

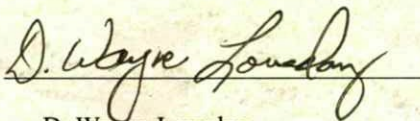
Quarterly Progress Report

Volume 1

**Second Quarter Report
April 1 through June 30, 2005**

Submitted to EPA on July 28, 2005

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



D. Wayne Loveday

07.28.05

Date



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Executive Summary

On February 11, 2005, the Knoxville Utilities Board (KUB) entered into a Consent Decree with the United States, the State of Tennessee, the Tennessee Clean Water Network, and the City of Knoxville. The following Quarterly Progress Report is submitted to fulfill the reporting requirements described in Section XIX of the Consent Decree.

Consent Decree language, pages 82-83: *"Beginning thirty (30) Days after the first Calendar Quarter following the Date of Entry, and thirty (30) Days after each Calendar Quarter thereafter until termination of the Consent Decree, KUB shall submit to the Parties, and simultaneously place in the PDR, a Quarterly Progress Report. Quarterly Progress Reports shall not be subject to the Public Review Requirement of Section VI.A.2. However, KUB shall receive questions and comments from the public for KUB's review for a period of twenty (20) Days following placement in the PDR. Each Quarterly Progress Report shall contain:*

- 1. A summary of compliance with and activities related to implementation of the Phase 1 CAP/ER and Phase 2 CAP/ER, including: the status of construction projects in comparison to the schedules that have been established pursuant to the Consent Decree for those projects; and schedule deadlines and milestones achieved during Calendar Quarter and expected during the next Calendar Quarter;*
- 2. A summary of compliance with and activities related to implementation of the CPE and CCP;*
- 3. A summary of implementation of and compliance with the Process Controls Program;*
- 4. A summary of the implementation of the Capacity Assurance Program for the Calendar Quarter, including the number of, and anticipated flow from, sewer connections that have been authorized, by Sewerbasin, a description of the projects that have been authorized and the number of credits earned and banked by KUB that will be expended for those projects, by Sewerbasin, and any exceptions granted for connections for essential services;*
- 5. Identification of any transfer of an ownership interest, operation, management, or other control of the Treatment Works, or any portion thereof.*
- 6. A description of the status of compliance or non-compliance with the requirements of this Decree and, if applicable, the reasons for non-compliance, including a list of all violations that are subject to stipulated penalties under Section X of this Decree.*
- 7. A spreadsheet and summary of all SSOs, Bypasses, Diversions and effluent limit violations that occurred during the previous Calendar Quarter. Information on Building Backups may be provided in separate spreadsheets and summaries from other SSOs. The spreadsheets and summaries shall identify:*
 - a. For all SSOs, the location, source, date, time, duration, pathway (if any), receiving water (if any), the reason for each SSO, the total SSO volume, the volume returned to the WCTS, and the volume not captured;*
 - b. For all Bypasses and Diversions, the location, date, time, duration, volume and reason for each Bypass and Diversion; and the total Bypass and Diversion volumes;*
 - c. For all effluent limit violations, all information required to be reported on KUB's Discharge Monitoring Reports.*
- 8. The water quality monitoring data and other information required pursuant to Section VII.D.1.(e).(v)."*

KUB compiled this Quarterly Progress Report to detail the events that occurred during the second quarter of 2005 from April 1 until June 30. This is the first quarterly report required of KUB under this Consent Decree. The Consent Decree requirements pertaining to the Phase 1 CAP/ER, Phase 2 CAP/ER, Comprehensive Performance Evaluation, Composite Correction Plan, Process Controls Program, and Capacity Assurance Program will not be fulfilled in this report; rather, a description of the status of development for those programs is given. The Consent Decree reporting requirements for those programs will be met after EPA has approved each of the deliverables.

Report Organization

Section 1: Phase 1 CAP/ER and Phase 2 CAP/ER – Summarizes the status of the development of these deliverables.

Section 2: Comprehensive Performance Evaluation and Composite Correction Plan – Summarizes the status of the development of these deliverables.

Section 3: Process Controls Program – Summarizes the status of the development of this deliverable.

Section 4: Capacity Assurance Program - Summarizes the status of the development of this deliverable.

Section 5: Transfers of Ownership – Identifies any transfers of ownership interest, operation, management, or other control of the treatment works, or any portion thereof.

Section 6: Compliance and Non-Compliance with the Consent Decree – Describes the status of compliance or non-compliance with requirements of this Consent Decree.

Section 7: SSOs, Bypasses, Diversions, and Effluent Limit Violations – Provides a spreadsheet and summary of all SSOs, Bypasses, Diversions, and effluent limit violations.

Section 8: Water Quality Monitoring Data – Summarizes all sampling that was conducted, the results of the sampling, and the projected data collection for the third quarter of 2005.

Status of Deliverables

Below is a list of significant dates on which KUB submitted deliverables to EPA or received approval for deliverables. To date, KUB has submitted all deliverables in accordance with the schedule set forth in the Consent Decree.

March 2, 2005

- Submitted to EPA - Grease Control Legal Support Program

April 5, 2005

- Submitted to EPA - Operations Record-Keeping Program

April 6, 2005

- Submitted to EPA - Comprehensive Performance Evaluation Program Initial Scope

April 7, 2005

- Submitted to EPA - Sewer Overflow Response Plan

April 14, 2005

- Submitted to EPA - Private Lateral Legal Support Program

April 26, 2005

- Submitted to EPA - 2001-2004 Sanitary Sewer Overflow Evaluation Report Annual Update

May 4, 2005

- Approved by EPA - Operations Record-Keeping Program
- Approved by EPA - Comprehensive Performance Evaluation Program Initial Scope

May 9, 2005

- Submitted to EPA - Reporting, Notification, and Record-Keeping Program
- Submitted to EPA - Gravity Line Preventive Maintenance Program
- Submitted to EPA - revised Grease Control Legal Support Program

May 20, 2005

- Approved by EPA - revised Grease Control Legal Support Program
- Approved by EPA - Private Lateral Legal Support Program

June 3, 2005

- Approved by EPA - 2001-2004 Sanitary Sewer Overflow Evaluation Report Annual Update

June 27, 2005

- Submitted to EPA - revised Sewer Overflow Response Plan

June 29, 2005

- Approved by EPA - Reporting, Notification, and Record-Keeping Program
- Approved by EPA - Gravity Line Preventive Maintenance Program

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Section 1 Phase 1 CAP/ER and Phase 2 CAP/ER

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... A summary of compliance with and activities related to implementation of the Phase 1 CAP/ER and Phase 2 CAP/ER, including the status of construction projects in comparison to the schedules that have been established pursuant to the Consent Decree for those projects; and schedule deadlines and milestones achieved during Calendar Quarter and expected during next Calendar Quarter."*

KUB began developing a Corrective Action Plan/Engineering Report (CAP/ER) in January 2004, following the completion of the Phase I Sanitary Sewer Overflow Evaluation Report (SSOER) required by the Agreed Order with the Tennessee Department of Environment and Conservation (TDEC) and, subsequently, the Consent Decree. The objective of the Phase I CAP/ER is to identify facility improvements needed to alleviate SSOs occurring in the collection system during the period of 2001–2004 and to support future growth needs. The Phase 1 CAP/ER will be submitted to EPA by November 1, 2005. The Phase 2 CAP/ER will be submitted to EPA within 12 months after EPA approval of the SSOER Annual Update submitted on April 30, 2008.

Although the Phase 1 CAP/ER is not required to be submitted until November 1, 2005, the following is a summary of pertinent information gathered regarding the development of this program as of the close of this reporting period.

1.1 Flow Model

KUB uses a hydraulic model of the major trunk sewers as a planning tool. This model was developed by KUB consultant Camp Dresser and McKee Inc. (CDM) using the EXTRAN block of EPA's Stormwater Management Model (SWMM). EXTRAN is a dynamic flow routing model that routes inflow hydrographs through an open channel and/or a closed conduit system to compute a time history of flows and heads throughout the system. EXTRAN requires two basic data inputs: (1) physical information describing the sanitary sewer system and (2) flows into the sanitary sewer system consisting of wastewater, groundwater, and rainfall derived inflow and infiltration (RDI/I).

The trunk sewers portion of the model was developed based on system data provided by the Knoxville-Knox County-KUB Geographical Information System (KGIS), as well as other record drawings maintained by KUB, and field confirmation of some information. The flow inputs are assembled from data gathered regarding land use, water usage, pump station flow, and collection system flows. That data is used to determine the base wastewater flows, groundwater infiltration, and RDI/I. The initial base flow data for the model was collected from a 1991 to 1992 temporary flow study of the entire KUB collection system, during which 241 temporary meters were installed throughout the system. The model was calibrated with additional data collected from KUB's permanent network of meters from 1998–2000. In addition, projected future base flow estimates were developed using current information from the Metropolitan Planning Commission.

1.2 Collection System Flow Monitoring

KUB maintains a permanent network of 25 flow meters and six rain gauges strategically placed throughout the collection system. Additionally, each pump station is equipped with a Supervisory Control and Data Acquisition (SCADA) system that records flow-related data at the pump stations. Modelers use the data to periodically recalibrate the flow model with actual flows in the system. However, this permanent network of meters is not dense enough to provide data sufficient to analyze RDI/I rates in each sub-basin.

KUB also uses temporary flow studies to provide data at a more concentrated level to analyze flow components within specific sub-basins. KUB completed temporary flow studies in First Creek, Third Creek, Fourth Creek, and South Knoxville sub-basins in early spring 2004. Second Creek, Williams Creek, Loves Creek, and the Northeast Knox Utility District areas where KUB provides wastewater service were studied in spring 2005. Over 200 temporary flow meters were installed during these periods.

CDM used flow and rainfall data to determine the decomposition of flows in the collection system (base flow, groundwater flow, and RDI/I). Modelers can then calculate R-values which are a measure of the amount of rainfall from a storm event that enters the sewer system as RDI/I for each monitor, or sub-basin,. The R-value for each sub-basin is a key parameter used to develop the system-planning flow model. The flow data is also used for dry and wet weather model calibration.

CDM has completed the flow analysis for the data collected in 2004 and will complete the analysis of the spring 2005 data in July 2005. The analysis will be used to finalize the Phase 1 CAP/ER and to support development of the Phase 2 CAP/ER.

1.3 Alternatives Analysis

In January 2004, KUB began the process of identifying and analyzing corrective actions for SSOs by analyzing overflows occurring from 2001–2003. SSOs that occurred in 2004 have been added to this planning process. Corrective action alternatives include system rehabilitation, trunkline and pump station improvements, and wet weather storage. Many of the corrective actions being considered are already part of KUB's Capital Improvement Plan. KUB will incorporate those projects and future alternatives into the overall Phase 1 CAP/ER and Phase 2 CAP/ER.

1.4 Current Capital Improvement Plan for FY 04/05

The following is a list of facility improvement projects included in the Capital Improvement Plan for FY 04/05 (July 1, 2004 to June 30, 2005). These projects were in various stages during the reporting period including preliminary engineering, design, construction, and completion. Many of these projects are "find and fix" rehabilitation projects. Find work is defined as the inspection (i.e. flow monitoring, CCTV, manhole inspections, smoke testing, etc.) and design phase of the project. Fix is defined as the construction phase that may include manhole rehabilitation/replacement, main line rehabilitation/replacement, and lower lateral rehabilitation/replacement. Other projects are trunkline capacity improvements or wet-weather storage. Each of these projects is considered part of the overall Phase 1 CAP/ER.

First Creek

1. **Fountain Road** - Upsize 3,700 linear feet (lf) of gravity sewer using open cut and pipe bursting methods. Replace manholes and services. [Complete]
2. **Fair Drive Phase II** - Rehabilitate 3691 lf and replace 2458 lf of existing 8-12 inch gravity sewer along Fair Drive. [Complete]
3. **Greenfield Lane** - Replace approximately 3,300 lf of existing sewer with 8-inch and 12-inch PVC and ductile iron pipe. [Complete]
4. **Whites Creek Phase III** - Replace 300 lf of 12-inch, 300 lf of 16-inch, 2,700 lf of 24-inch, and 5,000 lf of 36-inch sewer.
5. **First Creek Sub-basins 3 and 4 Rehabilitation** - Find and fix rehabilitation in First Creek sewer basin in the Fountain City area (mini-basins 03B1, 03B2, and 04B2). Project includes inspection (CCTV, smoke test, manhole inspections), design, rehabilitation of 265,000 lf of lines requiring repair, and replace 10,500 lf of sewer.
6. **First Creek 8A1** - Find and design rehabilitation projects in First Creek sewer basin in the North Knoxville area around North Broadway and I-640. Project includes inspection (CCTV, smoke test, manhole inspections), design, rehabilitation of 21,067 lf, and replace 10,273 lf of sewer. Construction will be scheduled when design is complete and will occur in several phases of work.
7. **Upper First Creek Storage** - Design 9 million gallon (MG) wet-weather storage tank to control sewer overflows near Old Broadway during rain events.
8. **Lower First Creek Storage** - Design 5 MG wet-weather storage tank to control sewer overflows near North Hoitt Avenue during rain events.

Second Creek

1. **Second Creek Sub-basin 15 Rehabilitation** - Rehabilitate approximately 23,500 lf of pipe in mini-basin 15D2. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair.
2. **Second Creek Pilleaux PS Collector** - Rehabilitate 19,600 lf of collection system piping in mini-basin 05A4. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair.
3. **Second Creek 23E1** - Find and design rehabilitation needs for mini-basin 23E1. A total of 28,067 lf of pipe is to be inspected. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair. Construction will be scheduled when design is complete.

Third Creek

1. **Mynderse, Western, and Canna** - Replace approximately 1,700 lf of 8-inch sewer and pipe-burst approximately 3,400 lf of 8-inch up to 10-inch and 12-inch pipe to address wet-weather capacity restrictions resulting in overflows near Pleasant Ridge Road. [Complete]
2. **Third Creek Storage** - Design 4.5 MG wet-weather storage tank to control sewer overflows near Western Avenue and Third Creek Road during rain events.
3. **Third Creek 28C1** - Find and design rehabilitation needs for collectors in mini-basin 28C1 (approximately 25,355 lf of pipe). Project includes inspection (CCTV, smoke

test, manhole inspections), design, and rehabilitation of lines requiring repair. Construction will be scheduled when design is complete.

4. **Third Creek Basin 11** - Find and design rehabilitation needs for collectors in sub-basin 11 (approximately 129,657 lf). Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair. Construction will be scheduled when design is complete.
5. **Third Creek Basin 9** - Find and design rehabilitation methods for collectors in sub-basin 9 (approximately 177,900 lf). Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair. Construction will be scheduled when design is complete.

Fourth Creek

1. **Papermill Drive Phases I, II, and III** - Design and construct replacement of approximately 4,000 lf of 15-inch and 18-inch sewer in the Papermill Drive area to increase conveyance capacity and reduce sewer overflows. [Phases I & III are complete]
2. **Pinebrook Drive Sewer Replacement** - Design and construct replacement of 330 lf of 8-inch gravity sewer that has been partially exposed by erosion of the bank of the adjacent drainage channel. [Complete]
3. **Walker Springs Rehabilitation (Mini-Basin 32A4)** - Perform, find, and design work in mini-basin 32A4 in the Walker Springs area. Plans will be developed for future rehabilitation work. Inspection includes 43,000 lf of smoke testing, 43,000 lf of CCTV, and 228 manhole inspections.
4. **Walker Springs Storage** - Design and begin construction on 3.6 MG wet-weather storage tank to control sewer overflows near Walker Springs Pump Station during rain events.

South Knox

1. **Maryville Pike** - Design and construct replacement of 800–1,200 lf of 24-inch sewer located in Witherspoon Superfund site. Design will reroute sewer around site. [Complete]
2. **South Haven Phase I and Phase II** - Relocate, rehabilitate, and upsize approximately 4,700 lf of existing collector sewers to increase conveyance capacity and reduce I/I. [Complete]
3. **Island Home Rehabilitation** - Rehabilitate 9,400 lf and replace 1,200 lf of collector sewers to reduce I/I. [Complete]
4. **East Ford Valley Rehabilitation** - Rehabilitate approximately 16,000 lf of sewers in mini-basin 41A4. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair.
5. **South Haven Rehabilitation Phase III** - Rehabilitate approximately 21,700 lf of sewers in mini-basin 40F1. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair.
6. **Stone Road Rehabilitation** - Rehabilitate approximately 13,500 lf of sewers in mini-basin 41B1. Project includes inspection (CCTV, smoke test, manhole inspections), design, and rehabilitation of lines requiring repair.

Williams Creek

1. **Delrose Force Main Replacement** - Design and construct replacement of approximately 5,000 lf of 16-inch ductile iron pipe force main that has severe structural problems. [Complete]
2. **Williams Creek Trunk Line Replacement** - Design and construct replacement of approximately 3,700 lf of 24-inch sewer to correct structural problems.

Section 2 Comprehensive Performance Evaluation Program (CPE) and Composite Correction Plan (CCP)

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... A summary of compliance with and activities related to implementation of the CPE and CCP."*

KUB representatives, along with consultants from CDM began drafting the CPE Initial Scope in early January 2005. CDM and KUB personnel reviewed the draft CPE Scope. Once the draft was finalized, the CPE Initial Scope was submitted to EPA and posted in the Public Document Repository on April 4, 2005. EPA approved the CPE Initial Scope on May 4, 2005. The approved CPE Initial Scope is included in Appendix A. A CPE implementation and coordination meeting was held on June 22, 2005, between KUB representatives and consultants from CDM. Activities planned for the next quarter include data collection and evaluation of influent, primary effluent, and final effluent characteristics, hydraulic analyses, evaluations of major unit processes, and identification of performance limiting factors. The full CPE will be submitted to EPA by February 28, 2006.

As part of the CCP, recommendations for rehabilitation and/or upgrades to the Kuwahee, Fourth Creek, and Loves Creek wastewater treatment plants (WWTPs) will be addressed following the results of the CPE.

Section 3 Process Controls Program

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... A summary of implementation of and compliance with the Process Controls Program."*

KUB representatives and consultants from CDM participated in an initial workshop for the development of the Process Controls Program (PCP) on January 26-27, 2005. The first day of the workshop included step-by-step discussions of high-flow procedures and the evaluation of hydraulic profiles of the plants to determine areas of interest. The second day included plant tours of Kuwahee, Fourth Creek, and Loves Creek WWTPs. The existing Standard Operating Procedures (SOPs) and wet weather checklists were revisited and distributed for review on March 3, 2005. A second PCP workshop occurred on March 8, 2005. High-flow SOPs and wet weather checklists were again reviewed and revised. Final review of the PCP occurred on April 12, 2005. After being posted in the Public Document Repository, the PCP will be submitted for EPA review on July 8, 2005. Upon approval of the PCP, KUB will implement the program in accordance with the following schedule:

	<u>Days from Approval Date</u>
Procure and install additional sampling and monitoring equipment (high flow samplers and TSS meters)	60
Complete supporting standard operating procedures (SOPs)	60
Complete refresher training for operations staff	90

Section 4 Capacity Assurance Program

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... A summary of the implementation of the Capacity Assurance Program for that Calendar Quarter, including the number of, and anticipated flow from, sewer connections that have been authorized, by Sewerbasin, a description of the projects that have been authorized and the number of credits earned and banked by KUB that will be expended for those projects, by Sewerbasin, and any exceptions granted for connections for essential services."*

KUB personnel and KUB consultant CDM are developing the Capacity Assurance Program (EPA CAP) to satisfy the requirements of the Consent Decree. The EPA CAP will be submitted by February 10, 2006.

An oversight team of various KUB personnel and managers has been assembled to oversee the development of this program and to ensure that the program is properly coordinated and implemented throughout the organization. The oversight team has met twice to discuss the EPA CAP requirements presented in the Consent Decree and to begin developing an outline of what the EPA CAP will include.

As required by the Consent Decree, KUB continues to evaluate and manage new wastewater connections per the CAP based on the TDEC Agreed Order (TDEC CAP) until the EPA CAP is approved by EPA.

Appendix B contains a list of all new wastewater service connections applied for and approved since the TDEC CAP started in May 2004. The list also shows the approved wastewater connections where wastewater service has not started.

Section 5 Transfers of Ownership

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... Identification of any transfer of an ownership interest, operation, management, or other control of the Treatment Works, or any portion thereof."*

There has been no transfer of an ownership interest, operation, management, or other control of the Treatment Works, or any portion thereof during this reporting period.

Section 6 Compliance and Non-Compliance with the Consent Decree

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain...A description of the status of compliance or non-compliance with the requirements of this Decree and, if applicable, the reasons for non-compliance, including a list of all violations that are subject to stipulated penalties under Section X of this Consent Decree."*

6.1 Submission of Deliverables

To date, KUB has submitted all deliverables in accordance with the schedule set forth in the Consent Decree. The following sections detail all activity related to deliverables that occurred during the past quarter. The dates each submittal was available for public comment in the Public Document Repository (PDR), when the deliverable was submitted to EPA, when EPA responded with comments, when KUB responded to those comments, and when EPA approval was received are noted for each deliverable.

6.1.1 Grease Control Legal Support Program

Consent Decree language, page 48: *"No later than thirty (30) Days after the Date of Entry, KUB shall prepare an enforcement response guide to address violations of the Grease Control Program set forth in Section VII.D.2.(a) and other applicable rules and regulations. This Deliverable is subject to Review Level 2. It shall be placed in the PDR for public review and information, but shall not be subject to the Public Review Requirement of Section VI.A.2. However, KUB shall receive questions and comments from the public on this Deliverable for a period of twenty (20) Days after placement in the PDR."*

On March 2, 2005, KUB simultaneously placed in the PDR and submitted to EPA the Grease Control Legal Support Program. This Review Level 2 Deliverable was available for public comment from March 2, 2005, until March 23, 2005. No comments were received during that period. On April 14, 2005, KUB received EPA's comments regarding revisions for this deliverable. As part of the comments for this deliverable, EPA requested that several changes be made to the Grease Interceptor Maintenance Log that is part of the Grease Control Program. EPA's comments were addressed and the deliverable was resubmitted on May 9, 2005, and subsequently approved by EPA on May 20, 2005. This program has been actively implemented since approval.

6.1.2 Sewer Overflow Response Plan

Consent Decree language, page 45: *"No later than seventy-five (75) Days after the Date of Entry, KUB shall revise and submit the SORP to provide for KUB's timely and effective response to all SSOs, as set forth below."*

On March 3, 2005, KUB placed the Sewer Overflow Response Plan (SORP) in the PDR. This Review Level 1 Deliverable was available for public comment from March 3, 2005 until April 4, 2005. No comments were received during that period. KUB submitted the SORP to EPA on April 7, 2005. EPA disapproved this

deliverable on June 3, 2005 requiring several changes be made. KUB addressed those comments and resubmitted this deliverable to EPA on June 27, 2005.

6.1.3 Private Lateral Legal Support Program

Consent Decree language, page 49: *"No later than one-hundred and eighty (180) Days after the Date of Entry, KUB shall prepare an enforcement response guide to address Private Laterals that may contain defects and/or improper connections that (1) are potential sources of I/I to the WCTS that may cause or contribute to SSOs or other violations of the NPDES Permits; (2) allow for possible exfiltration of wastewater onto or below the surface of the ground that could then enter the stormwater system; or (3) allow roots and/or debris to enter the WCTS through cracks, holes, or poorly sealed joints, thus restricting flow and increasing the likelihood of SSOs."*

On March 9, 2005, KUB placed the Private Lateral Legal Support Program in the PDR. This Review Level 1 Deliverable was available for public comment from March 9, 2005 until April 8, 2005. One comment was received pertaining to the document, although it was not received via the PDR but through an email address dedicated to wastewater inquiries. KUB responded to the comment and submitted it as part of the deliverable on April 14, 2005. EPA approved this deliverable on May 20, 2005. This program has been actively implemented since approval.

6.1.4 Reporting, Notification, and Record-Keeping Program

Consent Decree language, page 43: *"No later than ninety (90) Days after the Date of Entry, KUB shall develop and submit a Reporting, Notification and Record Keeping Program as described below."*

On March 21, 2005, KUB placed the Reporting, Notification, and Record-Keeping Program in the PDR. This Review Level 1 Deliverable was available for public comment from March 21, 2005 until April 21, 2005. No comments were received during that period. KUB submitted this deliverable on May 9, 2005. EPA approved this deliverable on June 29, 2005. This program has been actively implemented since approval.

6.1.5 Gravity Line Preventive Maintenance Program

Consent Decree language, page 58: *"No later than ninety (90) Days after the Date of Entry, KUB shall submit a Gravity Line Preventive Maintenance Program that includes the following components: (i) blockage abatement (including both hydraulic and mechanical cleaning); (ii) root control; and (iii) manhole preventative maintenance."*

On March 21, 2005, KUB placed the Gravity Line Preventive Maintenance Program in the PDR. This Review Level 1 Deliverable was available for public comment from March 21, 2005 until April 21, 2005. No comments were received during that period. KUB submitted this deliverable on May 9, 2005. EPA approved this deliverable on June 29, 2005. This program has been actively implemented since approval.

6.1.6 Comprehensive Performance Evaluation Program Initial Scope

Consent Decree language, page 41: *"No later than sixty (60) Days after the Date of Entry, KUB shall submit an initial scope for a CPE for the Kuwahee, Fourth Creek and Loves Creek WWTPs."*

KUB submitted the Comprehensive Performance Evaluation Program Initial Scope to EPA on April 6, 2005. This Review Level 1 Deliverable was not subject to the Public Review Requirement of Section VI.A.2. EPA approved the Initial Scope on May 4, 2005. The approved Initial Scope is being used in the development of the full CPE to be submitted by February 28, 2006.

6.1.7 Operations Record-Keeping Program

Consent Decree language, page 57: *"No later than sixty (60) Days after the Date of Entry, KUB shall submit an Operations Record Keeping Program for the WWTPs."*

On April 5, 2005, KUB submitted to EPA and placed in the PDR the Operations Record-Keeping Program. This Review Level 2 Deliverable was available for public comment from April 5, 2005 until April 25, 2005. No comments were received during that period. EPA approved this deliverable on May 4, 2005. This program has been actively implemented since approval.

6.1.8 2001-2004 Sanitary Sewer Overflow Evaluation Report Annual Update

Consent Decree language, page 21: *"Beginning on April 30, 2005, and on an annual basis thereafter, until termination of this Consent Decree, KUB shall submit an update to the SSOER to address those conditions that caused the SSOs that occurred during the previous Calendar Year, in accordance with subparagraphs (b) through (e) below ("Annual SSOER Update")."*

On April 26, 2005, KUB submitted to EPA and placed in the PDR the 2001-2004 Sanitary Sewer Overflow Evaluation Report Annual Update. This Review Level 1 Deliverable was available for public comment from April 26, 2005 until May 16, 2005. No comments were received during that period. EPA approved this deliverable on June 3, 2005.

6.1.9 Process Controls Program

Consent Decree language, page 57: *"No later than one-hundred and fifty (150) Days after the Date of Entry, KUB shall submit a Process Controls Program for the Kuwahee, Fourth Creek and Loves Creek WWTPs for use during wet weather operating conditions."*

KUB placed the Process Controls Program in the PDR on May 25, 2005. This Review Level 1 Deliverable was available for public comment from May 25, 2005 until June 25, 2005. No comments were received during that period. As of the close of this reporting period, this deliverable will be submitted to EPA on July 8, 2005.

6.1.10 Continuing Sewer System Assessment Program

Consent Decree language, page 26: *"No later than one-hundred and fifty (150) Days after the Date of Entry, KUB shall submit a CSSAP to analyze the infrastructure of the WCTS."*

KUB placed the Continuing Sewer System Assessment Program in the PDR on May 25, 2005. This Review Level 1 Deliverable was available for public comment from May 25, 2005 until June 25, 2005. No comments were received during that period. As of the close of this reporting period, this deliverable will be submitted to EPA on July 8, 2005.

6.1.11 Water Quality Monitoring Program

Consent Decree language, page 50: *"No later than one-hundred and eighty (180) Days after Date of Entry, KUB shall submit the Water Quality Monitoring Program described below to: (a) identify Unpermitted Discharges originating at sewer pipe creek crossings and other isolated or remote sewer locations adjacent to or in proximity to waterways; (b) locate the source or sources of such Unpermitted Discharges; and (c) assess the impact upon the environment and public health of such Unpermitted Discharges."*

KUB placed the Water Quality Monitoring Program in the PDR on June 20, 2005. This Review Level 1 Deliverable will be available for public comments until July 21, 2005 and will be submitted to EPA by August 10, 2005.

6.2 Violations Subject to Stipulated Penalties

During this reporting period, KUB incurred 24 Unpermitted Discharges. The majority (16) were related to heavy rainfall. Six events were due to blockages by grease, roots, debris, or a combination thereof. One event occurred due to equipment damaged by a lightning strike to a pump station, and one event was due to a collapsed pipe. Table 1 below lists all violations subject to stipulated penalties as outlined in the Consent Decree.

Table 1. Violations Subject to Stipulated Penalties

Violation	Date	Address	Cause
Unpermitted Discharge	4/2/05	2015 Neyland Drive	Heavy rainfall
Unpermitted Discharge	4/2/05	2621 Parkview Avenue	Blockage – grease
Unpermitted Discharge	4/2/05	4408 Cheyenne Drive	Blockage – roots
Unpermitted Discharge	4/2/05	2505 Delrose Drive	Heavy rainfall
Unpermitted Discharge	4/2/05	438 Maryville Pike	Heavy rainfall
Unpermitted Discharge	4/2/05	600 Gallaher View Road	Heavy rainfall
Unpermitted Discharge	4/4/05	3741 Eakers Street	Heavy rainfall
Unpermitted Discharge	4/13/05	600 Gallaher View Road	Heavy rainfall
Unpermitted Discharge	4/19/05	4713 Broadway	Heavy rainfall
Unpermitted Discharge	4/29/05	1015 Phillip Fulmer Way	Blockage – grease and debris
Unpermitted Discharge	5/20/05	2015 Neyland Drive	Heavy rainfall
Unpermitted Discharge	5/20/05	436 Maryville Pike	Heavy rainfall

Violation	Date	Address	Cause
Unpermitted Discharge	5/20/05	2505 Delrose Drive	Heavy rainfall
Unpermitted Discharge	5/20/05	925 Mayville Pike	Heavy rainfall
Unpermitted Discharge	5/20/05	1305 Rickard Drive	Blockage – grease
Unpermitted Discharge	5/20/05	600 Gallaher View Road	Heavy rainfall
Unpermitted Discharge	5/24/05	3741 Eakers Street	Heavy rainfall
Unpermitted Discharge	5/25/05	305 Churchwell Avenue	Blockage – debris
Unpermitted Discharge	6/7/05	2505 Delrose Drive	Heavy rainfall
Unpermitted Discharge	6/7/05	1422 Hoitt Avenue	Heavy rainfall
Unpermitted Discharge	6/7/05	4817 Beverly Road	Heavy rainfall
Unpermitted Discharge	6/10/05	7620 Bud Hawkins Road	Lightning strike to pump station*
Unpermitted Discharge	6/16/05	2645 Chukar Road	Blockage – grease and debris
Unpermitted Discharge	6/30/05	900 Volunteer Landing Lane	Collapsed pipe

*At the time of this event, the pump station was being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures.

Section 7 SSOs, Bypasses, Diversions, and Effluent Limit Violations

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... A spreadsheet and summary of all SSOs, Bypasses, Diversions, and effluent limit violations that occurred during the previous Calendar Quarter. Information on Building Backups may be provided in separate spreadsheets and summaries from other SSOs. The spreadsheets and summaries shall identify:*

- a. For all SSOs, the location, source, date, time, duration, pathway (if any), receiving water (if any), the reason for each SSO, the total SSO volume, the volume returned to the WCTS, and the volume not captured;*
- b. For all Bypasses and Diversions, the location, date, time, duration, volume and reason for each Bypass and Diversion; and the total Bypass or Diversion volumes;*
- c. For all effluent limit violations, all information required to be reported on KUB's Discharge Monitoring Reports."*

7.1 SSOs

Appendix C lists all SSOs that occurred during this reporting period. During this period, there were 39 SSO events. Of that number, 16 occurred due to heavy rainfall, 11 were caused by blockages, five were due to broken pipe, four were caused by mechanical failure of a grinder pump (three residential and one commercial), two were due to construction failure, and one was due to a lightning strike at a pump station. The majority of events (24) were in the 0 – 1000 gallons volume range. Eleven events ranged from 1001 – 10,000 gallons, and four events were greater than 10,000 gallons. Durations for events during this period are as follows: 19 ranged from 0 – 2 hours, 12 ranged from 2.1 – 5 hours, and 8 lasted more than five hours.

Four of the SSOs were significant events totaling 449,760 gallons. Two of those significant events (Gallaher View Road on 4/13/05 and Delrose Avenue on 5/20/05) were related to wet weather events resulting from heavy rainfall in those areas of the collection system. The third significant event (Churchwell Avenue on 5/25/05) was due to a blockage caused by debris. This event was significant because responders were unable to clear the blockage until the flow subsided. The fourth event (Volunteer Landing Lane on 6/30/05) resulted from a collapsed pipe.

7.2 Building Backups

Appendix D lists all Building Backups that occurred during this reporting period. During this period, there were 15 Building Backups. Causes for these events are as follows: six were due to a blockage, six were due to heavy rainfall, two were the result of construction failure, and one occurred due to flushing operations.

7.3 Bypasses and Diversions

No Bypasses occurred during this reporting period.

Table 2 shows all five Diversions that occurred during this reporting period: three at Kuwahee WWTP and two at Fourth Creek WWTP. No Diversions occurred at Loves Creek WWTP during this period. Eastbridge WWTP does not bypass or divert flows. The total Diversion volume for the reporting period (April 1, 2005 to June 30, 2005) was 72.21 MG.

7.4 Effluent Limit Violations

Table 3 contains all effluent limit violations that occurred during this reporting period. The table contains the information as it is reported in KUB's Discharge Monitoring Reports. During this reporting period, four effluent limit violations occurred at Kuwahee WWTP. Two were violations of total suspended solids, one was a violation of settleable solids, and one was a violation of fecal coliform. No effluent limit violations occurred at Fourth Creek, Loves Creek, or Eastbridge WWTPs during the reporting period.

Table 2: Bypasses and Diversions

WWTP	Did an event occur?	Type of Event	Date diversion gate opened	Time diversion gate opened	Date diversion gate closed	Time diversion gate closed	Date Diversion flow reported	Duration (hrs)	Volume (MG)	Reason for Event
Kuwahee	Yes	Diversion	4/02/2005	01:15	Continuation	Continuation	4/01/2005	5.75	11.02	High flow event due to excess rainfall
Kuwahee	Yes	Diversion	Continuation	Continuation	4/03/2005	07:00	4/02/2005	24	31.66	High flow event due to excess rainfall
Kuwahee	Yes	Diversion	4/14/2005	0:15	4/14/2005	07:00	4/13/2005	6.75	4.53	High flow event due to excess rainfall
Kuwahee	Yes	Diversion	5/20/2005	04:40	Continuation	Continuation	5/19/2005	2.33	4.85	High flow event due to excess rainfall
Kuwahee	Yes	Diversion	Continuation	Continuation	5/21/2005	23:55	5/20/2005	17	18.35	High flow event due to excess rainfall
Fourth Creek	Yes	Diversion	4/01/2005	22:00	4/02/2005	4:30	4/01/2005	6.5	.92	High flow event due to excess rainfall
Fourth Creek	Yes	Diversion	5/20/2005	03:35	Continuation	Continuation	5/19/2005	3.5	.46	High flow event due to excess rainfall
Fourth Creek	Yes	Diversion	Continuation	Continuation	5/20/2005	11:00	5/20/2005	4	.42	High flow event due to excess rainfall
Loves Creek	No		-		-	-		-	-	
Eastbridge	No		-		-	-		-	-	

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Table 3: Effluent Limit Violations

WWTP	Did an event occur?	Date	Parameter	Type	Limit	Value
Kuwahee	Yes	4/2/2005	Daily Max	TSS	45 mg/l	47 mg/l
Kuwahee	Yes	4/2/2005	Daily Max	SS	1 ml/l	2.5 ml/l
Kuwahee	Yes	3/27/2005-4/2/2005	Weekly Avg	TSS	14,678 lbs	16,336 lbs
Kuwahee	Yes	6/14/2005	Daily Max	Fecal	1,000 cfu/100 ml	3,200 cfu/100 ml
Fourth Creek	No	-	-	-	-	-
Loves Creek	No	-	-	-	-	-
Eastbridge	No					
SS - Settleable Solids	mg/l - milligrams per liter					
TSS - Total Suspended Solids	cfu – Colony Forming Unit					
ml/l – milliliters per liter	lbs - Pounds					

Section 8 Water Quality Monitoring Data

Consent Decree language, pages 82-83: *"Each Quarterly Progress Report shall contain... The water quality monitoring data and other information required pursuant to Section VII.D.1.(e),(v)."*

8.1 Sampling Conducted and Results

Appendix E lists all sampling that was conducted during the reporting period and the results thereof.

8.2 Projected Data Collection

During the third quarter of 2005, KUB will continue to monitor the 24 routine sampling locations in the sewer basins of eight area creeks. KUB will collect samples from the following sample locations during the third quarter:

Sample Locations by Creek Mile or Site Number

<i>Creek Name</i>	<i>Creek Mile #</i>	<i>Creek Mile #</i>	<i>Creek Mile #</i>
First Creek	0.45	2.57	6.33
Second Creek	0.36	1.54	5.76
Third Creek	0.87	2.08E	4.80W
Fourth Creek	0.55	1.33	1.78
Baker Creek	0.15	0.32	0.36S
Goose Creek	0.35	0.90E	1.50E
Loves Creek	0.85	1.89	3.45
Williams Creek	0.53	1.12	1.67

KUB will also pursue necessary actions to implement an investigative monitoring component to determine whether the pollution is related to sewer or non-sewer sources. Sampling for the investigative component will tentatively begin in the fourth quarter of 2005.

The Water Quality Monitoring Program will be submitted to EPA by August 10, 2005.

Appendix A

Comprehensive Performance Evaluation Program Initial Scope

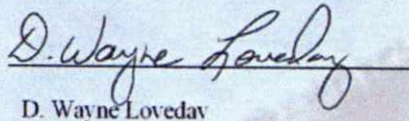
Comprehensive Performance Evaluation Program

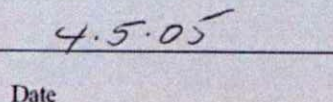
Initial Scope

Kuwahee, Fourth Creek, and Loves Creek Wastewater Treatment Plants

Submitted to EPA April 5, 2005

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


D. Wayne Loveday


Date



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Comprehensive Performance Evaluation Program

Initial Scope

Kuwahee, Fourth Creek, and Loves Creek Wastewater Treatment Plants

I. Introduction

In accordance with the Consent Decree (CD), Knoxville Utilities Board (KUB) is required to implement several work elements related to its wastewater treatment plants (WWTPs). The following three related work elements apply to the Kuwahee, Fourth Creek, and Loves Creek WWTPs.

1. **Comprehensive Performance Evaluation Program (CPE)** - For each WWTP, KUB must complete a comprehensive performance evaluation using flow modeling and other appropriate evaluation techniques to determine capacity and ability to meet permits. To the extent applicable, the CPE shall be consistent with Environmental Protection Agency (EPA) publications "Improving POTW Performance Using the Composite Correction Approach" - EPA CERL, October 1984, and "Retrofitting POTWs" - EPA CERL, July 1989. The CPE is a thorough, structured review of a WWTP's process performance capabilities and associated administrative, operational, and maintenance practices. The objectives are to identify potential improvements in process performance that can be achieved without significant capital improvements, and to identify process components that will require capital improvements to achieve permit compliance. [Ref. CD Section VII.D.1.(a).(iv)]
2. **Composite Correction Plan (CCP)** - The CCP is the performance improvement phase that follows the CPE. It is a systematic approach to implementing administrative, operation, and maintenance improvements as well as rehabilitation and/or upgrades to the WWTPs to address the problems identified in the CPE. The CCP shall be consistent with the EPA publications "Improving POTW Performance Using the Composite Correction Approach" - EPA CERL, October 1984 and "Retrofitting POTWs" - EPA CERL, July 1989; and the "Tennessee Design Criteria". The CCP shall: (A) address all factors which limit or which could limit the WWTP's operating efficiency or the ability to achieve NPDES Permit compliance; (B) address the peak flow handling procedures and peak flow capacity of the WWTP; and (C) identify specific actions and schedules to correct each limiting factor, including capital improvements to the existing WWTP where appropriate. The CCP shall evaluate all appropriate alternatives and provide schedules for achieving permit compliance. [Ref. CD Section VII.D.1.(a).(v)]
3. **Process Controls Program (PCP)** for WWTPs - For each WWTP, KUB must establish standard operating procedures (SOPs) for wet weather flow conditions to optimize

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treatment using existing facilities. Each SOP must establish criteria such as plant flow, mixed liquor suspended solids (MLSS), blanket levels, etc., to initiate process control changes. Development of specific procedures for when to initiate and conclude Diversions (i.e. blending) in accordance with 1994 NPDES Permit requirements are the primary goals of this program. [Ref. CD Section VII.D.2.(b)]

The CD specifically requires KUB to complete the CPE and CCP (Engineering Program Components of the Management Program required by the CD), to the extent applicable, consistent with the EPA publications referenced above (the 1989 publication is an expanded update of the 1984 publication).

This CPE Plan has been developed for review and approval by EPA prior to initiating the CPE. The PCP and CCP will be separate deliverables, each subject to EPA review and approval.

II. Peak Wet Weather Flow Issues

A key issue to be addressed in the CPE is diversion of flows during peak wet weather flow conditions. The CD requires compliance with the 1994 NPDES Permit Diversion provisions until new permits become effective. Draft permits, which are currently under appeal, do not contain the Diversion language contained in the 1994 permits.

Diversion and Bypass language from the 1994 and current draft permits are provided below:

1994 NPDES Permit Language

Bypass

"a. 'Bypass' means the discharge of wastes from any portion of the collection or treatment system other than through permitted outfalls. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass is prohibited unless the following three (3) conditions are met:

- i. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
- ii. There are not feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment down-time or preventative maintenance;
- iii. The permittee submits notice of an unanticipated bypass to the appropriate field office of the Division of Water Pollution Control within 24 hours of becoming aware of the bypass (if this information is provided orally, a written submission must be provided within five days). When the need for the bypass

is foreseeable, prior notification shall be submitted to the Director, if possible, at least ten (10) days before the date of the bypass.

- c. The permittee shall operate the collection system so as to avoid bypassing. The permittee shall actively pursue the goal of eliminating bypasses through its Collection System Inspection and Rehabilitation Program as outlined in Exhibit A.

Diversion

- a. 'Diversion' is the intentional rerouting of wastewater within a treatment facility away from a biological portion of the treatment facility.
- b. A diversion is permissible only when necessary to protect the active biomass from a wash-out due to peak flow events and when this action does not cause effluent limitations to be exceeded".

The CPE will focus on meeting the 1994 permit requirements, which are consistent with the approved design of the plants.

However, the CPE will also determine unit process capacities under expected operating conditions for each plant to support Diversions and/or additional treatment capacity that may be required.

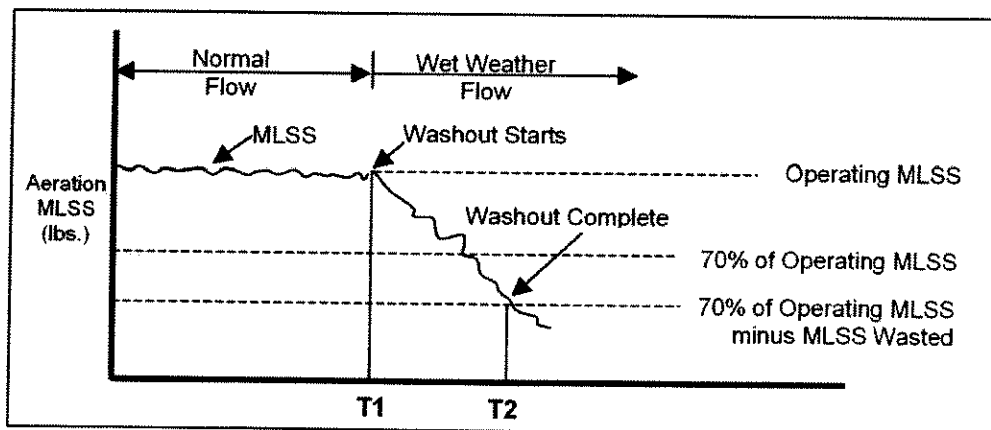
Diversions, under the 1994 permit provisions, can be made only when necessary to protect the active biomass from a washout and when this action does not cause effluent limitations to be exceeded. A washout is specifically defined to mean a specific result (loss of 30 percent of MLSS in aeration basins only), as illustrated in Figure 1. Note that the definition of "Washout" contained in the permits refers to loss of biomass from the aeration basins, not from the plant, and is exclusive of MLSS decrease due to solids wasting to the sludge disposal system.

The definition of "Washout" in both permits is as follows:

"For domestic wastewater plants only, a "washout" shall be defined as loss of Mixed Liquor Suspended Solids (MLSS) of 30% or more. This refers to the MLSS in the aeration basin(s) only. This does not include MLSS decrease due to solids wasting to the sludge disposal system. A washout can be caused by improper operation or from peak flows due to infiltration and inflow.

A washout is prohibited. If a washout occurs, the permittee must report the incident to the appropriate field office within 24 hours by telephone. A written submission must be provided within five (5) days. The washout must be noted on the discharge monitoring report. Each day of a washout is a separate violation."

Figure 1: Aeration MLSS and Washout



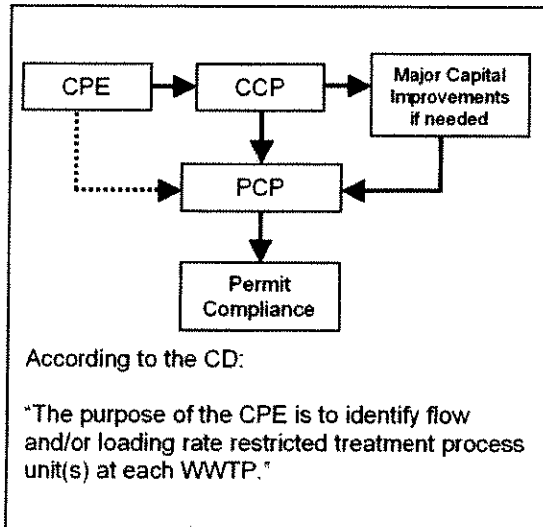
The measurement of aeration basin MLSS (as a concentration) to monitor the occurrence of washout conditions is more difficult for plug flow basins (i.e. Kuwahee WWTP) than for complete mix basins (i.e. Fourth Creek and Loves Creek WWTPs), since MLSS concentration will vary from front to back of a plug flow basin. This issue will have to be considered in the development of a monitoring/testing program for each plant.

The effluent limits imposed by the 1994 NPDES permits for the treatment plants are as shown in Table 1.

Table 1. 1994 NPDES Permit Limits for Fourth Creek, Kuwahee and Loves Creek Wastewater Treatment Plants

Parameter	Value for Fourth Creek	Value for Kuwahee	Value for Loves Creek
BOD (mg/L)			
Monthly	30		
Weekly	40		
Daily	45		
CBOD (mg/L)			
Monthly		25	25
Weekly		35	35
Daily		40	40
Minimum BOD removal (%)			
Daily	40%	40%	40%
Monthly	85%	85%	85%
Suspended solids (mg/L)			
Monthly	30	30	30
Weekly	40	40	40
Daily	45	45	45
Minimum suspended-solids removal (%)			
Daily	40%	40%	40%
Monthly	85%	85%	85%
Ammonia nitrogen—May through September (mg/L)			
Monthly		5	5
Weekly		7.5	7.5
Daily		10	10
Ammonia nitrogen—October through April (mg/L)			
Monthly		15	15
Weekly		20	20
Daily		25	25
Settleable solids (ml/L)			
Daily	1	1	1
Dissolved oxygen (mg/L)			
Daily minimum	1.0		
Instantaneous minimum		1.0	1.0
Fecal coliform (number/100 ml)			
Monthly (geometric mean)	200	200	200
Daily	1,000	1,000	1,000
pH			
Daily minimum	6	6	6
Daily maximum	9	9	9

The table shows that effluent standards for the Kuwahee and Loves Creek plants are more stringent than standards for the Fourth Creek plant. The Kuwahee and Loves Creek plants require nitrification, but the Fourth Creek plant does not. The difference will have some impact on the assessment of the plants.



The limits under the new permits are the same as is in the 1994 permits. All of the plants have stringent maximum day effluent concentration limits, and minimum daily removal efficiencies for CBOD (or BOD) and suspended solids.

III. CPE Overview

The CPE process is a detailed, systematic process for identifying current WWTP performance limiting factors that impact current NPDES Permit compliance. The process features several classification processes for rating plants based on major unit processes and for prioritizing performance-limiting factors (typically operations, maintenance, or administration factors). These are summarized below:

Evaluation of Major Unit Processes

Type 1 WWTP – CPE indicates performance problems are not a result of unit process capacities, but are related to operation, maintenance, administration, or to facility problems that can be corrected with minor modifications.

Type 2 WWTP – CPE indicates performance problems may be related to marginal capacity of one or more major unit processes; major facility modifications are likely required.

Type 3 WWTP – CPE indicates one or more major unit processes does not have sufficient capacity; major modifications or facility replacement may be required.

Prioritization of Performance Limiting Factors

A Rating – CPE indicates major performance effect on long-term, repetitive basis

B Rating – CPE indicates minimum performance effect on routine basis, or major effect on a periodic basis

C Rating – CPE indicates minor performance effect

There is also a points allocation system for rating individual unit process capabilities (aeration, final clarifiers, and sludge handling). The process supports subsequent CCP activities and ultimately, any required major capital improvements. The process also supports the PCP, which will likely require revisions to wet weather operational practices as improvements are made.

Given the stated purpose of the CPE, the unique characteristics of the WWTPs (i.e. designed for Diversions, nitrification requirements, etc.), and KUB's administration model (i.e. shared staff among plants, etc.), some aspects of the prescribed CPE process are not relevant.

A summary of CPE elements and KUB's approach to implementation is provided in Table 2.

Table 2: Summary of CPE Elements and Proposed KUB Implementation Approach

CPE Element	Comment	Proposed KUB Implementation Approach
1. Data Collection A. Kick-off Meeting B. Plant Tour C. Detailed Data Gathering	Will be completed generally in accordance with CPE guidelines	<ul style="list-style-type: none"> - Existing data, including record drawings, SOPs, recent flow and loading data, projected flows and loadings, and process performance data will be reviewed and evaluated - Interviews will be used to gather information on perceived plant performance issues and constraints
2. Evaluation of Major Unit Processes Influent Pumping Screening Grit Removal Primary Clarifiers Intermediate Pumping (if applicable) Biological Treatment Disinfection Residuals Management	Point scoring system for aeration, final clarifiers, and sludge handling will be supplemented with process modeling	<ul style="list-style-type: none"> - Establish current and planning period flows and loadings - Compare flow and loading design criteria to TDEC standards and other relevant design criteria - Conduct process modeling to establish capacity constraints and evaluate modifications and/or expansion alternatives for secondary treatment - Pilot testing may be required - Stress testing may be required <p><i>Note: Information from previous studies will be used to the extent possible.</i></p>
3. Prioritization of Performance-Limiting Factors	Will be limited to design and operations issues with focus on wet weather performance The forms in the CPE manual will not be used	<ul style="list-style-type: none"> - Administrative factors will only be addressed to extent necessary to address identified operations (and/or maintenance) factors that adversely impact performance, and to address implementation of recommendations if necessary - Design factors will include hydraulic capacity, process controls, level of automation, flow and measurement capabilities, and reliability criteria (per EPA guidelines) - Operations factors will include staffing level, operator training, SOPs, laboratory analysis procedures (including QA/QC) and data management - Sludge accountability evaluation to be completed

IV. Submittal Schedule

The CD requires the CPE to be completed in accordance with the following schedule:

<u>Item</u>	<u>Review Level</u>	<u>Delivery</u>
Submit CPE Plan for EPA Approval	1	60 days from Date of Entry (of CD)
Submit CPE for EPA Approval	1	300 days from CPE Plan approval (by EPA)

V. Scope of Study

To meet the CD requirements, the work will be accomplished in the following series of tasks:

<u>Task Series</u>	<u>Description</u>
100	Kickoff Meeting(s)
200	WWTP Tours
300	Data Collection and Assessment
400	Evaluation of Major Unit Processes
500	Evaluation of Performance Limiting Factors
600	CPE Memoranda and Reports
700	Process Controls Program Development (not included in this CPE Plan)

Task Series 100—Kickoff Meeting(s)

A project-planning workshop called a Project Quality Management (PQM) session will be held with key Camp, Dresser & McKee (CDM) team members and KUB staff. PQM is a one- to two-day workshop to develop consensus among all project stakeholders (KUB and CDM) on what must be done for the project to be successful and who is responsible for specific activities. Included in the PQM is development of a clear understanding of the project mission, identifying the critical success factors that the team must accomplish to achieve that mission, and developing a list of what has to be done so that the team can meet its critical success factors. Findings of the PQM will be integrated into the Work Plan to facilitate the implementation PQM mechanisms throughout the project duration. Because of the important nature of this process, it is essential that KUB staff participate in the workshop. Information obtained will be summarized and presented in a memorandum.

Task Series 200—WWTP Tours

The project team will tour each WWTP to familiarize themselves with facilities, site constraints, process controls, facility condition, and other features before conducting the PQM workshop. The tours will include KUB operations and maintenance staff who will be interviewed as part of the tours to gain additional insight on plant operation and performance issues.

Task Series 300—Data Collection and Assessment

The purpose of this task is to obtain relevant information to assess the performance of the treatment plants.

Subtask 301—Data Collection

KUB staff will provide data required for assessment. The data will include, but not be limited to, the following:

- Plans and specifications
- Operation and maintenance (O&M) manuals and SOPs
- Studies and reports
- Influent water quality data for past three years
- Plant operations data for past three years
- Discharge Monitoring Reports for past three years
- Permit violations for past three years
- Daily operating reports for past three years (in electronic format)
- Typical wet weather flow hydrographs
- Listing of units in operation and flow distribution
- Information on use of power, fuels, and chemicals for past three years
- Information on anticipated changes in waste streams (i.e., disposal of septage and grease-trap wastes, significant industrial dischargers, wet weather flows, etc.)
- Dissolved-oxygen concentrations in all aeration tanks.

Subtask 302—Assessment of Data

This subtask consists of preparing spreadsheets, graphs, and mass balances to help understand loadings and operational performance of the treatment plants. Material developed will include, but not be limited to, the following:

- Current and projected flows and mass balances
- Averages and percentiles of critical criteria
- Plots (daily and moving averages, as appropriate) of:
 - Flow and rainfall
 - Temperature
 - Influent concentrations and loads
 - Concentrations and loads in primary effluent
 - Concentrations and loads in secondary effluent (prior to blending)
 - Solids retention time
 - Sludge volume index.

Wet weather influent characteristics and process performance will be analyzed separately from dry weather conditions. Preliminary Corrective Action Plan/Engineering Report (CAP/ER) results will be used to estimate wet weather flows and loadings.

Subtask 303—Wet Weather Flow and Loading Analyses

Wet weather flow analyses will be performed to evaluate the impacts of different combinations of treatment and storage capacity on the frequency and volume of wet weather flows and loadings that reach each WWTP. These analyses will be conducted using the Storage Treatment, Overflow, and Runoff Model (STORM).

The STORM analysis is an effective planning tool for evaluating wet weather flow frequency statistics, and for determining the most cost-effective combination of collection system rehabilitation, system storage, and treatment capacity. The results will also be used to develop

statistics for annual average excess flow events (i.e. flow in excess of available reliable treatment capacity and/or hydraulic conveyance capacity of a plant) to determine the appropriate level of additional capacity required.

Subtask 304—Identification of Need for Additional Data

The initial assessment of data will likely reveal gaps in information. If available data are inadequate, data needed and a program for collection will be detailed. Information that might not be available now could include flows and concentrations of sidestreams, diurnal flow and loading characteristics, and analytical data described in Subtask 301.

Task Series 400—Evaluation of Major Unit Processes

For analysis of unit process performance capabilities and alternatives, the project team will use a variety of methods, depending on the specific task. As appropriate, we will use calculations on spreadsheets and simulation models using available plant data supplemented by additional analyses and tests. In addition, pilot testing of new processes and/or stress testing of existing processes may be required.

The activated sludge process for each plant will be evaluated using the BioWIN dynamic simulation model. The model will be used to evaluate existing facilities (i.e., determine existing capacities with and without Diversions) and alternative modifications, with and without potential blending scenarios.

Subtask 401—Evaluations Based on Industry Standards

Evaluation of some unit processes can best be carried out by comparing loading rates or performance on industry and/or TDEC standards, as well as EPA reliability criteria. Processes for which comparison of loading rates and performance can appropriately be based on standards include the following:

- Screens
- Grit chambers
- Primary clarifiers
- Disinfection
- Thickening (Kewaunee WWTP only)
- Digestion (Kewaunee WWTP only)
- Dewatering (Kewaunee WWTP only).

Firm capacity of existing facilities will be determined. In addition, feasible process improvements or modifications (such as chemical feed to primary clarifiers) will be evaluated as appropriate. The need for additional capacity will also be determined and a preliminary assessment of feasible alternatives will be completed.

Subtask 402—Evaluation of Activated Sludge System for the Fourth Creek WWTP

The permit level for the Fourth Creek WWTP does not include requirements for nitrogen; the permit focuses on removal of biological oxygen demand (BOD) and total suspended solids (TSS). The capacity of a plant with these requirements can be accurately determined with the use of a dynamic model such as BioWIN.

The simulation will require developing kinetic and stoichiometric parameters appropriate to the treatment plant. The simulation is set up with actual plant operating parameters (including

number of tanks and geometry, influent flows and concentrations, wasting rates, return rates, and other variables) and the simulation is run to predict effluent quality. The anticipated work includes use of solids flux analysis to determine the MLSS concentration at which the capacity of the aeration tanks for BOD removal matches the capacity of the secondary clarifiers. Relevant data and assumptions needed for this analysis included flow rates and peaking factors, BOD loads and peaking factors, yield, required solids retention time, and sludge volume index. The analysis is relatively straightforward, but engineering judgment is required to select appropriate process parameters. Shifting of solids from aeration tanks to secondary clarifiers during short-term high flows can also be incorporated into the analysis.

The simulation program will be used to simulate other operating conditions and to determine plant capacity. For these WWTPs, multiple simulations will be run to identify bottlenecks and potential corrective actions. The flow that can be sustained without Bypass or Diversion will be identified. In addition, the capacity of the existing plants with Diversions will be determined. Alternative process improvements, modifications and additions will be evaluated as appropriate.

Oxygen requirements must also be assessed. For this, existing data on oxygen use will be reviewed and spreadsheet calculations will be used to determine the adequacy of aeration equipment.

The flow that can be sustained without Bypass or Diversion will be identified from this analysis. In addition, the capacity of the existing plants with Diversions will be determined. Feasible process improvements or modifications (such as conversion to step feed aeration) will be evaluated as appropriate. The need for additional capacity will be determined, and a preliminary assessment of feasible alternatives will be completed.

Subtask 403—Evaluation of Activated Sludge System for the Kuwahee and Loves Creek WWTPs

The effluent requirements for the Kuwahee and Loves Creek WWTPs are more stringent than those for the Fourth Creek WWTP. In addition to setting effluent requirements for BOD and total suspended solids (TSS), the permit also limits concentrations of ammonia. The capacity of a plant with these requirements can be accurately determined with the use of a dynamic model such as BioWIN.

The simulation will require developing kinetic and stoichiometric parameters appropriate to the treatment plant. The simulation is set up with actual plant operating parameters (including number of tanks and geometry, influent flows and concentrations, wasting rates, return rates, and other variables) and the simulation is run to predict effluent quality.

The anticipated work includes use of solids flux analysis to determine the MLSS concentration at which the capacity of the aeration tanks for BOD removal matches the capacity of the secondary clarifiers. Relevant data and assumptions needed for this analysis included flow rates and peaking factors, BOD loads and peaking factors, yield, required solids retention time, and sludge volume index. The analysis is relatively straightforward, but engineering judgment is required to select appropriate process parameters. Shifting of solids from aeration tanks to secondary clarifiers during short-term high flows can also be incorporated into the analysis.

An important parameter for evaluation of a treatment plant that provides nitrification is the maximum specific growth rate of nitrifying organisms. To improve the estimate of the specific growth rate laboratory testing will be conducted, following the procedures developed in the Water Environment Research Foundation report *Methods for Wastewater Characterization in Activated Sludge Modeling*.

The simulation program will be used to simulate other operating conditions and to determine plant capacity. For these WWTPs, multiple simulations will be run to identify bottlenecks and potential corrective actions. The flow that can be sustained without Bypass or Diversion will be identified. In addition, the capacity of the existing plants with Diversions will be determined. Alternative process improvements, modifications and additions will be evaluated as appropriate.

Oxygen requirements must also be assessed. For this, existing data on oxygen use will be reviewed and spreadsheet calculations will be used to determine the adequacy of aeration equipment.

The flow that can be sustained without Bypass or Diversion will be identified from this analysis. In addition, the capacity of the existing plants with Diversions will be determined. Feasible process improvements or modifications (such as conversion to step feed aeration) will be evaluated as appropriate. The need for additional capacity will be determined, and a preliminary assessment of feasible alternatives will be completed.

Subtask 404—Stress and/or Pilot Testing

Stress testing of existing facilities and/or pilot testing of process modifications (e.g. chemical addition) or supplemental processes (e.g. ballasted flocculation) will be conducted if necessary. It is anticipated that stress testing (and pilot testing if final effluent quality may be affected) will require regulatory approval. A technical memorandum will be prepared summarizing our recommendations.

Task Series 500—Evaluation of Performance Limiting Factors

The evaluation of major unit processes focuses on potential treatment capacity and performance based on physical facility parameters (tank volume, surface area, etc.) and operational parameters for the primary and secondary treatment components (e.g. TSS removals, sludge volume index (SVI), yield, MLSS, etc.). This series of tasks will evaluate performance-limiting factors that may impact optimum, reliable performance of existing facilities. These factors include the following:

- Unit Process Design Capacity – current and optimized capacity of each unit process
- Plant Hydraulics – the capability to reliably pass peak flows without adverse process impacts
- Process Controls – the capability to control processes in response to variations in flows and loadings to optimize performance
- Process Measurements – the capability to measure flows and the use of flows and process parameters to make operational decisions and account for solids production, including the availability of appropriate automation and decision support systems

- Plant Operations Practices – the applicability of standard operating procedures, including but not limited to initial Process Controls Program results, to optimize plant performance, and comply with NPDES Permit requirements
- Plant Operations Capacity – the availability of well-trained staff to operate the facility at all times
- System Reliability – the condition of plant facilities and potential impacts on performance and reliability, including evaluation of facilities with respect to appropriate EPA reliability criteria.

Subtask 501— Evaluation of Unit Process Design Capacity

For each WWTP, the results of Task Series 400 will be used to develop performance potential graphs to identify unit processes that potentially limit total plant capacity. Consideration will be given to normal operations (full primary and secondary treatment of all flows) and Diversion mode operations.

Subtask 502—Evaluation of Hydraulic Capacity

Under this subtask, hydraulic capacity of each process unit and of pumping systems, closed conduits, and channels connecting process units will be reviewed, to determine potential bottlenecks. Hydraulic profiles will be developed for peak flows, using spreadsheets or a hydraulic model such as MIKE SWMM for analysis. Field measurements of water surface elevations may be required for confirmation. Based on the results of initial hydraulic evaluations, the need for more sophisticated analyses using computational fluid dynamics (CFD) software to evaluate specific process or hydraulic control structure performance will be evaluated.

Subtask 503—Evaluation of Process Controls

For each WWTP, process controls will be evaluated to assess their adequacy to control variable flows and process loadings to optimize performance. Process controls to be evaluated include, but are not limited to, flow measurement, flow distribution to multiple process units, sludge wasting, dissolved oxygen control, chemical feed controls, and diversion controls. In addition, existing process automation and opportunities to enhance process control through additional automation will be evaluated.

Subtask 504—Evaluation of Process Measurements

For each WWTP, process measurements including influent, intermediate and final flows and loads, as well as process performance indicators such as SVI, MLSS, settleable solids, dissolved oxygen will be evaluated. The evaluation will consider the availability of data, the timelines and accuracy of the available data, and the way data are used to make process decisions and develop performance reports. In addition, a sludge accountability evaluation will be conducted for each WWTP to verify data accuracy and adequacy.

Subtask 505—Evaluation of Operations Practices

For each WWTP, O & M Manuals and SOPs along with operations record-keeping and data analysis procedures will be evaluated relative to results of the major unit process evaluations, and previous subtasks involving hydraulics, process controls, and process measurements.

Subtask 506—Evaluation of Plant Operations Capacity

KUB's plant operations staff levels, shifts and training will be evaluated relative to current and potential future operations requirements.

Subtask 507—Evaluation of System Reliability

For each WWTP, the condition of existing facilities will be evaluated to determine if they are capable of reliable performance, particularly under wet weather conditions. In addition, the facilities will be evaluated with respect to appropriate EPA reliability criteria.

Task Series 600—CPE Memoranda and Reports

The project will require preparation of technical memoranda and reports. Technical memoranda will be prepared to document recommendations and decisions by the project team, and, more important, the basis for the recommendations and decisions. In general, the memoranda will be prepared in draft form, for review by KUB. After receiving KUB's comments, the memoranda will be prepared in final form and distributed. The technical memoranda will be numbered and catalogued.

The CPE Report covering all three WWTPs likewise will be developed in draft and final draft forms prior to submission to EPA, with review by KUB between draft and final draft forms. The report will include text, tables, and graphics in detail sufficient to explain all aspects of the study and its recommendations. An executive summary, table of contents, and lists of tables and figures will be provided. The CPE Report will serve as the basis for development of the Composite Correction Plan for the three WWTPs.

It is anticipated that the memoranda will provide source material for the CPE Report; however, they will be adapted for use specifically in the report and not merely inserted into the report. The draft report will be made available for public review and comments. Public and EPA comments on the draft will be reviewed and addressed prior to finalizing the report.

Task Series 700—Process Controls Program Development

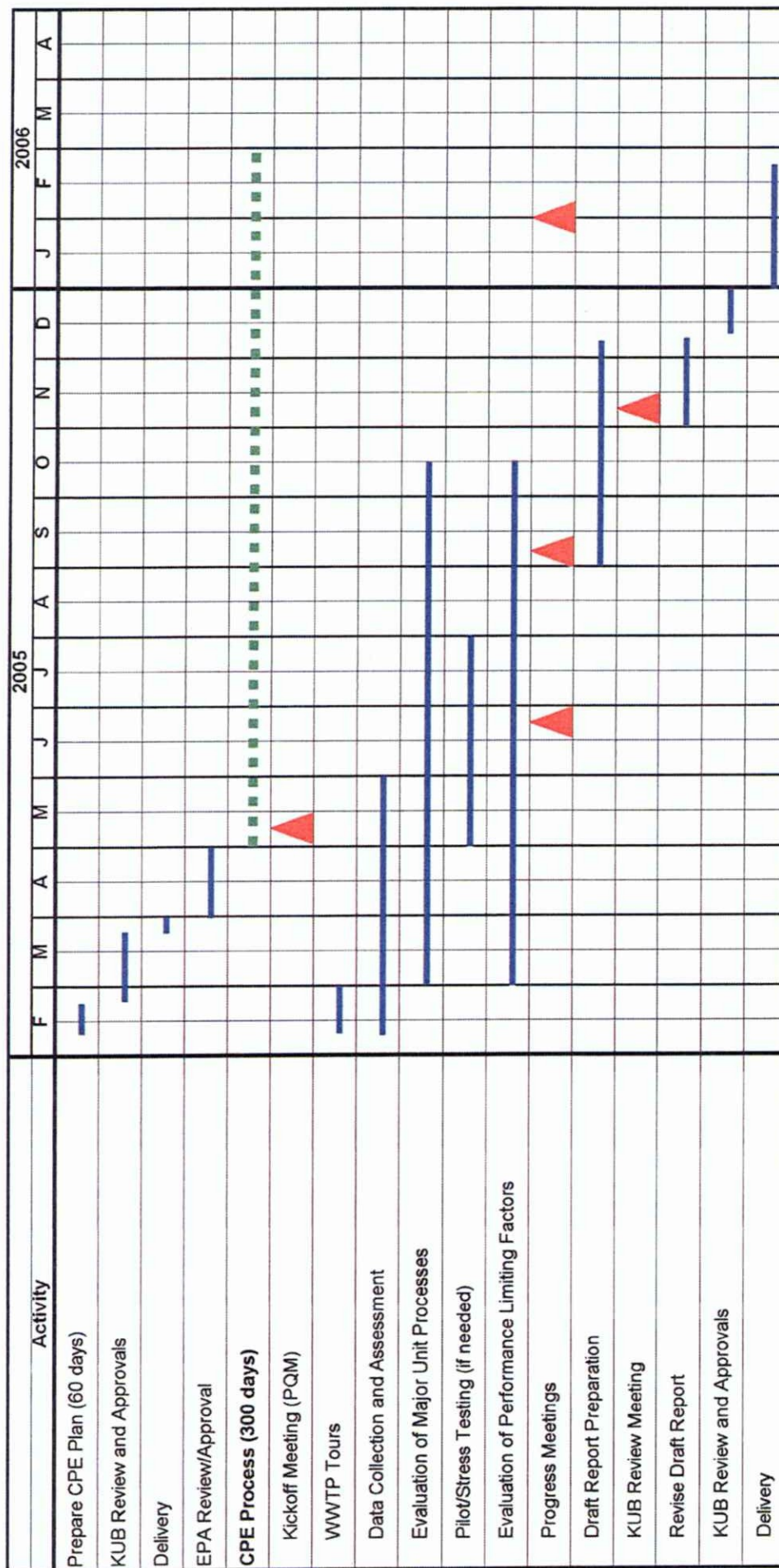
The PCP is an Operations Program component of the Management Program required by the CD, and therefore requires development of separate documents for approval by EPA. However, the PCPs are closely related to the results of the CPE, and ultimately the CCPs. It is envisioned that the initial PCPs will be modified on completion of the CPEs, and again as CCP elements are implemented; however, these updates are not included in this scope of study. Development of the PCP is not addressed in this plan.

VI. Project Schedule

The CD requires KUB to submit a CPE Report to EPA for review and approval within 300 days of approval of this CPE Plan. Figure 2 provides a preliminary project schedule that will enable KUB to comply with this requirement. The CCP will be initiated upon EPA's approval of the CPE.

The schedule for the PCP is included in the schedule because although a stand-alone program, it must be coordinated with the CPE.

Figure 2
Preliminary CPE/PCP Completion Schedule



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0000459

Appendix B

Authorized Sewer Connections

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
1	3105 Fairway Rd	167	250	1st Creek	Kuwahee	5/25/2004	1st Quarter
2	4504 Ivy Rose Dr	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
3	4508 Ivy Rose Dr	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
4	4512 Ivy Rose Dr	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
5	4516 Ivy Rose Dr	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
6	4520 Ivy Rose Dr	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
7	2330 Fine Ave	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
8	5301 Tazewell Pointe Way	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
9	5311 Tazewell Pointe Way	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
10	5235 Tazewell Pointe Way	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
11	5243 Tazewell Pointe Way	167	250	1st Creek	Kuwahee	5/26/2004	1st Quarter
12	1708 Boone St	167	250	1st Creek	Kuwahee	6/3/2004	1st Quarter
13	5223 Tropicana Dr	167	250	1st Creek	Kuwahee	6/8/2004	1st Quarter
14	5227 Tropicana Dr	167	250	1st Creek	Kuwahee	6/8/2004	1st Quarter
15	1620 Maple View Way	334	500	1st Creek	Kuwahee	6/8/2004	1st Quarter
16	2108 Karnswood Dr	167	250	1st Creek	Kuwahee	6/15/2004	1st Quarter
17	2037 Fenwood Dr	167	250	1st Creek	Kuwahee	6/15/2004	1st Quarter
18	2045 Fenwood Dr	167	250	1st Creek	Kuwahee	6/15/2004	2nd Quarter
19	2504 Cecil Ave	1002	1500	1st Creek	Kuwahee	6/17/2004	2nd Quarter
20	5228 Magic Lantern	167	250	1st Creek	Kuwahee	7/1/2004	1st Quarter
21	5342 Summer Rose Blvd.	167	250	1st Creek	Kuwahee	7/12/2004	1st Quarter
22	5204 Tropicana Drive	167	250	1st Creek	Kuwahee	7/12/2004	1st Quarter
23	1312 East Walnut Grove Road	167	250	1st Creek	Kuwahee	7/13/2004	1st Quarter
24	5419 Rosebay	167	250	1st Creek	Kuwahee	7/20/2004	1st Quarter
25	4507 Intrigue Lane	167	250	1st Creek	Kuwahee	7/21/2004	1st Quarter
26	4618 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/22/2004	1st Quarter
27	4612 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/22/2004	1st Quarter
28	4528 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/22/2004	1st Quarter
29	4606 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/23/2004	1st Quarter
30	4600 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/23/2004	1st Quarter
31	4524 Ivy Rose Drive	167	250	1st Creek	Kuwahee	7/23/2004	1st Quarter
32	2701 Cecil Avenue	167	250	1st Creek	Kuwahee	7/27/2004	1st Quarter
33	2503 Washington Avenue	167	250	1st Creek	Kuwahee	7/27/2004	1st Quarter
34	5016 Magic Lantern Drive	167	250	1st Creek	Kuwahee	7/28/2004	1st Quarter
35	5529 Beverly Square Way	501	750	1st Creek	Kuwahee	7/29/2004	1st Quarter
36	4613 Mockingbird Dr	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
37	4804 Laurelwood Rd	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
38	5255 Fountainhead Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
39	5259 Fountainhead Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
40	4858 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
41	4854 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
42	5256 Fountainhead Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
43	5260 Fountainhead Ln	167	250	1st Creek	Kuwahee	7/29/2004	1st Quarter
44	5212 Sweet Kathleen Ln	167	250	1st Creek	Kuwahee	7/30/2004	1st Quarter
45	4500 Linton Rose Ln	167	250	1st Creek	Kuwahee	8/5/2004	1st Quarter
46	1407 Creekwood Dr	167	250	1st Creek	Kuwahee	8/10/2004	1st Quarter
47	5916 Grove Park Rd	167	250	1st Creek	Kuwahee	8/10/2004	1st Quarter
48	5206 Sweet Kathleen Ln	167	250	1st Creek	Kuwahee	8/11/2004	1st Quarter
49	5726 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter
50	5730 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
51	5734 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter
52	5738 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter
53	5472 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter
54	5722 Enchanted Ln	167	250	1st Creek	Kuwahee	8/16/2004	1st Quarter
55	2110 Washington Ave	167	250	1st Creek	Kuwahee	8/19/2004	1st Quarter
56	2122 Brice St	167	250	1st Creek	Kuwahee	8/19/2004	1st Quarter
57	2202 Brice St	167	250	1st Creek	Kuwahee	8/19/2004	1st Quarter
58	6028 Medlin Heights Rd	167	250	1st Creek	Kuwahee	9/2/2004	1st Quarter
59	6032 Medlin Heights Rd	167	250	1st Creek	Kuwahee	9/2/2004	1st Quarter
60	6036 Medlin Heights Rd	167	250	1st Creek	Kuwahee	9/2/2004	1st Quarter
61	6042 Medlin Heights Rd	167	250	1st Creek	Kuwahee	9/2/2004	1st Quarter
62	6048 Medlin Heights Rd	167	250	1st Creek	Kuwahee	9/2/2004	1st Quarter
63	Lot 6, Blazing Star Ln	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
64	Lot 7, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
65	Lot 8, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
66	Lot 9, Jade Pasture Ln	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
67	Lot 250, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	2nd Quarter
68	Lot 251, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
69	Lot 252, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	1st Quarter
70	Lot 253, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/3/2004	2nd Quarter
71	2504 East Glenwood Ave	167	250	1st Creek	Kuwahee	9/7/2004	1st Quarter
72	5425 Rosebay Rd	167	250	1st Creek	Kuwahee	9/7/2004	1st Quarter
73	3208 Gibbs Dr	167	250	1st Creek	Kuwahee	9/9/2004	1st Quarter
74	4510 Linton Rose Ln	167	250	1st Creek	Kuwahee	9/13/2004	1st Quarter
75	5225 Magic Lantern Dr	167	250	1st Creek	Kuwahee	9/13/2004	2nd Quarter
76	5503 Crestwood Rd	167	250	1st Creek	Kuwahee	9/14/2004	1st Quarter
77	5204 Fountain Gate Rd	167	250	1st Creek	Kuwahee	9/15/2004	1st Quarter
78	Lot 249, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/21/2004	1st Quarter
79	319 N Central St	0	0	1st Creek	Kuwahee	9/21/2004	2nd Quarter
80	5259 Walkercrest Ln	167	250	1st Creek	Kuwahee	9/22/2004	1st Quarter
81	Lot 248, Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	9/23/2004	1st Quarter
82	5242 Tropicana Dr	167	250	1st Creek	Kuwahee	9/23/2004	1st Quarter
83	5241 Tropicana Dr	167	250	1st Creek	Kuwahee	9/23/2004	1st Quarter
84	1335 Grainger Ave	167	250	1st Creek	Kuwahee	9/23/2004	1st Quarter
85	4904 High Grove Ln	167	250	1st Creek	Kuwahee	9/24/2004	1st Quarter
86	5209 Tropicana Dr	167	250	1st Creek	Kuwahee	9/24/2004	1st Quarter
87	5213 Tropicana Dr	167	250	1st Creek	Kuwahee	9/24/2004	1st Quarter
88	5360 Summer Rose Blvd	167	250	1st Creek	Kuwahee	9/28/2004	1st Quarter
89	5366 Summer Rose Blvd	167	250	1st Creek	Kuwahee	9/28/2004	1st Quarter
90	3201 Culpepper Rd	167	250	1st Creek	Kuwahee	10/4/2004	1st Quarter
91	4505 Linton Rose Ln	167	250	1st Creek	Kuwahee	10/5/2004	2nd Quarter
92	5612 Kesterbrooke Blvd	167	250	1st Creek	Kuwahee	10/14/2004	1st Quarter
93	5731 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
94	5743 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
95	5739 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
96	5735 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
97	5727 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
98	5723 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
99	5715 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
100	5701 Enchanted Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
101 4529 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
102 4607 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
103 4613 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
104 4619 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
105 4625 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
106 6516 Autumn Kayla Ln	167	250	1st Creek	Kuwahee	10/20/2004	1st Quarter
107 6030 Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	10/21/2004	1st Quarter
108 4016 Oakland Drive	167	250	1st Creek	Kuwahee	10/21/2004	1st Quarter
109 6500 Autumn Kayla Ln	167	250	1st Creek	Kuwahee	10/27/2004	1st Quarter
110 5021 Jade Pasture Ln	167	250	1st Creek	Kuwahee	10/28/2004	2nd Quarter
111 4601 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/29/2004	1st Quarter
112 4736 Ivy Rose Dr	167	250	1st Creek	Kuwahee	10/29/2004	1st Quarter
113 5354 Summer Rose Blvd	167	250	1st Creek	Kuwahee	10/29/2004	1st Quarter
114 5029 Fieldcrest Ln	167	250	1st Creek	Kuwahee	11/2/2004	1st Quarter
115 4511 Linton Rose Ln	167	250	1st Creek	Kuwahee	11/3/2004	1st Quarter
116 4501 Linton Rose Ln	167	250	1st Creek	Kuwahee	11/3/2004	1st Quarter
117 1900 Luttrell St	167	250	1st Creek	Kuwahee	11/9/2004	1st Quarter
118 5118 Gouffon Rd	167	250	1st Creek	Kuwahee	11/10/2004	1st Quarter
119 5005 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/10/2004	1st Quarter
120 5009 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/10/2004	1st Quarter
121 5013 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/10/2004	2nd Quarter
122 5017 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/10/2004	1st Quarter
123 6035 Shannon Valley Dr	334	500	1st Creek	Kuwahee	11/15/2004	1st Quarter
124 4502 Floribunda Ln	167	250	1st Creek	Kuwahee	11/15/2004	1st Quarter
125 4850 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
126 4846 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
127 4842 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
128 4838 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
129 4801 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
130 4805 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
131 4817 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
132 4821 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
133 4825 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
134 4829 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
135 4833 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
136 2610 N Cherry St	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
137 2616 N Cherry St	167	250	1st Creek	Kuwahee	11/19/2004	1st Quarter
138 5207 Sweet Kathleen Ln	167	250	1st Creek	Kuwahee	11/22/2004	2nd Quarter
139 5025 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	2nd Quarter
140 5029 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	2nd Quarter
141 6100 Fresh Garden Dr	167	250	1st Creek	Kuwahee	11/29/2004	1st Quarter
142 5014 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	1st Quarter
143 5030 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	1st Quarter
144 5034 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	2nd Quarter
145 5038 Jade Pasture Ln	167	250	1st Creek	Kuwahee	11/29/2004	2nd Quarter
146 5101 Prairie Clover Ln	167	250	1st Creek	Kuwahee	12/1/2004	1st Quarter
147 6031 Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	12/1/2004	1st Quarter
148 5037 Jade Pasture Ln	167	250	1st Creek	Kuwahee	12/1/2004	1st Quarter
149 5312 Beverly Oaks Dr	167	250	1st Creek	Kuwahee	12/6/2004	1st Quarter
150 2601 Cecil Ave	167	250	1st Creek	Kuwahee	12/7/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
151	2605 Cecil Ave	167	250	1st Creek	Kuwahee	12/7/2004	1st Quarter
152	2609 Cecil Ave	167	250	1st Creek	Kuwahee	12/7/2004	1st Quarter
153	2502 East Glenwood Ave	167	250	1st Creek	Kuwahee	12/14/2004	1st Quarter
154	5713 Washington Pk	0	0	1st Creek	Kuwahee	12/20/2004	1st Quarter
155	5529 Beverly Square Way	2171	3250	1st Creek	Kuwahee	12/21/2004	1st Quarter
156	2135 Bernhurst Dr	167	250	1st Creek	Kuwahee	1/6/2005	1st Quarter
157	4520 Linton Rose Ln	167	250	1st Creek	Kuwahee	1/6/2005	2nd Quarter
158	2317 Prosser Rd	2004	3000	1st Creek	Kuwahee	1/11/2005	1st Quarter
159	5373 Summer Rose Blvd	167	250	1st Creek	Kuwahee	1/12/2005	2nd Quarter
160	4700 Treybrooke Ln	167	250	1st Creek	Kuwahee	1/14/2005	2nd Quarter
161	5609 Cypress Tree Ln	167	250	1st Creek	Kuwahee	1/14/2005	1st Quarter
162	5308 Beverly Oaks Dr	167	250	1st Creek	Kuwahee	1/18/2005	1st Quarter
163	621 Drakewood Rd	167	250	1st Creek	Kuwahee	1/18/2005	1st Quarter
164	5263 Walkercrest In	167	250	1st Creek	Kuwahee	1/20/2005	1st Quarter
165	4616 Aylesbury Dr	167	250	1st Creek	Kuwahee	1/21/2005	1st Quarter
166	5029 Fieldcrest In	167	250	1st Creek	Kuwahee	1/25/2005	1st Quarter
167	5005 Blazing Star Ln	167	250	1st Creek	Kuwahee	1/26/2005	2nd Quarter
168	5006 Blazing Star Ln	167	250	1st Creek	Kuwahee	1/26/2005	1st Quarter
169	5204 Magic Lantern Dr	167	250	1st Creek	Kuwahee	1/31/2005	1st Quarter
170	1807 Dandridge Ave	334	500	1st Creek	Kuwahee	2/1/2005	1st Quarter
171	2815 Copeland St	167	250	1st Creek	Kuwahee	2/1/2005	1st Quarter
172	4306 Gaines Rd	167	250	1st Creek	Kuwahee	2/8/2005	1st Quarter
173	1673 Maple View Way	4008	6000	1st Creek	Kuwahee	2/8/2005	2nd Quarter
174	5211 Trumpet Vine Ln	167	250	1st Creek	Kuwahee	2/9/2005	1st Quarter
175	5018 Ivy Rose Dr	167	250	1st Creek	Kuwahee	2/15/2005	1st Quarter
176	5010 Ivy Rose Dr	167	250	1st Creek	Kuwahee	2/15/2005	1st Quarter
177	4703 Barbara Dr	167	250	1st Creek	Kuwahee	2/15/2005	1st Quarter
178	3203 Misty Hill Way	668	1000	1st Creek	Kuwahee	2/17/2005	1st Quarter
179	2128 Linden Ave	167	250	1st Creek	Kuwahee	2/17/2005	2nd Quarter
180	4832 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
181	4828 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
182	4824 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
183	4812 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
184	4808 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
185	4804 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
186	4800 Lindsey Blair Ln	167	250	1st Creek	Kuwahee	2/23/2005	1st Quarter
187	2445 Hoitt Ave	167	250	1st Creek	Kuwahee	2/24/2005	1st Quarter
188	902 Firefly Way	4008	6000	1st Creek	Kuwahee	3/1/2005	2nd Quarter
189	5009 Blazing Star Ln	167	250	1st Creek	Kuwahee	3/2/2005	2nd Quarter
190	5614 Fountain Gate Rd	167	250	1st Creek	Kuwahee	3/3/2005	2nd Quarter
191	1120 Forsythe St	167	250	1st Creek	Kuwahee	3/3/2005	1st Quarter
192	4805 N Broadway	835	1250	1st Creek	Kuwahee	3/8/2005	2nd Quarter
193	2504 Maple Dr	167	250	1st Creek	Kuwahee	3/8/2005	2nd Quarter
194	5557 Beverly Square Way	501	750	1st Creek	Kuwahee	3/15/2005	2nd Quarter
195	4867 N Broadway	501	750	1st Creek	Kuwahee	3/15/2005	1st Quarter
196	4021 Acorn Drive	167	250	1st Creek	Kuwahee	3/29/2005	3rd Quarter
197	4023 Acorn Drive	167	250	1st Creek	Kuwahee	3/29/2005	3rd Quarter
198	5114 Tazewell Pike	167	250	1st Creek	Kuwahee	3/30/2005	3rd Quarter
199	3906 Fairmont Blvd	167	250	1st Creek	Kuwahee	3/31/2005	3rd Quarter
200	5001 Blazing Star Lane	167	250	1st Creek	Kuwahee	3/31/2005	3rd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
201	4528 Linton Rose Lane	167	250	1st Creek	Kuwahee	4/5/2005	3rd Quarter
202	5701 N Broadway	405	608	1st Creek	Kuwahee	4/7/2005	3rd Quarter
203	1504 Cecil Avenue	167	250	1st Creek	Kuwahee	4/12/2005	3rd Quarter
204	5372 Summer Rose Blvd	167	250	1st Creek	Kuwahee	4/20/2005	3rd Quarter
205	2139 Bernhurst Drive	167	250	1st Creek	Kuwahee	4/21/2005	3rd Quarter
206	6001 Shannon Valley Farms Blvd	167	250	1st Creek	Kuwahee	4/25/2005	3rd Quarter
207	1718 Ridgecrest Drive	167	250	1st Creek	Kuwahee	4/28/2005	3rd Quarter
208	2504 Cecil Avenue	150	225	1st Creek	Kuwahee	5/10/2005	3rd Quarter
209	6536 Autumn Kayle Lane	167	250	1st Creek	Kuwahee	5/10/2005	3rd Quarter
210	5233 Magic Lantern Drive	167	250	1st Creek	Kuwahee	5/11/2005	3rd Quarter
211	1605 West Mansfield Drive	167	250	1st Creek	Kuwahee	5/19/2005	3rd Quarter
212	4741 N Broadway	763	1,145	1st Creek	Kuwahee	5/24/2005	3rd Quarter
213	4607 Linton Rose Lane	167	250	1st Creek	Kuwahee	5/31/2005	3rd Quarter
214	4801 Linton Rose Lane	167	250	1st Creek	Kuwahee	5/31/2005	3rd Quarter
215	3320 Knox Lane	167	250	1st Creek	Kuwahee	6/2/2005	3rd Quarter
216	4139 Oakstone Lane	167	250	1st Creek	Kuwahee	6/7/2005	3rd Quarter
217	4143 Oakstone Lane	167	250	1st Creek	Kuwahee	6/7/2005	3rd Quarter
218	4237 Homewood Road	167	250	1st Creek	Kuwahee	6/7/2005	3rd Quarter
219	5014 Ivy Rose Drive	167	250	1st Creek	Kuwahee	6/8/2005	3rd Quarter
220	5024 Ivy Rose Drive	167	250	1st Creek	Kuwahee	6/8/2005	3rd Quarter
221	4119 Oakstone Lane	167	250	1st Creek	Kuwahee	6/9/2005	3rd Quarter
222	4119 Oakstone Lane	167	250	1st Creek	Kuwahee	6/9/2005	3rd Quarter
223	4123 Oakstone Lane	167	250	1st Creek	Kuwahee	6/9/2005	3rd Quarter
224	4127 Oakstone Lane	167	250	1st Creek	Kuwahee	6/9/2005	3rd Quarter
225	4700 New Harvest Lane	6,250	9,375	1st Creek	Kuwahee	6/9/2005	3rd Quarter
226	5821 Fountain Road	167	250	1st Creek	Kuwahee	6/14/2005	3rd Quarter
227	2941 Tazewell Pike	193	290	1st Creek	Kuwahee	6/16/2005	3rd Quarter
228	5321 Fountain Gate Rd	167	250	1st Creek	Kuwahee	6/20/2005	3rd Quarter
229	5246 Hugh Willis Road	167	250	1st Creek	Kuwahee	6/20/2005	3rd Quarter
230	4313 Aylesbury Drive	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
231	1119 Forsythe Street	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
232	2107 McCroskey Avenue	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
233	4221 Homewood Road	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
234	4222 Homewood Road	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
235	4225 Homewood Road	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
236	4226 Homewood Road	167	250	1st Creek	Kuwahee	6/21/2005	3rd Quarter
237	4900 Ivy Rose Drive	167	250	1st Creek	Kuwahee	6/22/2005	3rd Quarter
238	4201 Raven Drive	167	250	1st Creek	Kuwahee	6/23/2005	3rd Quarter
239	614 Mitchell Drive	138	207	1st Creek	Kuwahee	6/30/2005	3rd Quarter
240	622 Mitchell Drive	138	207	1st Creek	Kuwahee	6/30/2005	3rd Quarter
241	1308 Maryland Ave	0	0	2nd Creek	Kuwahee	5/25/2004	1st Quarter
242	4531 Clinton Highway	501	750	2nd Creek	Kuwahee	5/26/2004	1st Quarter
243	401 Cedar Ave	167	250	2nd Creek	Kuwahee	5/28/2004	1st Quarter
244	205 W. Baxter Avenue	167	250	2nd Creek	Kuwahee	6/22/2004	1st Quarter
245	406 Walnut Street	0	0	2nd Creek	Kuwahee	6/30/2004	2nd Quarter
246	1630 Boyd Street	167	250	2nd Creek	Kuwahee	7/27/2004	2nd Quarter
247	1015 Tulip Ave	334	500	2nd Creek	Kuwahee	8/10/2004	1st Quarter
248	1426 Lantana Ln	167	250	2nd Creek	Kuwahee	8/19/2004	1st Quarter
249	420 Watauga Ave	167	250	2nd Creek	Kuwahee	8/19/2004	1st Quarter
250	928 Virginia Ave	167	250	2nd Creek	Kuwahee	9/9/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
251	804 W Oak Hill Ave	167	250	2nd Creek	Kuwahee	10/7/2004	1st Quarter
252	800 W Oak Hill Ave	167	250	2nd Creek	Kuwahee	10/7/2004	1st Quarter
253	1428 W Fourth Ave	167	250	2nd Creek	Kuwahee	10/19/2004	1st Quarter
254	1438 W Fourth Ave	167	250	2nd Creek	Kuwahee	10/19/2004	1st Quarter
255	305 Kensi Dr	167	250	2nd Creek	Kuwahee	10/26/2004	1st Quarter
256	808 W Oak Hill Ave	167	250	2nd Creek	Kuwahee	11/2/2004	1st Quarter
257	4901 Rowan Rd	0	0	2nd Creek	Kuwahee	11/2/2004	1st Quarter
258	1013 Louisiana Ave	167	250	2nd Creek	Kuwahee	11/9/2004	1st Quarter
259	4500 Central Avenue Pk	0	0	2nd Creek	Kuwahee	11/11/2004	1st Quarter
260	635 Dameron Ave	334	500	2nd Creek	Kuwahee	11/19/2004	1st Quarter
261	4500 Central Avenue Pk	0	0	2nd Creek	Kuwahee	12/9/2004	1st Quarter
262	3319 Johnston St	167	250	2nd Creek	Kuwahee	12/28/2004	1st Quarter
263	2314 Stonewall St	167	250	2nd Creek	Kuwahee	1/11/2005	1st Quarter
264	1209 Euclid Ave	167	250	2nd Creek	Kuwahee	1/27/2005	1st Quarter
265	1308 Wilson Rd	668	1000	2nd Creek	Kuwahee	3/8/2005	1st Quarter
266	1416 Lantana Lane	167	250	2nd Creek	Kuwahee	4/7/2005	3rd Quarter
267	5502 Ridgefield Road	167	250	2nd Creek	Kuwahee	5/17/2005	3rd Quarter
268	306 E Oklahoma Avenue	167	250	2nd Creek	Kuwahee	5/24/2005	3rd Quarter
269	4604 Fennel Road	442	663	2nd Creek	Kuwahee	5/24/2005	3rd Quarter
270	724 Dutch Valley Drive	676	1,014	2nd Creek	Kuwahee	5/31/2005	3rd Quarter
271	703 Belleaire Avenue	167	250	2nd Creek	Kuwahee	6/7/2005	3rd Quarter
272	4616 Fennel Road	774	1161	2nd Creek	Kuwahee	6/28/2005	3rd Quarter
273	1705 Ailor Ave	167	250	3rd Creek	Kuwahee	5/25/2004	1st Quarter
274	1221 Ohio Ave	167	250	3rd Creek	Kuwahee	5/25/2004	1st Quarter
275	1863 Tillery Square Ln	167	250	3rd Creek	Kuwahee	6/1/2004	1st Quarter
276	1804 Tillery Square Ln	167	250	3rd Creek	Kuwahee	6/1/2004	1st Quarter
277	3328 Sutherland Ave	167	250	3rd Creek	Kuwahee	6/3/2004	1st Quarter
278	2804 Eaglewood Lane	167	250	3rd Creek	Kuwahee	7/14/2004	1st Quarter
279	2815 Oakleigh Township Drive	167	250	3rd Creek	Kuwahee	7/15/2004	1st Quarter
280	2224 Orange Ave	167	250	3rd Creek	Kuwahee	7/15/2004	2nd Quarter
281	2232 Orange Ave	167	250	3rd Creek	Kuwahee	7/15/2004	1st Quarter
282	2240 Orange Ave	167	250	3rd Creek	Kuwahee	7/15/2004	2nd Quarter
283	1801 Western Avenue	0	0	3rd Creek	Kuwahee	7/20/2004	1st Quarter
284	1919 Tennessee Avenue	1002	1500	3rd Creek	Kuwahee	7/20/2004	2nd Quarter
285	1713 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
286	1740 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
287	1714 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
288	1737 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
289	1605 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
290	1705 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
291	1701 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
292	1609 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
293	1726 Moses Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
294	1912 Brandau Street	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
295	1934 Brandau Street	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
296	1418 University Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	2nd Quarter
297	800 Knoxville College	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
298	720 Monroe Senter St	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
299	741 Monroe Senter St	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
300	804 Knoxville College Dr	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
301	1600 Dora Street	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
302	219 Douglas Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	1st Quarter
303	1414 Iredell Avenue	167	250	3rd Creek	Kuwahee	7/27/2004	2nd Quarter
304	1900 Brandau St	167	250	3rd Creek	Kuwahee	8/3/2004	1st Quarter
305	1006 Knoxville College Dr	167	250	3rd Creek	Kuwahee	8/3/2004	1st Quarter
306	2608 Woods-Smith Rd	0	0	3rd Creek	Kuwahee	8/5/2004	1st Quarter
307	2811 Oakleigh Township Dr	167	250	3rd Creek	Kuwahee	8/12/2004	1st Quarter
308	2911 Timber Green Ln	167	250	3rd Creek	Kuwahee	8/16/2004	1st Quarter
309	1813 Tillery Square Ln	167	250	3rd Creek	Kuwahee	8/19/2004	1st Quarter
310	1821 Tillery Square Ln	167	250	3rd Creek	Kuwahee	8/19/2004	1st Quarter
311	1847 Explorer Ln	167	250	3rd Creek	Kuwahee	8/24/2004	1st Quarter
312	4054 Gumwood Ln	167	250	3rd Creek	Kuwahee	9/9/2004	1st Quarter
313	4920 Tenwood Dr	167	250	3rd Creek	Kuwahee	9/16/2004	1st Quarter
314	6631 Clinton Hwy	334	500	3rd Creek	Kuwahee	9/21/2004	1st Quarter
315	6005 Westmeade Rd	167	250	3rd Creek	Kuwahee	9/21/2004	1st Quarter
316	6009 Westmeade Rd	167	250	3rd Creek	Kuwahee	9/21/2004	1st Quarter
317	4832 Bradshaw Rd	167	250	3rd Creek	Kuwahee	9/30/2004	1st Quarter
318	4836 Bradshaw Rd	167	250	3rd Creek	Kuwahee	9/30/2004	1st Quarter
319	4914 Tenwood Dr	167	250	3rd Creek	Kuwahee	10/7/2004	1st Quarter
320	4916 Tenwood Dr	167	250	3rd Creek	Kuwahee	10/7/2004	1st Quarter
321	5119 Woodglen Dr	167	250	3rd Creek	Kuwahee	10/12/2004	1st Quarter
322	5123 Woodglen Dr	167	250	3rd Creek	Kuwahee	10/12/2004	1st Quarter
323	1505 New York Ave	167	250	3rd Creek	Kuwahee	10/12/2004	1st Quarter
324	1031 East Nokomis Cir	167	250	3rd Creek	Kuwahee	10/19/2004	1st Quarter
325	1038 East Nokomis Cir	167	250	3rd Creek	Kuwahee	10/19/2004	1st Quarter
326	1415 Iredell Ave	334	500	3rd Creek	Kuwahee	10/21/2004	1st Quarter
327	4600 Bobcat Ln	334	500	3rd Creek	Kuwahee	10/22/2004	1st Quarter
328	1916 Connecticut Ave	167	250	3rd Creek	Kuwahee	10/26/2004	1st Quarter
329	2606 Shady Grove Ln	167	250	3rd Creek	Kuwahee	10/26/2004	1st Quarter
330	2612 Shady Grove Ln	167	250	3rd Creek	Kuwahee	10/26/2004	1st Quarter
331	923 Ohio Ave	167	250	3rd Creek	Kuwahee	10/28/2004	1st Quarter
332	2800 Oakleigh Township Dr	167	250	3rd Creek	Kuwahee	10/28/2004	2nd Quarter
333	3434 Savoy St	167	250	3rd Creek	Kuwahee	11/2/2004	1st Quarter
334	1825 Tillery Square Ln	167	250	3rd Creek	Kuwahee	11/2/2004	1st Quarter
335	900 Knoxville College Dr	167	250	3rd Creek	Kuwahee	11/9/2004	1st Quarter
336	808 Knoxville College Dr	167	250	3rd Creek	Kuwahee	11/9/2004	1st Quarter
337	1853 Tillery Square Ln	167	250	3rd Creek	Kuwahee	11/16/2004	1st Quarter
338	1846 Explorer Ln	167	250	3rd Creek	Kuwahee	11/16/2004	1st Quarter
339	3904 Lonas Dr	15030	22500	3rd Creek	Kuwahee	11/16/2004	1st Quarter
340	1805 Tillery Square Ln	167	250	3rd Creek	Kuwahee	11/22/2004	1st Quarter
341	2922 Timber Green Ln	167	250	3rd Creek	Kuwahee	12/6/2004	1st Quarter
342	2018 Western Ave	6346	9500	3rd Creek	Kuwahee	12/7/2004	2nd Quarter
343	2234 Keith Ave	0	0	3rd Creek	Kuwahee	12/7/2004	1st Quarter
344	6075 Round Hill Ln	835	1250	3rd Creek	Kuwahee	12/9/2004	1st Quarter
345	1848 Tillery Square Ln	167	250	3rd Creek	Kuwahee	12/14/2004	1st Quarter
346	4602 Bobcat Ln	0	0	3rd Creek	Kuwahee	1/5/2005	1st Quarter
347	4607 Bobcat Ln	0	0	3rd Creek	Kuwahee	1/5/2005	1st Quarter
348	1840 Western Ave	0	0	3rd Creek	Kuwahee	1/6/2005	1st Quarter
349	6051 Round Hill Ln	167	250	3rd Creek	Kuwahee	1/18/2005	2nd Quarter
350	2101 Texas Ave	167	250	3rd Creek	Kuwahee	1/20/2005	2nd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
351	1212 Ohio Ave	167	250	3rd Creek	Kuwahee	1/20/2005	2nd Quarter
352	3310 Divide St	167	250	3rd Creek	Kuwahee	2/1/2005	1st Quarter
353	6115 Morning Glory Pl	167	250	3rd Creek	Kuwahee	2/8/2005	2nd Quarter
354	6119 Morning Glory Pl	167	250	3rd Creek	Kuwahee	2/8/2005	1st Quarter
355	6123 Morning Glory Pl	167	250	3rd Creek	Kuwahee	2/8/2005	2nd Quarter
356	1726 Delaware Ave	167	250	3rd Creek	Kuwahee	2/10/2005	1st Quarter
357	1505 Ohio Ave	167	250	3rd Creek	Kuwahee	2/15/2005	1st Quarter
358	208 Sequoyah Gardens Way	167	250	3rd Creek	Kuwahee	2/17/2005	2nd Quarter
359	1833 Tillery Square Ln	167	250	3rd Creek	Kuwahee	2/17/2005	1st Quarter
360	1829 Tillery Square Ln	167	250	3rd Creek	Kuwahee	2/17/2005	1st Quarter
361	1801 Western Ave	334	500	3rd Creek	Kuwahee	2/22/2005	2nd Quarter
362	2923 Timber Green Ln	167	250	3rd Creek	Kuwahee	2/23/2005	2nd Quarter
363	1135 Ohio Ave	167	250	3rd Creek	Kuwahee	2/24/2005	2nd Quarter
364	2814 Oakleigh Township Dr	167	250	3rd Creek	Kuwahee	2/28/2005	1st Quarter
365	6631 Clinton Hwy	668	1000	3rd Creek	Kuwahee	3/1/2005	1st Quarter
366	6083 Round Hill Ln	1670	2500	3rd Creek	Kuwahee	3/1/2005	2nd Quarter
367	2551 Maple Branch Ln	1670	2500	3rd Creek	Kuwahee	3/1/2005	2nd Quarter
368	5800 Brierview Ln	167	250	3rd Creek	Kuwahee	3/1/2005	2nd Quarter
369	6035 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/1/2005	2nd Quarter
370	6039 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/1/2005	1st Quarter
371	1966 Clove Ln	167	250	3rd Creek	Kuwahee	3/15/2005	1st Quarter
372	1960 Clove Ln	167	250	3rd Creek	Kuwahee	3/15/2005	2nd Quarter
373	6000 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/17/2005	2nd Quarter
374	6008 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/17/2005	2nd Quarter
375	6020 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/17/2005	2nd Quarter
376	5006 Knoxwood Dr	167	250	3rd Creek	Kuwahee	3/17/2005	1st Quarter
377	4905 Woodglen Dr	167	250	3rd Creek	Kuwahee	3/17/2005	1st Quarter
378	4907 Woodglen Dr	167	250	3rd Creek	Kuwahee	3/17/2005	1st Quarter
379	1852 Tillery Square Ln	167	250	3rd Creek	Kuwahee	3/17/2005	1st Quarter
380	2100 White Ave	1336	2000	3rd Creek	Kuwahee	3/17/2005	1st Quarter
381	6012 Glenmay Dr	167	250	3rd Creek	Kuwahee	3/17/2005	2nd Quarter
382	6101 Burlwood Rd	167	250	3rd Creek	Kuwahee	3/22/2005	1st Quarter
383	4211 Pleasant Ridge Rd	167	250	3rd Creek	Kuwahee	3/22/2005	1st Quarter
384	1845 Tillery Square Lane	167	250	3rd Creek	Kuwahee	3/29/2005	3rd Quarter
385	1849 Tillery Square Lane	167	250	3rd Creek	Kuwahee	3/29/2005	3rd Quarter
386	2806 Ramona Avenue	167	250	3rd Creek	Kuwahee	3/29/2005	3rd Quarter
387	6100 Glenmay Drive	167	250	3rd Creek	Kuwahee	3/29/2005	3rd Quarter
388	2914 Timber Green Lane	167	250	3rd Creek	Kuwahee	3/30/2005	3rd Quarter
389	2806 Oakleigh Township Drive	167	250	3rd Creek	Kuwahee	4/1/2005	3rd Quarter
390	2809 Eaglewood Lane	167	250	3rd Creek	Kuwahee	4/1/2005	3rd Quarter
391	2020 Wilson Road	9,936	14,904	3rd Creek	Kuwahee	4/5/2005	3rd Quarter
392	5007 Woodglen Drive	167	250	3rd Creek	Kuwahee	4/14/2005	3rd Quarter
393	5700 Walden Woods Court	167	250	3rd Creek	Kuwahee	4/14/2005	3rd Quarter
394	6901 Ellesmere Drive	167	250	3rd Creek	Kuwahee	4/14/2005	3rd Quarter
395	432 Anteelah Trail	167	250	3rd Creek	Kuwahee	4/19/2005	3rd Quarter
396	1510 University Avenue	150	225	3rd Creek	Kuwahee	4/19/2005	3rd Quarter
397	2815 Texas Avenue	3,240	4,860	3rd Creek	Kuwahee	4/26/2005	3rd Quarter
398	4824 Old Kingston Pike	650	975	3rd Creek	Kuwahee	4/26/2005	3rd Quarter
399	6104 Glenmay Drive	167	250	3rd Creek	Kuwahee	4/28/2005	3rd Quarter
400	4501 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
401	4501 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
402	4501 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
403	4501 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
404	4502 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
405	4503 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
406	4503 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
407	4503 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
408	4503 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
409	4504 Ball Camp Pike	192	288	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
410	4504 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
411	4505 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
412	4505 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
413	4505 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
414	4505 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
415	4506 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
416	4506 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
417	4507 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
418	4507 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
419	4507 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
420	4507 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
421	4508 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
422	4508 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
423	4509 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
424	4509 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
425	4509 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
426	4509 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
427	4509 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
428	4510 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
429	4511 Elm Ridge Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
430	4511 Hickory Haven Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
431	4511 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
432	4511 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
433	4512 Pine Glen Way	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
434	4512 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
435	4514 Sycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
436	4516 ycamore Grove	138	207	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
437	6029 Glenmay Drive	167	250	3rd Creek	Kuwahee	5/10/2005	3rd Quarter
438	3434 Mynatt Avenue	1,340	2,010	3rd Creek	Kuwahee	5/17/2005	3rd Quarter
439	6405 Ridge Run Drive	167	250	3rd Creek	Kuwahee	5/19/2005	3rd Quarter
440	2558 Maple Branch Lane	167	250	3rd Creek	Kuwahee	5/24/2005	3rd Quarter
441	5502 Kenbrook Lane	167	250	3rd Creek	Kuwahee	5/24/2005	3rd Quarter
442	6021 Glenmay Drive	167	250	3rd Creek	Kuwahee	5/31/2005	3rd Quarter
443	6118 Morning Glory Place	167	250	3rd Creek	Kuwahee	5/31/2005	3rd Quarter
444	4708 Santala Drive	167	250	3rd Creek	Kuwahee	6/7/2005	3rd Quarter
445	700 Sapphire Road	167	250	3rd Creek	Kuwahee	6/14/2005	3rd Quarter
446	2401 Lassie Way	1,750	2,625	3rd Creek	Kuwahee	6/14/2005	3rd Quarter
447	4712 Santala Drive	167	250	3rd Creek	Kuwahee	6/14/2005	3rd Quarter
448	5800 Pine Needle Lane	167	250	3rd Creek	Kuwahee	6/14/2005	3rd Quarter
449	2805 Timber Green Lane	167	250	3rd Creek	Kuwahee	6/16/2005	3rd Quarter
450	1864 Explorer Lane	167	250	3rd Creek	Kuwahee	6/21/2005	3rd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
451	2808 Timber Green Lane	167	250	3rd Creek	Kuwahee	6/24/2005	3rd Quarter
452	3814 Dance Avenue	175	263	3rd Creek	Kuwahee	6/28/2005	3rd Quarter
453	4511 Sunflower Drive	167	250	3rd Creek	Kuwahee	6/28/2005	3rd Quarter
454	6017 Glenmay Drive	167	250	3rd Creek	Kuwahee	6/30/2005	3rd Quarter
455	2529 Maple Branch Lane	276	414	3rd Creek	Kuwahee	6/30/2005	3rd Quarter
456	2508 Maple Branch Lane	276	414	3rd Creek	Kuwahee	6/30/2005	3rd Quarter
457	6101 Round Hill Lane	276	414	3rd Creek	Kuwahee	6/30/2005	3rd Quarter
458	5225 Bent River Blvd	167	250	4th Creek	4th Creek	5/26/2004	1st Quarter
459	2314 Slate Valley Ln	167	250	4th Creek	4th Creek	5/26/2004	1st Quarter
460	2330 Slate Valley Ln	167	250	4th Creek	4th Creek	5/26/2004	1st Quarter
461	5235 Bent River Blvd	167	250	4th Creek	4th Creek	5/27/2004	1st Quarter
462	2303 Slate Valley Ln	167	250	4th Creek	4th Creek	6/1/2004	1st Quarter
463	554 Stratfield Wy	167	250	4th Creek	4th Creek	6/3/2004	1st Quarter
464	206 Whithorn Ln	167	250	4th Creek	4th Creek	6/3/2004	1st Quarter
465	224 Kirkwall Ln	167	250	4th Creek	4th Creek	6/3/2004	1st Quarter
466	7424 Northshore Dr	0	0	4th Creek	4th Creek	6/3/2004	1st Quarter
467	7318 Bellingham Dr	167	250	4th Creek	4th Creek	6/8/2004	1st Quarter
468	823 Big Ben Way	167	250	4th Creek	4th Creek	6/9/2004	1st Quarter
469	819 Big Ben Way	167	250	4th Creek	4th Creek	6/9/2004	1st Quarter
470	805 Big Ben Way	167	250	4th Creek	4th Creek	6/9/2004	1st Quarter
471	801 Big Ben Way	167	250	4th Creek	4th Creek	6/9/2004	1st Quarter
472	2104 Cove View Way	167	250	4th Creek	4th Creek	6/10/2004	1st Quarter
473	1008 Webster Groves Ln	334	500	4th Creek	4th Creek	6/10/2004	1st Quarter
474	2334 Saddlebrook	167	250	4th Creek	4th Creek	6/22/2004	1st Quarter
475	6429 Granite Hill Lane	167	250	4th Creek	4th Creek	6/22/2004	1st Quarter
476	6425 Granite Hill Lane	167	250	4th Creek	4th Creek	6/22/2004	1st Quarter
477	501 Camp Light Way	2338	3500	4th Creek	4th Creek	6/22/2004	1st Quarter
478	221 Rothesay Lane	167	250	4th Creek	4th Creek	6/29/2004	1st Quarter
479	218 Rothesay Lane	167	250	4th Creek	4th Creek	6/29/2004	1st Quarter
480	5951 Middlebrook Pke	38410	57500	4th Creek	4th Creek	7/6/2004	1st Quarter
481	8262 Glenrothes Blvd	167	250	4th Creek	4th Creek	7/7/2004	1st Quarter
482	620 Stratfield Way	167	250	4th Creek	4th Creek	7/8/2004	2nd Quarter
483	7208 S. Northshore Drive	167	250	4th Creek	4th Creek	7/8/2004	1st Quarter
484	7151 Sir Arthur Way	167	250	4th Creek	4th Creek	7/8/2004	1st Quarter
485	404 Westbridge Drive	167	250	4th Creek	4th Creek	7/13/2004	1st Quarter
486	7500 Lawford Road	167	250	4th Creek	4th Creek	7/13/2004	1st Quarter
487	7700 Ellisville Rd	501	750	4th Creek	4th Creek	7/15/2004	1st Quarter
488	7700 Ellisville Rd	835	1250	4th Creek	4th Creek	7/15/2004	1st Quarter
489	5347 Bent River Rd	167	250	4th Creek	4th Creek	7/23/2004	1st Quarter
490	7108 Westland Drive	167	250	4th Creek	4th Creek	7/27/2004	1st Quarter
491	6405 Granite Hill Ln	167	250	4th Creek	4th Creek	8/3/2004	1st Quarter
492	423 Westbridge Dr	167	250	4th Creek	4th Creek	8/5/2004	1st Quarter
493	419 Westbridge Dr	167	250	4th Creek	4th Creek	8/5/2004	1st Quarter
494	7400 Bellingham Dr	167	250	4th Creek	4th Creek	8/10/2004	1st Quarter
495	7823 Ellisville Rd	3340	5000	4th Creek	4th Creek	8/17/2004	2nd Quarter
496	5277 Bent River Blvd	167	250	4th Creek	4th Creek	8/25/2004	1st Quarter
497	7214 Iron Duke Way	167	250	4th Creek	4th Creek	9/2/2004	1st Quarter
498	100 Brechin Ln	167	250	4th Creek	4th Creek	9/7/2004	1st Quarter
499	411 Westbridge Dr	167	250	4th Creek	4th Creek	9/7/2004	1st Quarter
500	7420 Bellingham Drive	167	250	4th Creek	4th Creek	9/21/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
501 501 Camp Light Way	3340	5000	4th Creek	4th Creek	9/21/2004	1st Quarter
502 8050 Ellisville Ln	835	1250	4th Creek	4th Creek	9/24/2004	1st Quarter
503 6429 Cobblecreek Way	167	250	4th Creek	4th Creek	9/30/2004	1st Quarter
504 6439 Cobblecreek Way	167	250	4th Creek	4th Creek	9/30/2004	1st Quarter
505 6406 Granite Hill Ln	167	250	4th Creek	4th Creek	10/7/2004	1st Quarter
506 6409 Granite Hill Ln	167	250	4th Creek	4th Creek	10/7/2004	1st Quarter
507 Ball Road Area	58283	87250	4th Creek	4th Creek	10/11/2004	2nd Quarter
508 8218 Glenrothes Blvd	167	250	4th Creek	4th Creek	10/12/2004	1st Quarter
509 6435 Cobblecreek Way	167	250	4th Creek	4th Creek	10/19/2004	1st Quarter
510 841 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
511 837 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
512 831 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
513 827 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
514 815 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
515 809 Big Ben Way	167	250	4th Creek	4th Creek	10/21/2004	1st Quarter
516 8035 Kingston Pk	167	250	4th Creek	4th Creek	10/26/2004	2nd Quarter
517 2313 Slate Valley Ln	167	250	4th Creek	4th Creek	10/26/2004	1st Quarter
518 2309 Slate Valley Ln	167	250	4th Creek	4th Creek	10/26/2004	1st Quarter
519 8413 Kingston Pike	334	500	4th Creek	4th Creek	10/28/2004	1st Quarter
520 1718 Evening Shade Ln	167	250	4th Creek	4th Creek	10/29/2004	1st Quarter
521 1707 Evening Shade Ln	167	250	4th Creek	4th Creek	10/29/2004	1st Quarter
522 7004 Shady Knoll Ln	167	250	4th Creek	4th Creek	10/29/2004	1st Quarter
523 2317 Slate Valley Ln	167	250	4th Creek	4th Creek	11/2/2004	1st Quarter
524 6417 Granite Hill Ln	167	250	4th Creek	4th Creek	11/2/2004	1st Quarter
525 7751 S Northshore Dr	334	500	4th Creek	4th Creek	11/4/2004	1st Quarter
526 2323 Slate Valley Ln	167	250	4th Creek	4th Creek	11/9/2004	1st Quarter
527 2327 Slate Valley Ln	167	250	4th Creek	4th Creek	11/9/2004	1st Quarter
528 6413 Granite Hill Ln	167	250	4th Creek	4th Creek	11/9/2004	1st Quarter
529 5219 Bent River Blvd	167	250	4th Creek	4th Creek	11/10/2004	1st Quarter
530 7412 Bellingham Dr	167	250	4th Creek	4th Creek	11/22/2004	1st Quarter
531 1816 Duncan Woods Lane	167	250	4th Creek	4th Creek	11/24/2004	1st Quarter
532 607 Stratfield Way	167	250	4th Creek	4th Creek	11/30/2004	1st Quarter
533 5655 Crooked Pine Ln	167	250	4th Creek	4th Creek	11/30/2004	1st Quarter
534 7751 S Northshore Dr	0	0	4th Creek	4th Creek	12/2/2004	1st Quarter
535 8331 East Walker Springs Ln	2004	3000	4th Creek	4th Creek	12/7/2004	1st Quarter
536 1451 Dowell Springs Blvd	2505	3750	4th Creek	4th Creek	12/7/2004	1st Quarter
537 1312 Rudder Oaks Way	167	250	4th Creek	4th Creek	12/8/2004	1st Quarter
538 7308 Lorimar Pl	167	250	4th Creek	4th Creek	12/9/2004	1st Quarter
539 2346 Slate Valley Ln	167	250	4th Creek	4th Creek	12/14/2004	1st Quarter
540 1321 Rudder Oaks Way	167	250	4th Creek	4th Creek	12/17/2004	1st Quarter
541 5505 Crooked Pine Ln	167	250	4th Creek	4th Creek	12/21/2004	1st Quarter
542 801 Londontown Way	11189	16750	4th Creek	4th Creek	12/21/2004	1st Quarter
543 1114 April Dr	167	250	4th Creek	4th Creek	12/23/2004	1st Quarter
544 1410 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	2nd Quarter
545 1412 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	2nd Quarter
546 1422 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	2nd Quarter
547 1424 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	2nd Quarter
548 1416 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	1st Quarter
549 1418 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	2nd Quarter
550 1428 Villa Forest Way	167	250	4th Creek	4th Creek	1/24/2005	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
551	8008 Ellisville Ln	2505	3750	4th Creek	4th Creek	2/3/2005	1st Quarter
552	7636 Chatham Cir	334	500	4th Creek	4th Creek	2/8/2005	1st Quarter
553	8231 Kingston Pk	334	500	4th Creek	4th Creek	2/22/2005	1st Quarter
554	7016 Shady Knoll Ln	167	250	4th Creek	4th Creek	3/2/2005	1st Quarter
555	7031 Shady Knoll Ln	167	250	4th Creek	4th Creek	3/2/2005	1st Quarter
556	7704 Devonshire Dr	167	250	4th Creek	4th Creek	3/3/2005	1st Quarter
557	6428 Granite Hill Ln	167	250	4th Creek	4th Creek	3/8/2005	1st Quarter
558	2350 Slate Valley Ln	167	250	4th Creek	4th Creek	3/8/2005	1st Quarter
559	2358 Slate Valley Ln	167	250	4th Creek	4th Creek	3/8/2005	1st Quarter
560	8413 Kingston Pk	501	750	4th Creek	4th Creek	3/10/2005	1st Quarter
561	1716 Glenbean Court	167	250	4th Creek	4th Creek	3/21/2005	1st Quarter
562	2444 Honey Grove Ln	167	250	4th Creek	4th Creek	3/22/2005	1st Quarter
563	6216 Highland Place Way	751	1,127	4th Creek	Kuwahee	3/31/2005	3rd Quarter
564	6401 Granite Hill Lane	167	250	4th Creek	Kuwahee	3/31/2005	3rd Quarter
565	6432 Granite Hill Lane	167	250	4th Creek	Kuwahee	3/31/2005	3rd Quarter
566	6433 Granite Hill Lane	167	250	4th Creek	Kuwahee	3/31/2005	3rd Quarter
567	1703 Evening Shade Lane	167	250	4th Creek	Kuwahee	4/13/2005	3rd Quarter
568	6705 Fern Meadow Way	167	250	4th Creek	Kuwahee	4/14/2005	3rd Quarter
569	212 Golfclub Road	167	250	4th Creek	Kuwahee	4/19/2005	3rd Quarter
570	2300 Slate Valley Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
571	2338 Slate Valley Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
572	2342 Slate Valley Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
573	2357 Slate Valley Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
574	5610 Eagle Crest Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
575	6440 Granite Hill Lane	167	250	4th Creek	Kuwahee	4/26/2005	3rd Quarter
576	2335 Slate Valley Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
577	2354 Slate Valley Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
578	6405 Granite Hill Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
579	6414 Granite Hill Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
580	6418 Granite Hill Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
581	6436 Granite Hill Lane	167	250	4th Creek	Kuwahee	5/24/2005	3rd Quarter
582	7150 Sir Arthur Way	167	250	4th Creek	Kuwahee	6/2/2005	3rd Quarter
583	7400 Nubbin Ridge Drive	167	250	4th Creek	Kuwahee	6/2/2005	3rd Quarter
584	1830 Duncan Woods Lane	167	250	4th Creek	Kuwahee	6/14/2005	3rd Quarter
585	6800 Lion Heart Lane	167	250	4th Creek	Kuwahee	6/14/2005	3rd Quarter
586	2306 Slate Valley Lane	167	250	4th Creek	Kuwahee	6/16/2005	3rd Quarter
587	2310 Slate Valley Lane	167	250	4th Creek	Kuwahee	6/16/2005	3rd Quarter
588	6422 Granite Hill Lane	167	250	4th Creek	Kuwahee	6/16/2005	3rd Quarter
589	2416 Honey Grove Lane	167	250	4th Creek	Kuwahee	6/21/2005	3rd Quarter
590	7920 Ellisville Lane	167	250	4th Creek	Kuwahee	6/28/2005	3rd Quarter
591	5317 Stricter Ln	167	250	Eastbridge	Eastbridge	5/27/2004	1st Quarter
592	2121 Holston Bend Dr.	0	0	Eastbridge	Eastbridge	6/1/2004	1st Quarter
593	7745 Gilmore Lane	167	250	Eastbridge	Eastbridge	6/23/2004	1st Quarter
594	3905 Hillside Terrace Lane	167	250	Eastbridge	Eastbridge	6/24/2004	1st Quarter
595	3836 Hillside Terrace Lane	167	250	Eastbridge	Eastbridge	6/24/2004	1st Quarter
596	3842 Hillside Terrace Lane	167	250	Eastbridge	Eastbridge	6/24/2004	1st Quarter
597	5311 Azinger Lane	167	250	Eastbridge	Eastbridge	6/24/2004	2nd Quarter
598	7711 Gilmore Lane	167	250	Eastbridge	Eastbridge	6/24/2004	1st Quarter
599	7609 Gilmore Lane	167	250	Eastbridge	Eastbridge	6/24/2004	1st Quarter
600	2942 Windsock Lane	167	250	Eastbridge	Eastbridge	6/25/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

	Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
601	4109 Ellistown Road	167	250	Eastbridge	Eastbridge	6/28/2004	1st Quarter
602	2825 Wendi Ann Drive	167	250	Eastbridge	Eastbridge	6/28/2004	1st Quarter
603	2121 Holston Bend	1336	2000	Eastbridge	Eastbridge	6/29/2004	1st Quarter
604	2821 Wendi Ann Drive	167	250	Eastbridge	Eastbridge	6/30/2004	1st Quarter
605	2849 Wendi Ann Drive	167	250	Eastbridge	Eastbridge	7/7/2004	1st Quarter
606	605 Drakewood Road	167	250	Eastbridge	Eastbridge	7/12/2004	1st Quarter
607	8606 Crosswind Landing Lane	167	250	Eastbridge	Eastbridge	7/14/2004	1st Quarter
608	8540 Crosswind Landing Lane	167	250	Eastbridge	Eastbridge	7/14/2004	1st Quarter
609	7736 Gilmore Lane	167	250	Eastbridge	Eastbridge	7/15/2004	1st Quarter
610	7605 Gilmore Lane	167	250	Eastbridge	Eastbridge	7/15/2004	1st Quarter
611	5301 Azinger Lane	167	250	Eastbridge	Eastbridge	7/15/2004	1st Quarter
612	5301 Stricter Lane	167	250	Eastbridge	Eastbridge	7/16/2004	1st Quarter
613	9524 Commission Drive	1169	1750	Eastbridge	Eastbridge	7/20/2004	2nd Quarter
614	7646 Gilmore Ln	167	250	Eastbridge	Eastbridge	7/22/2004	1st Quarter
615	5329 Mattice Ln	167	250	Eastbridge	Eastbridge	7/22/2004	1st Quarter
616	2925 Windsock Ln	167	250	Eastbridge	Eastbridge	7/28/2004	1st Quarter
617	4117 Ellistown Rd	167	250	Eastbridge	Eastbridge	8/2/2004	1st Quarter
618	8610 Asheville Hwy	167	250	Eastbridge	Eastbridge	8/3/2004	1st Quarter
619	8018 Chestnut Hill Ln	167	250	Eastbridge	Eastbridge	8/4/2004	1st Quarter
620	5301 Mattice Ln	167	250	Eastbridge	Eastbridge	8/4/2004	1st Quarter
621	5308 Stricter Ln	167	250	Eastbridge	Eastbridge	8/4/2004	1st Quarter
622	322 Woodsedge Rd	167	250	Eastbridge	Eastbridge	8/5/2004	1st Quarter
623	8534 Asheville Hwy	3006	4500	Eastbridge	Eastbridge	8/6/2004	1st Quarter
624	5416 Waldorf Ln	167	250	Eastbridge	Eastbridge	8/30/2004	2nd Quarter
625	2915 Windsock Ln	167	250	Eastbridge	Eastbridge	8/31/2004	1st Quarter
626	5300 Mattice Ln	167	250	Eastbridge	Eastbridge	8/31/2004	1st Quarter
627	9043 Rocky Ridge Way	167	250	Eastbridge	Eastbridge	9/9/2004	1st Quarter
628	9047 Rocky Ridge Way	167	250	Eastbridge	Eastbridge	9/9/2004	1st Quarter
629	219 Butterfly Way	167	250	Eastbridge	Eastbridge	9/9/2004	2nd Quarter
630	215 Butterfly Way	167	250	Eastbridge	Eastbridge	9/9/2004	2nd Quarter
631	214 Butterfly Way	167	250	Eastbridge	Eastbridge	9/9/2004	1st Quarter
632	210 Butterfly Way	167	250	Eastbridge	Eastbridge	9/9/2004	1st Quarter
633	208 Butterfly Way	167	250	Eastbridge	Eastbridge	9/9/2004	1st Quarter
634	525 Drakewood Rd	167	250	Eastbridge	Eastbridge	9/10/2004	1st Quarter
635	3711 Elliston Rd	167	250	Eastbridge	Eastbridge	9/13/2004	1st Quarter
636	5321 Mattice Ln	167	250	Eastbridge	Eastbridge	9/21/2004	1st Quarter
637	5300 Azinger Ln	167	250	Eastbridge	Eastbridge	9/22/2004	1st Quarter
638	2817 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	9/22/2004	1st Quarter
639	7329 Friendly Way	167	250	Eastbridge	Eastbridge	9/30/2004	1st Quarter
640	3828 Hillside Terrace Ln	167	250	Eastbridge	Eastbridge	9/30/2004	1st Quarter
641	537 Drakewood Rd	167	250	Eastbridge	Eastbridge	9/30/2004	1st Quarter
642	5322 Mattice Ln	167	250	Eastbridge	Eastbridge	10/6/2004	1st Quarter
643	2121 Holston Bend Dr	334	500	Eastbridge	Eastbridge	10/11/2004	1st Quarter
644	278 Woodsedge Rd	167	250	Eastbridge	Eastbridge	10/13/2004	1st Quarter
645	5413 Singh Ln	167	250	Eastbridge	Eastbridge	10/15/2004	1st Quarter
646	5316 Stricter Ln	167	250	Eastbridge	Eastbridge	10/20/2004	1st Quarter
647	7740 Gilmore Ln	167	250	Eastbridge	Eastbridge	10/20/2004	1st Quarter
648	7725 Gilmore Ln	167	250	Eastbridge	Eastbridge	10/20/2004	1st Quarter
649	2824 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	11/5/2004	1st Quarter
650	2828 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	11/5/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
651 7601 Gilmore Ln	167	250	Eastbridge	Eastbridge	11/8/2004	1st Quarter
652 2841 Diane Gayle Dr	167	250	Eastbridge	Eastbridge	11/18/2004	1st Quarter
653 5308 Azinger Ln	167	250	Eastbridge	Eastbridge	11/22/2004	2nd Quarter
654 2813 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	12/1/2004	1st Quarter
655 344 Woodsedge Rd	167	250	Eastbridge	Eastbridge	12/22/2004	1st Quarter
656 5307 Azinger Ln	167	250	Eastbridge	Eastbridge	1/1/2005	2nd Quarter
657 5330 Azinger Ln	167	250	Eastbridge	Eastbridge	1/1/2005	1st Quarter
658 9130 Wyrick Rudder Dr	167	250	Eastbridge	Eastbridge	1/4/2005	1st Quarter
659 2814 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	1/6/2005	2nd Quarter
660 2820 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	1/6/2005	1st Quarter
661 2121 Holston Bend Dr	501	750	Eastbridge	Eastbridge	1/12/2005	1st Quarter
662 8731 Tigris Pointe Ln	167	250	Eastbridge	Eastbridge	1/18/2005	1st Quarter
663 8731 Tigris Pointe Ln	167	250	Eastbridge	Eastbridge	1/18/2005	1st Quarter
664 8409 N Ruggles Ferry Pk	167	250	Eastbridge	Eastbridge	1/19/2005	1st Quarter
665 5325 Mattice Ln	167	250	Eastbridge	Eastbridge	1/28/2005	1st Quarter
666 7613 Gilmore Ln	167	250	Eastbridge	Eastbridge	1/28/2005	1st Quarter
667 7617 Gilmore Ln	167	250	Eastbridge	Eastbridge	1/28/2005	2nd Quarter
668 8119 Chestnut Hill Ln	167	250	Eastbridge	Eastbridge	2/1/2005	1st Quarter
669 5306 Mattice Ln	167	250	Eastbridge	Eastbridge	2/7/2005	1st Quarter
670 204 Butterfly Way	167	250	Eastbridge	Eastbridge	2/8/2005	2nd Quarter
671 200 Butterfly Way	167	250	Eastbridge	Eastbridge	2/8/2005	2nd Quarter
672 8935 Hillside Ave	167	250	Eastbridge	Eastbridge	2/15/2005	1st Quarter
673 5314 Azinger Ln	167	250	Eastbridge	Eastbridge	2/28/2005	2nd Quarter
674 9030 Asheville Hwy	167	250	Eastbridge	Eastbridge	3/1/2005	1st Quarter
675 5326 Azinger Ln	167	250	Eastbridge	Eastbridge	3/1/2005	2nd Quarter
676 5322 Azinger Ln	167	250	Eastbridge	Eastbridge	3/1/2005	1st Quarter
677 5318 Azinger Ln	167	250	Eastbridge	Eastbridge	3/1/2005	1st Quarter
678 4606 Angakot Rd	167	250	Eastbridge	Eastbridge	3/9/2005	1st Quarter
679 4604 Angakot Rd	167	250	Eastbridge	Eastbridge	3/9/2005	1st Quarter
680 4600 Angakot Rd	167	250	Eastbridge	Eastbridge	3/9/2005	1st Quarter
681 811 Carter View Ln	167	250	Eastbridge	Eastbridge	3/10/2005	2nd Quarter
682 617 Drakewood Rd	167	250	Eastbridge	Eastbridge	3/10/2005	2nd Quarter
683 2806 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	3/10/2005	1st Quarter
684 4119 Ellistown Rd	167	250	Eastbridge	Eastbridge	3/16/2005	1st Quarter
685 2810 Wendi Ann Dr	167	250	Eastbridge	Eastbridge	3/18/2005	2nd Quarter
686 7370 Friendly Way	167	250	Eastbridge	Eastbridge	3/22/2005	1st Quarter
687 714 Drakewood Road	167	250	Eastbridge	Eastbridge	3/30/2005	3rd Quarter
688 8829 Crosswind Landing Lane	167	250	Eastbridge	Eastbridge	4/13/2005	3rd Quarter
689 2825 Diane Gaye Lane	167	250	Eastbridge	Eastbridge	4/14/2005	3rd Quarter
690 5405 Singh Lane	167	250	Eastbridge	Eastbridge	4/19/2005	3rd Quarter
691 9419 Mascot Road	167	250	Eastbridge	Eastbridge	4/19/2005	3rd Quarter
692 9421 Mascot Road	167	250	Eastbridge	Eastbridge	4/19/2005	3rd Quarter
693 8614 Asheville Hwy	138	207	Eastbridge	Eastbridge	4/20/2005	3rd Quarter
694 801 Carter View Lane	167	250	Eastbridge	Eastbridge	4/21/2005	3rd Quarter
695 819 Carter View Lane	167	250	Eastbridge	Eastbridge	4/21/2005	3rd Quarter
696 7741 Gilmore Lane	167	250	Eastbridge	Eastbridge	4/22/2005	3rd Quarter
697 201 Butterfly Way	175	263	Eastbridge	Eastbridge	4/28/2005	3rd Quarter
698 205 Butterfly Way	175	263	Eastbridge	Eastbridge	4/28/2005	3rd Quarter
699 8712 Tigris Point Lane	167	250	Eastbridge	Eastbridge	5/9/2005	3rd Quarter
700 8878 Spindlewood Lane	167	250	Eastbridge	Eastbridge	5/11/2005	3rd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
701 800 Carter View Lane	167	250	Eastbridge	Eastbridge	5/25/2005	3rd Quarter
702 512 Drakewood Road	167	250	Eastbridge	Eastbridge	5/26/2005	3rd Quarter
703 513 Drakewood Road	167	250	Eastbridge	Eastbridge	5/26/2005	3rd Quarter
704 601 Drakewood Road	167	250	Eastbridge	Eastbridge	5/26/2005	3rd Quarter
705 710 Drakewood Road	167	250	Eastbridge	Eastbridge	5/26/2005	3rd Quarter
706 2805 Wendi Ann Drive	167	250	Eastbridge	Eastbridge	5/26/2005	3rd Quarter
707 718 Drakewood Road	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
708 721 Drakewood Road	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
709 725 Drakewood Road	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
710 729 Drakewood Road	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
711 8116 Chestnut Hill Lane	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
712 8127 Chestnut Hill Lane	167	250	Eastbridge	Eastbridge	6/1/2005	3rd Quarter
713 1805 Saylor's Ford Road	138	207	Eastbridge	Eastbridge	6/7/2005	3rd Quarter
714 5311 Stricter Lane	167	250	Eastbridge	Eastbridge	6/7/2005	3rd Quarter
715 8160 Chestnut Hill Lane	167	250	Eastbridge	Eastbridge	6/7/2005	3rd Quarter
716 5300 Stricter Lane	167	250	Eastbridge	Eastbridge	6/14/2005	3rd Quarter
717 5304 Stricter Lane	167	250	Eastbridge	Eastbridge	6/14/2005	3rd Quarter
718 348 Woodsedge Road	167	250	Eastbridge	Eastbridge	6/15/2005	3rd Quarter
719 629 Drakewood Road	167	250	Eastbridge	Eastbridge	6/15/2005	3rd Quarter
720 9023 Rocky Ridge Way	175	263	Eastbridge	Eastbridge	6/16/2005	3rd Quarter
721 9027 Rocky Ridge Way	175	263	Eastbridge	Eastbridge	6/16/2005	3rd Quarter
722 9031 Rocky Ridge Way	175	263	Eastbridge	Eastbridge	6/16/2005	3rd Quarter
723 4591 Walden Pond Lane	167	250	Eastbridge	Eastbridge	6/22/2005	3rd Quarter
724 4682 Walden Pond Lane	167	250	Eastbridge	Eastbridge	6/23/2005	3rd Quarter
725 1012 Leon Drive	167	250	Loves Creek	Loves Creek	5/25/2004	1st Quarter
726 730 Rufus Graham Rd	7682	11500	Loves Creek	Loves Creek	5/26/2004	1st Quarter
727 2120 Cedargreens Road	167	250	Loves Creek	Loves Creek	6/24/2004	1st Quarter
728 2023 Cedargreens Lane	167	250	Loves Creek	Loves Creek	6/28/2004	1st Quarter
729 313 Brakebil Road	835	1250	Loves Creek	Loves Creek	6/29/2004	1st Quarter
730 1301 Joy Road	167	250	Loves Creek	Loves Creek	7/1/2004	2nd Quarter
731 2105 Blue Sage Lane	167	250	Loves Creek	Loves Creek	7/1/2004	1st Quarter
732 2142 Blue Sage Lane	167	250	Loves Creek	Loves Creek	7/26/2004	1st Quarter
733 2138 Blue Sage Lane	167	250	Loves Creek	Loves Creek	7/26/2004	1st Quarter
734 2142 Blue Sage Ln	167	250	Loves Creek	Loves Creek	7/26/2004	1st Quarter
735 2138 Blue Sage Ln	167	250	Loves Creek	Loves Creek	7/26/2004	1st Quarter
736 4212 Valley View Drive	167	250	Loves Creek	Loves Creek	7/27/2004	1st Quarter
737 2116 Cedargreens Rd	167	250	Loves Creek	Loves Creek	7/30/2004	1st Quarter
738 2112 Cedargreens Rd	167	250	Loves Creek	Loves Creek	7/30/2004	1st Quarter
739 2108 Cedargreens Rd	167	250	Loves Creek	Loves Creek	7/30/2004	1st Quarter
740 1713 Wisteria View Way	167	250	Loves Creek	Loves Creek	8/1/2004	2nd Quarter
741 1711 Wisteria View Way	167	250	Loves Creek	Loves Creek	8/1/2004	2nd Quarter
742 1705 Wisteria View Way	167	250	Loves Creek	Loves Creek	8/1/2004	2nd Quarter
743 1703 Wisteria View Way	167	250	Loves Creek	Loves Creek	8/1/2004	2nd Quarter
744 1701 Wisteria View Way	167	250	Loves Creek	Loves Creek	8/1/2004	2nd Quarter
745 2027 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/3/2004	1st Quarter
746 2109 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
747 2101 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
748 2100 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
749 6334 Sky Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
750 6330 Sky Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	2nd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
751 6326 Sky Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	2nd Quarter
752 6322 Sky Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	2nd Quarter
753 1647 Wood Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
754 1643 Wood Song Ln	167	250	Loves Creek	Loves Creek	8/4/2004	1st Quarter
755 5710 Green Pasture Dr	167	250	Loves Creek	Loves Creek	8/6/2004	1st Quarter
756 7500 Strawberry Plains Pk	0	0	Loves Creek	Loves Creek	8/10/2004	1st Quarter
757 2104 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/13/2004	1st Quarter
758 4913 McIntyre Rd	167	250	Loves Creek	Loves Creek	8/24/2004	1st Quarter
759 1211 Yellowstone Rd	0	0	Loves Creek	Loves Creek	8/24/2004	1st Quarter
760 5322 Blue Star Dr	334	500	Loves Creek	Loves Creek	8/24/2004	1st Quarter
761 3840 Holston Dr	0	0	Loves Creek	Loves Creek	8/26/2004	1st Quarter
762 2104 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
763 2121 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
764 2119 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
765 2113 Blue Sage Ln	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
766 2019 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
767 2100 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
768 2032 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
769 2028 Cedargreens Rd	167	250	Loves Creek	Loves Creek	8/27/2004	1st Quarter
770 617 N Burns Rd	167	250	Loves Creek	Loves Creek	8/31/2004	1st Quarter
771 2113 Blue Sage Ln	167	250	Loves Creek	Loves Creek	9/7/2004	1st Quarter
772 5206 Blue Star Dr	835	1250	Loves Creek	Loves Creek	9/14/2004	1st Quarter
773 4221 Asheville Hwy	334	500	Loves Creek	Loves Creek	10/4/2004	1st Quarter
774 5110 McIntyre Rd	167	250	Loves Creek	Loves Creek	10/14/2004	1st Quarter
775 7509 Strawberry Plains Pk	0	0	Loves Creek	Loves Creek	11/2/2004	1st Quarter
776 2020 Cedargreens Rd	167	250	Loves Creek	Loves Creek	11/5/2004	1st Quarter
777 2015 Cedargreens Rd	167	250	Loves Creek	Loves Creek	11/5/2004	1st Quarter
778 3523 Cherry Hill Ave	167	250	Loves Creek	Loves Creek	11/9/2004	1st Quarter
779 21253 Blue Sage Ln	167	250	Loves Creek	Loves Creek	11/19/2004	1st Quarter
780 2129 Blue Sage Ln	167	250	Loves Creek	Loves Creek	11/19/2004	1st Quarter
781 2143 Blue Sage Ln	167	250	Loves Creek	Loves Creek	11/19/2004	2nd Quarter
782 3840 Holston Dr	1503	2250	Loves Creek	Loves Creek	12/14/2004	1st Quarter
783 730 Rufus Graham Rd	0	0	Loves Creek	Loves Creek	1/6/2005	1st Quarter
784 6318 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
785 6319 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
786 6323 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
787 6327 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
788 6331 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
789 6335 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	1st Quarter
790 6339 Sky Song Ln	167	250	Loves Creek	Loves Creek	1/19/2005	2nd Quarter
791 4448 Tynemouth Dr	167	250	Loves Creek	Loves Creek	1/20/2005	1st Quarter
792 209 N Burns Rd	167	250	Loves Creek	Loves Creek	2/8/2005	1st Quarter
793 5211 Blue Star Dr	334	500	Loves Creek	Loves Creek	2/15/2005	1st Quarter
794 5304 Blue Star Dr	334	500	Loves Creek	Loves Creek	2/15/2005	2nd Quarter
795 1613 Leconte Rd	167	250	Loves Creek	Loves Creek	2/24/2005	1st Quarter
796 1615 Leconte Rd	167	250	Loves Creek	Loves Creek	2/24/2005	1st Quarter
797 6109 Rutledge Pk	0	0	Loves Creek	Loves Creek	3/2/2005	1st Quarter
798 4306 Washington Pk	0	0	Loves Creek	Loves Creek	3/8/2005	1st Quarter
799 Lot 101, Cedargreens Rd	167	250	Loves Creek	Loves Creek	3/10/2005	2nd Quarter
800 5231 Blue Star Dr	167	250	Loves Creek	Loves Creek	3/10/2005	2nd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
801 3809 Skyline Dr	167	250	Loves Creek	Loves Creek	3/17/2005	2nd Quarter
802 3805 Skyline Dr	167	250	Loves Creek	Loves Creek	3/17/2005	2nd Quarter
803 5340 Millertown Pike	0	0	Loves Creek	Loves Creek	3/17/2005	2nd Quarter
804 2012 Wayland Rd	167	250	Loves Creek	Loves Creek	3/22/2005	1st Quarter
805 4711 Mildred Drive	167	250	Loves Creek	Loves Creek	3/31/2005	3rd Quarter
806 4032 Skyline Drive	167	250	Loves Creek	Loves Creek	4/5/2005	3rd Quarter
807 4215 Skyline Drive	167	250	Loves Creek	Loves Creek	4/5/2005	3rd Quarter
808 4516 Asheville Hwy	366	549	Loves Creek	Loves Creek	5/10/2005	3rd Quarter
809 100 Stone Bluff Court	167	250	Loves Creek	Loves Creek	5/13/2005	3rd Quarter
810 3051 Kinzel Way	3,333	5,000	Loves Creek	Loves Creek	5/17/2005	3rd Quarter
811 5917 Holston View Lane	167	250	Loves Creek	Loves Creek	5/24/2005	3rd Quarter
812 4008 Larigo Drive	167	250	Loves Creek	Loves Creek	6/14/2005	3rd Quarter
813 4014 Larigo Drive	167	250	Loves Creek	Loves Creek	6/14/2005	3rd Quarter
814 4020 Larigo Drive	167	250	Loves Creek	Loves Creek	6/14/2005	3rd Quarter
815 4026 Larigo Drive	167	250	Loves Creek	Loves Creek	6/14/2005	3rd Quarter
816 4032 Larigo Drive	167	250	Loves Creek	Loves Creek	6/14/2005	3rd Quarter
817 3740 Catalpa Avenue	167	250	Loves Creek	Loves Creek	6/21/2005	3rd Quarter
818 1205 S Chilhowee Drive	40	60	Loves Creek	Loves Creek	6/23/2005	3rd Quarter
819 4516 Asheville Hwy	38	57	Loves Creek	Loves Creek	6/28/2005	3rd Quarter
820 5201 Blue Star Drive	167	250	Loves Creek	Loves Creek	6/30/2005	3rd Quarter
821 5227 Blue Star Drive	167	250	Loves Creek	Loves Creek	6/30/2005	3rd Quarter
822 5200 Sinclair Drive	167	250	Loves Creek	Loves Creek	6/30/2005	3rd Quarter
823 6126 Hammer Rd	167	250	Sinking Creek	Loves Creek	7/22/2004	1st Quarter
824 205 Stone Bluff Court	167	250	Sinking Creek	Loves Creek	10/21/2004	1st Quarter
825 214 Neals Landing Rd	167	250	Sinking Creek	Loves Creek	10/21/2004	1st Quarter
826 209 Neals Landing Rd	167	250	Sinking Creek	Loves Creek	10/28/2004	1st Quarter
827 205 Neals Landing Rd	167	250	Sinking Creek	Loves Creek	10/28/2004	1st Quarter
828 7431 Mountie Ln	167	250	Sinking Creek	Loves Creek	2/4/2005	2nd Quarter
829 7430 Kilbridge Dr	167	250	Sinking Creek	Loves Creek	2/23/2005	2nd Quarter
830 125 Neals Landing Rd	167	250	Sinking Creek	Loves Creek	3/21/2005	1st Quarter
831 241 Mount David Drive	167	250	South Knox / Knob Cr	Kuwahee	6/28/2004	1st Quarter
832 2321 Champman Highway	167	250	South Knox / Knob Cr	Kuwahee	7/7/2004	1st Quarter
833 1946 Earl Ave	167	250	South Knox / Knob Cr	Kuwahee	8/3/2004	2nd Quarter
834 142 Woodlawn Pk	167	250	South Knox / Knob Cr	Kuwahee	8/24/2004	1st Quarter
835 3512 Maloney Rd	501	750	South Knox / Knob Cr	Kuwahee	9/14/2004	1st Quarter
836 130 Ingersoll Ave	167	250	South Knox / Knob Cr	Kuwahee	9/21/2004	1st Quarter
837 111 Childress St	0	0	South Knox / Knob Cr	Kuwahee	9/24/2004	1st Quarter
838 2121 Sevier Ave	167	250	South Knox / Knob Cr	Kuwahee	10/12/2004	1st Quarter
839 918 Baker Ave	167	250	South Knox / Knob Cr	Kuwahee	10/12/2004	1st Quarter
840 6104 Adelia Dr	167	250	South Knox / Knob Cr	Kuwahee	10/19/2004	1st Quarter
841 107 Flenniken Ave	5845	8750	South Knox / Knob Cr	Kuwahee	10/28/2004	2nd Quarter
842 2641 Maryville Pk	0	0	South Knox / Knob Cr	Kuwahee	11/18/2004	1st Quarter
843 405 Woodlawn Gardens Way	2839	4250	South Knox / Knob Cr	Kuwahee	11/19/2004	2nd Quarter
844 4414 Clayton Rd	167	250	South Knox / Knob Cr	Kuwahee	11/22/2004	1st Quarter
845 2544 Sevier Ave	167	250	South Knox / Knob Cr	Kuwahee	11/30/2004	1st Quarter
846 2135 Woodson Dr	167	250	South Knox / Knob Cr	Kuwahee	12/1/2004	1st Quarter
847 4422 Clayton Rd	167	250	South Knox / Knob Cr	Kuwahee	12/16/2004	1st Quarter
848 138 Woodlawn Pk	167	250	South Knox / Knob Cr	Kuwahee	12/16/2004	1st Quarter
849 4802 Julian St	167	250	South Knox / Knob Cr	Kuwahee	1/25/2005	1st Quarter
850 2319 Bradford St	167	250	South Knox / Knob Cr	Kuwahee	3/1/2005	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
851 2951 Scottish Pk	8350	12500	South Knox / Knob Cr	Kuwahee	3/3/2005	1st Quarter
852 107 Flenniken Ave	7014	10500	South Knox / Knob Cr	Kuwahee	3/10/2005	2nd Quarter
853 704 Centroak Dr	167	250	South Knox / Knob Cr	Kuwahee	3/24/2005	1st Quarter
854 416 Woodlawn Gardens Way	875	1,313	South Knox / Knob Cr	Kuwahee	3/31/2005	3rd Quarter
855 912 Baker Avenue	167	250	South Knox / Knob Cr	Kuwahee	4/12/2005	3rd Quarter
856 621 Latham Avenue	167	250	South Knox / Knob Cr	Kuwahee	5/17/2005	3rd Quarter
857 4509 Sims Road	167	250	South Knox / Knob Cr	Kuwahee	5/19/2005	3rd Quarter
858 432 Woodlawn Gardens Way	167	250	South Knox / Knob Cr	Kuwahee	5/24/2005	3rd Quarter
859 2932 Ginnbrooke Lane	167	250	South Knox / Knob Cr	Kuwahee	5/26/2005	3rd Quarter
860 3039 Alcoa Hwy	117	176	South Knox / Knob Cr	Kuwahee	6/2/2005	3rd Quarter
861 222 E Red Bud Rd	167	250	South Knox / Knob Cr	Kuwahee	6/21/2005	3rd Quarter
862 2934 Alcoa Highway	2000	3000	South Knox / Knob Cr	Kuwahee	6/28/2005	3rd Quarter
863 6006 Kaywood Rod	167	250	South Knox / Knob Cr	Kuwahee	6/28/2005	3rd Quarter
864 5266 N. National Dr	1837	2750	Williams Creek	Kuwahee	7/21/2004	2nd Quarter
865 2527 Washington Avenue	167	250	Williams Creek	Kuwahee	7/27/2004	1st Quarter
866 2332 Martin Luther King, Jr. Ave	1002	1500	Williams Creek	Kuwahee	8/24/2004	1st Quarter
867 2705 Tarleton Ave	167	250	Williams Creek	Kuwahee	9/7/2004	1st Quarter
868 1805 Wilder Pl	167	250	Williams Creek	Kuwahee	9/21/2004	1st Quarter
869 2600 Sea Ray Dr	334	500	Williams Creek	Kuwahee	12/7/2004	1st Quarter
870 2905 Selma Ave	167	250	Williams Creek	Kuwahee	1/25/2005	1st Quarter
871 2711 E Magnolia Ave	21710	32500	Williams Creek	Kuwahee	2/3/2005	2nd Quarter
872 731 S Chesnut St	167	250	Williams Creek	Kuwahee	2/17/2005	1st Quarter
873 2332 Martin Luther King Jr Ave	501	750	Williams Creek	Kuwahee	2/24/2005	1st Quarter
874 2600 Sea Ray Dr	334	500	Williams Creek	Kuwahee	3/1/2005	1st Quarter
875 503 Houston St	167	250	Williams Creek	Kuwahee	3/10/2005	1st Quarter
876 2824 Delrose Dr	167	250	Williams Creek	Kuwahee	3/15/2005	1st Quarter
877 2720 Delrose Drive	167	250	Williams Creek	Kuwahee	6/7/2005	3rd Quarter
878 2820 Delrose Drive	167	250	Williams Creek	Kuwahee	6/28/2005	3rd Quarter
879 5409 Crooked Oak Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
880 3420 Maple Valley Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
881 5400 Sunny Side Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
882 5404 Sunny Side Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
883 3313 Maple Valley Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
884 3317 Maple Valley Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
885 3321 Maple Valley Ln	167	250	WKUD	Kuwahee	5/25/2004	1st Quarter
886 3309 Maple Valley Ln	167	250	WKUD	Kuwahee	6/4/2004	1st Quarter
887 5400 Crooked Oak Lane	167	250	WKUD	Kuwahee	6/10/2004	1st Quarter
888 3300 Lands End Ln	167	250	WKUD	Kuwahee	6/14/2004	1st Quarter
889 5704 Rhyne Cove Lane	167	250	WKUD	Kuwahee	7/1/2004	1st Quarter
890 3305 Maple Valley Lane	167	250	WKUD	Kuwahee	7/12/2004	1st Quarter
891 5108 Beaver Dam Lane	167	250	WKUD	Kuwahee	7/15/2004	1st Quarter
892 3604 Aztec lane	167	250	WKUD	Kuwahee	7/15/2004	1st Quarter
893 3318 Lands End Lane	167	250	WKUD	Kuwahee	7/15/2004	1st Quarter
894 3313 Lands End Ln	167	250	WKUD	Kuwahee	7/21/2004	1st Quarter
895 3316 Maple Valley Ln	167	250	WKUD	Kuwahee	7/26/2004	1st Quarter
896 3320 Maple Valley Ln	167	250	WKUD	Kuwahee	7/26/2004	2nd Quarter
897 3312 Maple Valley Ln	167	250	WKUD	Kuwahee	7/26/2004	1st Quarter
898 3308 Maple Valley Ln	167	250	WKUD	Kuwahee	7/26/2004	1st Quarter
899 3300 Maple Valley Ln	167	250	WKUD	Kuwahee	8/9/2004	1st Quarter
900 2913 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
901 2909 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
902 2905 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
903 3321 Lands End Ln	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
904 2904 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
905 2908 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
906 2912 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
907 2916 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
908 2920 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
909 2924 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/16/2004	1st Quarter
910 3023 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/19/2004	1st Quarter
911 3027 Oakleigh Township Dr	167	250	WKUD	Kuwahee	8/19/2004	1st Quarter
912 3318 Lands End Ln	167	250	WKUD	Kuwahee	8/31/2004	1st Quarter
913 2903 Oakleigh Township Dr	167	250	WKUD	Kuwahee	9/8/2004	1st Quarter
914 5705 Rhyne Cove Ln	167	250	WKUD	Kuwahee	9/8/2004	1st Quarter
915 3335 Johnson Rd	167	250	WKUD	Kuwahee	9/16/2004	1st Quarter
916 3301 Maple Valley Ln	167	250	WKUD	Kuwahee	10/7/2004	1st Quarter
917 2818 Oakleigh Township Dr	167	250	WKUD	Kuwahee	10/7/2004	1st Quarter
918 5401 Crooked Oak Ln	167	250	WKUD	Kuwahee	10/8/2004	1st Quarter
919 5405 Crooked Oak Ln	167	250	WKUD	Kuwahee	10/8/2004	1st Quarter
920 2932 Oakleigh Township Dr	167	250	WKUD	Kuwahee	10/28/2004	1st Quarter
921 2806 Amherst Rd	0	0	WKUD	Kuwahee	10/28/2004	2nd Quarter
922 5100 Beaver Dam Ln	167	250	WKUD	Kuwahee	10/28/2004	2nd Quarter
923 5104 Beaver Dam Ln	167	250	WKUD	Kuwahee	10/28/2004	2nd Quarter
924 2936 Oakleigh Township Dr	167	250	WKUD	Kuwahee	11/10/2004	1st Quarter
925 3305 Johnson Rd	167	250	WKUD	Kuwahee	11/12/2004	1st Quarter
926 2936 Oakleigh Township Dr	167	250	WKUD	Kuwahee	11/29/2004	1st Quarter
927 3200 Glenlake Blvd	167	250	WKUD	Kuwahee	1/21/2005	1st Quarter
928 3209 Glenlake Blvd	167	250	WKUD	Kuwahee	1/21/2005	2nd Quarter
929 3205 Glenlake Blvd	167	250	WKUD	Kuwahee	1/21/2005	1st Quarter
930 3325 Lands End Ln	167	250	WKUD	Kuwahee	1/21/2005	2nd Quarter
931 3201 Glenlake Blvd	167	250	WKUD	Kuwahee	1/21/2005	2nd Quarter
932 3308 Lighted Path Ln	167	250	WKUD	Kuwahee	1/27/2005	1st Quarter
933 3316 Lighted Path Ln	167	250	WKUD	Kuwahee	1/27/2005	2nd Quarter
934 3320 Lighted Path Ln	167	250	WKUD	Kuwahee	1/27/2005	1st Quarter
935 3213 Glenlake Blvd	167	250	WKUD	Kuwahee	1/28/2005	1st Quarter
936 3324 Lighted Path Ln	167	250	WKUD	Kuwahee	2/2/2005	2nd Quarter
937 3332 Lighted Path Ln	167	250	WKUD	Kuwahee	2/2/2005	1st Quarter
938 3322 Lands End Ln	167	250	WKUD	Kuwahee	2/7/2005	2nd Quarter
939 5707 Copperleaf Dr	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
940 3311 Lighted Path Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
941 3307 Lighted Path Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
942 3303 Lighted Path Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
943 3300 Lighted Path Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
944 3304 Lighted Path Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
945 7319 Olive Branch Ln	167	250	WKUD	Kuwahee	2/14/2005	1st Quarter
946 5701 Copperleaf Dr	167	250	WKUD	Kuwahee	2/16/2005	1st Quarter
947 7302 Olive Branch Ln	167	250	WKUD	Kuwahee	2/16/2005	1st Quarter
948 7306 Olive Branch Ln	167	250	WKUD	Kuwahee	2/16/2005	1st Quarter
949 3309 Lands End Ln	167	250	WKUD	Kuwahee	2/23/2005	1st Quarter
950 3310 Lands End Ln	167	250	WKUD	Kuwahee	2/24/2005	2nd Quarter

Not yet connected = shaded

CAP List of New Connections since May 20, 2004

Address	Avg Flow	Peak Flow	Basin	WWTP	Activity Date	Calendar Quarter
951 5709 Rhyne Cove Ln	167	250	WKUD	Kuwahee	2/28/2005	2nd Quarter
952 3307 Lighted Path Ln	167	250	WKUD	Kuwahee	3/10/2005	1st Quarter
953 3329 Lighted Path Ln	167	250	WKUD	Kuwahee	3/10/2005	1st Quarter
954 7315 Olive Branch Ln	167	250	WKUD	Kuwahee	3/10/2005	2nd Quarter
955 3315 Lighted Path Ln	167	250	WKUD	Kuwahee	3/11/2005	1st Quarter
956 7311 Olive Branch Ln	167	250	WKUD	Kuwahee	3/22/2005	1st Quarter
957 7307 Olive Branch Ln	167	250	WKUD	Kuwahee	3/22/2005	1st Quarter
958 2812 Amherst Road	167	250	WKUD	Kuwahee	4/5/2005	3rd Quarter
959 5715 Rhyne Cove Lane	167	250	WKUD	Kuwahee	4/6/2005	3rd Quarter
960 3321 Lighted Path Lane	167	250	WKUD	Kuwahee	4/7/2005	3rd Quarter
961 7331 Olive Branch Lane	167	250	WKUD	Kuwahee	4/7/2005	3rd Quarter
962 3325 Lighted Path Lane	167	250	WKUD	Kuwahee	4/8/2005	3rd Quarter
963 7335 Olive Branch Lane	167	250	WKUD	Kuwahee	4/14/2005	3rd Quarter
964 7323 Olive Branch Lane	167	250	WKUD	Kuwahee	4/29/2005	3rd Quarter
965 7327 Olive Branch Lane	167	250	WKUD	Kuwahee	5/9/2005	3rd Quarter
966 7240 Olive Branch Lane	167	250	WKUD	Kuwahee	5/12/2005	3rd Quarter
967 7244 Olive Branch Lane	167	250	WKUD	Kuwahee	5/12/2005	3rd Quarter
968 7236 Olive Branch Lane	167	250	WKUD	Kuwahee	5/13/2005	3rd Quarter
969 3300 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
970 3301 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
971 3312 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
972 3323 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
973 3326 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
974 3334 Stars Cove Lane	167	250	WKUD	Kuwahee	5/19/2005	3rd Quarter
975 5700 Capeside Lane	167	250	WKUD	Kuwahee	5/26/2005	3rd Quarter
976 3315 Stars Cove Lane	167	250	WKUD	Kuwahee	6/17/2005	3rd Quarter
977 3330 Stars Cove Lane	167	250	WKUD	Kuwahee	6/17/2005	3rd Quarter
978 3335 Stars Cove Lane	167	250	WKUD	Kuwahee	6/17/2005	3rd Quarter
979 7209 Olive Branch Lane	167	250	WKUD	Kuwahee	6/17/2005	3rd Quarter
980 7213 Olive Branch Lane	167	250	WKUD	Kuwahee	6/17/2005	3rd Quarter
981 3120 Gose Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
982 3131 Gose Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
983 3104 Gose Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
984 3121 Gose Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
985 7228 Olive Branch Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
986 7224 Olive Branch Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
987 7220 Olive Branch Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
988 3318 Stars Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
989 3327 Stars Cove Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter
990 5706 Capeside Lane	167	250	WKUD	Kuwahee	6/29/2005	3rd Quarter

Not yet connected = shaded

Appendix C

SSOs

1	2	3	4	5	6	7	8	9	10
Date	Time	Street #	Street	Plant	Watershed	Basin	Overflow Location	Pathway	Receiving Water
4/2/2005	1:15 AM	2015	NEYLAND DR	KUW	Third Creek	35B	Secondary Junction Box	Swale to River	TN River
4/2/2005	4:32 PM	2621	PARKVIEW AVE	KUW	Williams Creek	19	MH 5-97	Storm Sewer to Creek	Williams Creek
4/2/2005	2:35 PM	4408	CHEYENNE DR	KUW	South Knoxville	39	MH 63-20	Swale to Creek	Unnamed Tributary to Goose Creek
4/2/2005	10:50 AM	2505	DELROSE DR	KUW	Williams Creek	25	MH 12	Swale to Creek	Williams Creek
4/2/2005	8:46 AM	438	MARYVILLE PIKE	KUW	South Knoxville	39	MH 30	Swale to Creek	Goose Creek
4/2/2005	1:35 PM	600	GALLAHER VIEW RD	FC	Fourth Creek	32A	MH 77	Swale to Creek	Ten Mile Creek
4/4/2005	8:42 AM	813	BARCLAY DR	KUW	South Knoxville	40	MH 57-110	Swale to Soil Saturation	
4/4/2005	5:21 PM	3741	EAKERS ST	KUW	South Knoxville	40	MH 47-1	Swale to Creek	Baker Creek
4/5/2005	11:47 AM	612	EDWARDS DR	KUW	Knob Creek	41	MH 67-141	Ditch to Soil Saturation	
4/12/2005	9:30 AM	3920	OAKLAND DR	KUW	First Creek	2	Broken Lateral	Swale to Soil Saturation	
4/13/2005	12:45 PM	600	GALLAHER VIEW RD	FC	Fourth Creek	32A	MH 77	Swale to Creek	Ten Mile Creek
4/17/2005	7:19 PM	751	MURRAY DR	KUW	Third Creek	9	Grinder Pump	Soil Saturation	
4/19/2005	2:00 PM	4713	OLD BROADWAY	KUW	First Creek	7	MH 2	Swale to Creek	Adair Creek to First Creek
4/20/2005	9:00 AM	3993	MIDLAND AVE	KUW	Third Creek	34	Cleanout	Soil Saturation	
4/25/2005	3:25 PM	205	BENTLEY ST	KUW	Williams Creek	19	Cleanout	Soil Saturation	
4/29/2005	4:20 PM	6218	PLEASANT RIDGE RD	KUW	Third Creek	9	Cleanout	Soil Saturation	
4/29/2005	5:11 PM	1015	PHILLIP FULMER WAY	KUW	Second Creek	35A	MH 21	Storm Sewer to River	TN River
5/20/2005	4:00 AM	2015	NEYLAND DR	KUW	Third Creek	35B	Primaries # 3-4 Influent Boxes	Ditch to Storm Sewer to River	TN River
5/20/2005	5:40 AM	436	MARYVILLE PIKE	KUW	South Knoxville	39	MH 29-2	Swale to Creek	Goose Creek
5/20/2005	7:20 AM	2505	DELROSE DR	KUW	Williams Creek	25	MH 12	Swale to Creek	Williams Creek
5/20/2005	9:08 AM	925	MARYVILLE PIKE	KUW	South Knoxville	39	MHS 27-345 & 27-344	Swale to Creek	Goose Creek
5/20/2005	1:57 PM	1305	RICKARD DR	KUW	Second Creek	10	MH 14-67	Swale to Storm Sewer to Swale to Soli Saturation and Creek	Second Creek
5/20/2005	11:04 AM	600	GALLAHER VIEW RD	FC	Fourth Creek	32A	MH 77	Swale to Creek	Ten Mile Creek
5/21/2005	4:30 PM	801	MARLBORO RD	FC	Fourth Creek	32B	MH 4-62	Swale to Soil Saturation	
5/24/2005	8:00 AM	3741	EAKERS ST	KUW	South Knoxville	40	MH 47	Swale to Creek	Baker Creek
5/25/2005	12:07 PM	305	CHURCHWELL AVE	KUW	Second Creek	15	MH 21-1	Swale to Creek	Second Creek
5/26/2005	8:22 PM	5272	BENT RIVER BLVD	FC	Fourth Creek	43	Grinder Pump	Swale and Soil Saturation	
5/31/2005	2:08 PM	717	INGERSOLL AVE	KUW	South Knoxville	39	MH 40-9	Swale and Soil Saturation	
6/6/2005	8:48 PM	751	MURRAY DR	KUW	Third Creek	9	Grinder Pump	Soil Saturation	
6/6/2005	5:40 PM	6377	LOVE SONG LN	LC	Swanpond Creek	67	MH 40-25	Ditch and Soil Saturation	
6/6/2005	5:12 PM	5548	WASHINGTON PK	KUW	First Creek	2	Broken Force Main	Soil Saturation	
6/7/2005	12:15 PM	2505	DELROSE DR	KUW	Williams Creek	25	MH 12	Swale to Creek	Williams Creek
6/7/2005	12:55 PM	1422	HOITT AVE	KUW	First Creek	17	MH 4	Ditch to Creek	First Creek
6/7/2005	7:08 PM	4817	BEVERLY RD	KUW	First Creek	2	MH 39-45	Swale to Creek	Unnamed Tributary to Whites Creek
6/9/2005	10:14 PM	5205	BENT RIVER BLVD	FC	Fourth Creek	43	Grinder Pump	Swale and Soil Saturation	
6/10/2005	11:30 PM	7620	BUD HAWKINS RD	EB	NEKUD	101	Wetwell	Swale to Creek	Unnamed Tributary to Roseberry Creek
6/16/2005	9:10 PM	2645	CHUKAR RD	FC	Fourth Creek	32A	MH 69	Swale to Ditch to Soil Saturation and Creek	Unnamed Tributary to Ten Mile Creek
6/27/2005	9:40 AM	4216	VALENCIA RD	KUW	Third Creek	38	Underground Flow	Swale and Soil Saturation	
6/30/2005	4:30 PM	900	VOLUNTEER LANDING LN	KUW	First Creek	30	MH 3-65	Storm Sewer to Creek	First Creek

11	12	13	14	15	16
Cause of SSO/KUB Response	Total Volume (Gallons)	Recovered Volume (Gallons)	Non-Recovered Volume (Gallons)	Duration (Hours)	Unpermitted Discharge
During high flow conditions, valve operations deemed necessary by operator to control flow into the WWTP resulted in an inadvertent overflow.	9,000	0	9,000	1.5	Yes
The sewer main was flushed to remove the blockage caused by grease.	1,200	0	1,200	4	Yes
The sewer main was flushed to remove the blockage caused by roots.	720	0	720	4	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	375	0	375	4	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	225	0	225	4	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	7,200	0	7,200	20	Yes
The sewer main was flushed to remove the blockage caused by roots.	360	0	360	1	No
Heavy rainfall in the area resulted in high flows in the collection system.	1,200	0	1,200	4	Yes
The sewer main was flushed to remove the blockage caused by grease and roots.	60	0	60	1	No
The service lateral collapse was caused by vehicular traffic involved in the cleanup of a previous SSO.	480	0	480	48	No
Heavy rainfall in the area resulted in high flows in the collection system.	247,680	0	247,680	43	Yes
There was a mechanical failure of the commercial grinder pump. The pump was replaced.	4	0	4	1	No
Heavy rainfall in the area resulted in high flows in the collection system.	250	0	250	2	Yes
The broken sewer main was repaired. The debris (dye bottle) was removed from the main.	20	0	20	2	No
The sewer main was flushed to remove the blockage caused by grease and roots.	561	0	561	1	No
The blockage was caused by a third-party contractor working on the sewer main. The blockage was removed.	240	0	240	1	No
The sewer main was flushed to remove the blockage caused by grease and debris.	2,160	0	2,160	2	Yes
During high flow conditions, valve operations deemed necessary by operator to control flow into the WWTP resulted in an inadvertent overflow.	500	0	500	0.17	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	480	0	480	2	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	31,680	0	31,680	3	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	4,150	0	4,150	3	Yes
The sewer main was flushed to remove the blockage caused by grease.	1,080	0	1,080	3	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	5,610	0	5,610	2.75	Yes
The partial collapse in the sewer main was repaired.	240	0	240	8	No
Heavy rainfall in the area resulted in high flows in the collection system.	60	0	60	1	Yes
The sewer main was flushed to remove the blockage caused by debris.	18,000	0	18,000	24	Yes
The residential grinder pump was replaced.	50	0	50	4	No
The sewer main was flushed to remove the blockage caused by grease.	120	0	120	1	No
The residential grinder pump was replaced.	1	0	1	1	No
The sewer main was repaired and flushed to remove the debris blockage caused a third-party excavation.	18	0	18	4	No
The intermittent leak from the force main coupling was repaired.	360	0	360	1	No
Heavy rainfall in the area resulted in high flows in the collection system.	90	0	90	1	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	3,850	0	3,850	1	Yes
Heavy rainfall in the area resulted in high flows in the collection system.	480	0	480	4	Yes
The residential grinder pump and circuitry were replaced.	5	0	5	1.5	No
Equipment damaged by lightning strike was repaired and the station was returned to service.	2,880	0	2,880	1	Yes
The sewer main was flushed to remove the blockage caused by grease and debris.	1,440	0	1,440	8	Yes
Bypass pumping was initiated and the collapsed pipe was replaced by pipe-bursting.	540	0	540	24	No
Bypass pumping was initiated and the collapsed pipe was repaired.	152,400	22,800	129,600	127	Yes

Appendix D

Building Backups

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Date	Time	Street #	Street	Plant	Watershed	Basin	Backup Location	Pathway	Cause of Backup/KUB Response	Total Volume (Gallons)	Recovered Volume (Gallons)	Discharged Volume (Gallons)	Duration (Hours)
4/3/2005	9:39 AM	2601	Parkview Ave	KUW	Williams Creek	19	Building Backup	Building	The sewer main was flushed to remove blockage caused by debris.	N/A	N/A	N/A	N/A
4/4/2005	11:24 AM	708	Edwards Drive	KUW	Knob Creek	41	Building Backup	Building	Backup caused by a third party contractor working on sewer main.	N/A	N/A	N/A	N/A
4/8/2005	10:11 AM	143	Ingersoll Ave	KUW	South Knoxville	39	Building Backup	Basement	Building backup due to sewer main flushing.	N/A	N/A	N/A	N/A
4/15/2005	1:05 PM	2439	Martin Luther King Blvd	KUW	First Creek	24	Building Backup	Basement	Backup caused by a third party contractor working on underground street light lines.	N/A	N/A	N/A	N/A
4/15/2005	10:04 AM	308	Tillery Drive	KUW	Second Creek	10	Building Backup	Basement	The sewer main was flushed to remove blockage caused by roots.	N/A	N/A	N/A	N/A
4/15/2005	1:35 AM	418	Woodlawn Pike	KUW	South Knoxville	40	Building Backup	Building	The sewer main was flushed to remove blockage caused by debris.	N/A	N/A	N/A	N/A
4/25/2005	4:45 PM	205	Bentley St	KUW	Williams Creek	19	Building Backup	Basement	The sewer main was flushed to remove blockage caused by grease and roots.	N/A	N/A	N/A	N/A
4/28/2005	1:57 AM	6220	Western Ave	KUW	Third Creek	11	Building Backup	Building	The sewer main was flushed to remove blockage caused by debris and grease.	N/A	N/A	N/A	N/A
5/20/2005	10:24 AM	2837	Woodrow Drive	KUW	First Creek	4	Building Backup	Building	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A
6/7/2005	10:18 AM	2600	Parkview Ave	KUW	Williams Creek	19	Building Backup	Basement	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A
6/8/2005	10:15 AM	2101	Edgewood Ave	KUW	First Creek	16	Building Backup	Basement	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A
6/8/2005	9:46 AM	2000	Washington Pike	KUW	First Creek	17	Building Backup	Basement	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A
6/8/2005	7:36 AM	2575	Parkview Ave	KUW	Williams Creek	19	Building Backup	Building	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A
6/10/2005	3:12 AM	3930	Sumercrest Way	KUW	Second Creek	10	Building Backup	Basement	The sewer main was flushed to remove blockage caused by grease.	N/A	N/A	N/A	N/A
6/23/2005	1:29 PM	621	Eleanor Street	KUW	First Creek	24	Building Backup	Basement	Heavy rainfall in the area resulted in high flows in the collection system.	N/A	N/A	N/A	N/A

Appendix E

Water Quality Monitoring Data



Creek Monitoring Report

Report Date: 7/22/2005

Knoxville Utilities Board
Water Quality Laboratory
Debbie Ailey, Lab Supervisor
835 East Jackson Avenue
Knoxville, Tennessee 37915
(865) 594-8286 Fax: (865) 594-8245

Creek Mile #	Sample Date	Sample Time	pH	Sample Temp (C)	Dissolved Oxygen (mg/l)	Fecal Coliform (CFU/100 ml)	E-Coli (MPN)	Precipitation Event	Status*
First Creek									
0.45	04/27/2005	08:10	8.5	14.5	8.7	320	330	Dry	R
2.57	04/27/2005	08:32	8.3	14.2	8.6	430	390	Dry	R
6.33	04/27/2005	08:54	7.5	12.6	7.7	230	130	Dry	R
0.45	06/09/2005	08:15	7.9	20.9	6.9	3100	1700	Dry	I
2.57	06/09/2005	08:40	7.6	20.4	9.4	2700	1400	Dry	I
6.33	06/09/2005	09:04	7.5	18.2	7.3	2400	920	Dry	R
Second Creek									
0.30	04/15/2005	08:50	8.1	14.2	9.1	2600	920	Dry	R
1.54	04/15/2005	09:15	8.0	13.5	8.6	480	580	Dry	R
5.76S	04/15/2005	09:40	7.4	14.3	6.7	550	130	Dry	R
0.30	05/10/2005	08:45	8.1	18.5	7.5	4000	>2400	Dry	I
1.54	05/10/2005	08:28	7.7	18.1	7.1	160	180	Dry	R
5.76S	05/10/2005	09:01	8.0	17.5	7.8	170	170	Dry	R
0.30	06/24/2005	08:00	7.6	19.9	7.9	1300	1300	Dry	I
1.54	06/24/2005	08:20	7.7	20.1	8.7	220	440	Dry	R
5.76S	06/24/2005	08:49	7.1	17.6	10.2	420	650	Dry	R
0.30	06/29/2005	08:02	7.7	21.7	8.6	460	370	Dry	R
1.54	06/29/2005	08:17	7.8	22.1	8.6	400	260	Dry	R
5.76S	06/29/2005	08:37	7.8	21.9	8.7	300	390	Dry	R

0000486

*Status: I = Site Under Investigation, R = Reportable for monitoring purposes



Creek Monitoring Report

Report Date: 7/22/2005

Knoxville Utilities Board
Water Quality Laboratory
Debbie Ailey, Lab Supervisor
835 East Jackson Avenue
Knoxville, Tennessee 37915
(865) 594-8286 Fax: (865) 594-8245

Creek Mile #	Sample Date	Sample Time	pH	Sample Temp (C)	Dissolved Oxygen (mg/l)	Fecal Coliform (CFU/100 ml)	E-Coli (MPN)	Precipitation Event	Status*
<u>Third Creek</u>									
0.87	04/20/2005	08:50	8.6	17.3	7.5	570	610	Dry	R
2.08E	04/20/2005	09:15	8.1	15.1	7.6	210	110	Dry	R
4.80W	04/20/2005	09:25	7.8	15.0	8.2	140	150	Dry	R
0.87	05/18/2005	09:56	8.0	16.2	9.1	430	490	Dry	R
2.08E	05/18/2005	10:12	8.2	14.7	9.4	350	610	Dry	R
4.80W	05/18/2005	09:39	7.5	14.9	9.4	120	120	Dry	R
0.87	06/29/2005	10:29	8.5	20.6	8.6	4000	2400	Dry	I
2.08E	06/29/2005	10:49	8.4	21.4	8.6	3500	>2400	Dry	I
4.80W	06/29/2005	10:12	8.2	22.3	8.1	2700	1200	Dry	I
<u>Fourth Creek</u>									
0.55	04/26/2005	09:37	8.1	14.0	8.6	210	180	Wet	R
1.33	04/26/2005	09:14	7.7	13.9	8.3	140	170	Wet	R
1.78	04/26/2005	08:45	7.9	14.7	8.4	210	170	Wet	R
0.55	05/26/2005	08:39	7.8	14.1	9.2	290	440	Dry	R
1.33	05/26/2005	09:00	7.6	14.5	9.3	290	390	Dry	R
1.78	05/26/2005	09:20	7.7	14.6	9.2	230	410	Dry	R
0.55	06/29/2005	09:10	7.8	19.4	11.1	1700	820	Dry	R
1.33	06/29/2005	09:29	8.0	19.0	10.9	2100	980	Dry	R
1.78	06/29/2005	09:52	7.9	19.1	10.7	580	870	Dry	R

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Creek Monitoring Report

Report Date: 7/22/2005

Knoxville Utilities Board
Water Quality Laboratory
Debbie Ailey, Lab Supervisor
835 East Jackson Avenue
Knoxville, Tennessee 37915
(865) 594-8286 Fax: (865) 594-8245

Creek Mile #	Sample Date	Sample Time	pH	Sample Temp (C)	Dissolved Oxygen (mg/l)	Fecal Coliform (CFU/100 ml)	E-Coli (MPN)	Precipitation Event	Status*
<u>Goose Creek</u>									
0.35	04/22/2005	07:59	7.7	16.1	6.6	2200	1600	Wet	I
0.90E	04/22/2005	08:20	7.8	15.9	7.9	170	160	Wet	R
1.50E	04/22/2005	08:49	7.6	15.2	7.8	200	370	Wet	R
0.35	05/18/2005	08:39	7.8	15.8	9.7	520	870	Dry	R
0.90E	05/18/2005	08:57	8.1	15.6	9.9	900	610	Dry	R
1.50E	05/18/2005	09:14	7.8	14.2	10.5	300	550	Dry	R
0.35	05/26/2005	07:30	7.8	14.7	8.9	327	650	Dry	R
0.90E	05/26/2005	07:51	7.9	15.5	8.8	164	214	Dry	R
1.50E	05/26/2005	08:10	7.8	13.1	9.3	236	240	Dry	R
0.35	06/03/2005	11:10	7.2	18.3	7.1	20000	>2400	Dry	I
0.90E	06/03/2005	11:29	7.4	19.7	7.8	5900	>2400	Dry	I
1.50E	06/03/2005	11:44	7.4	17.5	7.5	2000	1700	Dry	I
<u>Baker Creek</u>									
0.15	04/18/2005	08:05	7.2	16.0	7.2	580	920	Dry	R
0.32	04/18/2005	08:27	8.3	12.9	8.4	2000	>2400	Dry	I
0.36S	04/18/2005	08:47	7.9	12.5	8.7	540	550	Dry	R
0.15	05/11/2005	09:15	8.3	16.8	9.7	2200	280	Dry	R
0.32	05/11/2005	08:55	8.1	15.7	9.2	3300	1600	Dry	I
0.36S	05/11/2005	08:24	7.9	14.6	9.5	2700	>2400	Dry	I
0.15	06/03/2005	10:15	7.5	18.9	8.1	28000	>2400	Dry	I
0.32	06/03/2005	10:27	7.7	17.6	9.1	31000	>2400	Dry	I
0.36S	06/03/2005	10:53	7.5	17.9	7.7	25000	>2400	Dry	I

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Creek Mile #	Sample Date	Sample Time	pH	Sample Temp (C)	Dissolved Oxygen (mg/l)	Fecal Coliform (CFU/100 ml)	E-Coli (MPN)	Precipitation Event	Status*
<u>Loves Creek</u>									
0.85	04/06/2005	09:56	7.9	13.5	8.2	110	96	Dry	R
1.89	04/06/2005	09:32	7.5	14.2	8.4	40	62	Dry	R
3.45	04/06/2005	09:10	8.0	15.6	7.9	100	93	Dry	R
0.85	05/06/2005	08:44	8.1	15.2	7.9	200	190	Dry	R
1.89	05/06/2005	08:17	7.6	15.8	8.0	60	79	Dry	R
3.45	05/06/2005	07:59	7.8	14.8	7.8	45	66	Dry	R
0.85	06/03/2005	08:40	7.4	17.1	10.7	1100	980	Dry	R
1.89	06/03/2005	08:20	6.8	16.7	8.9	390	550	Dry	R
3.45	06/03/2005	08:07	7.8	19.0	8.6	450	580	Dry	R
<u>Williams Creek</u>									
0.53	04/13/2005	08:20	7.6	13.9	7.9	580	920	Wet	R
1.12	04/13/2005	07:57	7.1	14.5	6.3	1100	1400	Wet	I
1.67	04/13/2005	07:35	7.7	16.7	6.4	550	520	Wet	R
0.53	05/04/2005	08:15	7.7	11.7	10.8	210	>200	Dry	R
1.12	05/04/2005	07:52	7.6	12.1	7.8	330	280	Dry	R
1.67	05/04/2005	07:30	8.2	14.3	7.6	270	250	Dry	R
0.53	06/01/2005	09:00	7.4	17.2	7.4	1700	610	Wet	R
1.12	06/01/2005	08:40	7.2	18.6	6.8	580	650	Wet	R
1.67	06/01/2005	08:15	7.3	18.5	7.5	3800	>2400	Wet	I

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