
02/08/06	0.0	0.0	0.0	0.0	0%
02/09/06	0.0	0.0	0.0	0.0	0%
02/10/06	0.0	0.0	0.0	0.0	0%
02/11/06	0.0	0.0	0.0	0.0	0%
02/12/06	0.0	0.0	0.0	0.0	0%
02/13/06	0.0	0.0	0.0	0.0	0%
02/14/06	0.0	0.0	0.0	0.0	0%
02/15/06	0.0	0.0	0.0	0.0	0%
02/16/06	0.0	0.0	0.0	0.0	0%
02/17/06	0.0	0.0	0.0	0.0	0%
02/18/06	0.0	0.0	0.0	0.0	0%
02/19/06	0.0	0.0	0.0	0.0	0%
02/20/06	0.0	0.0	0.0	0.0	0%
02/21/06	0.0	0.0	0.0	0.0	0%
02/22/06	0.0	0.0	0.0	0.0	0%
02/23/06	0.0	0.0	0.0	0.0	0%
02/24/06	0.0	0.0	0.0	0.0	0%
02/25/06	0.0	0.0	0.0	0.0	0%
02/26/06	0.0	2.0	2.0	0.0	0%
02/27/06	0.0	53.3	53.3	0.0	0%
02/28/06	0.0	15.7	15.7	0.0	0%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
03/01/06	0.0	8.7	8.7	0.0	0%
03/02/06	0.0	1.0	1.0	0.0	0%
03/03/06	0.0	4.6	4.6	0.0	0%
03/04/06	0.0	1.0	1.0	0.0	0%
03/05/06	0.0	1.0	1.0	0.0	0%
03/06/06	0.0	1.0	1.0	0.0	0%
03/07/06	0.0	18.6	18.6	0.0	0%
03/08/06	0.0	1.0	1.0	0.0	0%
03/09/06	0.0	1.0	1.0	0.0	0%
03/10/06	0.0	1.0	1.0	0.0	0%
03/11/06	0.0	19.7	19.7	0.0	0%
03/12/06	0.0	1.0	1.0	0.0	0%
03/13/06	0.0	1.0	1.0	0.0	0%
03/14/06	0.0	1.0	1.0	0.0	0%
03/15/06	0.0	1.0	1.0	0.0	0%
03/16/06	0.0	1.0	1.0	0.0	0%
03/17/06	0.0	0.0	0.0	0.0	0%
03/18/06	0.0	21.2	21.2	0.0	0%
03/19/06	0.0	24.0	24.0	0.0	0%
03/20/06	0.0	12.1	12.1	0.0	0%
03/21/06	0.0	1.0	1.0	0.0	0%
03/22/06	0.0	1.0	1.0	0.0	0%
03/23/06	0.0	1.0	1.0	0.0	0%
03/24/06	0.0	1.0	1.0	0.0	0%
03/25/06	0.0	1.0	1.0	0.0	0%
03/26/06	0.0	1.0	1.0	0.0	0%
03/27/06	0.0	1.0	1.0	0.0	0%
03/28/06	0.0	16.5	16.5	0.0	0%
03/29/06	0.0	19.7	19.7	0.0	0%
03/30/06	0.0	6.2	6.2	0.0	0%
03/31/06	0.0	1.0	1.0	0.0	0%
04/01/06	0.0	19.9	19.9	0.0	0%
04/02/06	0.0	9.8	9.8	0.0	0%
04/03/06	0.0	7.6	7.6	0.0	0%
04/04/06	0.0	8.2	8.2	0.0	0%
04/05/06	0.0	16.7	16.7	0.0	0%
04/06/06	0.0	11.8	11.8	0.0	0%
04/07/06	0.0	2.0	2.0	0.0	0%
04/08/06	0.0	2.0	2.0	0.0	0%
04/09/06	0.0	2.0	2.0	0.0	0%
04/10/06	0.0	2.0	2.0	0.0	0%
04/11/06	0.0	2.0	2.0	0.0	0%
04/12/06	0.0	2.0	2.0	0.0	0%
04/13/06	0.0	2.0	2.0	0.0	0%
04/14/06	0.0	2.0	2.0	0.0	0%
04/15/06	0.0	1.7	1.7	0.0	0%
04/16/06	0.0	41.2	41.2	0.0	0%
04/17/06	0.0	7.9	7.9	0.0	0%
04/18/06	0.0	9.1	9.1	0.0	0%
04/19/06	0.0	38.9	38.9	0.0	0%
04/20/06	0.0	2.0	2.0	0.0	0%
04/21/06	0.0	2.0	2.0	0.0	0%
04/22/06	0.0	2.0	2.0	0.0	0%
04/23/06	0.0	2.0	2.0	0.0	0%
04/24/06	0.0	17.0	17.0	0.0	0%
04/25/06	0.0	9.8	9.8	0.0	0%
04/26/06	0.0	9.8	9.8	0.0	0%
04/27/06	0.0	21.1	21.1	0.0	0%
04/28/06	0.0	2.0	2.0	0.0	0%
04/29/06	0.0	2.0	2.0	0.0	0%
04/30/06	0.0	2.0	2.0	0.0	0%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
05/01/06	0.0	2.0	2.0	0.0	0%
05/02/06	0.0	2.0	2.0	0.0	0%
05/03/06	0.0	2.0	2.0	0.0	0%
05/04/06	0.0	2.0	2.0	0.0	0%
05/05/06	0.0	2.0	2.0	0.0	0%
05/06/06	0.0	2.0	2.0	0.0	0%
05/07/06	0.0	2.0	2.0	0.0	0%
05/08/06	0.0	3.0	3.0	0.0	0%
05/09/06	0.0	2.0	2.0	0.0	0%
05/10/06	0.0	2.0	2.0	0.0	0%
05/11/06	0.0	2.0	2.0	0.0	0%
05/12/06	0.0	2.0	2.0	0.0	0%
05/13/06	0.0	2.0	2.0	0.0	0%
05/14/06	0.0	2.0	2.0	0.0	0%
05/15/06	0.0	2.0	2.0	0.0	0%
05/16/06	0.0	2.0	2.0	0.0	0%
05/17/06	0.0	2.0	2.0	0.0	0%
05/18/06	0.0	2.0	2.0	0.0	0%
05/19/06	0.0	2.0	2.0	0.0	0%
05/20/06	0.0	2.0	2.0	0.0	0%
05/21/06	0.0	2.0	2.0	0.0	0%
05/22/06	0.0	11.1	11.1	0.0	0%
05/23/06	0.0	2.0	2.0	0.0	0%
05/24/06	0.0	2.0	2.0	0.0	0%
05/25/06	0.0	2.0	2.0	0.0	0%
05/26/06	0.0	2.0	2.0	0.0	0%
05/27/06	0.0	2.0	2.0	0.0	0%
05/28/06	0.0	2.0	2.0	0.0	0%
05/29/06	0.0	2.0	2.0	0.0	0%
05/30/06	0.0	2.0	2.0	0.0	0%
05/31/06	0.0	2.0	2.0	0.0	0%
06/01/06	0.0	2.0	2.0	0.0	0%
06/02/06	0.0	2.0	2.0	0.0	0%
06/03/06	0.0	2.0	2.0	0.0	0%
06/04/06	0.0	2.0	2.0	0.0	0%
06/05/06	0.0	2.0	2.0	0.0	0%
06/06/06	0.0	2.0	2.0	0.0	0%
06/07/06	0.0	2.0	2.0	0.0	0%
06/08/06	0.0	2.0	2.0	0.0	0%
06/09/06	0.0	2.0	2.0	0.0	0%
06/10/06	0.0	2.0	2.0	0.0	0%
06/11/06	0.0	2.0	2.0	0.0	0%
06/12/06	0.0	2.0	2.0	0.0	0%
06/13/06	0.0	2.0	2.0	0.0	0%
06/14/06	0.0	2.0	2.0	0.0	0%
06/15/06	0.0	2.0	2.0	0.0	0%
06/16/06	11.7	2.0	13.7	0.0	0%
06/17/06	7.0	2.0	9.0	0.0	0%
06/18/06	0.0	1.6	1.6	0.0	0%
06/19/06	0.0	2.0	2.0	0.0	0%
06/20/06	0.0	2.0	2.0	0.0	0%
06/21/06	7.5	2.0	9.5	0.0	0%
06/22/06	0.0	2.0	2.0	0.0	0%
06/23/06	0.0	2.0	2.0	0.0	0%
06/24/06	0.0	2.0	2.0	0.0	0%
06/25/06	0.0	2.0	2.0	0.0	0%
06/26/06	0.0	3.5	3.5	0.0	0%
06/27/06	0.0	2.0	2.0	0.0	0%
06/28/06	0.0	2.0	2.0	0.0	0%
06/29/06	0.0	2.0	2.0	0.0	0%
06/30/06	0.0	2.0	2.0	0.0	0%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
07/01/06	0.0	2.0	2.0	0.0	0%
07/02/06	0.0	2.0	2.0	0.0	0%
07/03/06	0.0	2.0	2.0	0.0	0%
07/04/06	0.0	0.9	0.9	0.0	0%
07/05/06	0.0	0.3	0.3	0.0	0%
07/06/06	0.0	1.7	1.7	5.0	14%
07/07/06	0.0	1.6	1.6	11.0	35%
07/08/06	0.0	1.6	1.6	11.0	48%
07/09/06	0.0	1.6	1.6	11.0	57%
07/10/06	0.0	1.6	1.6	11.5	63%
07/11/06	0.0	1.6	1.6	11.5	67%
07/12/06	0.0	1.6	1.6	11.5	71%
07/13/06	0.0	1.5	1.5	11.5	73%
07/14/06	0.0	1.5	1.5	11.3	75%
07/15/06	0.0	1.5	1.5	9.8	77%
07/16/06	0.0	1.5	1.5	10.7	78%
07/17/06	0.0	1.5	1.5	11.5	79%
07/18/06	0.0	0.0	0.0	0.0	79%
07/19/06	0.0	0.0	0.0	0.0	79%
07/20/06	0.0	0.0	0.0	0.0	79%
07/21/06	0.0	0.0	0.0	0.0	79%
07/22/06	0.0	0.0	0.0	0.0	79%
07/23/06	0.0	0.0	0.0	0.0	79%
07/24/06	0.0	0.0	0.0	0.0	79%
07/25/06	0.0	0.0	0.0	0.0	79%
07/26/06	0.0	0.0	0.0	0.0	79%
07/27/06	0.0	0.0	0.0	0.0	79%
07/28/06	0.0	0.8	0.8	1.4	79%
07/29/06	0.0	1.5	1.5	4.1	78%
07/30/06	0.0	1.5	1.5	4.0	77%
07/31/06	0.0	0.6	0.6	1.4	77%
08/01/06	0.0	0.9	0.9	6.7	79%
08/02/06	0.0	0.6	0.6	4.6	80%
08/03/06	0.0	1.5	1.5	11.5	82%
08/04/06	0.0	1.5	1.5	11.9	83%
08/05/06	0.0	0.5	0.5	4.0	84%
08/06/06	0.0	0.0	0.0	0.0	84%
08/07/06	0.0	0.0	0.0	0.0	84%
08/08/06	0.0	0.0	0.0	0.0	84%
08/09/06	0.0	0.0	0.0	0.0	84%
08/10/06	0.0	0.6	0.6	5.0	85%
08/11/06	0.0	1.5	1.5	11.9	86%
08/12/06	0.0	1.5	1.5	11.9	87%
08/13/06	0.0	1.5	1.5	11.9	88%
08/14/06	0.0	1.5	1.5	11.9	88%
08/15/06	0.0	1.5	1.5	11.9	88%
08/16/06	0.0	1.5	1.5	11.9	88%
08/17/06	0.0	1.5	1.5	11.9	88%
08/18/06	0.0	1.5	1.5	11.9	88%
08/19/06	0.0	1.5	1.5	11.9	89%
08/20/06	0.0	1.5	1.5	11.9	89%
08/21/06	0.0	1.5	1.5	11.9	89%
08/22/06	0.0	1.5	1.5	11.5	89%
08/23/06	0.0	1.5	1.5	11.1	89%
08/24/06	0.0	1.5	1.5	9.5	88%
08/25/06	0.0	0.8	0.8	2.2	88%
08/26/06	0.0	0.0	0.0	0.0	88%
08/27/06	0.0	0.0	0.0	0.0	88%
08/28/06	0.0	0.0	0.0	0.0	88%
08/29/06	0.0	0.9	0.9	7.9	88%
08/30/06	0.0	1.5	1.5	9.9	88%
08/31/06	0.0	3.6	3.6	7.7	85%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
09/01/06	0.0	0.9	0.9	5.6	85%
09/02/06	0.0	1.5	1.5	4.8	85%
09/03/06	0.0	0.8	0.8	0.0	84%
09/04/06	0.0	0.5	0.5	7.7	85%
09/05/06	0.0	0.6	0.6	7.3	85%
09/06/06	0.0	0.4	0.4	3.6	86%
09/07/06	0.0	0.0	0.0	0.0	86%
09/08/06	0.0	0.0	0.0	0.0	86%
09/09/06	0.0	0.0	0.0	0.0	86%
09/10/06	0.0	0.0	0.0	0.0	86%
09/11/06	0.0	0.0	0.0	0.0	86%
09/12/06	0.0	0.0	0.0	0.0	86%
09/13/06	0.0	0.0	0.0	0.0	86%
09/14/06	0.0	0.9	0.9	5.0	86%
09/15/06	0.0	0.8	0.8	5.8	86%
09/16/06	0.0	0.0	0.0	0.0	86%
09/17/06	0.0	0.0	0.0	0.0	86%
09/18/06	0.0	0.0	0.0	0.0	86%
09/19/06	0.0	0.0	0.0	0.0	86%
09/20/06	0.0	0.0	0.0	0.0	86%
09/21/06	0.0	0.0	0.0	0.0	86%
09/22/06	0.0	0.0	0.0	0.0	86%
09/23/06	0.0	0.0	0.0	0.0	86%
09/24/06	0.0	0.0	0.0	0.0	86%
09/25/06	0.0	0.0	0.0	0.0	86%
09/26/06	3.8	0.9	4.7	0.0	81%
09/27/06	9.6	2.1	11.7	0.0	71%
09/28/06	0.0	0.0	0.0	0.0	71%
09/29/06	0.0	0.0	0.0	0.0	71%
09/30/06	0.0	0.0	0.0	0.0	71%
10/01/06	0.0	0.0	0.0	0.0	71%
10/02/06	2.2	1.1	3.3	0.0	69%
10/03/06	0.0	0.7	0.7	0.0	68%
10/04/06	0.0	0.0	0.0	0.0	68%
10/05/06	0.0	0.0	0.0	0.0	68%
10/06/06	0.0	0.0	0.0	0.0	68%
10/07/06	0.0	0.0	0.0	0.0	68%
10/08/06	0.0	0.0	0.0	0.0	68%
10/09/06	0.0	0.0	0.0	0.0	68%
10/10/06	0.0	0.0	0.0	0.0	68%
10/11/06	0.0	0.0	0.0	0.0	68%
10/12/06	4.4	0.5	4.9	0.0	63%
10/13/06	0.0	0.0	0.0	0.0	63%
10/14/06	0.0	0.0	0.0	0.0	63%
10/15/06	0.0	0.0	0.0	0.0	63%
10/16/06	0.0	0.9	0.9	0.0	62%
10/17/06	6.5	0.7	7.2	0.0	56%
10/18/06	10.1	0.8	10.9	0.0	47%
10/19/06	0.0	0.0	0.0	0.0	47%
10/20/06	0.0	0.0	0.0	0.0	47%
10/21/06	0.0	0.0	0.0	0.0	47%
10/22/06	0.0	0.0	0.0	0.0	47%
10/23/06	0.0	0.0	0.0	0.0	47%
10/24/06	0.0	0.0	0.0	0.0	47%
10/25/06	4.9	0.9	5.8	0.0	43%
10/26/06	7.3	0.9	8.2	0.0	37%
10/27/06	4.1	0.9	5.0	0.0	35%
10/28/06	0.0	0.9	0.9	0.0	34%
10/29/06	6.5	0.0	6.5	0.0	31%
10/30/06	6.6	0.9	7.5	0.0	28%
10/31/06	2.2	0.9	3.1	0.0	27%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
11/01/06	0.0	1.4	1.4	0.0	26%
11/02/06	0.0	1.4	1.4	0.0	26%
11/03/06	0.0	1.4	1.4	0.0	25%
11/04/06	0.0	1.0	1.0	0.0	25%
11/05/06	0.0	1.0	1.0	0.0	25%
11/06/06	0.0	1.0	1.0	0.0	24%
11/07/06	0.0	0.7	0.7	0.0	24%
11/08/06	0.0	0.7	0.7	0.0	24%
11/09/06	0.0	0.0	0.0	0.0	24%
11/10/06	0.0	0.0	0.0	0.0	24%
11/11/06	0.0	0.0	0.0	0.0	24%
11/12/06	0.0	0.0	0.0	0.0	24%
11/13/06	0.0	0.0	0.0	0.0	24%
11/14/06	0.0	0.0	0.0	0.0	24%
11/15/06	0.0	0.0	0.0	0.0	24%
11/16/06	0.0	0.0	0.0	0.0	24%
11/17/06	0.0	0.0	0.0	0.0	24%
11/18/06	0.0	0.0	0.0	0.0	24%
11/19/06	0.0	0.0	0.0	0.0	24%
11/20/06	0.0	0.8	0.8	0.0	24%
11/21/06	0.0	1.4	1.4	0.0	23%
11/22/06	0.0	1.4	1.4	0.0	23%
11/23/06	0.0	1.4	1.4	0.0	22%
11/24/06	0.0	1.4	1.4	0.0	22%
11/25/06	0.0	0.6	0.6	0.0	22%
11/26/06	0.0	0.0	0.0	0.0	22%
11/27/06	0.0	0.0	0.0	0.0	22%
11/28/06	0.0	0.0	0.0	0.0	22%
11/29/06	0.0	0.0	0.0	0.0	22%
11/30/06	0.0	0.0	0.0	0.0	22%
12/01/06	0.0	0.0	0.0	0.0	22%
12/02/06	0.0	0.0	0.0	0.0	22%
12/03/06	0.0	0.0	0.0	0.0	22%
12/04/06	0.0	0.0	0.0	0.0	22%
12/05/06	0.0	0.0	0.0	0.0	22%
12/06/06	0.0	0.2	0.2	0.9	23%
12/07/06	0.0	0.9	0.9	7.3	31%
12/08/06	0.0	0.6	0.6	5.1	36%
12/09/06	0.0	1.2	1.2	6.8	41%
12/10/06	0.0	0.0	0.0	0.0	41%
12/11/06	0.0	0.0	0.0	8.0	47%
12/12/06	0.0	1.2	1.2	5.7	49%
12/13/06	0.0	2.3	2.3	4.9	51%
12/14/06	0.0	0.7	0.7	0.0	50%
12/15/06	0.0	0.0	0.0	0.0	50%
12/16/06	0.0	0.0	0.0	0.0	50%
12/17/06	0.0	0.0	0.0	0.0	50%
12/18/06	0.0	0.0	0.0	0.0	50%
12/19/06	0.0	0.0	0.0	0.0	50%
12/20/06	0.0	0.0	0.0	0.0	50%
12/21/06	0.0	0.0	0.0	0.0	50%
12/22/06	0.0	0.0	0.0	0.0	50%
12/23/06	0.0	0.7	0.7	4.0	52%
12/24/06	0.0	1.6	1.6	8.9	56%
12/25/06	0.0	0.0	0.0	0.0	56%
12/26/06	0.0	0.4	0.4	1.4	57%
12/27/06	0.0	0.0	0.0	0.0	57%
12/28/06	0.0	2.1	2.1	3.3	57%
12/29/06	0.0	0.8	0.8	3.8	58%
12/30/06	0.0	0.0	0.0	0.0	58%
12/31/06	0.0	1.1	1.1	5.8	60%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
01/01/07	0.0	0.0	0.0	0.0	60%
01/02/07	0.0	0.0	0.0	0.0	60%
01/03/07	0.0	0.0	0.0	0.0	60%
01/04/07	0.0	0.0	0.0	0.0	60%
01/05/07	0.0	0.0	0.0	0.0	60%
01/06/07	0.0	0.0	0.0	0.0	60%
01/07/07	0.0	0.0	0.0	0.0	60%
01/08/07	0.0	0.0	0.0	0.0	60%
01/09/07	0.0	1.3	1.3	6.6	62%
01/10/07	0.0	3.8	3.8	9.9	63%
01/11/07	0.0	1.6	1.6	4.4	64%
01/12/07	0.0	0.0	0.0	0.0	64%
01/13/07	0.0	0.0	0.0	0.0	64%
01/14/07	0.0	0.0	0.0	0.0	64%
01/15/07	0.0	0.0	0.0	0.0	64%
01/16/07	0.0	0.0	0.0	0.0	64%
01/17/07	0.0	0.3	0.3	2.3	64%
01/18/07	0.0	0.8	0.8	3.3	65%
01/19/07	0.0	0.0	0.0	0.0	65%
01/20/07	0.0	0.0	0.0	0.0	65%
01/21/07	0.0	0.0	0.0	0.0	65%
01/22/07	0.0	0.0	0.0	0.0	65%
01/23/07	0.0	0.5	0.5	2.2	66%
01/24/07	0.0	1.7	1.7	2.3	65%
01/25/07	0.0	0.0	0.0	0.0	65%
01/26/07	0.0	0.0	0.0	0.0	65%
01/27/07	0.0	0.0	0.0	0.0	65%
01/28/07	0.0	0.0	0.0	0.0	65%
01/29/07	0.0	0.0	0.0	0.0	65%
01/30/07	0.0	0.0	0.0	0.0	65%
01/31/07	0.0	0.0	0.0	0.0	65%
02/01/07	0.0	0.2	0.2	0.0	65%
02/02/07	0.0	0.2	0.2	0.0	65%
02/03/07	0.0	0.2	0.2	0.0	65%
02/04/07	0.0	0.2	0.2	0.0	65%
02/05/07	0.0	0.2	0.2	0.0	64%
02/06/07	0.0	0.9	0.9	6.6	66%
02/07/07	0.0	1.3	1.3	2.9	66%
02/08/07	0.0	1.1	1.1	0.9	66%
02/09/07	0.0	0.2	0.2	0.0	66%
02/10/07	0.0	0.2	0.2	0.0	66%
02/11/07	0.0	0.4	0.4	0.0	65%
02/12/07	0.0	0.2	0.2	0.0	65%
02/13/07	0.0	0.4	0.4	2.5	66%
02/14/07	0.0	1.2	1.2	5.0	67%
02/15/07	0.0	0.8	0.8	2.9	67%
02/16/07	0.0	0.0	0.0	0.0	67%
02/17/07	0.0	0.0	0.0	0.0	67%
02/18/07	0.0	0.0	0.0	0.0	67%
02/19/07	0.0	0.0	0.0	0.0	67%
02/20/07	0.0	0.0	0.0	0.0	67%
02/21/07	0.0	0.0	0.0	0.0	67%
02/22/07	0.0	1.4	1.4	0.0	66%
02/23/07	0.0	0.0	0.0	0.0	66%
02/24/07	0.0	0.0	0.0	0.0	66%
02/25/07	0.0	0.0	0.0	0.0	66%
02/26/07	0.0	0.0	0.0	0.0	66%
02/27/07	0.0	0.0	0.0	0.0	66%
02/28/07	0.0	0.0	0.0	0.0	66%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
03/01/07	0.0	0.0	0.0	0.7	67%
03/02/07	0.0	0.0	0.0	0.0	67%
03/03/07	0.0	0.0	0.0	0.0	67%
03/04/07	0.0	0.0	0.0	0.0	67%
03/05/07	0.0	0.0	0.0	0.0	67%
03/06/07	0.0	0.0	0.0	0.0	67%
03/07/07	0.0	0.2	0.2	0.9	67%
03/08/07	0.0	0.0	0.0	0.0	67%
03/09/07	0.0	0.5	0.5	2.9	67%
03/10/07	0.0	1.1	1.1	5.7	69%
03/11/07	0.0	0.5	0.5	2.4	69%
03/12/07	0.0	0.0	0.0	0.0	69%
03/13/07	0.0	0.0	0.0	0.0	69%
03/14/07	0.0	0.0	0.0	0.0	69%
03/15/07	0.0	1.1	1.1	3.4	69%
03/16/07	0.0	0.0	0.0	0.0	69%
03/17/07	0.0	0.0	0.0	0.0	69%
03/18/07	0.0	0.0	0.0	0.0	69%
03/19/07	0.0	0.0	0.0	0.0	69%
03/20/07	0.0	0.2	0.2	0.0	69%
03/21/07	0.0	0.4	0.4	0.0	69%
03/22/07	0.0	0.0	0.0	0.0	69%
03/23/07	0.0	0.0	0.0	0.0	69%
03/24/07	0.0	0.0	0.0	0.0	69%
03/25/07	0.0	0.0	0.0	0.0	69%
03/26/07	0.0	0.0	0.0	0.0	69%
03/27/07	0.0	0.0	0.0	0.0	69%
03/28/07	0.0	0.0	0.0	0.0	69%
03/29/07	0.0	0.0	0.0	0.0	69%
03/30/07	0.0	0.0	0.0	0.0	69%
03/31/07	0.0	0.0	0.0	0.0	69%
04/01/07	0.0	0.0	0.0	0.0	69%
04/02/07	0.0	0.0	0.0	0.0	69%
04/03/07	0.0	0.0	0.0	0.0	69%
04/04/07	0.0	0.0	0.0	0.0	69%
04/05/07	0.0	0.0	0.0	0.0	69%
04/06/07	0.0	0.0	0.0	0.0	69%
04/07/07	0.0	0.0	0.0	0.0	69%
04/08/07	0.0	0.0	0.0	0.0	69%
04/09/07	0.0	0.0	0.0	0.0	69%
04/10/07	0.0	0.0	0.0	0.0	69%
04/11/07	0.0	0.0	0.0	0.0	69%
04/12/07	0.0	0.0	0.0	0.0	69%
04/13/07	0.0	0.0	0.0	0.0	69%
04/14/07	0.0	0.0	0.0	0.0	69%
04/15/07	0.0	0.0	0.0	0.0	69%
04/16/07	0.0	0.0	0.0	0.0	69%
04/17/07	0.0	1.4	1.4	4.0	69%
04/18/07	0.0	1.7	1.7	4.2	69%
04/19/07	0.0	0.0	0.0	0.0	69%
04/20/07	0.0	0.1	0.1	0.0	69%
04/21/07	0.0	0.0	0.0	0.0	69%
04/22/07	0.0	0.0	0.0	0.0	69%
04/23/07	0.0	0.0	0.0	0.0	69%
04/24/07	0.0	0.0	0.0	0.0	69%
04/25/07	0.0	0.0	0.0	0.0	69%
04/26/07	0.0	0.0	0.0	0.0	69%
04/27/07	0.0	0.0	0.0	0.0	69%
04/28/07	0.0	0.0	0.0	0.0	69%
04/29/07	0.0	0.0	0.0	0.0	69%
04/30/07	0.0	0.0	0.0	0.0	69%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
05/01/07	0.0	0.0	0.0	0.0	69%
05/02/07	0.0	0.0	0.0	0.0	69%
05/03/07	0.0	0.0	0.0	0.0	69%
05/04/07	0.0	0.5	0.5	1.5	70%
05/05/07	0.0	0.2	0.2	1.5	70%
05/06/07	0.0	0.7	0.7	4.8	71%
05/07/07	0.0	0.7	0.7	4.8	73%
05/08/07	0.0	0.7	0.7	4.8	74%
05/09/07	0.0	0.3	0.3	2.6	74%
05/10/07	0.0	0.0	0.0	0.0	74%
05/11/07	0.0	0.0	0.0	0.0	74%
05/12/07	0.0	0.0	0.0	0.0	74%
05/13/07	0.0	0.0	0.0	0.0	74%
05/14/07	0.0	0.0	0.0	0.0	74%
05/15/07	0.0	0.0	0.0	0.0	74%
05/16/07	0.0	0.0	0.0	0.0	74%
05/17/07	0.0	0.0	0.0	0.0	74%
05/18/07	0.0	0.3	0.3	1.3	74%
05/19/07	0.0	0.5	0.5	2.9	75%
05/20/07	0.0	0.8	0.8	2.5	75%
05/21/07	0.0	0.6	0.6	2.4	75%
05/22/07	0.0	0.0	0.0	0.0	75%
05/23/07	0.0	0.0	0.0	0.0	75%
05/24/07	0.0	0.4	0.4	0.0	75%
05/25/07	0.0	0.5	0.5	5.8	76%
05/26/07	0.0	0.4	0.4	3.9	77%
05/27/07	0.0	0.3	0.3	3.9	78%
05/28/07	0.0	0.3	0.3	3.8	79%
05/29/07	0.0	0.3	0.3	4.0	79%
05/30/07	0.0	0.3	0.3	4.3	80%
05/31/07	0.0	0.3	0.3	2.3	80%
06/01/07	0.0	0.0	0.0	0.0	80%
06/02/07	0.0	0.0	0.0	0.0	80%
06/03/07	0.0	0.0	0.0	0.0	80%
06/04/07	0.0	0.0	0.0	0.0	80%
06/05/07	0.0	0.0	0.0	0.0	80%
06/06/07	0.0	0.0	0.0	0.0	80%
06/07/07	0.0	0.0	0.0	0.0	80%
06/08/07	0.0	0.0	0.0	0.0	80%
06/09/07	0.0	0.0	0.0	0.0	80%
06/10/07	0.0	0.0	0.0	0.0	80%
06/11/07	0.0	0.8	0.8	0.0	80%
06/12/07	0.0	1.5	1.5	0.0	78%
06/13/07	0.0	1.5	1.5	0.0	77%
06/14/07	0.0	1.5	1.5	0.0	75%
06/15/07	0.0	1.5	1.5	0.0	74%
06/16/07	0.0	1.5	1.5	0.0	72%
06/17/07	0.0	1.5	1.5	0.0	71%
06/18/07	0.0	0.5	0.5	0.0	71%
06/19/07	0.0	0.0	0.0	0.0	71%
06/20/07	0.0	0.0	0.0	0.0	71%
06/21/07	0.0	0.0	0.0	0.0	71%
06/22/07	0.0	0.0	0.0	0.0	71%
06/23/07	0.0	0.0	0.0	0.0	71%
06/24/07	0.0	0.0	0.0	0.0	71%
06/25/07	0.0	0.0	0.0	0.0	71%
06/26/07	0.0	0.0	0.0	0.0	71%
06/27/07	0.0	0.0	0.0	0.0	71%
06/28/07	0.0	0.0	0.0	0.0	71%
06/29/07	0.0	0.0	0.0	0.0	71%
06/30/07	0.0	0.0	0.0	0.0	71%

Table 3-2b
Turner Cells 3 & 4
Volume of Diluent and Recycled Water Recharged

Date	Diluent Water (AF)			Recycled Water (AF)	Recycled Water in Surface Water
	Import	Local	Total		
07/01/07	0.0	0.0	0.0	0.0	71%
07/02/07	0.0	0.0	0.0	0.0	71%
07/03/07	0.0	0.0	0.0	0.0	71%
07/04/07	0.0	0.0	0.0	0.0	71%
07/05/07	0.0	0.0	0.0	0.0	71%
07/06/07	0.0	0.0	0.0	0.0	71%
07/07/07	0.0	0.0	0.0	0.0	71%
07/08/07	0.0	0.0	0.0	0.0	71%
07/09/07	0.0	0.0	0.0	0.0	71%
07/10/07	0.0	0.0	0.0	0.0	71%
07/11/07	0.0	0.0	0.0	0.0	71%
07/12/07	0.0	0.0	0.0	0.0	71%
07/13/07	0.0	0.0	0.0	0.0	71%
07/14/07	0.0	0.0	0.0	0.0	71%
07/15/07	0.0	0.0	0.0	0.0	71%
07/16/07	0.0	0.0	0.0	0.0	71%
07/17/07	0.0	0.0	0.0	0.0	71%
07/18/07	0.0	0.0	0.0	0.0	71%
07/19/07	0.0	0.0	0.0	0.0	71%
07/20/07	0.0	0.0	0.0	0.0	71%
07/21/07	0.0	0.0	0.0	0.0	71%
07/22/07	0.0	0.0	0.0	0.0	71%
07/23/07	0.0	0.0	0.0	0.0	71%
07/24/07	0.0	0.0	0.0	0.0	71%
07/25/07	0.0	0.3	0.3	0.0	70%
07/26/07	0.0	0.7	0.7	0.0	69%
07/27/07	0.0	0.3	0.3	0.0	69%
07/28/07	0.0	0.0	0.0	0.0	69%
07/29/07	0.0	0.0	0.0	0.0	69%
07/30/07	0.0	0.0	0.0	0.0	69%
07/31/07	0.0	0.0	0.0	0.0	69%
08/01/07	0.0	0.0	0.0	0.0	69%
08/02/07	0.0	0.0	0.0	0.0	69%
08/03/07	0.0	0.0	0.0	0.0	69%
08/04/07	0.0	0.0	0.0	0.0	69%
08/05/07	0.0	0.0	0.0	0.0	69%
08/06/07	0.0	0.0	0.0	0.0	69%
08/07/07	0.0	0.0	0.0	0.0	69%
08/08/07	0.0	0.6	0.6	0.0	68%
08/09/07	0.0	0.9	0.9	0.0	67%
08/10/07	0.0	1.0	1.0	0.0	66%
08/11/07	0.0	1.0	1.0	0.0	65%
08/12/07	0.0	1.0	1.0	0.0	64%
08/13/07	0.0	1.1	1.1	0.0	63%
08/14/07	0.0	1.1	1.1	0.0	62%
08/15/07	0.0	1.1	1.1	0.0	61%
08/16/07	0.0	1.1	1.1	0.0	60%
08/17/07	0.0	0.9	0.9	0.0	59%
08/18/07	0.0	0.0	0.0	0.0	59%
08/19/07	0.0	0.0	0.0	0.0	59%
08/20/07	0.0	0.0	0.0	0.0	59%
08/21/07	0.0	0.0	0.0	0.0	59%
08/22/07	0.0	0.0	0.0	0.0	59%
08/23/07	0.0	0.0	0.0	0.0	59%
08/24/07	0.0	0.0	0.0	0.0	59%
08/25/07	0.0	0.0	0.0	0.0	59%
08/26/07	0.0	0.0	0.0	0.0	59%
08/27/07	0.0	0.0	0.0	0.0	59%
08/28/07	0.0	0.0	0.0	0.0	59%
08/29/07	0.0	0.0	0.0	0.0	59%
08/30/07	0.0	0.0	0.0	0.0	59%
08/31/07	0.0	0.0	0.0	0.0	59%

Table 3-3
Turner Basin Recycled Water Contribution
From Historical Diluent Water (DW) and Recycled Water (RW) Deliveries

DATE		NO. MOS. SINCE INITIAL RW DELIVERY	DW (AF)	DW 60-MONTH TOTAL (AF)	RW (AF)	RW 60-MONTH TOTAL (AF)	DW + RW 60-MONTH TOTAL (AF)	RWC (%)
July 1 2001 to June 2006		0 to 60		3,818		0		0%
2006/07	Jul-06	1	93.0	3,911	160.4	160	4,071	4%
	Aug-06	2	54.2	3,965	348.0	508	4,474	11%
	Sep-06	3	128.7	4,094	154.2	663	4,756	14%
	Oct-06	4	229.3	4,323	0.0	663	4,986	13%
	Nov-06	5	45.0	4,368	0.0	663	5,031	13%
	Dec-06	6	43.9	4,412	169.0	832	5,244	16%
	Jan-07	7	37.5	4,450	101.6	933	5,383	17%
	Feb-07	8	20.7	4,470	65.0	998	5,468	18%
	Mar-07	9	28.9	4,499	72.8	1,071	5,570	19%
	Apr-07	10	8.0	4,507	22.0	1,093	5,600	20%
	May-07	11	20.0	4,527	135.9	1,229	5,756	21%
	Jun-07	12	11.0	4,538	3.0	1,232	5,770	21%
2007/08	Jul-07	13	5.0	4,543	0.0	1,232	5,775	21%
	Aug-07	14	48.0	4,591	0.0	1,232	5,823	21%
	Sep-07	15	16.0	4,607	0.0	1,232	5,839	21%
	Oct-07	16	65.0	4,672	0.0	1,232	5,904	21%
	Nov-07	17	162.0	4,834	0.0	1,232	6,066	20%
	Dec-07	18	277.0	5,111	0.0	1,232	6,343	19%
	Jan-08	19	454.0	5,565	0.0	1,232	6,797	18%
	Feb-08	20	260.0	5,825	0.0	1,232	7,057	17%
	Mar-08	21	17.0	5,842	0.0	1,232	7,074	17%
	Apr-08	22	18.0	5,860	0.0	1,232	7,092	17%
	May-08	23	181.0	6,041	0.0	1,232	7,273	17%

Table 3-4
Turner Basin Infiltration Rate Estimates

	Start (Date/Time)	Water Depth, H (feet)	End (Date/Time)	Water Depth, H (feet)	dT (days)	dH (feet)	Observed Infiltration (dH/dT) (feet/day)
Turner 1 & 2	01/01/06 00:15	12.30	01/01/06 21:30	11.85	0.89	0.45	0.51
	01/04/06 02:23	13.30	01/09/06 01:33	11.70	4.97	1.60	0.32
	03/04/06 05:39	20.70	03/05/06 03:59	20.10	0.93	0.60	0.64
	03/05/06 20:00	19.65	03/06/06 10:29	19.24	0.60	0.41	0.68
	03/07/06 08:00	19.60	03/08/06 10:29	18.98	1.10	0.62	0.56
	03/08/06 10:29	19.24	03/09/06 09:02	18.38	0.94	0.86	0.92
	03/09/06 21:40	16.50	03/10/06 22:06	16.10	1.02	0.40	0.39
	10/12/06 09:49	12.66	10/16/06 05:54	10.26	3.84	2.40	0.63
	11/20/06 14:51	10.96	11/25/06 00:56	9.96	4.42	1.00	0.23
	12/12/06 15:26	12.38	12/13/06 22:26	12.00	1.29	0.38	0.29
	12/15/06 17:42	11.51	12/17/06 15:43	11.01	1.92	0.50	0.26
	12/19/06 15:28	10.49	12/21/06 03:43	10.14	1.51	0.35	0.23
	12/23/06 16:59	12.37	12/24/06 14:14	12.14	0.89	0.23	0.26
	12/26/06 22:29	14.36	12/29/06 04:34	13.40	2.25	0.96	0.43
	12/31/06 09:59	14.97	01/01/07 07:24	14.54	0.89	0.43	0.48
	01/02/07 02:39	14.76	01/04/07 12:05	13.99	2.39	0.77	0.32
	01/04/07 12:05	13.99	01/06/07 09:56	12.99	1.91	1.00	0.52
	01/09/07 10:22	14.71	01/11/07 05:07	14.07	1.78	0.64	0.36
	01/18/07 11:29	15.41	01/20/07 14:41	14.56	2.13	0.85	0.40
	01/20/07 14:41	14.56	01/22/07 10:41	13.93	1.83	0.63	0.34
Turner 3 & 4	12/21/05 12:28	12.28	12/22/05 12:18	11.94	0.99	0.34	0.34
	12/29/05 11:52	12.80	12/30/05 07:26	12.30	0.82	0.50	0.61
	12/29/05 21:08	12.56	12/31/05 15:33	11.80	1.77	0.76	0.43
	01/04/06 03:48	11.90	01/08/06 15:03	10.90	4.47	1.00	0.22
	03/06/06 13:00	14.07	03/06/06 16:00	13.94	0.13	0.13	1.04
	10/12/06 17:49	14.35	10/16/06 04:44	13.94	3.45	0.41	0.12
	11/25/06 22:06	14.69	12/01/06 06:33	14.11	5.35	0.58	0.11
	12/08/06 13:56	15.30	12/09/06 07:31	15.19	0.73	0.11	0.15
	12/10/06 01:11	15.73	12/12/06 08:31	15.37	2.31	0.36	0.16
	12/14/06 11:16	16.63	12/17/06 16:33	16.02	3.22	0.61	0.19
	12/21/06 00:43	15.49	12/23/06 13:34	15.17	2.54	0.32	0.13
	12/24/06 18:29	16.60	12/28/06 06:34	16.05	3.50	0.55	0.16
	12/29/06 11:39	17.03	12/31/06 05:39	16.69	1.75	0.34	0.19
	01/01/07 10:24	17.71	01/04/07 18:40	17.01	3.34	0.70	0.21
	01/04/07 18:40	17.01	01/07/07 00:31	16.60	2.24	0.41	0.18
	01/07/07 00:31	16.60	01/09/07 05:56	16.29	2.23	0.31	0.14
	01/11/07 09:43	18.49	01/12/07 08:04	18.22	0.93	0.27	0.29
	01/12/07 07:24	18.22	01/13/07 06:54	18.00	0.98	0.22	0.22
	01/14/07 06:29	17.76	01/15/07 13:24	17.53	1.29	0.23	0.18
	01/15/07 13:24	17.53	01/17/07 12:19	17.25	1.95	0.28	0.14
	01/18/07 16:41	17.76	01/20/07 02:40	17.51	1.42	0.25	0.18
	01/20/07 02:40	17.51	01/21/07 18:41	17.24	1.67	0.27	0.16

Table 4-1a
Turner Cell 1: Surface Water and Lysimeter Results
Electrical Conductivity
(µmhos/cm)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25 ft bgs Lysimeter	Percentage RW in Basin
	0	5	10	15	25	35		
01/13/06	325	325	335	355	420	385	0%	0%
01/24/06	500	470	455	405	415	365	0%	0%
02/07/06	535	525	525	480	495	465	0%	0%
02/14/06	535	550	540	500	520	485	0%	0%
02/21/06	345	415	450	495	500	490	0%	0%
02/28/06	210	385	390	450	460	420	0%	0%
03/07/06	175	230	230	260	345	380	0%	0%
03/14/06	160	200	200	250	245	325	0%	0%
03/21/06	110	180	175	230	240	290	0%	0%
03/28/06	140	145	160	195	230	235	0%	0%
04/11/06	190	155	170	170	185	175	0%	0%
04/18/06	201	197	205	190	197	187	0%	0%
04/25/06	225	215	230	205	200	205	0%	0%
05/02/06	230	225	230	210	205	215	0%	0%
05/09/06	250	230	220	220	215	220	0%	0%
05/16/06	287	278	215	230	219	IS	0%	0%
05/23/06	215	300	225	245	230	IS	0%	0%
05/31/06	256	260	250	280	230	IS	0%	0%
06/06/06	285	291	265	285	254	IS	0%	0%
06/13/06	345	315	270	290	270	IS	0%	0%
06/20/06	345	365	290	310	285	IS	0%	0%
06/27/06	330	375	320	340	295	IS	0%	0%
07/04/06	No Water	IS	350	365	305	IS	0%	0%
07/11/06	No Water	IS	365	IS	IS	IS	0%	0%
07/18/06	No Water	IS	IS	IS	IS	IS	0%	0%
07/25/06	No Water	IS	IS	IS	IS	IS	0%	0%
08/01/06	520	685	515	425	400	IS	25%	35%
08/08/06	605	640	530	475	IS	330	31%	68%
08/15/06	660	655	550	480	445	380	36%	71%
08/22/06	600	670	625	510	505	430	51%	70%
08/29/06	625	660	630	530	570	460	68%	84%
09/06/06	645	625	610	560	575	520	69%	88%
09/12/06	665	660	630	575	645	IS	86%	89%
09/19/06	670	665	640	575	620	IS	80%	80%
09/26/06	540	675	640	575	620	IS	80%	36%
10/03/06	410	585	600	IS	635	IS	84%	11%
10/10/06	415	475	510	560	660	IS	90%	7%
10/17/06	375	410	435	IS	630	IS	83%	5%
10/24/06	340	395	420	475	595	IS	74%	2%
10/31/06	355	370	400	425	565	IS	66%	1%
11/07/06	380	365	370	400	520	IS	55%	1%
11/14/06	405	395	275	380	500	IS	50%	1%
11/21/06	405	405	390	390	469	IS	42%	1%
11/28/06	420	430	410	405	455	IS	39%	1%
12/05/06	450	450	435	425	445	IS	36%	1%
12/12/06	610	485	480	IS	475	IS	44%	44%
12/19/06	575	520	495	IS	455	IS	39%	49%
12/28/06	670	565	530	450	465	IS	41%	70%
01/03/07	675	630	575	IS	475	IS	44%	75%
01/09/07	710	660	620	IS	475	IS	44%	77%
01/16/07	720	685	645	IS	515	IS	54%	78%
01/18/07	715	IS	IS	IS	555	IS	64%	79%
01/23/07	720	705	655	IS	580	IS	70%	79%
01/30/07	710	700	675	IS	575	IS	69%	70%
02/01/07	715	IS	IS	IS	640	IS	85%	70%
02/06/07	735	715	690	IS	625	IS	81%	73%
02/13/07	730	710	695	IS	595	IS	74%	73%
02/15/07	685	IS	IS	IS	660	IS	90%	74%
02/20/07	680	710	695	590	615	460	79%	74%
02/27/07	695	685	680	635	630	615	83%	74%
03/06/07	700	695	680	675	635	675	54%	78%
03/13/07	730	715	695	IS	655	IS	62%	81%
03/20/07	720	720	710	IS	650	670	60%	67%
03/27/07	730	700	IS	IS	IS	IS	62%	67%

Table 4-1a
Turner Cell 1: Surface Water and Lysimeter Results
Electrical Conductivity
(µmhos/cm)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25 ft bgs Lysimeter	Percentage RW in Basin
	0	5	10	15	25	35		
04/03/07	730	710	695	IS	660	IS	64%	67%
04/10/07	745	730	695	IS	680	IS	72%	67%
04/17/07	740	705	680	IS	680	IS	72%	67%
04/24/07	675	685	690	IS	695	IS	78%	69%
05/01/07	635	675	IS	IS	690	IS	76%	69%
05/08/07	715	665	690	IS	710	IS	84%	80%
05/15/07	720	670	665	640	720	IS	88%	81%
05/22/07	725	700	675	IS	710	IS	84%	80%
05/29/07	725	705	690	IS	690	IS	76%	83%
06/05/07	750	735	720	IS	710	IS	84%	85%
06/12/07	745	735	705	IS	700	IS	80%	84%
06/19/07	735	695	695	IS	670	IS	68%	83%
06/26/07	705	705	700	IS	685	IS	74%	83%
07/03/07	685	695	695	IS	690	IS	76%	83%
07/10/07	710	715	705	IS	690	IS	76%	83%
07/17/07	735	740	710	IS	675	IS	70%	83%
07/24/07	780	760	705	IS	660	IS	64%	83%
07/31/07	630	780	735	IS	695	IS	78%	69%
08/06/07	560	760	710	IS	670	IS	68%	53%
08/14/07	560	715	725	IS	665	IS	66%	50%
08/21/07	545	645	725	IS	645	IS	58%	29%
08/28/07	540	635	730	IS	670	IS	68%	15%
Notes	IS:	Insufficient sample from lysimeter result in parameter not being analyzed						
	##%	Value estimated using adjacent days' data due to no available EC for the sample day						

Table 4-1b
Turner Cell 4: Surface Water and Lysimeter Results
Electrical Conductivity
(µmhos/cm)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 15-ft bgs Lysimeter	Percentage RW in Basin
	0	5	10	15	25	35		
01/24/06	525	465	445	450	730	1030	0%	0%
02/07/06	505	540	425	485	725	IS	0%	0%
02/14/06	560	520	450	500	735	1430	0%	0%
02/21/06	495	525	460	495	735	1450	0%	0%
02/28/06	200	545	475	510	745	1490	0%	0%
03/07/06	150	340	410	420	875	1520	0%	0%
03/14/06	145	210	305	385	810	1540	0%	0%
03/21/06	140	205	275	370	750	1540	0%	0%
03/28/06	155	195	250	340	735	1530	0%	0%
04/11/06	1360	190	225	290	800	1560	0%	0%
04/18/06	197	155	209	250	835	1301	0%	0%
04/25/06	225	210	190	230	915	1380	0%	0%
05/02/06	230	255	200	225	920	IS	0%	0%
05/09/06	255	295	260	260	IS	1280	0%	0%
05/16/06	290	345	280	287	IS	IS	0%	0%
05/23/06	295	335	315	305	IS	IS	0%	0%
05/31/06	300	315	325	315	IS	1120	0%	0%
06/06/06	329	364	329	329	995	1070	0%	0%
06/13/06	325	350	335	335	IS	IS	0%	0%
06/20/06	320	390	350	360	850	1090	0%	0%
06/27/06	360	385	360	375	IS	1090	0%	0%
07/04/06	350	365	370	380	IS	1100	0%	0%
07/11/06	595	375	370	380	IS	IS	0%	67%
07/18/06	615	525	380	395	675	1110	0%	79%
07/25/06	570	600	390	IS	IS	IS	< 50%	79%
08/01/06	600	605	420	IS	IS	IS	< 50%	79%
08/08/06	620	605	450	535	705	1010	59%	84%
08/15/06	605	610	515	545	IS	1060	61%	88%
08/22/06	590	615	545	590	IS	1070	73%	89%
08/29/06	590	615	550	600	IS	1070	75%	88%
09/06/06	575	600	590	IS	795	1070	*83%*	86%
09/12/06	590	610	610	IS	IS	1120	*91%*	86%
09/14/06	570	IS	IS	695	IS	IS	99%	86%
09/19/06	600	570	610	IS	IS	1120	94%	86%
09/26/06	605	565	610	IS	IS	1120	89%	81%
10/03/06	520	500	610	IS	IS	IS	84%	68%
10/10/06	515	520	610	IS	IS	1140	79%	68%
10/12/06	500	IS	IS	595	IS	IS	74%	63%
10/17/06	490	515	595	IS	IS	1130	72%	56%
10/24/06	445	500	600	IS	IS	1130	70%	47%
10/31/06	390	480	595	IS	IS	1120	68%	27%
11/07/06	385	415	570	IS	IS	1100	66%	24%
11/14/06	390	400	550	555	IS	1090	64%	24%
11/21/06	390	420	520	545	IS	1090	61%	23%
11/28/06	395	430	490	520	IS	1080	55%	22%
12/05/06	390	410	465	470	IS	1060	43%	22%
12/12/06	505	IS	455	IS	IS	IS	< 40%	49%
12/19/06	525	400	435	IS	IS	1050	< 40%	50%
12/28/06	565	475	415	IS	IS	IS	< 40%	57%
01/03/07	595	515	415	IS	825	IS	< 40%	60%
01/09/07	560	525	410	IS	IS	785	< 40%	62%
01/16/07	625	570	420	425	IS	980	31%	64%
01/18/07	615	IS	IS	425	IS	IS	31%	65%
01/23/07	580	580	440	IS	IS	945	34%	66%
01/30/07	575	550	480	450	IS	IS	38%	65%
02/01/07	575	IS	IS	495	IS	IS	49%	65%
02/06/07	575	515	510	IS	IS	915	52%	66%
02/13/07	590	515	530	520	580	900	55%	66%
02/15/07	585	IS	IS	540	IS	IS	60%	67%
02/20/07	535	590	555	540	700	880	60%	67%
02/27/07	510	585	565	545	600	865	61%	66%
03/06/07	525	580	585	565	IS	775	66%	67%
03/13/07	595	555	595	IS	590	850	68%	69%
03/20/07	605	530	570	575	IS	760	69%	69%
03/27/07	595	545	575	600	IS	IS	75%	69%
04/03/07	595	570	575	IS	IS	850	75%	69%
04/10/07	595	580	575	600	IS	640	75%	69%
04/17/07	585	565	555	IS	IS	850	75%	69%
04/24/07	615	555	555	IS	850	IS	76%	69%
05/01/07	615	IS	570	IS	IS	660	76%	69%
05/08/07	670	560	590	IS	IS	790	76%	74%
05/15/07	675	620	590	IS	IS	815	77%	74%
05/22/07	705	590	590	IS	IS	785	77%	75%
05/29/07	690	605	590	IS	IS	680	77%	79%
06/05/07	730	635	610	610	640	775	78%	80%
06/12/07	725	635	620	610	IS	710	78%	78%
06/19/07	675	650	620	IS	IS	860	80%	71%
06/26/07	685	645	630	630	IS	760	83%	71%
07/03/07	660	IS	630	IS	IS	IS	83%	71%
07/10/07	650	665	640	IS	675	770	84%	71%
07/17/07	625	640	640	IS	680	740	84%	71%
07/24/07	640	645	640	640	IS	860	85%	71%
07/31/07	610	720	640	IS	IS	775	86%	69%
08/06/07	605	645	665	650	IS	720	88%	69%
08/14/07	615	675	660	660	IS	780	90%	62%
08/21/07	575	660	655	665	IS	765	91%	59%
08/28/07	570	660	660	IS	IS	785	91%	59%

Notes
IS: Insufficient sample from lysimeter result in parameter not being analyzed
##% Value estimated using adjacent days' data due to no available EC for the sample day

Table 4-2a
Turner Cell 1: Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25 ft bgs Lysimeter
	0	5	10	15	25	35	
01/13/06	5.2	3.4	2.8	2.0	2.1	1.5	0%
01/17/06	5.4	4.7	3.0	1.6	1.9	1.2	0%
01/24/06	4.3	3.7	2.5	1.5	1.5	1.1	0%
01/31/06	5.7	3.7	2.3	1.5	1.7	1.1	0%
02/07/06	5.8	3.8	2.5	1.5	1.7	1.1	0%
02/14/06	6.5	4.5	2.7	1.6	1.9	1.3	0%
02/21/06	10.7	7.8	4.4	1.9	2.3	1.4	0%
02/28/06	7.8	7.4	4.6	2.2	3.7	1.8	0%
03/07/06	4.9	6.5	4.2	2.3	2.5	1.8	0%
03/14/06	4.7	3.8	2.7	2.0	2.3	1.8	0%
03/21/06	5.2	3.5	3.0	2.0	2.3	1.6	0%
03/28/06	5.5	3.3	2.6	2.0	2.2	1.7	0%
04/04/06	3.9	3.3	2.5	2.4	2.5	1.7	0%
04/11/06	2.9	2.7	2.0	1.7	2.2	1.7	0%
04/18/06	2.8	1.8	1.5	1.4	1.4	1.4	0%
04/25/06	2.1	1.7	1.4	1.3	1.4	1.3	0%
05/02/06	2.1	1.8	1.5	1.3	1.5	1.1	0%
05/09/06	2.6	2.0	1.6	1.3	1.7	1.3	0%
05/16/06	3.9	3.0	1.9	1.6	1.7	1.3	0%
05/23/06	14.5	3.6	1.7	1.5	1.5	1.3	0%
05/31/06	11.2	8.2	2.0	1.5	1.4	1.2	0%
06/06/06	10.9	7.6	2.1	1.8	1.5	1.0	0%
06/13/06	11.1	7.6	2.4	2.1	1.8	1.1	0%
06/20/06	10.5	6.4	3.0	2.3	2.3	1.0	0%
06/27/06	13.9	5.3	3.1	2.5	2.5	1.1	0%
07/04/06	No Water	5.4	3.0	2.2	2.5	1.3	0%
07/11/06	No Water	6.0	3.2	2.1	1.9	1.1	0%
07/18/06	No Water	IS	IS	1.9	1.7	1.0	0%
07/25/06	No Water	IS	IS	IS	1.6	1.1	0%
08/01/06	7.0	7.4	3.9	2.0	1.7	1.1	25%
08/08/06	6.0	5.0	3.7	2.4	1.6	1.1	31%
08/15/06	6.8	4.6	3.2	2.1	2.3	1.4	36%
08/22/06	6.9	4.1	3.4	2.1	2.5	1.6	51%
08/29/06	6.7	4.2	3.3	2.0	2.1	1.7	68%
09/06/06	6.1	3.9	3.2	2.1	2.3	1.8	69%
09/12/06	6.3	3.8	3.0	1.8	1.7	1.7	86%
09/19/06	6.1	4.0	3.2	2.0	2.4	1.7	80%
09/26/06	7.5	3.6	3.1	1.9	2.0	1.6	80%
10/03/06	5.4	3.6	2.9	1.9	2.4	1.7	84%
10/10/06	5.5	3.2	2.7	1.7	2.3	1.6	90%
10/17/06	2.7	3.0	2.6	1.8	2.4	1.6	83%
10/24/06	4.3	2.8	2.4	1.6	2.0	1.5	74%
10/31/06	2.5	2.6	2.3	1.8	1.9	1.7	66%
11/07/06	5.2	2.5	2.2	1.6	2.0	3.0	55%
11/14/06	5.6	2.7	2.3	1.5	1.9	3.7	50%
11/21/06	6.0	2.7	2.2	1.4	1.7	2.0	42%
11/28/06	8.0	2.9	2.2	1.4	1.7	2.2	39%
12/05/06	9.1	3.6	2.5	1.4	1.8	1.7	36%
12/12/06	6.8	3.5	2.7	3.6	1.9	1.5	44%
12/19/06	7.1	3.4	2.5	1.3	1.6	2.1	39%
12/28/06	6.1	3.5	2.5	1.2	1.5	1.3	41%
01/03/07	6.3	3.5	2.7	1.3	1.5	1.3	44%
01/09/07	7.1	3.6	2.8	1.5	1.7	1.3	44%
01/16/07	7.1	3.8	2.9	1.6	1.8	2.3	54%
01/23/07	6.6	3.8	3.1	2.3	2.0	1.2	70%
01/30/07	5.7	3.7	2.9	2.3	1.7	1.1	69%
02/06/07	5.9	3.3	2.8	1.6	1.9	2.2	81%
02/13/07	5.3	3.2	2.8	1.7	1.9	IS	74%
02/20/07	5.7	3.1	2.9	1.7	1.9	1.1	79%
02/27/07	5.5	3.2	2.8	2.2	2.0	2.1	83%
03/06/07	5.5	3.2	2.8	2.6	2.0	3.7	54%
03/13/07	6.4	3.3	2.7	1.8	2.1	2.7	62%
03/20/07	6.9	3.1	2.6	2.4	2.1	2.1	60%
03/27/07	6.8	3.2	2.7	3.0	2.0	3.3	62%

Table 4-2a
Turner Cell 1: Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25 ft bgs Lysimeter
	0	5	10	15	25	35	
04/03/07	6.5	3.3	2.7	2.3	2.0	2.2	64%
04/10/07	8.5	3.8	2.7	1.9	2.1	1.4	72%
04/17/07	8.9	3.6	2.4	1.6	2.0	1.1	72%
04/24/07	8.0	3.9	2.6	2.9	2.0	1.6	78%
05/01/07	8.7	4.1	3.0	1.6	2.0	1.4	76%
05/08/07	6.9	3.9	2.5	1.5	2.0	1.3	84%
05/15/07	7.6	3.9	3.0	1.4	1.9	1.6	88%
05/22/07	6.9	4.0	3.0	3.7	2.0	0.7	84%
05/29/07	6.7	4.0	3.1	3.5	2.5	2.2	76%
06/05/07	8.5	4.1	3.1	3.8	1.6	2.1	84%
06/12/07	8.7	3.9	2.9	1.9	2.1	0.7	80%
06/19/07	9.0	3.9	2.9	2.0	2.2	1.5	68%
06/26/07	8.8	4.4	4.0	3.7	2.1	1.3	74%
07/03/07	8.4	4.8	2.7	1.9	2.1	0.9	76%
07/10/07	8.4	5.3	2.8	2.1	2.3	0.8	76%
07/17/07	9.9	5.5	2.9	3.8	2.6	4.4	70%
07/24/07	9.8	5.7	3.2	3.8	2.2	4.7	64%
07/31/07	13.6	6.3	4.2	2.3	2.0	5.4	78%
08/06/07	9.0	6.4	3.0	3.5	2.1	2.1	68%
08/14/07	9.3	6.0	3.2	3.1	1.7	2.7	66%
08/21/07	19.6	6.3	3.0	3.7	2.2	3.4	58%
08/28/07	25.3	6.4	2.9	3.5	1.7	3.0	68%
Averages	7.6	4.0	2.9	2.2	2.0	2.0	
20-Sample Averages by Date							
05/29/07	6.8	3.6	2.8	2.2	2.0	1.9	
06/05/07	6.9	3.6	2.8	2.3	2.0	1.8	
06/12/07	7.0	3.6	2.8	2.3	2.0	1.8	
06/19/07	7.1	3.6	2.8	2.2	2.0	1.8	
06/26/07	7.3	3.6	2.9	2.3	2.0	1.8	
07/03/07	7.4	3.7	2.9	2.4	2.0	1.7	
07/10/07	7.6	3.8	2.9	2.4	2.0	1.7	
07/17/07	7.8	4.0	2.9	2.5	2.1	1.8	
07/24/07	8.0	4.1	2.9	2.5	2.1	1.9	
07/31/07	8.4	4.2	3.0	2.5	2.1	2.0	
08/06/07	8.5	4.4	3.0	2.6	2.1	2.0	
08/14/07	8.6	4.5	3.0	2.6	2.1	2.0	
08/21/07	9.3	4.7	3.0	2.7	2.1	2.1	
08/28/07	10.1	4.8	3.0	2.7	2.1	2.1	

Notes

- Averages were calculated using data from August 1, 2006 through August 28, 2007. and represent time when the lysimeter had recycled water at any percentage.
- 20-sample averages were made when all 20 values at the 25-foot depth have %RW > 50%

IS: Insufficient sample from lysimeter result in parameter not being analyzed
##% Estimate made using adjacent data due to no available EC for the sample

Table 4-2b
Turner Cell 4: Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 15-ft bgs
	0	5	10	15	25	35	Lysimeter
01/10/06	5.5	3.0	2.0	2.1	1.3	1.7	0%
01/17/06	4.7	4.1	2.0	2.1	1.2	1.5	0%
01/24/06	3.6	3.2	1.8	1.8	1.0	1.6	0%
01/31/06	4.1	2.2	1.8	1.6	1.1	2.0	0%
02/07/06	4.7	2.5	1.8	1.5	1.3	2.2	0%
02/14/06	5.0	2.1	1.8	1.5	1.4	2.4	0%
02/21/06	5.5	2.3	1.8	1.7	1.5	2.5	0%
02/28/06	8.1	2.6	1.8	1.7	1.4	2.4	0%
03/07/06	6.6	3.7	1.9	1.6	1.5	2.4	0%
03/14/06	5.5	2.9	2.0	1.7	1.5	2.4	0%
03/21/06	4.9	3.1	2.1	1.8	1.5	2.4	0%
03/28/06	5.2	3.0	2.1	1.9	1.6	2.2	0%
04/04/06	4.5	3.1	2.1	1.9	1.6	2.2	0%
04/11/06	4.9	2.6	2.0	2.0	1.7	2.2	0%
04/18/06	2.8	2.6	1.8	1.7	1.5	1.9	0%
04/25/06	2.4	2.3	1.7	1.8	1.4	1.8	0%
05/02/06	2.5	1.6	1.7	1.5	1.4	1.8	0%
05/09/06	2.9	1.9	1.4	1.5	IS	1.9	0%
05/16/06	4.1	2.7	1.7	1.8	1.6	1.9	0%
05/23/06	4.7	2.7	1.6	1.5	1.7	1.7	0%
05/31/06	7.4	2.6	1.5	1.4	1.7	1.6	0%
06/06/06	7.8	3.2	1.5	1.5	2.0	1.5	0%
06/13/06	6.7	3.6	1.7	1.7	1.9	1.6	0%
06/20/06	6.9	3.6	1.9	1.7	1.9	1.7	0%
06/27/06	95.0	4.2	2.0	2.0	2.0	1.8	0%
07/04/06	11.3	4.4	2.0	2.0	2.1	1.7	0%
07/11/06	6.7	4.6	2.0	2.1	1.9	1.7	0%
07/18/06	6.6	4.4	2.3	2.3	2.2	1.7	0%
07/25/06	7.5	4.4	2.5	2.7	2.1	1.9	< 50%
08/01/06	6.1	4.3	2.6	2.5	1.8	1.8	< 50%
08/08/06	6.5	4.2	2.5	2.5	1.8	1.8	59%
08/15/06	6.3	3.8	2.4	2.4	1.7	1.7	61%
08/22/06	14.7	3.9	2.5	2.5	2.0	1.7	73%
08/29/06	6.3	3.7	2.4	2.4	1.7	1.6	75%
09/06/06	5.0	3.6	2.5	2.5	1.8	1.6	83%
09/12/06	5.7	3.7	2.5	2.7	1.8	1.7	91%
09/19/06	5.3	3.7	2.5	2.6	1.8	1.7	94%
09/26/06	5.3	3.5	2.4	2.6	1.7	1.7	89%
10/03/06	5.0	3.7	2.3	4.2	1.6	1.7	84%
10/10/06	5.3	3.3	2.4	2.4	1.7	1.6	79%
10/17/06	5.2	3.1	2.3	2.4	1.7	1.6	72%
10/24/06	4.8	2.9	2.2	2.2	1.6	1.5	70%
10/31/06	4.2	2.9	2.2	2.2	1.6	1.5	68%
11/07/06	4.4	2.9	2.1	2.2	1.6	1.5	66%
11/14/06	4.7	2.6	2.1	2.1	1.5	1.4	64%
11/21/06	3.0	2.7	2.1	2.0	1.7	1.4	61%
11/28/06	4.8	2.5	2.0	1.9	1.4	1.4	55%
12/05/06	5.3	2.7	2.1	2.2	3.0	1.4	43%
12/12/06	5.2	2.7	2.0	2.0	1.4	1.4	< 40%
12/19/06	5.2	2.5	1.9	1.9	1.3	1.3	< 40%
12/28/06	6.5	2.6	1.9	1.8	1.3	1.3	< 40%
01/03/07	5.8	2.7	1.8	1.8	1.2	1.3	< 40%
01/09/07	6.0	2.7	1.8	1.9	3.3	1.2	< 40%
01/16/07	6.7	2.7	1.8	1.8	1.1	1.2	31%
01/23/07	7.6	2.8	1.8	1.9	1.5	1.3	34%
01/30/07	8.1	2.5	1.8	1.8	1.8	1.1	38%
02/06/07	6.0	2.2	1.7	1.7	1.8	1.1	52%
02/13/07	6.5	2.1	1.7	1.8	1.8	1.2	55%
02/20/07	7.1	2.6	1.7	1.6	IS	1.0	60%
02/27/07	6.6	2.8	1.8	1.7	1.6	1.0	61%
03/06/07	7.0	2.7	1.8	1.8	1.8	1.2	66%
03/13/07	6.4	2.6	1.7	1.8	3.9	1.0	68%
03/20/07	6.1	2.9	1.7	1.7	1.6	1.0	69%
03/27/07	6.2	2.9	1.7	1.7	1.0	4.5	75%

Table 4-2b
Turner Cell 4: Surface Water and Lysimeter Results
Total Organic Carbon
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 15-ft bgs Lysimeter
	0	5	10	15	25	35	
04/03/07	6.8	3.0	1.7	IS	1.0	1.3	75%
04/10/07	7.5	2.8	1.7	1.8	1.0	0.9	75%
04/17/07	7.2	2.6	1.6	1.8	IS	0.9	75%
04/24/07	6.9	2.6	1.7	1.9	1.0	1.1	76%
05/01/07	7.1	1.9	1.8	1.9	1.6	0.9	76%
05/08/07	7.2	2.5	1.7	1.8	1.3	0.9	76%
05/15/07	7.3	2.8	1.7	1.5	2.9	1.2	77%
05/22/07	8.0	3.1	1.8	1.6	3.3	0.9	77%
05/29/07	8.6	3.0	1.8	1.7	1.1	0.9	77%
06/05/07	10.6	3.3	1.7	1.6	2.4	1.7	78%
06/12/07	10.1	3.4	1.8	1.7	1.1	1.0	78%
06/19/07	9.6	3.3	2.0	1.9	1.5	0.9	80%
06/26/07	9.7	3.4	1.9	1.8	1.4	0.9	83%
07/03/07	9.4	9.4	2.0	1.8	0.9	0.8	83%
07/10/07	7.8	7.8	2.1	2.0	1.0	0.9	84%
07/17/07	9.0	9.0	2.2	2.5	1.7	0.9	84%
07/24/07	8.4	8.4	2.2	2.0	2.1	1.1	85%
07/31/07	10.9	10.9	2.2	2.1	2.5	1.4	86%
08/06/07	13.2	13.2	2.4	2.2	IS	1.6	88%
08/14/07	16.7	16.7	2.2	2.1	1.0	1.4	90%
08/21/07	25.2	25.2	2.3	2.1	1.5	1.5	91%
08/28/07	15.4	15.4	2.3	2.2	1.0	1.4	91%
Averages	7.6	4.5	2.0	2.1	1.7	1.4	
20-Sample Averages by Date							
06/19/07	7.4	2.7	1.7	1.7	1.7	1.2	
06/26/07	7.6	2.8	1.8	1.7	1.7	1.2	
07/03/07	7.8	3.2	1.8	1.7	1.7	1.2	
07/10/07	7.8	3.4	1.8	1.8	1.6	1.2	
07/17/07	7.9	3.7	1.8	1.8	1.6	1.2	
07/24/07	8.0	4.0	1.8	1.8	1.7	1.2	
07/31/07	8.2	4.5	1.8	1.8	1.6	1.2	
08/06/07	8.6	5.0	1.9	1.9	1.6	1.2	
08/14/07	9.1	5.7	1.9	1.9	1.6	1.1	
08/21/07	10.0	6.8	1.9	1.9	1.6	1.1	
08/28/07	10.4	7.4	2.0	1.9	1.6	1.1	

Notes

- Averages were calculated using data from July 25, 2006 through August 28, 2007. and represent time when the lysimeter had recycled water at any percentage.
- 20-sample averages were made when all 20 values at the 15-foot depth have %RW > 50%

IS: Insufficient sample from lysimeter result in parameter not being analyzed
##% Estimate made using adjacent data due to no available EC for the sample

Table 4-3a
Turner Cell 1: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN1-SW Surface Water					TRN1-05 5 ft bgs					TRN1-10 10 ft bgs					TRN1-15 15 ft bgs					TRN1-25 25 ft bgs					TRN1-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1/13/2006	0.3	1.1	0.04	IS	1.4	0.1	0.6	0.13	IS	0.9	0.1	0.9	0.01	IS	1.0	<0.1	0.9	0.05	IS	1.0	<0.1	0.5	0.05	IS	0.6	<0.1	0.6	<0.01	IS	0.7
1/17/2006	0.3	0.9	0.05	1.70	2.6	<0.1	0.7	0.12	0.73	1.5	<0.1	0.5	0.06	0.40	1.0	<0.1	0.7	0.03	0.24	0.9	<0.1	0.3	0.02	0.24	0.6	<0.1	0.6	<0.01	<0.2	0.7
1/24/2006	0.1	1.1	0.03	0.76	1.9	<0.1	1.5	0.03	0.64	2.2	<0.1	1.4	<0.01	0.66	2.1	<0.1	0.9	0.02	0.82	1.8	<0.1	0.5	<0.01	<0.2	0.6	<0.1	0.6	<0.01	0.25	0.8
1/31/2006	0.3	1.0	0.03	1.40	2.4	<0.1	0.9	0.06	0.61	1.6	<0.1	1.4	0.02	0.35	1.8	0.1	1.2	0.01	<0.2	1.3	<0.1	1.0	<0.01	<0.2	1.1	0.1	0.9	<0.01	<0.2	1.0
2/7/2006	0.3	0.9	0.04	1.70	2.6	<0.1	0.8	0.06	0.73	1.6	<0.1	0.7	0.03	0.41	1.2	<0.1	1.0	0.02	0.24	1.2	<0.1	0.6	0.02	0.28	0.9	0.1	0.9	<0.01	0.36	1.3
2/14/2006	0.3	0.8	0.05	1.90	2.8	<0.1	0.6	0.03	0.86	1.5	<0.1	0.2	<0.01	0.39	0.6	0.3	0.6	0.02	0.42	1.0	0.2	0.3	<0.01	0.78	1.1	<0.1	0.7	<0.01	0.20	0.9
2/21/2006	0.3	1.0	0.05	2.00	3.1	0.1	0.2	0.11	0.66	1.0	0.1	<0.1	0.02	0.32	0.4	0.1	0.3	0.01	<0.2	0.4	0.1	<0.1	<0.01	0.24	0.3	0.1	0.5	<0.01	<0.2	0.6
2/28/2006	0.2	0.7	0.03	1.60	2.3	0.5	0.1	0.03	0.93	1.1	0.1	<0.1	<0.01	0.27	0.3	0.1	<0.1	<0.01	<0.2	<0.3	0.1	<0.1	<0.01	0.24	0.3	0.1	0.2	<0.01	<0.2	0.3
3/7/2006	0.2	0.6	0.02	0.79	1.5	0.2	0.7	0.19	0.66	1.6	0.1	0.3	0.07	0.27	0.6	<0.1	0.3	0.08	<0.2	0.4	<0.1	0.1	<0.01	<0.2	<0.3	<0.1	0.2	<0.01	<0.2	<0.3
3/14/2006	0.2	1.1	0.02	1.00	2.1	<0.1	1.0	0.06	0.41	1.5	<0.1	0.6	0.05	0.24	0.9	<0.1	0.5	0.07	<0.2	0.7	<0.1	0.5	0.04	0.24	0.8	<0.1	0.6	<0.01	<0.2	0.7
3/21/2006	0.4	0.9	0.04	1.40	2.4	0.1	1.2	0.01	0.60	1.9	0.2	0.2	0.06	0.25	0.5	0.2	<0.1	0.06	<0.2	<0.3	0.2	<0.1	0.02	<0.2	<0.3	0.1	0.2	<0.01	<0.2	<0.3
3/28/2006	0.2	0.9	0.06	1.20	2.1	<0.1	1.1	0.11	0.34	1.5	<0.1	<0.1	0.08	<0.2	<0.3	0.1	<0.1	0.07	0.20	0.3	0.1	<0.1	0.05	0.24	0.3	0.1	<0.1	0.06	0.34	0.5
4/4/2006	0.1	0.7	0.04	0.79	1.5	0.1	0.9	0.01	0.40	1.3	0.1	0.3	0.07	0.24	0.6	<0.1	0.2	0.06	0.32	0.6	<0.1	0.2	<0.01	0.25	0.4	<0.1	0.1	0.07	<0.2	<0.3
4/11/2006	0.1	0.7	0.03	0.55	1.3	<0.1	1.0	0.05	0.41	1.4	0.1	0.4	0.07	<0.2	0.6	<0.1	0.5	0.06	0.36	0.9	<0.1	0.2	0.04	0.44	0.7	0.2	<0.1	0.07	0.28	0.4
4/18/2006	<0.1	0.6	0.02	0.52	1.2	<0.1	0.8	<0.01	0.26	1.1	0.1	0.5	0.05	0.24	0.8	<0.1	0.5	0.03	<0.2	0.6	<0.1	0.3	0.06	<0.2	0.4	<0.1	0.2	0.05	<0.2	<0.3
4/25/2006	<0.1	0.6	0.04	0.44	1.1	<0.1	0.8	<0.01	0.30	1.1	0.1	0.4	0.09	0.25	0.7	0.1	0.5	0.06	<0.2	0.6	<0.1	0.3	0.09	0.22	0.6	<0.1	0.3	0.06	<0.2	0.5
5/2/2006	0.1	0.6	0.01	<0.5	1.1	<0.1	0.7	<0.01	0.50	1.2	0.1	0.1	0.01	<0.5	<0.6	<0.1	0.3	0.05	<0.5	<0.6	<0.1	0.1	0.03	<0.5	<0.6	<0.1	0.2	0.04	<0.5	<0.6
5/9/2006	0.1	0.5	<0.01	0.55	1.0	0.1	<0.1	<0.01	<0.5	<0.6	0.1	0.1	0.03	<0.5	<0.6	<0.1	<0.1	<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
5/16/2006	0.2	0.6	<0.01	1.60	2.2	0.5	<0.1	<0.01	0.98	1.0	0.1	0.1	0.07	0.89	1.1	0.1	<0.1	<0.01	0.58	0.6	0.1	<0.1	<0.01	0.73	0.8	IS	IS	IS	IS	IS
5/23/2006	0.3	1.3	0.04	2.90	4.2	0.1	0.4	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
5/31/2006	0.1	0.9	0.06	2.00	3.0	0.4	0.3	<0.01	0.89	1.2	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.79	0.8	<0.1	IS	IS	<0.5	IS
6/6/2006	0.4	0.3	<0.01	2.26	2.6	0.5	0.8	0.06	1.48	2.3	0.2	<0.1	<0.01	0.80	0.9	0.3	<0.1	<0.01	<0.5	<0.6	0.2	<0.1	<0.01	0.52	0.6	IS	IS	IS	IS	IS
6/13/2006	0.4	0.6	0.06	2.15	2.8	0.4	0.2	0.03	1.20	1.4	<0.1	<0.1	<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	IS	IS	IS	IS	IS
6/20/2006	0.2	0.4	<0.01	2.08	2.5	0.4	0.7	<0.01	0.53	1.3	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.51	0.6	IS	IS	IS	IS	IS
6/27/2006	0.1	<0.1	<0.01	2.03	2.1	<0.1	0.7	<0.01	1.70	2.5	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	1.00	1.1	<0.1	<0.1	<0.01	1.22	1.3	IS	IS	IS	IS	IS
7/4/2006	Dry	Dry	Dry	Dry	Dry	<0.1	IS	IS	0.96	IS	<0.1	<0.1	<0.01	0.80	0.9	<0.1	0.3	<0.01	0.74	1.1	<0.1	<0.1	<0.01	0.83	0.9	IS	IS	IS	IS	IS
7/11/2006	Dry	Dry	Dry	Dry	Dry	IS	IS	IS	IS	IS	0.2	<0.1	<0.01	2.32	2.4	<0.1	IS	IS	0.91	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
7/18/2006	Dry	Dry	Dry	Dry	Dry	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
7/25/2006	Dry	Dry	Dry	Dry	Dry	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
8/1/2006	<0.1	1.6	<0.01	1.77	3.4	0.2	10.7	0.13	1.94	12.8	<0.1	9.0	0.04	1.46	10.5	<0.1	0.5	<0.01	0.64	1.1	<0.1	0.7	<0.01	0.77	1.5	IS	IS	IS	IS	IS
8/8/2006	<0.1	2.5	<0.01	1.90	4.5	0.1	3.9	<0.01	1.16	5.0	<0.1	3.7	0.12	<0.5	4.1	<0.1	3.0	<0.01	<0.5	3.3	<0.1	IS	IS	<0.5	IS	<0.1	0.1	<0.01	<0.5	<0.6
8/15/2006	<0.1	1.5	<0.01	2.07	3.6	<0.1	0.9	<0.01	0.51	1.5	<0.1	0.8	0.07	<0.5	1.1	<0.1	1.7	0.02	<0.5	1.9	<0.1	2.1	0.02	1.13	3.3	<0.1	1.1	<0.01	1.31	2.4
8/22/2006	<0.1	1.6	<0.01	1.19	2.8	<0.1	0.4	<0.01	<0.5	0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.7	<0.01	<0.5	1.0	<0.1	1.6	<0.01	<0.5	1.9	<0.1	0.7	<0.01	<0.5	1.0
8/29/2006	<0.1	1.7	<0.01	2.25	3.9	<0.1	0.5	<0.01	<0.5	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.4	<0.01	<0.5	0.6	<0.1	1.0	<0.01	<0.5	1.2	<0.1	0.4	<0.01	<0.5	0.6

Table 4-3a
Turner Cell 1: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN1-SW Surface Water					TRN1-05 5 ft bgs					TRN1-10 10 ft bgs					TRN1-15 15 ft bgs					TRN1-25 25 ft bgs					TRN1-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
9/6/2006	0.5	2.2	<0.01	1.83	4.1	<0.1	0.3	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.88	0.9	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.6	<0.01	0.59	1.2	<0.1	0.2	<0.01	<0.5	<0.6
9/12/2006	<0.1	1.7	<0.01	2.23	4.0	<0.1	0.3	<0.01	0.78	1.1	<0.1	<0.1	<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	<0.1	IS	IS	<0.5	IS
9/19/2006	0.4	2.2	<0.01	2.62	4.9	<0.1	0.3	<0.01	0.76	1.0	<0.1	<0.1	<0.01	0.77	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS
9/26/2006	<0.1	0.4	<0.01	2.16	2.6	0.2	0.2	<0.01	0.79	1.0	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.66	0.7	IS	IS	IS	IS	IS
10/3/2006	<0.1	0.1	<0.01	1.69	1.8	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
10/10/2006	<0.1	<0.1	<0.01	1.58	1.6	<0.1	0.2	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
10/17/2006	<0.1	<0.1	<0.01	2.03	2.1	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
10/24/2006	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.2	<0.01	1.93	2.2	<0.1	<0.1	<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	IS	IS	IS	IS	IS
10/31/2006	<0.1	0.7	0.08	4.91	5.7	<0.1	0.2	0.07	0.73	1.0	<0.1	<0.1	0.07	0.89	1.0	<0.1	<0.1	0.06	<0.5	<0.6	<0.1	<0.1	0.06	0.57	0.7	<0.1	IS	IS	0.54	IS
11/7/2006	0.2	0.8	0.02	1.81	2.6	<0.1	0.2	<0.01	0.79	1.0	<0.1	<0.1	<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	0.10	IS	IS	0.89	IS
11/14/2006	0.2	0.3	0.45	2.20	2.9	<0.1	0.2	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
11/21/2006	<0.1	0.2	0.25	2.51	3.0	<0.1	0.2	<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	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS
11/28/2006	<0.1	0.3	0.14	1.91	2.3	<0.1	0.2	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
12/5/2006	<0.1	0.2	0.08	1.90	2.2	<0.1	0.3	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
12/12/2006	<0.1	3.3	0.02	1.68	5.0	0.1	0.3	<0.01	<0.5	<0.6	<0.1	0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.19	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
12/19/2006	<0.1	2.1	0.03	2.01	4.2	<0.1	0.4	<0.01	<0.5	<0.6	<0.1	0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	0.11	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS
12/28/2006	0.1	3.6	<0.01	1.40	5.0	<0.1	1.0	<0.01	<0.5	1.0	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.20	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
1/3/2007	<0.1	3.6	<0.01	1.5	5.1	0.1	2.0	<0.01	<0.5	2.3	<0.1	0.5	0.02	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	0.3	<0.01	<0.5	<0.6	0.6	IS	IS	<0.5	IS
1/9/2007	<0.1	3.1	<0.01	2.0	5.1	<0.1	3.2	<0.01	1.3	4.5	0.2	0.7	0.02	<0.5	1.0	<0.1	IS	IS	<0.5	IS	<0.1	0.3	<0.01	0.6	0.9	IS	IS	IS	IS	IS
1/16/2007	0.2	2.7	<0.01	1.8	4.5	0.1	3.5	<0.01	0.8	4.3	0.2	0.6	0.03	0.7	1.3	IS	IS	IS	IS	IS	0.2	0.2	<0.01	0.6	0.8	0.3	IS	IS	<0.5	IS
1/23/2007	<0.1	2.3	<0.01	1.1	3.4	<0.1	3.1	<0.01	0.6	3.7	<0.1	0.8	0.02	<0.5	1.1	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
1/30/2007	<0.1	2.7	<0.01	2.4	5.1	<0.1	2.3	<0.01	<0.5	2.6	<0.1	0.8	0.03	<0.5	1.1	<0.1	IS	IS	<0.5	IS	<0.1	0.3	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
2/6/2007	0.2	3.9	<0.01	1.15	5.0	<0.1	2.1	<0.01	<0.5	2.4	<0.1	0.6	0.03	<0.5	0.9	IS	IS	IS	IS	IS	<0.1	0.33	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
2/13/2007	0.2	3.3	0.03	1.84	5.2	<0.1	1.7	<0.01	<0.5	2.0	<0.1	0.6	0.03	<0.5	0.9	IS	IS	IS	IS	IS	<0.1	0.25	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
2/20/2007	0.3	3.2	0.03	1.98	5.2	<0.1	1.1	<0.01	1.03	2.1	<0.1	0.4	0.02	0.63	1.0	IS	IS	IS	IS	IS	<0.1	0.16	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
2/27/2007	0.2	3.8	0.03	1.54	5.4	<0.1	0.7	<0.01	<0.5	1.0	<0.1	0.3	<0.01	0.51	0.8	<0.1	IS	IS	<0.5	IS	<0.1	0.13	<0.01	<0.5	<0.6	<0.1	0.4	<0.01	<0.5	<0.6
3/6/2007	<0.1	3.7	0.03	1.6	5.3	<0.1	0.9	<0.01	1.0	1.9	<0.1	0.5	<0.01	0.6	1.1	<0.1	0.7	<0.01	0.60	1.3	<0.1	0.1	<0.01	0.50	0.6	<0.1	2.9	0.02	1.31	4.2
3/13/2007	<0.1	2.5	<0.01	2.1	4.6	<0.1	1.6	<0.01	0.6	2.2	<0.1	0.5	<0.01	0.61	1.1	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	0.69	0.7	IS	IS	IS	IS	IS
3/20/2007	0.1	2.2	0.03	2.7	4.9	<0.1	1.2	<0.01	0.8	2.0	<0.1	0.1	<0.01	0.62	0.7	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	0.78	0.8	<0.1	0.7	<0.01	0.59	1.3
3/27/2007	0.4	2.0	0.04	1.5	3.5	<0.1	0.3	<0.01	0.8	1.1	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
4/3/2007	<0.1	1.608	<0.01	1.775	3.4	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.52	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
4/10/2007	<0.1	1.8	<0.01	3.11	4.9	<0.1	0.2	<0.01	0.68	0.9	<0.1	<0.1	<0.01	0.59	0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
4/17/2007	<0.1	1.5	<0.01	1.71	3.2	<0.1	0.2	<0.01	0.62	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
4/24/2007	<0.1	1.9	0.05	1.60	3.5	<0.1	0.2	<0.01	0.92	1.1	<0.1	<0.1	<0.01	0.70	0.8	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS

Table 4-3a
Turner Cell 1: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN1-SW Surface Water					TRN1-05 5 ft bgs					TRN1-10 10 ft bgs					TRN1-15 15 ft bgs					TRN1-25 25 ft bgs					TRN1-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
5/1/2007	<0.1	<0.1	0.05	2.38	2.5	<0.1	0.1	<0.01	0.78	0.9	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	0.5	0.6	IS	IS	IS	IS	IS
5/8/2007	0.1	4.7	0.01	1.70	6.4	<0.1	0.2	<0.01	0.60	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
5/15/2007	0.2	3.2	0.08	2.20	5.5	<0.1	0.2	<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	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
5/22/2007	0.2	2.3	0.09	1.69	4.1	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
5/29/2007	<0.1	2.3	0.04	1.82	4.2	<0.1	0.2	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.50	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
6/5/2007	<0.1	2.1	0.02	3.38	5.5	<0.1	<0.1	<0.01	0.68	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
6/12/2007	0.1	1.7	0.08	3.54	5.3	<0.1	0.3	<0.01	<0.5	<0.6	0.2	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.18	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
6/19/2007	0.4	0.6	<0.01	2.57	3.2	0.3	<0.1	<0.01	<0.5	<0.6	0.2	<0.1	<0.01	0.59	0.6	IS	IS	IS	IS	IS	0.34	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
6/26/2007	0.2	<0.1	<0.01	0.84	0.9	<0.1	0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.13	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
7/3/2007	<0.1	<0.1	<0.01	1.23	1.3	<0.1	<0.1	<0.01	0.69	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	0.50	0.6	IS	IS	IS	IS	IS
7/10/2007	0.8	<0.1	<0.01	1.19	1.2	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
7/17/2007	<0.1	<0.1	<0.01	1.51	1.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
7/24/2007	<0.1	<0.1	<0.01	0.81	0.9	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.61	0.7	IS	IS	IS	IS	IS	0.3	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
7/31/2007	<0.1	<0.1	<0.01	2.64	2.7	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS
8/6/2007	<0.1	<0.1	<0.01	2.18	2.2	0.1	<0.1	<0.01	0.70	0.8	0.2	<0.1	<0.01	0.75	0.8	IS	IS	IS	IS	IS	0.6	<0.1	<0.01	<0.5	0.9	IS	IS	IS	IS	IS
8/14/2007	0.1	<0.1	<0.01	4.03	4.1	0.2	<0.1	<0.01	1.41	1.5	0.1	<0.1	<0.01	1.32	1.4	IS	IS	IS	IS	IS	<0.1	0.2	<0.01	0.60	0.8	IS	IS	IS	IS	IS
8/21/2007	<0.1	<0.1	<0.01	2.34	2.4	<0.1	<0.1	<0.01	0.61	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.2	<0.01	0.52	0.8	IS	IS	IS	IS	IS
8/28/2007	<0.1	0.2	<0.01	2.70	2.9	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.6	<0.01	<0.5	0.8	<0.1	0.1	<0.01	<0.5	<0.6

Notes

IS: Insufficient sample from lysimeter result in parameter not being analyzed

Dry: Basin had no water to sample

Table 4-3b
Turner Cell 4: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN4-SW Surface Water					TRN4-05 5 ft bgs					TRN4-10 10 ft bgs					TRN4-15 15 ft bgs					TRN4-25 25 ft bgs					TRN4-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1/10/2006	0.7	0.7	0.05	0.97	1.7	0.1	0.7	0.02	0.30	1.0	0.1	0.7	0.02	0.40	1.1	0.1	0.6	<0.01	0.41	1.0	0.1	0.4	<0.01	0.23	0.6	0.1	0.6	0.01	0.5	1.1
1/17/2006	0.2	0.8	0.04	0.78	1.6	0.1	0.3	0.05	0.56	0.9	<0.1	0.6	0.04	0.26	0.9	<0.1	0.5	0.02	0.32	0.9	<0.1	0.4	<0.01	<0.2	0.5	IS	IS	IS	0.3	IS
1/24/2006	0.2	1.0	0.03	0.71	1.7	<0.1	1.0	0.05	0.42	1.5	<0.1	0.5	0.03	0.53	1.1	<0.1	0.4	<0.01	0.91	1.3	<0.1	0.5	<0.01	<0.2	0.6	0.1	1.1	<0.01	0.6	1.7
1/31/2006	0.3	0.8	NS	0.73	1.5	0.1	1.4	0.01	0.24	1.7	0.1	0.3	0.03	<0.2	0.4	0.1	0.6	0.01	<0.2	0.8	<0.1	0.4	<0.01	0.27	0.7	0.1	1.2	IS	0.3	1.5
2/7/2006	0.4	0.5	0.03	1.40	1.9	0.1	0.8	<0.01	0.33	1.1	<0.1	0.4	0.02	<0.2	0.5	<0.1	0.7	<0.01	<0.2	0.8	<0.1	0.3	<0.01	<0.2	0.4	IS	IS	IS	0.4	IS
2/14/2006	0.3	0.8	0.03	1.70	2.5	0.5	0.5	<0.01	0.52	1.0	0.4	0.5	0.02	0.30	0.8	<0.1	0.6	<0.01	0.48	1.1	0.4	0.2	<0.01	<0.2	0.7	0.2	1.3	<0.01	0.6	1.9
2/21/2006	0.3	1.0	<0.01	1.50	2.5	0.1	0.4	<0.01	0.20	0.6	<0.1	0.5	0.02	<0.2	0.6	0.1	0.4	<0.01	<0.2	0.5	<0.1	0.2	<0.01	0.35	0.5	<0.1	1.2	<0.01	0.3	1.5
2/28/2006	0.3	0.7	0.04	1.60	2.3	0.1	0.8	<0.01	0.39	1.2	0.1	0.5	<0.01	0.20	0.7	<0.1	0.4	<0.01	0.32	0.7	0.1	0.1	<0.01	0.23	0.4	0.1	1.2	<0.01	0.3	1.5
3/7/2006	0.1	0.7	0.04	1.40	2.1	<0.1	1.1	<0.01	0.71	1.8	<0.1	0.5	0.02	0.39	1.0	<0.1	0.5	<0.01	<0.2	0.6	<0.1	0.5	<0.01	0.28	0.8	0.1	1.3	<0.01	0.3	1.6
3/14/2006	0.1	1.0	0.03	1.10	2.2	<0.1	1.0	<0.01	0.35	1.4	<0.1	0.6	0.02	<0.2	0.7	<0.1	0.7	0.01	<0.2	0.8	<0.1	0.8	<0.01	<0.2	0.9	<0.1	1.5	<0.01	0.2	1.8
3/21/2006	0.4	1.0	0.04	0.98	2.1	0.1	0.6	0.01	0.92	1.5	<0.1	0.1	0.03	0.25	0.4	<0.1	0.2	0.05	0.22	0.4	<0.1	0.4	<0.01	<0.2	0.5	0.7	1.4	0.10	0.2	1.7
3/28/2006	0.2	0.8	0.05	1.20	2.1	<0.1	0.4	0.02	0.37	0.8	<0.1	<0.1	0.03	0.27	0.3	<0.1	<0.1	0.05	0.21	<0.3	<0.1	<0.1	<0.01	0.20	<0.3	0.1	1.3	<0.01	0.6	1.9
4/4/2006	0.2	0.8	0.04	0.98	1.8	<0.1	<0.1	<0.01	0.35	0.4	<0.1	<0.1	<0.01	0.28	0.3	<0.1	<0.1	0.04	0.36	0.4	<0.1	0.2	<0.01	0.31	0.5	0.2	1.5	<0.01	0.3	1.8
4/11/2006	0.1	0.9	0.04	1.00	1.9	<0.1	<0.1	0.03	0.28	0.4	<0.1	<0.1	<0.01	0.36	0.4	<0.1	<0.1	<0.01	0.41	0.5	<0.1	<0.1	<0.01	<0.2	<0.3	0.2	1.5	<0.01	0.7	2.2
4/18/2006	0.1	0.7	0.03	0.55	1.3	<0.1	<0.1	<0.01	0.30	0.4	<0.1	<0.1	<0.01	<0.2	<0.3	<0.1	<0.1	<0.01	<0.2	<0.3	<0.1	<0.1	<0.01	0.30	0.4		1.3	<0.01	0.3	1.6
4/25/2006	0.1	0.8	0.05	0.48	1.3	0.1	0.2	0.05	0.35	0.6	<0.1	0.1	0.04	<0.2	<0.3	<0.1	<0.1	0.04	<0.2	<0.3	<0.1	0.2	<0.01	0.26	0.4	0.2	1.4	<0.01	0.2	1.6
5/2/2006	0.1	0.6	0.03	0.9	1.5	0.1	0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.7	0.8	<0.1	0.1	<0.01	0.6	0.7	IS	IS	IS	IS	IS
5/9/2006	0.1	0.5	<0.01	<0.5	0.6	0.1	<0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	0.7	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.1	1.1	<0.01	0.9	2.0
5/16/2006	0.1	0.6	<0.01	0.6	1.2	0.1	<0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	0.5	0.6	0.4	<0.1	<0.01	0.7	0.7	IS	IS	IS	<0.5	IS	IS	IS	IS	0.5	IS
5/23/2006	0.2	0.6	<0.01	0.7	1.3	0.1	<0.1	<0.01	0.7	0.8	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	IS	IS	0.5	IS
5/31/2006	<0.1	0.8	0.02	1.3	2.2	<0.1	<0.1	<0.01	0.8	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	1.1	1.1	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.9	<0.01	0.6	1.5
6/6/2006	<0.1	0.6	0.03	1.2	1.9	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	1.3	1.3	<0.1	<0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	0.8	0.8	<0.1	0.7	<0.01	1.1	1.8
6/13/2006	0.1	0.4	<0.01	1.6	2.1	<0.1	<0.1	<0.01	1.0	1.1	<0.1	<0.1	<0.01	0.9	1.0	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	IS	IS	<0.5	IS
6/20/2006	<0.1	0.2	<0.01	1.0	1.3	0.1	<0.1	<0.01	<0.5	<0.6	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.7	0.8	0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.7	<0.01	<0.5	0.9
6/27/2006	0.3	<0.1	<0.01	170.1	170.4	<0.1	<0.1	<0.01	1.2	1.2	<0.1	<0.1	<0.01	1.3	1.3	<0.1	<0.1	<0.01	0.6	0.6	<0.1	IS	IS	0.5	IS	<0.1	0.7	<0.01	1.0	1.7
7/4/2006	<0.1	<0.1	<0.01	1.8	1.9	<0.1	<0.1	<0.01	2.0	2.1	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.7	<0.01	0.5	1.2
7/11/2006	<0.1	2.2	<0.01	2.3	4.5	<0.1	<0.1	<0.01	1.6	1.6	<0.1	<0.1	<0.01	0.6	0.6	<0.1	<0.1	<0.01	0.7	0.7	<0.1	IS	IS	0.6	IS	<0.1	IS	IS	1.2	IS
7/18/2006	<0.1	2.2	<0.01	1.2	3.4	<0.1	<0.1	<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	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.7	147.86	<0.5	148.8
7/25/2006	0.1	1.3	<0.01	2.8	4.2	<0.1	<0.1	<0.01	1.1	1.1	<0.1	<0.1	<0.01	0.8	0.9	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	IS	IS	1.3	IS
8/1/2006	<0.1	1.3	<0.01	1.6	2.9	<0.1	<0.1	<0.01	1.5	1.5	<0.1	<0.1	<0.01	0.9	0.9	<0.1	IS	IS	0.8	IS	<0.1	IS	IS	0.8	IS	<0.1	IS	IS	0.7	IS
8/8/2006	<0.1	1.3	<0.01	2.7	4.0	<0.1	<0.1	<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	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.5	<0.01	<0.5	<0.6
8/15/2006	0.2	1.1	<0.01	2.4	3.5	<0.1	<0.1	<0.01	1.5	1.6	<0.1	<0.1	<0.01	1.3	1.3	<0.1	<0.1	<0.01	0.6	0.6	<0.1	IS	IS	1.2	IS	<0.1	0.4	<0.01	0.7	1.1
8/22/2006	<0.1	1.0	<0.01	18.0	19.0	0.1	<0.1	<0.01	<0.5	0.3	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
8/29/2006	<0.1	0.5	<0.01	0.9	1.4	<0.1	<0.1	<0.01	1.0	1.0	<0.1	<0.1	<0.01	0.6	0.6	<0.1	<0.1	<0.01	0.6	0.6	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6

Table 4-3b
Turner Cell 4: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN4-SW Surface Water					TRN4-05 5 ft bgs					TRN4-10 10 ft bgs					TRN4-15 15 ft bgs					TRN4-25 25 ft bgs					TRN4-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
9/6/2006	<0.1	0.8	<0.01	5.9	6.7	0.1	<0.1	<0.01	0.7	0.9	<0.1	<0.1	<0.01	0.7	0.8	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	0.8	0.8	<0.1	0.4	<0.01	<0.5	<0.6
9/12/2006	<0.1	<0.1	<0.01	1.8	1.8	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	IS	IS	<0.1	0.4	<0.01	IS	<0.6
9/19/2006	<0.1	<0.1	<0.01	1.5	1.6	<0.1	<0.1	<0.01	0.7	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
9/26/2006	<0.1	<0.1	<0.01	1.4	1.5	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
10/3/2006	<0.1	<0.1	<0.01	0.9	1.0	<0.1	<0.1	<0.01	0.75	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	0.73	IS	<0.1	IS	IS	<0.5	IS
10/10/2006	<0.1	<0.1	<0.01	0.7	0.7	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
10/17/2006	<0.1	<0.1	<0.01	0.6	0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
10/24/2006	<0.1	<0.1	<0.01	1.2	1.2	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
10/31/2006	<0.1	<0.1	0.046	1.0	1.1	<0.1	<0.1	0.048	<0.5	<0.6	<0.1	<0.1	0.049	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	0.054	<0.5	<0.6
11/7/2006	<0.1	<0.1	<0.01	0.9	1.0	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
11/14/2006	<0.1	<0.1	<0.01	0.8	0.8	<0.1	<0.1	<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	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
11/21/2006	<0.1	<0.1	<0.01	3.6	3.6	<0.1	<0.1	<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	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
11/28/2006	<0.1	<0.1	<0.01	1.2	1.3	<0.1	<0.1	<0.01	4.785	4.8	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	4.025	4.1	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
12/5/2006	<0.1	<0.1	<0.01	1.1	1.2	<0.1	<0.1	<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	<0.1	IS	IS	<0.5	IS	<0.1	0.4	<0.01	<0.5	<0.6
12/12/2006	<0.1	2.502	<0.01	2.9	5.4	<0.1	IS	IS	<0.5	IS	<0.1	<0.1	<0.01	0.58	0.6	<0.1	IS	IS	<0.5	IS	IS	IS	IS	IS	IS	<0.1	IS	IS	<0.5	IS
12/19/2006	<0.1	2.405	0.021	1.2	3.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
12/28/2006	<0.1	2.3	0.022	1.5	3.9	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	2.16	IS	IS	3.5	IS	0.32	IS	IS	<0.5	IS
1/3/2007	<0.1	2.4	0.042	1.7	4.1	<0.1	<0.1	<0.01	<0.5	<0.6	0.57	<0.1	<0.01	<0.5	0.9	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS
1/9/2007	0.19	1.9	0.052	2.4	4.3	0.21	<0.1	<0.01	<0.5	<0.6	0.19	<0.1	<0.01	<0.5	<0.6	0.31	IS	IS	<0.5	IS	IS	IS	IS	IS	IS	0.36	1.2	<0.01	0.6	1.8
1/16/2007	0.18	1.9	0.041	2.2	4.2	0.3	<0.1	<0.01	<0.5	<0.6	0.18	<0.1	<0.01	<0.5	<0.6	0.15	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.23	0.3	<0.01	<0.5	<0.6
1/23/2007	<0.1	1.4	0.047	2.1	3.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.195	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
1/30/2007	<0.1	1.1	0.055	3.5	4.6	<0.1	<0.1	<0.01	0.77	0.8	<0.1	0.322	<0.01	0.5	0.8	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	IS	IS	0.7	IS
2/6/2007	<0.1	1.1	0.059	1.0	2.1	<0.1	0.258	<0.01	<0.5	<0.6	<0.1	0.446	<0.01	<0.5	<0.6	<0.1	IS	IS	0.55		IS	IS	IS	IS	IS	<0.1	0.3	<0.01	<0.5	<0.6
2/13/2007	<0.1	1.4	0.039	1.6	3.1	<0.1	0.278	<0.01	<0.5	<0.6	<0.1	0.366	<0.01	<0.5	<0.6	<0.1	0.123	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
2/20/2007	<0.1	1.2	0.033	5.0	6.2	<0.1	0.204	<0.01	<0.5	<0.6	<0.1	0.177	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
2/27/2007	<0.1	1.0	0.04	1.9	2.9	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.293	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	IS	IS	<0.5	IS	<0.1	0.5	<0.01	0.5	1.0
3/6/2007	<0.1	1.0	0.05	2.2	3.2	<0.1	<0.1	<0.01	1.105	1.2	<0.1	0.512	<0.01	0.69	1.2	<0.1	<0.1	<0.01	0.685	0.7	IS	IS	IS	IS	IS	<0.1	0.5	<0.01	0.7	1.2
3/13/2007	<0.1	1.6	0.039	1.4	3.0	<0.1	<0.1	<0.01	0.595	0.7	<0.1	0.799	<0.01	<0.5	1.1	IS	IS	IS	IS	IS	<0.1	1.192	<0.01	<0.5	1.4	<0.1	0.6	<0.01	1.0	1.6
3/20/2007	<0.1	1.3	0.049	1.6	2.9	<0.1	<0.1	<0.01	0.52	0.6	<0.1	0.702	<0.01	0.79	1.5	<0.1	0.606	<0.01	0.51	1.1	IS	IS	IS	IS	IS	<0.1	0.7	<0.01	<0.5	0.9
3/27/2007	0.1	0.8	0.05	1.9	2.7	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.491	<0.01	<0.5	0.7	<0.1	0.193	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
4/3/2007	<0.1	0.4	<0.01	2.2	2.6	<0.1	<0.1	<0.01	0.575	0.6	<0.1	0.502	<0.01	<0.5	0.8	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.8	<0.01	<0.5	1.1
4/10/2007	0.425	0.3	<0.01	2.0	2.3	<0.1	<0.1	<0.01	0.615	0.7	<0.1	0.514	<0.01	<0.5	0.8	<0.1	0.216	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.6	<0.01	<0.5	0.9
4/17/2007	0.51	0.2	0.08	1.6	1.9	<0.1	1.091	<0.01	<0.5	1.3	<0.1	0.387	<0.01	<0.5	0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	1.0	<0.01	<0.5	1.3
4/24/2007	0.42	0.5	<0.01	1.9	2.4	<0.1	0.413	<0.01	<0.5	<0.6	<0.1	0.205	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.659	<0.01	<0.5	0.9	IS	IS	IS	IS	IS

Table 4-3b
Turner Cell 4: Surface Water and Lysimeter Results
Nitrogen Speciation

Date	TRN4-SW Surface Water					TRN4-05 5 ft bgs					TRN4-10 10 ft bgs					TRN4-15 15 ft bgs					TRN4-25 25 ft bgs					TRN4-35 35 ft bgs				
	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN	NH3-N	NO3-N	NO2-N	TKN	TN
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
5/1/2007	<0.1	0.4	0.039	2.0	2.5	IS	IS	IS	IS	IS	<0.1	0.103	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
5/8/2007	<0.1	2.3	<0.01	1.7	4.0	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	0.52	0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.8	<0.01	<0.5	1.1
5/15/2007	<0.1	2.1	0.029	1.4	3.5	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.9	<0.01	<0.5	1.1
5/22/2007	0.375	1.6	0.079	2.0	3.7	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	0.21	1.3	<0.01	1.0	2.3
5/29/2007	<0.1	1.9	0.48	1.8	4.2	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	0.12	0.4	<0.01	0.5	0.9
6/5/2007	<0.1	1.5	0.058	1.8	3.3	<0.1	<0.1	<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	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.8	<0.01	<0.5	1.0
6/12/2007	0.3	1.2	0.112	1.8	3.1	<0.1	<0.1	<0.01	0.52	0.6	0.36	<0.1	<0.01	<0.5	<0.6	0.16	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.21	0.5	<0.01	<0.5	<0.6
6/19/2007	0.63	0.6	<0.01	2.2	2.8	0.24	<0.1	<0.01	0.64	0.7	0.3	<0.1	<0.01	0.67	0.7	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	0.42	1.2	<0.01	<0.5	1.4
6/26/2007	0.74	0.3	0.066	0.9	1.2	0.14	<0.1	<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	IS	IS	IS	IS	IS	<0.1	0.7	<0.01	<0.5	0.9
7/3/2007	<0.1	<0.1	<0.01	6.2	6.2	IS	IS	IS	IS	IS	<0.1	<0.1	<0.01	3.115	3.2	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
7/10/2007	<0.1	<0.1	<0.01	1.6	1.6	<0.1	<0.1	<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	<0.1	0.21	<0.01	<0.5	<0.6	<0.1	0.6	<0.01	<0.5	0.9
7/17/2007	<0.1	<0.1	<0.01	1.7	1.7	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.297	<0.01	<0.5	<0.6	<0.1	0.5	<0.01	IS	IS
7/24/2007	<0.1	<0.1	<0.01	2.7	2.7	<0.1	<0.1	<0.01	0.59	0.6	<0.1	<0.1	<0.01	0.585	0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	1.0	<0.01	<0.5	1.3
7/31/2007	0.49	<0.1	<0.01	2.6	2.6	<0.1	<0.1	<0.01	<0.5	<0.6	<0.1	0.103	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.5	<0.01	<0.5	<0.6
8/6/2007	<0.1	<0.1	<0.01	2.9	2.9	0.16	<0.1	<0.01	3.26	3.3	0.17	<0.1	<0.01	<0.5	<0.6	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	<0.1	0.5	<0.01	<0.5	<0.6
8/14/2007	0.13	<0.1	<0.01	4.8	4.8	0.1	<0.1	<0.01	1.24	1.3	<0.1	<0.1	<0.01	0.88	0.9	<0.1	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	0.15	0.5	<0.01	<0.5	<0.6
8/21/2007	<0.1	<0.1	<0.01	11.5	11.5	<0.1	<0.1	<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	IS	IS	IS	IS	IS	<0.1	0.4	<0.01	<0.5	<0.6
8/28/2007	0.29	1.6	0.032	2.5	4.1	<0.1	<0.1	<0.01	<0.5	<0.6	0.14	<0.1	<0.01	<0.5	<0.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	<0.1	0.5	<0.01	<0.5	<0.6

Notes

IS: Insufficient sample from lysimeter result in parameter not being analyzed

Table 4-4a
Turner Cell 1: Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25-ft bgs
	0	5	10	15	25	35	Lysimeter
1/13/2006	1.4	0.9	1.0	1.0	0.6	0.7	0%
1/17/2006	2.6	1.5	1.0	0.9	0.6	0.7	0%
1/24/2006	1.9	2.2	2.1	1.8	0.6	0.8	0%
1/31/2006	2.4	1.6	1.8	1.3	1.1	1.0	0%
2/7/2006	2.6	1.6	1.2	1.2	0.9	1.3	0%
2/14/2006	2.8	1.5	0.6	1.0	1.1	0.9	0%
2/21/2006	3.1	1.0	0.4	0.4	0.3	0.6	0%
2/28/2006	2.3	1.1	0.3	<0.3	0.3	0.3	0%
3/7/2006	1.5	1.6	0.6	0.4	<0.3	<0.3	0%
3/14/2006	2.1	1.5	0.9	0.7	0.8	0.7	0%
3/21/2006	2.4	1.9	0.5	<0.3	<0.3	<0.3	0%
3/28/2006	2.1	1.5	<0.3	0.3	0.3	0.5	0%
4/4/2006	1.5	1.3	0.6	0.6	0.4	<0.3	0%
4/11/2006	1.3	1.4	0.6	0.9	0.7	0.4	0%
4/18/2006	1.2	1.1	0.8	0.6	0.4	<0.3	0%
4/25/2006	1.1	1.1	0.7	0.6	0.6	0.5	0%
5/2/2006	1.1	1.2	<0.6	<0.6	<0.6	<0.6	0%
5/9/2006	1.0	<0.6	<0.6	<0.6	<0.6	<0.6	0%
5/16/2006	2.2	1.0	1.1	0.6	0.8	IS	0%
5/23/2006	4.2	<0.6	<0.6	<0.6	<0.6	IS	0%
5/31/2006	3.0	1.2	<0.6	<0.6	0.8	IS	0%
6/6/2006	2.6	2.3	0.9	<0.6	0.6	IS	0%
6/13/2006	2.8	1.4	<0.6	<0.6	<0.6	IS	0%
6/20/2006	2.5	1.3	<0.6	<0.6	0.6	IS	0%
6/27/2006	2.1	2.5	<0.6	1.1	1.3	IS	0%
7/4/2006	IS	IS	0.9	1.1	0.9	IS	0%
7/11/2006	IS	IS	2.4	IS	IS	IS	0%
7/18/2006	IS	IS	IS	<0.6	IS	IS	0%
7/25/2006	IS	IS	IS	IS	IS	IS	0%
8/1/2006	3.4	12.8	10.5	1.1	1.5	IS	24%
8/8/2006	4.5	5.0	4.1	3.3	IS	<0.6	30%
8/15/2006	3.6	1.5	1.1	1.9	3.3	2.4	35%
8/22/2006	2.8	<1.6	<0.6	1.0	1.9	1.0	50%
8/29/2006	3.9	0.7	<0.6	0.6	1.2	0.6	66%
9/6/2006	4.1	<0.6	0.9	<0.6	1.2	<0.6	67%
9/12/2006	4.0	1.1	<0.6	<0.6	<0.6	IS	84%
9/19/2006	4.9	1.0	0.8	<0.6	<0.6	IS	78%
9/26/2006	2.6	1.0	<0.6	<0.6	0.7	IS	78%
10/3/2006	1.8	<0.6	<0.6	IS	<0.6	IS	82%
10/10/2006	1.6	<0.6	<0.6	<0.6	<0.6	IS	88%
10/17/2006	2.1	<0.6	<0.6	IS	<0.6	IS	80%
10/24/2006	<0.6	2.2	<0.6	<0.6	<0.6	IS	72%
10/31/2006	5.7	1.0	1.0	<0.6	0.7	IS	65%
11/7/2006	2.6	1.0	<0.6	<0.6	<0.6	IS	54%
11/14/2006	2.9	<0.6	<0.6	<0.6	<0.6	IS	49%
11/21/2006	3.0	<0.6	<0.6	<0.6	<0.6	IS	41%
11/28/2006	2.3	<0.6	<0.6	<0.6	<0.6	IS	38%
12/5/2006	2.2	<0.6	<0.6	<0.6	<0.6	IS	35%
12/12/2006	5.0	<0.6	<0.6	IS	<0.6	IS	43%
12/19/2006	4.2	<0.6	<0.6	IS	<0.6	IS	38%
12/28/2006	5.0	1.0	<0.6	<0.6	<0.6	IS	40%
1/3/2007	5.1	2.3	<0.6	IS	<0.6	IS	43%
1/9/2007	5.1	4.5	1.0	IS	0.9	IS	43%
1/16/2007	4.5	4.3	1.3	IS	0.8	IS	52%
1/23/2007	3.4	3.7	1.1	IS	<0.6	IS	68%
1/30/2007	5.1	2.6	1.1	IS	<0.6	IS	67%

Table 4-4a
Turner Cell 1: Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Depth (ft bgs)					Percentage RW at 25-ft bgs
	0	5	10	15	25	35	Lysimeter
2/6/2007	5.0	2.4	0.9	IS	<0.6	IS	79%
2/13/2007	5.2	2.0	0.9	IS	<0.6	IS	72%
2/20/2007	5.2	2.1	1.0	IS	<0.6	IS	77%
2/27/2007	5.4	1.0	0.8	IS	<0.6	<0.6	80%
3/6/2007	5.3	1.9	1.1	1.3	0.6	4.2	82%
3/13/2007	4.6	2.2	1.1	IS	0.7	IS	87%
3/20/2007	4.9	2.0	0.7	IS	0.8	1.3	85%
3/27/2007	3.5	1.1		IS	IS	IS	87%
4/3/2007	3.4	<0.6	<0.6	IS	<0.6	IS	88%
4/10/2007	4.9	0.9	0.6	IS	<0.6	IS	93%
4/17/2007	3.2	0.8	<0.6	IS	<0.6	IS	93%
4/24/2007	3.5	1.1	0.8	IS	<0.6	IS	96%
5/1/2007	2.5	0.9		IS	0.6	IS	95%
5/8/2007	6.4	0.8	<0.6	IS	<0.6	IS	100%
5/15/2007	5.5	<0.6	<0.6	<0.6	<0.6	IS	102%
5/22/2007	4.1	<0.6	<0.6	IS	<0.6	IS	100%
5/29/2007	4.2	<0.6	<0.6	IS	<0.6	IS	95%
6/5/2007	5.5	0.7	<0.6	IS	<0.6	IS	100%
6/12/2007	5.3	<0.6	<0.6	IS	<0.6	IS	98%
6/19/2007	3.2	<0.6	0.6	IS	<0.6	IS	90%
6/26/2007	0.9	<0.6	<0.6	IS	<0.6	IS	94%
7/3/2007	1.3	0.7	<0.6	IS	0.6	IS	95%
7/10/2007	1.2	<0.6	<0.6	IS	<0.6	IS	95%
7/17/2007	1.6	<0.6	<0.6	IS	<0.6	IS	91%
7/24/2007	0.9	<0.6	0.7	IS	<0.6	IS	88%
7/31/2007	2.7	<0.6	<0.6	IS	<0.6	IS	96%
8/6/2007	2.2	0.8	0.8	IS	0.9	IS	90%
8/14/2007	4.1	1.5	1.4	IS	0.8	IS	89%
8/21/2007	2.4	0.7	<0.6	IS	0.8	IS	84%
8/28/2007	2.9	<0.6	<0.6	IS	0.8	<0.6	90%
Averages	3.7	0.9	0.6	IS	0.4	IS	

Notes
Averages were calculated using data after February 1, 2007.
IS: Insufficient sample from lysimeter result in parameter not being analyzed
XX% Due to no EC for the sample, percent RW is the average of the first prior and first later percentage.

Table 4-4b
Turner Cell 4: Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Samples (ft bgs)					Percentage RW at 15-ft bgs
	0	5	10	15	25	35	Lysimeter
01/10/06	1.7	1.0	1.1	1.0	0.6	1.1	0%
01/17/06	1.6	0.9	0.9	0.9	0.5	IS	0%
01/24/06	1.7	1.5	1.1	1.3	0.6	1.7	0%
01/31/06	1.5	1.7	0.4	0.8	0.7	1.5	0%
02/07/06	1.9	1.1	0.5	0.8	0.4	IS	0%
02/14/06	2.5	1.0	0.8	1.1	0.7	1.9	0%
02/21/06	2.5	0.6	0.6	0.5	0.5	1.5	0%
02/28/06	2.3	1.2	0.7	0.7	0.4	1.5	0%
03/07/06	2.1	1.8	1.0	0.6	0.8	1.6	0%
03/14/06	2.2	1.4	0.7	0.8	0.9	1.8	0%
03/21/06	2.1	1.5	0.4	0.4	0.5	1.7	0%
03/28/06	2.1	0.8	0.3	<0.3	<0.3	1.9	0%
04/04/06	1.8	0.4	0.3	0.4	0.5	1.8	0%
04/11/06	1.9	0.4	0.4	0.5	<0.3	2.2	0%
04/18/06	1.3	0.4	<0.3	<0.3	0.4	1.6	0%
04/25/06	1.3	0.6	<0.3	<0.3	0.4	1.6	0%
05/02/06	1.5	<0.6	<0.6	0.8	0.7	IS	0%
05/09/06	0.6	<0.6	0.7	<0.6	IS	2.0	0%
05/16/06	1.2	<0.6	0.6	0.7	IS	IS	0%
05/23/06	1.3	0.8	<0.6	<0.6	IS	IS	0%
05/31/06	2.2	0.8	<0.6	1.1	<0.6	1.5	0%
06/06/06	1.9	<0.6	1.3	<0.6	0.8	1.8	0%
06/13/06	2.1	1.1	1.0	<0.6	IS	IS	0%
06/20/06	1.3	<0.6	<0.6	0.8	<0.6	0.9	0%
06/27/06	170.4	1.2	1.3	0.6	IS	1.7	0%
07/04/06	1.9	2.1	<0.6	<0.6	IS	1.2	0%
07/11/06	4.5	1.6	0.6	0.7	IS	IS	0%
07/18/06	3.4	<0.6	<0.6	<0.6	<0.6	148.8	0%
07/25/06	4.2	1.1	0.9	IS	IS	IS	< 50%
08/01/06	2.9	1.5	0.9	IS	IS	IS	< 50%
08/08/06	4.0	<0.6	<0.6	<0.6	<0.6	<0.6	59%
08/15/06	3.5	1.6	1.3	0.6	IS	1.1	61%
08/22/06	19.0	<0.6	<0.6	<0.6	IS	<0.6	73%
08/29/06	1.4	1.0	0.6	0.6	IS	<0.6	75%
09/06/06	6.7	0.9	0.8	IS	0.8	<0.6	83%
09/12/06	1.8	<0.6	<0.6	IS	IS	<0.6	91%
09/19/06	1.6	0.8	<0.6	IS	IS	<0.6	94%
09/26/06	1.5	<0.6	<0.6	IS	IS	<0.6	89%
10/03/06	1.0	0.8	<0.6	IS	IS	IS	84%
10/10/06	0.7	<0.6	<0.6	IS	IS	<0.6	79%
10/12/06	IS	IS	IS	IS	IS	IS	74%
10/17/06	0.6	<0.6	<0.6	IS	IS	<0.6	72%
10/24/06	1.2	<0.6	<0.6	IS	IS	<0.6	70%
10/31/06	1.1	<0.6	<0.6	IS	IS	<0.6	68%
11/07/06	1.0	<0.6	<0.6	IS	IS	<0.6	66%
11/14/06	0.8	<0.6	<0.6	<0.6	IS	<0.6	64%
11/21/06	3.6	<0.6	<0.6	<0.6	IS	<0.6	61%
11/28/06	1.3	4.8	<0.6	4.1	IS	<0.6	55%
12/05/06	1.2	<0.6	<0.6	<0.6	IS	<0.6	43%
12/12/06	5.4	IS	0.6	IS	IS	IS	< 40%
12/19/06	3.6	<0.6	<0.6	IS	IS	<0.6	< 40%
12/28/06	3.9	<0.6	<0.6	IS	IS	IS	< 40%
01/03/07	4.1	<0.6	0.9	IS	<0.6	IS	< 40%
01/09/07	4.3	<0.6	<0.6	IS	IS	1.8	< 40%
01/16/07	4.2	<0.6	<0.6	<0.6	IS	<0.6	31%
01/23/07	3.6	<0.6	<0.6	IS	IS	<0.6	34%
01/30/07	4.6	0.8	0.8	<0.6	IS	IS	38%
02/06/07	2.1	<0.6	<0.6	IS	IS	<0.6	52%
02/13/07	3.1	<0.6	<0.6	<0.6	IS	<0.6	55%
02/15/07	IS	IS	IS	IS	IS	IS	60%
02/20/07	6.2	<0.6	<0.6	<0.6	IS	<0.6	60%
02/27/07	2.9	<0.6	<0.6	<0.6	IS	1.0	61%
03/06/07	3.2	1.2	1.2	0.7	IS	1.2	66%
03/13/07	3.0	0.7	1.1	IS	1.4	1.6	68%
03/20/07	2.9	0.6	1.5	1.1	IS	0.9	69%
03/27/07	2.7	<0.6	0.7	<0.6	IS	IS	75%

Table 4-4b
Turner Cell 4: Surface Water and Lysimeter Results
Total Nitrogen
(mg/L)

Date	Surface Water	Lysimeter Samples (ft bgs)					Percentage RW at 15-ft bgs
	0	5	10	15	25	35	Lysimeter
04/03/07	2.6	0.6	0.8	IS	IS	1.1	75%
04/10/07	2.3	0.7	0.8	<0.6	IS	0.9	75%
04/17/07	1.9	1.3	0.6	IS	IS	1.3	75%
04/24/07	2.4	<0.6	<0.6	IS	0.9	IS	76%
05/01/07	2.5	IS	<0.6	IS	IS	<0.6	76%
05/08/07	4.0	<0.6	0.6	IS	IS	1.1	76%
05/15/07	3.5	<0.6	<0.6	IS	IS	1.1	77%
05/22/07	3.7	<0.6	<0.6	IS	IS	2.3	77%
05/29/07	4.2	<0.6	<0.6	IS	IS	0.9	77%
06/05/07	3.3	<0.6	<0.6	<0.6	<0.6	1.0	78%
06/12/07	3.1	0.6	<0.6	<0.6	IS	<0.6	78%
06/19/07	2.8	0.7	0.7	IS	IS	1.4	80%
06/26/07	1.2	<0.6	<0.6	<0.6	IS	0.9	83%
07/03/07	6.2	IS	3.2	IS	IS	IS	83%
07/10/07	1.6	<0.6	<0.6	<0.6	<0.6	0.9	84%
07/17/07	1.7	<0.6	<0.6	IS	<0.6	IS	84%
07/24/07	2.7	0.6	0.6	<0.6	IS	1.3	85%
07/31/07	2.6	<0.6	<0.6	IS	IS	<0.6	86%
08/06/07	2.9	3.3	<0.6	<0.6	IS	<0.6	88%
08/14/07	4.8	1.3	0.9	<0.6	IS	<0.6	90%
08/21/07	11.5	<0.6	<0.6	<0.6	IS	<0.6	91%
08/28/07	4.1	<0.6	<0.6	IS	IS	<0.6	91%
Averages	3.4	0.6	0.6	0.4	0.7	0.9	

Notes		
		Averages were calculated using data after February 1, 2007.
	IS:	Insufficient sample from lysimeter result in parameter not being analyzed
	XX%	Due to no EC for the sample, percent RW is the average of the first prior and first later percentage.

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
01/01/06						01/01/06					
01/02/06						01/02/06					
01/03/06						01/03/06					
01/04/06						01/04/06					
01/05/06						01/05/06					
01/06/06						01/06/06					
01/07/06						01/07/06					
01/08/06						01/08/06					
01/09/06						01/09/06					
01/10/06						**01/10/06**	5.5	2.1	0%		35
01/11/06						01/11/06					
01/12/06						01/12/06					
01/13/06	5.2	2.1	0%		21	01/13/06					
01/14/06						01/14/06					
01/15/06						01/15/06					
01/16/06						01/16/06					
01/17/06	5.4	1.9	0%		21	**01/17/06**	4.7	2.1	0%		35
01/18/06						01/18/06					
01/19/06						01/19/06					
01/20/06						01/20/06					
01/21/06						01/21/06					
01/22/06						01/22/06					
01/23/06						01/23/06					
01/24/06	4.3	1.5	0%		21	**01/24/06**	3.6	1.8	0%		35
01/25/06						01/25/06					
01/26/06						01/26/06					
01/27/06						01/27/06					
01/28/06						01/28/06					
01/29/06						01/29/06					
01/30/06						01/30/06					
01/31/06	5.7	1.7	0%	69%	21	**01/31/06**	4.1	1.6	0%		35
02/01/06						02/01/06					
02/02/06						02/02/06					
02/03/06						02/03/06					
02/04/06						02/04/06					
02/05/06						02/05/06					
02/06/06						02/06/06					
02/07/06	5.8	1.7	0%	84%	21	**02/07/06**	4.7	1.5	0%		35
02/08/06						02/08/06					
02/09/06						02/09/06					
02/10/06						02/10/06					
02/11/06						02/11/06					
02/12/06						02/12/06					
02/13/06						02/13/06					
02/14/06	6.5	1.9	0%	57%	21	**02/14/06**	5.0	1.5	0%	73%	35
02/15/06						02/15/06					
02/16/06						02/16/06					
02/17/06						02/17/06					
02/18/06						02/18/06					
02/19/06						02/19/06					
02/20/06						02/20/06					
02/21/06	10.7	2.3	0%	59%	21	**02/21/06**	5.5	1.7	0%	65%	35
02/22/06						02/22/06					
02/23/06						02/23/06					
02/24/06						02/24/06					
02/25/06						02/25/06					
02/26/06						02/26/06					
02/27/06						02/27/06					
02/28/06	7.8	3.7	0%	36%	21	**02/28/06**	8.1	1.7	0%	53%	35
03/01/06						03/01/06					
03/02/06						03/02/06					
03/03/06						03/03/06					
03/04/06						03/04/06					
03/05/06						03/05/06					
03/06/06						03/06/06					
03/07/06	4.9	2.5	0%	62%	21	**03/07/06**	6.6	1.6	0%	61%	35
03/08/06						03/08/06					
03/09/06						03/09/06					
03/10/06						03/10/06					
03/11/06						03/11/06					
03/12/06						03/12/06					
03/13/06						03/13/06					
03/14/06	4.7	2.3	0%	79%	21	**03/14/06**	5.5	1.7	0%	64%	35
03/15/06						03/15/06					

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
03/16/06						03/16/06					
03/17/06						03/17/06					
03/18/06						03/18/06					
03/19/06						03/19/06					
03/20/06						03/20/06					
03/21/06	5.2	2.3	0%	70%	21	**03/21/06**	4.9	1.8	0%	65%	35
03/22/06						03/22/06					
03/23/06						03/23/06					
03/24/06						03/24/06					
03/25/06						03/25/06					
03/26/06						03/26/06					
03/27/06						03/27/06					
03/28/06	5.5	2.2	0%	56%	21	**03/28/06**	5.2	1.9	0%	66%	35
03/29/06						03/29/06					
03/30/06						03/30/06					
03/31/06						03/31/06					
04/01/06						04/01/06					
04/02/06						04/02/06					
04/03/06						04/03/06					
04/04/06	3.9	2.5	0%	47%	21	**04/04/06**	4.5	1.9	0%	76%	35
04/05/06						04/05/06					
04/06/06						04/06/06					
04/07/06						04/07/06					
04/08/06						04/08/06					
04/09/06						04/09/06					
04/10/06						04/10/06					
04/11/06	2.9	2.2	0%	58%	21	**04/11/06**	4.9	2.0	0%	70%	35
04/12/06						04/12/06					
04/13/06						04/13/06					
04/14/06						04/14/06					
04/15/06						04/15/06					
04/16/06						04/16/06					
04/17/06						04/17/06					
04/18/06	2.8	1.4	0%	75%	21	**04/18/06**	2.8	1.7	0%	69%	35
04/19/06						04/19/06					
04/20/06						04/20/06					
04/21/06						04/21/06					
04/22/06						04/22/06					
04/23/06						04/23/06					
04/24/06						04/24/06					
04/25/06	2.1	1.4	0%	64%	21	**04/25/06**	2.4	1.8	0%	64%	35
04/26/06						04/26/06					
04/27/06						04/27/06					
04/28/06						04/28/06					
04/29/06						04/29/06					
04/30/06						04/30/06					
05/01/06						05/01/06					
05/02/06	2.1	1.5	0%	47%	21	**05/02/06**	2.5	1.5	0%	71%	35
05/03/06						05/03/06					
05/04/06						05/04/06					
05/05/06						05/05/06					
05/06/06						05/06/06					
05/07/06						05/07/06					
05/08/06						05/08/06					
05/09/06	2.6	1.7	0%	40%	21	**05/09/06**	2.9	1.5	0%	67%	35
05/10/06						05/10/06					
05/11/06						05/11/06					
05/12/06						05/12/06					
05/13/06						05/13/06					
05/14/06						05/14/06					
05/15/06						05/15/06					
05/16/06	3.9	1.7	0%	20%	21	**05/16/06**	4.1	1.8	0%	64%	35
05/17/06						05/17/06					
05/18/06						05/18/06					
05/19/06						05/19/06					
05/20/06						05/20/06					
05/21/06						05/21/06					
05/22/06						05/22/06					
05/23/06	14.5	1.5	0%	27%	21	**05/23/06**	4.7	1.5	0%	46%	35
05/24/06						05/24/06					
05/25/06						05/25/06					
05/26/06						05/26/06					
05/27/06						05/27/06					
05/28/06						05/28/06					
05/29/06						05/29/06					
05/30/06						05/30/06					
05/31/06	11.2	1.4	0%	46%	21	**05/31/06**	7.4	1.4	0%	42%	35

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
06/01/06						06/01/06					
06/02/06						06/02/06					
06/03/06						06/03/06					
06/04/06						06/04/06					
06/05/06						06/05/06					
06/06/06	10.9	1.5	0%	62%	21	**06/06/06**	7.8	1.5	0%	40%	35
06/07/06						06/07/06					
06/08/06						06/08/06					
06/09/06						06/09/06					
06/10/06						06/10/06					
06/11/06						06/11/06					
06/12/06						06/12/06					
06/13/06	11.1	1.8	0%	87%	21	**06/13/06**	6.7	1.7	0%	41%	35
06/14/06						06/14/06					
06/15/06						06/15/06					
06/16/06						06/16/06					
06/17/06						06/17/06					
06/18/06						06/18/06					
06/19/06						06/19/06					
06/20/06	10.5	2.3	0%	79%	21	**06/20/06**	6.9	1.7	0%	57%	35
06/21/06						06/21/06					
06/22/06						06/22/06					
06/23/06						06/23/06					
06/24/06						06/24/06					
06/25/06						06/25/06					
06/26/06						06/26/06					
06/27/06	13.9	2.5	0%	77%	21	**06/27/06**	95.0	2.0	0%	57%	35
06/28/06						06/28/06					
06/29/06						06/29/06					
06/30/06						06/30/06					
07/01/06						07/01/06					
07/02/06						07/02/06					
07/03/06						07/03/06					
07/04/06	NT	2.5	0%	78%	NT	**07/04/06**	11.3	2.0	0%	74%	14
07/05/06						07/05/06					
07/06/06						07/06/06					
07/07/06						07/07/06					
07/08/06						07/08/06					
07/09/06						07/09/06					
07/10/06						07/10/06					
07/11/06	NT	1.9	0%	82%	NT	**07/11/06**	6.7	2.1	0%	73%	14
07/12/06						07/12/06					
07/13/06						07/13/06					
07/14/06						07/14/06					
07/15/06						07/15/06					
07/16/06						07/16/06					
07/17/06						07/17/06					
07/18/06	NT	1.7	0%	88%	NT	**07/18/06**	6.6	2.3	0%	66%	21
07/19/06						07/19/06					
07/20/06						07/20/06					
07/21/06						07/21/06					
07/22/06						07/22/06					
07/23/06						07/23/06					
07/24/06						07/24/06					
07/25/06	NT	1.6	0%	NT	NT	**07/25/06**	7.5	2.7	50%	59%	28
07/26/06						07/26/06					
07/27/06						07/27/06					
07/28/06						07/28/06					
07/29/06						07/29/06					
07/30/06						07/30/06					
07/31/06						07/31/06					
08/01/06	7.0	1.7	25%	NT	21	**08/01/06**	6.1	2.5	50%	63%	28
08/02/06						08/02/06					
08/03/06						08/03/06					
08/04/06						08/04/06					
08/05/06						08/05/06					
08/06/06						08/06/06					
08/07/06						08/07/06					
08/08/06	6.0	1.6	31%	NT	21	**08/08/06**	6.5	2.5	59%	63%	28
08/09/06						08/09/06					
08/10/06						08/10/06					
08/11/06						08/11/06					
08/12/06						08/12/06					
08/13/06						08/13/06					
08/14/06						08/14/06					
08/15/06	6.8	2.3	36%	NT	21	**08/15/06**	6.3	2.4	61%	64%	28

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
08/16/06						08/16/06					
08/17/06						08/17/06					
08/18/06						08/18/06					
08/19/06						08/19/06					
08/20/06						08/20/06					
08/21/06						08/21/06					
08/22/06	6.9	2.5	51%	65%	21	**08/22/06**	14.7	2.5	73%	66%	28
08/23/06						08/23/06					
08/24/06						08/24/06					
08/25/06						08/25/06					
08/26/06						08/26/06					
08/27/06						08/27/06					
08/28/06						08/28/06					
08/29/06	6.7	2.1	68%	65%	21	**08/29/06**	6.3	2.4	75%	61%	28
08/30/06						08/30/06					
08/31/06						08/31/06					
09/01/06						09/01/06					
09/02/06						09/02/06					
09/03/06						09/03/06					
09/04/06						09/04/06					
09/05/06						09/05/06					
09/06/06	6.1	2.3	69%	66%	21	**09/06/06**	5.0	2.5	83%	62%	28
09/07/06						09/07/06					
09/08/06						09/08/06					
09/09/06						09/09/06					
09/10/06						09/10/06					
09/11/06						09/11/06					
09/12/06	6.3	1.7	86%	75%	28	**09/12/06**	5.7	2.7	91%	56%	28
09/13/06						09/13/06					
09/14/06						09/14/06					
09/15/06						09/15/06					
09/16/06						09/16/06					
09/17/06						09/17/06					
09/18/06						09/18/06					
09/19/06	6.1	2.4	80%	64%	28	**09/19/06**	5.3	2.6	94%	82%	28
09/19/06						09/19/06					
09/20/06						09/20/06					
09/21/06						09/21/06					
09/22/06						09/22/06					
09/23/06						09/23/06					
09/24/06						09/24/06					
09/25/06						09/25/06					
09/26/06	7.5	2.0	80%	67%	28	**09/26/06**	5.3	2.6	89%	60%	28
09/26/06						09/26/06					
09/27/06						09/27/06					
09/28/06						09/28/06					
09/29/06						09/29/06					
09/30/06						09/30/06					
10/01/06						10/01/06					
10/02/06						10/02/06					
10/03/06	5.4	2.4	84%	63%	28	**10/03/06**	5.0	4.2	84%	17%	28
10/03/06						10/03/06					
10/04/06						10/04/06					
10/05/06						10/05/06					
10/06/06						10/06/06					
10/07/06						10/07/06					
10/08/06						10/08/06					
10/09/06						10/09/06					
10/10/06	5.5	2.3	90%	64%	28	**10/10/06**	5.3	2.4	79%	57%	28
10/11/06						10/11/06					
10/12/06						10/12/06					
10/12/06						10/12/06					
10/13/06						10/13/06					
10/14/06						10/14/06					
10/15/06						10/15/06					
10/16/06						10/16/06					
10/17/06	2.7	2.4	83%	61%	28	**10/17/06**	5.2	2.4	72%	55%	28
10/18/06						10/18/06					
10/19/06						10/19/06					
10/20/06						10/20/06					
10/21/06						10/21/06					
10/22/06						10/22/06					
10/23/06						10/23/06					
10/24/06	4.3	2.0	74%	73%	28	**10/24/06**	4.8	2.2	70%	59%	35
10/25/06						10/25/06					
10/26/06						10/26/06					
10/27/06						10/27/06					
10/28/06						10/28/06					
10/29/06						10/29/06					
10/30/06						10/30/06					
10/31/06	2.5	1.9	66%	64%	28	**10/31/06**	4.2	2.2	68%	56%	35

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
11/01/06						11/01/06					
11/02/06						11/02/06					
11/03/06						11/03/06					
11/04/06						11/04/06					
11/05/06						11/05/06					
11/06/06						11/06/06					
11/07/06	5.2	2.0	55%	65%	28	**11/07/06**	4.4	2.2	66%	58%	35
11/08/06						11/08/06					
11/09/06						11/09/06					
11/10/06						11/10/06					
11/11/06						11/11/06					
11/12/06						11/12/06					
11/13/06						11/13/06					
11/14/06	5.6	1.9	50%	31%	28	**11/14/06**	4.7	2.1	64%	60%	35
11/15/06						11/15/06					
11/16/06						11/16/06					
11/17/06						11/17/06					
11/18/06						11/18/06					
11/19/06						11/19/06					
11/20/06						11/20/06					
11/21/06	6.0	1.7	42%	76%	28	**11/21/06**	3.0	2.0	61%	61%	35
11/22/06						11/22/06					
11/23/06						11/23/06					
11/24/06						11/24/06					
11/25/06						11/25/06					
11/26/06						11/26/06					
11/27/06						11/27/06					
11/28/06	8.0	1.7	39%	76%	28	**11/28/06**	4.8	1.9	55%	60%	35
11/29/06						11/29/06					
11/30/06						11/30/06					
12/01/06						12/01/06					
12/02/06						12/02/06					
12/03/06						12/03/06					
12/04/06						12/04/06					
12/05/06	9.1	1.8	36%	77%	35	**12/05/06**	5.3	2.2	43%	49%	42
12/06/06						12/06/06					
12/07/06						12/07/06					
12/08/06						12/08/06					
12/09/06						12/09/06					
12/10/06						12/10/06					
12/11/06						12/11/06					
12/12/06	6.8	1.9	44%	82%	35	**12/12/06**	5.2	2.0	40%	54%	42
12/13/06						12/13/06					
12/14/06						12/14/06					
12/15/06						12/15/06					
12/16/06						12/16/06					
12/17/06						12/17/06					
12/18/06						12/18/06					
12/19/06	7.1	1.6	39%	87%	35	**12/19/06**	5.2	1.9	40%	59%	42
12/20/06						12/20/06					
12/21/06						12/21/06					
12/22/06						12/22/06					
12/23/06						12/23/06					
12/24/06						12/24/06					
12/25/06						12/25/06					
12/26/06						12/26/06					
12/27/06						12/27/06					
12/28/06	6.1	1.5	41%	82%	35	**12/28/06**	6.5	1.8	40%	39%	42
12/29/06						12/29/06					
12/30/06						12/30/06					
12/31/06						12/31/06					
01/01/07						01/01/07					
01/02/07						01/02/07					
01/03/07	6.3	1.5	44%	84%		**01/03/07**	5.8	1.8	40%	62%	49
01/04/07					35	01/04/07					
01/05/07						01/05/07					
01/06/07						01/06/07					
01/07/07						01/07/07					
01/08/07						01/08/07					
01/09/07	7.1	1.7	44%	82%	35	**01/09/07**	6.0	1.9	40%	60%	49
01/10/07						01/10/07					
01/11/07						01/11/07					
01/12/07						01/12/07					
01/13/07						01/13/07					
01/14/07						01/14/07					
01/15/07						01/15/07					

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
01/16/07	7.1	1.8	54%	74%	35	**01/16/07**	6.7	1.8	31%	66%	49
01/17/07						01/17/07					
01/18/07						01/18/07					
01/19/07						01/19/07					
01/20/07						01/20/07					
01/21/07						01/21/07					
01/22/07						01/22/07					
01/23/07	6.6	2.0	70%	72%	35	**01/23/07**	7.6	1.9	34%	64%	56
01/24/07						01/24/07					
01/25/07						01/25/07					
01/26/07						01/26/07					
01/27/07						01/27/07					
01/28/07						01/28/07					
01/29/07						01/29/07					
01/30/07	5.7	1.7	69%	72%	42	**01/30/07**	8.1	1.8	38%	66%	56
01/31/07						01/31/07					
02/01/07						02/01/07					
02/02/07						02/02/07					
02/03/07						02/03/07					
02/04/07						02/04/07					
02/05/07						02/05/07					
02/06/07	5.9	1.9	81%	70%	42	**02/06/07**	6.0	1.7	52%	74%	56
02/07/07						02/07/07					
02/08/07						02/08/07					
02/09/07						02/09/07					
02/10/07						02/10/07					
02/11/07						02/11/07					
02/12/07						02/12/07					
02/13/07	5.3	1.9	74%	74%	42	**02/13/07**	6.5	1.8	55%	73%	56
02/14/07						02/14/07					
02/15/07						02/15/07					
02/16/07						02/16/07					
02/17/07						02/17/07					
02/18/07						02/18/07					
02/19/07						02/19/07					
02/20/07	5.7	1.9	79%	73%	52	**02/20/07**	7.1	1.6	60%	72%	56
02/21/07						02/21/07					
02/22/07						02/22/07					
02/23/07						02/23/07					
02/24/07						02/24/07					
02/25/07						02/25/07					
02/26/07						02/26/07					
02/27/07	5.5	2.0	83%	70%	52	**02/27/07**	6.6	1.7	61%	72%	56
02/28/07						02/28/07					
03/01/07						03/01/07					
03/02/07						03/02/07					
03/03/07						03/03/07					
03/04/07						03/04/07					
03/05/07						03/05/07					
03/06/07	5.5	2.0	54%	64%	52	**03/06/07**	7.0	1.8	66%	73%	56
03/07/07						03/07/07					
03/08/07						03/08/07					
03/09/07						03/09/07					
03/10/07						03/10/07					
03/11/07						03/11/07					
03/12/07						03/12/07					
03/13/07	6.4	2.1	62%	64%	61	**03/13/07**	6.4	1.8	68%	73%	56
03/14/07						03/14/07					
03/15/07						03/15/07					
03/16/07						03/16/07					
03/17/07						03/17/07					
03/18/07						03/18/07					
03/19/07						03/19/07					
03/20/07	6.9	2.1	60%	65%	61	**03/20/07**	6.1	1.7	69%	77%	56
03/21/07						03/21/07					
03/22/07						03/22/07					
03/23/07						03/23/07					
03/24/07						03/24/07					
03/25/07						03/25/07					
03/26/07						03/26/07					
03/27/07	6.8	2.0	62%	63%	61	**03/27/07**	6.2	1.7	75%	79%	56
03/28/07						03/28/07					
03/29/07						03/29/07					
03/30/07						03/30/07					
03/31/07						03/31/07					

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
04/01/07						04/01/07					
04/02/07						04/02/07					
04/03/07	6.5	2.0	64%	62%	61	**04/03/07**	6.8	NT 1.7	75%	71%	56
04/04/07						04/04/07					
04/05/07						04/05/07					
04/06/07						04/06/07					
04/07/07						04/07/07					
04/08/07						04/08/07					
04/09/07						04/09/07					
04/10/07	8.5	2.1	72%	63%	61	**04/10/07**	7.5	1.8	75%	73%	56
04/11/07						04/11/07					
04/12/07						04/12/07					
04/13/07						04/13/07					
04/14/07						04/14/07					
04/15/07						04/15/07					
04/16/07						04/16/07					
04/17/07	8.9	2.0	72%	64%	61	**04/17/07**	7.2	1.8	75%	75%	56
04/18/07						04/18/07					
04/19/07						04/19/07					
04/20/07						04/20/07					
04/21/07						04/21/07					
04/22/07						04/22/07					
04/23/07						04/23/07					
04/24/07	8.0	2.0	78%	63%	61	**04/24/07**	6.9	1.9	76%	72%	56
04/25/07						04/25/07					
04/26/07						04/26/07					
04/27/07						04/27/07					
04/28/07						04/28/07					
04/29/07						04/29/07					
04/30/07						04/30/07					
05/01/07	8.7	2.0	76%	64%	61	**05/01/07**	7.1	1.9	76%	73%	56
05/02/07						05/02/07					
05/03/07						05/03/07					
05/04/07						05/04/07					
05/05/07						05/05/07					
05/06/07						05/06/07					
05/07/07						05/07/07					
05/08/07	6.9	2.0	84%	64%	61	**05/08/07**	7.2	1.8	76%	72%	56
05/09/07						05/09/07					
05/10/07						05/10/07					
05/11/07						05/11/07					
05/12/07						05/12/07					
05/13/07						05/13/07					
05/14/07						05/14/07					
05/15/07	7.6	1.9	88%	70%	61	**05/15/07**	7.3	1.5	77%	76%	56
05/16/07						05/16/07					
05/17/07						05/17/07					
05/18/07						05/18/07					
05/19/07						05/19/07					
05/20/07						05/20/07					
05/21/07						05/21/07					
05/22/07	6.9	2.0	84%	71%	61	**05/22/07**	8.0	1.6	77%	74%	56
05/23/07						05/23/07					
05/24/07						05/24/07					
05/25/07						05/25/07					
05/26/07						05/26/07					
05/27/07						05/27/07					
05/28/07						05/28/07					
05/29/07	6.7	2.5	76%	63%	61	**05/29/07**	8.6	1.7	77%	75%	56
05/30/07						05/30/07					
05/31/07						05/31/07					
06/01/07						06/01/07					
06/02/07						06/02/07					
06/03/07						06/03/07					
06/04/07						06/04/07					
06/05/07	8.5	1.6	84%	75%	61	**06/05/07**	10.6	1.6	78%	78%	56
06/06/07						06/06/07					
06/07/07						06/07/07					
06/08/07						06/08/07					
06/09/07						06/09/07					
06/10/07						06/10/07					
06/11/07						06/11/07					
06/12/07	8.7	2.1	80%	75%	61	**06/12/07**	10.1	1.7	78%	76%	56
06/13/07						06/13/07					
06/14/07						06/14/07					
06/15/07						06/15/07					

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
06/16/07						06/16/07					
06/17/07						06/17/07					
06/18/07						06/18/07					
06/19/07	9.0	2.2	68%	75%	61	**06/19/07**	9.6	1.9	80%	72%	56
06/20/07						06/20/07					
06/21/07						06/21/07					
06/22/07						06/22/07					
06/23/07						06/23/07					
06/24/07						06/24/07					
06/25/07						06/25/07					
06/26/07	8.8	2.1	74%	74%	61	**06/26/07**	9.7	1.8	83%	75%	56
06/27/07						06/27/07					
06/28/07						06/28/07					
06/29/07						06/29/07					
06/30/07						06/30/07					
07/01/07						07/01/07					
07/02/07						07/02/07					
07/03/07	8.4	2.1	76%	76%	61	**07/03/07**	9.4	1.8	74%	76%	56
07/04/07						07/04/07					
07/05/07						07/05/07					
07/06/07						07/06/07					
07/07/07						07/07/07					
07/08/07						07/08/07					
07/09/07						07/09/07					
07/10/07	8.4	2.3	76%	67%	61	**07/10/07**	7.8	2.0	74%	73%	56
07/11/07						07/11/07					
07/12/07						07/12/07					
07/13/07						07/13/07					
07/14/07						07/14/07					
07/15/07						07/15/07					
07/16/07						07/16/07					
07/17/07	9.9	2.6	70%	66%	61	**07/17/07**	9.0	2.5	75%	69%	56
07/18/07						07/18/07					
07/19/07						07/19/07					
07/20/07						07/20/07					
07/21/07						07/21/07					
07/22/07						07/22/07					
07/23/07						07/23/07					
07/24/07	9.8	2.2	64%	68%	61	**07/24/07**	8.4	2.0	79%	77%	56
07/25/07						07/25/07					
07/26/07						07/26/07					
07/27/07						07/27/07					
07/28/07						07/28/07					
07/29/07						07/29/07					
07/30/07						07/30/07					
07/31/07	13.6	2.0	78%	70%	61	**07/31/07**	10.9	2.1	80%	80%	56
08/01/07						08/01/07					
08/02/07						08/02/07					
08/03/07						08/03/07					
08/04/07						08/04/07					
08/05/07						08/05/07					
08/06/07	9.0	2.1	68%	76%	61	**08/06/07**	13.2	2.2	78%	78%	56
08/07/07						08/07/07					
08/08/07						08/08/07					
08/09/07						08/09/07					
08/10/07						08/10/07					
08/11/07						08/11/07					
08/12/07						08/12/07					
08/13/07						08/13/07					
08/14/07	9.3	1.7	66%	80%	61	**08/14/07**	16.7	2.1	71%	78%	56
08/15/07						08/15/07					

Table 5-1
Turner Cells 1 & 4: Total Organic Carbon Removal Efficiency

Turner 1						Turner 4					
Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)	Date	TOC (mg/L) Surface Water 0	TOC (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TOC Removal	Travel Time Offset (days)
08/16/07						08/16/07					
08/17/07						08/17/07					
08/18/07						08/18/07					
08/19/07						08/19/07					
08/20/07						08/20/07					
08/21/07	19.6	2.2	58%	76%	61	**08/21/07**	25.2	2.1	71%	78%	56
08/22/07						08/22/07					
08/23/07						08/23/07					
08/24/07						08/24/07					
08/25/07						08/25/07					
08/26/07						08/26/07					
08/27/07						08/27/07					
08/28/07	25.3	1.7	68%	81%	61	**08/28/07**	15.4	2.2	71%	77%	56
08/29/07						08/29/07					
08/30/07						08/30/07					
08/31/07						08/31/07					
	Average for Recycled Water >= 50%, 1/16/07 to 8/28/07						**Average for Recycled Water >= 50%, 2/6/07 to 8/28/07**				
	8.6	2.0	72%	70%			9.1	1.8	73%	75%	
	Average for Diluent Water						**Average for Diluent Water**				
	6.6	2.0	0%	62%			8.7	1.8	0%	62%	

Notes

Color shadings mark identical offset periods of surface water to lysimeter depth. The first values in a shade for surface water and lysimeter depth are correlated.
NT: Not Tested due to lack of water in basin or lysimeters
IS: Insufficient Sample to conduct test
IS 65%: Insufficient Sample & percent recycled water estimated from suface water percent recycled water and travel time.
NT 71%: Not Tested, but interpreted percentage from the samples immediately before and after this date.

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
01/01/06						01/01/06					
01/02/06						01/02/06					
01/03/06						01/03/06					
01/04/06						01/04/06					
01/05/06						01/05/06					
01/06/06						01/06/06					
01/07/06						01/07/06					
01/08/06						01/08/06					
01/09/06						01/09/06					
01/10/06						**01/10/06**	1.7	1.0	0%		35
01/11/06						01/11/06					
01/12/06						01/12/06					
01/13/06	1.4	1.1	0%		21	**01/13/06**					
01/14/06						01/14/06					
01/15/06						01/15/06					
01/16/06						01/16/06					
01/17/06	2.6	0.3	0%		21	**01/17/06**	1.6	0.9	0%		35
01/18/06						01/18/06					
01/19/06						01/19/06					
01/20/06						01/20/06					
01/21/06						01/21/06					
01/22/06						01/22/06					
01/23/06						01/23/06					
01/24/06	1.9	0.3	0%		21	**01/24/06**	1.7	1.3	0%		35
01/25/06						01/25/06					
01/26/06						01/26/06					
01/27/06						01/27/06					
01/28/06						01/28/06					
01/29/06						01/29/06					
01/30/06						01/30/06					
01/31/06	2.4	<0.3	0%	89%	21%	**01/31/06**	1.5	0.8	0%		*35*
02/01/06						02/01/06					
02/02/06						02/02/06					
02/03/06						02/03/06					
02/04/06						02/04/06					
02/05/06						02/05/06					
02/06/06						02/06/06					
02/07/06	2.6	0.8	0%	81%	21	**02/07/06**	1.9	0.8	0%		35
02/08/06						02/08/06					
02/09/06						02/09/06					
02/10/06						02/10/06					
02/11/06						02/11/06					
02/12/06						02/12/06					
02/13/06						02/13/06					
02/14/06	2.8	<0.3	0%	80%	21	**02/14/06**	2.5	1.1	0%	34%	35
02/15/06						02/15/06					
02/16/06						02/16/06					
02/17/06						02/17/06					
02/18/06						02/18/06					
02/19/06						02/19/06					
02/20/06						02/20/06					
02/21/06	3.1	0.3	0%	86%	21	**02/21/06**	2.5	0.5	0%	67%	35
02/22/06						02/22/06					
02/23/06						02/23/06					
02/24/06						02/24/06					
02/25/06						02/25/06					
02/26/06						02/26/06					
02/27/06						02/27/06					
02/28/06	2.3	0.4	0%	84%	21%	**02/28/06**	2.3	0.7	0%	59%	*35*
03/01/06						03/01/06					
03/02/06						03/02/06					
03/03/06						03/03/06					
03/04/06						03/04/06					
03/05/06						03/05/06					
03/06/06						03/06/06					
03/07/06	1.5	0.7	0%	76%	21	**03/07/06**	2.1	0.6	0%	60%	35
03/08/06						03/08/06					
03/09/06						03/09/06					
03/10/06						03/10/06					
03/11/06						03/11/06					
03/12/06						03/12/06					
03/13/06						03/13/06					
03/14/06	2.1	0.4	0%	86%	21	**03/14/06**	2.2	0.8	0%	58%	35
03/15/06						03/15/06					

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
03/16/06						03/16/06					
03/17/06						03/17/06					
03/18/06						03/18/06					
03/19/06						03/19/06					
03/20/06						03/20/06					
03/21/06	2.4	0.6	0%	73%	21	**03/21/06**	2.1	0.4	0%	82%	35
03/22/06						03/22/06					
03/23/06						03/23/06					
03/24/06						03/24/06					
03/25/06						03/25/06					
03/26/06						03/26/06					
03/27/06						03/27/06					
03/28/06	2.1	<0.6	0%	79%	21	**03/28/06**	2.1	<0.3	0%	94%	35
03/29/06						03/29/06					
03/30/06						03/30/06					
03/31/06						03/31/06					
04/01/06						04/01/06					
04/02/06						04/02/06					
04/03/06						04/03/06					
04/04/06	1.5	<0.6	0%	86%	21	**04/04/06**	1.8	0.4	0%	81%	35
04/05/06						04/05/06					
04/06/06						04/06/06					
04/07/06						04/07/06					
04/08/06						04/08/06					
04/09/06						04/09/06					
04/10/06						04/10/06					
04/11/06	1.3	0.8	0%	67%	21	**04/11/06**	1.9	0.5	0%	78%	35
04/12/06						04/12/06					
04/13/06						04/13/06					
04/14/06						04/14/06					
04/15/06						04/15/06					
04/16/06						04/16/06					
04/17/06						04/17/06					
04/18/06	1.2	<0.6	0%	86%	21	**04/18/06**	1.3	<0.3	0%	93%	35
04/19/06						04/19/06					
04/20/06						04/20/06					
04/21/06						04/21/06					
04/22/06						04/22/06					
04/23/06						04/23/06					
04/24/06						04/24/06					
04/25/06	1.1	0.8	0%	45%	21	**04/25/06**	1.3	<0.3	0%	93%	35
04/26/06						04/26/06					
04/27/06						04/27/06					
04/28/06						04/28/06					
04/29/06						04/29/06					
04/30/06						04/30/06					
05/01/06						05/01/06					
05/02/06	1.1	0.6	0%	56%	21	**05/02/06**	1.5	0.8	0%	63%	35
05/03/06						05/03/06					
05/04/06						05/04/06					
05/05/06						05/05/06					
05/06/06						05/06/06					
05/07/06						05/07/06					
05/08/06						05/08/06					
05/09/06	1.0	<0.6	0%	74%	21	**05/09/06**	0.6	<0.6	0%	83%	35
05/10/06						05/10/06					
05/11/06						05/11/06					
05/12/06						05/12/06					
05/13/06						05/13/06					
05/14/06						05/14/06					
05/15/06						05/15/06					
05/16/06	2.2	0.6	0%	50%	21	**05/16/06**	1.2	0.7	0%	63%	35
05/17/06						05/17/06					
05/18/06						05/18/06					
05/19/06						05/19/06					
05/20/06						05/20/06					
05/21/06						05/21/06					
05/22/06						05/22/06					
05/23/06	4.2	1.3	0%	-15%	21	**05/23/06**	1.3	<0.6	0%	77%	35
05/24/06						05/24/06					
05/25/06						05/25/06					
05/26/06						05/26/06					
05/27/06						05/27/06					
05/28/06						05/28/06					
05/29/06						05/29/06					
05/30/06						05/30/06					
05/31/06	3.0	0.9	0%	15%	21	**05/31/06**	2.2	1.1	0%	11%	35

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
06/01/06						06/01/06					
06/02/06						06/02/06					
06/03/06						06/03/06					
06/04/06						06/04/06					
06/05/06						06/05/06					
06/06/06	2.6	IS	0%	IS	21	**06/06/06**	1.9	<0.6	0%	80%	35
06/07/06						06/07/06					
06/08/06						06/08/06					
06/09/06						06/09/06					
06/10/06						06/10/06					
06/11/06						06/11/06					
06/12/06						06/12/06					
06/13/06	2.8	IS	0%	IS	21	**06/13/06**	2.1	<0.6	0%	47%	35
06/14/06						06/14/06					
06/15/06						06/15/06					
06/16/06						06/16/06					
06/17/06						06/17/06					
06/18/06						06/18/06					
06/19/06						06/19/06					
06/20/06	2.5	IS	0%	IS	21	**06/20/06**	1.3	0.8	0%	35%	35
06/21/06						06/21/06					
06/22/06						06/22/06					
06/23/06						06/23/06					
06/24/06						06/24/06					
06/25/06						06/25/06					
06/26/06						06/26/06					
06/27/06	2.1	1.5	0%	41%	21	**06/27/06**	170.4	0.6	0%	53%	35
06/28/06						06/28/06					
06/29/06						06/29/06					
06/30/06						06/30/06					
07/01/06						07/01/06					
07/02/06						07/02/06					
07/03/06						07/03/06					
07/04/06	NT	IS	0%	IS	NT	**07/04/06**	1.9	<0.6	0%	86%	14
07/05/06						07/05/06					
07/06/06						07/06/06					
07/07/06						07/07/06					
07/08/06						07/08/06					
07/09/06						07/09/06					
07/10/06						07/10/06					
07/11/06	NT	3.3	0%	-33%	NT	**07/11/06**	4.5	0.7	0%	61%	14
07/12/06						07/12/06					
07/13/06						07/13/06					
07/14/06						07/14/06					
07/15/06						07/15/06					
07/16/06						07/16/06					
07/17/06						07/17/06					
07/18/06	NT	1.9	0%	11%	NT	**07/18/06**	3.4	<0.6	0%	86%	21
07/19/06						07/19/06					
07/20/06						07/20/06					
07/21/06						07/21/06					
07/22/06						07/22/06					
07/23/06						07/23/06					
07/24/06						07/24/06					
07/25/06	NT	1.2	0%	NT	NT	**07/25/06**	4.2	IS	50%	IS	28
07/26/06						07/26/06					
07/27/06						07/27/06					
07/28/06						07/28/06					
07/29/06						07/29/06					
07/30/06						07/30/06					
07/31/06						07/31/06					
08/01/06	3.4	1.2	25%	NT	21	**08/01/06**	2.9	IS	50%	IS	28
08/02/06						08/02/06					
08/03/06						08/03/06					
08/04/06						08/04/06					
08/05/06						08/05/06					
08/06/06						08/06/06					
08/07/06						08/07/06					
08/08/06	4.5	<0.6	31%	NT	21	**08/08/06**	4.0	<0.6	59%	91%	28
08/09/06						08/09/06					
08/10/06						08/10/06					
08/11/06						08/11/06					
08/12/06						08/12/06					
08/13/06						08/13/06					
08/14/06						08/14/06					
08/15/06	3.6	<0.6	36%	NT	21	**08/15/06**	3.5	0.6	61%	82%	28

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
08/16/06						08/16/06					
08/17/06						08/17/06					
08/18/06						08/18/06					
08/19/06						08/19/06					
08/20/06						08/20/06					
08/21/06						08/21/06					
08/22/06	2.8	0.7	51%	79%	21	**08/22/06**	19.0	<0.6	73%	93%	28
08/23/06						08/23/06					
08/24/06						08/24/06					
08/25/06						08/25/06					
08/26/06						08/26/06					
08/27/06						08/27/06					
08/28/06						08/28/06					
08/29/06	3.9	<0.6	68%	93%	21	**08/29/06**	1.4	0.6	75%	78%	28
08/30/06						08/30/06					
08/31/06						08/31/06					
09/01/06						09/01/06					
09/02/06						09/02/06					
09/03/06						09/03/06					
09/04/06						09/04/06					
09/05/06						09/05/06					
09/06/06	4.1	<0.6	69%	92%	21	**09/06/06**	6.7	IS	83%	IS	28
09/07/06						09/07/06					
09/08/06						09/08/06					
09/09/06						09/09/06					
09/10/06						09/10/06					
09/11/06						09/11/06					
09/12/06	4.0	<0.6	86%	89%	28	**09/12/06**	1.8	IS	91%	IS	28
09/13/06						09/13/06					
09/14/06						09/14/06					
09/15/06						09/15/06					
09/16/06						09/16/06					
09/17/06						09/17/06					
09/18/06						09/18/06					
09/19/06	4.9	<0.6	80%	92%	28	**09/19/06**	1.6	IS	94%	IS	28
09/20/06						09/20/06					
09/21/06						09/21/06					
09/22/06						09/22/06					
09/23/06						09/23/06					
09/24/06						09/24/06					
09/25/06						09/25/06					
09/26/06	2.6	0.7	80%	83%	28	**09/26/06**	1.5	IS	89%	IS	28
09/27/06						09/27/06					
09/28/06						09/28/06					
09/29/06						09/29/06					
09/30/06						09/30/06					
10/01/06						10/01/06					
10/02/06						10/02/06					
10/03/06	1.8	<0.6	84%	92%	28	**10/03/06**	1.0	IS	84%	IS	28
10/04/06						10/04/06					
10/05/06						10/05/06					
10/06/06						10/06/06					
10/07/06						10/07/06					
10/08/06						10/08/06					
10/09/06						10/09/06					
10/10/06	1.6	<0.6	90%	92%	28	**10/10/06**	0.7	IS	79%	IS	28
10/11/06						10/11/06					
10/12/06						10/12/06					
10/13/06						10/13/06					
10/14/06						10/14/06					
10/15/06						10/15/06					
10/16/06						10/16/06					
10/17/06	2.1	<0.6	83%	94%	28	**10/17/06**	0.6	IS	72%	IS	28
10/18/06						10/18/06					
10/19/06						10/19/06					
10/20/06						10/20/06					
10/21/06						10/21/06					
10/22/06						10/22/06					
10/23/06						10/23/06					
10/24/06	<0.6	<0.6	74%	88%	28	**10/24/06**	1.2	IS	70%	IS	28
10/25/06						10/25/06					
10/26/06						10/26/06					
10/27/06						10/27/06					
10/28/06						10/28/06					
10/29/06						10/29/06					
10/30/06						10/30/06					
10/31/06	5.7	<0.6	66%	83%	28	**10/31/06**	1.1	IS	68%	IS	35

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
11/01/06						11/01/06					
11/02/06						11/02/06					
11/03/06						11/03/06					
11/04/06						11/04/06					
11/05/06						11/05/06					
11/06/06						11/06/06					
11/07/06	2.6	<0.6	55%	82%	28	**11/07/06**	1.0	IS	66%	IS	35
11/08/06						11/08/06					
11/09/06						11/09/06					
11/10/06						11/10/06					
11/11/06						11/11/06					
11/12/06						11/12/06					
11/13/06						11/13/06					
11/14/06	2.9	<0.6	50%	86%	28	**11/14/06**	0.8	<0.6	64%	53%	35
11/15/06						11/15/06					
11/16/06						11/16/06					
11/17/06						11/17/06					
11/18/06						11/18/06					
11/19/06						11/19/06					
11/20/06						11/20/06					
11/21/06	3.0	<0.6	42%	87%	28	**11/21/06**	3.6	<0.6	61%	53%	35
11/22/06						11/22/06					
11/23/06						11/23/06					
11/24/06						11/24/06					
11/25/06						11/25/06					
11/26/06						11/26/06					
11/27/06						11/27/06					
11/28/06	2.3	<0.6	39%	95%	28	**11/28/06**	1.3	4.1	55%	-233%	35
11/29/06						11/29/06					
11/30/06						11/30/06					
12/01/06						12/01/06					
12/02/06						12/02/06					
12/03/06						12/03/06					
12/04/06						12/04/06					
12/05/06	2.2	0.9	36%	89%	35	**12/05/06**	1.2	<0.6	43%	73%	42
12/06/06						12/06/06					
12/07/06						12/07/06					
12/08/06						12/08/06					
12/09/06						12/09/06					
12/10/06						12/10/06					
12/11/06						12/11/06					
12/12/06	5.0	0.8	44%	86%	35	**12/12/06**	5.4	IS	40%	IS	42
12/13/06						12/13/06					
12/14/06						12/14/06					
12/15/06						12/15/06					
12/16/06						12/16/06					
12/17/06						12/17/06					
12/18/06						12/18/06					
12/19/06	4.2	<0.6	39%	95%	35	**12/19/06**	3.6	IS	40%	IS	42
12/20/06						12/20/06					
12/21/06						12/21/06					
12/22/06						12/22/06					
12/23/06						12/23/06					
12/24/06						12/24/06					
12/25/06						12/25/06					
12/26/06						12/26/06					
12/27/06						12/27/06					
12/28/06	5.0	<0.6	41%	87%	35	**12/28/06**	3.9	IS	40%	IS	42
12/29/06						12/29/06					
12/30/06						12/30/06					
12/31/06						12/31/06					
01/01/07						01/01/07					
01/02/07						01/02/07					
01/03/07	5.1	<0.6	44%	86%		**01/03/07**	4.1	IS	40%	IS	49
01/04/07					35	01/04/07					
01/05/07						01/05/07					
01/06/07						01/06/07					
01/07/07						01/07/07					
01/08/07						01/08/07					
01/09/07	5.1	<0.6	44%	86%	35	**01/09/07**	4.3	IS	40%	IS	49
01/10/07						01/10/07					
01/11/07						01/11/07					
01/12/07						01/12/07					
01/13/07						01/13/07					
01/14/07						01/14/07					
01/15/07						01/15/07					

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
01/16/07	4.5	<0.6	54%	94%	35	**01/16/07**	4.2	<0.6	31%	74%	49
01/17/07						01/17/07					
01/18/07						01/18/07					
01/19/07						01/19/07					
01/20/07						01/20/07					
01/21/07						01/21/07					
01/22/07						01/22/07					
01/23/07	3.4	<0.6	70%	93%	35	**01/23/07**	3.6	IS	34%	IS	56
01/24/07						01/24/07					
01/25/07						01/25/07					
01/26/07						01/26/07					
01/27/07						01/27/07					
01/28/07						01/28/07					
01/29/07						01/29/07					
01/30/07	5.1	0.6	69%	88%	42	**01/30/07**	4.6	<0.6	38%	92%	56
01/31/07						01/31/07					
02/01/07						02/01/07					
02/02/07						02/02/07					
02/03/07						02/03/07					
02/04/07						02/04/07					
02/05/07						02/05/07					
02/06/07	5.0	0.7	81%	85%	42	**02/06/07**	2.1	IS	52%	IS	56
02/07/07						02/07/07					
02/08/07						02/08/07					
02/09/07						02/09/07					
02/10/07						02/10/07					
02/11/07						02/11/07					
02/12/07						02/12/07					
02/13/07	5.2	0.8	74%	84%	42	**02/13/07**	3.1	<0.6	55%	92%	56
02/14/07						02/14/07					
02/15/07						02/15/07					
02/16/07						02/16/07					
02/17/07						02/17/07					
02/18/07						02/18/07					
02/19/07						02/19/07					
02/20/07	5.2	IS	79%	IS	52	**02/20/07**	6.2	<0.6	60%	93%	56
02/21/07						02/21/07					
02/22/07						02/22/07					
02/23/07						02/23/07					
02/24/07						02/24/07					
02/25/07						02/25/07					
02/26/07						02/26/07					
02/27/07	5.4	<0.6	83%	91%	52	**02/27/07**	2.9	<0.6	61%	93%	56
02/28/07						02/28/07					
03/01/07						03/01/07					
03/02/07						03/02/07					
03/03/07						03/03/07					
03/04/07						03/04/07					
03/05/07						03/05/07					
03/06/07	5.3	<0.6	54%	94%	52	**03/06/07**	3.2	0.7	66%	82%	56
03/07/07						03/07/07					
03/08/07						03/08/07					
03/09/07						03/09/07					
03/10/07						03/10/07					
03/11/07						03/11/07					
03/12/07						03/12/07					
03/13/07	4.6	<0.6	62%	94%	61	**03/13/07**	3.0	IS	68%	IS	56
03/14/07						03/14/07					
03/15/07						03/15/07					
03/16/07						03/16/07					
03/17/07						03/17/07					
03/18/07						03/18/07					
03/19/07						03/19/07					
03/20/07	4.9	<0.6	60%	94%	61	**03/20/07**	2.9	1.1	69%	69%	56
03/21/07						03/21/07					
03/22/07						03/22/07					
03/23/07						03/23/07					
03/24/07						03/24/07					
03/25/07						03/25/07					
03/26/07						03/26/07					
03/27/07	3.5	0.6	62%	89%	61	**03/27/07**	2.7	<0.6	75%	94%	56
03/28/07						03/28/07					
03/29/07						03/29/07					
03/30/07						03/30/07					
03/31/07						03/31/07					

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L)		% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L)		% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
	Surface Water 0	Lysimeter 25					Surface Water 0	Lysimeter 15			
04/01/07						04/01/07					
04/02/07						04/02/07					
04/03/07	3.4	<0.6	64%	94%	61	**04/03/07**	2.6	IS	75%	IS	56
04/04/07						04/04/07					
04/05/07						04/05/07					
04/06/07						04/06/07					
04/07/07						04/07/07					
04/08/07						04/08/07					
04/09/07						04/09/07					
04/10/07	4.9	<0.6	72%	94%	61	**04/10/07**	2.3	<0.6	75%	90%	56
04/11/07						04/11/07					
04/12/07						04/12/07					
04/13/07						04/13/07					
04/14/07						04/14/07					
04/15/07						04/15/07					
04/16/07						04/16/07					
04/17/07	3.2	<0.6	72%	94%	61	**04/17/07**	1.9	IS	75%	IS	56
04/18/07						04/18/07					
04/19/07						04/19/07					
04/20/07						04/20/07					
04/21/07						04/21/07					
04/22/07						04/22/07					
04/23/07						04/23/07					
04/24/07	3.5	<0.6	78%	94%	61	**04/24/07**	2.4	IS	76%	IS	56
04/25/07						04/25/07					
04/26/07						04/26/07					
04/27/07						04/27/07					
04/28/07						04/28/07					
04/29/07						04/29/07					
04/30/07						04/30/07					
05/01/07	2.5	<0.6	76%	94%	61	**05/01/07**	2.5	IS	76%	IS	56
05/02/07						05/02/07					
05/03/07						05/03/07					
05/04/07						05/04/07					
05/05/07						05/05/07					
05/06/07						05/06/07					
05/07/07						05/07/07					
05/08/07	6.4	<0.6	84%	94%	61	**05/08/07**	4.0	IS	76%	IS	56
05/09/07						05/09/07					
05/10/07						05/10/07					
05/11/07						05/11/07					
05/12/07						05/12/07					
05/13/07						05/13/07					
05/14/07						05/14/07					
05/15/07	5.5	<0.6	88%	94%	61	**05/15/07**	3.5	IS	77%	IS	56
05/16/07						05/16/07					
05/17/07						05/17/07					
05/18/07						05/18/07					
05/19/07						05/19/07					
05/20/07						05/20/07					
05/21/07						05/21/07					
05/22/07	4.1	<0.6	84%	94%	61	**05/22/07**	3.7	IS	77%	IS	56
05/23/07						05/23/07					
05/24/07						05/24/07					
05/25/07						05/25/07					
05/26/07						05/26/07					
05/27/07						05/27/07					
05/28/07						05/28/07					
05/29/07	4.2	0.6	76%	84%	61	**05/29/07**	4.2	IS	77%	IS	56
05/30/07						05/30/07					
05/31/07						05/31/07					
06/01/07						06/01/07					
06/02/07						06/02/07					
06/03/07						06/03/07					
06/04/07						06/04/07					
06/05/07	5.5	<0.6	84%	91%	61	**06/05/07**	3.3	<0.6	78%	87%	56
06/06/07						06/06/07					
06/07/07						06/07/07					
06/08/07						06/08/07					
06/09/07						06/09/07					
06/10/07						06/10/07					
06/11/07						06/11/07					
06/12/07	5.3	<0.6	80%	94%	61	**06/12/07**	3.1	<0.6	78%	84%	56
06/13/07						06/13/07					
06/14/07						06/14/07					
06/15/07						06/15/07					

Table 5-2
Turner Cells 1 & 4: Total Nitrogen Removal Efficiency

Turner 1						Turner 4					
Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 25	% RW at 25-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)	Date	TN (mg/L) Surface Water 0	TN (mg/L) Lysimeter 15	% RW at 15-ft bgs Lysimeter	Percent TN Removal	Travel Time Offset (days)
06/16/07						06/16/07					
06/17/07						06/17/07					
06/18/07						06/18/07					
06/19/07	3.2	<0.6	68%	91%	61	**06/19/07**	2.8	IS	80%	IS	56
06/20/07						06/20/07					
06/21/07						06/21/07					
06/22/07						06/22/07					
06/23/07						06/23/07					
06/24/07						06/24/07					
06/25/07						06/25/07					
06/26/07	0.9	<0.6	74%	92%	61	**06/26/07**	1.2	<0.6	83%	88%	56
06/27/07						06/27/07					
06/28/07						06/28/07					
06/29/07						06/29/07					
06/30/07						06/30/07					
07/01/07						07/01/07					
07/02/07						07/02/07					
07/03/07	1.3	0.9	76%	64%	61	**07/03/07**	6.2	IS	74%	IS	56
07/04/07						07/04/07					
07/05/07						07/05/07					
07/06/07						07/06/07					
07/07/07						07/07/07					
07/08/07						07/08/07					
07/09/07						07/09/07					
07/10/07	1.2	0.8	76%	88%	61	**07/10/07**	1.6	<0.6	74%	92%	56
07/11/07						07/11/07					
07/12/07						07/12/07					
07/13/07						07/13/07					
07/14/07						07/14/07					
07/15/07						07/15/07					
07/16/07						07/16/07					
07/17/07	1.6	0.8	70%	86%	61	**07/17/07**	1.7	IS	75%	IS	56
07/18/07						07/18/07					
07/19/07						07/19/07					
07/20/07						07/20/07					
07/21/07						07/21/07					
07/22/07						07/22/07					
07/23/07						07/23/07					
07/24/07	0.9	0.8	64%	80%	61	**07/24/07**	2.7	<0.6	79%	93%	56
07/25/07						07/25/07					
07/26/07						07/26/07					
07/27/07						07/27/07					
07/28/07						07/28/07					
07/29/07						07/29/07					
07/30/07						07/30/07					
07/31/07	2.7	0.3	78%	93%	61	**07/31/07**	2.6	IS	80%	IS	56
08/01/07						08/01/07					
08/02/07						08/02/07					
08/03/07						08/03/07					
08/04/07						08/04/07					
08/05/07						08/05/07					
08/06/07	2.2	0.9	68%	84%	61	**08/06/07**	2.9	<0.6	78%	90%	56
08/07/07						08/07/07					
08/08/07						08/08/07					
08/09/07						08/09/07					
08/10/07						08/10/07					
08/11/07						08/11/07					
08/12/07						08/12/07					
08/13/07						08/13/07					
08/14/07	4.1	0.8	66%	86%	61	**08/14/07**	4.8	<0.6	71%	89%	56
08/15/07						08/15/07					
08/16/07						08/16/07					
08/17/07						08/17/07					
08/18/07						08/18/07					
08/19/07						08/19/07					
08/20/07						08/20/07					
08/21/07	2.4	0.8	58%	76%	61	**08/21/07**	11.5	<0.6	71%	76%	56
08/22/07						08/22/07					
08/23/07						08/23/07					
08/24/07						08/24/07					
08/25/07						08/25/07					
08/26/07						08/26/07					
08/27/07						08/27/07					
08/28/07	2.9	0.8	68%	7%	61	**08/28/07**	4.1	IS	71%	IS	56
08/29/07						08/29/07					
08/30/07						08/30/07					
08/31/07						08/31/07					
	Average for Recycled Water >= 50%, 1/16/07 to 8/28/07						**Average for Recycled Water >= 50%, 2/6/07 to 8/28/07**				
	3.8	0.5	72%	87%			3.4	0.4	73%	87%	
	Average for Diluent Water						**Average for Diluent Water**				
	2.1	0.8	0%	58%			8.3	0.6	0%	67%	

Notes

Color shadings mark identical offset periods of surface water to lysimeter depth. The first values in a shade for surface water and lysimeter depth are correlated.
NT: Not Tested due to lack of water in basin or lysimeters
IS: Insufficient Sample to conduct test
IS 65%: Insufficient Sample & percent recycled water estimated from suface water percent recycled water and travel time.

Table 7-1a
Turner Basin Cells 1 & 2
RWC Management Plan

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

Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2001/02	Jul-01	-60	0.					
	Aug-01	-59	0.					
	Sep-01	-58	0.					
	Oct-01	-57	0.					
	Nov-01	-56	19.9					
	Dec-01	-55	18.7					
	Jan-02	-54	19.6					
	Feb-02	-53	24.1					
	Mar-02	-52	13.1					
	Apr-02	-51	3.					
	May-02	-50	1.6					
	Jun-02	-49	0.					
2002/03	Jul-02	-48	0.					
	Aug-02	-47	0.					
	Sep-02	-46	0.					
	Oct-02	-45	0.					
	Nov-02	-44	10.					
	Dec-02	-43	30.6					
	Jan-03	-42	0.					
	Feb-03	-41	29.4					
	Mar-03	-40	32.2					
	Apr-03	-39	37.7					
	May-03	-38	52.3					
	Jun-03	-37	0.					
2003/04	Jul-03	-36	0.					
	Aug-03	-35	0.					
	Sep-03	-34	0.					
	Oct-03	-33	0.					
	Nov-03	-32	0.					
	Dec-03	-31	0.					
	Jan-04	-30	0.					
	Feb-04	-29	0.					
	Mar-04	-28	0.					
	Apr-04	-27	0.					
	May-04	-26	0.					
	Jun-04	-25	0.					
2004/05	Jul-04	-24	0.					
	Aug-04	-23	0.					
	Sep-04	-22	0.					
	Oct-04	-21	60.5					
	Nov-04	-20	131.					
	Dec-04	-19	165.5					
	Jan-05	-18	96.4					
	Feb-05	-17	87.7					
	Mar-05	-16	65.5					
	Apr-05	-15	0.					
	May-05	-14	0.5					
	Jun-05	-13	0.					

Table 7-1a
Turner Basin Cells 1 & 2
RWC Management Plan

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

Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2005/06	Jul-05	-12	0.		0.			
	Aug-05	-11	0.		0.			
	Sep-05	-10	89.3		0.			
	Oct-05	-9	95.2		0.			
	Nov-05	-8	178.5		0.			
	Dec-05	-7	359.		0.			
	Jan-06	-6	261.9		0.			
	Feb-06	-5	152.		0.			
	Mar-06	-4	426.5		0.			
	Apr-06	-3	389.8		0.			
	May-06	-2	97.1		0.			
	Jun-06	-1	11.		0.	0.		0%
2006/07	Jul-06	1	63.	3023	22.3	22	3045	1%
	Aug-06	2	20.8	3043	113.	135	3179	4%
	Sep-06	3	106.7	3150	114.4	250	3400	7%
	Oct-06	4	164.4	3315	0.	250	3564	7%
	Nov-06	5	29.	3324	0.	250	3573	7%
	Dec-06	6	30.3	3335	103.2	353	3688	10%
	Jan-07	7	27.1	3343	70.6	424	3766	11%
	Feb-07	8	11.7	3330	44.	468	3798	12%
	Mar-07	9	25.7	3343	56.8	524	3867	14%
	Apr-07	10	5.	3345	14.	538	3883	14%
	May-07	11	12.	3355	79.	617	3973	16%
	Jun-07	12	1.	3356	3.	620	3977	16%
2007/08	Jul-07	13	4.	3360	0.	620	3981	16%
	Aug-07	14	38.	3398	0.	620	4019	15%
	Sep-07	15	4.	3402	0.	620	4023	15%
	Oct-07	16	62.	3464	0.	620	4085	15%
	Nov-07	17	96.	3550	0.	620	4171	15%
	Dec-07	18	215.	3735	0.	620	4355	14%
	Jan-08	19	311.	4046	0.	620	4666	13%
	Feb-08	20	251.	4267	0.	620	4888	13%
	Mar-08	21	17.	4252	0.	620	4873	13%
	Apr-08	22	14.	4229	0.	620	4849	13%
	May-08	23	143.	4319	0.	620	4940	13%
	Jun-08	24	0.	4319	0.	620	4940	13%
2008/09	Jul-08	25	20.	4339	0.	620	4960	13%
	Aug-08	26	10.	4349	0.	620	4970	12%
	Sep-08	27	50.	4399	30.	650	5050	13%
	Oct-08	28	100.	4499	70.	720	5220	14%
	Nov-08	29	110.	4609	60.	780	5390	14%
	Dec-08	30	190.	4799	0.	780	5580	14%
	Jan-09	31	170.	4969	0.	780	5750	14%
	Feb-09	32	130.	5099	0.	780	5880	13%
	Mar-09	33	130.	5229	0.	780	6010	13%
	Apr-09	34	100.	5329	60.	840	6170	14%
	May-09	35	60.	5389	75.	915	6305	15%
	Jun-09	36	0.	5389	0.	915	6305	15%

Table 7-1a
Turner Basin Cells 1 & 2
RWC Management Plan

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

Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2009/10	Jul-09	37	20.	5409	0.	915	6325	14%
	Aug-09	38	10.	5419	0.	915	6335	14%
	Sep-09	39	50.	5469	30.	945	6415	15%
	Oct-09	40	100.	5509	70.	1015	6524	16%
	Nov-09	41	110.	5488	60.	1075	6563	16%
	Dec-09	42	190.	5512	0.	1075	6588	16%
	Jan-10	43	170.	5586	0.	1075	6661	16%
	Feb-10	44	130.	5628	0.	1075	6703	16%
	Mar-10	45	130.	5693	0.	1075	6768	16%
	Apr-10	46	100.	5793	60.	1135	6928	16%
	May-10	47	60.	5852	75.	1210	7062	17%
	Jun-10	48	0.	5852	0.	1210	7062	17%
2010/11	Jul-10	49	20.	5872	0.	1210	7082	17%
	Aug-10	50	10.	5882	0.	1210	7092	17%
	Sep-10	51	50.	5843	30.	1240	7083	18%
	Oct-10	52	100.	5848	70.	1310	7158	18%
	Nov-10	53	110.	5779	60.	1370	7149	19%
	Dec-10	54	190.	5610	0.	1370	6980	20%
	Jan-11	55	170.	5518	0.	1370	6888	20%
	Feb-11	56	130.	5496	0.	1370	6866	20%
	Mar-11	57	130.	5200	0.	1370	6570	21%
	Apr-11	58	100.	4910	60.	1430	6340	23%
	May-11	59	60.	4873	75.	1505	6378	24%
	Jun-11	60	0.	4862	0.	1505	6367	24%
2011/12	Jul-11	61	20.	4819	0.	1483	6302	24%
	Aug-11	62	10.	4808	0.	1370	6178	22%
	Sep-11	63	50.	4751	90.	1346	6097	22%
	Oct-11	64	100.	4687	90.	1436	6122	23%
	Nov-11	65	110.	4768	60.	1496	6263	24%
	Dec-11	66	190.	4928	0.	1392	6320	22%
	Jan-12	67	170.	5070	0.	1322	6392	21%
	Feb-12	68	130.	5189	0.	1278	6467	20%
	Mar-12	69	130.	5293	70.	1291	6584	20%
	Apr-12	70	100.	5388	100.	1377	6765	20%
	May-12	71	60.	5436	100.	1398	6834	20%
	Jun-12	72	0.	5435	0.	1395	6830	20%

RWC = 60-month running total of recycled water / 60-month running total of all recharged water.
All recharged water includes recycled water and diluent water (imported and storm water)
RWC Limit = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC)

Table 7-1b
Turner Basin Cells 3 & 4
RWC Management Plan

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

Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2001/02	Jul-01	-60	0.					
	Aug-01	-59	0.					
	Sep-01	-58	0.					
	Oct-01	-57	0.					
	Nov-01	-56	0.					
	Dec-01	-55	0.					
	Jan-02	-54	0.					
	Feb-02	-53	0.					
	Mar-02	-52	0.					
	Apr-02	-51	0.					
	May-02	-50	0.					
	Jun-02	-49	0.					
2002/03	Jul-02	-48	0.					
	Aug-02	-47	0.					
	Sep-02	-46	0.					
	Oct-02	-45	0.					
	Nov-02	-44	0.					
	Dec-02	-43	0.					
	Jan-03	-42	0.					
	Feb-03	-41	0.					
	Mar-03	-40	0.					
	Apr-03	-39	0.					
	May-03	-38	0.					
	Jun-03	-37	0.					
2003/04	Jul-03	-36	0.					
	Aug-03	-35	0.					
	Sep-03	-34	0.					
	Oct-03	-33	0.					
	Nov-03	-32	0.					
	Dec-03	-31	0.					
	Jan-04	-30	0.					
	Feb-04	-29	0.					
	Mar-04	-28	0.					
	Apr-04	-27	0.					
	May-04	-26	0.					
	Jun-04	-25	0.					
2004/05	Jul-04	-24	0.					
	Aug-04	-23	0.					
	Sep-04	-22	0.					
	Oct-04	-21	120.8					
	Nov-04	-20	128.2					
	Dec-04	-19	217.9					
	Jan-05	-18	257.4					
	Feb-05	-17	232.					
	Mar-05	-16	174.4					
	Apr-05	-15	0.					
	May-05	-14	0.5					
	Jun-05	-13	0.					

Table 7-1b
Turner Basin Cells 3 & 4
RWC Management Plan

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

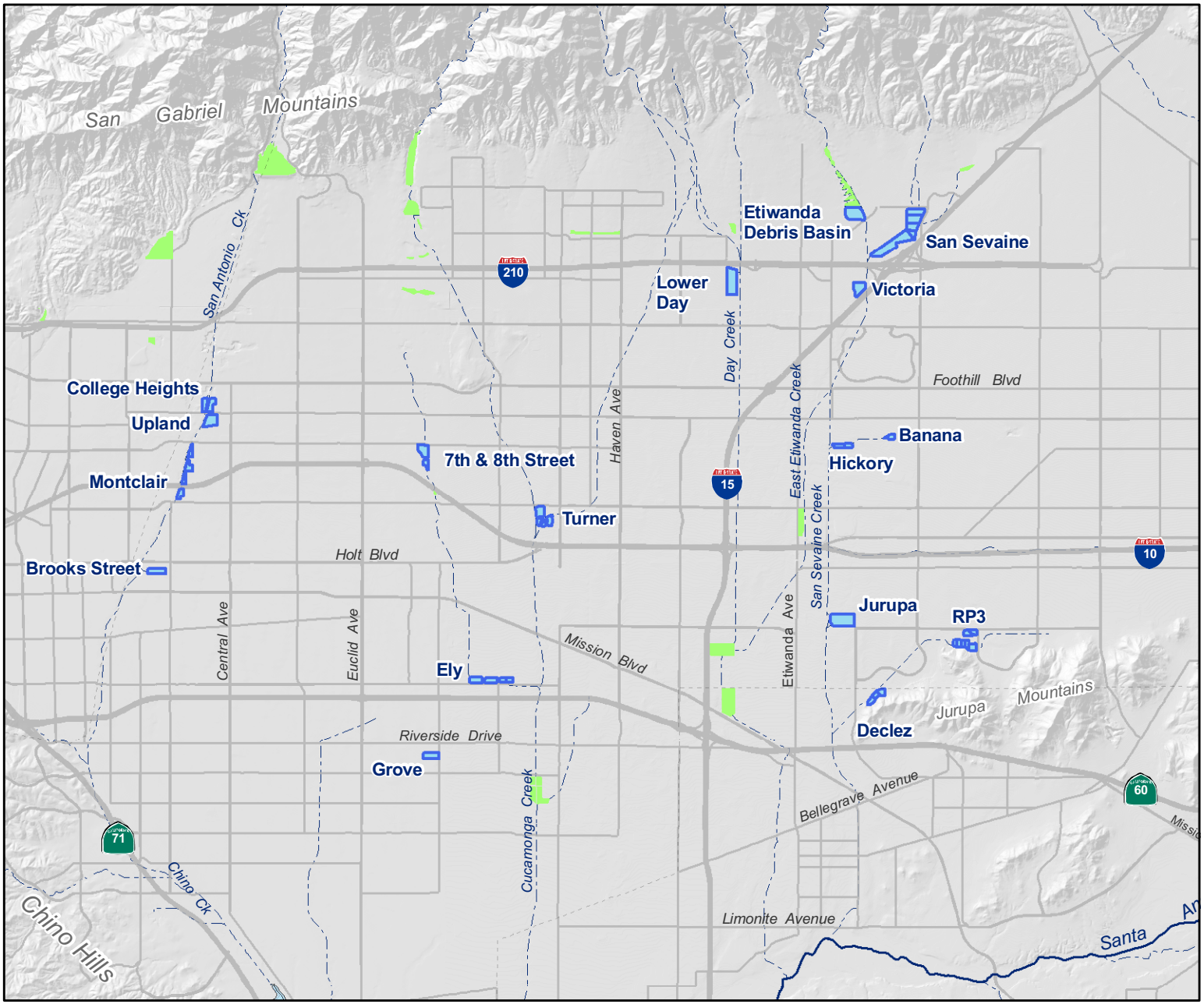
Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2005/06	Jul-05	-12	0.		0.			
	Aug-05	-11	0.		0.			
	Sep-05	-10	0.		0.			
	Oct-05	-9	0.		0.			
	Nov-05	-8	0.		0.			
	Dec-05	-7	124.		0.			
	Jan-06	-6	74.9		0.			
	Feb-06	-5	71.		0.			
	Mar-06	-4	171.3		0.			
	Apr-06	-3	260.4		0.			
	May-06	-2	72.1		0.			
	Jun-06	-1	87.		0.	0.		0%
2006/07	Jul-06	1	30.3	2022	22.3	22	2044	1%
	Aug-06	2	33.4	2056	113.	135	2191	6%
	Sep-06	3	22.1	2078	114.4	250	2327	11%
	Oct-06	4	64.9	2143	0.	250	2392	10%
	Nov-06	5	16.	2159	0.	250	2408	10%
	Dec-06	6	13.6	2172	103.2	353	2525	14%
	Jan-07	7	10.	2182	70.6	424	2606	16%
	Feb-07	8	9.	2191	44.	468	2659	18%
	Mar-07	9	4.	2195	56.8	524	2719	19%
	Apr-07	10	3.	2198	14.	538	2736	20%
	May-07	11	7.9	2206	79.	617	2823	22%
	Jun-07	12	10.	2216	3.	620	2836	22%
2007/08	Jul-07	13	1.	2217	0.	620	2837	22%
	Aug-07	14	10.	2227	0.	620	2847	22%
	Sep-07	15	12.	2239	0.	620	2859	22%
	Oct-07	16	3.	2242	0.	620	2862	22%
	Nov-07	17	66.	2308	0.	620	2928	21%
	Dec-07	18	62.	2370	0.	620	2990	21%
	Jan-08	19	143.	2513	0.	620	3133	20%
	Feb-08	20	9.	2522	0.	620	3142	20%
	Mar-08	21	0.	2522	0.	620	3142	20%
	Apr-08	22	4.	2526	0.	620	3146	20%
	May-08	23	38.	2564	0.	620	3184	19%
	Jun-08	24	30.	2594	0.	620	3214	19%
2008/09	Jul-08	25	10.	2604	0.	620	3224	19%
	Aug-08	26	10.	2614	0.	620	3234	19%
	Sep-08	27	10.	2624	90.	710	3334	21%
	Oct-08	28	50.	2674	70.	780	3454	23%
	Nov-08	29	50.	2724	70.	850	3574	24%
	Dec-08	30	100.	2824	0.	850	3674	23%
	Jan-09	31	120.	2944	0.	850	3794	22%
	Feb-09	32	80.	3024	0.	850	3874	22%
	Mar-09	33	90.	3114	90.	940	4054	23%
	Apr-09	34	70.	3184	70.	1010	4194	24%
	May-09	35	30.	3214	70.	1080	4294	25%
	Jun-09	36	30.	3244	0.	1080	4324	25%

Table 7-1b
Turner Basin Cells 3 & 4
RWC Management Plan

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

Date		No. Mos. Since Initial RW Delivery	DW (AF)	DW 60-Month Total (AF)	RW (AF)	RW 60-Month Total (AF)	DW + RW 60-Month Total (AF)	RWC
2009/10	Jul-09	37	10.	3254	0.	1080	4334	25%
	Aug-09	38	10.	3264	0.	1080	4344	25%
	Sep-09	39	10.	3274	90.	1170	4444	26%
	Oct-09	40	50.	3203	70.	1240	4444	28%
	Nov-09	41	50.	3125	70.	1310	4435	30%
	Dec-09	42	100.	3007	0.	1310	4317	30%
	Jan-10	43	120.	2870	0.	1310	4180	31%
	Feb-10	44	80.	2718	0.	1310	4028	33%
	Mar-10	45	90.	2633	90.	1400	4034	35%
	Apr-10	46	70.	2703	70.	1470	4174	35%
	May-10	47	30.	2733	70.	1540	4273	36%
	Jun-10	48	30.	2763	0.	1540	4303	36%
2010/11	Jul-10	49	10.	2773	0.	1540	4313	36%
	Aug-10	50	10.	2783	0.	1540	4323	36%
	Sep-10	51	10.	2793	90.	1630	4423	37%
	Oct-10	52	50.	2843	70.	1700	4543	37%
	Nov-10	53	50.	2893	70.	1770	4663	38%
	Dec-10	54	100.	2869	0.	1770	4639	38%
	Jan-11	55	120.	2914	0.	1770	4684	38%
	Feb-11	56	80.	2923	0.	1770	4693	38%
	Mar-11	57	90.	2842	90.	1860	4702	40%
	Apr-11	58	70.	2651	70.	1930	4582	42%
	May-11	59	30.	2609	70.	2000	4609	43%
	Jun-11	60	30.	2552	0.	2000	4552	44%
2011/12	Jul-11	61	10.	2532	0.	1978	4510	44%
	Aug-11	62	10.	2508	0.	1865	4373	43%
	Sep-11	63	10.	2496	120.	1871	4367	43%
	Oct-11	64	50.	2481	90.	1961	4442	44%
	Nov-11	65	50.	2515	90.	2051	4566	45%
	Dec-11	66	100.	2602	0.	1947	4549	43%
	Jan-12	67	120.	2712	0.	1877	4589	41%
	Feb-12	68	80.	2783	0.	1833	4616	40%
	Mar-12	69	90.	2869	90.	1866	4735	39%
	Apr-12	70	70.	2936	120.	1972	4908	40%
	May-12	71	30.	2958	90.	1983	4941	40%
	Jun-12	72	30.	2978	0.	1980	4958	40%

RWC = 60-month running total of recycled water / 60-month running total of all recharged water.
All recharged water includes recycled water and diluent water (imported and storm water)
RWC Limit = 0.5 mg/L / the Running Average of Total Organic Carbon (TOC)



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

Location of Facilities at Turner Basin

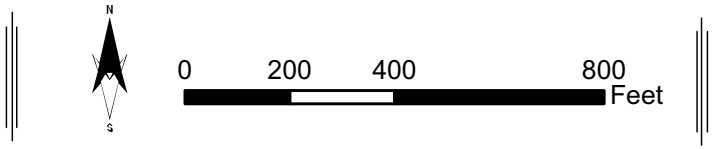


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Figure 2-1

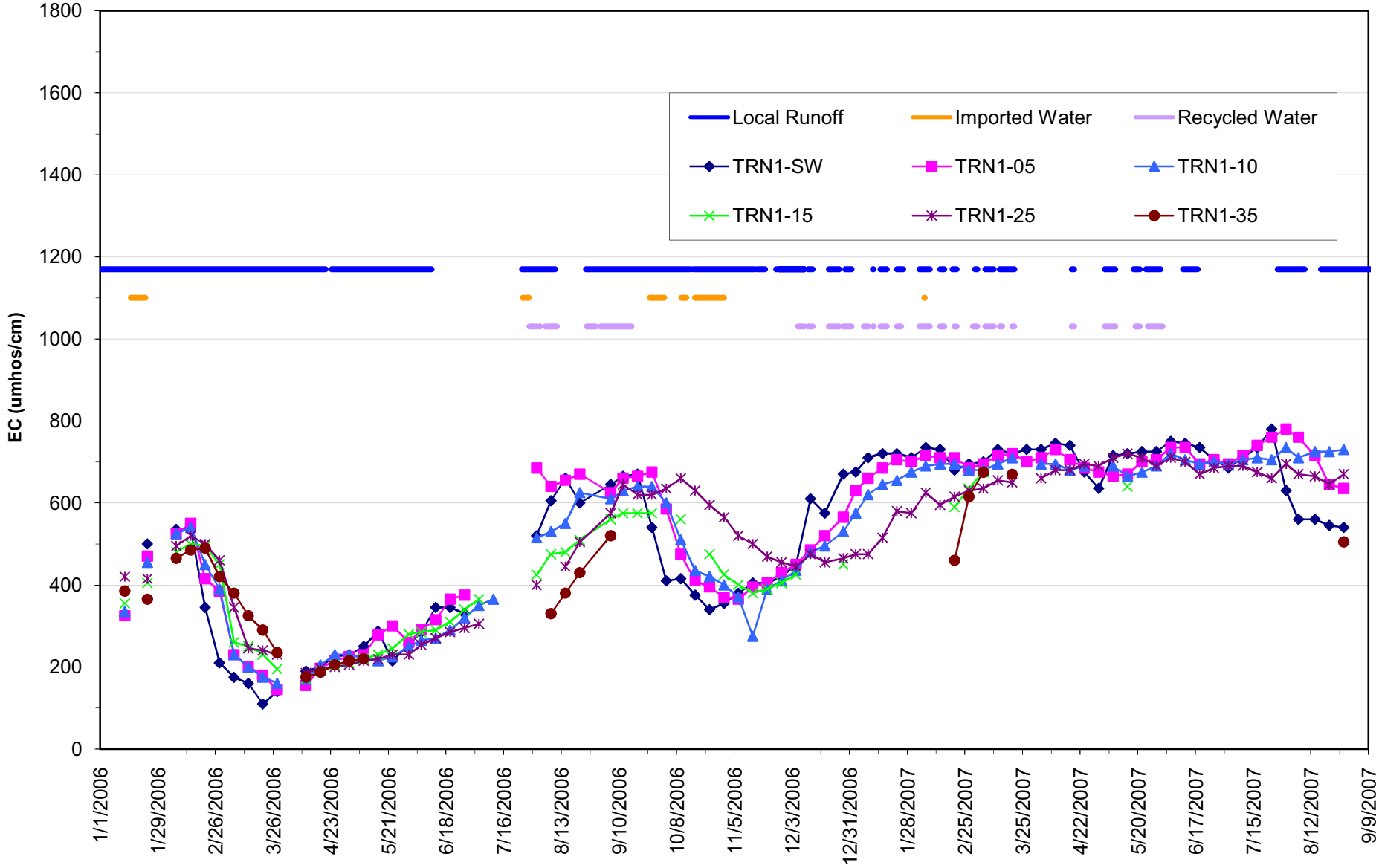

FIGURE 4-1A
TURNER CELL 1
ELECTRICAL CONDUCTIVITY TIME SERIES

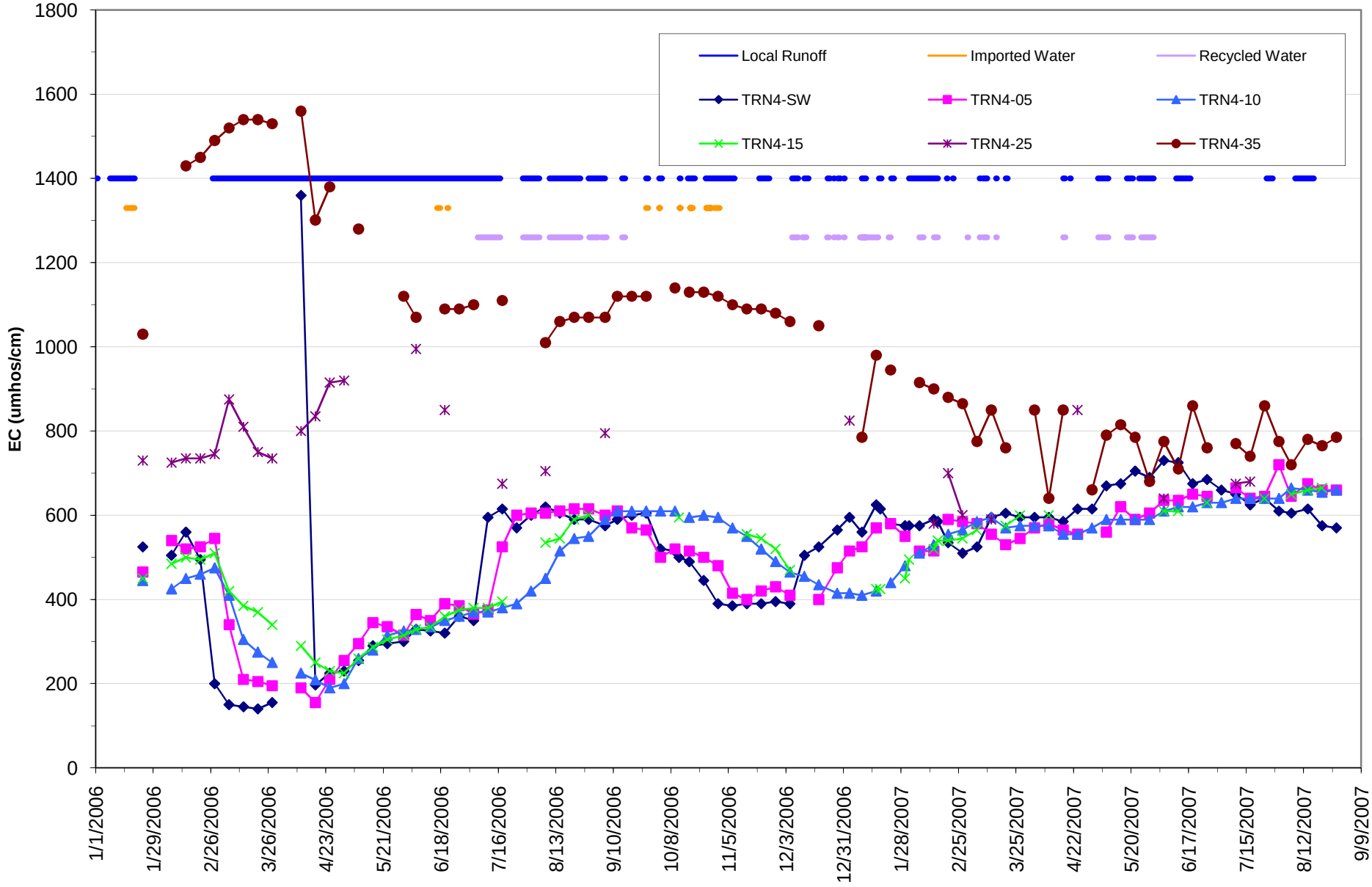

FIGURE 4-1B
TURNER CELL 4
ELECTRICAL CONDUCTIVITY TIME SERIES

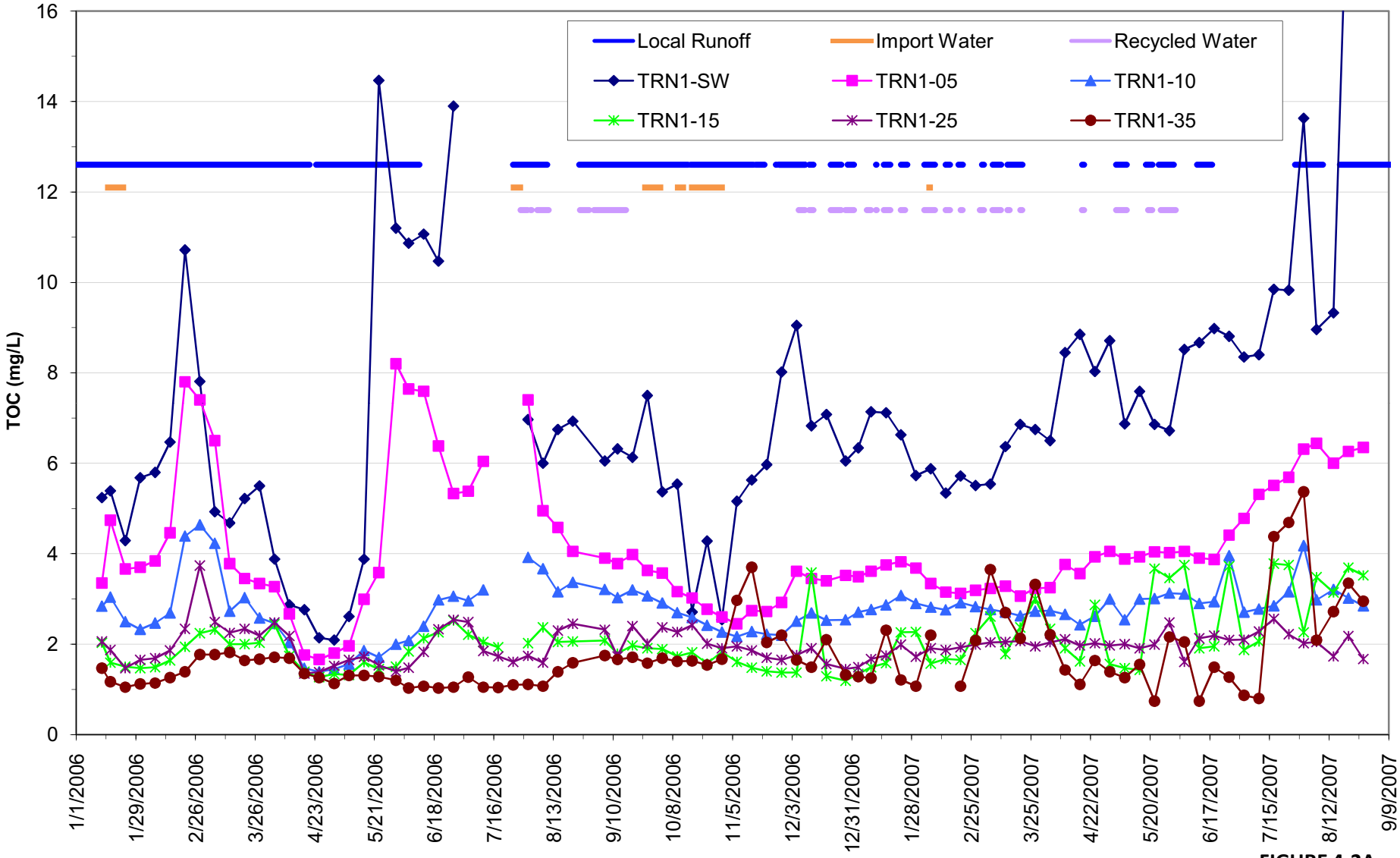

FIGURE 4-2A
TURNER CELL 1
TOTAL ORGANIC CARBON TIME SERIES

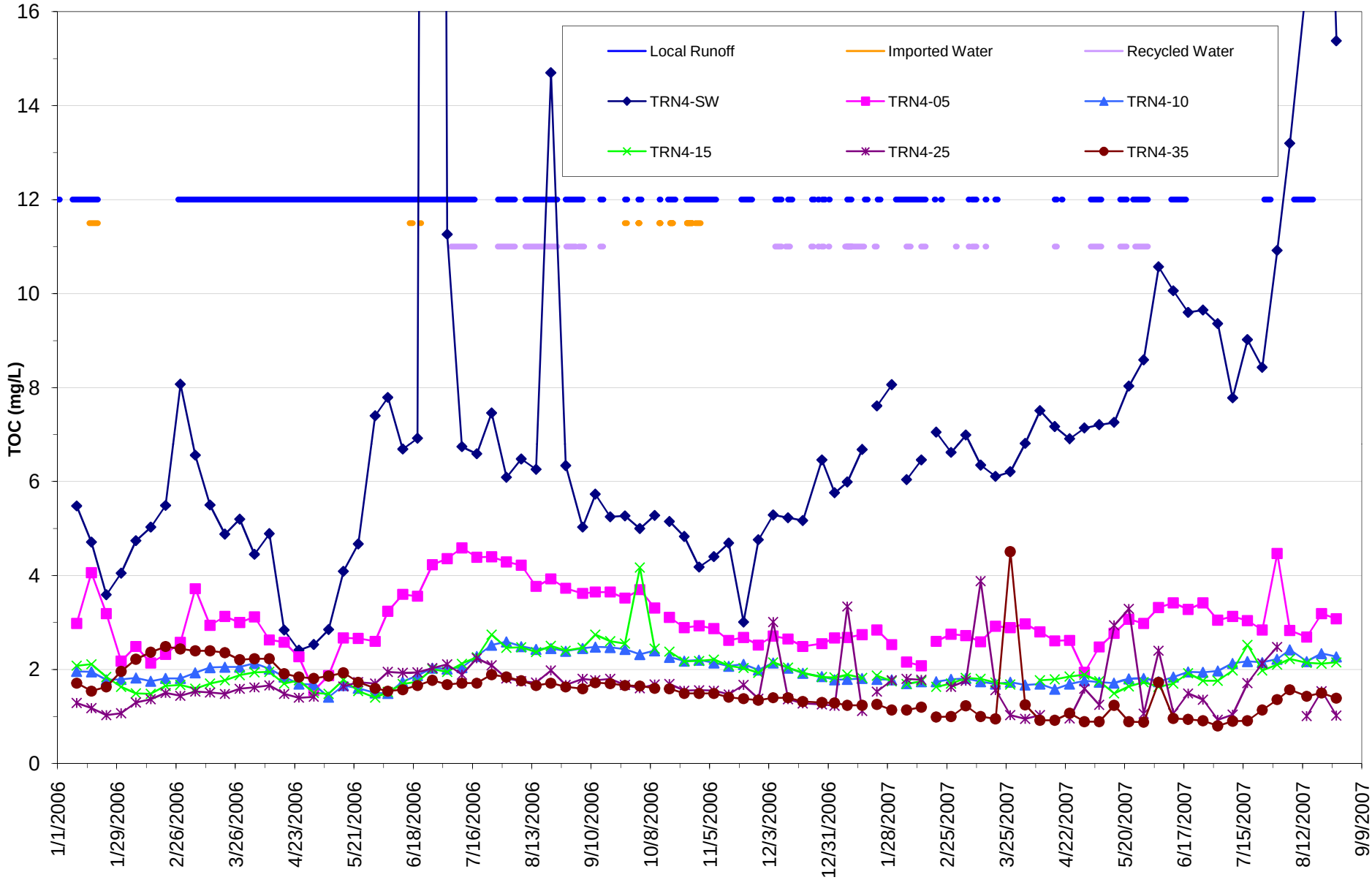

FIGURE 4-2B
TURNER CELL 4
TOTAL ORGANIC CARBON TIME SERIES

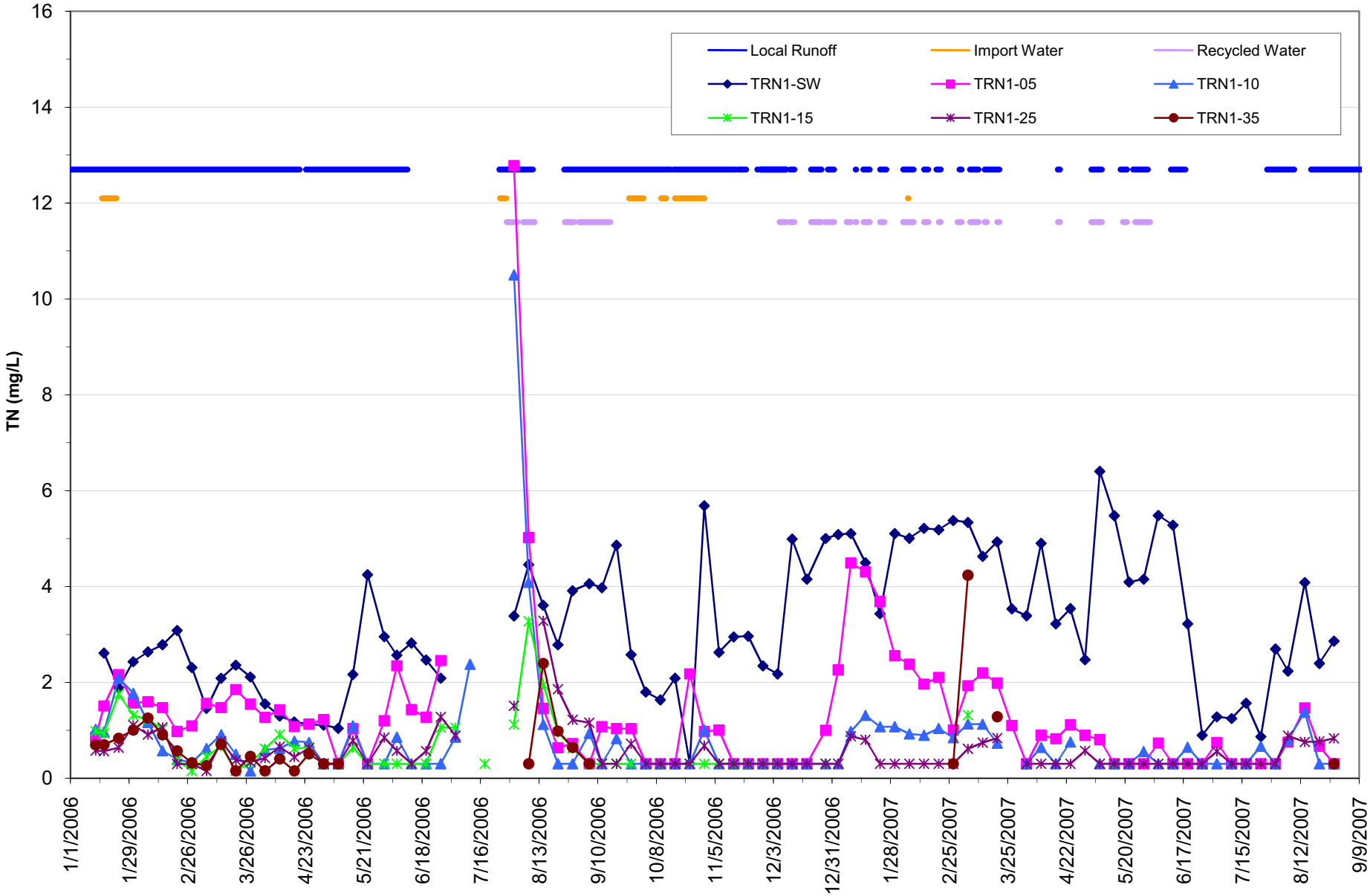

FIGURE 4-3A
TURNER CELL 1
TOTAL NITROGEN TIME SERIES

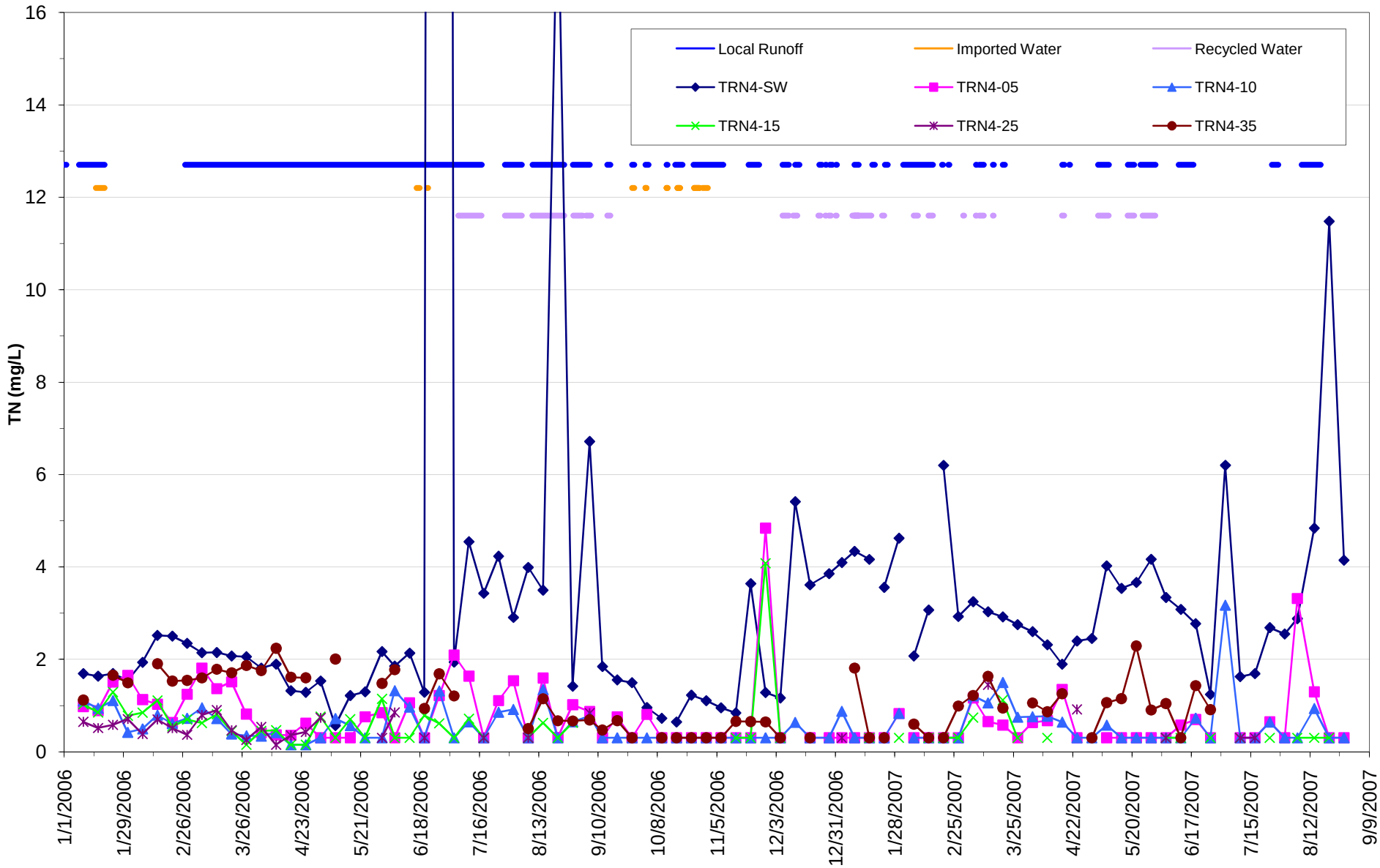

FIGURE 4-3B
TURNER CELL 4
TOTAL NITROGEN TIME SERIES

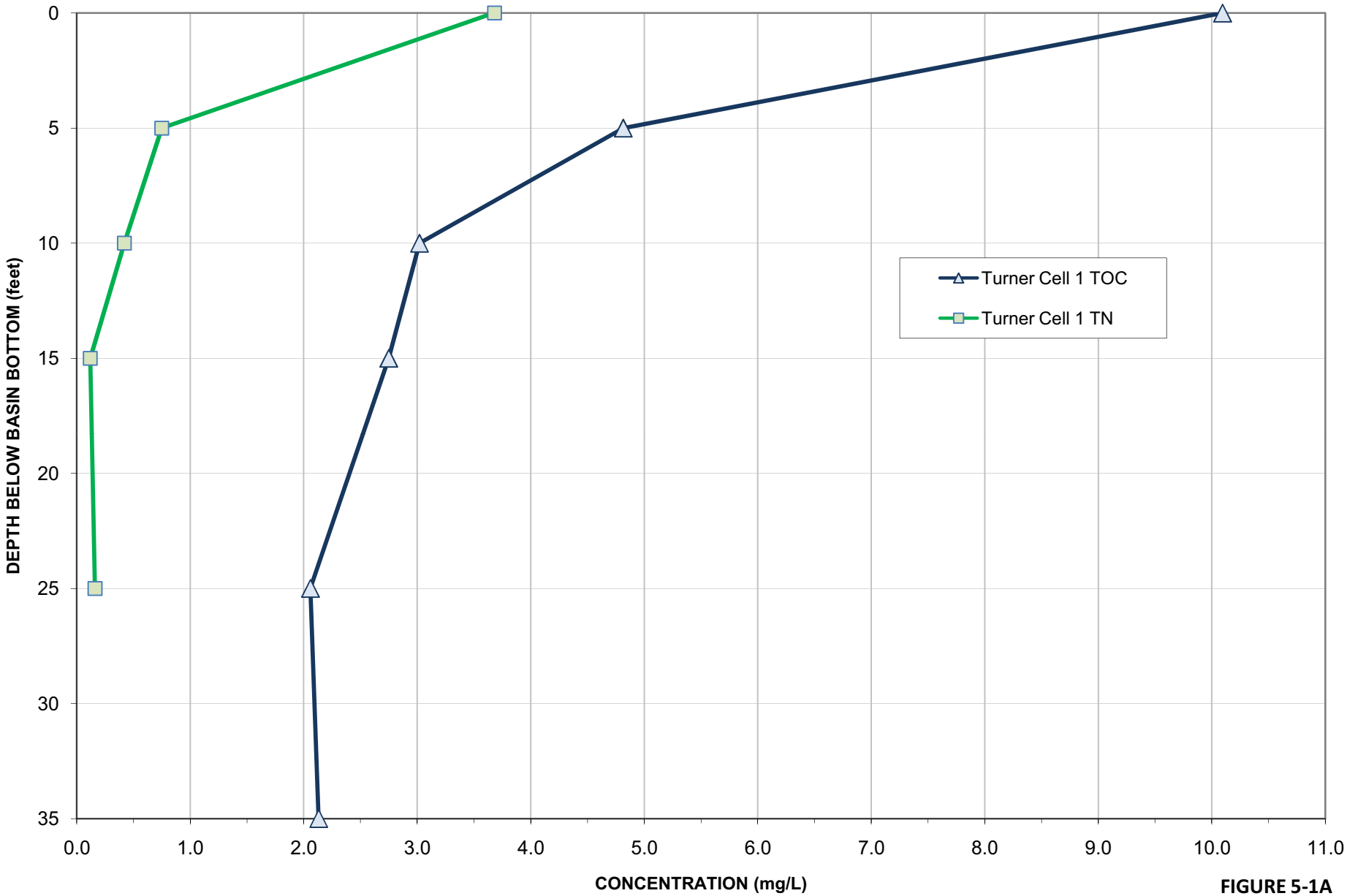

FIGURE 5-1A
TURNER CELL 1
DEPTH PROFILE OF AVERAGE TOC AND TN

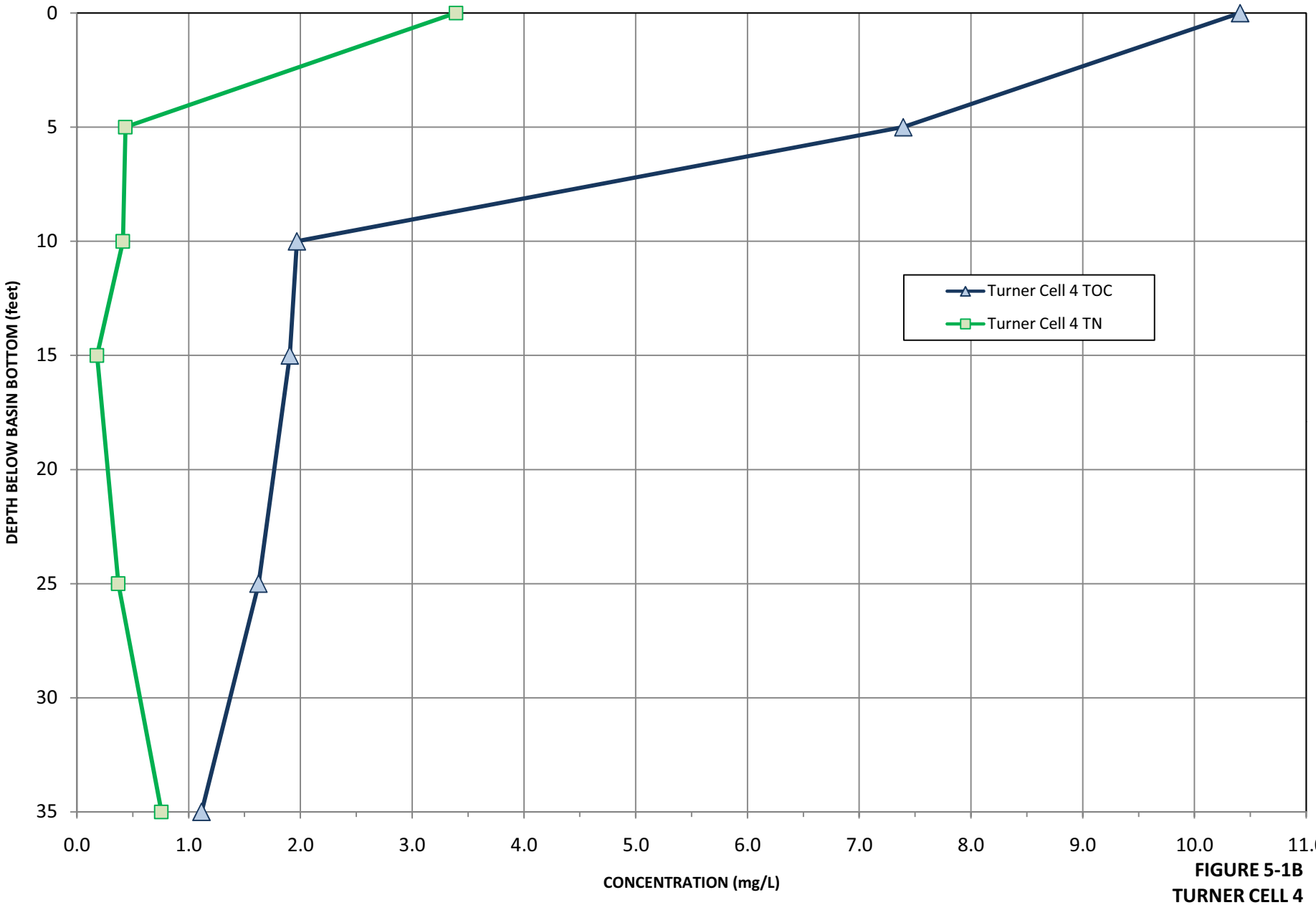

FIGURE 5-1B
TURNER CELL 4
DEPTH PROFILE OF AVERAGE TOC AND TN

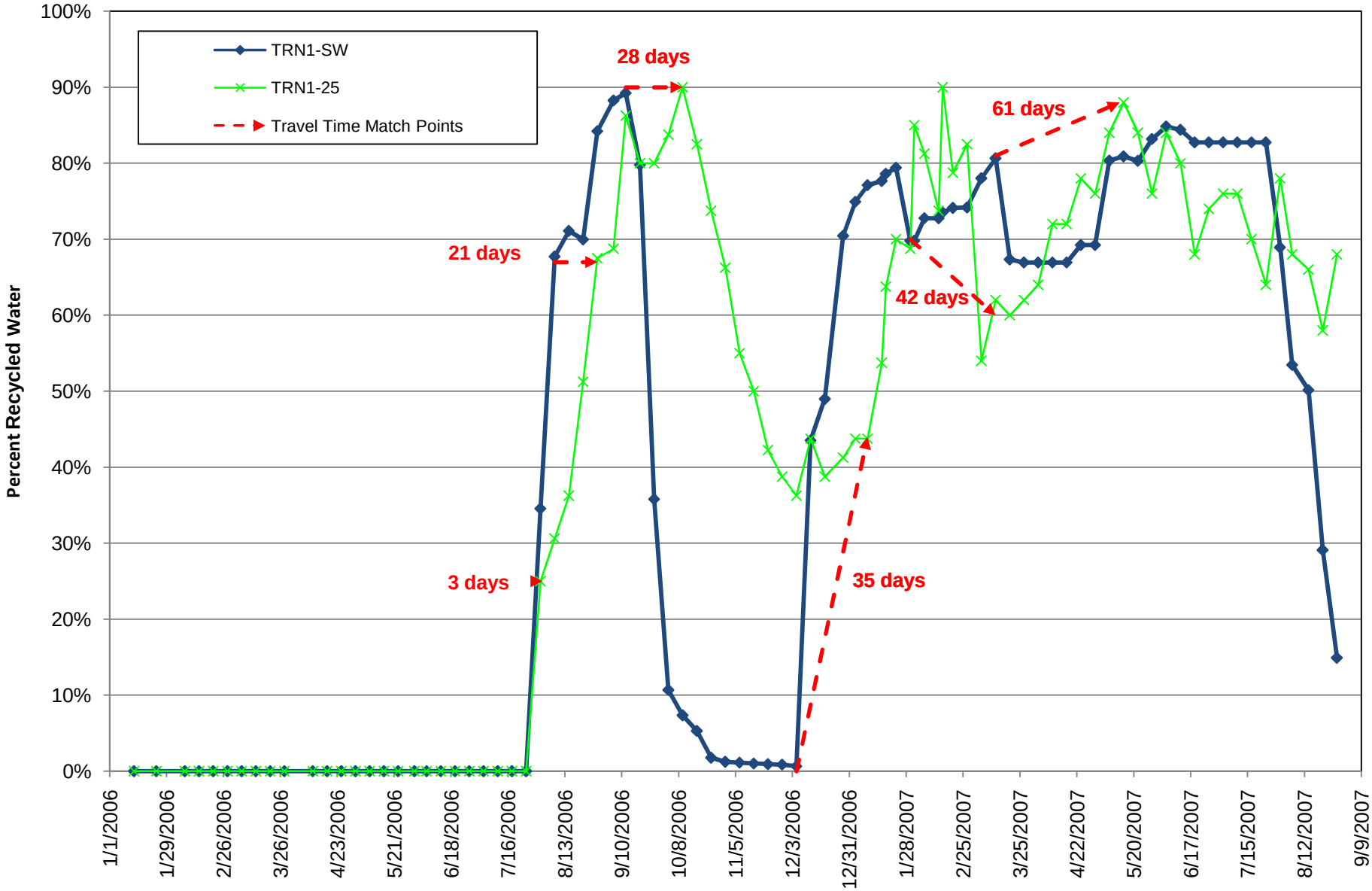

FIGURE 5-2A
TURNER CELL 1
CORRELATION OF PERCENT RECYCLED WATER -SURFACE & LYSIMETER SAMPLES

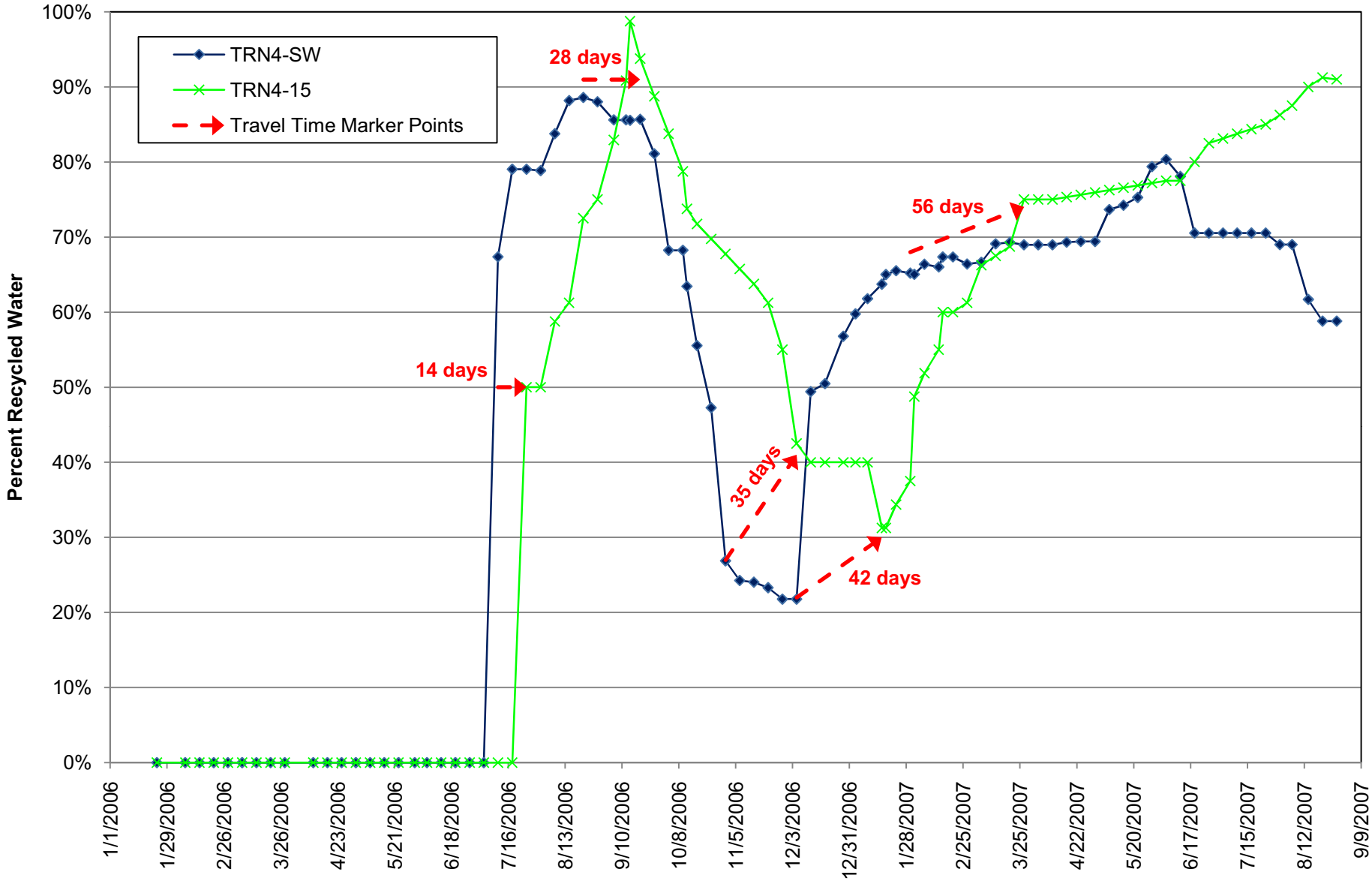

FIGURE 5-2B
TURNER CELL 4
CORRELATION OF PERCENT RECYCLED WATER -SURFACE & LYSIMETER SAMPLES

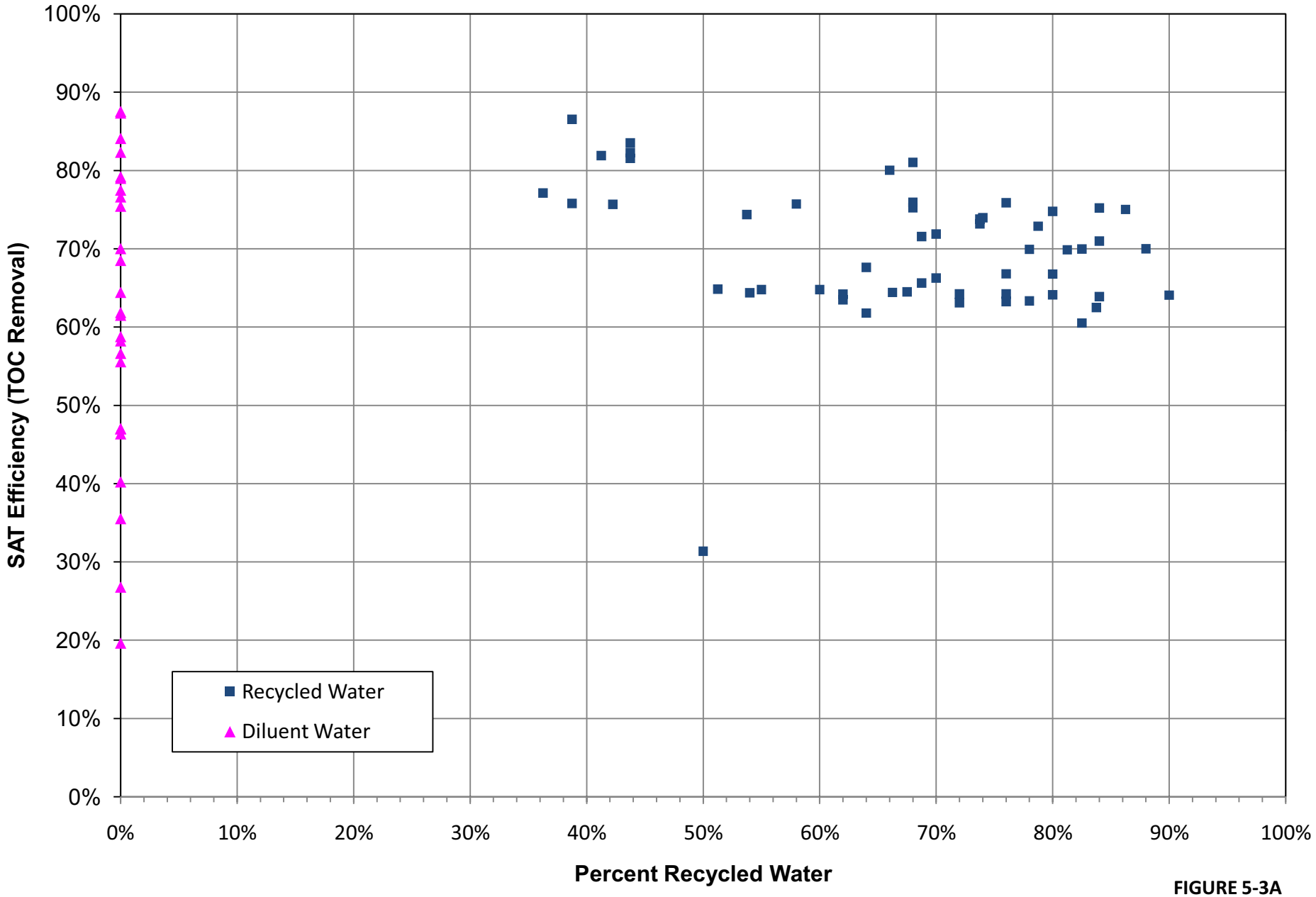

FIGURE 5-3A
TURNER 1: 25-FOOT LYSIMETER
PERCENT RECYCLED WATER VS TOC REMOVAL

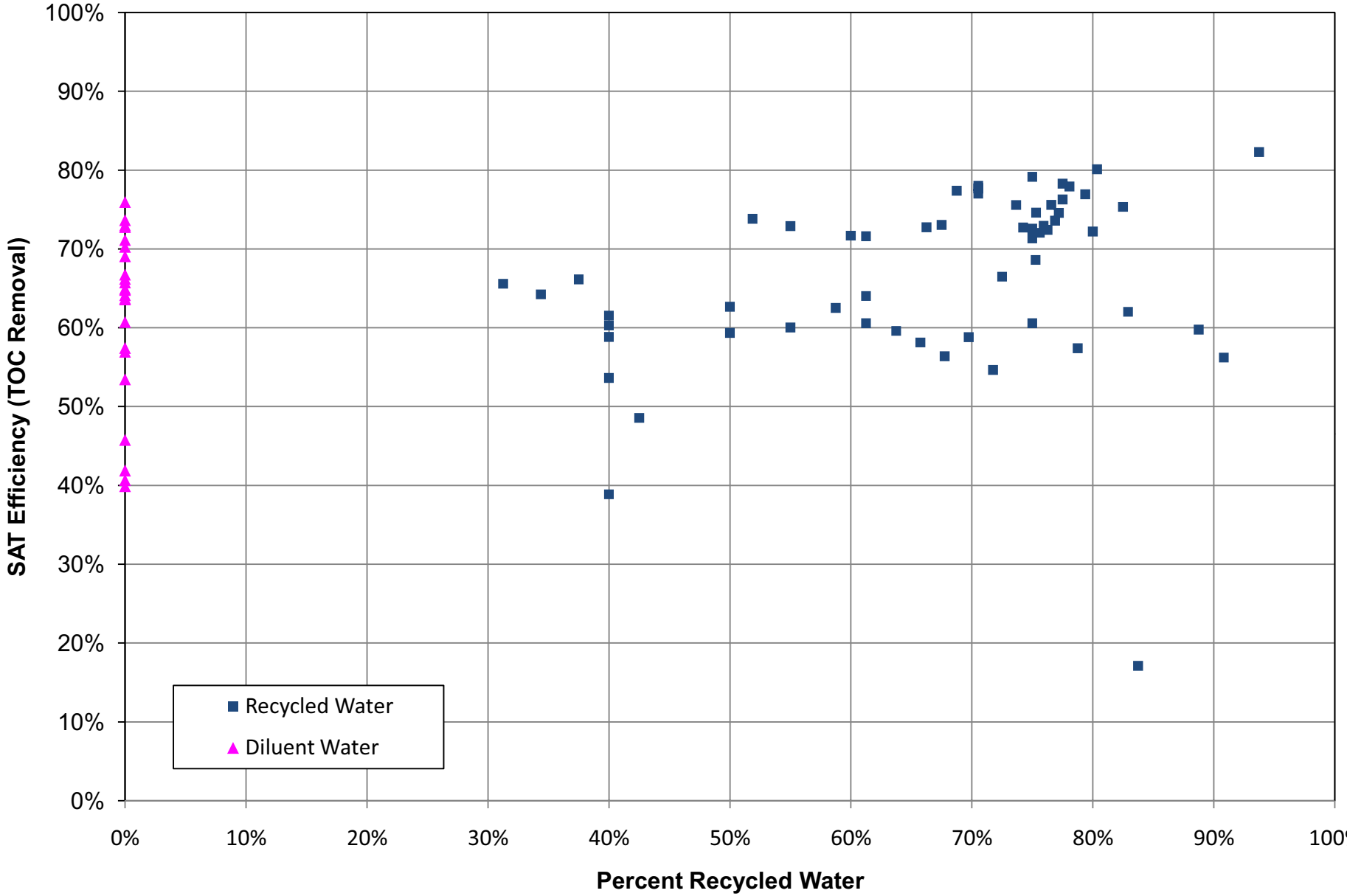

FIGURE 5-3B
TURNER 4: 15-FOOT LYSIMETER
PERCENT RECYCLED WATER VS TOC REMOVAL

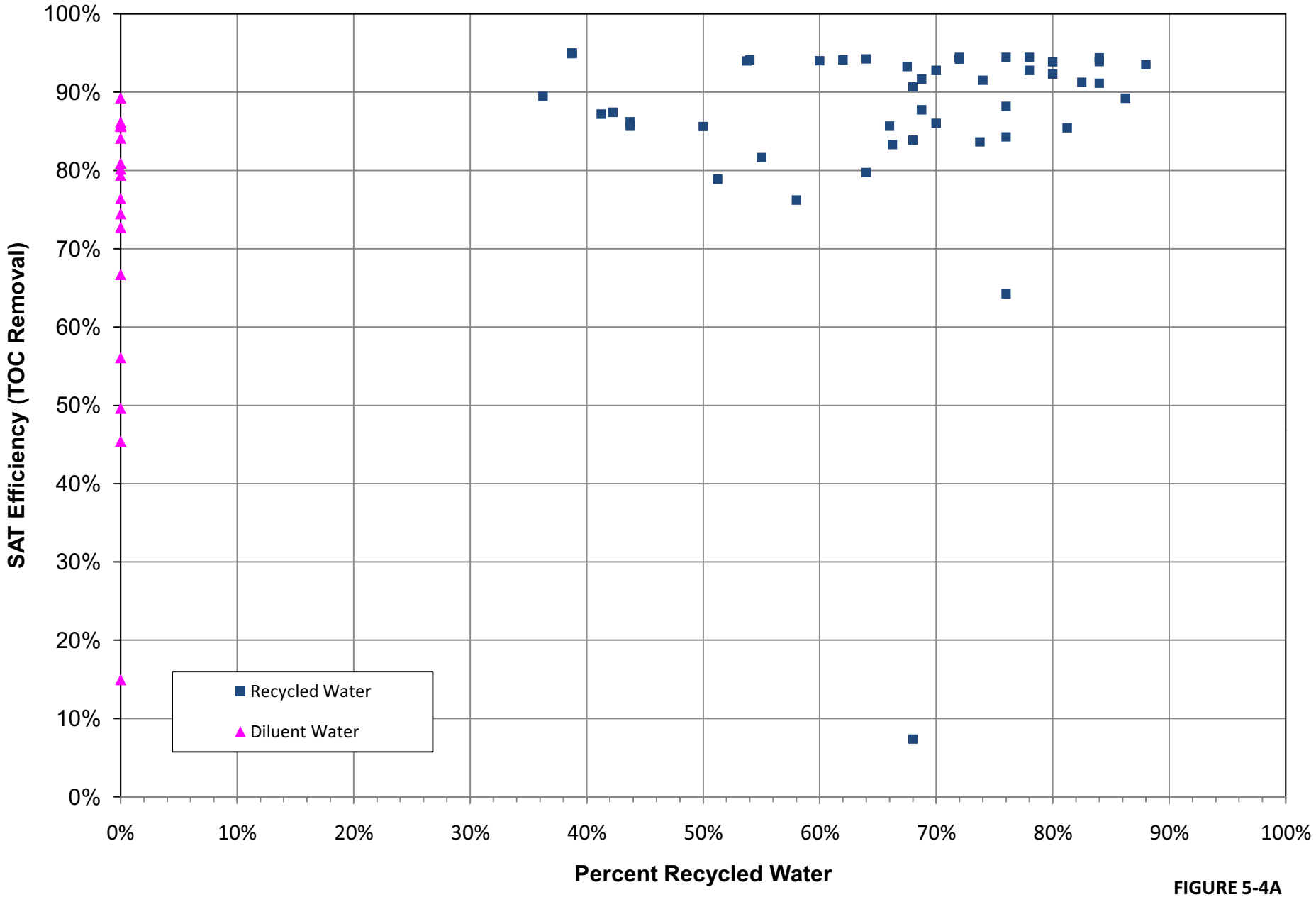

FIGURE 5-4A
TURNER 1
PERCENT RECYCLED WATER VS TN REMOVAL

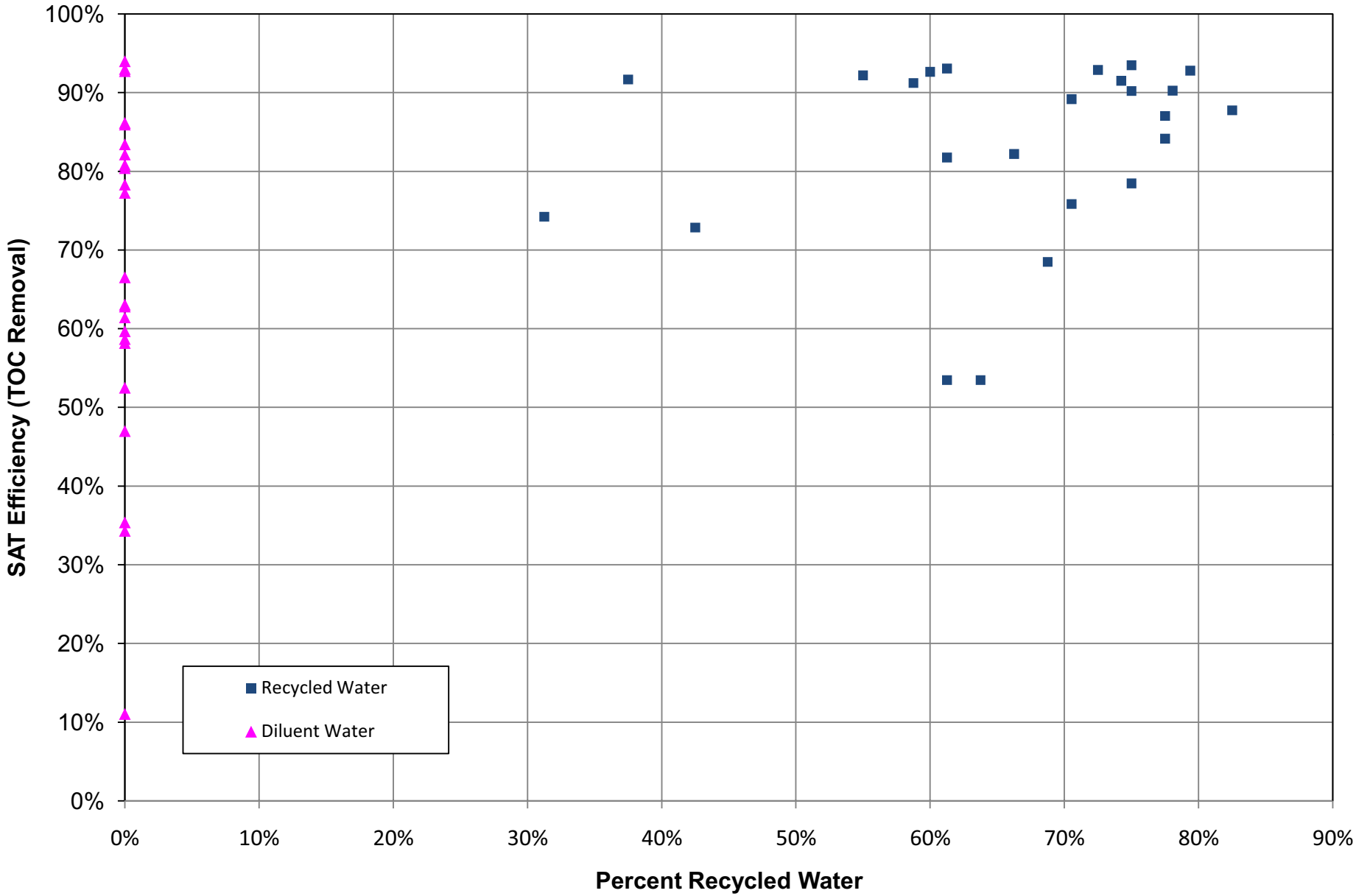

FIGURE 5-4B
TURNER 4
PERCENT RECYCLED WATER VS TN REMOVAL

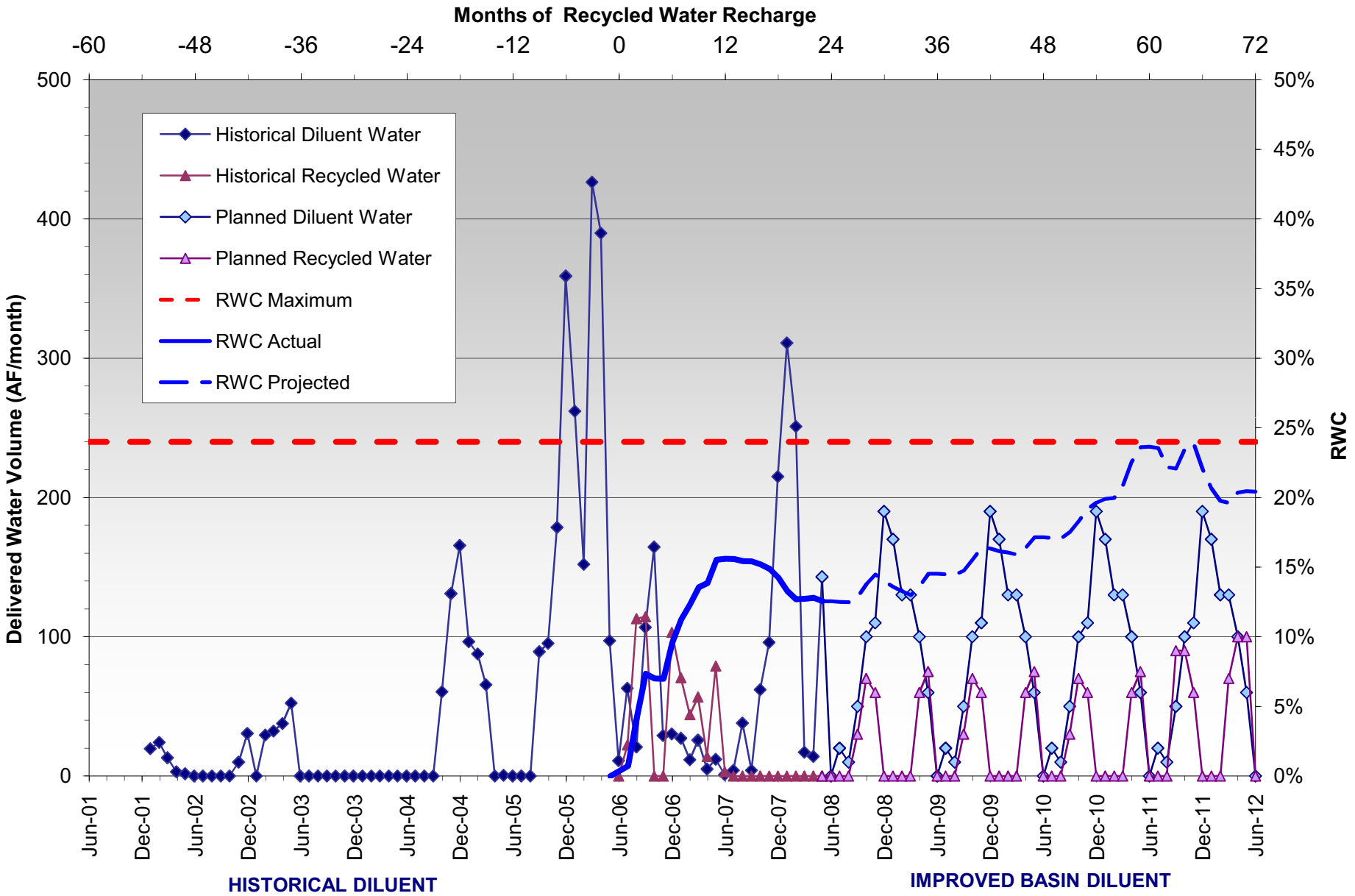

FIGURE 7-1A
TURNER BASIN CELLS 1 & 2
RWC MANAGEMENT PLAN

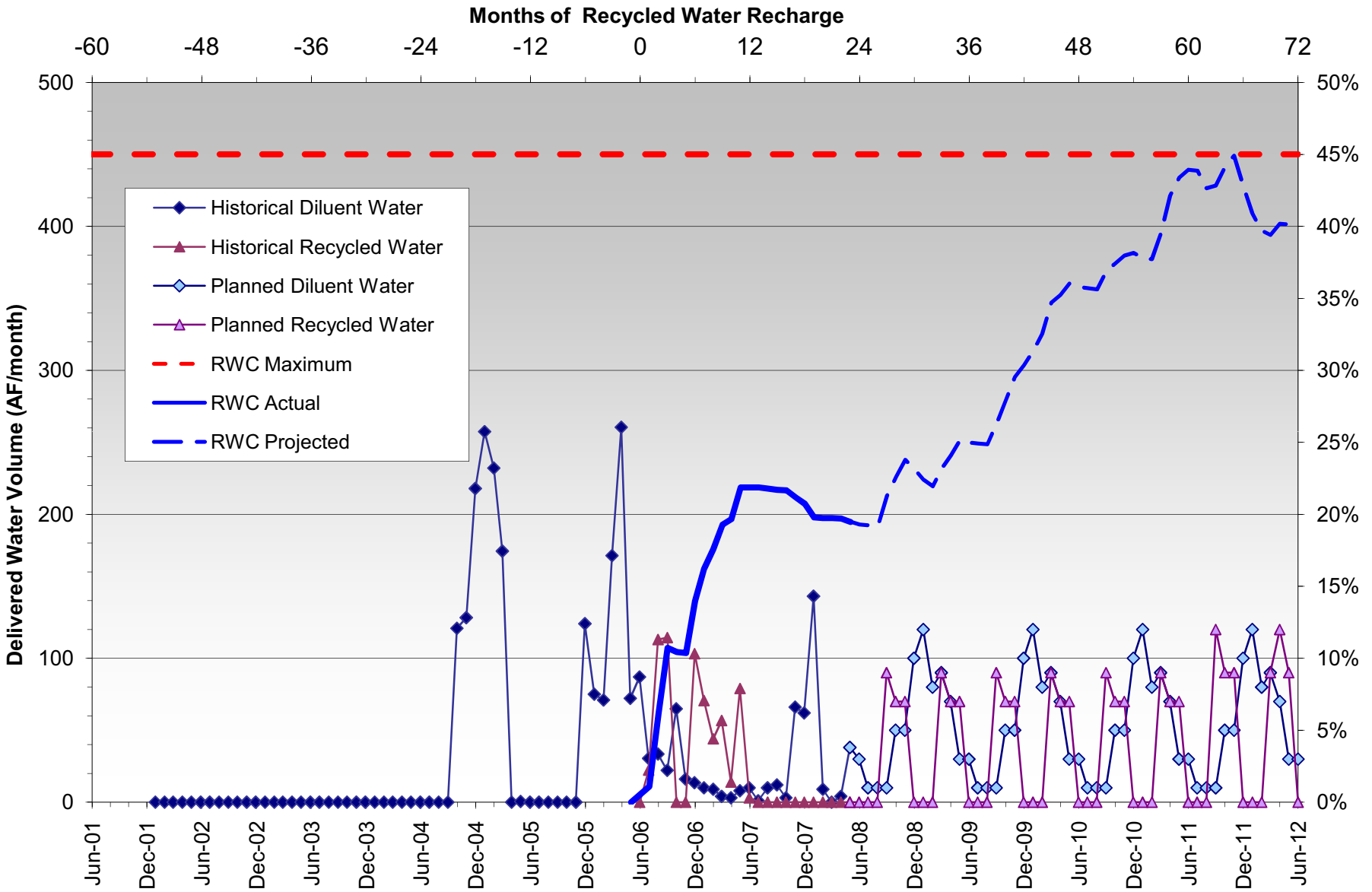

FIGURE 7-1B
TURNER BASIN CELLS 3 & 4
RWC MANAGEMENT PLAN