

**Performance Audit:
Department of
Watershed Management
Consent Decree Monitoring**

April 2006

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



CITY OF ATLANTA

City Auditor's Office
Leslie Ward, City Auditor
404.330.6452

April 2006

Performance Audit:

Department of Watershed Management, Consent Decree Monitoring

Why We Did This Audit

Council Resolution 03-R-2134 requested the city auditor to perform ongoing reviews and analyses of consent decree related capital improvements and related financial and performance issues and to report quarterly to the City Utilities Committee. We also monitored the department's performance on collecting water and sewer bills because it impacts revenues available to support capital improvement projects.

What We Recommended

Our recommendations are intended to improve the reporting of managing and overseeing consent decree projects. We also continue to recommend early action to speed and increase water and sewer collections. The Department of Watershed Management should:

- ensure continuity of project expenditure data for reporting,
- incorporate project level data into the new monthly reporting format,
- consult with the Departments of Law and Finance to define non-revenue accounts, and
- develop a collection strategy that focuses on improving the timeliness of collections.

We also recommend that the chief financial officer work with the Department of Watershed Management to resolve outstanding water and sewer service charges to other city government funds and to keep the accounts current in the future.

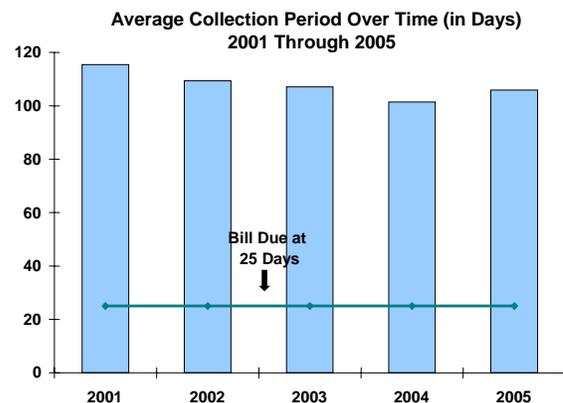
For more information regarding this report, please contact Stephanie Jackson at 404.330.6639 or sjackson@atlantaga.gov.

What We Found

The Department of Watershed Management has implemented a number of recommendations from our interim reports. It has streamlined how it compiles financial data, which should result in more reliable and complete financial data available for reporting. It has also eliminated duplication of effort between the two groups that collect program and project level data. The department agreed that its monthly progress and status reports were of limited value and stopped producing them, except for the monthly report to the Georgia Environmental Facilities Authority (GEFA). It also has tentative plans to produce two new reports: one designed for executives, and one for management in the field, but does not plan to include project-level data in either of the new reports.

The Department of Watershed Management has made significant progress in its collection activities. It has actively begun terminating services for delinquent customers and has begun writing off uncollectible accounts, with plans to recommend accounts for write-off on a quarterly basis. Department staff is working with the Department of Finance to obtain payment on delinquent city department accounts. The department increased its water and sewer collection rate, and has met its collection performance goal for the first time since resuming the collection function from its contractor, United Water.

Despite these efforts, the amount of time it takes to collect on the accounts has remained high. The average collection period for 2005 was 106 days, 81 days past the bill's due date of 25 days.





CITY OF ATLANTA

LESLIE WARD
City Auditor
lward1@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
W. Wayne Woody, Chair
Henry A. Kelly, Vice-Chair
Fred Williams
Mayor Shirley Franklin
Council President Lisa Borders

April 17, 2006

Honorable Mayor and Members of the City Council:

This is the fourth and final report in a series to monitor Watershed Management's consent decree projects. Our purpose was to provide the City Council with objective information about the cost effectiveness, timeliness, and quality control of the consent decree and related projects. We also reviewed the department's performance on collecting water and sewer bills because it impacts revenues available to support capital improvement projects.

The Department of Watershed Management has implemented many of the recommendations included in our interim reports and has made significant progress in its collection activities, but still needs to address the timeliness of collections. Our final recommendations focus on ensuring the continuity of project expenditure data for reporting, incorporating project level data into the department's new monthly reporting format, and developing a collection strategy to improve the timeliness of collections. We also recommend that the chief financial officer work with the department to arrange payment for outstanding water and sewer service charges from city entities. Management's responses to our recommendations are appended to the report. We've also appended our response to the Department of Watershed Management that describes corrections we made and addresses an inaccuracy in the director's comments.

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 city staff throughout the audit. The team for this project was Stephanie Jackson, Eric Palmer, and Al Moses.

Leslie Ward
City Auditor

Wayne Woody
Audit Committee Chair

Department of Watershed Management – Consent Decree Monitoring

Table of Contents

| | |
|--|----|
| Introduction | 1 |
| Background | 2 |
| Consent Decree Requirements and Related Projects | 2 |
| Financing for Consent Decree and Related Capital Improvement Projects | 4 |
| Management and Oversight of the Capital Improvement Program | 6 |
| Organization of Watershed Management..... | 6 |
| Audit Objectives | 6 |
| Scope and Methodology | 7 |
| Findings and Analysis..... | 9 |
| Streamlined Data Collection, Still Needs Project Performance Measures | 9 |
| Department Has Streamlined Process for Compiling Financial Information..... | 9 |
| Department Has Clarified Project Data Collection and Reporting Responsibilities | 13 |
| Department Discontinued Project Performance Reporting | 14 |
| Department Has Taken Steps to Improve Collections | 16 |
| Department Has Increased Shut-Offs of Delinquent Accounts..... | 17 |
| Department Has Written Off Millions in Uncollectible Amounts and Plans Quarterly Review Process | 17 |
| Additional Initiatives Implemented to Encourage Payments..... | 18 |
| Department Seeks Payment from Delinquent City Entities | 19 |
| Collection Rate Increased..... | 21 |
| Department’s Strategy Should Include Methods to Improve the Timeliness of Collections | 23 |
| Average Time to Collect Remains High..... | 23 |
| Collection Strategy Should Emphasize Early Action | 25 |
| Recommendations | 27 |

List of Exhibits

| | | |
|-----------|---|----|
| Exhibit 1 | Water and Wastewater Consent Decree and Related Capital Improvement Projects | 3 |
| Exhibit 2 | Consent Decree Project Expenditures – Departmental Reports Compared to MARS/G (1st Quarter Interim Report) | 10 |
| Exhibit 3 | Current and Previous Data Gathering and Reporting Processes | 12 |
| Exhibit 4 | Water and Sewer Service Charges to City of Atlanta Agencies – 1999 through 2004 (3rd Quarter Interim Report) | 20 |
| Exhibit 5 | Water and Sewer Annual Collection Rate – 2001 through 2005 | 22 |
| Exhibit 6 | Average Collection Period over Time (in days) – 2001 through 2005 | 24 |
| Exhibit 7 | Collection Statistics as Reported by a Collection Industry Survey..... | 24 |
| Exhibit 8 | Summary of Water and Sewer Accounts Receivable Balance – 7/25/05 through 10/3/05 (3rd Quarter Interim Report) | 25 |

Appendices

| | | |
|------------|---|----|
| Appendix 1 | 1 st Quarter Interim Report, Department of Watershed Management – April 26, 2005 | 31 |
| Appendix 2 | 2 nd Quarter Interim Report, Department of Watershed Management – August 30, 2005 | 51 |
| Appendix 3 | 3 rd Quarter Interim Report, Department of Watershed Management – November 21, 2005 | 77 |
| Appendix 4 | Audit Response – Department of Watershed Management and City Auditor’s Comments on DWM Response | 93 |
| Appendix 5 | Audit Response – Department of Finance | 99 |

Introduction

We conducted this performance audit of the consent decree program 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 the primary duties of the City Auditor's Office. The Audit Committee reviewed our audit scope in January 2005.

A performance audit is an objective, systematic examination of evidence to assess independently the performance of an organization, program, activity, or function. The purpose of a performance audit is to provide information to improve public accountability and facilitate decision-making. Performance audits encompass a wide variety of objectives, including those related to assessing program effectiveness and results; economy and efficiency; internal control; compliance with legal or other requirements; and objectives related to providing prospective analyses, guidance, or summary information.¹

Council Resolution 03-R-2134 requested the city auditor to perform ongoing reviews and analyses of consent decree related capital improvements and related financial and performance issues, and to report quarterly to the City Utilities Committee. The purpose of the reviews is to provide the council with objective information about the cost effectiveness, timeliness, and quality control of the consent decree and related projects. We also monitored the department's performance on collecting water and sewer bills because it impacts revenues available to support capital improvement projects.

This is the fourth and final report in a series of interim reports designed to address consent decree and related issues. We issued interim reports in April, August, and November 2005. Each of the interim reports is attached in its entirety in the appendices of this report.

¹ Comptroller General of the United States, *Government Auditing Standards*, Washington, DC: U.S. General Accounting Office, 2003, p. 21.

Background

Consent Decree Requirements and Related Projects

Operation of the city's water and wastewater system is subject to federal and state environmental laws and regulations. The city is currently operating under two court-ordered consent decrees that require the city to evaluate and implement short and long term plans to eliminate water quality violations. In 1998, the city entered into the Combined Sewer Overflow (CSO) Consent Decree with the United States Environmental Protection Agency (EPA), the Georgia Environmental Protection Division (EPD), and three citizen plaintiffs. The CSO consent decree requires the city to develop and implement a solution to end violations resulting from combined sewer overflow treatment facilities. The city's plan to address CSOs involves a combination of tunnels and the separation of selected sewer areas. The capital projects and other provisions required by the CSO must be completed by a court-established deadline of November 2007.

The City of Atlanta has federal deadlines of 2007 and 2014 for compliance with the Clean Water Act outlined in two consent decrees – the CSO (Combined Sewer Overflows) and the SSO (Sanitary Sewer Overflows). The city is also undertaking related projects that will be completed concurrently with the consent-decree work.

The consent decree was amended in 1999 to add projects to eliminate water quality violations from sanitary sewer overflows (SSOs). The SSO program includes developing and implementing maintenance, operations, and management programs, completing specific capital improvement projects for the sewer system, an aggressive grease management program, and evaluating and rehabilitating existing sewers. All operational and capital improvements, upgrades, and repairs required by the First Amended Consent Decree must be completed by July 2014.

In addition to achieving and maintaining compliance with the consent decrees, the city must comply with the Safe Drinking Water Act and operating permit requirements. To meet these requirements, the city has begun a number of regulatory and contract compliance capital improvement projects. The city has also undertaken several capital improvement projects that are needed to achieve and maintain the reliable operation of the water system. These related projects will be completed concurrently with the consent decree projects.

The total budgeted amount for the program is currently \$3.9 billion, and the department has spent a total of \$689.5 million on 210 projects. The

current forecasted amount is approximately \$464 million higher than the total project costs reported in the Series 2004 Water and Wastewater Revenue Bonds document. Exhibit 1 lists each capital improvement project area, the number of projects in each area, and the amounts expended on the projects through November 2005. Department staff explained that approved bids for some of the projects were higher than estimated because of several factors, which include changes in the scope of work during final design, and unanticipated increases in the cost of labor, materials, and fuel.

EXHIBIT 1

WATER AND WASTEWATER CONSENT DECREE AND RELATED CAPITAL IMPROVEMENT PROJECTS

| Project Area | Number of Projects | Forecasted Budgeted Amount | Expended Amount (Through 11/30/05) |
|---|---------------------------|-----------------------------------|---|
| WASTEWATER | | | |
| Combined Sewer Overflow | 20 | \$ 820,166,860 | \$ 214,440,297 |
| Sanitary Sewer Overflow | 78 | 1,884,020,832 | 281,010,980 |
| Regulatory/Contract Compliance | 16 | 132,393,479 | 34,657,726 |
| System Renewal/Operational Reliability | 30 | 163,928,036 | 21,517,304 |
| Total | 144 | <u>\$ 3,000,509,207</u> | <u>\$ 551,626,307</u> |
| DRINKING WATER | | | |
| Consent Decree | 12 | \$ 130,009,283 | \$ 37,783,331 |
| Regulatory/Contract Compliance | 10 | 161,148,467 | 48,693,196 |
| System Renewal/Operational Reliability | 44 | 648,808,642 | 51,383,107 |
| Total | 66 | <u>\$ 939,966,392</u> | <u>\$ 137,859,634</u> |
| Capital Improvement Project Total | 210 | <u>\$ 3,940,475,599</u> | <u>\$ 689,485,941</u> |

Source: Department of Watershed Management's Project Summary Report, January 2006

Financing for Consent Decree and Related Capital Improvement Projects

The department funds its capital improvement projects from several sources, including cash generated from water and sewer charges or from interjurisdictional partners, state and federal grants, and low interest loans from the Georgia Environmental Facilities Authority (GEFA). The primary source of funding for the capital program is long-term bonds, such as the Series 2004 bonds.

Department of Watershed Management's Revenue Sources

Operating Revenue

- Water and sewer service charges
- Sewer service charges to other governmental units
- Interjurisdictional reimbursements for capital projects
- Fees and charges for retail services, including tap fees, meter sales and other miscellaneous charges

Non-Operating Revenue

- Sales tax revenue
- Investment income
- Interest income

Capital improvement projects are funded primarily by revenue bonds. The Series 2004 bond proceeds total \$789,506,476, and at least 77 capital projects are to be financed in part by these bonds. These projects include consent decree as well as operational reliability and regulatory or contract compliance projects.

The city must meet the debt service requirement for the bonds, defined in the bond ordinance as the total principal and interest due in any specified period. In order to comply with the requirement, the department's net revenues should equal at least 110% (ratio of 1.10) of the average

annual debt service on the bonds. The department's 2004 net revenues exceeded the amount needed for debt coverage on the Series 2004 bonds.

The bond documents projected a debt service requirement of \$91.9 million and net revenues of \$107 million in 2004, to provide a debt service coverage ratio of 1.16.² Actual debt service for 2004, according to the Finance Department, was \$86.3 million and net revenues were \$154.6 million, providing a coverage ratio of 1.79. Sales tax revenue made up for lower than projected operating revenue,

2004 sales tax revenue helped the city to meet debt coverage on the 2004 bonds.

² Camp, Dresser & McKee, Inc., *Engineer's Financial Feasibility Study, Water and Wastewater Revenue Bonds, Series 2004*, August 16, 2004

while the department's operating expenses and debt service also were lower than forecasted by bond consultants.

Rate increases were required to service debt. In any given year, water and wastewater rates should be designed so that sufficient revenue is collected to meet all operating and capital expenses. Effective January 2004, the City Council approved a significant water and sewer rate increase that included a minimum charge for service, a tiered rate structure for varying levels of use and a homeland security surcharge. The rate increases were to be implemented over five years. The legislation included a commitment for the City Council to find additional sources of revenue to offset scheduled increases, including the proposal of a 1% sales tax.

Sales tax revenues offset water and sewer rate increases. Voters passed the 1% sales tax on goods purchased within the city limits, effective October 2004. Revenue from the tax is designated to support the city's Watershed Rate Relief Program (WRRP) by reducing water and sewer rates on a dollar-for-dollar basis. As a result of sales tax revenues, the 2005 rates were increased by 1% instead of the approved 43%.

Sales tax revenues are significantly higher than anticipated.

The rates will increase 10% in January 2006, and another 10% in July, which will apply to the following year (to coincide with the city's transition to a July 1 – June 30 fiscal year). The scheduled increases will again be lower than originally approved by the City Council in 2004, offset by the sales tax revenue.

By the end of 2004, sales tax revenues were \$20.4 million. The tax revenues were estimated to provide annual revenues of \$84.6 million, beginning in 2005.³ Also, according to information provided by the Department of Finance, from January through July 2005, actual sales tax receipts were already \$56.1 million. Collections in excess of projections will be used to reduce water and sewer rates in future years.

The Georgia Environmental Facilities Authority agreed to provide up to \$500 million in low cost loans for the capital projects. Based on an agreement with the state, the city is eligible to borrow up to \$50 million per year in low interest loans for 10 years to assist in funding the capital improvement projects. The Georgia Environmental Facilities

³ *Estimated 1% Sales Tax Revenue to the City of Atlanta*, Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University, August 11, 2004.

Authority (GEFA) is a state agency that uses a combination of state, federal, and private funds to provide low-interest loans to local governments for water, wastewater, and solid waste management projects.

Management and Oversight of the Capital Improvement Program

A Program Management Team (PMT), composed of both consultants and city employees, helps the city to manage and implement the wastewater Capital Improvement Program (CIP). Several entities oversee the CIP, including the courts, the Environmental Protection Division (EPD), the Environmental Protection Agency (EPA), and GEFA. The governor created a GEFA task force to provide input and assistance in the use of funds from state bonds for the water and sewer projects, and the City Council supported the input of the task force for the timely completion of the consent decree projects.

Organization of Watershed Management

The Department of Watershed Management oversees the city's water and wastewater systems through the Office of the Commissioner and seven bureaus: Engineering Services, Wastewater Treatment & Collection, Drinking Water, Watershed Protection, Financial Administration, Management, and Program Performance. From 1999 through 2003, the city contracted with United Water Services Unlimited Atlanta LLC, to manage and operate the water system, including the billing and collection function. Since dissolution of the contract in April 2003, the city assumed operations of its water system through the department's Bureau of Drinking Water.

Audit Objectives

The audit follows up on recommendations we made in our interim reports and addresses the reliability, timeliness, and completeness of the data used to manage the consent decree program. This report answers the following questions:

- Has the PMT's consent decree monthly report format been modified to provide accurate "at-a-glance" snapshots of project status?
- Does the PMT reconcile information in the monthly reports, and are the reports internally consistent?

- Has the information system provided to the PMT for the consent decree monthly reports improved in the areas of timeliness and completeness?
- Has coordination between the PMT and the construction management group improved in the areas of collection and reporting?
- What are the third quarter, fourth quarter, and annual water and sewer collection rates, and how do they compare to the previous rates and departmental performance goal?
- Have written-off amounts been removed from the accounts receivable balance in the customer information system?
- Are shut-offs of past due accounts occurring in accordance with the department's established timeline and the Code of Ordinances?

Scope and Methodology

This audit was conducted in accordance with generally accepted government auditing standards except for completion of an external peer review⁴. We conducted our audit fieldwork for this final report from November through December. The entire audit period, beginning with our interim reports, was from January 2005 to December 2005.

The audit methods included:

- Obtaining information from the department's staff regarding the status of their implementation of recommendations made in our interim reports, as well as recommendations made in our previous reviews of the water and sewer billing and collection process.
- Interviewing department staff regarding the collection and reporting of the data used to manage the consent decree project.
- Interviewing department staff regarding the water and sewer billing and collection process.
- Reviewing the department's 4th quarter 2005 water and sewer collection rate for comparison with the previously reported rates,

⁴ Government auditing standards require audit organizations to undergo an external peer review every three years. A peer review is planned for 2006.

performance target, and the estimated rate included in the 2004 bond documents.

- Analyzing C-Star II data on shut-off activity in September, October, and November 2005 and the processing of approved write-off amounts.
- Meeting with staff of the Georgia Environmental Facilities Authority (GEFA) and attending their monthly oversight task force meetings in order to coordinate our monitoring activities and avoid duplication of effort.

Findings and Analysis

Streamlined Data Collection, Still Needs Project Performance Measures

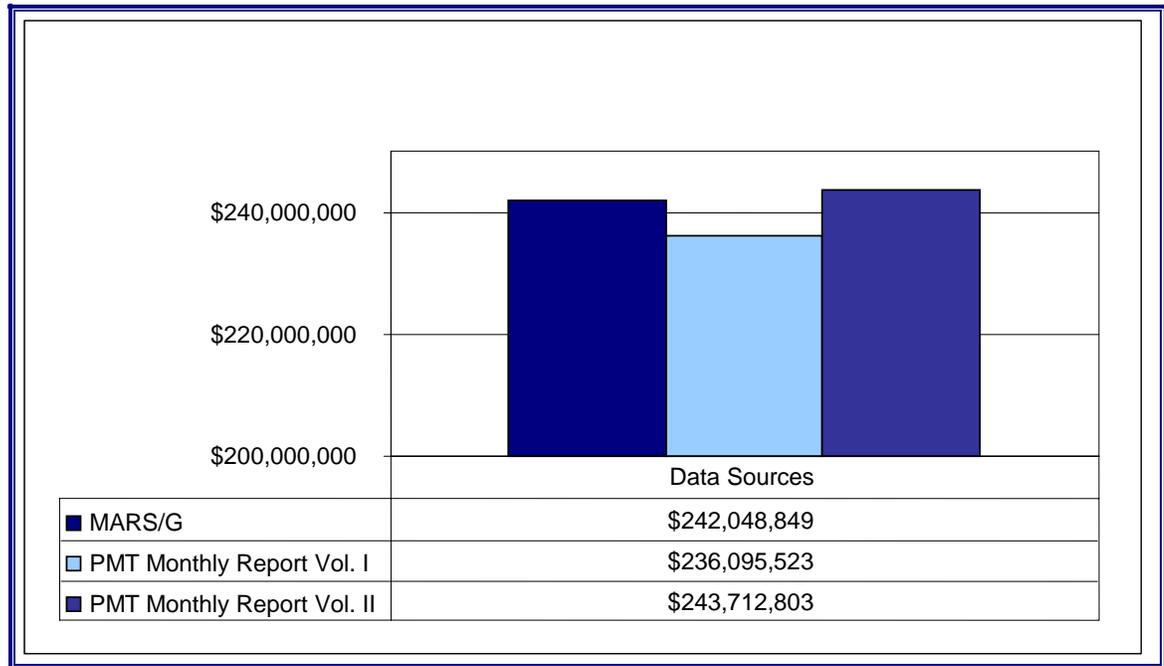
The Department of Watershed Management has streamlined the data collection efforts; however, they have stopped producing external project status reports. We recommended in our interim reports that the department simplify and streamline financial reporting and that they produce “snapshot” reports for project status. Since then, the department has implemented processes that have made the financial reports more reliable and complete, while collecting the data more efficiently. The department is discussing ways to modify the monthly report format to make it more useful. As the department continues to develop the format of the new monthly reports, we encourage them to report a snapshot of project status, including progress indicators of work, schedule, and budget.

Department Has Streamlined Process for Compiling Financial Information

The department has taken steps to improve the quality of the financial data they need for management and reporting. The department has developed a MARS/G data extraction, or “data dump,” which allows the department to pull expenditure data for the capital improvement projects directly from the city’s accounting system into a database. The download provides a single source for project expenditure information, which should help to ensure the completeness and accuracy of the data. The process also eliminates the need for manual entry into the database for expenditure tracking.

In our previous reviews, we found discrepancies between the department’s reported expenditures and MARS/G. In our previous interim reviews, we found that the department’s monthly reports were inconsistent with the information in the city’s accounting system. The department produced two volumes of a monthly progress report that contained expenditure data on the projects. As shown in Exhibit 2 on the following page, a comparison of the total expenditures from these reports with expenditure data in MARS/G showed significant variances. In addition, our review of 21 active consent decree projects found only three projects where the total expenditures in the monthly reports matched the data in MARS/G.

EXHIBIT 2
CONSENT DECREE PROJECT EXPENDITURES
DEPARTMENTAL REPORTS COMPARED TO MARS/G
(1ST QUARTER INTERIM REPORT)



Sources: *Progress and Status Report for the Period: February 1-28, 2005, Cost, Scheduling & Reporting, Volume I, Summary;*
Progress and Status Report for the Period: February 1-28, 2005, Cost, Scheduling & Reporting, Volume II, Detail (Cost Encumbrance Report);
MARS/G (data extraction containing expenditures for Watershed capital projects)

- Notes:**
- As shown in the chart above, project expenditure amounts (through February 28, 2005) are inconsistent among the three sources containing expenditure data.
 - The expenditures above do not include costs of land acquisition and rights-of-way.
 - Volume II expenditure data were taken from the Cost Encumbrance Report.

The City Utilities Committee asked us to work with department staff to reconcile the major differences. We reconciled all but about \$17,000 on five projects. We reiterated our previous recommendation to the department to use consistent data sources in the monthly reporting process to improve the accuracy and reliability of future reporting.

The previous information gathering and reporting process increased the risk for error. In our 1st quarter interim report, we found inefficiencies in the process by which the Project Management Team (PMT)

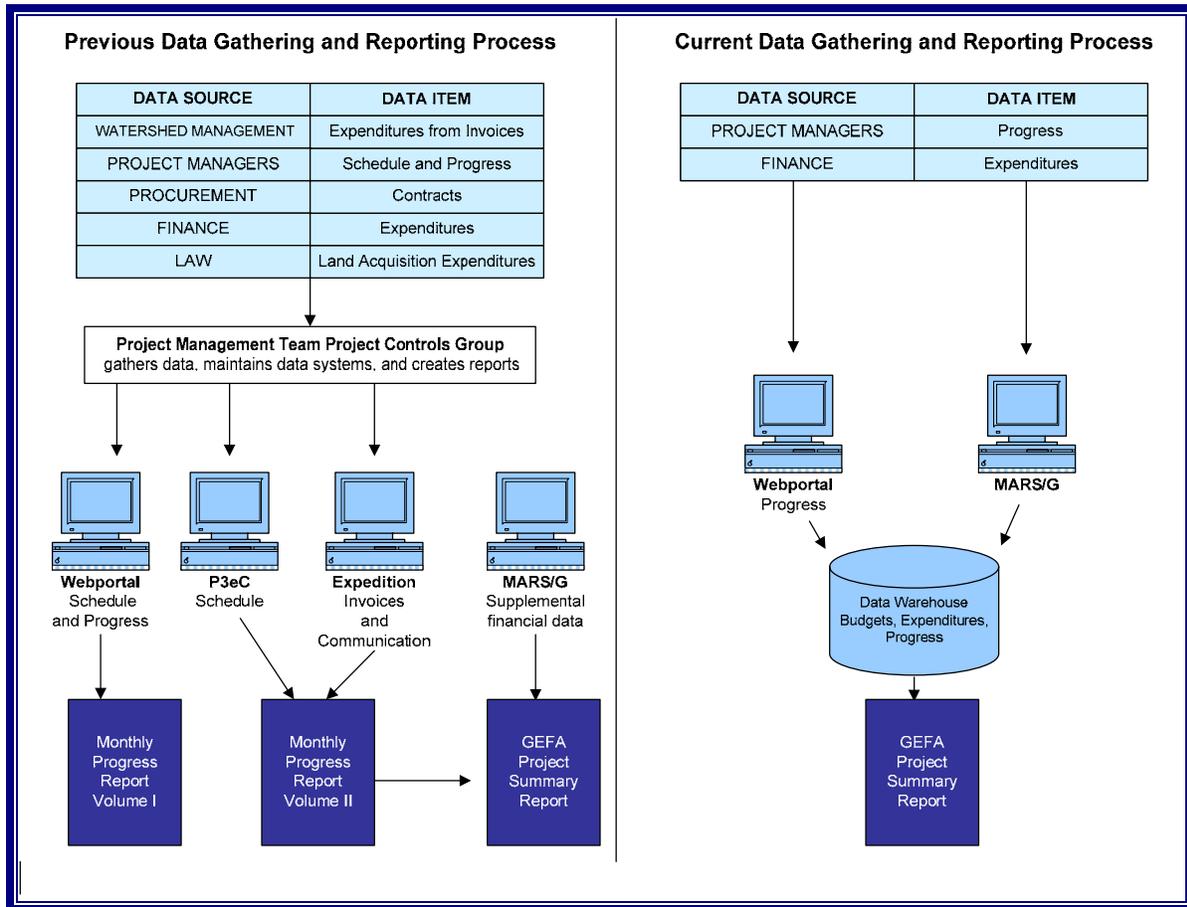
compiled the department's monthly reports that led to data inaccuracies in the expenditure information and project performance data. We noted:

- The PMT did not consistently receive critical pieces of data that would allow them to properly record and reconcile project expenditures.
- The PMT used information from several data systems to create the monthly reports. The systems were not integrated, and the PMT did not reconcile data among systems.
- The PMT relied on hardcopy information obtained from various sources, including individual project managers, department staff, and staffs from the Departments of Law, Procurement, and Finance. However, the PMT did not receive complete data from these sources.

The information gathering and reporting process increased the risk for error, particularly because the data was not reconciled. We recommended in our first quarter interim report that the department ensure that the PMT re-evaluate their current data systems and eliminate duplicate data entry, decrease manual entry into systems wherever possible, and more effectively capture the data it needs to report project expenditure costs accurately.

We also recommended that the department and PMT staff continue to work with the Department of Finance to streamline the provision of financial information from MARS/G on a project-by-project basis. In their response to the first quarter report, the department stated, "The MARS/G download initiative will provide a single source of project expenditures information and offer automatic reconciliation."

EXHIBIT 3
CURRENT AND PREVIOUS DATA GATHERING
AND REPORTING PROCESSES



Sources: Audit staff interviews with department and Project Management Team (PMT) staff and review of documentation received from the PMT

Current process ensures completeness and accuracy in the financial data. As shown in Exhibit 3, the department simplified its data gathering and reporting processes. The new process uses a single source of expenditure data and relies on fewer data systems, each with specific roles. The data download is produced with the assistance of staff from the Departments of Finance and Information Technology. The download is run each month after the Department of Finance closes its books. Expenditures from the previous month (paid invoices and general ledger transactions) are captured in each download. This process provides a single source for financial information, the city's accounting system. It also simplifies the data collection process, which helps to ensure completeness and accuracy.

The download allows the PMT to allocate expenses more easily to specific projects. PMT staff have stated that the download has enabled them to

identify expenditures that they were not aware of previously. The data download process is currently being used to provide the expenditure data in the GEFA report, which is the only report currently produced.

Department of Finance as well as watershed officials sign off on the

GEFA report. GEFA requested that the departments sign off on the report for accountability and accuracy purposes.

Expenditures for the capital improvement projects are now extracted directly from MARS/G instead of multiple information sources.

Department should ensure continued data availability. Department of Information Technology staff have indicated that the data downloads may be discontinued once a project-tracking module is in place for MARS/G. The department should ensure that it provides information necessary for the PMT reporting and that the PMT is able to continue its required reporting if the data collection process is affected by a discontinuation of the data downloads or the transition to the Oracle database. The department should ensure that there is a process available in the new Oracle system to allow for the tracking of project level expenditures.

Department Has Clarified Project Data Collection and Reporting Responsibilities

The department has modified the PMT's duties to distinguish its role from the Construction Management Group's Project Controls Group. The PMT is now responsible for collecting data on the program level while the Project Controls Group is responsible for collecting the project level data.

We reported in our 2nd quarter interim report that some of the PMT's data collection activities overlapped and/or duplicated some functions of the newly created Construction Management Group's (CMG) Project Controls Group. The PMT recreated much of the data that was already generated by the CMG at the project level. It wasn't clear how the two groups were intended to work together and the two groups did not directly share project information. Specifically, we noted:

- The PMT's Project Support Group provides scheduling, procurement tracking, expenditure tracking, cost estimating, and reporting services for the department. They are also charged with providing field staffing assistance on an as needed basis, providing various schedules, cost estimates, and project specific reports, as laid out in their scope of services.

- Similarly, the Project Controls Group's responsibilities include providing field level cost and schedule data to management for project tracking. Their activities include maintaining and updating project schedules and tracking cost and schedule variances to provide to management for decision-making purposes.

In our 1st quarter interim report, we recommended that the department review the duties and functions of the PMT with respect to their data collection and reporting responsibilities, and that they work with the PMT and the Construction Management Group to determine and coordinate the most efficient way for the PMT to satisfy its reporting requirements. Department and PMT staff stated that the department has made changes to both the PMT's data collection and reporting requirements.

Department Discontinued Project Performance Reporting

The department has stopped producing the monthly progress and status reports on individual projects. They have proposed two new status reports: one designed for executive level use (commissioner, deputy commissioners, mayor's office, other departments, and excerpts for City Council), and one designed for management at the field level. The department does not plan to include project level information in either of the reports – they plan to report only program level data. We continue to recommend that the department report a complete snapshot of project status, including progress indicators of work, schedule, and budget.

The department collects the data it needs to manage the consent decree projects. In our previous interim report, we noted that the department has the necessary data to manage the projects. The department compares work completed to schedules and tracks costs compared to budget, using methods similar to those of other jurisdictions with consent decree construction projects and consistent with industry standards.

Work actually performed is measured against a baseline to track the progress of the project, and the cost of the project is tied to specific units of work completed. As the project continues, performance information is updated and reviewed to forecast future progress and identify situations that need corrective action. Both the department's procedures and the project contract provisions require the contractors to document and report the amount of work done and the value of the

Department collects project-level data consistent with industry standards.

work completed. Using these tools, the department collects information that allows project managers and senior management to assess whether projects are on budget and on schedule.

The PMT's monthly reports didn't allow internal and external users to assess project progress. We noted in our 2nd quarter interim report that although the department has the necessary data available, the quality of that information is not reflected in the department's reports. The department's monthly reports appeared to be of limited value to internal and external users for assessing project progress. The reports did not provide a clear and complete snapshot of the projects' status in relation to schedule and budget.

The PMT produced a two-volume, monthly status report for upper level management and for external monitoring, as well as a monthly report that is primarily for use by the Georgia Environmental Facilities Authority (GEFA). As part of the condition for the capital projects loans, GEFA requested that the city provide them with a monthly report providing the cumulative cash payments made by the city for each vendor and project.

Although all three monthly reports contained data that were valuable, none of the reports presented a complete picture of whether the projects are on budget and on schedule. Also, the performance indicators were undefined, and the indicators were not integrated in a way that puts them in the proper context and makes them easy to interpret.

We recommended that the department require the PMT to modify the formats of project performance data in the monthly reports and the GEFA report to improve the clarity and ease of use of both reports, and to ensure that the reports contain indicators that show: the amount of work completed to date, the amount of the contract budget that had been spent, and the amount of time expended and remaining on the project. We also recommended that the indicators be defined, reported together to show the value of the indicator as well as put them in the proper context, and to provide an accurate "at-a-glance" snapshot of the projects' status in relation to schedule and budget. The department agreed that "no single report provides a clear and complete snapshot of the project schedule, budget, and costs" and that "the systems and reports can be significantly improved in terms of clarity and use."

The department has stopped producing both of the monthly reports. Following our recommendation, the department discontinued its monthly status report, except for the GEFA report, which contains primarily financial information on the capital improvement projects. Department

staff told us that they plan to develop two new reports: one designed for executive level use (commissioner, deputy commissioners, mayor's office, other departments, and excerpts for City Council), and the other report will be designed for management at the field level. However, according to department staff, neither of the new reports will contain information about the status of individual projects – the data will remain at the program level. The GEFA report does not include any schedule information, which is part of a complete picture of the project status. The department has stated that the format of the report has been mutually agreed upon with GEFA and it intends to make no changes.

Project performance areas to be tracked are:

- **Work**
- **Schedule (time)**
- **Cost**

Based on the department's requirements, the primary performance areas to be tracked are work, schedule (time), and cost. Therefore, a progress report should contain a complete mix of indicators in these performance areas in order to provide a meaningful snapshot of project status. While we agree that there is a need for aggregate executive level data for oversight, decision makers also need information on individual projects. The department should produce a report that contains a "snapshot" of the project status. This includes data on the progress indicators of work, schedule, and budget.

Department Has Taken Steps to Improve Collections

The watershed management department has improved collections. The collection rate has increased since transferring operations back to the city from its contractor. The department met its collection performance goal of 98.5% during the last two quarters of 2005 for the first time since resuming operations. We recommended in our November 2004 audit of the department's billing and collection process that the department begin the collection process sooner including, imposing late fees, shutting off services, referring delinquent accounts to the city's collection agency, and writing off uncollectible accounts.

The department is now shutting off delinquent accounts more consistently, is imposing a late fee, and has implemented a number of initiatives designed to improve customer service as well as to encourage prompt payment on accounts. They are working with the Department of Finance to obtain payment on delinquent city department accounts. The department has also begun writing off uncollectible accounts and plans to

review accounts regularly to recommend accounts for write-off on a quarterly basis.

Department Has Increased Shut-Offs of Delinquent Accounts

The department began to shut off services on delinquent accounts in October 2004 in order to collect on outstanding delinquent balances. The department reported it had collected over \$18 million through July 2005 as a result of shut-offs and plugs. We reported in our November 2004 audit that the department was not shutting off service in accordance with the code provisions. The department did not shut off service for a delinquent residential account until the balance reached \$700 – roughly eight to ten months after the bill was first overdue – which decreased the likelihood of collecting on the accounts. The code provides that termination of water service shall be “no later than 30 days from the due date of the bill.”

The department is shutting off delinquent accounts within six weeks of the bill’s due date. In our sample of 90 delinquent residential accounts, all had been shut off within 47-55 days of the due date and a \$45 shut-off fee charged to all but three of the accounts. While the code provides for shutting off delinquent accounts “no later than 30 days from the due date of the bill,” the department has interpreted this provision to mean 30 business days from the bill’s due date – or about six weeks.

We reviewed a sample of accounts from Cut Reports (reports with a list of accounts to be shut off) from September, October, and November 2005 for the two geographical zones with the largest numbers of shut-offs to determine whether inspectors had cut service on the account, how long it was before service was cut, and whether the shut-off fee was charged.

Department Has Written Off Millions in Uncollectible Amounts and Plans Quarterly Review Process

We recommended in 2004 that the department promptly and properly write off uncollectible accounts when all other collection efforts have proven to be unsuccessful in obtaining payment. Watershed has written off \$8.3 million in uncollectible charges, has approval to write off an additional \$4.1 million, and recently established a policy to recommend accounts for write-off on a quarterly basis. Writing off the uncollectible accounts improves the accuracy of the department’s financial data as the accounts receivable balance reflects amounts the department can reasonably expect to collect.

Over \$12 million approved for write-off. In July 2005, the chief financial officer approved 15,910 uncollectible accounts totaling \$7.6 million for administrative write-off. In August, the City Council also approved the write-off of 35 larger accounts totaling about \$1 million. In November 2005, the department obtained approval to write off 1,844 additional uncollectible accounts totaling \$4 million.

Accounts receivable balance appropriately adjusted. The department applied \$8.3 million to 13,839 accounts in the C-Star II system in August 2005, removing those amounts from the accounts receivable inventory, as required by generally accepted accounting principles. The actual amount applied to the accounts differed from the amounts approved in July because some accounts had already been paid, adjustments were made to the accounts, or they needed further review by the department.

Write-offs recorded in C-Star II system. We reviewed 66 accounts, which included a sample of 33 of the accounts approved for write-off administratively and all of the 33 accounts approved for write-off legislatively, to ensure that the write-offs were correctly recorded in the C-Star II system. We reviewed whether the stated amounts were posted in the system as write-offs, whether the accounts had zero balances, and whether the accounts were closed. All of the 66 accounts in our sample met these criteria.

New policy calls for quarterly review. The department has established a policy to review the uncollectible accounts regularly and recommend accounts for write-off on a quarterly basis. The department should continue its efforts to write off uncollectible accounts, in accordance with generally accepted accounting principles. Writing off the accounts in a timely manner will help to decrease the accounts receivable balance.

Additional Initiatives Implemented to Encourage Payments

Beginning in September 2004, the department started initiatives designed to improve customer service, increase collections, and reduce long-term delinquencies of customer accounts. Some of these initiatives are:

- The department moved to monthly rather than bi-monthly billing in September 2004.
- Bill payment hours have been extended, offering telephone payments to be made from 8:00 a.m. to 8:00 p.m. weekdays. Credit and debit card payments can be made 24 hours a day by telephone. Payments may also be made online.

- The \$5 late fee was implemented with the move to a monthly billing cycle. The code provides for the assessment of a late fee of \$5 or 5% of the total bill, whichever is larger. Department staff reported previously that the fee was not imposed because the C-Star II system was unable to calculate a percentage fee – it could only calculate a flat fee. Staff indicated that the new billing system will be able to assess both a percentage and a flat fee.
- In an effort to increase the deterrent effect, the shut-off fees were increased from \$20 to \$45.
- Department staff have stated that they will begin using locking devices on the meters in January 2006 to encourage payment and discourage customers from turning the water back on after it has been shut off by inspectors.

Department Seeks Payment from Delinquent City Entities

As reported in our 3rd quarter interim report, city departments and agencies owe at least \$5.1 million to the water/sewer fund on past due water and sewer bills. These charges date from 1999 through 2004. The department is working with Department of Finance staff to determine how to address the outstanding water and sewer account balances and how to manage the payment of these accounts in the future, including charges for 2005.

City departments owe at least \$5.1 million. As shown in Exhibit 4, from 1999 through 2004, a total of \$16.4 million was billed to city departments and agencies for water and sewer service charges. During that period, the Department of Finance transferred \$7.1 million to the water and wastewater operating fund in payment on these accounts, leaving a balance of \$9.3 million. However, 46% of this balance represents charges to the water and sewer operating fund itself. This amount is not owed to the Department of Watershed Management from other city departments or funds. The total past due from these other funds is \$5.1 million.

EXHIBIT 4
WATER AND SEWER SERVICE CHARGES TO
CITY OF ATLANTA AGENCIES – 1999 THROUGH 2004
(3RD QUARTER INTERIM REPORT)

| Fund | Amount Billed | Amount Collected | Amount Outstanding | Percentage of Outstanding Amount |
|----------------------|----------------------|---------------------|---------------------|----------------------------------|
| General Fund | \$ 7,459,985 | \$ 2,998,241 | \$ 4,461,744 | 47.9% |
| Water and Sewer Fund | 7,758,091 | 3,512,119 | 4,245,971 | 45.5% |
| Other Funds | <u>1,191,167</u> | <u>575,626</u> | <u>615,542</u> | 6.6% |
| Total | <u>\$ 16,409,243</u> | <u>\$ 7,085,986</u> | <u>\$ 9,323,257</u> | 100.0% |

Source: Department of Watershed Management's review of water and sewer charges from 1999 through 2004

Note: Other funds includes city traffic court, aviation, motor transport, underground Atlanta, sanitation, and city civic center

The total amounts owed by city departments could be higher, as the department has identified an additional \$2.3 million in outstanding charges for 1999 through 2004. These accounts are primarily within the Department of Parks and Recreation and have been classified historically as non-revenue accounts. The department is reviewing the criteria for classifying these accounts.

The Department of Watershed also pays the city's general fund \$9.8 million annually, in lieu of the property taxes and franchise fees a privately owned utility would pay. The fee, authorized by council, consists of a franchise-fee utility charge of up to 5% of gross revenue from water and sewer service charges, and an annual payment in lieu of property taxes (PILOT) in the same amount that the water and sewer system would be assessed if it were privately owned. The franchise fee and the PILOT are paid to the general fund as a single, combined annual payment. As an enterprise fund that makes a payment in lieu of property taxes and franchise fees, the department is obligated to collect those outstanding water and sewer charges.

The chief financial officer should continue to work with the Department of Watershed Management to resolve outstanding water and sewer service charges to other city government funds and to keep the accounts current in the future. The Department of Watershed Management also should consult with the Departments of Law and Finance to review and clarify the basis for classifying non-revenue accounts.

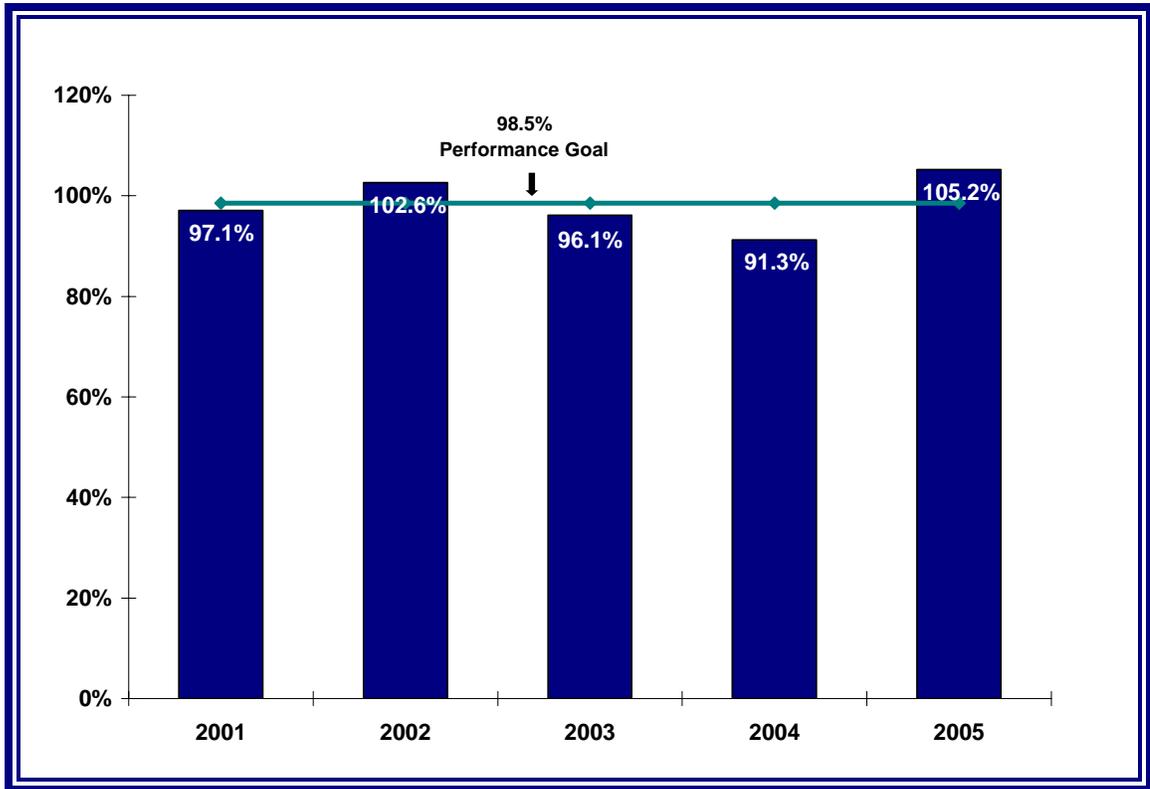
Collection Rate Increased

The department increased its water and sewer collection rate since beginning more aggressive collection efforts toward the end of 2004. The lowest annual collection rate was in 2004. However, the 2005 annual rate increased significantly from the previous year. In the last two quarters of 2005, the department met its collection performance goal for the first time since resuming the collection function from its contractor, United Water.

As shown in Exhibit 5, the annual collection rate increased from 91.3% in 2004 to 105% in 2005. The 2004 rate decreased from 2003 to 2004 (the city resumed the collection function from the contractor in April 2003; therefore, the 2003 rates were not under the city's control until May).

In the last two quarters of 2005, the department met its 98.5% collection performance goal for the first time since transferring operations from the contractor. During 2005, the department's annual collection rate also met the target rate of 97% used in the 2004 bond documents. Collection rates higher than 100% show that the collections exceed current billings and include past due accounts.

EXHIBIT 5
WATER AND SEWER ANNUAL COLLECTION RATE
2001 THROUGH 2005



Source: Audit staff analysis of C-Star II 6248 reports

Note: The city resumed the collection function from the contractor in April 2003; therefore, the 2003 rates were not under the city's control until May.

Write-offs impact our collection rate calculation. Writing off \$8.3 million in uncollectible accounts in August 2005 reduced the receivable balance, while significantly increasing the collection rate.⁵ The accounts receivable balance went from \$81 million in July to \$73.2 million in August. The collection rate also rose to 144% in August from a July rate of 91%.

⁵ The department's billing system doesn't provide information to calculate collection rate as it is typically used in the industry to mean current receipts divided by current billing. We calculate the collection rate by dividing cash receipts into the adjusted billing amount, which includes write off adjustments. Therefore, the write offs will reduce the accounts receivable balance and increase the collection rate.

Department's Strategy Should Include Methods to Improve the Timeliness of Collections

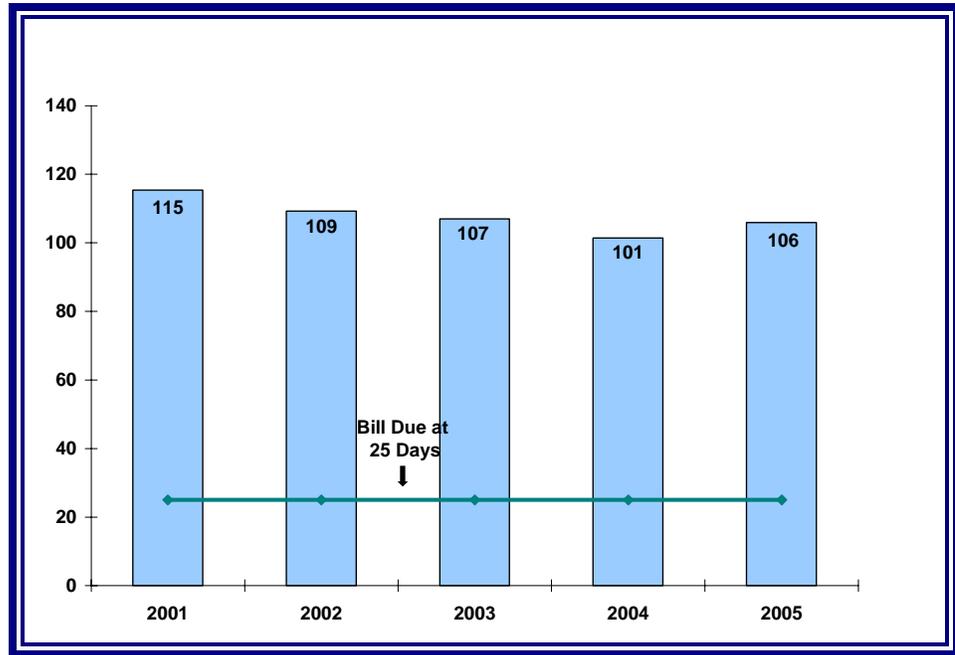
We recommended in our November 2004 audit of the department's billing and collection process that the department begin the collection process sooner following an account delinquency, for greater collection effectiveness. Despite the department's efforts to increase collections and reduce the balance of accounts receivable, timeliness is still a problem. During 2004, the department took an average of 101 days to collect bills that were due within 25 days from the date the bill was generated. In 2005, the department took an average of 106 days to collect. We continue to recommend earlier action to speed collections. Planned equipment upgrades and a new billing information system should support earlier enforcement efforts.

Average Time to Collect Remains High

The amount of time it takes to collect on the accounts has remained high. As shown in Exhibit 6, the average collection period for 2005 was 106 days, 81 days past the bill's due date of 25 days. The 2005 figure increased from the 2004 collection period of 101 days.

The probability of collecting on accounts decreases as the accounts age. As we stated in our 2004 report, a survey by the Commercial Collection Agency Association (CCAA) survey shows that the probability of collecting delinquent accounts drops significantly as they age. For an account that is three months old, the collection probability is 73%. That probability drops to 57% when the account reaches six months. It is critical for collection efforts to begin quickly after an account's due date.

EXHIBIT 6
AVERAGE COLLECTION PERIOD OVER TIME (IN DAYS)
2001 THROUGH 2005



Source: Audit staff analysis of C-Star II 6248 reports

EXHIBIT 7
COLLECTION STATISTICS AS REPORTED BY A
COLLECTION INDUSTRY SURVEY

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

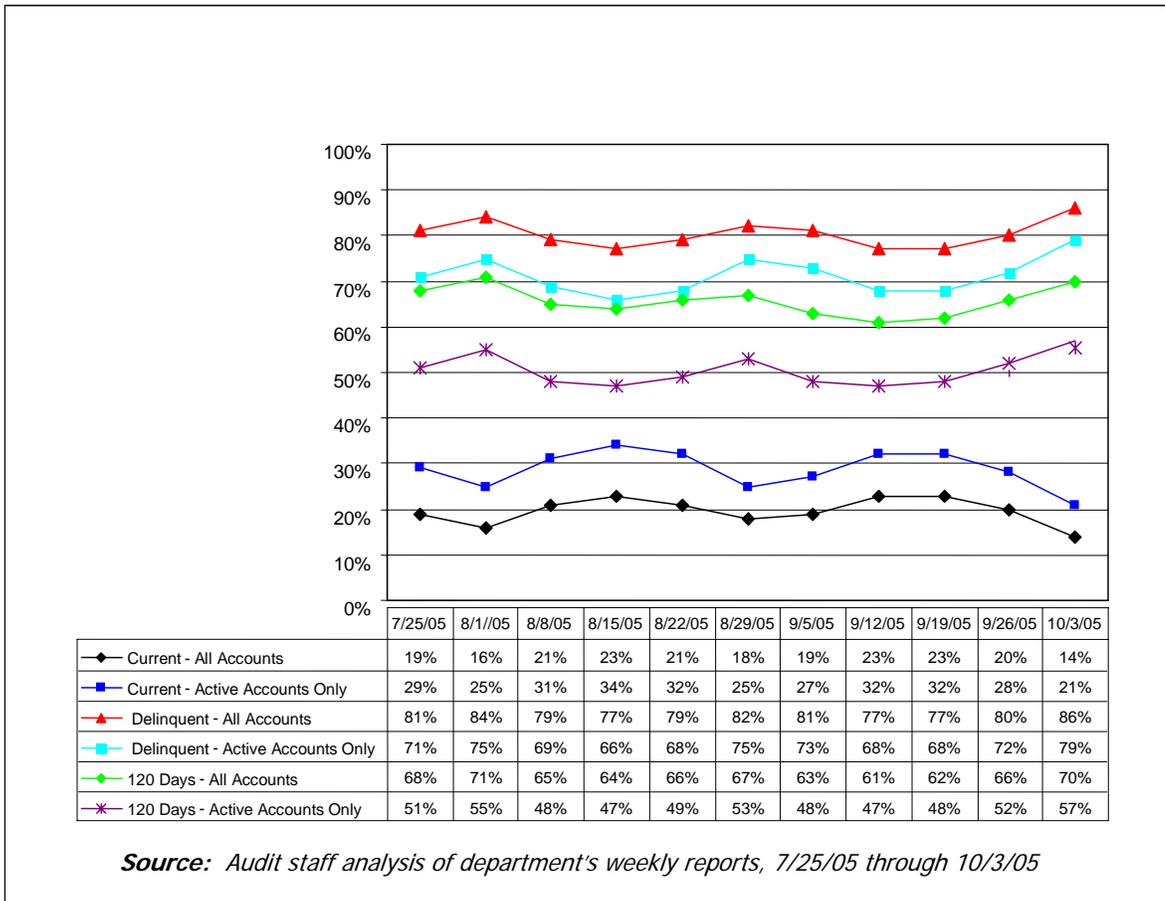
Source: Commercial Collection Agency Association

The majority of the accounts receivable balance is delinquent. The majority of the accounts receivable balance remains significantly delinquent by at least 120 days or more. The longer the accounts remain delinquent, the lower the probability of the department collecting on the accounts. Consequently, customers who pay their bills on time bear the cost of delinquent and non-paying customers.

As shown in Exhibit 8, during an eleven-week period from July through October 2005, the delinquent outstanding balance remained at around 71%

for active accounts and 80% for all accounts receivable. About 50% of the active portion and 66% of all accounts receivable were at least 120 days delinquent.

EXHIBIT 8
SUMMARY OF WATER AND SEWER
ACCOUNTS RECEIVABLE BALANCE
7/25/05 THROUGH 10/3/05
(3RD QUARTER INTERIM REPORT)



Collection Strategy Should Emphasize Early Action

We continue to recommend earlier action to speed collections. The department does not shut off delinquent accounts until six weeks after the bill was due. Since the department has found that shut-offs increase collections, more timely shut-offs could improve the timeliness of collections. Department staff is reluctant to rely on their current information system to take more aggressive enforcement action. The department is implementing a new customer information system and

repairing broken meters in an effort to obtain more complete and accurate billing data, which should support earlier enforcement effort. We recommend the department set timeliness goals as part of its overall collection strategy and track its progress in meeting the goals as these initiatives are completed.

Equipment upgrades and repairs could speed collections. According to the department, many accounts are delinquent and in dispute because bills were based on estimated water use due to broken meters. The department estimates that over 8,000 water meters need repair. We did not audit billing in this report, but agree that the quality of billing information affects the department's ability to effectively take enforcement action and collect on bills.

Reliable management information should support enforcement efforts. The department is reluctant to rely on reports from its current billing system – C-Star II – to take more aggressive enforcement action. Staff is unable to generate lists of delinquent accounts that exclude those with billing disputes or established payment plans. Staff must manually review shut-off reports to determine which delinquent accounts should and should not be shut off. Consequently, the department does not shut off delinquent accounts until six weeks after the bill was due. The department has found that shut-offs increase collections. More timely shut-offs could improve the timeliness of collections. The department should ensure that its new customer information system would provide reliable reports to support more aggressive collection efforts.

The department has fewer enforcement options to collect past due amounts on closed accounts. Department staff reported that 36% of the accounts receivable balance as of July 2005 consisted of closed accounts that were slated for write-off, placed with a collection agency, or had liens placed on the properties. Because it is more difficult for the department to collect on accounts once they are closed, the department should speed enforcement efforts on active accounts so past due amounts don't build up before the account is closed.

The department's collection strategy should cover the entire billing and collection cycle and focus on timeliness as well as collection rate. We recommend the department set goals for the average time to collect and benchmark its progress in meeting the timeliness goals as well as its collection rate goals.

Recommendations

Our recommendations are intended to improve reporting for managing and overseeing consent decree projects. We also continue to recommend earlier action to speed and increase water and sewer collections. The department's initiatives to upgrade systems and repair equipment should support earlier enforcement.

- 1. Ensure continuity of project expenditure data for reporting.** Department of Information Technology staff have indicated that the data downloads may be discontinued once a project-tracking module is in place for MARS/G. The Department of Watershed Management should make sure that an efficient process is in place in which to make expenditure data available to the Project Management Team for reporting purposes. The department should also ensure that there is a process available in the new Oracle system to allow for the tracking of project level expenditures.
- 2. Incorporate project level data in the new monthly reporting format.** As the department continues to develop the new report formats, we recommend that the Department of Watershed Management produce a report that contains a "snapshot" of project status. This includes data on the progress indicators of work, schedule, and budget. While we agree that there is a need for aggregate executive level data for oversight, decision makers also need information on individual projects.
- 3. Arrange payment for outstanding water and sewer service charges from city entities.** The Chief Financial Officer should work with the Department of Watershed Management to resolve outstanding water and sewer service charges to other city government funds and to keep the accounts current in the future. As an option, the city government funds could pay for the services rendered, or the chief financial officer could reduce the annual payment in lieu of taxes and franchise fees (PILOT) by the outstanding amount owed to the Department of Watershed Management for water and sewer services.
- 4. Define non-revenue accounts.** The Department of Watershed Management should consult with the Departments of Law and Finance to review and clarify the basis for classifying nonrevenue accounts.

5. **Develop a collection strategy that focuses on improving the timeliness of collections.** The department's collection strategy should cover the entire billing and collection cycle and focus on timeliness as well as collection rate. We recommend the department set goals for the average time to collect and benchmark its progress in meeting the timeliness goals as well as its collection rate goals. The Department of Watershed Management should build on its initiatives to improve its equipment and information system to take more aggressive enforcement action, including quicker shut-off of delinquent accounts. The department should continue to identify and recommend uncollectible accounts for write-off on a quarterly basis in order to accurately assess the effectiveness of the collection strategy.

Appendices

APPENDIX 1
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005



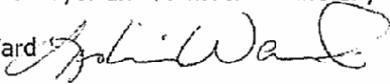
CITY OF ATLANTA

LESLIE WARD
City Auditor
lward1@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
W. Wayne Woody, Chair
Henry A. Kelly, Vice-Chair
Fred Williams
Mayor Shirley Franklin
Council President Lisa Borders

TO: Honorable Mayor and Members of the City Council

FROM: Leslie Ward 

DATE: April 28, 2005

SUBJECT: First quarter report – Consent decree monitoring project

Our first interim audit report on consent decree monitoring, presented to the City Utilities Committee on April 26, is attached. The attached report includes the response from the commissioner of the Department of Watershed Management, as well as our comments to the response.

In the interim report, we focused on two areas related to the consent decree monitoring: the reliability, timeliness and completeness of the data used to manage the consent decree program and the effectiveness of the department's data and information processing capabilities. As part of our ongoing monitoring of the water and sewer collection rates, we also reviewed the department's 2005 1st quarter collection rate for comparison with the previously reported rates, performance target, and the estimated rate included in the 2004 bond documents.

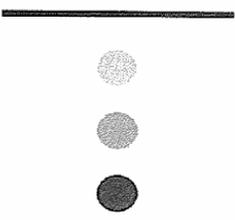
We found discrepancies between the reported total project expenditures in the department's monthly progress reports, produced by the project management team, and the expenditure totals contained in the city's financial system, MARS/G. These expenditure differences ranged from a few cents to \$4.5 million. We identified several factors that may contribute to these discrepancies; however, without additional work we cannot state which source is the most accurate. These factors include breakdowns in the process by which the PMT compiles and reports the data, and ineffective use of the computer systems used to collect and report the data. We are continuing to work with department and PMT staff to reconcile the expenditure discrepancies.

The department has, however, improved its collection rate on the water and sewer accounts. In the first quarter of this year, the department has met the 97% target collection rate in the 2004 bond documents, increased its progress towards its 98.5% performance goal, and has reduced its average collection period. In short, the department is collecting more revenues in a shorter period of time.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

1st Quarter Interim Report
Quarterly Consent Decree Monitoring
Department of Watershed Management

City Auditor's Office
Leslie Ward, City Auditor
Audit Team - Stephanie Jackson and Eric Palmer
April 26, 2005



Introduction

- o This is an interim report on an audit project requested by the City Council. Council Resolution 03-R-2134 asked the City Auditor to perform ongoing reviews and analyses of consent decree-related capital improvements and related financial and performance issues and to report quarterly to the City Utilities Committee.
- o This report addresses the following objectives:
 - o Does the Department of Watershed Management have the data it needs to manage the consent decree program and is it reliable, timely and complete?
 - Are information and data useful and reliable for program management and reporting?
 - Are data and information processing capabilities being effectively used?
 - o What is the department's collection rate for the first quarter of 2005, and how does it compare to the department's previously reported rates, its performance target, and the estimated rate used in the 2004 bond documents?
 - Continued monitoring of the city's collection performance on water and sewer service charges is a supplement to our 2004 audit report, Billing and Collection of Water and Sewer Service Charges.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

Audit Scope and Methods

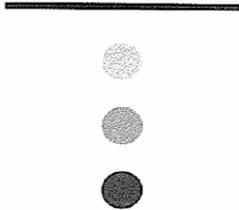
- The audit included a review of active consent decree and amended consent decree projects listed in the department's Clean Water Atlanta Management Report dated March 1, 2005, produced by the Project Management Team (PMT).
- Volumes I and II of the PMT's Monthly Report serve as a "management level report" and a "decision tool for when action is required by senior management staff."
- The audit was conducted in accordance with generally accepted government auditing standards.

The audit methods included:

- Interviewing Department of Watershed Management and PMT staff regarding the department's data needs and reporting requirements, and the information systems used to meet the requirements.
- Interviewing individual project managers regarding how project data is tracked at the project sites and reported to the Project Management Team.
- Meeting with staff of the Georgia Environmental Facilities Authority (GEFA) in order to coordinate our monitoring efforts and avoid duplication of effort.
- Comparing the expenditure data in Volumes I and II of the PMT's Monthly Report to MARS/G.

Data Testing Methodology

- The PMT compiles data on the consent decree projects from a number of various sources; some of the data is manually entered into databases and reports. In an effort to review the consistency of data among reporting sources, we decided to compare the data in the monthly reports to MARS/G.
- We selected 21 projects for review. Our sample included all of the of the consent decree and amended consent decree projects listed in the March 2005 Clean Water Atlanta Management Report (monthly report), except the Tanyard West Area Disinfection Facility and the Sewer Group 1-Rehabilitation projects because there were no contracts/expenditures reported for these yet.
- We compared the contract amounts and expenditures to date information in order to determine whether the information reported was consistent among the primary reporting sources:
 - *Progress and Status Report for the Period: February 1-28, 2005, Cost, Scheduling & Reporting, Volume I, Summary*
 - *Progress and Status Report for the Period: February 1-28, 2005, Cost, Scheduling & Reporting, Volume II, Detail (Cost Encumbrance Report)*
 - MARS/G (data extraction containing expenditures for Watershed capital projects)

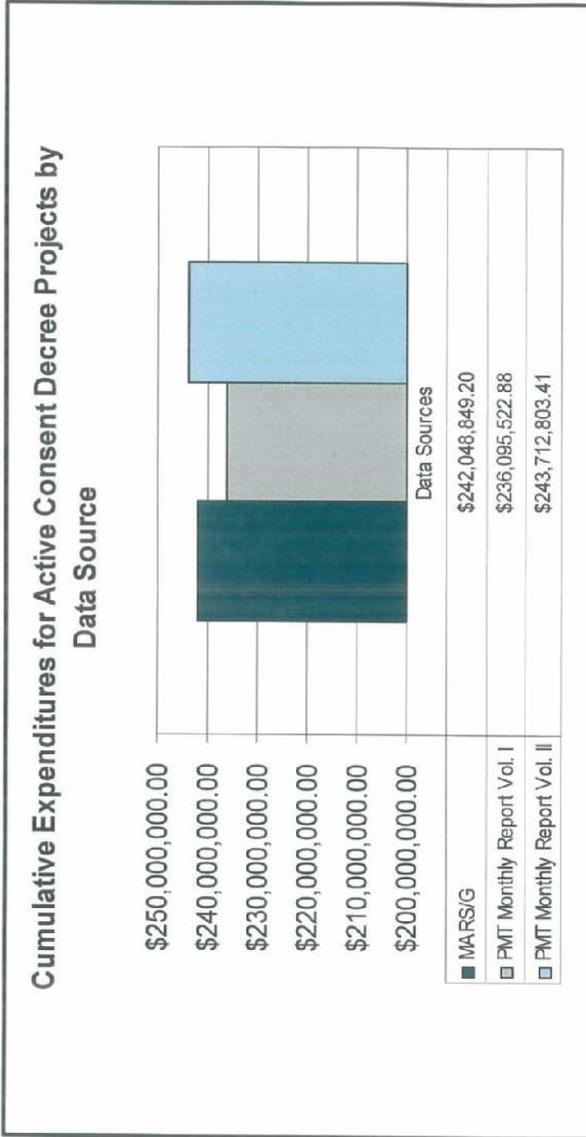


Findings and Analysis

- *In our review of 21 active consent decree projects, we found only three projects for which total reported expenditures in both the Monthly Reports matched the financial data contained in MARS/G, as shown in the chart on page 6. The largest total dollar difference is between Volumes I and II of the PMT's Monthly Report, at \$7.6 million, as shown on page 5. The expenditures in Volume II of the Monthly Report more closely corresponded with the city's financial data.*
- *The differences in the reported expenditures for individual projects ranged from a few cents to \$4.5 million and followed no specific pattern, as shown on page 6.*
- *We identified several factors that may affect the accuracy and completeness of the three expenditure sources. However, without additional work we cannot state which source is the most accurate.*
- *Per its management contract, the Project Management Team (PMT) produces the department's primary reporting document, the Clean Water Atlanta – Management Report (monthly report), which is a progress and status report on each active capital project. The PMT also compiles project expenditure data that is reported to GEFA. In order to produce the monthly report, the PMT relies on information obtained from different sources, including individual project managers, multiple software programs (including data pulled from MARS/G), department staff, and staffs from the Departments of Law, Procurement, and Finance. However, the PMT does not reconcile financial data from the different sources, which creates an increased risk of reporting unreliable data. Because of this risk, we compared the sources in areas that theoretically should match, namely the contract and expenditure amounts.*

Findings and Analysis (cont.)

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005



- As shown in the chart above, project expenditure amounts (through February 28, 2005) are inconsistent among the three sources containing expenditure data.
- The expenditures above do not include costs of land acquisition and rights-of-way.
- Volume II expenditure data were taken from the Cost Encumbrance Report.

Findings and Analysis (cont.)

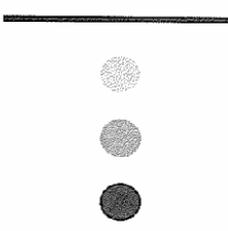
APPENDIX 1 (continued) 1ST QUARTER INTERIM REPORT DEPARTMENT OF WATERSHED MANAGEMENT APRIL 26, 2005

Total Project Expenditures by Data Source

| Project | MARSIG | PMT Monthly Report (Volume I) | PMT Monthly Report (Volume II) | Difference Between MARSIG and Volume I of the PMT Monthly Report | Difference Between MARSIG and Volume II of the PMT Monthly Report | Difference Between Volumes I and II of the PMT Monthly Report |
|--|-------------------------|-------------------------------|--------------------------------|--|---|---|
| 1 Greenway Acquisition | \$4,755,716.00 | \$4,678,268.45 | \$4,755,715.62 | \$77,447.55 | \$0.38 | (\$77,447.17) |
| 2 West Area Storage Tunnel and Pumping Station | \$55,740,577.20 | \$52,853,100.21 | \$53,739,271.03 | \$2,887,478.99 | \$2,001,306.17 | (\$886,170.82) |
| 3 Custer Avenue Storage & Dechlorination | \$1,519,364.97 | \$1,519,364.97 | \$1,519,364.97 | \$0.00 | \$0.00 | \$0.00 |
| 4 West Area CSO Treatment Plant | See Footnote 1 | \$1,460,361.61 | \$1,460,361.61 | Unknown | Unknown | \$0.00 |
| 5 Infranchisement Creek CSO Treatment Plant | \$6,969,464.07 | \$6,070,310.55 | \$6,070,310.55 | \$899,153.52 | \$899,153.52 | \$0.00 |
| 6 Greenleafy Combined Sewer Separation | \$2,493,863.60 | \$2,494,844.95 | \$2,494,844.94 | (\$981.35) | (\$981.34) | \$0.01 |
| 7 McDaniel Combined Sewer Separation | \$3,061,259.46 | \$3,061,259.46 | \$3,062,012.16 | \$0.00 | (\$752.70) | (\$752.70) |
| 8 Stockade Combined Sewer Separation | \$2,444,709.55 | \$2,444,709.55 | \$2,444,709.55 | \$0.00 | \$0.00 | \$0.00 |
| 9 CSO Dechlorination West | \$586,522.93 | \$329,221.00 | \$586,543.93 | \$257,301.93 | (\$21.00) | (\$257,322.93) |
| 10 Indian Creek Segments 3 & 4 | \$13,977,734.40 | \$14,707,555.39 | \$14,707,555.41 | (\$729,820.99) | (\$729,821.01) | (\$0.02) |
| 11 Sewer Group 1 - SSES Contract A | \$3,736,120.35 | \$5,141,940.15 | \$3,736,120.35 | (\$1,405,819.80) | \$0.00 | \$1,405,819.80 |
| 12 Sewer Group 1 - SSES Contract B | \$3,987,434.08 | \$3,987,434.02 | \$3,987,434.08 | \$0.06 | \$0.00 | (\$0.06) |
| 13 Sewer Group 1 - SSES Contract C | \$5,807,528.61 | \$5,264,589.10 | \$6,383,548.87 | \$542,939.51 | (\$576,020.26) | (\$1,118,959.77) |
| 14 Sewer Group 1 - SSES Contract D | \$5,755,395.24 | \$5,205,163.34 | \$3,909,945.28 | \$550,231.90 | \$1,845,449.96 | \$1,295,218.06 |
| 15 Sewer Group 2 - SSES Contract A | \$253,526.22 | \$92,112.72 | \$253,526.22 | \$161,413.50 | \$0.00 | (\$161,413.50) |
| 16 Sewer Group 2 - SSES Contract B | \$3,071,466.04 | \$3,071,465.99 | \$3,071,323.70 | \$0.05 | \$142.34 | \$142.29 |
| 17 Sewer Group 2 - SSES Contract D | \$2,174,936.59 | \$500,335.21 | \$2,347,597.80 | \$1,674,601.38 | (\$172,861.21) | (\$1,847,262.59) |
| 18 Nancy Creek Tunnel | \$99,105,792.61 | \$101,056,147.88 | \$103,648,744.28 | (\$1,950,355.27) | (\$4,542,951.67) | (\$2,592,596.40) |
| 19 Nancy Creek Pump Station | \$18,769,977.00 | \$17,432,310.12 | \$17,743,909.78 | \$1,337,666.88 | \$1,026,067.22 | (\$311,599.66) |
| 20 Rock and Vine Street Sewer Project | \$783,791.60 | \$0.00 | \$736,294.60 | \$783,791.60 | \$47,497.00 | (\$736,294.60) |
| 21 Small Diameter Sewer Rehab | \$7,053,665.68 | \$4,725,028.21 | \$7,053,668.68 | \$2,328,640.47 | \$0.00 | (\$2,328,640.47) |
| Totals | \$242,048,848.20 | \$236,995,522.88 | \$243,712,803.41 | \$7,413,687.93 | (\$205,592.60) | (\$7,617,280.53) |

Note: Items shaded in gray indicate projects with matching dollar amounts. Values in red indicate negative numbers.
Source: Expenditure amounts compiled by the audit team using the MARSIG database, the Project Summary Information for each project in Volume I of the Monthly Report and the Cost Encumbrance Report in Volume II of the Monthly Report.
1 These expenditures are grouped by Purchase Order under Infranchisement Creek. The total value for both projects is reflected there.

1st Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

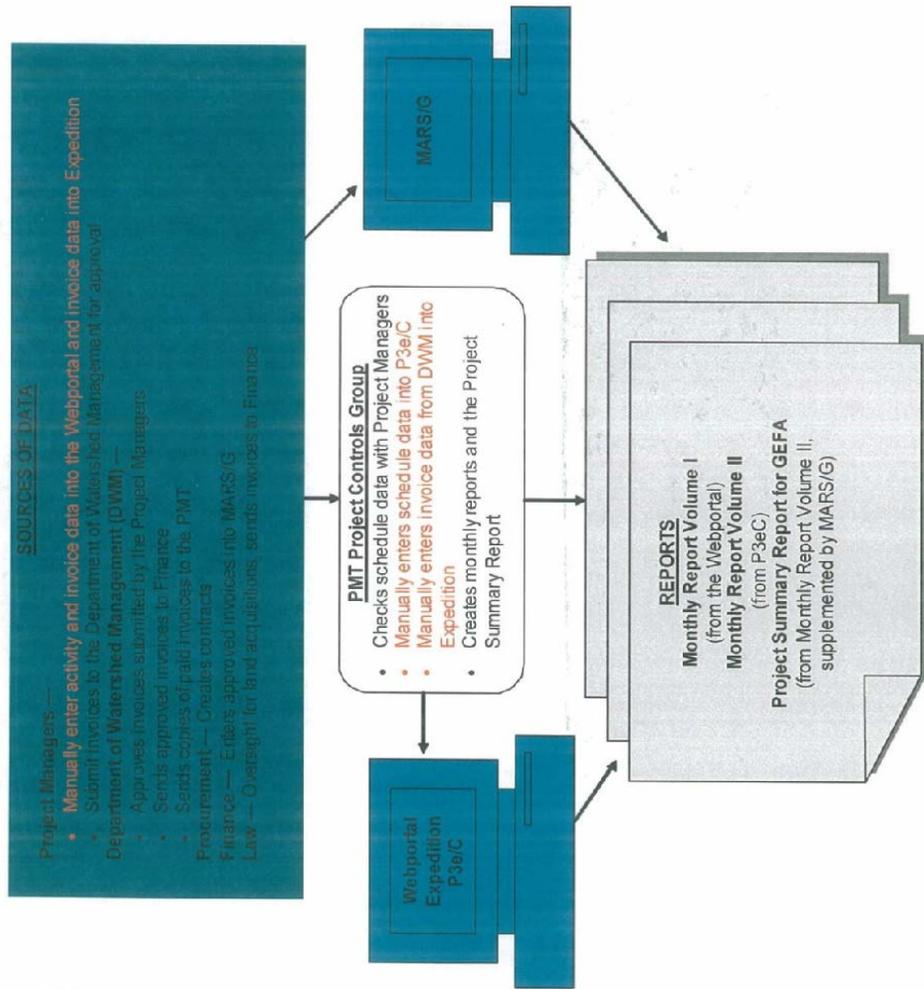


Findings and Analysis (cont.)

- *The PMT does not consistently receive critical pieces of data that would allow the group to properly record and reconcile project expenditures. Some of the discrepancies in the data may be attributable to breakdowns in the process by which the Project Management Team (PMT) compiles and reports the data.*

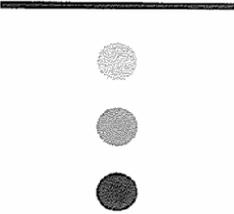
For example, copies of all payment requisitions are not sent to the PMT from the project managers, nor are copies of all invoices forwarded to the group from the Departments of Watershed Management or Finance, nor are copies of all contracts sent from Procurement. Also, PMT staff do not always receive data from the Department of Law regarding land acquisitions. This information would allow the PMT to accurately record, reconcile, and report project expenditures.
- *The PMT uses several data systems to compile project activity and expenditure data, upgrading and adding systems as needed. However, as shown on page eight, these systems do not appear to have made the expenditure tracking process more efficient, or effective.*
 - Duplicate information is input into multiple systems by project managers. For example, as shown on page eight in red text, project managers input invoice information into the Clean Water Atlanta web portal. This information is also input into Expedition by either the project managers or the PMT, although the financial data in Expedition does not appear to be consistently updated. PMT staff also manually enter expenditure data from MARS/G into spreadsheets to create the Encumbrance Report in Volume II of the monthly report.
 - Information is pulled from multiple systems in order to create the monthly report, and the systems are not integrated or linked together. This information gathering and reporting process increases the risk for error, particularly if the data is not reconciled.
 - Department of Watershed Management, PMT, and Department of Finance staffs have recently begun working together to create a process by which data will be extracted from MARS/G and directly migrated to a database. The goal is to eliminate some of the manual data entry and to more accurately allocate expenditures to specific projects.

Findings and Analysis (cont.)



1st Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

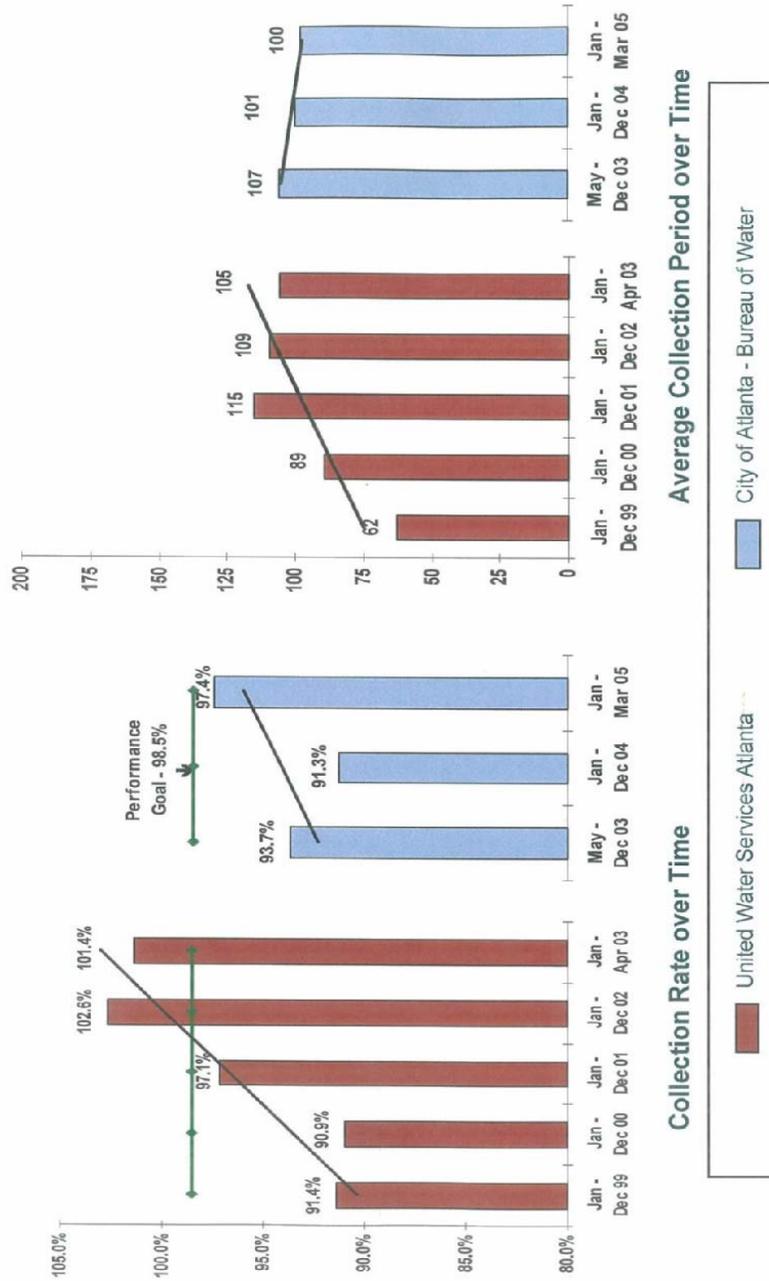


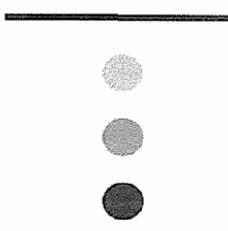
Recommendations

- *The Department of Watershed Management should ensure that the PMT obtains the project expenditure and related information that it needs from Watershed staff, as well as other department staff.*
- *The Department of Watershed Management should require the PMT to reconcile the expenditure data and ensure that the information reported is accurate and complete.*
- *The Department of Watershed Management should ensure that the PMT re-evaluate their current data systems and eliminate duplication of data entry efforts, decrease manual entry into project expenditure costs.*
- *Department of Watershed Management and PMT staff should continue to work with the Department of Finance to streamline the provision of financial information from MARS/G on a project by project basis.*

Continuous Monitoring of the Water Collection Rate

- For the January through March 2005 quarter, the Department has met the target collection rate of 97% stated in the 2004 bond documents and increased its progress towards its performance goal of 98.5%. The Department has also continued to reduce its average collection period, although it remains well above the 25 days in which current bills are due.





Future Consent Decree Reports

- We plan to issue interim quarterly reports on issues related to project and contract management and/or other areas related to the consent decree capital improvement projects. In January 2006, we plan to issue a full audit report providing an overview of our previously issued quarterly reports, as well as any other related findings and recommendations.
- The next reports will be tentatively issued according to the following schedule:
 - July 26, 2005
 - November 1, 2005
 - January 31, 2006 (full report)
 - The reports will be presented at the City Utilities Committee and release dates will coincide with the meeting dates.
- The interim reports will also include quarterly updates on the collection of water and wastewater bills.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005



CITY OF ATLANTA

SHIRLEY FRANKLIN
MAYOR

55 TRINITY AVENUE, S.W. • SUITE 5400 • SOUTH BUILDING
ATLANTA, GEORGIA 30303-0310
Office: (404) 330-6081 • Fax: (404) 658-7194

DEPARTMENT OF
WATERSHED MANAGEMENT
ROBERT J. HUNTER
Commissioner

April 25, 2005

Ms. Leslie Ward
City Internal Auditor
City of Atlanta
68 Mitchell Street, SW
Suite 12100
Atlanta, Georgia 30303-0312

Re: Quarterly Consent Decree Monitoring Report - April 2005

Dear Ms. Ward:

Thank you for the opportunity to comment on the draft of your Quarterly Consent Decree Monitoring Report. This quarter's report addresses two primary objectives: (1) an assessment of the availability and utility of management data for the consent decree program and (2) the continued monitoring of the Department's water and sewer bill collection performance.

Consent Decree Management Data Assessment

Your review focuses on the consistency of data from three reports or data sources for 21 active consent decree projects. Only two of the three are intended as financial information sources and the variation in total expenditures between those two summaries is less than 0.7% (MARS/G Data Extraction Summary & PMT Volume 2 Monthly Capital Report). Six of the projects have zero variance, two have a variance of \$21 or less and three others have a variance of less than \$1,000. The variance of a twelfth project is not reported because of project grouping within MARS/G. For over half of the 21 projects the largest variance is under 0.04%.

It is not possible to analyze the source of the variance for all nine of the other projects based on the information in the Quarterly Consent Decree Monitoring Report. However, the Department of Watershed Management (DWM) believes that we have identified the variance for two of nine of the projects.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

Ms. Leslie Ward
April 25, 2005
Page 2

- Sewer Group 1 – Contract C – The Vol. 2 report reflects the retainage for the project. A portion of the retainage is actually paid from another account, which is not reflected in the audit report spreadsheet on Page 6. If these retainages were accounted for in the audit report, these expenditure totals would be virtually identical for the Vol. 2 and MARS/G reports.

- Indian Creek 3 & 4 –

Design Contract - The Vol. 2 report reflects a split of the Design costs (50%/50%) with Indian Creek 3 & 4 and Indian Creek 1 & 2 projects, since there is only a single Design contract for both projects. However this is not reflected in the audit report spreadsheet. If the audit report would reflect the splitting of the design costs, these expenditure totals would be the same.

Construction Contract – The Vol. 2 report reflects invoices submitted and approved. This includes Change Order #1, which has been approved by the Department but has not been paid pending resolution performance issues. The MARS/G information only includes the paid to date invoices in the system. If the un-paid invoices were added to the audit report, these total expenditures would be the same.

Engineering Services During Construction – Same issue as the design contract above.

DWM is committed to working with your staff and that of the Department of Finance (DOF) to review the details of the MARS/G data extraction and the PMT Vol. 2 report for the seven remaining variances.

MARS/G is the City of Atlanta's accounting system and, as such, is the official financial record for Atlanta. These project expenditure summaries are not a published management report but a compilation of data extracted from the MARS/G accounting system for expenditures for the 21 projects. While not requiring manual data entry, the generation of MARS/G data files and the extraction of monthly summaries have been problematic. The PMT Volume 2 monthly report summarizes schedule, budget and expenditure information for capital projects. The Vol. 2 report is considered the definitive report for project expenditures, and is the source of data for the report to GEFA. However the generation of the Vol. 2 report requires the capture and manual entry of data. The most likely sources of variation between these two reports include time lag impacts (i.e., invoices entered in one system but not yet processed in the other), missed data impacts (i.e., invoices not recorded in system), and data entry errors (i.e., data incorrectly entered). The latter two items are more likely with the manual entry Vol. 2 report.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

Ms. Leslie Ward
April 25, 2005
Page 3

DWM and DOF have been working together for almost one year on a data download initiative that would automate this financial reporting function. DWM, the PMT, DOF and the Department of Information Technology (DIT) believe that in approximately 90 days we will have developed a monthly MARS/G data download that provides life-to-date expenditures by project, linked to the DWM CIP projects, providing a single source of project expenditure information and automatic reconciliation.

In addition, DWM and PMT are developing a data warehouse, using a relational database to link the MARS/G data download with the other project and program management computer applications including Expedition, P3eC, PMT monthly reports, and the web portal. This will offer a single data entry for all capital project information (schedule, budget, expenditures, and narrative information) and eliminate duplication of manual data entry into various reports.

The third report cited in the Quarterly Monitoring Report is not intended or utilized as a financial report by the Department or PMT. Therefore, the Department believes that any financial variance comparison between the PMT Volume 1 Monthly Capital Projects Report and the Vol. 2 or MARS/G data is inconsistent with the purpose of the report and inappropriate. The Vol. 1 report captures a variety of information from the project managers through their direct input via the intranet web portal. It serves as a useful tool to allow direct review and actions by senior level management staff on a variety of project status and other non-cost issues. The Vol. 1 report expenditure information as provided directly by the project managers is sometimes not current or updated each month. Therefore, it does not reconcile against the Vol. 2 report and MARS/G data. In order to minimize this issue we will utilize the more reliable and complete Vol. 2 expenditure information into the Vol. 1 project report.

The Department of Watershed management believes that these actions will address the specific recommendations of your monthly monitoring report.

Recommendation: The Department of Watershed Management should ensure that the PMT obtains the project expenditures and related information that it needs from Watershed staff, as well as other department staff.

- The MARS/G data download initiative being jointly developed with DOF and DIT, and the development of a data warehouse, will ensure that the PMT obtains the project expenditure and related information from the necessary sources.

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

Ms. Leslie Ward
April 25, 2005
Page 4

Recommendation: The Department of Watershed Management should require the PMT to reconcile the expenditure data and ensure that the information reported is accurate and complete.

- The MARS/G data download initiative will provide a single source of project expenditures information and offer automatic reconciliation.
- Watershed Management staff will work with the staff of the Internal Auditor and the Department of Finance to analyze the discrepancies between the Vol. 2 report and the MARS/G data extraction.

Recommendation: The Department of Watershed Management should ensure that the PMT re-evaluate their current data systems and eliminate duplication of data entry efforts, decrease manual entry into systems wherever possible, and more efficiently capture the data it needs to accurately report project expenditure costs.

- DWM and PMT are developing a data warehouse, using a relational database to link the MARS/G data download with Expedition; P3eC, PMT monthly reports, and the web portal. This will offer a single data entry for all capital project information (schedule, budget, expenditures, and narrative information) and eliminate manual duplication of data entry into various reports.

Recommendation: Department of Watershed Management and PMT staff should continue to work with the Department of Finance to streamline the provision of financial information from MARS/G on a project by project basis.

- DWM and PMT will continue the MARS/G download initiative with the Department of Finance and the Department of Information Technology to develop a monthly MARS/G data download that provides life-to-date expenditures by project. We currently project that this system will be functional in approximately 90 days.

The Department of Watershed Management has reliable, timely and complete information necessary to manage the consent decree program. The comprehensive monthly capital report (Vol. 2) includes schedules, budgets and expenditures encompassing the total long-term capital program, including the consent decree, wastewater and water components. With this management data report the Department has maintained full compliance with the consent decree requirements and schedule.

Water/Sewer Collection Performance

I reported on the Department's collection efforts to the City Utilities Committee

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

Ms. Leslie Ward
April 25, 2005
Page 5

(CUC) of Atlanta City Council earlier this month. You correctly state in your report that "the Department has met the target collection rate of 97% stated in the 2004 bond documents". The Department has expended considerable efforts in implementing our collection program and improving the average collection rate by over 6% from 2004. In fact, the current rate has surpassed the 97% level well before the 2009 date cited in the bond document. As you note, the average collection period remains high at 100 days but is decreasing. The Department is continuing our plan implementation and we anticipate continued improvement in these metrics. We will make our next comprehensive quarterly report to CUC in July 2005 and we will be including information on the several issues you highlighted in your previous report. This will include a review of our progress in resolving accounts receivable issues. I recommend that our staffs work in conjunction to develop and confirm that data.

The Department of Watershed Management appreciates the diligent, continuing efforts of you and your staff on these quarterly monitoring reports and I look forward to continued cooperation.

Sincerely,



Robert J. Hunter
Commissioner

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

City Auditor's Office comments on the Commissioner of Watershed Management's response to *1st Quarter Interim Report: Consent Decree Monitoring, April 26, 2005:*

We appreciate Mr. Hunter's response and are pleased that the Department of Watershed Management (DWM) is committed to improving the accuracy and reliability of its status reporting on the city's consent decree program.

Our comments address three issues in the response: the magnitude of reported expenditure differences for individual projects; the department's characterization of volumes I and II of the monthly status reports prepared by the project management team (PMT); and the department's response to our recommendations.

Some individual project expenditure differences are substantial. The response correctly notes the small differences between expenditures reported in the PMT monthly report (volume II) and the city's financial system (MARS-G) for 11 of 21 active consent decree projects, as well as the lack of comparison for a 12th project. Further, DWM now believes the differences for two additional projects can be explained. This assessment, however, is incomplete and therefore misleading. The seven remaining projects in our analysis had reported expenditure differences ranging from \$47,500 to \$4.5 million. Even the \$47,500 difference is important, since it represents 6 percent of this project's reported expenditures in MARS-G. For these seven projects, the percentage differences in reported expenditures range from 4 percent to 32 percent. The absolute value of these differences is \$10.5 million. (It should be noted that reporting the sum of negative and positive differences, as we did in the interim audit report, understates the true magnitude of individual project differences. The total absolute differences are far larger and a more accurate assessment of the degree of error in the reporting process.)

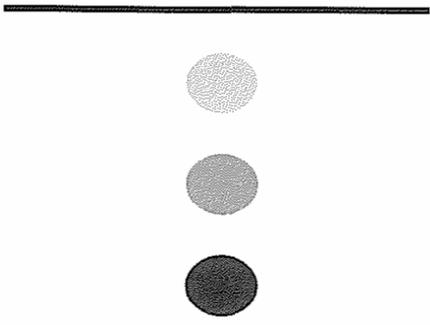
Volumes I and II of the monthly status reports should be consistent. The response characterizes as "inconsistent with the purpose of the [audit] report and inappropriate" our use of volume I of the PMT monthly report in our comparison of reported project expenditures. This criticism ignores the fact that our audit methodology, as well as our understanding of how the monthly reports are prepared, was validated with the PMT staff members who produce the reports. The staff members also told the auditors that they review the two volumes for consistency and that, in theory, similarly labeled information in the two volumes should match. Further, volumes I and II are labeled and titled so as to appear to be two parts of the same report, as the terms "volume I" and "volume II" clearly suggest. To say, as the DWM response does, that a monthly report titled "Cost, Scheduling & Reporting" contains expenditure information that is "sometimes not current or updated each month," is to suggest that it is the report that is inconsistent and inappropriate, not the audit comparison.

Response to audit recommendations does not address actions needed now, before the planned IT projects are completed. We agree with DWM that the completion of the information technology projects described in the response should eliminate most of the

APPENDIX 1 (continued)
1ST QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
APRIL 26, 2005

risks to data accuracy and reliability that now are present in the reporting process for consent decree capital projects. Our support for these projects is reflected in audit recommendations 3 and 4. We believe, however, that DWM should also commit to improving the reporting process during the 90 to 180 days until the IT initiatives are expected to be complete. Immediate actions would include ensuring that copies of invoices, contracts, and land acquisition or right-of-way agreements are provided directly to the PMT by DWM or other department staff who handle these transactions (recommendation 1). It would also include devising quality control and reconciliation procedures for manual data entry (recommendation 2) and incorporating the use of a standard data extraction from MARS-G in this process. (It should be noted that the data extraction used in the audit was adapted from a similar report obtained by the PMT.) Finally, it would include reporting clear and consistent definitions of the measures reported in volumes I and II of the monthly reports.

APPENDIX 2
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



2nd Quarter Interim Report
Quarterly Consent Decree Monitoring
Department of Watershed Management

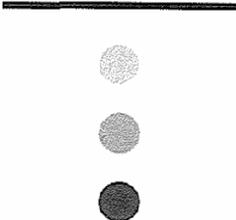
City Auditor's Office

Leslie Ward, City Auditor

Audit Team - Stephanie Jackson, Eric Palmer, and Al Moses

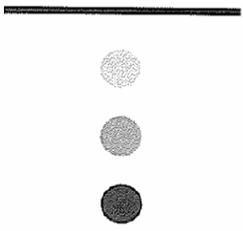
August 30, 2005

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



Introduction – Audit Initiation and 1st Quarter Objectives

- This is the second interim report on an audit project requested by the City Council. Council Resolution 03-R-2134 asked the City Auditor to perform ongoing reviews and analyses of consent decree-related capital improvements and related financial and performance issues and to report quarterly to the City Utilities Committee.
- The first interim report for the Consent Decree Monitoring Project, reported in April 2005, focused on two areas: the reliability, timeliness and completeness of the data used to manage the consent decree program and the effectiveness of the department's data and information processing capabilities. As part of our ongoing monitoring of the water and sewer collection rates, we also reviewed the department's 2005 1st quarter collection rate for comparison with the previously reported rates, performance target, and the estimated rate included in the 2004 bond documents.

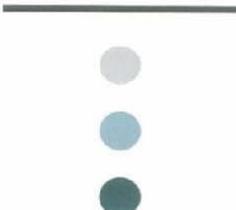


Introduction

2nd Quarter Objectives

This report addresses the following objectives:

- Does the data collected for the consent decree projects allow the department to accurately monitor project progress, and is that data reported in the Project Management Team's monthly reports for monitoring purposes?
- Does the department use standard industry methodology for determining project progress and performance?
- What specific requirements and guidelines does the department have to indicate how project managers are to determine and report project progress?
- Does the information reported in the Project Management Team's monthly reports show whether the projects are on schedule and on budget?
- What is the department's collection rate for the second quarter of 2005, and how does it compare to the department's previously reported rates, its performance target, and the estimated rate used in the 2004 bond documents?
- Are the department's collection efforts increasing the promptness of customer payments?



Introduction

Audit Scope and Methods

The department has nine active consent decree construction projects. We reviewed performance data for the following six projects:

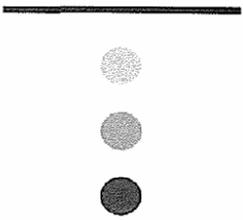
1. Nancy Creek Tunnel
2. Nancy Creek Pump Station
3. West Area Storage Tunnel and Pumping Station
4. CSO Dechlorination – West
5. Custer Area Storage and Dechlorination Facility
6. Intrenchment Creek CSO Treatment Plant

We did not include the following three projects because notices to proceed have only recently been issued, and there is not yet sufficient construction performance data to review.

7. Greensferry Combined Sewer Separation
8. Stockade Combined Sewer Separation
9. McDaniel Combined Sewer Separation

The audit methods included:

- Interviewing Department of Watershed Management staff and consultants, including senior construction managers, individual project managers, members of the project controls group of the PMT, and other project scheduling and control staff.
- Comparing the project performance data in the PMT's Monthly Report to the project schedules and project managers' reports.
- Interviewing staff from other jurisdictions with consent decree programs and researching professional literature for information on best practices.
- Reviewing water and sewer billing and collection data (covering activity from October 2004 through June 2005) to determine the current collection rates and analyze the sources of the collections.

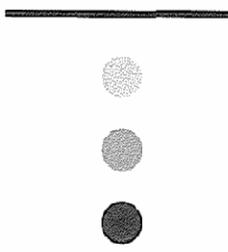


Summary of Findings

- o The department collects the data it needs to manage the consent decree projects. The department compares actual work completed to schedules and tracks costs compared to budget, using methods similar to those of other jurisdictions with consent decree construction projects and consistent with industry standards. Using these tools, the department collects information that allows project managers and senior management to assess whether projects are on budget and on schedule.
- o Although the department has the necessary data to manage the projects, the monthly reports, prepared by the PMT, appear to be of limited value to internal and external users for assessing project progress. The reports do not provide a clear and complete snapshot of the projects' status in relation to schedule and budget. Also, the PMT's process for collecting the data to produce the monthly reports is inefficient and appears to cause inaccuracies in the data. Further, some of the data collection activities of the PMT appear to overlap and/or duplicate some functions of another recently formed project controls group in the department.
- o The Department has continued to make progress toward increasing its water and sewer collection rates. The 12-month average collection rate increased from 97.4% for the first quarter of 2005 to 97.9% in the second quarter, which is an improvement over the 2004 rate of 91.3%. The department has also met the target collection rate of 97% used in the 2004 bond documents and is close to its 98.5% performance goal.
- o The Department is still taking a long time to collect on accounts. For the second quarter of 2005, it took the Department an average of 109 days to receive payment for water and sewer services. In addition, the percentage of accounts that are 90 days delinquent or more has grown from 71% in the 4th quarter of 2004 to 81% at the end of the second quarter of 2005. As recommended in our previous audit reports, the Department has taken steps to write off more than \$8 million in uncollectible accounts.

APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT DEPARTMENT OF WATERSHED MANAGEMENT AUGUST 30, 2005



Findings and Analysis – Consent Decree Program

- **The department compares actual work completed to schedules and tracks costs compared to budget, using methods similar to those of other jurisdictions with consent decree construction projects and consistent with industry standards.**

The department's process for tracking cost and schedule data is similar to methods used in other jurisdictions with consent decree construction projects. In addition, these methods incorporate concepts and principles of earned value management, a project management tool developed by the federal government and widely used as a best practice by both the government and private sectors.

Exhibit 1 (next page) shows that the department's cost and schedule tracking mirrors the steps of earned value management. Work actually performed is measured against a baseline to track the progress of the project, and the cost of the project is tied to specific units of work completed. As the project continues, performance information is updated and reviewed to forecast future progress and identify situations that need corrective action.

APPENDIX 2 (continued)

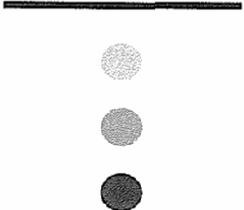
2ND QUARTER INTERIM REPORT DEPARTMENT OF WATERSHED MANAGEMENT AUGUST 30, 2005

Findings and Analysis – Consent Decree Program (cont.)

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

| Exhibit 1 | |
|---|---|
| DWM Performance Methodology Compared to Earned Value Management Methodology | Department of Watershed Management's Methodology |
| <p>Earned Value Management Methodology</p> <p>Establish Baseline</p> <ul style="list-style-type: none"> Breakdown of the total project into a cost-loaded schedule of work activities using a work breakdown structure to describe the work to be completed <p>Monitor Progress Against the Plan</p> <ul style="list-style-type: none"> Compute earned value (how much work was done) and compare to planned value (how much work should be done) and actual cost (how much did the work cost) Compute cost variance – whether project is over or under budget Compute schedule variance - whether project is ahead of or behind schedule Compute cost performance index - ratio of earned value to actual cost Compute schedule performance index - ratio of earned value to planned value Progress Payments based on how much work is physically done <p>Forecast Future Progress</p> <ul style="list-style-type: none"> Hold progress meetings Analyze variances and performance indices Calculate estimate at completion - expected cost of the project <p>Take Corrective Action</p> <ul style="list-style-type: none"> Determine if variances/indices fall within thresholds Develop plan to minimize risk if variances are outside thresholds Monitor the corrective action plan and show results <p>Sources: American National Standards Institute (ANSI) EIA-748, Earned Value Management project contracts.</p> | <p>Department of Watershed Management's Methodology</p> <p>Establish Baseline</p> <ul style="list-style-type: none"> Breakdown of the total project into a cost-loaded schedule of construction activities, known as the schedule of values <p>Monitor Progress Against the Plan</p> <ul style="list-style-type: none"> Measure contractor's schedule of values against baseline Review daily inspection reports and field engineers' estimates Assure contractor has properly loaded actual quantities and cost into schedule for each schedule monthly update Progress payment based on how much work is physically done <p>Forecast Future Progress</p> <ul style="list-style-type: none"> Hold weekly progress meetings Analyze cost and schedule variances Review monthly updates of contractor schedule Review 3 - week look ahead schedule forecast to predict costs <p>Take Corrective Action</p> <ul style="list-style-type: none"> Determine critical milestones in jeopardy and submit revised schedule for activities that fall more than 5% behind the critical path schedule Implement schedule recovery plan |

2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

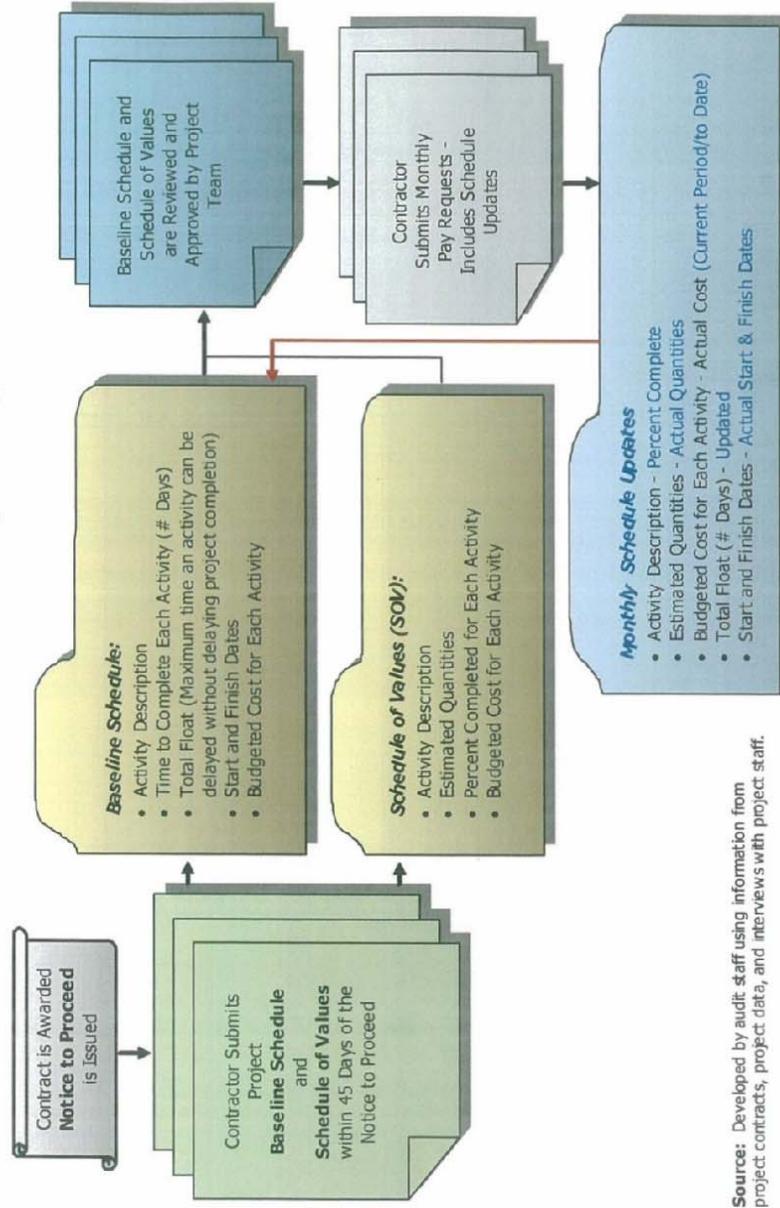


Findings and Analysis – Consent Decree Program (cont.)

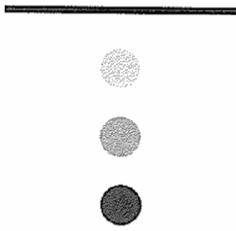
- **The department collects information that allows project managers and senior management to assess whether projects are on budget and on schedule.**
 - Both the department's procedures and the project contract provisions require the contractors to document and report the amount of work done and the value of the work completed. Exhibit 2 illustrates the required process.
 - Key components of the tracking process are the contractor's work schedules, which are the baseline schedule and the schedule of values. The baseline schedule generally lays out of all of the activities necessary to complete a project, including the estimated duration and budgeted cost of each activity. The schedule of values is developed from the baseline schedule. As the contractor completes work on the project, the actual start dates, costs, quantities used, and percentage complete for each activity are entered into the schedule. Each month, the schedule of values is updated and when a payment request is submitted, the contractor is paid based on the value of the work completed.
 - Updates to the schedule data are reported to the project engineers/project managers on a monthly basis and reviewed for accuracy. The department's project managers track cost and schedule progress by comparing the city's actual costs and the contractor work performed to a baseline schedule and schedule of values. The updates to the schedule of values also form the basis for paying contractors incrementally for work performed.
 - The project contracts also require the use of specific software. Contractors must produce the schedules using Primavera Project Planner for Windows (P3), a scheduling software that is commonly used in the construction field.

Findings and Analysis – Consent Decree Program (cont.)

**Exhibit 2
Data Used to Measure Project Progress and Performance**



2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management



Findings and Analysis – Consent Decree Program (cont.)

- The department's monthly reports, prepared by the PMT, appear to be of limited value to internal and external users for assessing project progress. The reports do not provide a clear and complete snapshot of the projects' status in relation to schedule and budget.

The Project Management Team (PMT) produces a two-volume monthly status report for upper level management and for external monitoring and reporting purposes, as well as a monthly report that is primarily for use by the Georgia Environmental Facilities Authority (GEFA). Although all three monthly reports contain data that are valuable, none of the reports present a complete picture of whether the projects are on budget and on schedule. Also, the performance indicators are undefined, and the indicators are not integrated in a way that puts them in the proper context and makes them easy to interpret.

Based on the department's requirements, the primary performance areas to be tracked are work, schedule (time), and cost. Therefore, a progress report should contain a complete mix of indicators in these performance areas in order to provide a meaningful snapshot of project status.

Exhibit 3 shows that no single report includes an indicator of each type for both the project as a whole and the current phase, e.g. construction. For example, no indicators are reported in Volume I of the monthly report for the amount of the construction contract budget that has been expended, although this indicator is shown in the monthly report to GEFA. The GEFA report does not contain indicators measuring the amount of time expended or remaining on a project, but these indicators are in Volume I. Additionally, indicators showing the activity and cost information, which directly affect each other, are reported separately in Volumes I and II of the monthly report.

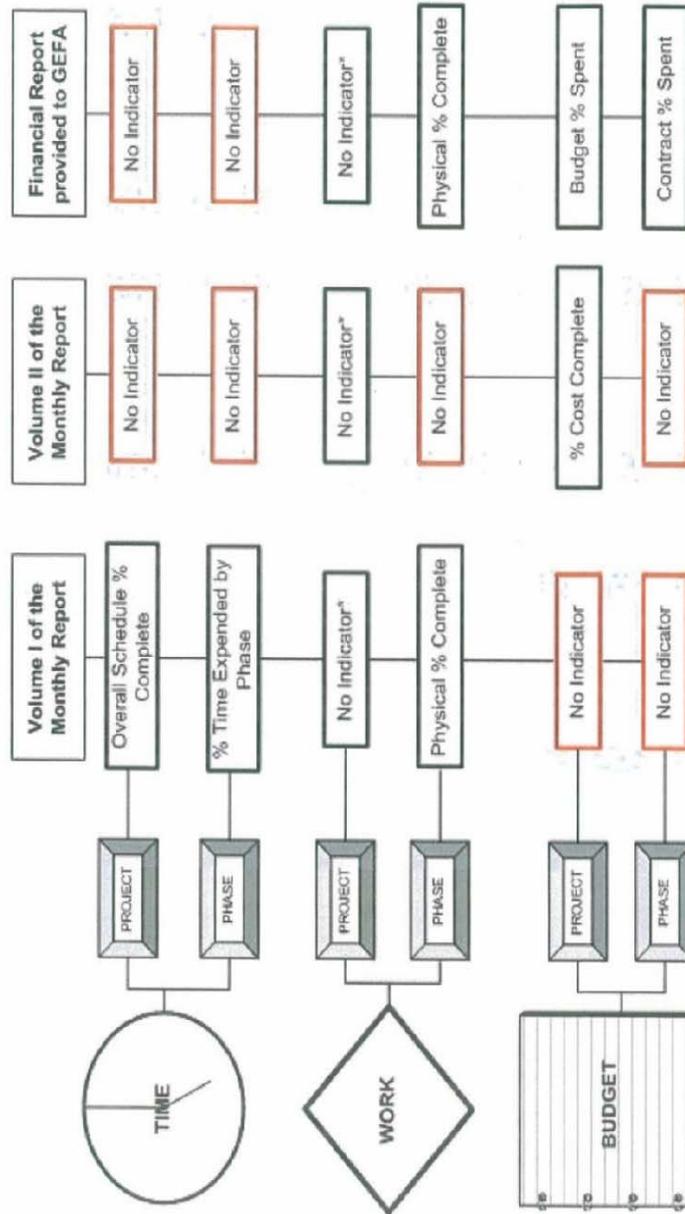
APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

Findings and Analysis –
Consent Decree Program (cont.)

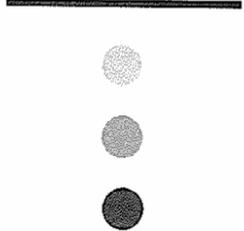
Exhibit 3

Progress Indicators - What is Measured and Where it is Reported



* The Department does not collect data that would provide an overall picture of the work completed. Progress during the design phase is measured at specific milestones.

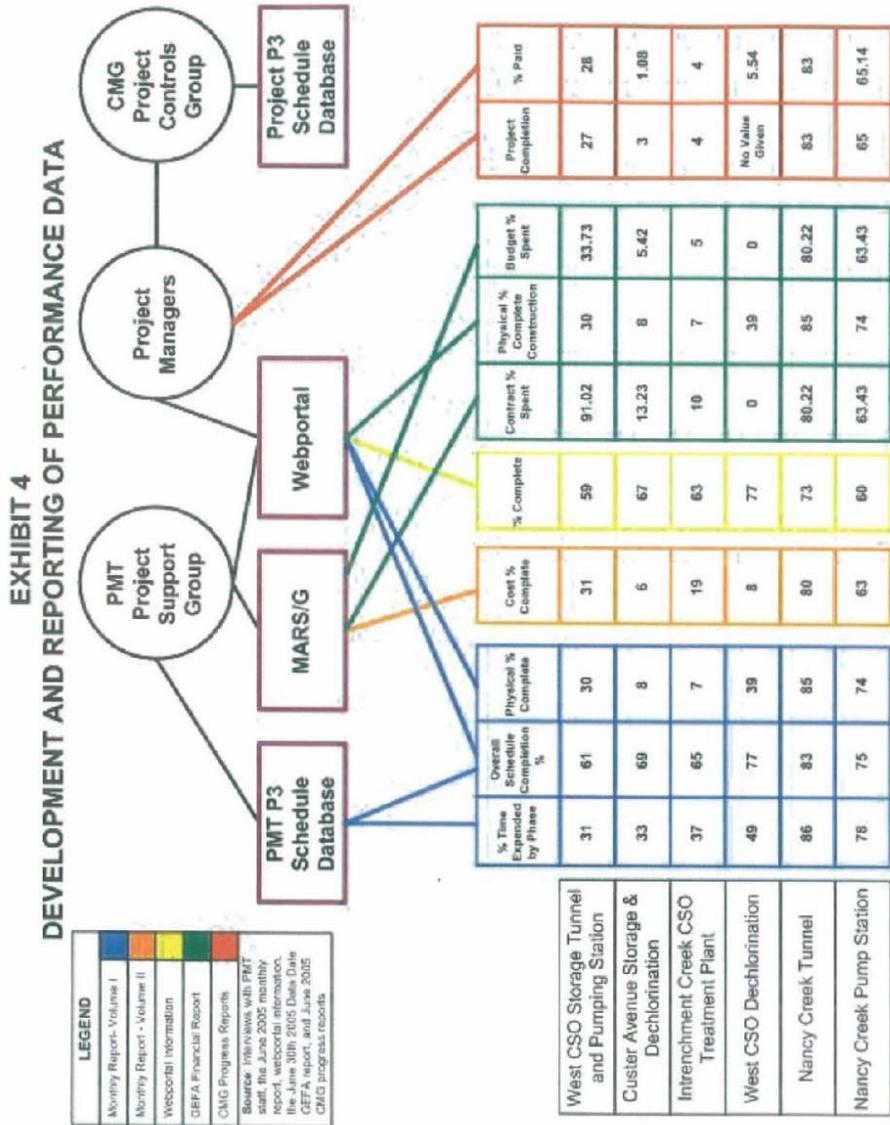
Source: Volumes I & II of the June 2005 Monthly Report, July 2005 (June 30th Data) GEFA Report and interviews with PMT staff



Findings and Analysis – Consent Decree Program (cont.)

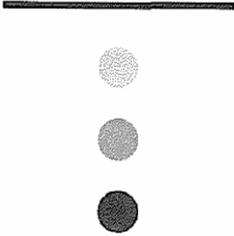
- **The PMT's process for collecting the data to produce the monthly reports is inefficient and appears to be causing inaccuracies in the data.** In our first quarter report, we noted inefficiencies in the process by which the PMT compiled the department's monthly reports that led to data inaccuracies in the expenditure information. We have found what appear to be similar problems with the compilation of the performance data.
 - As noted in our previous report, the three monthly reports rely on input from the project level, DWM, and other city departments. Information on the progress of the active projects primarily comes from the project managers through their monthly updates of the webportal information and hardcopy updates of the schedule data. Exhibit 4 (page 13) shows that the connections between the source information and the reporting systems are cumbersome and duplicative. This affects the picture that it gives about the projects and their progress.
 - For example, project schedule information is maintained on a P3 database by the Project Support Group. The information is updated by the project managers by inputting updates directly into the webportal. According to PMT staff, the webportal information is the source of the schedule progress data for Volume I of the monthly report. This means that the webportal entries made by project managers are the direct data source and should be what is shown Volume I.
 - However, as shown in Exhibit 4, the webportal entries (yellow, % complete) and the monthly report values (blue, overall schedule completion %) are different for five of six projects, when the two values should be the same. The two Nancy Creek projects show significant differences in these figures.
 - Exhibit 4 shows the groups that maintain project information, how that information is generated, and the reports where the information is shown.

Additional Analysis – Consent Decree Program (cont.)



2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



Findings and Analysis – Consent Decree Program (cont.)

According to PMT staff, the project manager's webportal entry for schedule progress should have been the figure shown in the monthly report. However, when the program was run to produce the monthly report, the PMT's P3 scheduling database substituted a different schedule value instead of the project manager's manual entry. They described the cause of the problem as a systems integration issue. Since we brought the discrepancy to their attention, they have begun working to fix the problem.

We also noted instances where the data varies among different reporting sources. In order to show the comparisons between similar indicators among different sources, Exhibit 5 on page 15 presents the indicators grouped according to their types. As shown in the exhibit, the data is not always consistent among sources.

Findings and Analysis – Consent Decree Program (cont.)

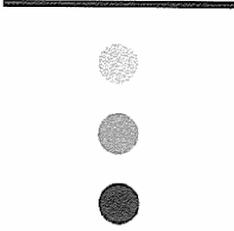
Exhibit 5
Progress Indicators – Grouped by Similar Types

| Types of Indicators: | Schedule – Overall | Work – Phase | Cost – Overall | Schedule – Phase |
|--|--|--|--|-----------------------|
| | Volume I of the Monthly Report - Project section | Volume I of the Monthly Report - Project section | Volume II of the Monthly Report - Detail Budget Report | CMG Progress Report |
| | Project Master Schedule in Volume I | GEFA Financial Report | GEFA Financial Report | GEFA Financial Report |
| | Webportal | Physical % Complete | Physical % Complete | Project Completion |
| | Overall Schedule Completion % | Physical % Complete | Cost % Complete | Budget % Spent |
| PROJECT | | | | |
| West CSO Storage Tunnel and Pumping Station | 61 | 30 | 31 | 27 |
| Custer Avenue Storage & Dechlorination | 69 | 8 | 6 | 3 |
| Intranchment Creek CSO Treatment Plant | 65 | 7 | 19 | 4 |
| West CSO Dechlorination | 77 | 39 | 8 | No value given |
| Nancy Creek Tunnel | 83 | 85 | 80 | 83 |
| Nancy Creek Pump Station | 75 | 74 | 63 | 65 |
| <p>Source: June 2005 PMT Monthly Reports; webportal information; the June 30th 2005 GEFA report; and June 2005 CMG progress reports.</p> | | | | |

2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

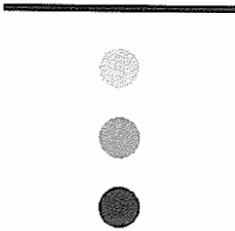


Findings and Analysis – Consent Decree Program (cont.)

- **Some of the data collection activities of the PMT appear to overlap and/or duplicate some functions of the newly created Construction Management Group's Project Controls Group.** The Construction Management Group's (CMG) Project Controls Group is responsible for providing data for project management at the field level; the Project Support Group within the PMT is responsible for compiling data on project progress for management use as well as internal and external reporting purposes for the consent decree program as a whole. However, these two groups do not appear to work together to share and/or compare data – the PMT re-creates much of the data that is already generated by the CMG at the project level. There appears to be a lack of clarity regarding some of the PMT's functions in relation to the Project Controls Group's activities.
- The PMT's Project Support Group provides scheduling, procurement tracking, expenditure tracking, cost estimating, and reporting services for the department. They are also charged with providing field staffing assistance on an as needed basis, providing various schedules, cost estimates and project specific reports, as laid out in their scope of services.
- Similarly, the Project Controls Group's responsibilities include providing field level cost and schedule data to management for project tracking. Their activities include maintaining and updating project schedules and tracking cost and schedule variances to provide to management for decision-making purposes.

APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



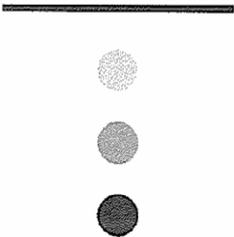
Findings and Analysis – Consent Decree Program (cont.)

The PMT attempts to collect project baseline schedules and budgets, and obtain monthly schedule and cost updates for the projects, either directly from the project managers or through other data sources within the department. In order to produce the monthly report and GEFA reports, the PMT must obtain project updates from project managers through the webportal, as well as update the P3 scheduling database using hardcopy updates from project managers.

The Project Controls Group, which was recently created within the Construction Management Group, provides information to project managers, who then report the data to the Project Support Group, either manually or through the webportal. The PMT takes the data submittals and inputs them into a database that consolidates the different data sources and produces the monthly reports.

The two groups do not directly share project information; in addition to the cumbersome and inefficient manner in which the PMT compiles data for reporting, this may also be a contributing factor to some of the data discrepancies.

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



Recommendations Consent Decree Program

- *The Department of Watershed Management should require the PMT to modify the format of the project performance data in the monthly reports and the GEFA report in order to improve the clarity and ease of use of both reports. The department should ensure that the reports contain indicators that show: the amount of work completed to date, the amount of the contract budget that has been spent, and the amount of time expended and remaining on the project. The indicators should be defined, reported together to show the value of the indicator as well as put them in the proper context, and to provide an accurate "at a glance" snapshot of the project's status in relation to schedule/budget.*

- *The Department of Watershed Management should review the duties and functions of the PMT with respect to their data collection and reporting responsibilities. The department should work with the PMT and the Construction Management Group to determine and coordinate the most efficient way for the PMT to collect data to satisfy its reporting requirements. The department should review the PMT's data systems as well as manual data gathering processes to develop a plan for them to compile data and produce complete and reliable performance reports.*

APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

Findings
Continuous Monitoring of the
Collection Rate



- o **The Department has continued to increase its water and sewer collection rates and is making progress toward its collection performance goal.**
 - The 12-month average collection rate increased from 97.4% for the first quarter of 2005 to 97.9% for the second quarter of 2005.* This is a significant improvement over the 2004 rate of 91.3%. (See Exhibit 6, next page).
 - For the first and second quarters of 2005, the department's 12-month average rate has met the target collection rate of 97% used in the 2004 bond documents and increased its progress toward its performance goal of 98.5%.
 - The quarterly collection rate decreased to 97% for the second quarter of 2005 from 118% in the first quarter of 2005. The collection rate for the first six months of the year was 107%. Rates higher than 100% show that the collections exceed current billings and include past due accounts.

- o **Although collection rates are improving, it is still taking the department a long time to collect on its accounts.**
 - The Department averaged 109 days to collect on water and sewer services in the second quarter of 2005. This average collection period is 84 days beyond the bill's due date of 25 days.
 - After declining to 100 days in the first quarter of 2005, the second quarter average collection period was the longest it has been since the city resumed the collection function.

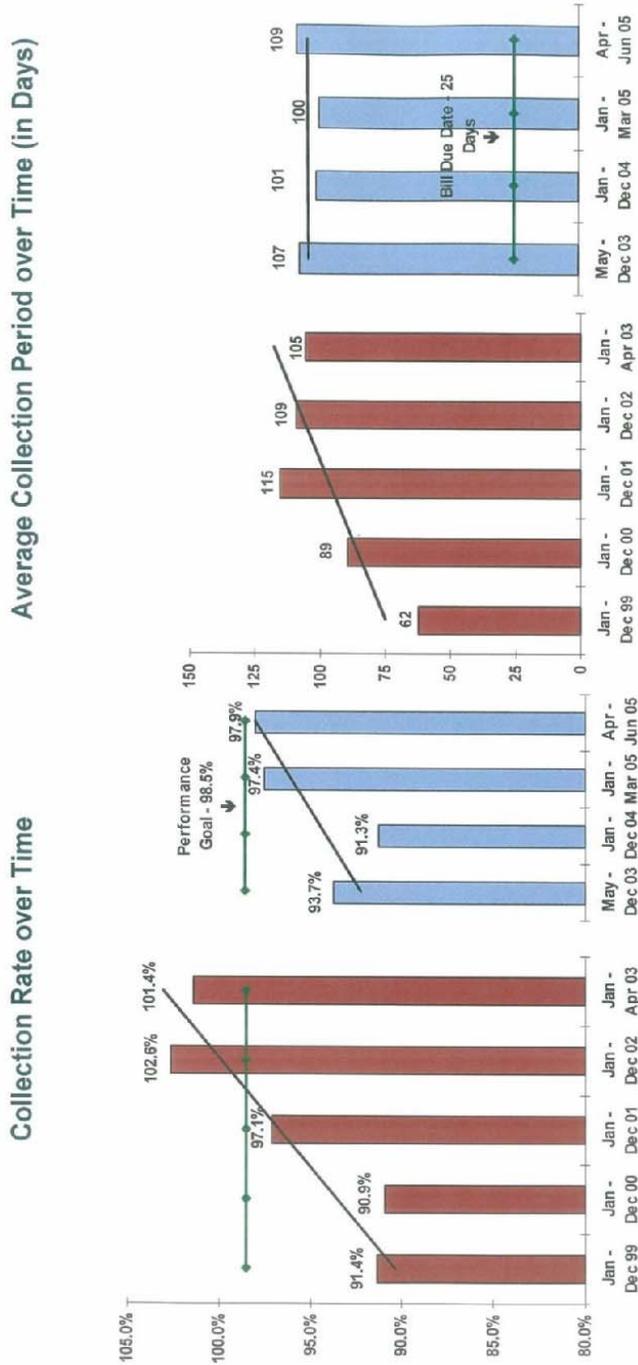
*For the first quarter 2005, the 12-month average includes April 2004 through March 2005; for the second quarter, it includes July 2004 through June 2005.

Findings

Continuous Monitoring of the Collection Rate

EXHIBIT 6

Collection Rate and Average Collection Period Over Time



Legend: United Water Services Atlanta (Red), City of Atlanta - Bureau of Water (Blue)

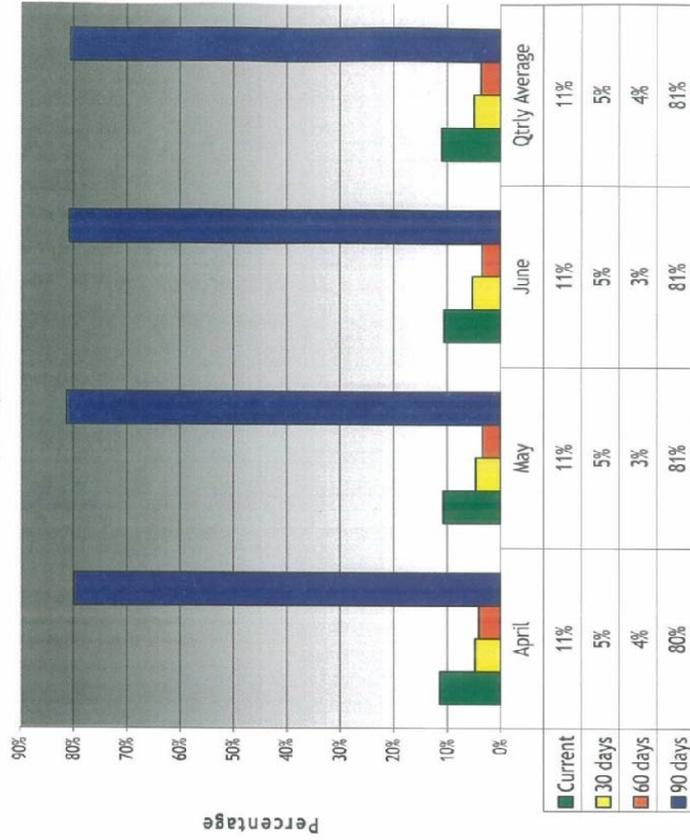
2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

Findings

Continuous Monitoring of the Water Collection Rate

- At the end of June 2005, 81 percent of the department's accounts receivable balance of \$100.2 million was 90 days delinquent or more. In comparison, 71 percent of the fourth quarter 2004 accounts receivable balance was at least 90 days past due.

Exhibit 7
 Department of Watershed Management
 Water and Sewer Accounts Receivable Aging
 2nd Quarter 2005



Source: DWM 2nd Quarter 2005 Aging Reports

21 2nd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

APPENDIX 2 (continued)

2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

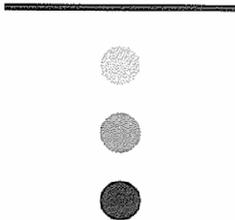


Continuous Monitoring of the Water Collection Rate

- As recommended in our previous reports, the Department continues to identify uncollectible accounts for write-off. In 2005, almost 16,000 inactive accounts totaling \$8.6 million have been written off.
 - The Chief Financial Officer has approved 15,910 uncollectible accounts totaling \$7.6 million for administrative write-off.
 - The Department of Watershed Management also has recommended the write-off of 35 larger accounts totaling about \$1 million, which has recently been approved by the City Council.

Recommendations

- *The Department should continue its efforts to increase the water and sewer collection rate as well as writing off uncollectible accounts, which will help to decrease the accounts receivable balance.*
- *In order to further reduce the accounts receivable balance and increase the collection rate, the Department should maximize its efforts to decrease the average collection period by beginning collection efforts sooner on delinquent accounts.*



Future Consent Decree Reports

- We plan to issue interim quarterly reports on issues related to project and contract management and/or other areas related to the consent decree capital improvement projects. In January 2006, we plan to issue a full audit report providing an overview of our previously issued quarterly reports, as well as any other related findings and recommendations.
- The next reports are scheduled to be issued on the following dates:
 - November 1, 2005 – third quarter report
 - January 31, 2006 – summary report
 - The reports will be presented at the City Utilities Committee and release dates will coincide with the meeting dates.
- The interim reports will also include quarterly updates on the collection of water and wastewater bills.

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005



CITY OF ATLANTA

SHIRLEY FRANKLIN
MAYOR

55 TRINITY AVENUE, S.W. • SUITE 5400 • SOUTH BUILDING
ATLANTA, GEORGIA 30303-0310
Office: (404) 330-6081 • Fax: (404) 658-7194

DEPARTMENT OF
WATERSHED MANAGEMENT
ROBERT J. HUNTER
Commissioner

August 26, 2005

Ms. Leslie Ward
City Internal Auditor - City of Atlanta
68 Mitchell Street, SW
Suite 12100
Atlanta, Georgia 30303-0312

Re: 2nd Quarter 2005 Interim Report
Quarterly Consent Decree Monitoring
Department of Watershed Management

Dear Ms. Ward:

Thank you for the opportunity to comment on the draft of your 2nd Quarter Interim Report. This report focused on two broad areas: the consent decree monthly project performance reports and the Department's ongoing revenue collection efforts. The work on the former evaluated the utility, efficiency and accuracy of three separate project performance reports and the emphasis of the latter was on the efficacy of the enhanced collection program.

Monthly Project Performance Reports

Your draft report states that the Department's three project performance reports are consistent with industry standards and use methods similar to those of other jurisdictions with consent decree construction projects. However, you indicate that the reporting process and format can be significantly improved in terms of efficiency and utility. In particular, you emphasize that no single report provides a clear and complete snapshot of the project schedule, budget and costs. We agree with that assessment and we have been working to consolidate and coordinate the reporting effort.

The performance management reports were developed at specific points in the consent decree program for specific purposes and differ in content, metrics and scope. For example, the GEFA financial report was developed this year through extensive interaction with the staff of the Georgia Environmental Facilities Authority (GEFA) to meet their specific oversight needs and their specific requirements for both information and format. In contrast, the format of the PMT Volume I and Volume II reports were established a few years ago and were

APPENDIX 2 (continued)
2ND QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
AUGUST 30, 2005

Ms. Leslie Ward
August 26, 2005
Page 2

designed to track the progress of the consent decree program with an emphasis on the project design process. The project reports of the Construction Management Group (CMG) evolved over the last several years from the large, Senate Bill 500 construction projects. Given that the primary purpose of the three reports differ so significantly (i.e., financial, program management, construction management) it is not surprising that they differ significantly in content and form. We believe that most of what you cite as data discrepancies are actually attributable to the specific definition of the metric. However, we are in absolute agreement that the systems and reports can be significantly improved in terms of clarity and ease of use.

As the consent decree program has matured through planning, design and construction phases, the management information needs and performance metrics have changed. The implementation of phase funding of projects has the beneficial impact of significantly reducing our finance costs but also complicates the reporting format as both total project performance and phase performance is tracked. One of the purposes of the Project Controls Group is to evaluate, integrate and streamline these reports. One of the goals is to consolidate the multiple-group reporting effort into unified program and project management system. While it is unlikely that the GEFA financial report will be modified we believe that it can be incorporated into a unified reporting format that increases utility, efficiency and accuracy.

Revenue Collection Performance

Thank you for highlighting the exceptional collection rates the Department has achieved for the first six months of 2005. The 107% collection rate obviously indicates that we are collecting part of the past due accounts receivables. We continue to implement the collections program we have outlined to the City Council and have made significant progress in processing the closed accounts. We continue to advance our program with active accounts and anticipate that those efforts will lead to steady improvement in the average collection period over the next several months. We will be presenting detailed information on these efforts in our next quarterly report to the Atlanta City Council.

The Department of Watershed Management continues to appreciate the efforts of you and your staff and the ongoing cooperative efforts.

Sincerely,



Robert J. Hunter
Commissioner

APPENDIX 3
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005



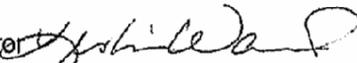
CITY OF ATLANTA

LESLIE WARD
City Auditor
lward1@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
W. Wayne Woody, Chair
Henry A. Kelly, Vice-Chair
Fred Williams
Mayor Shirley Franklin
Council President Lisa Borders

TO: Honorable Mayor and Members of the City Council

FROM: Leslie Ward, City Auditor 

DATE: November 21, 2005

SUBJECT: Third Quarter Interim Audit Report – Department of Watershed Management

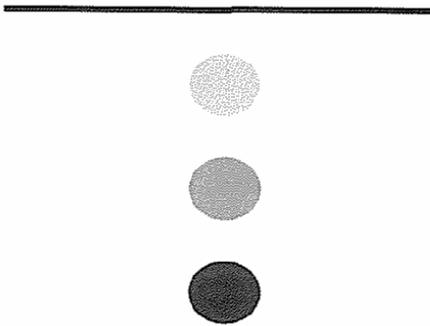
Our third quarter audit report on the consent decree monitoring project is attached for your review. This quarterly report focuses on debt coverage and collection rate monitoring. Commissioner Hunter's response is attached at the end of the report.

This report is scheduled for discussion at the November 29th meeting of the City Utilities Committee. If you have questions or would like more information in the mean time, please feel free to contact me.

Attachment

Copies: Audit Committee citizen members
Rob Hunter, Commissioner of Watershed Management
George Barnes, Deputy Commissioner
Sammy Goodson, Deputy Commissioner
Sheila Pierce, Deputy Commissioner
Janet Ward, Public Information Officer
Lynnette Young, Chief Operating Officer
Greg Pridgeon, Chief of Staff
Beverly Isom, Director of Communications
Chuck Meadows, Dept. of Finance
Greg Mason, GEFA

APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005



3rd Quarter Interim Report
Quarterly Consent Decree Monitoring
Department of Watershed Management

City Auditor's Office
Leslie Ward, City Auditor
Audit Team - Stephanie Jackson, Eric Palmer, and Al Moses
November 21, 2005

APPENDIX 3 (continued)

3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005



Introduction - Audit Initiation and 1st and 2nd Quarter Objectives

- This is the third interim report on an audit project requested by the City Council. Council Resolution 03-R-2134 asked the City Auditor to perform ongoing reviews and analyses of consent decree-related capital improvements and related financial and performance issues and to report quarterly to the City Utilities Committee.
- The first interim report for the Consent Decree Monitoring Project, reported in April 2005, focused on two areas: the reliability, timeliness and completeness of the data used to manage the consent decree program, and the effectiveness of the department's data and information processing capabilities.
- The second interim report, reported August 30, 2005, focused on the accuracy and reliability of the schedule and status information on projects and the reporting of that information.
- As part of our ongoing monitoring of the water and sewer collection rates, during both quarters we also reviewed the department's collection rate and compared it with previously reported rates, the department's performance target, and the projected rates used in the 2004 bond documents.

3rd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management



Introduction - 3rd Quarter Objectives

This report addresses the following objectives:

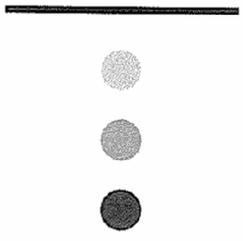
- Did the department generate sufficient revenues to meet debt coverage needs for 2004, as estimated in the Engineer's Financial Feasibility Study for the 2004 Water and Wastewater Revenue Bonds?
- What is the payment status of city government water and sewer accounts, and how much is owed on these accounts?
- What are the proportions of current and delinquent water and sewer accounts, based on the department's definitions?

3rd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management

3

APPENDIX 3 (continued)

3rd QUARTER INTERIM REPORT DEPARTMENT OF WATERSHED MANAGEMENT NOVEMBER 21, 2005



Introduction - Audit Scope and Methods

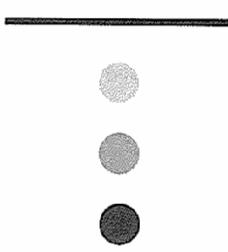
APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005

This audit was conducted in accordance with generally accepted government auditing standards. We conducted our audit fieldwork from September 2005 through October 2005. In addition to the objectives included in this report, we also attempted to examine the following:

- Have written off amounts been removed from the accounts receivable inventory, as required by generally accepted accounting principles?
- Is the department shutting off water services by day 55 of the bill due date, as stated in departmental reports?

However, we were unable to complete work on these objectives because the Department of Watershed Management staff did not meet with the audit team, provide the requested data, or provide access to the Department's customer information system during the audit period. We anticipate completing these objectives for our final quarterly report.

APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005

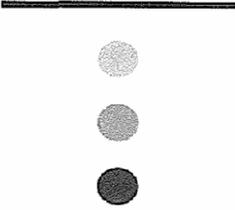


Introduction - Audit Scope and Methods (cont.)

The audit methods included:

- Interviewing Department of Finance and Department of Watershed Management staff regarding the methodology used to calculate the department's debt coverage.
- Reviewing data on outstanding city government water and sewer accounts.
- Reviewing and analyzing water and sewer collections reports to determine the current proportions of current and delinquent accounts.

3rd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management



Findings and Analysis

The Department of Watershed Management's 2004 net revenues exceeded the amount needed for debt coverage on the 2004 Water and Wastewater Revenue Bonds. Sales tax revenue made up for lower-than-projected operating revenue, while operating expenses and debt service also were lower than forecasted by bond consultants.

- The department's net revenues should equal at least 110% (ratio of 1.10) of the average annual debt service requirement on the bonds. For 2004 the bond documents projected a debt service requirement of \$91.9M and net revenues of \$107M, which would provide a debt service coverage ratio of 1.16. Actual debt service, according to the Finance Department, was \$86.3M and net revenue was \$154.6M, yielding a ratio of 1.79 (see Exhibit 1).
- Debt coverage for 2004 was far higher than bond consultants projected, despite water/sewer service revenues that were \$10.4M lower than forecast. Contributing factors included sales tax revenue and lower operating expenses.
- The 1% sales tax yielded \$20.4M in 2004, when no revenue from this source was projected. The sales tax revenue made up for the low 2004 collection rate of 91.3%, compared to the projected rate of 95%. Investment income and other revenue (tap fees, interjurisdictional sewer charges, etc.) also were somewhat lower than projections.
- The second factor resulting in high debt coverage was the high projection of operating expenses, compared to actual expenses. Bond consultants estimated Watershed Management expenses at \$177.2M, but 2004 audited financial statements report operating expenses of only \$133.1M.
- We did not examine why the department's actual operating expenses were so much lower than the projections in the feasibility study. The study noted a large number of staff vacancies in August 2004, which could have been a factor.

Findings and Analysis (cont.)

APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005

Exhibit 1
2004 Revenues, Expenses, and Debt Coverage
Projected and Actual (in thousands)

| | Projected | Actual | Variance (\$) | Variance (%) |
|---------------------------------|-------------------|-------------------|-------------------|---------------|
| Water and Sewer Service Charges | \$ 246,114 | \$ 235,732 | \$ (10,382) | -4.2% |
| Other Operating Revenue | 19,741 | 16,275 | (3,466) | -17.6% |
| Investment Income | 18,300 | 15,322 | (2,978) | -16.3% |
| Sales Tax Revenue | 0 | 20,449 | 20,449 | 0% |
| Total Revenues | \$ 284,155 | \$ 287,778 | \$ 3,623 | 1.3% |
| Total Operating Expenses | -177,158 | -133,146 | 44,012 | -24.8% |
| Net Revenues | \$ 106,997 | \$ 154,632 | \$ 47,635 | 44.5% |
| Debt Service Requirement | \$ 91,900 | \$ 86,278 | \$ (5,622) | -6.1% |
| Debt Coverage Required | 1.10 | 1.79 | | 62.7% |
| Debt Coverage Projection | 1.16 | 1.79 | | 53.9% |
| Annual Collection Rate | 95.0% | 91.3% | | -3.9% |

Sources: Projected figures: City of Atlanta, Water and Wastewater Revenue Bonds, Series 2004 – Engineer’s Financial Feasibility Study;
 Actual figures: Department of Watershed Management Financial Statements with Report of Independent Auditors, 12/31/04



Findings and Analysis (cont.)

City departments and agencies owe at least \$5.1M to the water/sewer fund on past due water and sewer bills. These charges date from 1999 through 2004.

- From 1999 through 2004, a total of \$16.4M was billed to city departments and agencies for water and sewer service charges. During that period, the Department of Finance transferred \$7.1M to the Water and Wastewater Operating fund in payment on these accounts, leaving a balance of \$9.3M (see Exhibit 2).
- However, 46% of this balance represents charges to the water and sewer operating fund itself. This amount is not owed to the Department of Watershed Management from other city departments or funds. The total past due from other funds is \$5.1M.
- The total amounts owed by city departments could be higher, as the department has identified an additional \$2.3M in outstanding charges for 1999 through 2004. These accounts are primarily within the Department of Parks and Recreation and have been classified historically as nonrevenue accounts. The department is reviewing the criteria for classifying these accounts.
- The department is working with the Department of Finance to determine how to address the outstanding water and sewer account balances and how to manage the payment of these accounts in the future, including charges for the current year.

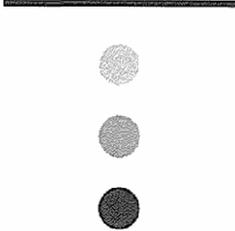
Findings and Analysis (cont.)

APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005

Exhibit 2
Water and Sewer Service Charges to City of Atlanta Agencies
1999 through 2004

| | Amount Billed | Amount Collected | Amount Outstanding | Percentage of Outstanding |
|--------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|
| General Fund | \$ 7,459,985 | \$ 2,998,241 | \$ 4,461,744 | 47.9% |
| Water and Sewer Fund | 7,758,091 | 3,512,119 | 4,245,971 | 45.5% |
| Other Funds ¹ | <u>1,191,167</u> | <u>575,626</u> | <u>615,542</u> | 6.6% |
| Total | <u>\$ 16,409,243</u> | <u>\$ 7,085,986</u> | <u>\$ 9,323,257</u> | 100.0% |

¹Includes City Traffic Court, Aviation, Motor Transport, Underground Atlanta, Sanitation, and City Civic Center.
Source: Department of Watershed Management's review of water and sewer charges from 1999 through 2004.

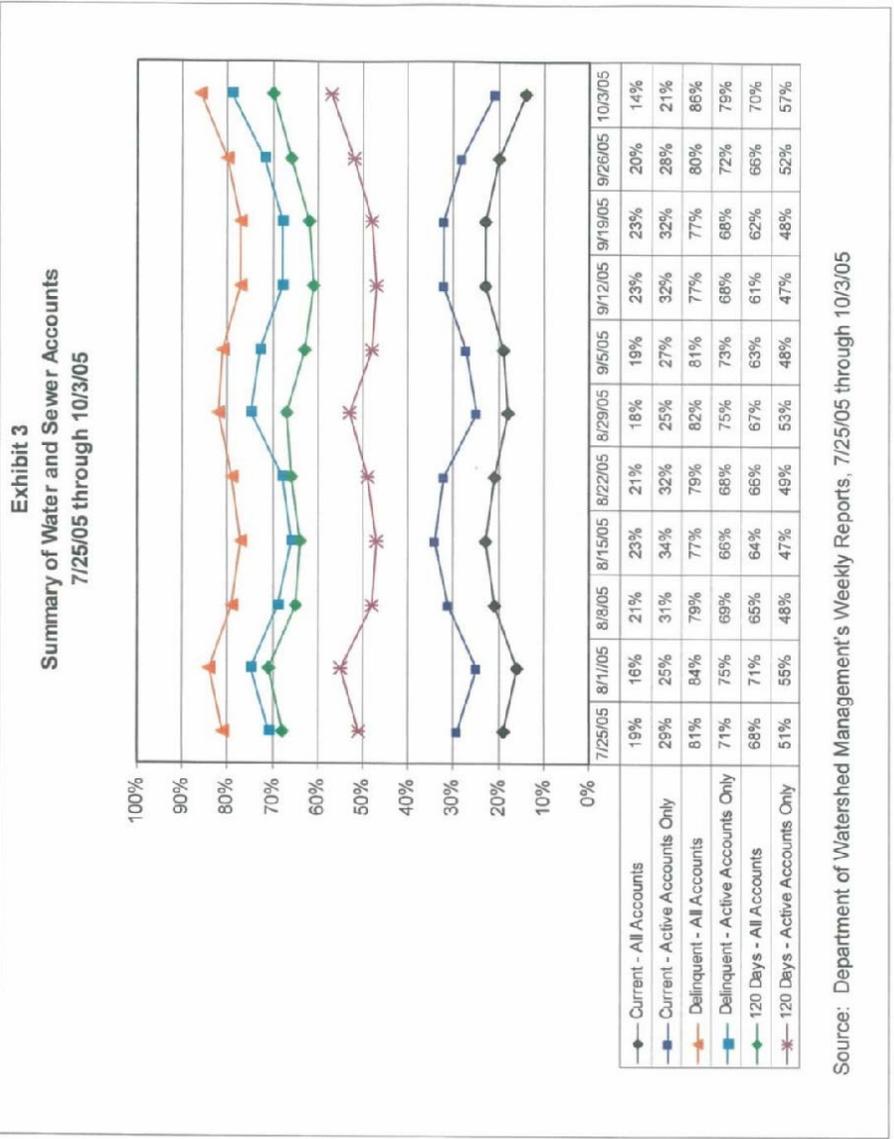


Findings and Analysis (cont.)

The accounts receivable balance that is current has been a relatively constant proportion over the past 11 weeks, showing no upward or downward trend. The percentage of the outstanding balance that is delinquent follows a similar pattern and remains high.

- In just over a 2-month period, the percentages of current and delinquent accounts receivable did not vary to a large degree. The proportions show weekly variations within each month, which may be related to billing cycles. Overall, however, the percentages of current and delinquent portions fluctuated only slightly (see Exhibit 3).
- The percentage of current accounts remained consistently low during this period, while the percentage of delinquent accounts remained high. This is true not only for all accounts receivable, but also for active accounts only. The delinquent outstanding balance hovered around 71% for active accounts and 80% for all accounts receivable. The percentage of current accounts averaged 20% for all accounts and 29% among active accounts. The largest portion of accounts receivable was 120 days or more past due. About 50% of active accounts and 66% of all accounts were at least 120 days delinquent.

Findings and Analysis (cont.)



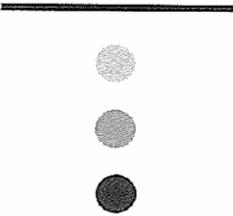
Source: Department of Watershed Management's Weekly Reports, 7/25/05 through 10/3/05

3rd Quarter Interim Report, Quarterly Consent Decree Monitoring, Department of Watershed Management



Recommendations

- *The Department of Watershed Management should review their expenditures to determine the reasons for the variance between the actual expenses and the projected expenses included in the Engineer's Financial Feasibility Study in the Water and Wastewater Revenue Bonds, Series 2004 document.*
- *The Department of Watershed Management should continue to work with the Department of Finance to resolve outstanding water and sewer service charges to other city government funds and to keep the accounts current in the future. The Department of Watershed Management also should consult with the Departments of Law and Finance to review and clarify the basis for classifying nonrevenue accounts.*



Future Consent Decree Reports

- o In January 2006, we plan to issue a full audit report providing an overview of our previously issued quarterly reports, and other related findings and recommendations. The final report also will include an annual update on the water and wastewater bill collection rates for 2005.
- o Objectives planned for our fourth quarter report, scheduled for release on January 31, 2006, are:
 1. Has the information provided to the Project Management Team (PMT) for the consent decree monthly reports improved in the areas of timeliness and completeness?
 2. Does the PMT reconcile information in the monthly reports, and are the reports internally consistent?
 3. Has the monthly report format been modified to provide accurate "at-a-glance" snapshots of project status?
 4. Has coordination between the PMT and the construction management group improved in the areas of data collection and reporting?
 5. What are the third and fourth quarter and annual water and sewer collection rates, and how do they compare to the previous rates and departmental performance goal?
 6. Have written off amounts been removed from the accounts receivable balance in the customer information system?
 7. Are shut offs of past due accounts occurring in accordance with the department's established timeline and the Code of Ordinances?

APPENDIX 3 (continued)
3rd QUARTER INTERIM REPORT
DEPARTMENT OF WATERSHED MANAGEMENT
NOVEMBER 21, 2005



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

November 21, 2005

DEPARTMENT OF
WATERSHED MANAGEMENT
Robert J. Hunter
Commissioner

INTEROFFICE MEMORANDUM

TO: Leslie Ward, City Auditor

FROM: Robert J. Hunter, Commissioner
Department of Watershed Management

SUBJECT: 3rd Quarter Interim Audit Report

I have reviewed the 3rd Quarter Interim Report on Consent Decree Monitoring prepared by your office and am in substantial agreement with the information it contains. The two recommendations on page 12 will be given consideration in particular the suggestion to continue working with the Department of Finance to resolve outstanding water and sewer service charges to other city government funds.

We look forward to your 2006 Full Audit Report.

APPENDIX 4

AUDIT RESPONSE – DEPARTMENT OF WATERSHED MANAGEMENT



RECEIVED FEB 14 2006

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

February 13, 2006

TO: Leslie Ward, City Auditor 

FROM: Robert J. Hunter, Commissioner
Department of Watershed Management

SUBJECT: **Comments on January 2006 Performance Audit:
Department of Watershed Management Consent Decree Monitoring**

We have reviewed City Auditor's draft report referenced above and offer the following comments:

- **Page 6** – Report concludes that the total capital program costs have increased from \$3.2 billion to \$3.9 billion. This is not accurate. The original baseline CIP budget was \$3.9 billion and has remained essentially unchanged. The GEFA summary report reflects the baseline capital program remaining about constant although some project costs have decreased and some have increased. The \$3.2 billion CIP represents an amount out of the \$3.9 baseline that the City had to finance at a given point in time.
- **Page 9** – Organization – suggest changing “oversees the City’s water system” to “oversees the City’s water and wastewater systems”.

We offer a single set of comments to the following sections of the report:

- **Page 12** – Findings – Data Collection – 1st paragraph
- **Page 17** – Findings – Project Performance Reporting
- **Page 19** – Findings – Monthly Reports
 - Comments
 - DWM produces a single monthly external summary report – the GEFA report – providing executive level financial data for the entire capital program.
 - DWM (Construction Management Team) produces monthly snapshot reports for each active capital project, with work, schedule and budget indicators – these have been used internally to manage projects, but can be distributed externally.
 - PMT is developing executive level and management level reporting, for release by the end of first quarter 2006, to supplement the GEFA report, with program level schedule, budget and cost information, and consent decree compliance information.
 - This tiered approach assures consistent information, and has eliminated the inconsistencies as previously noted by the auditor.

APPENDIX 4 (continued)

AUDIT RESPONSE – DEPARTMENT OF WATERSHED MANAGEMENT

- **Page 30** – Recommendation No. 2 – comments – We agree, and offer the following information:
 - DWM (Construction Management Team) produces monthly snapshot reports for each active capital project, with work, schedule and budget indicators – these have been used internally to manage projects, but can be distributed externally, by the end of first quarter 2006.
- **Page 20** - “The department is shutting off delinquent accounts within six weeks of the bill’s due date.”

DWM is adjusting its collection timeline toward shutting off delinquent accounts “no later than 30 days from the due date of the bill.” Automation of some of the collection activities through the new billing system (enQuesta) will facilitate this. The data clean up and other business processes the department is conducting as a part of the enQuesta implementation will reduce the risk of cutting accounts in error. Enquesta is scheduled to “go live” in September ’06. In addition, the department is taking steps to even out the number of accounts in each of the billing cycles/meter reading zones. The large variation in bill cycles poses a difficulty in scheduling staff resources to perform delinquent field activities in keeping with the monthly schedule.

Correction – in the last line on page 20 – please add the word “fee” after the words “shut off.”

- **Page 21** - “Accounts receivable balance appropriately adjusted.”

The department is exploring options for “freezing” all activity on accounts which have been submitted to the City Council for write off thus eliminating the possibility of any variance in the amount applied to the accounts versus the amount approved. The department will determine if this can be done under the current billing system, Customer Star 2, and the new Enquesta system.

- **Page 24** - “Write offs impact the collection rate.”

Write offs should not impact the collection rate as they are neither amounts billed nor received. They are however accounted for in the “adjustments” column of the CStar reports. In calculating the collection rate, the department does not treat the write off amounts as adjustments. The write offs reduce the accounts receivables but do not enter into the calculation of the collection rate. This would explain the difference in the department’s 12-month average collection rate of 100.6% and the rate of 105% reported by the internal audit.

- **Page 26** - Strategy to improve the timeliness of collections . . . “Average time to collect remains high.”

The department’s aged accounts receivables are artificially inflated due to several factors. There are approximately 2,900 large meters in the systems which are in need of repair or replacement. Many of these accounts carry large delinquent balances which are very old (averaging 219 days old). Under the Automated Meter Reading contract, which is scheduled to commence in April 2006, 100% of the large meters are scheduled for replacement and/or retrofitting with AMR device within the first 12 months of the contract. This will enable the

APPENDIX 4 (continued)

AUDIT RESPONSE – DEPARTMENT OF WATERSHED MANAGEMENT

department to obtain accurate readings on these large accounts and adjust them accordingly, thus clearing up many long-standing billing disputes and aged delinquent balances. Additional write offs in 2006 will further reduce the average age of the AR balance. There are still accounts in the system which are over the 4-year statute of limitations and therefore ineligible for referral to the collection agency. These will be reviewed and prepared for write off in the first half of '06.

cc: Sheila Pierce, Deputy Commissioner, Bureau of Management
Sammy Godson, Deputy Commissioner, Bureau of Financial Administration
Joe Basista, Deputy Commissioner, Bureau of Program Performance
George Barnes, Deputy Commissioner, Bureau of Engineering Services

APPENDIX 4 (continued)
CITY AUDITOR'S COMMENTS ON DWM RESPONSE



CITY OF ATLANTA

LESLIE WARD
City Auditor
lward1@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
W. Wayne Woody, Chair
Henry A. Kelly, Vice-Chair
Fred Williams
Mayor Shirley Franklin
Council President Lisa Borders

TO: Robert Hunter, Commissioner of the Department of Watershed Management
Janice Davis, Chief Financial Officer

FROM: Leslie Ward, City Auditor

DATE: February 15, 2006 *lw*

SUBJECT: Draft Audit Report – *Department of Watershed Management, Consent Decree Monitoring*

Thank you for your comments to our draft audit report, *Department of Watershed Management, Consent Decree Monitoring*. We have corrected the report as follows:

1. Pg. 9 – added "and wastewater systems"
2. Pg. 20 – added "fee"
3. Pg. 24 – added "our...calculation"
4. Pg. 6 – Deleted second sentence on page 6; added "The current forecasted amount is approximately \$464 million higher than the total project costs reported in the Series 2004 Water and Wastewater Revenue Bonds document."

Also, in response to your comment that the \$3.2 billion CIP represents an amount out of the \$3.9 billion baseline that the city had to finance at a given point in time, the official bond statement does not support that conclusion. The \$3.2 billion figure included \$313 million in previous funding and excluded another \$304 million in completed funding. The figures in the bond document approximate the 2004 CIP forecast budget of \$3.5 billion in the GEFA summary report. We have corrected our report to reflect those figures.

If you would like to provide revised comments, please do so by **Tuesday, February 21st**, or let me know otherwise. If you have any questions, please feel free to contact me at ext. 6804.

cc: Sheila Pierce, Deputy Commissioner, Bureau of Management
Sammy Goodson, Deputy Commissioner, Bureau of Financial Administration
Joe Basista, Deputy Commissioner, Bureau of Program Performance
George Barnes, Deputy Commissioner, Bureau of Engineering Services

APPENDIX 5
AUDIT RESPONSE – DEPARTMENT OF FINANCE



CITY OF ATLANTA

SHIRLEY FRANKLIN
MAYOR

DEPARTMENT OF FINANCE
68 MITCHELL STREET, S. W., SUITE 11100
ATLANTA, GEORGIA 30335-0312
VOICE (404) 330-6430 FAX (404) 658-6667

JANICE D. DAVIS
CHIEF FINANCIAL OFFICER

To: Leslie Ward
Internal Auditor

From: Janice D. Davis
Chief Financial Officer 

Date: February 15, 2006

Subject: Responses to Draft Audit Report – Department of Watershed Management,
consent Decree Monitoring

Recommendation 3: Arrange payment for outstanding water and sewer service charges from City entities

The Chief Financial Officer should work with the Department of Watershed Management to resolve outstanding water and sewer service charges to other city government funds and to keep the account current in the future. As an option, the city governmental funds could pay for the services rendered, or the Chief Financial Officer could reduce the annual payment in lieu of taxes and franchise fees (PILOT) by the outstanding amount owed to the Department of Watershed Management for water and sewer services.

Management Response

The Chief Financial Officer agrees with the recommendation. The Finance Department will work with the Department of Watershed Management to resolve the outstanding amounts.

RECEIVED FEB 21 2006

The Department of Finance...because customer service is important to us

