

**Performance Audit:
Department of Watershed Management
Back Billing of July 2008 Rate Increase**

August 2009

**City Auditor's Office
City of Atlanta**

File #09.03



CITY OF ATLANTA

City Auditor's Office
Leslie Ward, City Auditor
404.330.6452

August 2009

Why We Did This Audit

We undertook this audit at the request of the Atlanta City Council. The City Utilities Committee, in Resolution No. 09-R-0104, asked us to conduct "an analysis of the department's customer billing and service termination activities, including but not limited to commercial and residential bills and service terminations issued in December of 2008 and January of 2009."

The department, Atlanta City Council, and local media received numerous customer complaints regarding water billing, meter functionality and shutoffs in early January, shortly after the back billed adjustments were posted to accounts.

What We Recommended

To ensure that the city code and departmental policies are applied fairly and consistently among the department's customers, the Commissioner of Watershed Management should:

- Determine which customers were shut off due to the back bill posting and refund any shutoff charges.
- Notify all customers prior to shutoff, including NSF customers.

To ensure that city code provisions are reasonable and align with the department's current business practices, the Commissioner of Watershed Management should:

- Propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent.
- Propose changes to the city code to clarify the notice requirements for customers who do not pay their bill in full or dispute it by the due date.

For more information regarding this report, please contact Stephanie Jackson at 404.330.6678 or sjackson@atlantaga.gov.

Performance Audit:

Department of Watershed Management – Back Billing

What We Found

Retroactive billing ("back billing") of the July 2008 rate increase caused up to 1.7% of all of the shutoffs from December 2008 through February 2009. Five of a random sample of 162 accounts that we reviewed in detail were shut off because of the back billing. Although the department flags accounts for shutoff when balances are 30 days delinquent and at least \$50, these customers were between 9 and 11 days late in paying their bills. Their accounts were apparently flagged for shutoff based on the date that the back billed adjustment was posted rather than their bill due dates. Because the customer information system calculated the delinquency from the date that the adjustment was posted, by the time these customers received the bill with the back billed amount listed, the amount due was already a week or more into the 30-day window.

In addition, 18% of the customers in our sample of 162 were not notified prior to shutoff. All 28 of these customers were NSF (they had insufficient funds in their bank accounts when the department attempted to collect payment). City code requires the department to provide notice to customers before discontinuing water service. The code does not differentiate between NSF and other delinquent payments. The minimum notice required by the code may not be adequate.

The department did not adequately plan to implement the fiscal year 2009 rate increase or sufficiently plan for the back bill once it decided to recover revenue lost from the billing delay. The department's testing did not ensure that system changes operated as intended before sending out the bills, relying instead on the contractor. Consequently, nearly 40,000 accounts (11 of the 45 billing cycles) were charged penalties on the back billed amounts, which were considered current charges. The department subsequently reversed the penalty in the system and applied a credit on the customer's next bill.

The process for the July back billing was not timely or clearly explained to customers. The increase was not billed to customers' accounts until the December billing cycles and was posted as an adjustment. Prior to billing the amount, the department did not communicate with customers to explain how the charges would be calculated and when it would be posted to the accounts. Customers were notified of the rate increase in general and when it went into effect, but were not notified when the billing would occur.

Management Responses to Audit Recommendations

Summary of Management Responses		
Recommendation #1:	Determine which customers were shut off due to the back bill posting and refund any shutoff charges.	
Response & Proposed Action:	The department states there are no fees to refund.	Disagree
Timeframe:		
Recommendation #2:	Notify all customers prior to shutoff, including NSF customers.	
Response & Proposed Action:	The department asserts that the notice on the back of every bill that states that payment must be received by the due date to avoid termination is sufficient.	Disagree
Timeframe:		
Recommendation #3:	Propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent.	
Response & Proposed Action:	The department states that it will shut off service for delinquent accounts within the 30-day timeframe specified by the code.	Disagree
Timeframe:		
Recommendation #4:	Propose changes to the city code to clarify the notice requirements for customers who do not pay their bill in full or dispute it by the due date.	
Response & Proposed Action:	The department states that both Watershed and the Department of Law agree that no clarification is necessary.	Disagree
Timeframe:		

The full response from the Commissioner of Watershed Management is in Appendix B. The City Auditor's comment on the response is in Appendix C.



CITY OF ATLANTA

LESLIE WARD

City Auditor

lward1@atlantaga.gov**AMANDA NOBLE**

Deputy City Auditor

anoble@atlantaga.gov**CITY AUDITOR'S OFFICE**

68 MITCHELL STREET SW, SUITE 12100

ATLANTA, GEORGIA 30303-0312

(404) 330-6452

FAX: (404) 658-6077

AUDIT COMMITTEE

Fred Williams, CPA, Chair

Donald T. Penovi, CPA, Vice Chair

Cecelia Corbin Hunter

Council President Lisa Borders

August 27, 2009

Honorable Mayor and Members of the City Council:

We initiated this audit at the request of the Atlanta City Council. The City Utilities Committee, in Resolution No. 09-R-0104, asked us to conduct "an analysis of the department's customer billing and service termination activities, including but not limited to commercial and residential bills and service terminations issued in December of 2008 and January of 2009." We focused our review on residential and commercial water and sewer accounts for which service was terminated in December 2008, January 2008, or February 2009.

We found that the back billing of the July 2008 rate increase caused a relatively small number of customer accounts to be shut off when they ordinarily would not have been shut off based on Watershed's current business practices. The Department might have avoided these shutoffs with better planning for the implementation of the rate increase and more comprehensive testing of the system changes for the back billing. Also, timely communication with customers could have lessened customer dissatisfaction with the back billing process. Our recommendations focus on ensuring that city code provisions are aligned with departmental policies and business practices, and that they are applied fairly and consistently among Watershed's customers.

We provided a draft report on June 10 and a revised report on July 15 to the Commissioner of Watershed Management. We received responses to our findings and recommendations and additional comments from the commissioner on August 17 and include them in Appendix B. Because the comments contradict the audit evidence and the responses propose insufficient corrective action, our own additional comments appear in Appendix C, as required by *Government Audit Standards*. The Audit Committee has reviewed this report and is releasing it in accordance with Article 2, Chapter 6 of the City Charter. We appreciate the courtesy and cooperation of Watershed Management staff throughout the audit. The audit team for this project was Damien Berahzer, Katrina Clowers and Stephanie Jackson.

Handwritten signature of Leslie Ward in cursive.

Leslie Ward
City Auditor

Handwritten signature of Fred Williams in cursive.

Fred Williams
Audit Committee Chair

Department of Watershed Management-Back Billing

Table of Contents

Introduction	1
Background.....	2
Rate Increase Applied August 1 st	2
Watershed’s Monthly Billings Average \$26 Million.....	3
Shutoffs Occur More Than 30 Days after Bill Due Date	5
Customer Complaints Prompted Back Billing Audit.....	7
Audit Objectives	8
Scope and Methodology	8
Findings and Analysis.....	11
Back Billed Adjustment Caused Shutoffs	11
Back Bill Posting Date Triggered Shutoff Threshold	11
Department Does Not Notify All Customers Prior to Shutoff	14
Lack of Planning Led to Billing Delays and Customer Dissatisfaction.....	16
Department Was Not Prepared to Implement Rate Increase by the Effective Date	17
Customers Were Not Notified in Advance When July Increase Would Be Billed	20
July Rate Increase Computation Was Unclear	21
Testing for System Modifications Was Incomplete.....	22
Recommendations	24
Appendices	26
Appendix A Sampling Methodology	27
Appendix B Management Review and Response to Report Recommendations	31
Appendix C City Auditor’s Comments on the Commissioner’s Responses	39

List of Exhibits

Exhibit 1	Approved Water and Sewer Rates Fiscal Years 2008 through 2012	3
Exhibit 2	Billings by Month from July 2008 to February 2009.....	4
Exhibit 3	Adjustments by Month from July 2008 to February 2009.....	5
Exhibit 4	Number of Completed Shutoffs July 2008 through February 2009.....	7
Exhibit 5	Shutoff Timeframes for Regular Account Compared to Back Billed Account.....	13
Exhibit 6	Timeline of Back Billing Process	19

Introduction

We conducted this performance audit of the Department of Watershed Management pursuant to Chapter 6 of the Atlanta City Charter, which establishes the City of Atlanta Audit Committee and the City Auditor's Office and outlines their primary duties.

A performance audit is an objective analysis of sufficient, appropriate evidence to assess the performance of an organization, program, activity, or function. Performance audits provide assurance or conclusions to help management and those charged with governance improve program performance and operations, reduce costs, facilitate decision-making and contribute to public accountability. Performance audits encompass a wide variety of objectives, including those related to assessing program effectiveness and results; economy and efficiency; internal controls; compliance with legal or other requirements; and objectives related to providing prospective analyses, guidance, or summary information.¹

We undertook this audit at the request of the Atlanta City Council. The City Utilities Committee, in Resolution No. 09-R-0104, asked us to expand the scope of our audit of the Department of Watershed Management (performed by KPMG) to include, "an analysis of the Department's customer billing and service termination activities, including but not limited to commercial and residential bills and service terminations issued in December of 2008 and January of 2009."

The resolution also stated:

1. The computation, distribution, receipt, and payment of commercial and residential bills should occur in a timely fashion,
2. Termination of service is warranted only under reasonable circumstances after adequate notification, and
3. Customer accounts mistakenly billed and/or terminated should be made whole as quickly as practical; and the mistake explained.

¹Comptroller General of the United States, *Government Auditing Standards*, Washington, DC: U.S. Government Accountability Office, 2007, p. 17-18.

We focused our review on residential and commercial water and sewer accounts for which service was terminated in December 2008, January 2008, or February 2009.

Background

The Department of Watershed Management, created in 2002, provides drinking water and wastewater services for Atlanta residents, businesses and wholesale customers. The department's Bureau of Drinking Water serves approximately 150,000 residential, commercial, and industrial customers in an area of approximately 650 square miles, including Atlanta and most of Fulton County. The department is currently overhauling the city's water and sewer infrastructure through its Clean Water Atlanta Program. The majority of program funding is from water and sewer fees and a one percent tax collected on retail sales and use occurring in the incorporated city limits of Atlanta (the Municipal Option Sales Tax or MOST). Voters reauthorized MOST in February 2008 and it expires in 2012.

Rate Increase Applied August 1st

The Department of Watershed Management requested increases in water and sewer rates in order to compensate for reduced water use from the drought restrictions and cover operating expenses and debt service to finance the capital program. The City Council approved Ordinance 08-O-0744, which provided for a four-year rate package, as shown in Exhibit 1. Rates increased 27.5% for fiscal year 2009, beginning July 1, 2008. The ordinance approved rate increases of 12.5% in fiscal year 2010, 12.5% in fiscal year 2011, and 12% in fiscal year 2012, contingent on completion of an audit of the Watershed department. Pursuant to the legislation, our office contracted with KPMG to conduct the performance review. We released the final report April 30, 2009.

Exhibit 1
Approved Water and Sewer Rates
Fiscal Years 2008 through 2012

Fiscal Year (July 1 through June 30)	Percent Increase
2008 – 2009	27.5%
2009 – 2010	12.5%
2010 – 2011	12.5%
2011 – 2012	12%

Source: Ordinance No. 08-O-0744

The first rate increase was effective July 1, 2008. However, the department did not apply the increase to customers' accounts until August 1st. In order to recoup an estimated \$7.2 million in revenue, the department asked its contractor, Systems & Software (S&S), to modify the customer information system to "back bill" for customers' July water and sewer use. S&S has been under contract since 2005 to implement the department's new customer information system, enQuesta, and supports and maintains the system for Watershed under a written maintenance agreement. The back billing was not covered under this existing agreement.

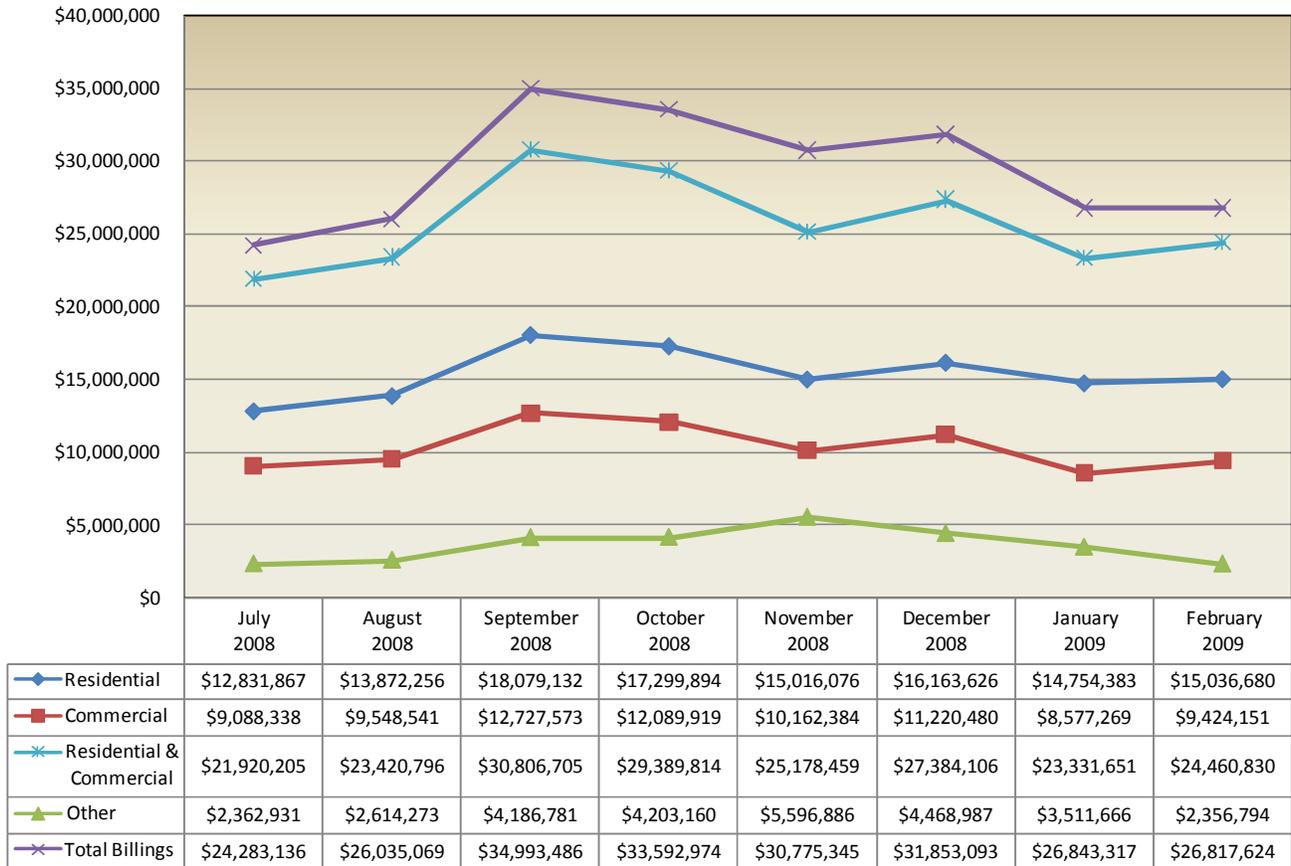
S&S started working on the back bill in September 2008. The department posted back bill adjustments to residential and commercial accounts in December 2008 and January 2009.

S&S charged the city \$18,360 to program enQuesta to back bill for the July increase. The scope of work performed by S&S was documented in the two invoices; no other formal agreement outlined the work to be done by the vendor for the system changes.

Watershed's Monthly Billings Average \$26 Million

Monthly billings for residential and commercial water and sewer accounts averaged \$25.7 million from July 2008 through February 2009. As shown in Exhibit 2, residential accounts made up the majority of the monthly billings, which include water and sewer charges, penalties and shutoff fees, but do not include adjustments such as the back bill or any account credits resulting from resolved disputes or billing errors.

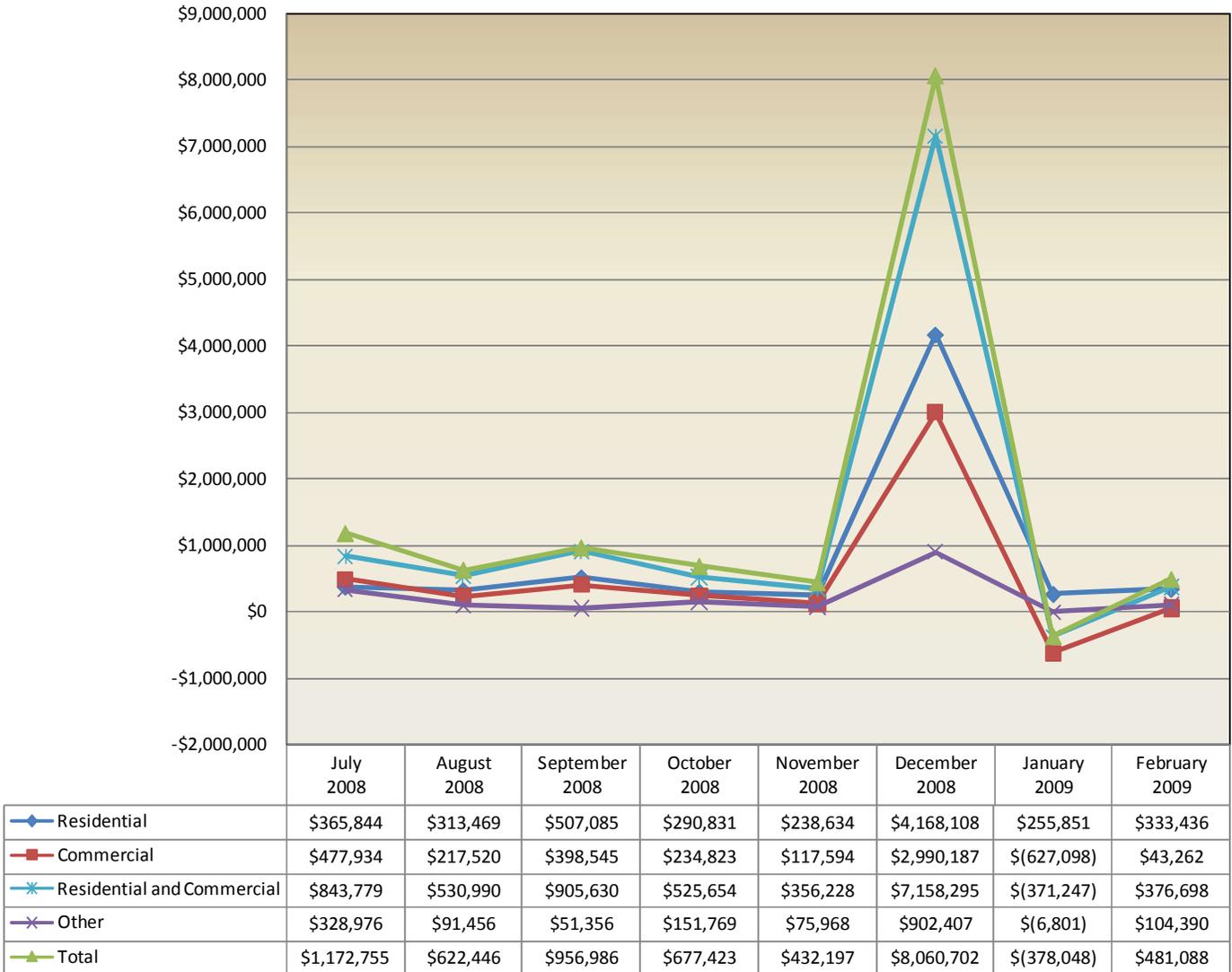
**Exhibit 2
Billings by Month
from July 2008 to February 2009**



Source: Department of Watershed Management 6248 Billing Reports from the enQuesta Customer Information System

Exhibit 3 shows net adjustments by account type from July 2008 through February 2009. The spike in December adjustments reflects the back billing for July.

**Exhibit 3
Adjustments by Month
from July 2008 to February 2009**



Source: Department of Watershed Management 6248 Billing Reports from the enQuesta Customer Information System

Shutoffs Occur More Than 30 Days after Bill Due Date

The department bills all customers monthly. Customers are divided among 45 billing cycles. The billing process begins with a meter read – information captured during meter reading provides the basis for the department’s water and sewer billing and collection. Meter readings are captured either electronically from automated meters or manually if the automated meters are not functioning properly or have not yet been installed. When a reading cannot be obtained for a

meter either manually or electronically, the usage for an account will be estimated. The meter readings are uploaded into enQuesta, and a vendor prints and sends bills to customers within 3 to 5 days of the meter reading. Bills are due approximately 17 days from the bill date.

Department's threshold for shutoff is met when a customer's past due balance reaches \$50 and is at least 30 days delinquent.

Customers with delinquent accounts can have their water service shut off for nonpayment. City code states that the shutoff will "not be later than 30 days from the bill due date". According to the department's procedures in effect during the audit, customers with a delinquent balance of \$50 or more that is 30 days past due will have their water service shut off. Because of these delinquency time and dollar amount thresholds, the department does not shut all customers off within 30 days of the bill due date.

Within one to three days after the bill due date, the department uses the enQuesta system to review the accounts of customers who have not yet paid their bills in full. All customers with past due balances are assessed a 5% late fee. The customer notification process is as follows:

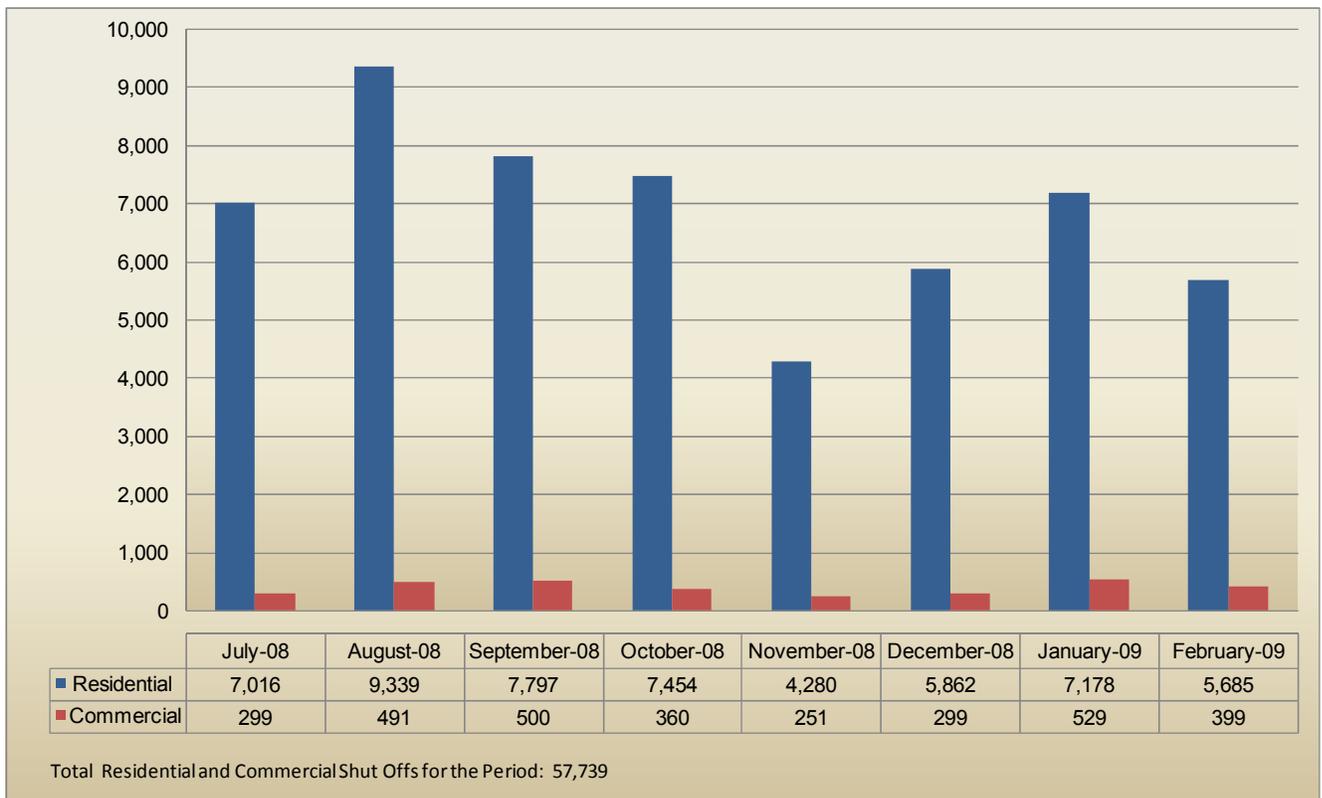
- The department takes no further action if the balance, including the late fee, is less than \$25.
- If the past due balance, including the late fee, is between \$25 and \$50, the department sends a delinquency/disconnect letter.
- If the past due balance including the late fee reaches \$50 or more, water service is shut off within 7 days from the delinquency/disconnect letter.

When a customer is slated for shutoff, a shutoff work order is created and the water is shut off the next business day. Although the department's documented process is to notify delinquent customers via an Interactive Voice Response (IVR) system as well as written notice, staff told us that they disabled enQuesta's IVR function in late November 2008 because it caused performance problems. The department charges customers a shutoff fee of \$45 if the meter is turned off or \$65 if the meter is turned off and locked.

As shown in Exhibit 4, the department shut off 57,739 residential and commercial accounts from July 2008 through February 2009. About

20,000 of the accounts were shut off from December 2008 through February 2009, when back bills were applied to customer accounts. The majority of the shutoffs were for residential accounts. The average number of shutoffs during the back billing period was lower than the average number of shutoffs from July through February; however, we cannot rule out possible seasonal differences in the data.

**Exhibit 4
Number of Completed Shutoffs
July 2008 through February 2009**



Source: Shutoffs – July 2008 through February 2009 from the enQuesta Customer Information System

Customer Complaints Prompted Back Billing Audit

The department, Atlanta City Council, and local media began receiving numerous customer complaints regarding water billing, meter functionality and shutoffs beginning in early January, shortly after the back billed adjustments were posted to accounts. Some customers complained that they were shut off and were

unaware that they owed money. Others claimed they were shut off even though they paid their bills. And others stated that they had high water bills and inaccurate meter reads.

The City Council questioned Watershed officials regarding the issues. The City Utilities Committee requested an audit of the back billing to determine whether the bills were issued timely, customer shutoffs were justified, and customers were notified prior to shutoff.

The Watershed Commissioner stated in media reports that the department's policy is to terminate service to customers whose bills are delinquent. He said customers receive two notices before service is discontinued. He said that only about 5% of all accounts are delinquent and he was confident that the majority of customers who were turned off were delinquent in their payments. He also said the adjustment caused some accounts to be considered delinquent, but did not attribute any service terminations investigated to back billing.

Audit Objectives

This report addresses the following objectives:

- Did the Department of Watershed Management bill customers for the rate increase in a timely manner?
- Was termination of service consistent with the department's normal business practices and after adequate notification?

Scope and Methodology

We conducted this audit in accordance with generally accepted government auditing standards. We conducted our audit fieldwork from January 2009 through May 2009. Generally accepted government auditing standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit methods included:

- Reviewing news articles and council meetings to understand customer concerns and document the department's statements on back billing.
- Reviewing the department's website, customer bills and bill inserts to assess the information provided to customers regarding the back billing.
- Interviewing management and billing and collections personnel to understand standard operating procedures and departmental practices.
- Interviewing department and contractor staff and reviewing contract documents to understand the system modifications and testing performed for the back billing.
- Reviewing city code provisions, legislation and department policies and procedures to understanding billing, collections, and shutoff requirements.
- Compiling and analyzing payment and shutoff data for July 2008 to February 2009, the period since the rate increase went into effect.
- Reviewing billing, payment, notification, and shutoff data from the department's billing system for residential and commercial customers whose water service was shut off in December 2008, January 2008, or February 2009. We reviewed billing and payment information summary reports for all customers who were shut off in December, January, and February to assess whether any customers were shut off because of the back billed adjustments. We reviewed electronic data files to identify accounts that did not have a previous balance that was over \$50 and more than 30 days delinquent. Because the electronic reports provided by the department did not contain complete customer account data, we reviewed accounts individually in the enQuesta system based on a sample. We verified account information for a sample of 162 accounts:
 - From the department's reports, we identified 77 accounts that appeared to have had no delinquency during both the month of **and** the month immediately preceding the shutoff. We reviewed all of the accounts in the enQuesta system to verify the account balances at shutoff.

- From the department's reports, we identified 2,662 accounts that appeared to have had no delinquency during either the month of shutoff **or** the month immediately preceding the shutoff. We randomly selected a sample of 85 of these accounts to review in enQuesta. Appendix A includes a description of the sampling method.

Findings and Analysis

Back Billed Adjustment Caused Shutoffs

Five of a sample of 162 accounts that we reviewed in detail were shut off because of the back billing. These customers were between 9 and 11 days late in paying their bills, but were apparently flagged for shutoff based on the date that the back billed adjustment was posted to their accounts rather than their bill due dates. These accounts did not meet the department's criteria for shutoff. We estimate that a relatively small number of accounts may have been affected by the back billing - up to 1.7% of all of the shutoffs from December 2008 through February.

In addition, 18% of the customers in our sample of 162 did not receive notification prior to shutoff. All 28 of these customers had insufficient funds in their bank accounts when the department attempted to collect payment. These payments are designated NSF. City code requires the Department of Watershed Management to provide notice to customers before discontinuing water service. The code does not differentiate between NSF and other delinquent payments. Although the department has interpreted the notice provision in the code to require only an explanatory note on the back of each bill as sufficient notice, that interpretation conflicts with Watershed's practice of sending written delinquency notices to customers prior to shutoff, with the exception of NSF customers.

Back Bill Posting Date Triggered Shutoff Threshold

The department posted back billed amounts to customer accounts between billing cycles and the amounts were listed as an adjustment on customers' subsequent bills. In our detailed review of 162 accounts, we found 5 accounts that were shut off due to the back billing adjustment. The customer information system apparently calculated the delinquency from the date that the adjustment was posted to the account. By the time these customers received the bill with the back billed amount listed, the amount due was already a week or more into the 30-day window. Thus customers who were 9 to 11 days late in paying their bills were shut off as if they were more

than 30 days late in paying their bills. The department's policy is to charge customers a shutoff fee of \$45 if the meter is turned off or \$65 if the meter was turned off and locked; these fees are authorized by Section 154-69 of the city code. Department staff told us that they did not charge shutoff fees for shutoffs occurring the week of January 5, 2009 (2,544 shutoffs) because they were not sure whether customers were shut off mistakenly due to back billed charges. The five accounts in our sample that were shut off based on the back bill posting date were not charged shutoff fees. We noted other accounts shut off during this time period that were charged shutoff fees. Other accounts may have been mistakenly disconnected and charged shutoff fees.

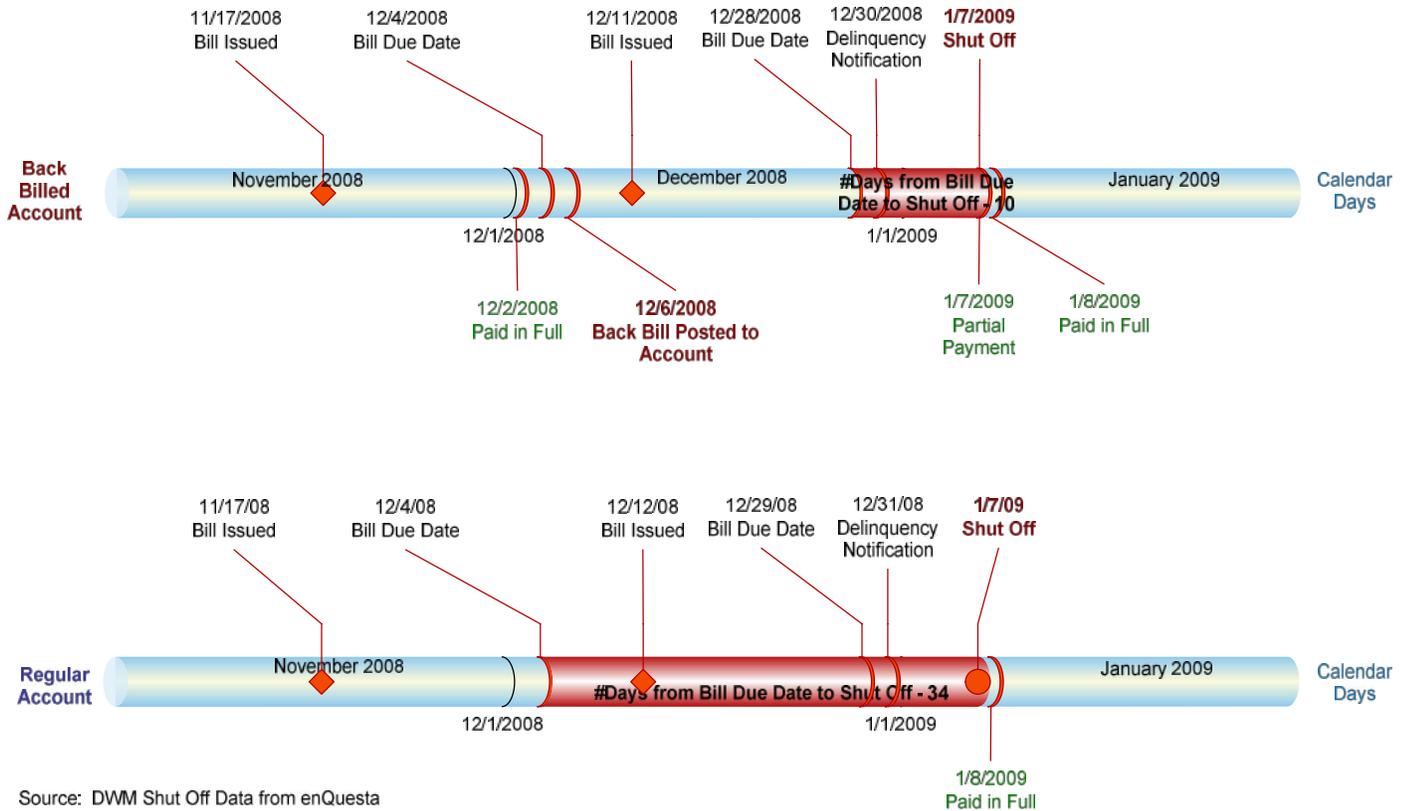
We also found another account outside of our sample that was shut off as a result of the adjustment. In this case, the account had a previous balance that was 15 days delinquent. However, the overdue balance was well under the dollar threshold for shutoff. The back billed amount posted to the account on December 6, 2008; however, the next bill was not due until December 28th. The account was shut off on January 7, 2009, 30 days from the date the back bill posted. The back billed amount caused the account to be treated as 30 days delinquent and the back billed amount caused the balance to reach the \$50 threshold. This customer was also charged a late fee as a result of the back billed amount.

Some customers were delinquent before they received bill for back billed amount. The back billed amount for July is categorized in enQuesta and listed on the customer's bill as an adjustment. Adjustments are posted to accounts between billing cycles. Based on our detailed review of a sample of 162 accounts that were shut off during December 2008 through February 2009, it appears that enQuesta flagged delinquencies from the date that the adjustment was posted to the account rather than the bill due date. In effect, by the time customers received their bills with the back billed amount listed, the amount due was already a week or more into the 30-day window. For some customers with no prior delinquency or a minimal delinquency, the back bill posting triggered the department's 30-day and \$50 shutoff thresholds.

Exhibit 5 shows two accounts in our sample - an account shut off due to back billing, and an account that was shut off due to a typical delinquency. As shown in Exhibit 5, the typical shutoff occurred

approximately 34 days from the bill due date. In contrast, the back billed account was shut off 10 days after the bill due date. The first bill for the back billed account was paid on December 2nd, two days before the due date. Although the second bill for this account was not paid by the December 28th due date, the shutoff occurred long before the bill was 30 days delinquent. Although the code allows the department to shut off an account any time after the bill due date as long as it gives customers notice, the department's policy is to shut off accounts when they are \$50 or more and at least 30 days delinquent. As shown with the typical shutoff in Exhibit 5, a delinquent customer would not reach the 30-day threshold for shutoff until the next billing cycle following the delinquency.

Exhibit 5 Shutoff Timeframes for Regular Account Compared to Back Billed Account



Back billed amounts resulted in shutoffs for a relatively small subset of customers. Of the 20,000 residential and commercial accounts shut off in December 2008 through February 2009, we identified 2,662 (13%) that could have been related to the back billing. Based on our random sample and detailed review of account histories, we estimate that up to 13% of this subset of shutoff accounts could have been triggered by the back billing – about 1.7% of all of the shutoffs.

Department Does Not Notify All Customers Prior to Shutoff

City code requires the Department of Watershed Management to provide notice to customers before discontinuing water service. Watershed failed to notify 28 of the customers in our sample of 162 before shutoff. All of these customers were NSF – they had insufficient funds in their bank accounts when the department attempted to collect payment. Department staff acknowledged that it is not their practice to send notice to these customers, but the code does not differentiate between NSF and other delinquencies.

The enQuesta system had no record that another 11 customers in our sample were notified prior to shutoff, but the department provided other documentation showing that they did in fact receive notification. Department staff said that notification should have been shown in the system for these accounts, and are working with S&S to determine why the notice did not post to the accounts. The enQuesta system is the system of record, and Watershed should ensure that it contains accurate and up-to-date customer information, including notification.

The department does not notify customers with NSF charges prior to shutoff. In our sample of 162 accounts, we found that 28 (18%) customers did not receive notification prior to shutoff. All 28 were NSF - customers who had insufficient funds in their bank accounts when the department attempted to collect the payment. Once the department has determined that the payment will not clear the bank, an NSF check fee is posted to the account, along with the original amount due on the bill. A work order is then created to lock the meter. Unlike other shutoffs for nonpayment, notification prior to shutoff is not a part of the process for NSF customers.

City code requires that customers be notified prior to shutoff.

According to Section 154-120 of the city code, if any person fails to pay or dispute their bill by the due date, the person will be sent a notice that their service will be terminated without further notice. The code makes no exception for customers with NSF payments. According to the department's February 2009 bill insert, customers who are not up-to-date on their water bills receive two notices prior to shutoff. The first notice is on the bill itself; the second is on the disconnect notice. The Law Department informed us that no additional notice is required other than an explanatory note on the back of each bill, which states that if customers do not pay by the due date, water service will be subject to termination. However, this differs from the department's publicly stated practice. In addition, while the statement on the back of each bill could meet minimum legal requirements, it might not be considered adequate. The City Council's request for this audit stated that shutoffs should occur "under reasonable circumstances and with adequate notification."

City code shutoff timeline may not be reasonable, given the department's notice requirement and procedures. Section 154-120 (1) of the code requires that customers be shut off no later than 30 days after the bill due date. According to the department's current procedures, a customer is not shut off until his bill has been delinquent for 30 days and the balance is \$50 or more. Based on this time frame, customers are shut off more than 30 days after the bill due date. Department staff said they are evaluating the best way to align their operations with the code provisions. We agree that the department should either streamline its business process to meet the 30 day deadline in the code or propose changes to the city code to reflect its business process. In either case, the process should provide for customers receiving their next bill showing any delinquent balance prior to being shut off.

Lack of Planning Led to Billing Delays and Customer Dissatisfaction

The Department of Watershed Management did not adequately plan to implement the fiscal year 2009 rate increase. Although the new rate was effective for most customers July 1, 2008, the department did not apply the increase to customer accounts until August 1. Watershed officials cited late Council approval, a new information system, and a change in the format of the rate legislation as reasons for the delay. Although Council approved the increase about two weeks before its effective date, the department submitted the rate proposal and legislative request in late April, well in advance of its approval. Despite these early preparations, the department did not ensure that plans were in place to implement the rate increase in a timely manner if approved.

Nor did the department adequately plan for the back bill once it decided to recover revenue lost from the billing delay. The department did not prepare a test plan to ensure that system changes operated as intended before sending out the bills, relying instead on the contractor. Consequently, nearly 40,000 accounts (11 of the 45 billing cycles) were charged penalties on the back billed amounts, which were considered current charges. The department subsequently reversed the penalty in the system and applied a credit on the customer's next bill.

The process for the July back billing was not timely or clearly explained to customers. The July increase was not billed to customers' accounts until the December billing cycles, and it was posted as an adjustment. Prior to billing the amount, the department did not communicate with customers to explain how the charges would be calculated and when they would be posted to accounts. Customers were notified of the rate increase in general and when it went into effect, but may not have been aware that the July increase hadn't been billed, and were not notified when the billing would occur.

Department Was Not Prepared to Implement Rate Increase by the Effective Date

The Department did not enter a rate adjustment into their customer information system in enough time to implement the 27.5% first year rate increase approved by the Atlanta City Council. The rate increase was approved June 19, 2008, and effective July 1st, but was programmed into the information system to begin applying the increase for billing cycles starting August 1st. The July amount, estimated at \$7.2 million in revenue, was not billed to accounts until December. According to Watershed staff, several factors contributed to the delay in applying the increase:

- The department recently implemented a new customer information system,
- the rate increase legislation included an effective date format that varied from previous rate increases,
- and the increase was approved by City Council too close to the effective date.

Despite these factors, the department anticipated proposing a rate increase as early as April 2008, and should have ensured that plans were in place to implement a rate increase at the time it was approved by Council.

Watershed staff implemented the new rates a month after the effective date. The City Council approved the rate increase on June 19, 2008, and the effective date in the legislation, as originally submitted by the department, was July 1, 2008. However, the increase was applied to accounts with billing cycles beginning August 1st. Watershed staff entered the 27.5% rate increase into enQuesta, the department's customer information system, using the system's billing rate module. Watershed staff stated that one of the reasons the rate increase was not billed by the effective date is because this was the first time that the department had to implement a multi-year rate increase in enQuesta, which was implemented in 2006.

Department staff also told us that the effective date of the rate increase legislation was different from prior rate increases; the current rate increase is effective on a specific date, whereas previous rate increases were effective on the next billing cycle after the

effective date. We reviewed legislation from the last rate increases and compared them to the current legislation. The last long-term graduated rate increase for the Department of Watershed Management was adopted December 1, 2003, and effective “for all billing cycles beginning on and after January 1, 2004,” which is consistent with the staff’s statement. However, the later reductions to that 5-year increase contained language stating the change would be effective either “beginning on and after” the effective date or on a specific day, similar to the 2008 rate increase.

The legislation for the 2008 rate increase was effective on July 1st. Staff said by the time they were aware of the discrepancy in the effective dates, some of the July bills had already gone out, based in part on June water consumption. They would need to back bill for the July use, which they found more difficult than anticipated.

The commissioner also said it was also difficult to program the new rates into the system before July 1st because the approval date of the rate increase was so close to the effective date. However, although there was about a two-week difference between the approval and effective dates, the department submitted the rate proposal and legislative request mid-April 2008. Watershed staff should have planned to implement the potential rate increase by the effective date.

Customers were not billed for the July 2008 increase until December 2008. As shown in Exhibit 6, the department did not bill customers for the July usage until billing cycles beginning in mid-December.

Exhibit 6 Timeline of Back Billing Process

April 2008	<ul style="list-style-type: none"> • April 18 - DWM submitted rate legislation
May 2008	<ul style="list-style-type: none"> • May 18 - Rate increase legislation heard by City Utilities Committee
June 2008	<ul style="list-style-type: none"> • June 19 - City Council approved four-year rate increase
July 2008	<ul style="list-style-type: none"> • July 1 - Effective date of 27.5% rate increase
August 2008	<ul style="list-style-type: none"> • August 1 - Rate increase applied to residential and commercial customers
September 2008	<ul style="list-style-type: none"> • September 1 - DWM rate increase effective for wholesale customers • Watershed established scope of work with vendor to perform system modifications for July back billing
October 2008	<ul style="list-style-type: none"> • Vendor continued to work on customer information system modifications for back billing
November 2008	<ul style="list-style-type: none"> • Vendor tested system modifications
December 2008	<ul style="list-style-type: none"> • Vendor moved system modifications to production • Department performed limited testing on system modifications • Mid-month, department began posting July back billed amounts on bills • The message box on December bill explained adjustment amount to customers • Penalty is added to the first ten billing cycles (39,677 accounts - penalty is later credited)
January 2009	<ul style="list-style-type: none"> • Department completed back billing for July usage • January bill inserts notified customers of back billing • Watershed officials made public statements that only customers who were delinquent were shut off • Department posted additional information on website about back billing issues • City Council requested audit of back billing process
February 2009	<ul style="list-style-type: none"> • Customers continue to complain of improper shutoffs

Sources: City Ordinances, vendor invoices and correspondence with department staff; data from the enQuesta customer information system; media articles.

Customers Were Not Notified in Advance When July Increase Would Be Billed

Watershed billed customers for the July increase on the December 2008 and January 2009 bills and the payment was posted to the accounts as an adjustment. No prior notice was provided to customers or publicly stated about the back-billed amount. Customers were informed of the back billed amount by a note in the message box on the December bill.

While the department was working with its contractor to program the system to bill for the July usage, it did not communicate with customers about when the July amount would be charged. It is likely that some customers were not aware that the rate increase had not been charged in July – the bill insert for that month stated that the rate increase had been passed by Council and that they would go into effect beginning July 1st, although it was not actually billed in July. Subsequent bills or inserts did not mention when and how the July usage would be billed.

The department did not provide written notification or post information to its website about the July back billing until customers complained about the process. Watershed officials have acknowledged that the department could have done a better job of communicating with customers regarding the back billing.

The back billing was explained to customers at the time it was billed. Customers were billed for the increase on their July use either in December or January, depending on their billing cycle. On these bills, the department included a note in the message box, as shown here. This was the first notification to customers about the increase for July; no other information was provided by the department prior to the billing.

The 27.5% rate increase scheduled for July 1st was not applied to your bill until August 1st. The line item on this bill entitled "Adjustments as of MM/DD/CCYY" includes your July Backbill charges for July water and sewer usage.

Source: Message Box on December/January Bills

After numerous customer complaints, the department provided an explanation of the back billed amount. After customers were back billed in December, the department began receiving calls from customers about the back billing, claiming, among other things, that they had received shutoffs as a result of the back billing, despite paying their water bills. Watershed staff responded by issuing press releases and posting information on their website stating essentially that although they could have made an error, most of the accounts that had been shut off were due to unpaid balances. In February, the state's House of Representatives Planning and Community Affairs committee also held a meeting to discuss the city's water billing issues.

The department published an "update on customer billing issues" in the February 2009 bill insert and on its website. The update provided information to customers about the department's disconnect policies and explained why accounts were back billed. The department also provided information on how to appeal a water bill. Watershed continued to post a series of explanatory notices on its website to further explain how the back bill amount was calculated.

July Rate Increase Computation Was Unclear

The department did not inform customers how the back billed amount was calculated until after complaints were made public. Because the back billed amount was posted as an adjustment and adjustments are not itemized on the bill, some customers could not tell from the bill what they were charged for the back bill. Some complaints might have been avoided if the department had communicated with customers sooner about the back billing process and how it would be handled.

The calculation for the back billed amount was not explained to customers before or at the time the amount was billed.

After the adjustments were billed the department provided information to customers explaining how the adjustment was calculated. The July back billed amount was calculated by obtaining the customer's water and sewer use from July 1 through July 31 and multiplying the previously charged amounts for those days by 0.275, as shown below. The use for July may have been on the customer's July and/or August bill, depending on the billing cycle.

Back Bill Calculation

For meter read charges:

$$\text{Meter Read Charge} \times \text{Rate Increase} \times \frac{\# \text{ of July days}}{\# \text{ of total meter read days}}$$

For service charges:

$$\text{Service Charge} \times \text{Rate Increase} \times \frac{\# \text{ of July days}}{\# \text{ of total meter read days}}$$

Source: Department of Watershed Management staff

Customers cannot distinguish back billed amount from other types of adjustments on their bills. The back billed amount for July is listed on the customer's bill as rate change adjustment on the December or January bill. Because miscellaneous adjustments are also listed on the bills in the same line item as the July back billed adjustment, customers may not be able to determine exactly how much they were billed for the July amount if they also had other adjustments on the bill containing the adjustment for the back bill.

According to city code Sect. 154-27(b) and (c), the commissioner of watershed can make adjustments and give credits in water sewer bills for meter and other leaks, meter reading errors, or billing errors. These adjustments and credits are also shown on the bills as an adjustment line item. However, customers are not able to distinguish back billed adjustments from other types of adjustments on their bills – the specific charge for the back bill is not broken out separately from other adjustments. Only Watershed employees with access to enQuesta can determine which line items within adjustments are for the July back billed amount – the back billed amounts are specifically identified in the system.

Testing for System Modifications Was Incomplete

The department did not prepare a test plan to ensure that system changes operated as intended before sending out the bills, relying instead on the contractor. The scope of work did not address testing. Consequently, nearly 40,000 accounts (11 of the 45 billing cycles) were charged penalties on the back billed amounts, which were considered current charges. The department subsequently reversed the penalty in the system and applied a credit on the customer's next bill.

The department did not develop a test plan for system modifications. Staff said that testing was S&S's responsibility, and the extent of the city's testing of the vendor's modifications consisted primarily of checking the rate increase calculations in the system. The department could not produce documentation showing specifically what they tested, or the test results. Industry change management procedures recommend that changes made to an application have been properly authorized, tested, and approved. Test documentation should include adequate detailed information so that retesting can be performed as needed. Although the department hired a vendor to make the system modifications and conduct testing of the changes, the department retains responsibility for the testing and results.

Penalties were applied to adjustments in 11 billing cycles before the error was corrected. While the back bills were intended to be posted as current charges, customers in the first 11 billing cycles that were run for the July back bill were charged penalties on the adjustment amount – affecting nearly 40,000 customers. The department reversed the penalty and added a credit on the next bill. This billing error may have been discovered if the city had developed a comprehensive test plan. Watershed staff publicly acknowledged the error.

Recommendations

To ensure that the city code and departmental policies are applied fairly and consistently among the department's customers, the Commissioner of Watershed Management should:

- 1. Determine which customers were shut off due to the back bill posting and refund any shutoff charges.** The department should work with its contractor, Systems & Software (S&S), to analyze the accounts of customers who were shut off because of the July back billed amount and determine if any other customers were similarly affected. The department should also reverse any shutoff penalties assessed to these accounts as the result of the shutoffs.
- 2. Notify all customers prior to shutoff, including NSF customers.** The department should revise its policies and procedures on customer notification to include NSF customers. The department should also work with its enQuesta contractor, S&S, to ensure that notification is properly posted to customers' accounts.

To ensure that city code provisions are reasonable and align with the department's current business practices, the Commissioner of Watershed Management should:

- 3. Propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent.** The department should review the code provisions that pertain to the 30-day shutoff requirement and work with the Department of Law to recommend revisions that are consistent with its operations. Regardless of the department's changes to its current timeline, it would be beneficial for customers to receive their next bill showing any delinquent balance prior to being shut off.

4. **Propose changes to the city code to clarify the notice requirements for customers who do not pay their bill in full or dispute it by the due date.** This would help to ensure that the notification requirements are clear and do not conflict with other sections of the code.

Appendices

Appendix A Sampling Methodology

We asked the Department of Watershed Management IT group to extract data from enQuesta to provide monthly billing information from July 1, 2008, through January 31, 2009, for residential and commercial accounts, including the following fields:

- account number
- route number
- billing cycle
- customer name
- customer type
- service address
- bill date
- payment due date
- previous balance
- payments
- adjustments
- penalties
- current charges
- total amount due

We also requested monthly listings of customers whose service was shut off from December 2008 through February 2009. We had planned to match the accounts on the shutoff reports to the account billing data to test whether all the accounts had previous delinquencies.

Watershed IT staff was unable to extract the data we requested, but provided us with monthly aged accounts receivable reports (AARD01), which are standard in enQuesta, that contain the customer's name, type (residential/commercial), account number, last payment date, and current, 30, 60 and 90-day balances. Staff downloaded the report data into comma separated value text files and imported the data into Access. We questioned whether the reports were complete because the files for different months contained varying numbers of records and we didn't expect the number of residential and commercial accounts to fluctuate so widely.

Data File	Record Count
AARD01July08	161,271
AARD01Aug08	164,179
AARD01Sep08	165,709
AARD01Oct08	155,175
AARD01Nov08	175,270
AARD01Dec08	186,034
AARD01Jan09	166,320

We further checked to see whether four accounts for which we had customer bills were listed in the October, November, December, and January reports. Although each of the accounts had been active over the entire review period, only one of the four accounts was listed in each of the monthly reports. We concluded that the aged receivable reports did not include all residential and commercial accounts. Watershed staff was unable to answer questions about the reports because the department does not use them.

Account Number	AARD01 Oct.08	AARD01 Nov.08	AARD01 Dec.08	AARD01 Jan.09
4364****	-	-	√	-
18612****	√	-	√	-
18311****	-	√	√	√
2571****	√	√	√	√

Because the department was unable to extract complete data from enQuesta, we reviewed detailed account histories in enQuesta for a sample of accounts that had been shut off between December 1, 2008, and February 28, 2009.

We identified 77 accounts that had been shut off in December, January or February for which the previous balance was \$0 or a record did not exist in each of the two months preceding the shutoff. We reviewed account histories in enQuesta for all 77 of these accounts and found no cases in which service was terminated due to the back billing.

We identified 2,662 accounts that had been shut off in December, January or February for which the previous balance was \$0 or a record did not exist in either of the two months preceding the shutoff. Due to time constraints, we randomly sampled 85 of these accounts for detailed review in enQuesta. Our sample was intended to test Commissioner Hunter’s statement that he thought no accounts had been shut off because of the back billing. If no accounts in the sample were terminated due to the back billing, we’d have a reasonable basis for concluding that there was not a systematic problem.

Five accounts from our random sample of 85 (5.9%) had been shut off due to the back billing. To extrapolate to the 2,662 accounts from which we sampled, we calculated 95 percent confidence intervals using an adjusted formula that approximates the hypergeometric distribution.²

² A very low error rate can distort the confidence interval calculation because the underlying population may violate the assumption of normality - the upper bound can be too low and the lower bound can be too high. See

Using this formula,

$$p = \frac{1}{1 + \frac{k^2}{n}} \left[\hat{p} + \frac{k^2}{2n} \pm k \sqrt{\frac{\hat{p}(1 - \hat{p})}{n} + \frac{k^2}{4n^2}} \right]$$

Where:

p = the proportion of 2,662 accounts shut off due to the back billing

\hat{p} = the proportion found in the sample ($5/85$)

n = the sample size (85)

k = 1.96 for .95 confidence interval

we estimate that shutoffs due to the back billing were between 2.5% and 13% of the 2,662 accounts, amounting to between 0.3% and 1.7% of the 19,952 accounts shut off in December, January and February.

Birnberg and Pratt, "Better Estimates of Confidence Intervals for Very Low Error Rate Population," Management Science Vol. 12, No 10, June 1966.

Appendix B

Management Review and Response to Report Recommendations



SHIRLEY FRANKLIN
MAYOR

CITY OF ATLANTA

55 TRINITY AVENUE SW, SUITE 5400, SOUTH BLDG.
ATLANTA, GEORGIA 30335-0310
OFFICE 404-330-6081
FAX 404-658-7194

DEPARTMENT OF
WATERSHED MANAGEMENT
ROBERT J. HUNTER
COMMISSIONER

August 11, 2009

Ms. Leslie Ward
City Internal Auditor
City of Atlanta
88 Mitchell Street, SW
Suite 12100
Atlanta, GA 30303

RE: Draft Performance Audit: Department of Watershed Management
Back Billing of July 2008 Rate Increase, July 2009

The Department of Watershed Management has received and reviewed the July 2009 draft audit report regarding the back billing of the July 2008 water & sewer rate increase. Watershed appreciates the corrections your staff made to the preliminary draft report based on our review and exit interview. However, a fundamental disagreement still remains regarding the framework of your recommendations.

Both our offices agree that the new rates that were effective July 1, 2009 were not applied until August 1, 2009; thereby requiring the back billing for the incremental costs for the month of July. We are also in agreement that the customer communication aspect of the back billing could have been significantly better. However there is fundamental disagreement over why customers had their service terminated. The position taken in your audit report is that customers' service was shut off due to the back billing and this conclusion is based on departmental procedures. Watershed's position is that service shut-offs occurred because customers had past due amounts in addition to the back billing and that the shut-offs are required by City Code. This is true for each of the five accounts identified in the audit.

While this distinction may seem esoteric to some, it is significant. The prior performance audits by your office have consistently emphasized Watershed changing our procedures to meet the Code requirements and that is what we have done.

The July 2009 audit is the third audit of billing and collection performance. Previous audits included the performance of United Water (January 2003) and Watershed Management (November 2004). A fundamental conclusion and recommendation of the November 2004 audit is that service shutoffs should adhere to the existing City Code and should occur as soon

as possible after the due date. This is exactly what Watershed Management has been striving to achieve. Specific, pertinent quotes from that report include:

- Cover Letter
“Our recommendations, most of which remain unchanged from those we made in our earlier reports, call for much quicker initiation of service shutoff and subsequent enforcement and collections procedures. The process we recommend not only is in line with accepted collection practices, it also complies with the Atlanta Code of Ordinances, while the department’s practices did not.”
- Findings & Analysis (page 7)
“The amount of time that accounts are allowed to remain delinquent prior to being slated for shut off is inconsistent with the shut off provision in the Code. The Code mandates that service be shut off no later than 30 days after the due date for monthly bills and no later than 60 days for bimonthly bills. However, the department did not usually shut off services until delinquent accounts reach a certain dollar threshold, which took an average of 10 months for residential accounts in 2003. Because this is one of the first and usually most effective steps in the enforcement process, it should occur as soon as possible after the bill’s due date.”
- Findings & Analysis (page 14)
“The department’s current practices allow an account delinquency to continue for longer than allowed in the Code before service is shut off. In addition to violating the Code, the amount of time that an account remains delinquent before meeting the department’s criteria for shut-off greatly reduces the collectability of the delinquent account, thus increasing the department’s account receivable balance. The department should terminate service according to the timelines set in the Code. This recommendation, made in our previous audit, has not been implemented.”
- Findings & Analysis (page 23)
“The Department of Watershed Management is not assessing a late fee on delinquent accounts, as mandated by the Code and as provided for in the department’s written policies...The result of not charging late fees is loss of revenue. Assessing the late fees could also function as a deterrent for continued delinquencies. We made this recommendation in our previous audit report, as shown in Appendix 1, it has not been implemented.”
- Recommendations (page 24)
“Shut off water and sewer service within 30 days after the bill’s due date, as mandated by the Code.”

The November 2004 audit was conducted during a period when Watershed Management was in the initial phases of getting a serious accounts receivable situation under control. The department had established a past due threshold of \$700 to trigger service cut-off based on the volume of past due accounts and the availability of staff. Service was not being terminated within the 30 day period as required by Code but was occurring a number of months later. The Code requires service shut-off within 30 days for any amount past due. Recently, the department's practice has been a threshold as low as \$25 and service shut-off occurring from 31 to 34 days past due.

The premise of the July 2009 audit is that some customers had their service shut-off because the back billing put them over a \$50 past due threshold and that their service should not have been terminated even though the Code required cut-off because they had a past due amount in addition to the back billing. This is a fundamental shift in position from the November 2004 audit position of Code compliance and termination within 30 days for any past due amount.

The customer accounts identified in the audit were not "shut off due to the back bill posting". They were shut off in accordance with the Code requirements.

A detailed response to the audit findings and recommendations is attached as a table. The following is a summary of the major points regarding the recommendations:

1. *Determine which customers were shut off due to the back bill posting and refund any shut-off charges.* No customers were shut off due to back bill posting. However, as previously reported to the audit team, Watershed has completed an extensive review of all accounts that received back bill charges. No fees were assessed to the customers disconnected under the audits definition. There are no fees to refund.
2. *Notify all customers prior to shutoff including NSF customers.* All customers already receive notice on every bill that payment must be received by the due date in order to avoid termination. Therefore, every customer receives one notice on the original bill and an additional notice on the next month's bill. No special notice for returned, NSF checks is required under the Code and would be contrary to industry practices. The department will not incur additional expenses to notify customers that they have bounced a check and are subject to service termination.
3. *Propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent.* DWM will take actions to shut off service for delinquent accounts within the 30 day timeframe specified by Code.
4. *Propose changes to the city code to clarify the notice requirements for customers who do not pay their bill in full or dispute it by the due date.* Watershed Management is not aware of any Code conflicts or inconsistencies in this regard. The audit team has discussed code sections 154-63 and 154-120 with Watershed and we have consulted the Law Department. Both Law and Watershed are in agreement that the two code

Ms. Leslie Ward
Back Billing Performance Audit
August 11, 2009
Page 4

sections refer to two distinctly different circumstances and that no clarification is necessary.

The Department of Watershed Management appreciates the opportunity to comment on the draft report of the Back Bill Audit. We are extremely concerned about the treatment and satisfaction of our customers. This audit helped us to focus on analyzing and understanding the facts surrounding the back bill adjustment. Our beneficial outcomes from the audit include:

- ✓ Increasing our level of assurance that the service terminations that occurred were performed appropriately, in accordance with city code.
- ✓ No customers have received late fees or disconnect fees that currently need reversal, as a result of the back bill adjustment.
- ✓ While we have significantly improved (decreased) the number of days we allow customers to be delinquent before terminating since the 2004 Follow-up Audit, we still need to streamline this process even further to ensure that we disconnect no later than thirty days (a code requirement) after the due date.
- ✓ The Back Bill adjustment was very transparent and the accuracy of calculations was validated by the audit process.
- ✓ The Back Bill communication plan should have followed the department's normal communication strategy, but the billing adjustment was not explained until the receipt of the bill. DWM's normal communication process would have helped to better address many of the customer questions and concerns.

I thank you and your staff in assisting us with that effort.

Sincerely,



Robert J. Hunter, Commissioner
Department of Watershed Management

**CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT'S
 RESPONSE TO THE BACK BILL AUDIT DRAFT REPORT
 JULY 2009**

BACK BILL AUDIT FINDINGS		
Finding	Agree Partially Agree Disagree	DWM Response
Back Billed Adjustment Caused Shut-offs		
Back Bill Posting Date Triggered Shutoff Threshold	Disagree	<p>This sub-heading falls under the heading of "Back Bill Adjustment Caused Shut-offs". DWM disagrees with this statement. All of the accounts that were terminated had delinquent charges, outside of the back bill adjustment, and were disconnected appropriately.</p> <p>The date of the back bill adjustment, or any other type of adjustment, does not "trigger" a threshold amount. A threshold amount is a variable that set-up in the system at the discretion of the department and allows the Department to manage productivity levels. When the process is ran to determine which accounts will be disconnected, this process looks at all accounts with balances that are no longer in the category of customers who have paid their bills on or before the due date.</p>
Some customers were delinquent before they received bill for back bill amount.	Agree	The audit did note that all five accounts identified in their sample had delinquent charges independent of the back bill adjustment; therefore, these accounts were terminated in accordance with the Atlanta City Code (City Code).
Back billed amount resulted in shut offs for a relatively small subset of customers.	Disagree	DWM disagrees that a small subset of customers were disconnected due to the back bill and maintains that because <i>all</i> of the accounts identified by the audit had delinquent balances, as acknowledged by the auditor, that all of those accounts were terminated in accordance with City Code. An account that is overdue by any amount is past due and thus subject to disconnection.
Department does not notify all customers prior to shut-off.		
The department does not notify customers with NSF charges prior to shut-off.	Disagree	DWM disagrees that City Code requires DWM to do so in these cases. This practice is consistent with other utilities in the surrounding area.
City code requires that customers be notified prior to shut-off.	Partially Agree	DWM agrees that City Code requires notification prior to shut-off, which is on the bill; however, DWM disagrees that we are in violation of the City Code. Delinquent customers receive notification before termination.
City code shut off timeline may not be reasonable, given the department's notice requirement and procedures.	Partially Agree	DWM does agree that the current timeline for disconnection may exceed thirty days delinquent by one to seven days; however, DWM does not agree that revising City Code to extend the number of days before disconnecting is a financially sound decision. This would negatively impact our accounts receivables and is in direct conflict with the 2004 Billing audit. DWM is in the process of further streamlining our collection process to ensure that all delinquent customers are

BACK BILL AUDIT FINDINGS		
Finding	Agree Partially Agree Disagree	DWM Response
		disconnected no later than thirty days past the due date, in accordance with City Code.
Lack of Planning Led to Billing Delays and Customer Dissatisfaction		
Department was not prepared to Implement Rate increase by the effective date.	Partially Agree	DWM agrees that the rate increase was not billed timely; however, the primary contributing factor could not have been impacted by better planning. The wording in the legislation for the previous rate increases stated that the effective date would begin the first full billing cycle <i>after</i> the effective date, which would have been approximately August 1 st , 2008. The new legislation reads that the rate increase will be effective for usage beginning July 1 st . This distinction in the language of the legislation was not emphasized, so the rates were set-up in the same manner as had been historically implemented.
Watershed staff implemented the new rates a month after the effective date.	Agree	
Customers were not billed for the July 2008 increase until December 2008.	Agree	
Customers were not notified in advance when July increase would be billed.	Agree	DWM agrees that the communication plan did not follow DWM's normal communication strategy. The normal communication strategy lead time would have resulted in the back bill being applied on March/April bill, which would have been almost seven to eight months after its effective date.
The back billing was explained to customers at the time it was billed.	Agree	
After numerous customer complaints, the department provided an explanation of the back-bill amount.	Partially Agree	DWM agrees that additional explanations were placed in the bill insert after the billing; however, this was not due to the number of customer complaints. There were already plans for the bill insert as well as explanations provided to the customer via the IVR and during conversations with customer service representatives.
July Rate Increase Computation was Unclear		
The calculation for the back-bill amount was not explained to customers before or at the time the amount was billed.	Partially Agree	DWM did not provide the computation formula on the bill due to limited space in the message box; however, the purpose of the charges was explained. The customer service representatives and bill inserts further explained the back bill adjustment.
Customers cannot distinguish back-bill amount from other types of adjustments on their bills.	Agree	The adjustment line item could have included other types of adjustments other than the back-bill amount; however, the customer could speak with a customer service representative who could easily inform the customer which of those charges were related to the back bill. DWM worked with the vendor to display these charges as a separate line item, but the programming required to allow this feature

BACK BILL AUDIT FINDINGS		
Finding	Agree Partially Agree Disagree	DWM Response
		was not possible.
Testing for System Modifications was Incomplete		
The department did not develop a test plan for system modifications.	Partially Agree	DWM agrees that a specific test plan was not developed for this modification. Testing was completed following normal testing procedures.
Penalties were applied to adjustments in 11 billing cycles before the error was corrected.	Agree	Without customer prompting, DWM immediately began the process of reversing all late fees for those eleven of forty-five cycles. The late fees were programmatically reversed within 4-7 days.

RECOMMENDATIONS		
Audit Recommendation	Agree Partially Agree Disagree	Comments
Determine which customers were shut off due to the back bill posting and refund any shut off charges.	Disagree	DWM disagrees because an extensive review of all accounts has already been completed. No disconnection fees were assessed to the customers disconnected under the audits definition. There are no fees to refund.
Notify all customers prior to shutoff, including NSF customers.	Disagree	All customers already receive notice on every bill that payment must be received by the due date in order to avoid termination. Therefore, every customer receives one notice on the original bill and an additional notice on the next month's bill. No special notice for returned, NSF, checks is required under the Code and would be contrary to industry practices. The department will not incur additional expenses to notify customers that they have bounced a check and are subject to service termination.
Propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent.	Disagree	DWM will take actions to shut off service for delinquent accounts within the 30 day timeframe specified by Code.
Propose changes to the city code to clarify the notice requirements for customers who do not pay their bill in full or dispute it by the due date.	Disagree	Watershed Management is not aware of any Code conflicts or inconsistencies in this regard. The audit team has discussed code sections 154-63 and 154-120 with Watershed and we have consulted the Law Department. Both Law and Watershed are in agreement that the two code sections refer to two distinctly different circumstances and that no clarification is necessary.

Appendix C

City Auditor's Comments on the Commissioner's Responses

Government Auditing Standards require us to explain in the report our reasons for disagreeing with comments from the audited entity if they conflict with the audit's findings and recommendations or when planned corrective actions do not adequately address the recommendations. Our comments elaborate on the audit evidence that contradicts the commissioner's assertions. In addition, we explain why our current recommendations do not, as the commissioner suggests, conflict with those we made in our previous audits of the department's billing and collections activities, but rather are consistent with them.

Department of Watershed Management staff acknowledged that back bill adjustments caused the unintentional shutoffs we found, and they took steps to prevent additional shutoffs due to the back bill adjustments.

Department staff reported that they took actions shortly after the back bill posted that temporarily reduced the likelihood of shutoffs and lessened the negative impact if they did occur. There would have been no reason for these measures, had not the department realized the problems caused by the back bill adjustment. Staff told us they increased the delinquency threshold from 30 to 60 days during the second week of January 2009, and reset it back to 30 days in February 2009. They also said they suspended shutoff fees during the first week in January 2009. They told us they made these changes to "ensure that no one was inappropriately disconnected due to back bill charges." This indicates that the department's intent was to avoid shutting off service to customers who did not meet the 30 day delinquency threshold, and to avoid penalizing customers for "inappropriate" shutoffs.

The department's response and comments either misunderstand or misrepresent how its own shutoff process operates. While the city code allows water service to be terminated at any time a payment is past due, the department has long used thresholds for both the dollar amount and length of time of delinquencies, recognizing that there is a cost involved to do the shutoffs. Flagging accounts that meet the thresholds (in this case, at least \$50 and 30 days delinquent) is an automated process; department staff do not look at all accounts or even all past due accounts as the department's response states. The staff uses a computer system to produce a report from the customer information and billing system listing the accounts with past due amounts that are large enough, and late enough, to meet the thresholds.

Our conclusion that the back bill adjustment caused shutoffs is supported by direct confirmations from staff who administer the process and by explanations of the automated programs used in the process. We requested the program code and query language used to flag accounts for shutoff, but the department did not provide it. Nevertheless, we were able to confirm our understanding of the shutoff process by viewing the computer screens

used to define the thresholds, staff descriptions of the screen printouts, and detailed analysis of billing, payment, and service records for 162 accounts in our sample. When we identified the 5 accounts that appeared on the shutoff reports without meeting the department's thresholds, we confirmed our interpretation with department staff. Staff confirmed that in each of these 5 instances, the back bill caused the account to become delinquent and subsequently shut off. A Watershed employee explained in writing that for one of the 5 accounts, the

"customer was shut off due to the back bill which was applied on Dec. 6th. Unfortunately, there were some accounts that became delinquent as a result of the rate increase which was not applied until December...enQuesta treated these back bill charges as a delinquency although the customer was not aware of the charges until their next bill."

This explanation is consistent with our finding that the back bill posting date triggered the shutoff threshold. The department's computer consultant also corroborated our finding by stating that the enQuesta system treated the back bill adjustments as current for 30 days from the dates they were posted to the accounts. As shown in exhibit 5 on page 13 of the audit report, some delinquent customers were shut off approximately 30 days from the date the back bill was posted, which occurred between billing cycles. The 5 accounts in our sample were shut off 31 or 32 days after the back bill adjustment was posted, while their overdue balances were only 9 to 11 days past their due date.

Unintentional shutoffs triggered by back bill adjustments were, as the commissioner states, authorized by the city code. They did not, however, treat customers "fairly and equally" as the department's public statements maintained.

The department does not consistently shut off delinquent customers. The back bill posting caused some customers to be shut off, while other customers who may have also been delinquent were not shut off. The 5 accounts in our sample whose back bill adjustment caused their service to be shut off could only have reached the \$50/30-day threshold because of the amount and timing of the back bill adjustment. Other customers, whose accounts were 9-11 days past due during this period, but whose delinquent balances plus back bill adjustments totaled less than \$50, would not have been shut off. Customers with high water usage (and resulting high bills) could have been shut off for the back bill amount alone. While we didn't find any accounts in this situation in our sample of 162 accounts, the small sample size doesn't preclude the possibility that they exist in the population of water and sewer customers.

The commissioner's response, as well as the department's previous public statements, distort the situation by insisting that the accounts we identified were delinquent and therefore subject to termination. In fact, every month some of the department's customers are late paying their bill and subject to termination, but their service is not shut off because

their past due amounts don't meet the department's thresholds. Under the current city code, the only ways to administer the shutoff provisions fairly and equally are (1) to shut off every account immediately upon becoming delinquent by any amount; or (2) administer the shutoff thresholds consistently. The first alternative is unlikely to become a viable option. The second alternative, in the case of the back bill adjustments, was not followed. The department administered the thresholds inconsistently.

Failure to provide adequate notice to all customers, including NSF customers, also is inconsistent with the department's stated intent to treat all customers fairly and equally.

Section 154-120 of the city code states that "if any person fails to pay or dispute their bill by the due date, the person will be sent a notice that their service will be terminated without further notice." Watershed's position is that the notice on the back of the bill satisfies the code's notice requirement. However, the commissioner issued a press release in January 2009 stating that "customers receive two payment notices – one on the bill itself and another on the Disconnect Notice." This statement was repeated in a bill insert in February 2009. The notice on the back of the bill is a generic policy statement, saying that "payment not received by the due date will be considered delinquent, and water service will be subject to termination." In comparison, the disconnect notice is separate correspondence sent to the customer that provides a statement of the total amount due and specifically states that it is a final demand for payment and that if the outstanding balance is not paid immediately, water service will be disconnected.

The department's reluctance to notify NSF customers before shutoff seems to deny the possibility of customer or bank error. Although the notice requirement in the code does not distinguish among circumstances that may lead to past due accounts, the department has made a business decision to not send NSF customers a disconnect notice. The commissioner's response states that every customer receives one notice on the original bill and another on the next month's bill. However, NSF customers may not receive another bill before they are shut off. The department has acknowledged the possibility that it will make errors in customer service, and we identified errors in the department's application of shutoffs in addition to the problems caused by the back bill adjustment. In our sample, we also found an account that was shut off because the department posted the customer's payment to another account in error. Receiving a disconnect notice could provide a customer with an opportunity to correct this type of error as well as an unintentional NSF payment.

The department has other policies designed to discourage NSF payments. Watershed staff said that some of their customers have repeatedly made NSF payments. However, the department's policy is to accept only cash payments from customers with a previous NSF. If this policy is enforced, it should decrease the number of NSF payments. If the commissioner is concerned about treating all customers "fairly and equally," he should send all customers disconnect letters, including NSF customers.

The department's response appears to indicate agreement with our recommendation to align their business processes with code provisions. Further, our current recommendations are entirely compatible with those in our previous audits, which suggest that Watershed terminate service according to the timelines set forth in the code.

We recommended that the department propose changes to the city code or modify the department's current meter reading and billing processes so that the shutoff provisions are consistent. The department's response states that it disagrees with our recommendation, but if they are able to speed up the shutoff timeframe, while still providing adequate notification to customers, our recommendation would be implemented.

The code provides that service be shut off no later than 30 days after the bill due date, and we stand by our previous recommendations for the department to comply with this provision. The department should take swift collection action on delinquent accounts, including terminating service. The department has made considerable progress in improving its enforcement and collection procedures since we first audited this function in 2004, after the city resumed direct operation of its water system. However, the recommendations we have made in this audit are intended also to ensure that customers are treated fairly and consistently, in addition to protecting the city's financial interests.

Finally, we have no evidence of the commissioner's statement that, "As previously reported to the audit team, Watershed has completed an extensive review of all accounts that received back bill charges."

Not only was this not reported to the audit team, it contradicts the department's previous public statements about the issue. The commissioner stated in a press release that "with more than 150,000 accounts in the system, it is inevitable that mistakes will occur on occasion. The service terminations in question do not appear, upon investigation, to fall into that category. The department is confident that the VAST majority of customers whose service was interrupted were, in fact, delinquent in their payments." The department has stated that about 5% of their customers pay their bills after the due date. We discovered an account outside our sample that had been shut off because of the back bill, similar to the 5 accounts we found in our sample. It is likely that there were other customers who were shut off because the back bill adjustment caused their account to exceed the \$50 threshold and to appear to be at least 30 days past due – up to 1.7% of accounts according to our sample statistics. When we first discussed the results of the audit with the commissioner on June 10, he expressed concern that his staff could identify all accounts with circumstances similar to the 5 accounts we identified because it would require manual review.

Although the five accounts in our sample were not charged shutoff fees, we noted other accounts shut off during the same time period that were charged shutoff fees (see page 12). Other accounts may have been similarly disconnected and charged shutoff fees. Staff told us after the audit work was completed that in addition to changing the shutoff

threshold to 60 days, they also temporarily discontinued the late fees and shutoff fees. However, we are not confident that all back billed accounts have been analyzed to determine whether any other customers were similarly affected as the five that we found in our sample and determine whether they were charged shutoff fees. We stand by our recommendation for the department to do so.