Performance Audit: United Water Services Unlimited Atlanta, LLC Billing and Collection of Water and Sewer Service Charges

January 2003

Office of the City Internal Auditor

City of Atlanta



CITY OF ATLANTA AUDIT COMMITTEE

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January 2, 2003

Honorable Mayor and Members of the City Council:

This report presents the results of an audit of United Water Services Unlimited Atlanta, LLC's ("United Water-Atlanta") performance of collection activities required by the company's 20-year agreement with the City of Atlanta for operation and maintenance of the City's water system and by the City of Atlanta Code of Ordinances. The City of Atlanta Audit Committee has reviewed the report and now releases it to the Mayor, City Council, and the public in accordance with Article 2, Chapter 6, of the City Charter.

Audit work on the United Water-Atlanta agreement is a substantial part of our 2002 audit plan. The purpose of this audit was to assess the effect of the company's collection performance on water and sewer revenue and to assess the revenue potential in delinquent accounts. We also sought to determine whether United Water-Atlanta met the 98.5 percent collection rate specified in the agreement. The audit has no bearing on other conditions of default and noncompliance described in the City's prior default notice letters to United Water-Atlanta.

United Water-Atlanta's collection performance fell far short of the requirements of the agreement. The company has collected only 95 percent of the amount it has billed since January 1999, while the agreement requires annual collections of 98.5 percent. This gap resulted in at least \$23.7 million of uncollected water and sewer revenue through August 2002. Only in 2002 has the collection rate reached the required level.

United Water-Atlanta's collection efforts were especially weak in 1999 and 2000, when 20 months passed with virtually no shut off of service to delinquent accounts reported by United Water-Atlanta. During these two years, the company's poor collection performance caused the water and sewer accounts receivable to more than double. Overall, accounts receivable have increased by \$33.8 million from January 1999 through August 2002.

United Water-Atlanta did not implement provisions in the agreement and in Chapter 154 of the Code of Ordinances designed to improve collections. These include imposing late fees, meeting specific time frames for initiating enforcement and for terminating service, and working with the City on a process to impose property liens on customers with delinquent accounts. High collection rates are feasible for water services and other utilities with effective use of service termination and other leverage to encourage prompt payment.

Our recommendations address critical steps to improve future collections, specific actions to increase collections on delinquent accounts, and procedures to write off old accounts that are essentially uncollectible. Collection is increasingly less likely once an account is 90 days past due. As of September 2002, over 38,000 accounts had unpaid balances of \$55 million that were 90 days or longer overdue. A concentrated effort targeted at these accounts may prevent some of them from having to be written off.

The recommendations address issues that must be resolved to improve collection performance regardless of who is performing this function. However, because of the current uncertainty about the future of the United Water-Atlanta agreement, we have not identified specific parties who should respond to and implement corrective actions. Therefore we have not requested written responses to the audit at this time.

We plan to issue a follow-up report after a decision is made on the future of the agreement. The follow-up will include additional information on effective collection practices obtained from other cities and water utilities. It may also include such additional analysis and recommendations as may be warranted by the decision reached on future provision of water services.

The audit team included Robert Harper, Barbara Henry, and Phillip Shaw, and was supervised by deputy city auditor Harriet Richardson. In addition, we had the cooperation and assistance of United Water-Atlanta staff and City staff, including those in the Departments of Watershed Management, Finance, Law, Information Technology, and the Office of the Mayor. Members of the Mayor's contract review committee, the consulting firm of Brown and Caldwell, and the accounting and auditing firm of KPMG also provided information and expertise.

W. Wayne Woody

Chair, Audit Committee

W. Wayne Woody

Leslie Ward

City Internal Auditor

United Water Services Unlimited Atlanta, LLC Billing and Collection of Water and Sewer Service Charges

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United Water Services Unlimited Atlanta, LLC Billing and Collection of Water and Sewer Service Charges

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Abbreviations

ASA	Additional Service Authorization
CAFR	Comprehensive Annual Financial Report
CCAS	Commercial Collection Agency Association
GAAP	Generally Accepted Accounting Principles

Introduction

This audit of United Water Services Unlimited Atlanta, LLC (United Water-Atlanta) was conducted pursuant to Chapter 6 of the Atlanta City Charter, which establishes the City of Atlanta Audit Committee and the Office of the City Internal Auditor and outlines the City Internal Auditor's primary duties. The annual audit plan for 2002 included a performance audit of the City's agreement with United Water-Atlanta for operation and maintenance of the City's water system. The Audit Committee approved the specific scope of this audit in May 2002.

A performance audit is an objective, systematic examination of evidence to independently assess the performance of an organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making. Performance audits may include objectives designed to assess whether the entity has complied with laws and regulations on matters of economy and efficiency, the extent to which the desired results or benefits established by the legislature or other authorizing body are being achieved, and whether the entity has complied with significant laws and regulations applicable to a program.¹

Audit Objectives

This audit is the second of three planned audits of performance issues related to the City's agreement with United Water-Atlanta. It was designed to answer the following questions:

- How have billing and collection activities affected water and sewer revenue?
- What revenue potential remains in delinquent accounts?
- Has United Water-Atlanta met the 98.5 percent collection rate required by the agreement?

¹ Comptroller General of the United States, *Government Auditing Standards*, Washington DC: U.S. Government Printing Office, 1994, p. 14-16.

Scope and Methodology

This audit was conducted in accordance with generally accepted government auditing standards. The audit scope was limited to determining the company's compliance with specific provisions of the agreement and related provisions of the Atlanta Code of Ordinances regarding billings and collections, as well as related collection activities of the City as needed to address the audit objectives. The audit does not provide a legal determination on United Water-Atlanta's compliance with specific requirements of the agreement.

The audit evaluates United Water-Atlanta's performance from January 1999 through August 2002, and includes a limited review of data prior to 1999 as needed to address the audit objectives. The audit also includes a review of data from September 2002 through mid-November 2002 with regard to service shut-off activity only. The audit methods included:

- reviewing the agreement to identify the billings and collections requirements
- reviewing Chapter 154, Utilities, of the Atlanta Code of Ordinances ("the Code") to identify billings and collection requirements for water services
- collecting and analyzing financial data related to water billings, collections, accounts receivable, and delinquent accounts
- reviewing the City's and United Water-Atlanta's policies and procedures regarding billings and collections
- interviewing Department of Water and United Water-Atlanta staff regarding their collection and enforcement practices
- surveying water department staff from other cities regarding their billings and collection practices.

United Water-Atlanta's billing and collection system, C-Star II, generated most of the data used in this report. As required by generally accepted government auditing standards, we assessed the reliability of the data, with assistance from Brown and Caldwell staff, by reconciling the results of the 6248 and WS38 reports, which were the two primary reports used as a basis for our analysis, and reviewing the billing and payment history on a sample of accounts. As a result of questions we raised regarding the reliability of the data, United Water-Atlanta corrected deficiencies in the C-Star II system that had caused the 6248 and WS38 reports not to reconcile. Based on our assessment of the corrected data, we conclude that the corrected data are sufficiently reliable to support our findings and

conclusions. We did not assess C-Star II to determine compliance with all system performance requirements in the agreement.

Government auditing standards require disclosure that privileged or confidential information was omitted from an audit report. No such information was omitted from this report.

Background

The City of Atlanta water system supplies over 100 million gallons of water daily to retail, residential, commercial, and industrial customers within the City and portions of Fulton County south of the Chattahoochee River, and on a wholesale basis to other municipalities that include Clayton and Fayette Counties and the Cities of Fairburn, Union City, and Hapeville. The area served is approximately 650 miles, with approximately 149,000 water meters, including about 134,000 residential meters.

City Agreement With United Water-Atlanta

The City and United Water-Atlanta entered into a 20-year agreement that commenced on January 1, 1999. United Water-Atlanta is responsible for providing uninterrupted operation and maintenance of the water system in a cost-effective, safe, and business-like manner in accordance with all applicable laws and the terms and conditions of the agreement. The City agreed to pay United Water-Atlanta an annual operation and maintenance fee of \$21.4 million, in monthly installments, with provisions allowing for annual and certain other adjustments. The agreement also provides for the City to reimburse United Water-Atlanta for certain pass-through costs such as utilities, for work performed under additional service authorizations (ASA), and for material capital repair and replacement projects. The City retains responsibility for certain capital improvement projects and may award capital projects to United Water-Atlanta or other contractors, at its discretion.

Billing and Collection Requirements

Although United Water-Atlanta only provides water services, the agreement includes responsibility for United Water-Atlanta to bill and collect for sewer services provided by the City, Fulton County, and Dekalb County. Schedule 19 of the agreement describes the billing

and collection requirements. Key requirements of Schedule 19 can be summarized as follows:

- collect outstanding bills at a rate of 98.5 percent or better annually based on the collection rate formula provided in the agreement
- collect all receivables outstanding from billings issued 90 days or less prior to the commencement date of the contract (i.e., since October 1, 1998)
- provide a billings and collection function at the performance level maintained by the City prior to the agreement
- provide customer service in compliance with the agreement and the Atlanta Code of Ordinances, Chapter 154, Utilities.

Findings and Recommendations

Summary

Our overall conclusions were that:

- United Water-Atlanta did not meet the required collection rate of 98.5 percent, primarily as a result of ineffective collection enforcement activities
- the ineffective collection activities have caused significant amounts of revenue to remain uncollected
- many delinquent accounts have limited revenue potential, primarily because of their age.

From January 1999 through August 2002, United Water-Atlanta's cumulative collection rate was 95 percent rather than the contractually required 98.5 percent. This caused United Water-Atlanta to collect at least \$23.7 million less in water and sewer revenue than it should have collected, and caused the accounts receivable balance to increase by 142 percent, from \$23.8 million to \$57.5 million.

The primary reason that United Water-Atlanta did not meet the required collection rate was that it did not perform the collection enforcement activities required by both the Atlanta Code of Ordinances and the agreement. Specifically, United Water-Atlanta used termination of service only to a limited extent, with virtually no shut-off activity performed for a 20-month period from August 1999 through March 2001; had not implemented a system for imposing late fees on delinquent accounts; and had not made recommendations to the City for imposing property liens on longstanding delinquent accounts. United Water-Atlanta also was ineffective in timely collection of billed accounts, taking an average of 93 days to collect on each account billed, which according to collection industry statistics, is a timeframe in which 27 percent will have already become uncollectible.

We found that collecting on aged delinquent accounts presented challenges because the agreement did not specifically assign responsibility for collecting accounts that became delinquent prior to October 1, 1998; because some accounts have longstanding and unresolved disputes; and because many of the delinquent accounts have become uncollectible due to their age. The agreement only specified that United Water-Atlanta was responsible for collecting

receivables that accrued on billings issued 90 days prior to commencement of the contract (i.e., billings issued since October 1, 1998). However, \$23 million in delinquent accounts receivable that accrued on billings issued prior to October 1, 1998 were transferred into the C-Star II billings and collections system, and United Water-Atlanta collected and applied \$18.9 million to this balance. Neither the City nor United Water-Atlanta collected on the \$16 million accounts receivable balance for delinquent, inactive accounts that did not transfer into the C-Star II system.

The \$16 million of accounts receivable that did not transfer into the C-Star II system, the remaining \$4.2 million balance of the \$23 million that transferred into the system, and many other delinquent account balances should be written off because they have aged beyond the statute of limitations or, according to collection industry statistics, have limited probability of being collected. Writing off accounts receivable for which United Water-Atlanta was contractually responsible to collect does not reduce their obligation to the City to collect that revenue.

The collection rate was not calculated according to the methodology provided in the agreement because the C-Star II system did not generate a report that separately identified the amount of payments applied to current versus past-due account balances. This resulted in all payments being included in the collection rate, which overstates the current collection rate. This methodology is inconsistent with the agreement requirements; however, it is consistent with that used by the City prior to commencement of the agreement with United Water-Atlanta and that used in previous analyses of United Water-Atlanta's collection performance under the agreement.

Finally, we found that although the agreement requires United Water-Atlanta to follow the Atlanta Code of Ordinances, including amendments, United Water-Atlanta had not implemented revisions to the Code that the City Council adopted in December 2001. The Code revisions strengthened the collection enforcement requirements for delinquent accounts by providing specific guidance for imposing late fees and timelines for terminating water service, and revised the method for allocating partial payments received on past-due balances.

We have identified recommendations to improve the current situation and provide more effective management of the collections process. We have not identified parties responsible for implementing the recommendations, due to the current uncertainty regarding the future of the agreement with United Water-Atlanta. The recommendations focus on:

- reviewing and cleaning up the database of accounts to identify and write off uncollectible accounts, to identify those with disputes needing resolution, and to identify which accounts should continue to be pursued for collection
- establishing a structured process for collecting delinquent accounts receivable
- establishing a procedure for writing off uncollectible accounts receivable in a timely manner to comply with generally accepted accounting principles
- refining the methodology used to calculate the current collection rate and generating reports to allow the rate to be calculated as defined.

We will provide a follow-up report that will refine the recommendations and identify the responsible parties after a decision has been made regarding the future status of the agreement with United Water-Atlanta. The follow-up report will also include the results of a survey we are conducting of other water service agencies to identify best practices for billing and collecting water accounts.

United Water-Atlanta Did Not Meet the Collection Rate Requirement

United Water-Atlanta has had a cumulative collection rate of 95.0 percent since January 1999, which has resulted in uncollected revenue and a growing accounts receivable balance. Earlier estimates of United Water-Atlanta's collection rate have varied due to the use of different data sources and methodologies to calculate the rate.

Agreement Requires an Annual Collection Rate of 98.5 Percent

The agreement requires United Water-Atlanta to collect outstanding bills at a rate of 98.5 percent annually. The agreement specifically provides that United Water-Atlanta's failure to perform any obligation under the agreement is a default item for which the City can collect on United Water-Atlanta's letter of credit or terminate the agreement for cause.

Using data from the C-Star II 6248 and WS38 reports, we determined the collection rate by calculating revenue collected as a percentage of total amounts billed, with certain adjustments as discussed below. The agreement provides a specific definition of the required

collection rate, based on differentiating between revenue collected on bills currently and past due. This definition and its implementation are discussed in a later section of this report, beginning on page 26.

Overall Rate is 95 Percent but Monthly and Annual Amounts Vary Widely

From January 1999 through August 2002, United Water-Atlanta collected \$634.1 million on total adjusted billings of \$667.9 million, for a cumulative collection rate of 95.0 percent. United Water-Atlanta's collection rate varied significantly, ranging from 50.6 percent to 150.2 percent on a monthly basis and, as shown in Exhibit 1, from 90.9 percent to 102.5 percent on an annual basis. Appendix 1 provides the monthly details of required collections compared to United Water-Atlanta's actual collections.

Exhibit 1. Comparison of Required Collections and United Water-Atlanta's Collections

Year	Adjusted Total Billings	Amount to Collect at 98.5%	Amount Collected by United Water- Atlanta	United Water- Atlanta's Collection Rate	Difference Between United Water- Atlanta's and Required Collections	
					\$	%
1999	\$174,159,283	\$171,546,894	\$159,136,002	91.4**%	(\$12,410,892)	(7.1%)
2000	\$184,120,396	\$181,358,590	\$167,353,790	90.9**%	(\$14,004,799)	(7.6%)
2001	\$180,699,341	\$177,988,851	\$175,489,172	97.1%	(\$2,499,679)	(1.4%)
2002*	<u>\$128,889,288</u>	<u>\$126,955,949</u>	<u>\$132,133,536</u>	<u>102.5%</u>	<u>\$5,177,587</u>	<u>4.0%</u>
Total	\$667,868,308	\$657,850,284	\$634,112,501	95.0%	(\$23,737,783)	(3.6%)

^{* 2002} figures are through August only.

SOURCE: United Water-Atlanta's 6248 Reports and Audit Staff Analysis

Exhibit 1 also shows that United Water-Atlanta's collection performance was especially weak early in the contract and has improved more recently. The 2002 collections, in excess of 100 percent of billings, indicate collection of past-due accounts.

The -\$23.7 million collections variance shown in Exhibit 1 is a conservative figure. The agreement requires the collection rate to be calculated on an annual basis. Considering the collections variance

^{**} The 1999 and 2000 collection rate and associated data reflect correction of an error that occurred in November 1999 but that wasn't actually corrected until January 2000. We adjusted the adjusted total billings for each of these months to prevent the collection rate from being skewed by this data. Leaving the correction in the data for January 2000 would have produced a collection rate of 85.3 percent for 1999 and 97.5 percent for 2000, but would not change the totals for the 44-month period reviewed. For consistency, our corrections are carried through to other analyses in this report.

on an annual basis, rather than on a cumulative basis as is shown in Exhibit 1, would mean that the variance could be as much as \$28.9 million for the three years in which United Water-Atlanta did not meet the required collection rate.

Methodology for calculating the collection rate. We calculated the collection rate by removing two types of accounts for which United Water-Atlanta does not collect revenue. First, we excluded the City's parks and recreation facilities and the Grady Hospital accounts (i.e., "nonrevenue" accounts) from which the City has not required payment for water and sewer services since before the agreement with United Water-Atlanta. Second, we excluded charges for water and sewer services to the City of Atlanta government itself because the City makes its payments directly to the Water and Sewerage Fund through accounting entries rather than through United Water-Atlanta's C-Star II system.

These adjustments are similar but not identical to those made in earlier assessments of United Water-Atlanta's collection performance. A comparison of the earlier assessments is discussed briefly on page 11 and in more detail in Appendix 2.

Lower Collection Rate Has Resulted in Lost Revenue and Higher Accounts Receivable

98.5 percent collection rate would have yielded an additional \$23.7 million since 1999. United Water-Atlanta's compliance with the 98.5 percent collection rate requirement would have provided the City with substantial additional water and sewer revenue since 1999. Based on typical annual billings of about \$180 million, a change of one percentage point in the collection rate is worth \$1.8 million per year. Since United Water-Atlanta assumed collection responsibility, achievement of the 98.5 percent collection rate would have produced \$657.8 million, while actual collections yielded \$634.1 million, a loss of \$23.7 million over nearly four years.³

Accounts receivable increased 141.9 percent since January 1999. United Water-Atlanta's lack of compliance with the 98.5 percent

United Water-Atlanta Billings and Collections

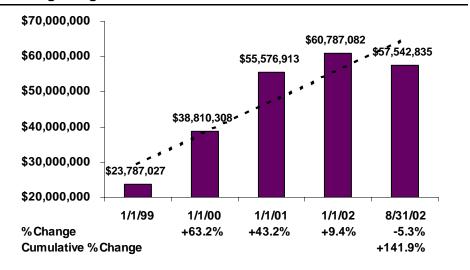
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² The exemption for the parks and recreation facilities is specified in the bond covenants. The exemption for Grady Hospital is specified in the agreement with the Fulton/Dekalb Hospital Authority, which allows the city to provide water in exchange for treatment services that the hospital provides to police and prisoners at no cost.

³ Our analysis includes all water and sewer revenue billed and collected by United Water-Atlanta without regard to its allocation among jurisdictions. We did not perform a collection rate calculation for accounts inside and outside the city to determine the amount collected on behalf of other jurisdictions.

collection rate has also caused the accounts receivable balance to grow significantly since 1999. Exhibit 2 shows that the accounts receivable balance increased a total of 141.9 percent from January 1999 through August 2002, growing from \$23.8 million⁴ to \$57.5 million during that 44-month period. The growth was most significant during the first two years of the agreement, when the accounts receivable balance more than doubled. There was additional, but less significant, growth to January 2002, and the accounts receivable balance has decreased 5.3 percent during the first eight months of 2002.⁵ The significant growth in the accounts receivable balance also indicates that United Water-Atlanta's collection performance has not been consistent with the "proven track record of significant revenue enhancement" that their proposal indicated they would provide. Exhibit 2 shows the growth in accounts receivable since the beginning of the agreement with United Water-Atlanta.

Exhibit 2. Growth in Accounts Receivable Balance, January 1999 Through August 2002



SOURCE: C-Star II 6248 and WS38 Reports, Adjusted for Nonrevenue and City Accounts, and Other Adjustments

⁴ The accounts receivable balance shown for January 1999 represents the amount that was transferred into the C-Star II billings and collections system rather than the full \$39.8 million balance that the city showed as of that date.

⁵ These figures are less than those reported by United Water-Atlanta in their 6248 and WS38 reports because we adjusted the accounts receivable balance to deduct nonrevenue and city accounts for which United Water-Atlanta does not collect revenue and to reflect correction of the November 1999 billing error during that month rather than in January 2000 when the correction actually occurred. These are the same adjustments we made to calculate the collection rate.

Different Data Sources and Methods Affected Earlier Estimates

The City's June 10, 2002, letter to United Water-Atlanta regarding contract performance stated that United Water-Atlanta has a financial obligation to the City for the difference between the amount of revenue the company collected and the amount it should have collected to meet the 98.5 percent collection rate. However, the use of different sources of data and varying methodologies for calculating the collection rate have resulted in different estimates of United Water-Atlanta's collection rate and the amount of additional revenue the company should have collected as a result. During the past year, three reports by City consultants and staff have produced three different sets of figures on this issue. The differences appear to be the result of several factors: the use of different reports, some of which were later found to be inaccurate; the use of different adjustments, some of which were based on inaccurate information provided by United Water-Atlanta staff; and variations in how the amount of lost revenue was calculated.

In general, these differences tended to overstate United Water-Atlanta's collection rate and therefore understate the amount of additional revenue the company should have collected. For one 13-month period that was used in two of the reports, for example, previous data and methodologies yielded collection rates of 94.2 to 95.2 percent, with a collections variance of -\$6.4 million to -\$8.8 million. Our calculation for the same period is 93.3 percent, with a collections variance of -\$10.4 million. Appendix 2 provides a detailed explanation of the different analyses of the 13-month period used in this example.

The example above illustrates the impact of seemingly small differences in data and methods when dealing with large amounts of revenue. Through extensive review and discussion with United Water-Atlanta staff, City staff, and consultants who are knowledgeable of water billing and collections issues and the C-Star II system design, we believe we have identified the reasons for differences in the earlier reports and made appropriate corrections.

⁶ The three reports were:

^{1.} Brown and Caldwell, City of Atlanta Water Contract Review, December 2001

^{2.} Letter from the City of Atlanta to United Water-Atlanta, June 10, 2002, "Twenty-Year Operations and Maintenance Agreement of Water System (the ("Contract") between United Water Services Unlimited Atlanta LLC ("United Water") and the City of Atlanta (the "City")"

^{3.} Letter from the City of Atlanta to United Water-Atlanta, July 29, 2002, "Twenty-Year Operations and Maintenance Agreement of Water System (the ("Agreement") between United Water Services Unlimited Atlanta LLC ("United Water") and the City of Atlanta (the "City")"

United Water-Atlanta has also made corrections in reports from the C-Star II system and has been made aware of the discrepancies in their past explanations of the reports. These corrections are also discussed in Appendix 2.

Collection Efforts Have Been Weak

The primary reason that United Water-Atlanta did not meet the collection rate requirement was that it had not performed the collection enforcement activities required by the agreement and Chapter 154, Article III, of the Atlanta Code of Ordinances pertaining to water utilities. Specifically, United Water-Atlanta took an average of 93 days to collect billed accounts which, according to collection industry statistics, significantly reduced the collectibility of accounts.

Meeting the 98.5 Percent Collection Rate Requirement Protects City Assets

Meeting the collection rate requirement of 98.5 percent is important because it helps protect City assets. The revenue due from water and sewer billings is an asset to the City, and each dollar not collected reduces the value of that asset. A high accounts receivable balance may also impact the financial stability of the Water and Sewerage Fund and cause future water and sewer rate increases to ensure there are sufficient revenues to offset expenses. Consequently, timely collection efforts are necessary to prevent accounts from becoming delinquent, and identifying opportunities to collect delinquent receivables becomes more critical for each fraction of a percentage that the collection rate falls below the minimum requirement.

Agreement and Code requirements. At the time the City and United Water-Atlanta entered into the agreement, Section 154-120 of the Atlanta Code of Ordinances provided a series of remedial activities for nonpayment of bills that included termination of water service and placing a lien on the property where the bill was incurred. Schedule 19 of the agreement requires United Water-Atlanta to comply with these Code requirements, as well as to initiate collection efforts after a maximum of 60 days delinquency and to recommend and implement a system for imposing late fees. The agreement also required the City and United Water-Atlanta to agree upon a procedure that would allow United Water-Atlanta to take advantage of the right to place liens on customer property for nonpayment of invoices, although the City retained the right to actually place liens on property.

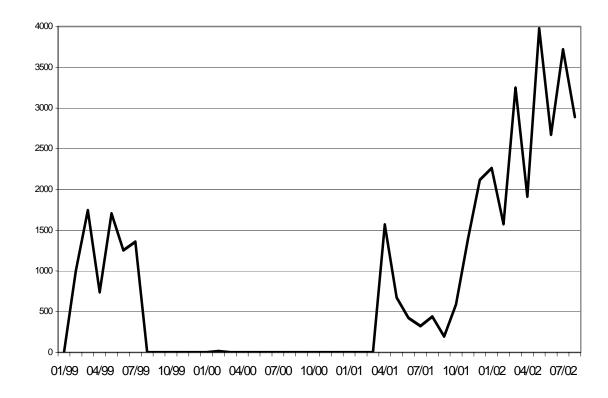
In December 2001, the City Council adopted additional collection enforcement requirements that were added to the Code. The revisions modified Code Section 154-120, and include a specific method for calculating late fees as well as a timeline that requires water service to be terminated no later than "30 days from the due date of the bill for monthly bills and 60 days for bi-monthly bills."

United Water-Atlanta Has Not Performed Collection Activities as Required

United Water-Atlanta has only sporadically used the collection enforcement procedures required by the Atlanta Code of Ordinances and the agreement. We found limited use of termination of service, no use of late fees, and no use of liens to encourage payment of delinquent accounts.

Termination of service used only to a limited extent. United Water-Atlanta performed virtually no shut offs for 20 of the 44 months we reviewed. Our analysis of the delinquent shut-off counts provided in United Water-Atlanta's monthly activity reports shows that United Water-Atlanta has not complied with the requirement in the Atlanta Code of Ordinances to terminate service on delinquent accounts. The monthly activity reports show that United Water-Atlanta has actively used termination of water service for nonpayment of accounts only since April 2001. Although United Water-Atlanta also terminated services during the early months of the contract, there were no shut-offs performed from August 1999 through March 2001, except for 14 performed in February 2000 and one in February 2001. Exhibit 3 shows the delinquent shut-off activity from January 1999 through August 2002.

Exhibit 3. Delinquent Account Shut-Off Activity, January 1999 Through August 2002



SOURCE: United Water-Atlanta's Monthly Activity Reports (See Appendix 3 for monthly figures.)

Exhibit 3 shows that delinquent account shut-off activity was limited until April 2001 when United Water-Atlanta began terminating service on delinquent accounts more often. The number of shut-offs ranged from 195 to 3,977 from April 2001 through August 2002 and averaged 1,763 per month during that period. Although the delinquent account shut-off activity has been more frequent since November 2001, averaging 2,577 shut-offs per month since then, Exhibit 3 shows that shut-offs as a collection enforcement method are still used only to a limited extent.

Other cities and utilities use timely shut-offs to achieve high collection rates. We found that the Atlanta Code provisions are consistent with the collection enforcement practices used by other cities to encourage and achieve timely payment of water bills. We conducted a telephone survey of several cities⁷ with similar populations to determine their collection rates and collection enforcement practices. These cities all reported collection rates of at

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⁷ The cities surveyed were Nashville, TN; Green Bay, WI; El Paso, TX; Wichita, KS; Kansas City, MO; and Anchorage, AK.

least 98 percent and indicated that their primary method for encouraging customers' timely payment of water bills was to terminate service early for nonpayment.

The results of our short survey were further supported by a research project recently completed by Chartwell, Inc., an Atlanta-based market research firm serving the utility industry. Chartwell's research found that "disconnections are still the primary weapon against nonpaying customers." Their research also found that the percentage of uncollectible debt for the 26 utilities that they surveyed averaged only 0.397 percent, which indicates that the 98.5 percent collection requirement in the agreement with United Water-Atlanta is not unreasonable. Additionally, a recent press release from the City of Chicago discussed a focused program of notification and subsequent shut-offs for nonpaying water customers and reported that the program generated nearly \$14 million in revenue in 2001.

We are conducting a more comprehensive survey of water agencies throughout the country to use as a basis for establishing benchmarks regarding effective collection enforcement practices. We will compile the results of this survey and include them in our follow-up report.

Late fees not implemented. United Water-Atlanta also has not implemented a system for imposing the required late fees although this is a specific obligation under Schedule 19 of the agreement. Schedule 19 requires United Water-Atlanta to, "Recommend for City approval a system for the imposition of late fees, and upon City approval, institute and maintain said system." United Water-Atlanta's initial proposal to the City in 1998 acknowledged this requirement, stating that it had "a proven track record of significant revenue enhancement" through its professionally managed collection process and specifically cited "late payment fees and extensive field collection activities" as part of its series of steps for improving collections for the City. However, United Water-Atlanta never complied with the requirement to recommend a procedure for assessing late fees.

The City Council adopted an ordinance in December 2001 that implemented a revised system for imposing late fees. United Water-Atlanta submitted a proposal to the City in April 2002 for an additional one-time fee of \$0.56 million and additional operating and maintenance fees of \$0.9 million per year to implement the new late

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⁸ Chartwell's research included a mix of electric, gas, and water utility agencies.

fee schedule. The proposal stated that there were currently no late fee charges, that implementing the requirement would necessitate revising the billing reports to show the late fee as a line item on bills, and that a programming change in the billing system would be required to calculate the late fees. The City identified late fees as a noncompliance issue that United Water-Atlanta was to correct during the 90-day contract cure period, and stated that United Water-Atlanta was not entitled to additional compensation based on late fees being "an original scope of services component."

No property liens imposed. Although the placement of property liens for nonpayment of accounts is a longstanding requirement of the Code, we found that no liens had been placed since the agreement commenced in January 1999. Additionally, the City and United Water-Atlanta did not establish a procedure to enable United Water-Atlanta to take advantage of the City's right to place liens through the collections function. Although United Water-Atlanta compiled monthly lists of delinquent accounts and placed the lists in a binder in the Fulton County Courthouse for the purpose of informing potential buyers of a property that there was a delinquent water bill, it did not provide these lists to the City. Only recently, in November 2002, did United Water-Atlanta make a recommendation to the City for placement of liens. However, this list contained only 26 accounts, although the November list that was filed with Fulton County contained over 18,000 delinquent accounts. Department of Water staff indicated that United Water-Atlanta produced the list of recommendations after individually reviewing each of the 26 accounts and determining that they were accounts that should continue to be pursued for collection.

Accounts Receivable Analysis Indicates Weak Collection Efforts

Collection of delinquent accounts becomes more difficult as they age. Statistically, the probability of collecting delinquent accounts drops significantly as they age. Exhibit 4 shows the results of a recent survey by the Commercial Collection Agency Association (CCAS) and confirms that collecting delinquent accounts becomes less likely as an account ages.

Exhibit 4. Collection Statistics as Reported by a Collection Industry Survey

Age of Account	Collection Probability
3 months	73%
6 months	57%
12 months	29%

SOURCE: Commercial Collection Agency Association

Exhibit 4 shows that the probability of collecting a delinquent account drops dramatically as an account ages, from 73 percent after three months, to 57 percent after six months, and to only 29 percent after one year. These results demonstrate how critical it is to begin focused collection efforts quickly when an account receivable ages past its due date. More importantly, if an account is not collected prior to the expiration of the applicable statute of limitations period, which is four years in the State of Georgia, it becomes highly improbable that the account will be collectible.

Age of the City's accounts receivable balance has reduced the probability of collection. The significant growth in the accounts receivable balance is a further indicator that United Water-Atlanta's collection efforts have been weak and have not met the contract requirement to begin collection efforts within 60 days of delinquency. However, the decrease in the accounts receivable balance during 2002 indicates that United Water-Atlanta has collected on past-due accounts in recent months.

We performed a financial analysis of the accounts receivables balances to determine the effectiveness of United Water-Atlanta's collection efforts. Exhibit 5 shows that the overall average time to collect on accounts is 93 days, which is well past the average two weeks that customers are provided for timely payment of their bills.

Exhibit 5. Financial Analysis of Accounts Receivable				
Year	Average Accounts Receivable	Accounts Receivable Turnover	Average Collection Period	
1999	\$29,717,159	5.9	62.3	
2000	\$45,109,377	4.1	89.4	
2001	\$57,140,483	3.2	115.4	
2002*	\$58,717,587	2.2	110.7	
Cumulative Average	\$46,666,930	14.3	93.3 days	

*2002 figures are through August only

SOURCE: Audit Staff Analysis of Accounts Receivable Balances (Adjusted for Nonrevenue and City Accounts, and Other Adjustments)

Exhibit 5 shows that United Water-Atlanta converted the accounts receivable balance into cash an average of 14 times during the 44-month period reviewed. This translates into an average of 93.3 days to collect each bill. More importantly, it shows that the average number of days to collect a bill is at a level where collection industry statistics indicate there is only a 73 percent probability of collection. These figures strongly indicate that United Water-Atlanta's collection efforts are not sufficient to protect the City's accounts receivable asset. Implementing accounts receivable performance measures, such as those included in Exhibit 5, would provide additional assurance to the City regarding efforts to collect outstanding bills and maintain the accounts receivable balance at a reasonable level.

Large accounts receivable balance has a low probability of being collected. In addition to our analysis of the overall accounts receivable balance, we reviewed accounts receivable aging reports produced by United Water-Atlanta. These reports age the accounts receivable at 30, 60, and 90-day intervals. The aging report for September 2002 showed 38,330 accounts having balances of \$55.2 million that were over three months old. Almost half of these accounts, representing about one quarter of the \$55.2 million of receivables, were inactive. Applying the 73 percent collection probability rate to these old accounts shows that approximately \$14.9 million of the \$55.2 million is not likely to be collected. Moreover, the probability of collecting on the inactive accounts is likely to be lower than on the active accounts because many of the

⁹ The \$55.2 million includes a portion of the \$23.7 million that United Water-Atlanta should have collected to meet the 98.5 percent collection rate requirement, an amount representing the 1.5 percent difference between total adjusted billings and the collection rate requirement, and the balance of aged delinquent accounts that were transferred into C-Star II but that the agreement did not assign responsibility to United Water-Atlanta to collect.

inactive accounts have balances that are much older than 90 days. Additionally, the City may have less leverage to collect on the inactive accounts since they are no longer receiving water service. Nevertheless, the lower probability of collection does not affect United Water-Atlanta's obligation to the City to meet the 98.5 percent collection rate requirement.

Collection Efforts Need to Begin Early

Collection industry emphasizes need to begin collection efforts early. The CCAS publication, "A Guide to Improve Collection Procedures," emphasizes the need to follow up immediately on past-due accounts, to use strong and action-oriented collection letters, and to maintain "rigid adherence to your collection policies." The City and United Water-Atlanta may have an advantage in collecting on delinquent accounts where the customer is still receiving water and terminating service can be used to encourage payment; however, the collection industry statistics indicate that the lack of consistent collection enforcement efforts are likely to have compromised the ability to collect on the remaining accounts.

City's collection policies should also emphasize early collection.

The City's policies and Schedule 19 of the agreement link the timing of collection efforts to the billing cycle rather than toward rapid collection of past-due accounts. Schedule 19 states that collection efforts shall begin "after a maximum of 60 days of delinquency," and the City Code requires service to be terminated within 30 days of the due date for monthly (i.e., commercial) bills and 60 days for bimonthly (i.e., residential) bills, which are timelines that mirror the billing cycles. However, collection industry statistics indicate that collection efforts will be more successful if they begin earlier. A policy that emphasizes beginning collection efforts as soon as an account becomes delinquent is likely to increase the collection rate and be more effective in generating revenue for the City.

Collection of Aged Delinquent Accounts Presents Challenges

Collecting on aged delinquent accounts presents challenges because the agreement does not assign responsibility for collecting accounts that became delinquent prior to October 1, 1998, because some accounts have longstanding and unresolved disputes, and because many of the delinquent accounts have become uncollectible due to their age.

Agreement Obligates United Water-Atlanta to Collect on Bills Issued Since October 1998

Schedule 19 of the agreement requires United Water-Atlanta to, "Collect all receivables outstanding from billings issued ninety (90) days or less prior to the Commencement Date of the Contract," and Section 3.07 and Schedule 25 require United Water-Atlanta to maintain billing and collection records for a minimum of four years, which is the statute of limitations for obtaining a legal judgment on a delinquent account. The agreement does not assign responsibility for delinquent balances on accounts billed prior to October 1, 1998. However, documentation regarding the conversion of accounts into the C-Star II system shows that all accounts classified as active were transferred into the system, regardless of when the delinquent balance accrued.

System conversion transferred balances originating before October 1998. The City had \$39.8 million in accounts receivable when United Water-Atlanta began providing services in January 1999, including \$16 million of inactive accounts and \$23.8 million of active accounts. The active accounts were all transferred into United Water-Atlanta's C-Star II system, and included \$23 million that accrued prior to October 1998 and \$0.8 million that accrued from billings issued from October 1, 1998 through December 31, 1998. Account balances that existed prior to October 1, 1998, were not separated from those originating after that date. 10 The City retained responsibility for the inactive accounts that did not transfer into the C-Star II system, but it is not clear who was responsible for collecting the \$23 million balance that accrued prior to October 1, 1998, and was transferred into the C-Star II system. While these account balances do not affect our calculation of United Water-Atlanta's collection rate, they do continue to be shown in the accounts receivable balance.

United Water-Atlanta has applied \$18.9 million to balances owed before October 1998. Because the agreement requires United Water-Atlanta to apply payments received to past-due balances first, United Water-Atlanta has applied some payments received to the large accounts receivable balance that accrued prior to October 1, 1998.

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¹⁰ Billings and collections under the agreement continued to be recorded through the city's Customer Information System until September 7, 1999, when United Water-Atlanta's C-Star II system was implemented.

Exhibit 6 shows that United Water-Atlanta has applied \$18.9 million in payments to these accounts, reducing the balance to \$4.2 million.

Exhibit 6. Payments Applied to Pre-1999 Delinquent Balances				
Accounts Receivable Transferred Into C-Star II System	\$23,787,027			
Less Balance of October - December 1998 Billings	- \$778,710			
Equals Pre-October 1998 Balance Transferred	\$23,008,317			
Less Current Balance of Pre-October 1998 Transferred Amount	- \$4,153,565			
Equals Payments Applied to Pre-October 1998 Balances	\$18,854,752			
SOURCE: C-Star II Pre-1999 Delinquent Balances Report, September 17, 2002				

It is generally considered to be a good financial practice to apply payments to old balances prior to current balances to prevent the old balance from aging to the point where it becomes uncollectible. However, in this instance, the practice has raised questions of how payments applied to aged delinquent accounts should be considered when evaluating United Water-Atlanta's performance toward meeting the required collection rate. Our calculation, as well as previous assessments of United Water-Atlanta's collection performance, have included these payments in United Water-Atlanta's total collections. This is a conservative approach that gives United Water-Atlanta credit in the collection rate calculation for payments applied to balances for which the agreement does not assign specific responsibility to collect.

City Has Not Put Effort Into Collecting Long-Term Delinquent Accounts

Since the beginning of the United Water-Atlanta agreement, the City has put no direct effort into collecting either the \$16 million that was not transferred to United Water-Atlanta's C-Star II system, or the remaining \$23 million that transferred but that the agreement did not specifically assign to United Water-Atlanta the responsibility to collect. The City had a contract with a collection agency to assist in collecting delinquent water accounts, which Department of Watershed Management staff recently indicated was used through September 1999. However, the City's accounting records show that the last payment to the agency was in 1998, which indicates that the collection agency did not collect any delinquent accounts after United Water-Atlanta began providing services. Additionally, the City allowed the collection agency's contract to expire in December 2000 although the contract had an option to be extended for one more year.

Initiative to collect in pre-October 1998 accounts did not begin until 2001. In September 2001, the City and United Water-Atlanta entered into an additional service authorization (ASA 506) to have United Water-Atlanta collect on the \$16 million of closed delinquent accounts that did not transfer into the C-Star II system. Although the agreement was signed, United Water-Atlanta later requested to terminate the agreement, and they did not perform work or receive payment under this ASA. The City's lack of attention to collecting accounts that became delinquent prior to October 1998 may have increased the amount of uncollectible accounts that now should be written off. Some portion of the accounts that became past due in 1997 and 1998, all of which are now beyond the four-year statute of limitations for obtaining legal judgments, might have been collectible had significant efforts started earlier. These accounts do not, however, affect our calculation of United Water-Atlanta's collection rate.

Some Accounts Transferred Into the C-Star II System Had Aged Beyond Collection

The accounts that were transferred into the C-Star II system were those that were classified as active. However, all accounts that were classified as active were not necessarily still receiving water services. In fact, some of the accounts had not received water service for long periods of time and had balances dating back ten years or more, but the accounts had never been closed. These accounts were transferred into the C-Star II system because there had not been sufficient effort to determine their collectibility prior to the conversion. Moreover, these accounts have remained in the C-Star II system without any review or clean-up. The following example describes an account that should not have been transferred into the C-Star II system based on its age and the amount of time since the account had received water service:

A former business in Atlanta opened a water account in September 1983. The account accrued water and sewer charges totaling \$49,421 through May 1986. The account had payments and adjustments totaling \$15,196 on a sporadic basis through November 1987, which left a balance of \$34,225. Although there was no billing activity on the account after May 1986 and no payment activity after November 1987, the City retained it as an active account and transferred it into the C-Star II system in September 1999. This account remains in the C-Star II system.

Review of Specific Accounts Indicates Inappropriate Collection Efforts

Shut-off fees inappropriately assessed. United Water-Atlanta has implemented collection activities on some accounts that are inappropriate given the probability of collection and the status of the account. One example of this is the assessment of a \$20 shut-off fee for delinquent accounts that are retained in an active status although they are no longer receiving water service. Charging these accounts a shut-off fee ultimately does nothing more than increase the accounts receivable balance since there is generally no one to collect from on these accounts and many of them have aged past the point of being collectible. United Water-Atlanta staff were unable to provide specific criteria as to when the delinquent shut-off fee is charged but stated that it was assessed through an automated process in the C-Star II system and that accounts that are assessed the fee are put on a cut-off list to have service terminated.

We reviewed a list of accounts charged the \$20 fee from September 1, 2002, through November 18, 2002, and found that the fee was assessed 10,037 times during that period. The 10,037 accounts included 904 accounts that had a second fee assessed about six weeks after the initial charge. Our review of several of these accounts revealed that they had not had any water consumption activity for some period of time but were assessed the shut-off fees because they were retained in an active status despite being essentially dead accounts. United Water-Atlanta staff indicated that some of these accounts were assessed the fee based on United Water-Atlanta's collection efforts, which included using *Urgent Delinquent* post card notifications and field inspections.

However, one account that we reviewed was for an abandoned apartment building and one was for the business described above that no longer exists. Based on the procedures stated by United Water-Atlanta staff, these accounts should have been placed on the cut-off list after the first delinquent shut-off fee was assessed, which means that someone should have gone to the service address to turn off the water. We believe that if United Water-Atlanta had indeed performed these collection activities, they should have known after the first activity that these businesses no longer existed, should have reversed the shut-off fee for those accounts, and should have initiated steps to close the accounts to prevent the C-Star II system from assessing a second shut-off fee six weeks later.

Shut-off fees do not reflect actual collection efforts. We did not perform a detailed review of any other accounts that were assessed duplicate shut-off fees during this six-week period, primarily because United Water-Atlanta staff stated that the fee was assessed through an automated process in the C-Star II system. The number of accounts assessed the fee also appeared inordinately high compared to United Water-Atlanta's actual collection efforts and the number of shut-offs reported in the monthly activity reports. We believe that a more detailed review of accounts with delinquent balances would identify numerous accounts that have had not activity for long periods of time and are uncollectible. Assessing shut-off fees on these accounts only increases the uncollectible accounts receivable balance.

Some Accounts Have Longstanding Disputes

We also found that some accounts have been difficult to collect because they have longstanding disputes that have not been resolved. United Water-Atlanta staff recently provided us with a list of over 700 accounts that have disputes, with more detailed background information on the Fulton County School District account, which has been in dispute since the mid- to late 1980s, and the Zoo Atlanta account, which has been in dispute since 1991. All of the disputed accounts need to be reviewed to resolve the outstanding issues, to identify the amounts for which the City is entitled to payment based on actual services provided, and to determine any adjustments that should be made to the disputed accounts.

The Age and High Number of Delinquent Accounts Indicate a Need to Review Accounts

The data in the C-Star II system needs to be reviewed and purged as many of these accounts have no potential to generate revenue. The age of many of the accounts transferred into the C-Star II system, as well as the high number of accounts with a past-due balance, indicates that a complete review of the accounts is needed to determine their collectibility and to identify accounts that continue to be maintained as active although they no longer receive water service. Until such a review is done, collection of aged accounts receivable will continue to present challenges.

The City Should Determine the Amount of Uncollectible Accounts to Write Off

The City has not written off uncollectible accounts receivable on a regular basis as required by Generally Accepted Accounting Principles (GAAP). This means that, although a large portion of the accounts receivable have been allocated to an allowance for doubtful accounts, the accounts receivable shown on City's financial statements continues to include delinquent accounts that have aged beyond the statute of limitations. The lack of write-offs has caused both the accounts receivable balance and the allowance for doubtful accounts to increase significantly over time.

Generally Accepted Accounting Principles Require Uncollectible Accounts to Be Written Off

To conform with GAAP, accounts receivable are reported in the financial statements at their net realizable value. This is accomplished by establishing an allowance for bad debts, which is a contra asset account that represents an estimate of the uncollectible accounts receivable. GAAP requires that the amounts be allocated to the allowance for bad debts in the accounting period in which their uncollectibility becomes probable and can be reasonably estimated. Specific accounts are then written off as they are determined to be uncollectible. This process improves the accuracy of the financial statements.

The City has not written off uncollectible accounts receivable on a regular basis. The City's financial policies, adopted by ordinance in August 1990, provide for writing off uncollectible accounts receivable, and the City's financial statements include an allowance for bad debt for delinquent water and sewer accounts. However, because the City has not consistently written off those water accounts that are uncollectible, the accounts receivable balance and the allowance for doubtful accounts increase significantly each year. The City's Comprehensive Annual Financial Report (CAFR) for 2001 shows a \$53.6 million allowance for bad debts in the Water and Sewerage System Fund, which is 60.6 percent of the \$88.5 million accounts receivable balance. This allowance was 9.2 percent more

than the 2000 allowance of \$49.1 million, and 31.9 percent more than the 1999 allowance of \$40.6 million.¹¹

Many accounts should be written off. The CAFR uses a conservative approach that allocates all account balances that are more than 60 days past due to the allowance for doubtful accounts. Although not all of these accounts are likely to be uncollectible based on the collection industry statistics, there are certain accounts that are likely to be uncollectible and should be written off. These include

- all of the \$16 million in accounts receivable that were not transferred into the C-Star II system and the remaining \$4.2 million balance of accounts that were transferred into the system since these accounts are all beyond the four-year statute of limitations for a legal judgment
- all accounts that have not received water service for at least one year
- accounts that are identifiable as uncollectible for other reasons, such as bankruptcies
- an amount for all remaining accounts that represents the uncollectible portion based on collection industry statistics.

The accounts receivable balance should also be adjusted to remove the amounts that have accrued for accounts for which revenue is not supposed to be collected. Additionally, delinquent accounts with disputes should be reviewed to resolve the dispute, identify adjustments to make to the accounts, and to identify any amount from these accounts that should be written off.

Reports Do Not Provide Data Needed to Calculate Current Collection Rate

The current collection rate has not been calculated according to the formula provided in the agreement because the C-Star II system does not generate a report that identifies the amount of payments applied to current versus past-due account balances. Although the methodology used is consistent with historical practice, it overstates the current

¹¹ The city's allowance for doubtful accounts is based on conservative criteria that include all accounts receivable more than 60 days old. The accounts receivable balance shown on the financial statements is overstated to the extent that it includes the parks and recreation facilities and the Grady Hospital accounts for which revenue will not be received, although this amount may not be material given the portion that would have been allocated to the allowance for doubtful accounts. The balance appropriately includes accounts receivable from city accounts because the city pays for its water usage; however, the balance should be adjusted when the city transfers payment into the Water and Sewerage Fund. It should be noted that even after these adjustments, the adjusted balance shown in the C-Star II reports and in the CAFR would not match due to other adjustments that are made on the financial statements to comply with GAAP.

collection rate because all payments received within a calendar month are included in the calculation.

C-Star II Reports Do Not Provide Data Needed to Calculate the Collection Rate Per the Agreement

Collection rate formula. The current practice for calculating the collection rate does not conform with the agreement requirements. Schedule 19 of the agreement provides the following formula for calculating the collection rate:

$$\frac{\text{Collected}_n}{(\text{Billed}_n \pm \text{Adjusted}_n)} \times 100, \text{ where } n \text{ represents the current month}$$

The agreement states that collection of accounts receivable for periods not invoiced in month, will not be included in the calculation of Collected,. This methodology focuses on measuring United Water-Atlanta's performance for timely collection of *current* billings and means that payments on past-due accounts should not be included when calculating the collection rate. The collection rate formula also states that to be considered "current," the collection rate "will be limited to include information applicable to amounts collected and adjustments for billing month n through the last day of month n+1." The purpose of allowing payments received in a subsequent month (i.e., n+1) to be included in the collection rate is to ensure that the calculation captures timely payments received on billings issued late in the previous month.

Collection reports include payments received on past-due

balances. All previous analyses of collections performance included all payments received within a calendar month regardless of whether they were for current billings or past-due account balances, which resulted in an overstatement of the current collection rate according to the definition. This methodology has been used because the C-Star II system does not generate a report that separately identifies the amount of payments applied to current versus past-due amounts.

Nonconformance with collection rate provision cited in previous audit. In October 2001, the former Internal Audit Division of the City's Department of Finance identified the collection rate calculation as a deficiency. The former Commissioner of Water responded to the finding in November 2001, stating that additional C-Star II reports "should be developed which would differentiate between the receipt of payments on current accounts and aged accounts receivable."

However, the Commissioner did not commit to taking corrective action, the City did not ask United Water-Atlanta to generate a report that would produce this information, and subsequent analyses of collections performance continued to include all payments received in the collection rate calculation.

United Water-Atlanta was provided a copy of the audit report in August 2002 to enable them to comply with the contract correction period requirement to correct all deficiencies cited in the audit. In September 2002, United Water-Atlanta responded to the audit finding stating that they were "calculating the collection rate based upon historical collection practices, encompassing all debts owed" and that they did so because "City Personnel sought this method" during the development of C-Star II. However, available documentation of the C-Star II implementation process does not indicate that the issue of how to calculate the collection rate was discussed.

Payments required to be allocated to past-due balances first.

Another provision in Schedule 19 of the agreement requires United Water-Atlanta to allocate payments to past-due account balances prior to applying them to current balances, and the C-Star II system was designed to accommodate this provision. United Water-Atlanta's response to the previous audit finding indicated that this provision contradicts the provision on how to calculate the collection rate. However, it appears that the actual reason for the discrepancy between how the collection rate is calculated and how it is defined in the agreement is that the system conversion emphasized replicating collection reports previously generated by the City's Customer Information System. Since the City's reports did not identify payments received on current versus past-due accounts, which is necessary to calculate the current collection rate as provided in the agreement, C-Star II reports also do not include this information.

To correct the discrepancy between the required collection rate formula and the actual methodology used, the collection rate methodology either needs to be revised to allow it to be based on all payments received, as United Water-Atlanta is currently doing, or a procedure for separately tracking payments received on current billings and past-due balances needs to be established to allow the collection rate to be calculated based only on payments that are for current billings, as required by the collection rate formula.

United Water-Atlanta Did Not Implement Changes in the Code of Ordinances

The City Council adopted an ordinance in December 2001 that revised Chapter 154 of the Atlanta Code of Ordinances and effectively changed two provisions in the City's agreement with United Water-Atlanta. First, the Code amendment strengthened the collection enforcement requirements, and second, it revised the methodology for allocating partial payments to delinquent accounts. Although Schedule 25 requires United Water-Atlanta to provide customer service as provided in Chapter 154 of the Atlanta Code of Ordinances, "as amended from time to time," United Water-Atlanta did not implement either of these changes.

Code Revisions Strengthened Collection Enforcement Requirements

Schedule 19 of the agreement requires United Water-Atlanta to recommend a system for imposing late fees and implement and maintain said system upon approval by the City. Schedule 25 of the agreement requires United Water-Atlanta to provide customer service procedures as provided in the agreement and Chapter 154 of the Atlanta Code of Ordinances, including those procedures "related to service turn-on and turn-off, meter installations, fees and charges, etc."

In December 2001, the City Council adopted an ordinance that strengthened the requirements for collecting delinquent water accounts. These revisions include specific guidelines for assessing late fees and require that persons who have not paid their water bills or sent a timely notice of dispute of their bill be notified that their service will be terminated, and that the termination shall occur within 30 days from the due date of the bill for monthly bills and 60 days for bi-monthly bills. Although the agreement requires United Water-Atlanta to provide customer service as provided in the Code, as amended from time to time, United Water-Atlanta has not yet implemented these changes.

Code Revisions Changed Methodology for Allocating Partial Payments

Schedule 19 of the agreement provides a methodology for applying payments as follows: "first to outstanding amounts due for previous water service, then to outstanding amounts due for previous sewer service, then to amounts due for current water service, then to

amounts due for current sewer service; or in any other priority order that the City shall determine."

The ordinance that the City Council adopted in December 2001 to revise Chapter 154 of the Atlanta Code of Ordinances changed this allocation methodology and now requires that partial payments on accounts be allocated on a percentage to total bill basis. Although it is likely that United Water-Atlanta would have to reprogram its C-Star II billing and collection system to accommodate this change, there was no evidence that they had initiated action to make changes in C-Star II to implement the new requirement.

Compliance with this methodology may become more important as rate increases occur at differing levels between water and sewer. Historically, sewer rates have increased more than water rates. If that trend continues, as it is expected to, continuing to allocate partial payments based on the methodology currently specified in the agreement would cause a disproportionate increase in uncollected sewer fees as a percentage of the fund's total accounts receivable.

Additional Issues Identified

We identified several areas needing a more detailed review that were outside the scope of our audit. We are addressing some of them here because they can be corrected without additional audit work. We have addressed others to a limited extent here and in other sections of the audit report, but are not addressing them in detail because they will require additional audit work to fully resolve. We will further evaluate these issues and make a decision as to whether to include them in our 2003 audit plan depending on the outcome of the City's decision regarding continuance of the agreement with United Water-Atlanta.

Issues Requiring Corrective Action

No policies and procedures for collection of delinquent accounts.

When the City Council adopted the Code revisions in December 2001 to strengthen the collection enforcement requirements, it included a provision for the Department of Water and the Treasury Division of the Department of Finance to develop written policies and procedures for the billing, collection, and shut-off functions on water and sewer accounts. The policies and procedures were to address eight specific requirements, including notifying customers that water service will be

terminated for nonpayment of bills, timelines for terminating service, a formula for assessing late fees on unpaid account balances, a requirement for past-due charges and late fees to be paid before service may be restored, use of payment plans on delinquent accounts, and a methodology for allocating partial payments among current and delinquent water and sewer account balances. We found that the policies and procedures have not been written; and, as discussed throughout this report, several of these provisions have not been implemented.

Misclassification of accounts. During our review of various accounts during this audit, we found many that were misclassified as to type. For example, we found several Fulton County government accounts incorrectly classified as residential and commercial, and numerous commercial accounts classified as residential. We also found that apartments were inconsistently classified, sometimes as commercial and sometimes as residential. Appropriate classification of accounts as to their type is important because it can aid in analyzing collection patterns and identifying targeted actions for improving collections for different types of customers.

Issues Requiring Additional Analysis

We identified several other issues that are not addressed in this report because they were outside the scope of this audit. We will further evaluate these issues and make a decision as to whether to include them in our 2003 audit plan depending on the outcome of the City's decision regarding continuance of the agreement with United Water-Atlanta. These issues include analysis of specific accounts with long-term or exceptionally high accounts receivable balances, accounts with no consumption activity for long periods of time but that are still carried as active accounts, accounts with longstanding disputes, and accounts that have been assessed a service shut-off fee without a corresponding shut-off activity.

Recommendations

Our recommendations identify what is needed to improve the current situation and to introduce more effective management of the collections process in the future. Except for Recommendation 4, which assigns responsibility for implementation based on Section 154-120 of the Atlanta Code of Ordinances, we have not identified parties responsible for implementing recommendations in this report.

Our follow-up report will refine the recommendations and identify parties responsible for implementation based on the outcome of the decision regarding the future of the agreement with United Water-Atlanta.

- A thorough review and clean-up of the accounts in the C-Star II system should be performed to remove uncollectible accounts.
 This will establish a reliable basis for calculating the current collection rate, analyzing payment and collection activities for trends, and identifying where to focus collection efforts. The review and clean-up process should:
 - Identify all accounts with delinquent account balances greater than four years. Determine which of those accounts have not received water services for an extended period of time and take steps to close those accounts and recommend them for write-off.
 - Identify each account with an outstanding dispute and initiate
 action to resolve the dispute. Upon completion of this review,
 accounts should be adjusted as necessary, recommended for
 write-off, or pursued for collection.
 - Determine the collectibility of all remaining delinquent accounts and identify which to include in an allowance for doubtful accounts, to recommend for write-off, or to pursue for collection.
 - Determine the accuracy of the account classifications and reclassify those that are incorrectly classified as to type.
 Particular attention should be given to the classification of multi-unit dwellings to ensure consistency in their classification.
- 2. Upon completion of this review, the City should:
 - Develop a list of accounts to recommend for write-off and follow established procedures to ensure these accounts are written off before the 2002 financial statements are prepared.
 - Develop a list of accounts recommended for property liens and initiate action to ensure the liens are placed.
 - Pursue collection activities on all remaining delinquent accounts as discussed in Recommendation 3 below.
- 3. A plan should be developed for an aggressive and targeted program for immediate collection of delinquent accounts for which collection is still feasible. This plan should conform with the requirements of Section 154-120 of the Atlanta Code of Ordinances and the guidelines provided by the Commercial

Collection Agency Association, and should, at a minimum, address the following:

- Prioritization criteria (e.g., age, amount, accounts still receiving water) to determine which accounts to pursue first.
- A sequence of collection enforcement activities, including a timeline for each.
- A letter to delinquent customers informing them of the action to be taken if their account is not paid or placed on an arranged payment schedule by a certain date. The letter should identify any associated late fees or shut-off fees and a date on which service will be terminated, as well as subsequent action that will be taken, such as forwarding the account to a collection agency or placing a lien on the property. The letter should also specify that termination of service will only be avoided if the account is paid in cash or with a cashier's check, money order, certified check, or credit or debit card (i.e., no personal checks).
- An amnesty period that would allow delinquent customers to have late fees waived if the account is paid in full by a specified date. This action would require an ordinance to allow a one-time waiver of the late fee requirement in the Atlanta Code of Ordinances. It could also involve extending cashier service hours on weekdays and opening on Saturday during this period of time to encourage customers to pay their delinquent accounts.
- 4. The Department of Watershed Management and the Department of Finance should develop policies and procedures for collection of delinquent accounts as required by Section 154-120 of the Atlanta Code of Ordinances. The policies and procedures should be based on an understanding of the likelihood of collection at various intervals of delinquency, and the impact of collectibility on the financial condition of the Water and Sewerage System Fund. The policies and procedures would guide the ongoing collection process after the targeted program discussed in Recommendation 3 has ended and should:
 - Address each element specifically identified in the Code.
 - Clearly delineate roles and responsibilities and establish the sequence and timeline for each aspect of the collection process (e.g., phone calls, late fees, letters, termination of service, referral to a collection agency, property liens).
 - Establish a timeline for progressive enforcement actions that is based on the probability of collection and meets the deadlines for termination of service in the Atlanta Code of Ordinances.

- 5. The City should have timely access to monthly aged accounts receivable reports, preferably within ten days after the end of the month. The reports should be aged at intervals that represent the probability of collection, based on collection industry statistics, the timelines established in Section 154-120(1) of the Atlanta Code of Ordinances, and the state statute of limitations for obtaining a legal judgment on delinquent accounts (i.e., 30, 60, and 90 days; 6 months; 1 year; and 4 years). The City should review these reports as they are received to determine the adequacy of collection efforts, identify additional collection activities to pursue, and identify accounts that should be recommended for write-off.
- 6. The City should ensure that uncollectible accounts are written off in a timely manner to ensure compliance with generally accepted accounting principles.
- 7. The City should develop a definition of the term "current" as used for calculating the collection rate. Specifically, a determination needs to be made as to whether a current payment is one made by the due date of the bill, within 30 days of the billing date, prior to the next billing date, or some other date. After developing a definition, the methodology for calculating the current collection rate needs to be revised to incorporate the definition.
- 8. The billings and collections reporting system should generate a monthly report that calculates the current collection rate as described in the methodology developed in Recommendation 7. Specifically, this report should include all "current" payments received in the month, the total billings for the period of time that would allow "current" payments to be received, and associated adjustments, including those for nonrevenue and City accounts.
- 9. The City should establish additional performance measures to assess collection performance and a requirement for developing a corrective action plan for not meeting the required standards. Examples of performance measures that might be considered are average collection period and timeliness of collection efforts (e.g., sending late letters, terminating service).
- 10. If the contract with United Water-Atlanta is retained, the agreement terms and conditions should be amended to incorporate changes based on recommendations in this audit report.

Appendices			

APPENDIX 1

Detailed Comparison of Required Collections and United Water-Atlanta's Collections
January 1999 Through September 2002

1999 Jan Feb Mar	\$16,594,276 \$12,199,477 \$13,778,106 \$12,301,779	\$16,345,362 \$12,016,485				ons
Jan Feb Mar	\$12,199,477 \$13,778,106 \$12,301,779				\$	%
Feb Mar	\$12,199,477 \$13,778,106 \$12,301,779					
Mar	\$13,778,106 \$12,301,779	@12 D16 106	\$12,205,240	73.55%	(\$4,140,122)	(24.95%)
	\$12,301,779		\$14,771,112	121.08%	\$2,754,627	22.58%
		\$13,571,434	\$14,895,637	108.11%	\$1,324,203	9.61%
Apr		\$12,117,252	\$12,792,273	103.99%	\$675,021	5.49%
May	\$12,892,231	\$12,698,847	\$10,526,235	81.65%	(\$2,172,612)	(16.85%)
Jun	\$15,085,221	\$14,858,943	\$14,069,370	93.27%	(\$789,573)	(5.23%)
Jul	\$13,624,720	\$13,420,350	\$13,773,568	101.09%	\$353,218	2.59%
Aug	\$16,188,530	\$15,945,702	\$13,409,586	82.83%	(\$2,536,116)	(15.67%)
Sep	\$13,176,469	\$12,978,822	\$11,806,568	89.60%	(\$1,172,254)	(8.90%)
Oct	\$16,618,447	\$16,369,170	\$9,499,690	57.16%	(\$6,869,480)	(41.34%)
Nov	\$17,788,701	\$17,521,871	\$14,095,900	79.24%	(\$3,425,971)	(19.26%)
Dec	<u>\$13,911,325</u>	<u>\$13,702,656</u>	\$17,290,822	<u>124.29%</u>	<u>\$3,588,167</u>	<u>25.79%</u>
Subtotal	\$174,159,283	\$171,546,894	\$159,136,002	91.37%	(\$12,410,892)	(7.13%)
2000	40.057.000	40 507 000	# 40.000.004	450 400/	0.4.47.4.050	E4 000/
Jan	\$8,657,833	\$8,527,966	\$13,002,024	150.18%	\$4,474,058	51.68%
Feb	\$19,314,286	\$19,024,572	\$9,772,116	50.60%	(\$9,252,455)	(47.90%)
Mar	\$13,466,843	\$13,264,840	\$16,299,206	121.03%	\$3,034,366	22.53%
Apr	\$13,253,954	\$13,055,145	\$12,588,437	94.98%	(\$466,708)	(3.52%)
May	\$15,102,843	\$14,876,300	\$15,321,543	101.45%	\$445,243	2.95%
Jun	\$14,998,130	\$14,773,158	\$14,580,282	97.21%	(\$192,877)	(1.29%)
Jul	\$18,790,562	\$18,508,703	\$13,937,049	74.17%	(\$4,571,655)	(24.33%)
Aug	\$15,858,532	\$15,620,654	\$15,949,722	100.58%	\$329,068	2.08%
Sep	\$17,329,240	\$17,069,301	\$13,198,638	76.16%	(\$3,870,663)	(22.34%)
Oct	\$17,362,838	\$17,102,395	\$15,729,532	90.59%	(\$1,372,863)	(7.91%)
Nov	\$15,288,512	\$15,059,184	\$16,088,865	105.23%	\$1,029,681	6.73%
Dec Subtotal	\$14,696,824 \$484,430,306	\$14,476,371 \$484,358,500	\$10,886,377 \$467,353,700	74.07%	(\$3,589,994)	(24.43%)
2001	\$184,120,396	\$181,358,590	\$167,353,790	90.89%	(\$14,004,799)	(7.61%)
Jan	\$14,231,815	\$14,018,337	\$15,344,583	107.82%	\$1,326,245	9.32%
Feb	\$14,514,092	\$14,296,381	\$15,564,324	107.24%	\$1,267,944	8.74%
Mar	\$14,353,229	\$14,137,931	\$13,815,290	96.25%	(\$322,641)	(2.25%)
Apr	\$12,807,874	\$12,615,756	\$12,788,792	99.85%	\$173,036	1.35%
May	\$15,198,048	\$14,970,077	\$13,939,690	91.72%	(\$1,030,387)	(6.78%)
Jun	\$15,112,365	\$14,885,679	\$13,004,843	86.05%	(\$1,880,836)	(12.45%)
Jul	\$14,571,424	\$14,352,853	\$15,648,045	107.39%	\$1,295,192	8.89%
Aug	\$16,868,708	\$16,615,677	\$13,836,041	82.02%	(\$2,779,636)	(16.48%)
Sep	\$17,381,784	\$17,121,057	\$14,521,090	83.54%	(\$2,599,967)	(14.96%)
Oct	\$17,820,675	\$17,553,365	\$19,167,352	107.56%	\$1,613,987	9.06%
Nov	\$14,537,018	\$14,318,963	\$14,720,541	101.26%	\$401,578	2.76%
Dec	\$13,302,309	\$13,102,774	\$13,138,581	98.77%	\$35,807	0.27%
Subtotal	\$180,699,341	\$177,988,851	\$175,489,172	97.12%	(\$2,499,679)	(1.38%)
2002	* * * * * * * * * * * * * * * * * * *	V 111,000,000	, ,,	*****	(4=,100,010)	(1100.10)
Jan	\$15,266,733	\$15,037,732	\$16,633,044	108.95%	\$1,595,311	10.45%
Feb	\$14,397,738	\$14,181,772	\$17,372,833	120.66%	\$3,191,061	22.16%
Mar	\$16,825,868	\$16,573,480	\$14,711,285	87.43%	(\$1,862,196)	(11.07%)
Apr	\$13,152,979	\$12,955,685	\$14,195,028	107.92%	\$1,239,344	9.42%
May	\$17,850,893	\$17,583,130	\$15,676,205	87.82%	(\$1,906,925)	(10.68%)
Jun	\$16,025,438	\$15,785,057	\$14,013,465	87.45%	(\$1,771,592)	(11.05%)
Jul	\$16,150,094	\$15,907,843	\$20,621,924	127.69%	\$4,714,081	29.19%
Aug	\$19,219,544	\$18,931,250	\$18,909,753	98.39%	(\$21,497)	<u>10.45%</u>
Subtotal	\$128,889,288	\$126,955,949	\$132,133,536	102.52%	\$5,177,877	4.02%
Total	\$667,868,308	\$657,850,284	\$634,112,501	94.95%	(\$23,737,783)	(3.55%)
			rts and Audit Staff			<u> </u>

APPENDIX 2

Comparison of Collection Rate Using Various Data Sources and Methodologies

Three previous reports by City consultants and staff have produced different results regarding United Water-Atlanta's collection performance. The varying results were caused by a combination of using different sources of data and different methodologies. Two of the reports used billings and collections data for May 2000 through May 2001 as the basis for the calculations. For comparative purposes, we used this same period to test and reconcile the various methodologies that resulted in different collection rates and estimates of additional revenue that United Water-Atlanta should have collected. The following table summarizes the results of the various calculations, showing a collection rate that ranges from 93.3 percent to 95.2 percent, and a collections variance of \$6.4 million to \$10.4 million.

Comparison of Collection Rate and Collections Variance Using Various Data Sources and Methodologies, May 2000 Through May 2001

Source of Analysis	Adjusted Total	Amount to Collect at	Amount Collected by	United Water- Atlanta's	Collection Variance	
	Billings	98.5%	United Water- Atlanta	Collection Rate*	\$	%
Brown and Caldwell Report – C-Star II 6248 reports	\$198,750,569	\$195,769,310	\$187,138,348	94.16%	(\$8,630,962)	(4.34%)
City's June 2002 Letter to United Water-Atlanta – Based in part on results of Brown and Caldwell's analysis	\$201,996,438			94.16%	(\$8,766,644)	
City's July 2002 Letter to United Water-Atlanta – C-Star II WS38 reports	\$196,057,970	\$193,177,100	\$186,716,843	95.24%	(\$6,400,257)	(3.26%)
Audit Staff Analysis – Corrected C-Star II 6248 and WS38 reports	\$200,532,538	\$197,524,550	\$187,144,686	93.32%	(\$10,379,864)	(5.18%)

*NOTE: Rounding impacts the results of some of the collection rate calculations. The 94.16% rate that Brown and Caldwell calculated is a rounded rate; the original calculation was 94.15739 percent. The City used the rounded rate in its June 21, 2002, letter that resulted in the collection rate variance of -\$8.8 million; all other calculations in this table are based on unrounded collection rates.

SOURCE: Brown and Caldwell Report, City of Atlanta Water Contract Review, December 2001 Letters from the City of Atlanta to United Water-Atlanta Regarding Contract Performance, June 10, 2002, and July 29, 2002

Audit Staff Analysis of Corrected C-Star II Data From the 6248 and WS38 Reports

Various Data Sources Used

The collection rates and collection variances that were calculated by Brown and Caldwell, the City of Atlanta, and the Office of the City Internal Auditor were based on various sources of data. Brown and Caldwell used data from early 6248 reports to calculate the collection rate for May 2001 through May 2002. The City used a portion of the data reported by Brown and Caldwell as the basis for calculating the collections variance cited in its June 2002 letter to United Water-Atlanta regarding contract performance. The City used data from early WS38 reports to calculate the collection rate and collections variance shown in Attachment 9 to its July 2002 letter to United Water-Atlanta regarding contract performance. Although both the 6248 and WS38 reports were generated by the C-Star II

Comparison of Collection Rate Using Various Data Sources and Methodologies

system, they contained different figures due to system errors that produced inconsistent results among the various reports. During the audit, United Water-Atlanta corrected the errors that caused the inconsistencies and produced reconciled reports, which we used for our calculation.

Various Methodologies Used

Various methodologies were also used to calculate the collections rates. The differences were primarily with regard to what adjustments were made to the total billings to determine the adjusted total billings amount on which to base the collection rate and involved a variety of combinations of the following:

- Adjustments listed in the 6248 and WS38 reports. These are adjustments made to bills for a loss of water that contributed to a high bill and include items such as meter leaks, underground leaks, toilet or faucet leaks, or other identified leaks. The reports do not adjust the total billings for these adjustments, so it is necessary to subtract them to identify an accurate total billings amount on which to base the collection rate calculation.
- <u>Nonrevenue accounts</u>. Nonrevenue accounts are for public facilities, such as certain park
 facilities and Grady Hospital, that receive water at no cost or in exchange for services. Since
 these accounts do not generate revenue, it is necessary to subtract them from the total billings
 to prevent the collections rate from being understated.
- City accounts. City accounts are accounts for City-owned facilities that receive water. Although the City pays for the water it receives, it does so through an accounting transaction that transfers money directly into the Water and Sewerage Fund. Since United Water-Atlanta is not directly responsible for collecting these payments and the payments do not pass through United Water-Atlanta's C-Star II system, it is necessary to subtract the billings for City accounts from the total billings to prevent the collections rate from being understated.
- Cancelled bills. During the course of the Brown and Caldwell contract review, United Water-Atlanta staff provided written documentation that cancelled bills were not included in total billings. As a result of this statement, some calculations of the collection rate adjusted total billings by subtracting out cancelled bills. However, United Water-Atlanta's description of their own reports was inaccurate. Audit staff discussions with United Water-Atlanta during the course of this audit revealed that while cancelled bills are not included as an adjustment in the month in which the original billing occurred if the cancellation occurs in a subsequent month, they are included as an adjustment to total billings in the month in which the cancellation actually occurred. Consequently, the total billings included in United Water-Atlanta's reports already account for all cancelled bills and a separate adjustment is not needed to calculate the collection rate. We notified United Water-Atlanta and Brown and Caldwell staff of the issue.

It should be noted that even with the correct adjustments, none of the methodologies would be fully compliant with the collection rate methodology provided in the agreement because the C-Star II system does not report revenues received on current billings only.

Comparison of Collection Rate Using Various Data Sources and Methodologies

Specific Data Sources and Methodologies Used by Various Entities Are Provided in Tables Below

The following tables describe the specific data sources and methodologies used by Brown and Caldwell, the City of Atlanta, and the Office of the City Internal Auditor to calculate the collection rate and the collections variance during the period of May 2000 through May 2001.

Comparison of Collection Rate Using Various Data Sources and Methodologies

1. Brown and Caldwell Report, City of Atlanta Water Contract Review, December 2001

Source of data: C-Star II 6248 reports for May 2000 through May 2001

Methodology: Brown and Caldwell subtracted adjustments included in the reports, cancelled bills, and nonrevenue and City accounts from the total billings, and divided cash receipts by the results. The adjustments and cancellations were applied to the month in which these financial transactions actually occurred, which is the same methodology used in the C-Star II reports.

NOTE: Brown and Caldwell's report did not include a calculation of the collections variance (i.e., the difference between United Water-Atlanta's collections and the collections required to achieve a 98.5 percent collection rate). We calculated these columns based on the data included in the report and provided the results here for comparative purposes. The dollar difference equals the Amount to Collect at 98.5 percent subtracted from the Amount Collected by United Water-Atlanta, and the percentage difference equals United Water-Atlanta's Collection Rate minus the required 98.5 percent collection rate.

Month	Adjusted	Amount to	Amount	United Water-	Collections Variance	
	Total Billings	Collect at 98.5%	Collected by United Water- Atlanta	Atlanta's Collection Rate	\$	%
May 00	\$14,807,012	\$14,584,907	\$15,320,674	103.47%	\$735,767	4.97%
Jun 00	\$14,869,181	\$14,646,143	\$14,580,281	98.06%	(\$65,862)	(0.44%)
Jul 00	\$18,586,025	\$18,307,235	\$13,937,048	74.99%	(\$4,370,187)	(23.51%)
Aug 00	\$15,821,988	\$15,584,658	\$15,949,723	100.81%	\$365,065	2.31%
Sep 00	\$17,391,795	\$17,130,918	\$13,198,638	75.89%	(\$3,932,280)	(22.61%)
Oct 00	\$17,175,254	\$16,917,625	\$15,729,544	91.58%	(\$1,188,082)	(6.92%)
Nov 00	\$15,064,073	\$14,838,112	\$16,088,624	106.80%	\$1,250,512	8.30%
Dec 00	\$14,437,552	\$14,220,989	\$10,886,170	75.40%	(\$3,334,820)	(23.10%)
Jan 01	\$13,848,015	\$13,640,295	\$15,344,582	110.81%	\$1,704,288	12.31%
Feb 01	\$14,650,367	\$14,430,612	\$15,564,095	106.24%	\$1,133,484	7.74%
Mar 01	\$14,219,625	\$14,006,330	\$13,812,873	97.14%	(\$193,457)	(1.36%)
Apr 01	\$12,799,496	\$12,607,504	\$12,786,948	99.90%	\$179,444	1.40%
May 01	\$15,080,185	\$14,853,982	\$13,939,149	92.43%	(\$914,833)	(6.07%)
	\$198,750,569	\$195,769,310	\$187,138,348	94.16%	(\$8,630,962)	(4.34%)

Comparison of Collection Rate Using Various Data Sources and Methodologies

2. City of Atlanta Letter to United Water-Atlanta Regarding Contract Performance, June 10, 2002

Source of data: Data in Brown and Caldwell Report, City of Atlanta Water Contract Review, December 2001

Methodology: The amount the City cited as being owed by United Water-Atlanta for not meeting the required 98.5 percent collection rate was based on the 94.16 percent (rounded up from 94.15739 percent) collection rate that Brown and Caldwell calculated for May 2000 through May 2001. The City calculated the dollar amount owed by multiplying 94.16 percent by the total billings that Brown and Caldwell calculated, as adjusted for cancelled bills and nonrevenue and City accounts, and subtracting the result from the amount United Water-Atlanta would have needed to collect to achieve a 98.5 percent collection rate based on these adjusted billings. However, the City's calculation omitted the adjustments listed separately in the 6248 reports although these adjustments are required to accurately reflect the adjusted total billings and were used by Brown and Caldwell to calculate the collection rate. This omission causes the adjusted total billings, the amount to collect at 98.5 percent, and the amount collected by United Water-Atlanta all to be overstated. Although the City did not specifically cite any of these amounts in its letter to United Water-Atlanta, we included them here to demonstrate how the City calculated the collections variance dollar amount that was included in the City's letter. If these figures had been accurately calculated, based on the data available at the time and used in the Brown and Caldwell report, they would have resulted in the same collections variances as shown in the table above for Brown and Caldwell.

Month	Adjusted	Amount to	Amount	United Water-		
	Total Billings	Collect at 98.5%	Collected by United Water- Atlanta	Atlanta's Collection Rate	\$	%
May 00	\$14,816,224	\$14,593,981				
Jun 00	\$15,184,334	\$14,956,569				
Jul 00	\$18,682,806	\$18,402,564				
Aug 00	\$16,377,472	\$16,131,810				
Sep 00	\$17,589,991	\$17,326,141				
Oct 00	\$17,161,673	\$16,904,248				
Nov 00	\$15,304,797	\$15,075,225				
Dec 00	\$14,433,972	\$14,217,462				
Jan 01	\$13,962,768	\$13,753,327				
Feb 01	\$14,827,810	\$14,605,393				
Mar 01	\$14,852,287	\$14,629,503				
Apr 01	\$13,474,420	\$13,272,304				
May 01	\$15,327,885	\$15,097,967				
	\$201,996,438	\$198,966,491	\$190,199,846	94.16%	(\$8,766,645)	(4.34%)

Comparison of Collection Rate Using Various Data Sources and Methodologies

3. Attachment 9 of the City of Atlanta Letter to United Water-Atlanta Regarding Contract Performance, July 29, 2002

Source of data: C-Star II WS38 reports

Methodology: The City's July 29, 2002, letter to United Water-Atlanta did not cite a specific amount that United Water-Atlanta owes the City for not meeting the required 98.5 percent collection rate. However, Attachment 9 to the letter is a spreadsheet that shows the collection rate variance for the period of January 1999 through April 2002. The following data for May 2000 through May 2001 was extracted from that spreadsheet. The City calculated the collection rate in this spreadsheet by subtracting adjustments included in the WS38 reports and cancelled bills from the total billings, and divided cash receipts by the results. This methodology excluded the required adjustment for nonrevenue and City accounts, and it applied the adjustment for cancelled bills to the month in which the original billing occurred rather than the month in which the cancellation occurred. The results of this methodology differ from that calculated by Brown and Caldwell because of differing methodologies and because the WS38 reports which, at the time, did not reconcile with the 6248 reports, were used as the source of data.

Month	Adjusted	Amount to	Amount	United Water-	Collections Variance	
	Total Billings	Collect at 98.5%	Collected by United Water- Atlanta	Atlanta's Collection Rate	\$	%
May 00	\$15,512,135	\$15,279,453	\$15,311,298	98.71%	\$31,845	0.21%
Jun 00	\$15,032,231	\$14,806,748	\$14,537,327	96.71%	(\$269,421)	(1.79%)
Jul 00	\$18,140,036	\$17,867,935	\$13,892,354	76.58%	(\$3,975,581)	(21.92%)
Aug 00	\$15,571,322	\$15,337,752	\$15,899,016	102.10%	\$561,264	3.60%
Sep 00	\$16,533,972	\$16,285,962	\$13,155,582	79.57%	(\$3,130,380)	(18.93%)
Oct 00	\$16,794,769	\$16,542,847	\$15,654,249	93.21%	(\$888,598)	(5.29%)
Nov 00	\$14,644,567	\$14,424,898	\$16,020,152	109.39%	\$1,595,254	10.89%
Dec 00	\$13,933,260	\$13,724,261	\$10,794,388	77.47%	(\$2,929,873)	(21.03%)
Jan 01	\$13,732,483	\$13,526,496	\$15,344,582	111.74%	\$1,818,086	13.24%
Feb 01	\$14,396,718	\$14,180,767	\$15,564,124	108.11%	\$1,383,357	9.61%
Mar 01	\$14,199,884	\$13,986,886	\$13,815,289	97.29%	(\$171,597)	(1.21%)
Apr 01	\$12,644,989	\$12,455,314	\$12,788,793	101.14%	\$333,479	2.64%
May 01	\$14,921,604	\$14,697,780	\$13,939,689	93.42%	(\$758,091)	(5.08%)
	\$196,057,970	\$193,117,100	\$186,716,843	95.24%	(\$6,400,257)	(3.26%)

Comparison of Collection Rate Using Various Data Sources and Methodologies

4. Office of the City Internal Auditor, Audit Staff Calculation

Source of data: Corrected C-Star II 6248 and WS38 reports

Methodology: Our calculation of the collection variance was based on both the C-Star II 6248 and WS38 reports, which reconciled after United Water-Atlanta made corrections to their billings and collections system. We adjusted total billings for nonrevenue and City accounts and for other adjustments listed in the reports; however we did not include an adjustment for cancelled bills based on clarification provided by United Water-Atlanta staff on how cancelled bills are recorded in the C-Star II system.

Month	Adjusted	Amount to	Amount	United Water-	Collections \	/ariance
	Total Billings	Collect at 98.5%	Collected by United Water- Atlanta	Atlanta's Collection Rate	\$	%
May 00	\$15,102,843	\$14,876,300	\$15,321,543	101.45%	\$445,243	2.95%
Jun 00	\$14,998,130	\$14,773,158	\$14,580,282	97.21%	(\$192,877)	(1.29%)
Jul 00	\$18,790,562	\$18,508,703	\$13,937,049	74.17%	(\$4,571,655)	(24.33%)
Aug 00	\$15,858,532	\$15,620,654	\$15,949,722	100.58%	\$329,068	2.08%
Sep 00	\$17,329,240	\$17,069,301	\$13,198,638	76.16%	(\$3,870,663)	(22.34%)
Oct 00	\$17,362,838	\$17,102,395	\$15,729,532	90.59%	(\$1,372,863)	(7.91%)
Nov 00	\$15,288,512	\$15,059,184	\$16,088,865	105.23%	\$1,029,681	6.73%
Dec 00	\$14,696,824	\$14,476,371	\$10,886,377	74.07%	(\$3,589,994)	(24.43%)
Jan 01	\$14,231,815	\$14,018,337	\$15,344,583	107.82%	\$1,326,245	9.32%
Feb 01	\$14,514,092	\$14,296,381	\$15,564,324	107.24%	\$1,267,944	8.74%
Mar 01	\$14,353,229	\$14,137,931	\$13,815,290	96.25%	(\$322,641)	(2.25%)
Apr 01	\$12,807,874	\$12,615,756	\$12,788,792	99.85%	\$173,036	1.35%
May 01	\$15,198,048	\$14,970,077	\$13,939,690	91.72%	(\$1,030,387)	(6.78%)
	\$200,532,538	\$197,524,550	\$187,144,686	93.32%	(\$10,379,864)	(5.18%)

APPENDIX 3

Delinquent Shut-Off Activity by Month

DATE	NUMBER OF SHUT-OFFS
1999	
January	0
February	1,001
March	1,745
April	740
May	1,705
June	1,255
July	1,357
August	0
September	0
October	0
November	0
December	0
TOTAL FOR YEAR	7,803
2000	_
January	0
February	14
March	0
April	0
May	0
June	0
July	0
August September	0
October	0
November	0
December	0
TOTAL FOR YEAR	— <u> </u>
2001	··
	0
January February	1
March	0
April	1,568
May	672
June	422
July	324
August	440
September	195
October	587
November	1,393
December	<u>2,118</u>
TOTAL FOR YEAR	7,720
2002	
January	2,262
February	1,574
March	3,250
April	1,912
May	3,977
June	2,674
July	3,719
August	<u>2,890</u>
TOTAL FOR YEAR	<u>22,258</u>
CUMULATIVE TOTAL	37,795
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