

Final Report

City of Milwaukee, Wisconsin

Analysis of the Sewer Maintenance Fund

October 12, 2010

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Springsted Incorporated
1110 North Old World Third Street,
Suite 218
Milwaukee, WI 53203
Tel: 414-220-4250
Fax: 414-220-4251
www.springsted.com

LETTER OF TRANSMITTAL

October 12, 2010

Mr. Timothy Thur, Chief Sewer Design Manager
Mr. Mark Nicolini, Budget and Management Director
Hon. W. Martin Morics, Comptroller
City of Milwaukee
200 E. Wells Street
Room 603
Milwaukee, Wisconsin 53202

Re: Summary of Analysis of Sewer Maintenance Fund User Rates

Gentlemen:

Springsted Incorporated was hired to perform a user rate analysis for the Sewer Maintenance Fund of the City of Milwaukee. This Study includes a review of the past performance of the fund, a determination of the adequacy of revenues in the Fund, and recommendations for future sewer and stormwater rates which reflect recent cost experience as well as anticipated capital improvement costs of the Fund. In addition to rate recommendations, recommendations for possible process and budget changes are included as part of our analysis.

We appreciate the opportunity to conduct the Analysis of the Sewer Maintenance Fund for the City of Milwaukee.

Respectfully submitted,

Joel Pittelman

Joel Pittelman, Vice President

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1. Executive Summary

This report was prepared to review the financial performance of the City of Milwaukee's current Sewer Maintenance Fund, ("SMF") and determine the appropriate sewer and stormwater rate structure and other revenue needed to adequately fund operations through 2016. The process included a historical review of the utility fund, the evaluation of the appropriate rate structures needed to fund operations over the planning period, a comparison of rates with other similar utilities, and recommendations regarding current budget practices.

In addition to the financial review and rate recommendations for the Sewer Maintenance Fund, the scope of work for this project included the reconciliation of the City's Comprehensive Annual Financial Report (CAFR) with the budget expense and revenue statements. The need for this reconciliation is to enable the managers of the Sewer Maintenance Fund to understand the reasons for differences between the budget documents and the City's CAFR.

The following conclusions were determined as a result of this study and our financial projections:

1. The Sewer Maintenance Fund as a whole shows historical operating revenues and expenditures have remained fairly stable over time.
2. Cash flow in the fund was insufficient to cover cash expenditures as a result of two circumstances relating to borrowing:
 - a. capital expenditures that are to be paid with borrowed funds exceeded new borrowing by \$36,771,000, and
 - b. the repayment of BANS that were previously issued. To cover this cash deficit, a series of three cash allocations in the years 2007, 2008 and 2009 totaling \$27,958,000 were made from the City's pooled cash to the Sewer Maintenance Fund.

These two items are symptomatic of the difficulty the budget staff encounters as it attempts to manage the financial condition of the SMF. What is an appropriate action for the execution of borrowing for SMF facilities may not be most appropriate for the cash management and budgeting of that Fund.

3. We recommend the Comptroller's debt management staff meet with the management of the Sewer Maintenance Fund on a semi-annual basis to review the status of the cash position in the Sewer Maintenance Fund and to discuss the financing of their capital improvements. As an adjunct to this recommendation, we further suggest that a more formalized process be developed by the Comptroller and the budget staff to estimate debt service costs for each upcoming budget cycle.
4. Our analysis of all prior bond issues for the sewer system indicates that the system of public bidding has produced very favorable interest rates and extraordinarily low costs of issuance in nearly every instance.

5. The use of short-term funding could be eliminated if it will assist in reducing confusion over the financial condition of the Sewer Maintenance Fund or the budgeting of the Fund's operations. This can be done by altering the procedure the City uses in drawing down funds from the state clean water loan program.
6. The reserves set aside in the sewer revenue bond program cannot be reduced as long as those revenue bonds are outstanding.
7. The use of revenue bonds carries some additional costs for the sewer system that could affect future sewer utility rates adversely. These costs could be offset by advantages realized by not having to use the City's limited general obligation issuing powers. A review of future borrowing needs for all City infrastructure improvements will be necessary to make a determination whether or not to use revenue bonds for sewer projects in the future.
8. All of the cash in the fund at the end of 2009 is restricted for debt service reserves. To provide more financial flexibility, the City should develop a policy regarding appropriate levels of unrestricted or operating cash that is held in the Sewer Maintenance Fund.
9. The City should maintain a minimum cash balance in the Sewer Maintenance Fund of at least three months of anticipated operating expenses, 50% of annual debt service, and legally required debt service reserves at the end of each year. If the City is prepared to promptly use general fund revenue to cover SMF deficiencies, this can substitute for some of these reserve requirements. However, the City should be fully aware that this action changes the self supporting nature of the sewer enterprise.
10. Sewer user rates and stormwater rates should be increased annually by 4.70% 2011 through 2015. These increases are needed to pay for anticipated operating and maintenance expenses, capital improvements, to provide sufficient cash flow for operations, and to maintain adequate cash reserves for future capital improvements.
11. We recommend the City establish the user rates for each utility fund for a three-year period and review them on an annual basis concurrent with the development of the following year's budget.
12. Three sensitivity analyses to show the impact on the projected rate increase caused by incorporating different, less favorable, assumptions into the projections. Three sensitivity analyses were performed as follows:
 - Capital expenditures are 20% greater than projected in the CIP
 - Operating expenditures increase at double the rate used in the previous financial projections
 - The cost of curb and gutter replacement is added to this fund

Of the three sensitivity variables evaluated, operating costs increasing at double the rate projected would require the most revenue at \$364.1 million over the planning period. Capital expenditures 20% greater than planned would require the second most revenues at \$363.1 million and adding the

cost of curb and gutter replacement to the fund would require the least at \$354.3 million.

These recommendations are based on information provided to us by City staff and used in our planning model (which has also been provided to the City). Therefore, the City will need to monitor the performance of each utility fund and make any necessary adjustments based upon its actual performance and on the actual construction costs of the anticipated capital improvements.

2. Introduction

Springsted Incorporated was retained to assist the City of Milwaukee with an analysis of the Sewer Maintenance Fund. The scope of our work included the following tasks:

- An analysis of historical performance of the Sewer Maintenance Fund
- Financial forecast of the Sewer Maintenance Fund integrating anticipated
 - Revenue sources
 - Operating expenditures
 - Capital expenditures
 - Existing and projected debt service
- Design of appropriate rates, fees and charges
- Comparison of proposed rates and charges with the City's current rates and charges and with those of three other similar utilities
- Sensitivity analyses
- Reconciliation of financial statements with budget expenses and revenue statements
- Dollar gap between proceeds from borrowing and capital expenditures
- Current unrestricted and restricted cash balances in the fund
- Current value of cash flow loans between the Sewer Maintenance Fund and other City Funds
- An analysis of bond issues for sewer purposes since 2003

The purpose of this report is to provide the results of our analyses, findings, and conclusions and recommendations.

3. Background

The City of Milwaukee, located on the western shore of Lake Michigan in southeastern Wisconsin, provides approximately 130,674 residential accounts and 15,537 non-residential customers with sewer service and approximately 142,678 accounts with storm drainage service. The City encompasses approximately 96.9 square miles and has an estimated 2008 population of approximately 600,000 persons.

Wastewater treatment is provided by the Milwaukee Metropolitan Sewerage District (MMSD). Collection is accomplished through a series of trunk lines that discharge into four existing MMSD interceptors located throughout the City.

Sewer customer data provided was categorized into residential, certified and non-certified. Certified accounts are those where the amount of flow into the sewers is either metered, or a special estimate of sewer flow has been agreed to. This is useful for a brewery, for example, in which it uses much more tap water than what enters the sewer system, because much of the water ends up in the product produced. For non-certified customers, it is assumed that water consumption is a reasonable proxy for sewer flow and charge accordingly based on a formula. Residential customers comprised 50% of the volume treated, certified was 35% and non-certified was the remaining 15%.

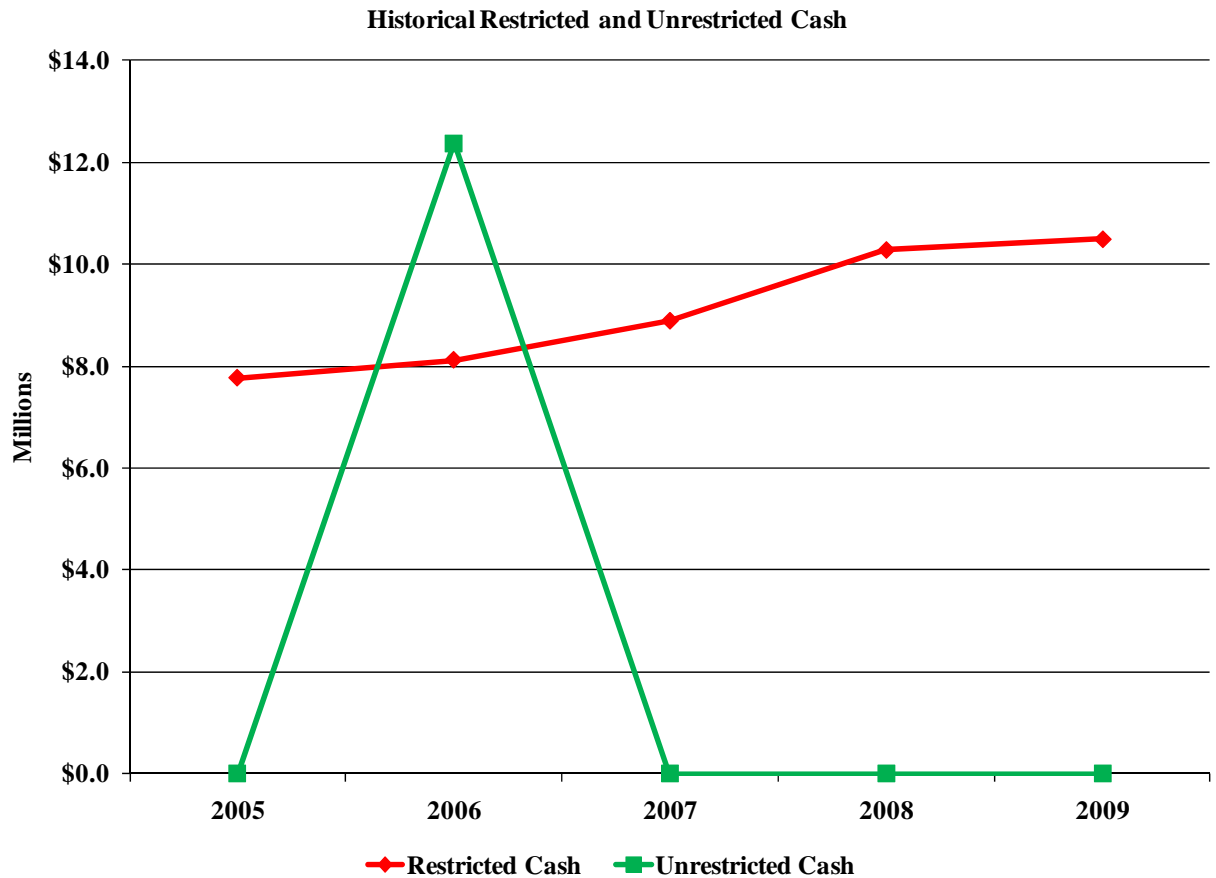
Stormwater customer data provided was categorized by the number of Equivalent Residential Units into residential, commercial, industrial, and public authority. An Equivalent Residential Unit (ERU) is equal to 1,610 square feet of impervious area. The number of ERUs for a non-residential property is calculated by dividing the impervious surface area of the property by 1,610. Residential properties comprised 34% of ERUs, commercial comprised 43%, industrial comprised 13% and public authority properties the remaining 10%.

Sewer Maintenance Fund Historical Information

The City budgets and accounts for sewer and storm water operations in the Sewer Maintenance Fund. A review of the City's Comprehensive Annual Financial Reports for 2005 through 2009 shows operating revenues have increased from \$31.1 million in 2005 to \$52.2 million in budget 2010 an average annual rate of 10.93%. Operating expenses have remained relatively flat over this period at \$19.2 million in 2005 and \$19.8 million in budget 2010. The combination of increased revenues and flat operating expenses has resulted in operating income increasing from \$11.8 million in 2005 to \$32.4 million in budget 2010. Non-operating expenses have increased from \$6.8 million in 2005 to \$16.3 million in budget 2010. These trends are shown in the chart on the following page.

The ending cash balance in the Sewer Maintenance Fund has varied considerably over this period ranging from a maximum of \$20.5 million in 2006 to a minimum of \$8.9 million in 2007. It is important to recognize that cash in this fund is either restricted or unrestricted. Restricted cash is cash that is restricted for debt service reserves or bond proceeds restricted for future capital expenditures. It is not available for other operating cost purposes. Unrestricted cash can be used for any lawful purpose. During the study period, unrestricted cash was available in the fund only in 2006. In all other years, unrestricted cash has been zero because the City has not yet issued debt financing to fund capital expenditures incurred. This results in the Fund having the appearance of being short of unrestricted funds, when actually, were bonds to have been issued as authorized for all capital projects, the Fund would have had unrestricted cash in each of these years. The composition of cash from 2005-2009 is shown in the table and chart below.

	2005	2006	2007	2008	2009
Unrestricted Cash	\$0	\$12,383,000	\$0	\$0	\$0
Restricted Cash	<u>\$7,762,000</u>	<u>\$8,116,000</u>	<u>\$8,885,000</u>	<u>\$10,280,000</u>	<u>\$10,492,000</u>
TOTAL CASH	\$7,762,000	\$20,499,000	\$8,885,000	\$10,280,000	\$10,492,000



The City should develop a policy regarding appropriate levels of unrestricted or operating cash, and the timing of borrowing to realize adequate reserves that should be available in the Sewer Maintenance Fund. A discussion of cash reserves occurs later in this report.

Revenues and expenditures for 2005-2009 and the 2010 budget are shown on the following pages.

Current Rate Schedules

Currently, sewer charges are based on actual water consumption for industrial and commercial customers; however, they can modify their consumption amount to account for the water that is used in preparing their product(s). This is done via a special application with the City. Residential sewer charges are based on water consumption in the winter quarter as it more accurately reflects the amount of water returned to the sewer system. The current sewer and stormwater rates are:

(Quarterly Billing)	2009 Rates
Sewer Usage (per Ccf)	\$1.16
Stormwater Charge	\$14.00
MMSD Sewer Service Charge	\$13.00
MMSD Usage Charge (per Ccf)	\$1.47

Sewer Maintenance Fund Historical Information

	2005	2006	2007	2008	2009	2010
Operating Revenues	Actual	Actual	Actual	Actual	Actual	Budget
Sewer Fee	30,532,791	26,758,568	23,769,847	26,358,869	27,508,815	28,591,500
Stormwater Fee		6,393,295	12,771,655	12,756,516	18,950,771	22,316,000
Charges for Service	534,451	1,109,171	1,215,558	1,608,929	1,739,065	1,286,000
Miscellaneous	4,513	-	-	-	434,702	-
Total Operating Revenues	31,071,755	34,261,034	37,757,060	40,724,314	48,633,353	52,193,500
Operating Expenses						
Environmental Decision Unit						
Gross Salaries & Wages	1,570,249	1,584,093	1,617,493	2,663,801	2,666,079	2,682,038
Fringe Benefits	728,923	716,893	979,127	1,061,499	972,967	1,017,365
Operating Expenditures	2,491,786	1,324,042	4,916,335	1,212,309	790,735	480,000
Equipment	54,338	48,103	42,108	46,084	30,077	38,500
Total Environmental Decision Unit	4,845,296	3,673,131	7,555,063	4,983,693	4,459,858	4,217,903
Underground Decision Unit						
Gross Salaries & Wages	3,370,414	3,243,302	3,077,015	3,699,018	4,071,953	3,672,138
Fringe Benefits	1,364,093	1,369,405	1,175,567	1,577,018	1,555,738	1,623,822
Operating Expenditures	4,468,154	4,664,505	4,604,171	5,526,060	5,430,360	5,191,000
Equipment	985,823	314,841	733,655	107,339	-	121,500
Total Underground Decision Unit	10,188,484	9,592,053	9,590,408	10,909,435	11,058,051	10,608,460
Depreciation	4,198,000	4,435,000	4,086,000	4,409,000	4,759,000	4,996,950
Total Operating Expenses	19,231,780	17,700,184	21,231,471	20,302,128	20,276,909	19,823,313
Operating Income (Loss)	11,839,975	16,560,850	16,525,589	20,422,186	28,356,444	32,370,187
Non Operating Revenues (Expenses)						
State or Federal Grants					14,632,000	868,000
Interest Income				309,000	173,285	258,000
Interest Expense Existing Debt	(2,562,000)	(2,736,000)	(3,495,000)	(3,424,000)	(5,866,898)	(5,433,132)
Interest Expense New Debt						(133,482)
Amortization Expense	(62,556)	(60,057)	297,569	(44,656)	(75,000)	
Reimbursables for Salaries & Wages				1,411,542	1,456,209	1,351,588
Payment to General Fund	(4,200,000)	(4,600,000)	(4,600,000)	(5,000,000)	(10,097,930)	(12,190,000)
Other						(1,016,000)
Total Non Operating Revenues (Expenses)	(6,824,556)	(7,396,057)	(7,797,431)	(6,748,114)	221,666	(16,295,026)
Income (Loss) Before Transfers & Contributions	5,015,419	9,164,793	8,728,158	13,674,072	28,578,110	16,075,161
Capital Contributions				200,000		
Transfers In						
Transfers (Out) - Water Administration	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)
Transfers (Out) - Capital Fund						(2,678,000)
Transfers (Out)						
Total Operating Transfers	(350,000)	(350,000)	(350,000)	(150,000)	(350,000)	(3,028,000)
Net Income (Loss)	4,665,419	8,814,793	8,378,158	13,524,072	28,228,110	13,047,161
Beginning Cash & Investments	20,610,000	7,762,200	20,499,000	8,885,000	10,280,000	10,492,000
Net Income	4,665,419	8,814,793	8,378,158	13,524,072	28,228,110	13,047,161
Depreciation	4,198,000	4,435,000	4,086,000	4,409,000	4,759,000	4,996,950
Amortization	62,556	60,057	(297,569)	44,656	75,000	-
Acquisition and Construction of Assets	(19,089,000)	(15,540,000)	(19,250,000)	(26,326,000)	(35,196,000)	(23,937,000)
Proceeds from New Long-Term Debt		33,990,000	26,194,000	36,217,000	3,863,000	23,117,431
Proceeds from BANS						46,000,000
Repayment of BANS						(23,117,431)
Payments on Long-Term Debt	(9,390,000)	(6,744,000)	(33,750,000)	(32,594,000)	(11,514,733)	(11,045,371)
Lease Payments				(843,546)	(843,546)	(844,000)
Float (to)/from Pooled Cash			5,451,000	7,429,000	15,078,000	(27,957,000)
Adjustment to Accruals	6,705,225	(12,279,050)	(2,425,589)	(465,182)	(4,236,831)	-
Ending Cash Balance*	7,762,200	20,499,000	8,885,000	10,280,000	10,492,000	10,752,740

	2005	2006	2007	2008	2009	2010
Restricted Cash	7,762,000	8,116,000	8,885,000	10,280,000	10,492,000	
Unrestricted Cash	-	12,383,000	-	-	-	

Cash Reserves

Springsted's clients often ask about the amount of cash reserves that should be available in their Utility funds. Utility funds need sufficient cash to pay current expenses, together with principal and interest on outstanding bonds. This would typically require the Sewer Maintenance fund to have a minimum of three months of anticipated operating expenses and one year's total debt service in cash at the end of each year. However, this does not provide any level of cash reserves for unforeseen expenses, emergencies, or to cover any shortfalls in the budget. The amount of cash reserves that a utility fund should have is dependent on a number of factors, including:

- Reserves that are legally required (2001 & 2003 revenue bond issues)
- Variability of the annual revenue stream
- Variability in annual expenditures
- Age and condition of fixed assets
- Anticipated future capital needs
 - Capital improvement plan
 - Asset management program
 - Regulatory compliance
- Tolerance for risk
- Number of relatively large customers

Unfortunately, there are no prescribed formulas, and the amount of reserves varies considerably between utilities. It is our opinion the Sewer Maintenance Fund should maintain a minimum cash balance of at least three months (ninety days) of anticipated operating expenses and one year's debt service at the end of each year. The City has a debt service reserve fund (Restricted Cash) for the 2001 and 2003 revenue debt to be repaid by the Sewer Maintenance Fund. Because the restricted cash in this debt service reserve fund is approximately 50% of outstanding annual debt service, we recommend the City gradually build up a reserve of an additional 50% of debt service and three months of operating expenses, in addition to the legally required debt service reserve fund.

Our recommendation for enhancing the SMF reserves may be tempered should the City affirm in its appropriation activities an understanding that it has in the past, and if needed, would in the future, provide general fund support to the SMF, should there be insufficient revenues to cover operating and non-operating expenses. While this diminishes the fund's position as a fully self-supporting enterprise, it provides an additional level of liquidity to the Fund. This would mitigate the need to increase rates to generate reserves.

Depreciation

Costs incurred in the operation of each Utility are either recorded as operating expenses or capitalized as assets. Whether the cost is expensed immediately or capitalized, the City actually pays for the asset at the time it is acquired. Generally, anything that is used up in the period in which the cost of acquiring it is incurred is treated as an operating expense. Personnel, supplies, and repairs and maintenance are typical examples of costs that are treated as operating expenses. These costs are shown on the income statement each year in the total

amount of the expenditure for each category. The cost incurred in the acquisition or construction of assets such as buildings and major pieces of equipment are capitalized. That means their cost does not show up as an expense on the income statement in the year in which the expenditure occurs. Rather, the cost of these assets is depreciated. Depreciation is the process of allocating the cost of an asset over its useful life in a systematic and rational manner.

The City currently includes depreciation as an operating expense in its annual budget. Because operating revenues have exceeded operating expenses each year, depreciation has been funded.

Assumptions

The City provided Springsted with a variety of material including:

- 2008 and portions of the 2009 Financial Reports
- 2009 & 2010 Operating Budgets for the Sewer Maintenance Fund
- 2010-2015 Capital Improvement Plan – listing cost and year of expenditure in 2009 dollars
- Current number of stormwater accounts
- Current number of sewer accounts
- Water consumption and ERU count for six average account types
- Ending 2009 cash balance of the Sewer Maintenance Fund, delineated by restricted and unrestricted cash
- Outstanding General Obligation and Revenue Bond debt schedules
- Current utility rates

We have used the information provided by the City, as well as several comprehensive discussions with City personnel as the basis of our projections.

4. Review of Bonding Practices

The City's budget staff has identified several concerns relating to how and when bonds are issued to finance sewer projects:

- Projects that are budgeted to be paid from bond proceeds are often temporarily financed with cash from the investment pool for an extended period before the bonds are actually issued. This has the effect of reducing cash available in the pool and diminishing the balance of the Sewer Maintenance Fund, (SMF). The budget staff is fearful that this leads to a faulty conclusion that rate increases are required to restore the SMF to a proper level, when it would, in fact have a healthy condition if the bonds would be issued in a timely fashion.
- In other instances, projects that are budgeted to be financed with long-term bonds are sometimes temporarily financed using short-term external financing including fixed rate notes and variable rate commercial paper. The budget office is concerned about the additional costs associated with multiple issuances of notes and bonds to finance the same project.

Accordingly, we have examined the City's planning process for the issuance of bonds and notes, and the actual issuance process to address each of these concerns.

The Comptroller's borrowing activities are constrained by two federally-imposed arbitrage regulations:

- Any funds obtained from the issuance of bonds or notes on a tax-exempt basis must be substantially expended within two years (called the "spend-down test.") This means that the City can't borrow too early in the process if there is a risk that the money cannot be fully expended.
- Any funds advanced by the City to pay construction which is to be reimbursed at a later date from the proceeds of a tax-exempt borrowing must be reimbursed within 18 months, (the "reimbursement limit.") If not reimbursed within that time, then it may not be reimbursed with tax-exempt bonds or notes.

As described by the Comptroller's debt management staff, the timing of the borrowing process is further complicated by the procedure the City uses to obtain State loans for large portions of the sewer projects. The State will disburse loan proceeds only for construction already completed. State loans offer very favorable rates—often 1% to 2% lower than the City's cost to borrow. Occasionally, these loans are actually converted to grants that require no repayment. As a result, the Comptroller tries to maximize the use of state loan money before he applies borrowed funds derived from City borrowing. As a result, the City waits for construction to be completed and for the State to have completed its loan disbursement before it can issue its portion of bonds to provide long-term financing for the project.

Again, as described by the debt management staff, if that waiting period exceeds 18 months, the reimbursement limit would have been exceeded, and the project would not be permitted to be funded with tax-exempt bonds. To

avoid that situation, the Comptroller issues short-term tax-exempt financing. That issuance acts as the exercising of the reimbursement before the 18 months runs out. Simultaneously, it reserves the City's flexibility to use the more favorable State loan or grant, and borrow long-term, at a later date only what it needs to complete the project. The Comptroller will simply issue fewer City bonds, (or if the loan is large enough, issue nothing) when the short-term financing comes due.

While the City's debt managers are waiting for State loans or grants and monitoring the 18 month reimbursement limit, construction is proceeding and contractors must be paid. Typically, the Comptroller has chosen to advance these payments from the City's investment pool of available cash. This inter-fund borrowing provides a temporary use of funds for public projects without incurring interest expense if funds had been borrowed externally. In today's market, where investment returns are near-zero, the wisdom of this approach is even easier to understand. The City would certainly have paid more to borrow than it is giving up in lost investment income.

Taken together, the two federal arbitrage regulations and the procedure the City has chosen to use when drawing upon the state funding source results in the debt manager having to issue short-term funding (of several types), and using inter-fund borrowing from the investment pool. They cannot borrow for a project until it is under construction in order to assure compliance with the spend-down test, and they must borrow by a specific date in order to maintain their access to the tax-exempt market, when the State source is insufficient to cover project costs. Further, they must wait for the State funding before they can borrow long-term, but they must also pay their construction contractors.

Looking back at the budget staff's concerns identified at the start of this section, the timing concerns explain why the Comptroller must do those things that are of concern to the budget staff.

Having examined the processes used by the Comptroller in managing the issuance of sewer borrowing, and having looked at all individual series of bonds and short-term notes issued since 2003, we conclude that the system used is the lowest cost alternative both to the City and to the Sewer system, when it is viewed as an independent enterprise. The Comptroller's use of public bidding whenever possible has consistently yielded the lowest available market rates of interest, as well as the lowest costs of issuance in nearly every instance. We believe these costs achieve the lowest levels one might reasonably expect to pay in order to accomplish project financing within the funding constraints set forth by federal laws and regulations, and by the state, given the process by which the City draws down on the state loan program.

We have looked for ways to reconcile the needs of the debt managers with those of the budget staff, and suggest several changes that could address the issues.

1. The Comptroller could reduce or eliminate the need for inter-fund borrowing by altering the procedure it uses to draw down state loans/grants. While it has been the City's practice to wait until a project has been completed before it obtains loan proceeds, the state permits interim draws during construction to cover the cost of work completed. By adopting this procedure, it would not be necessary to advance investment pool funds. This has the benefit of eliminating "due-to" entries in the CAFR that give the impression that the SMF has insufficient balances, that must be corrected with rate increases.
2. The 18 month reimbursement limit permits the City to use the longer of 18 months from the initial payment of construction costs or 18 months from the date the project is put into service. If the City adopts the state loan draw policy described above, there would be no need for short-term external borrowing, since the City would have a full 18 months after completion of the project to complete the issuance of bonds to cover the City's portion of a project's cost.
3. The state loan procedure includes the completion of a Financial Assistance Agreement (FAA). This sets forth the amount that will be coming from the state. It is typically completed prior to the start of a project. The City will get the loan amount shown in the FAA whether the actual project cost is more or less than the amount estimated in the FAA. This gives the City a great deal of lead time to determine the additional amount that may be required for City borrowing. Combined with the procedures discussed in the prior two paragraphs, the City could, if it chooses, borrow prior to project completion. This would eliminate any misunderstanding between capital and operating funds. If this approach is taken, it would be wise to consider adopting the procedure described in the following paragraph.
4. Since the long-term City borrowing is done near the end of the project, there is little likelihood that the City will have trouble meeting the two-year spend-down test. This problem can be entirely eliminated and the City could gain greater flexibility with the management of its bond proceeds if it de-couples the bond proceeds from specific projects for purposes of accounting for the spend-down of proceeds reported for arbitrage purposes. First-in/First-out accounting of these funds will satisfy the spend-down requirements. However, this will require the maintenance of additional accounting records for purposes of tracking bond authorizations to actual project expenditures.

Revenue Bond Reserve Funds

Long-term City borrowing to pay for sewer construction has used two types of bonds: City general obligation bonds, (GOs) and sewer utility revenue

bonds, (RBs). To the purchasers of the bonds, there is a distinct difference between the two. The repayment of GOs is secured by the City's full faith, credit and taxing power and the repayment of RBs are secured sewer revenue fees. For the City's purposes, the distinction between GOs and RBs is less significant. The City charges its GO debt service cost back to the SMF, so all debt service, whether arising from GOs or RBs is paid from sewer fees.

GOs provide the highest level of repayment security that the City can offer to bond investors. Accordingly, this type of bond receives the lowest rates and has the lowest costs of issuance. The holders of RBs are secured by the fees charged to users of the sewer system, but not by property taxes. To enhance security, the bondholders require a debt service reserve fund. This fund is written into the bond documents at a specific required level. It was originally funded with bond proceeds. If additional borrowings are done, the sizing of that issue should include the cost of the projects to be funded, plus the additional debt service reserve fund requirement. (There is no need to reduce the expenditure authority by 10 %.) This reserve fund may be used only to pay debt service if sewer fee revenues are insufficient. In the event this occurs, the bond documents require several immediate actions, one of which is to have the City replenish the reserve fund to its required level from the City's general fund.

As long as the City has RBs outstanding, the debt service reserve fund must be funded at its minimum required level. If additional RBs are issued, the minimum debt service reserve fund requirement must be increased to reflect debt service on the additional bonds. Simply stated, it is part of the contract between the sewer utility and the bondholders. To breach these provisions would constitute an event of default.

It is possible to reduce or eliminate the debt service reserve fund requirement by repaying (or prepaying) all the outstanding RBs. The City could do this by issuing GOs to replace the RBs. GOs require no debt service reserve fund. Alternatively, all outstanding RBs could be "refunded" with new RBs having a lower debt service reserve fund requirement. If this is to be done, be aware that by reducing the reserve fund requirement, bondholder security is also diminished. That may well result in lower credit quality and higher interest rates to be paid on the replacement issue and all future bond issues.

It may be useful to examine why the City uses RBs, as well as GOs. Typically, cities use revenue bonds for two reasons. First, it provides a clear separation between city funds and enterprise funds, so that the enterprise can operate as a free-standing business. Second, it conserves the availability of GOs for those public projects that have no other source of support except tax revenue. Cities are limited by the State Constitution to a maximum amount of GOs equal to 5% of their equalized value of taxable property. Cities that are approaching their debt limit, or can foresee great borrowing needs, will often conserve their GO resource by relying heavily on RBs.

In Milwaukee, the first reason for issuing RBs may have been addressed by an accounting system that is able to maintain a clear separation and distinction between the sewer enterprise and the City's general fund. (This conclusion may be arguable, however, since other portions of this study respond to matters that address some uncertainty as to the balances available in the SMF.) Assuming that these matters are resolved, the decision to issue revenue bonds rests on the City's need to conserve its GO resource. The answer to that is beyond the scope of our study, as it incorporates all capital improvement needs of the City, while the scope of this study is limited to the sewer system's needs.

If the City concludes that it has adequate unused GO capacity to fund all City capital needs without having to sell sewer RBs, the benefits to using GOs to fund sewer projects include lower interest rates on borrowing, lower costs of issuance, elimination of contractually required debt service reserve funds (but, as discussed elsewhere in the report, not the elimination of all reserves) and elimination of the contractual obligation to establish sewer system rate levels sufficient to meet required levels in order to issue additional revenue bonds. The outstanding sewer RBs now require that rates are sufficient to generate net revenue equal to 1.20 times the debt service on all outstanding bonds and the additional bonds. This "additional bonds test" could force the setting of water rates higher than would otherwise be necessary, if the City begins to rely more heavily on the issuance of sewer revenue bonds.

5. Reconciliation of Financial Statements

The scope of work for this project included the reconciliation of the City's Comprehensive Annual Financial Report (CAFR) with the budget expense and revenue statements. The need for this reconciliation is to enable the managers of the Sewer Maintenance Fund to understand the reasons for differences between the budget documents and the City's CAFR. These differences can be confusing, in part, because the budget document (typically prepared on a non-GAAP compliant basis) represents a projection of revenues and expenditures on an annual cash basis. The budget assumes the timing of revenues and expenditures will coincide with the City's fiscal year. The CAFR, which contains the annual financial statements for the Sewer Maintenance Fund, and are prepared on a GAAP basis, present a statement of revenues and expenditures on an accrual basis on the income statement and on a cash basis on the statement of cash flows. The CAFR income statement recognizes revenues when they are earned and expenses for the period when they are incurred without regard to the actual cash flows resulting from each of these. The CAFR statement of cash flows reconciles the actual cash received, expenses incurred, and the resulting change in cash for the fiscal year.

Comparison of Budget to CAFR

To reconcile these documents, we prepared a comparison of budgeted revenues and expenditures with the CAFR statement of cash flows for the period from 2004 to 2009. The budget document represents the Sewer Maintenance Fund approved financial plan for each year stating anticipated revenues and expenditures. The CAFR statement of cash flows shows the actual cash expenditures and therefore provides a basis of comparison. This comparison showed the following:

Revenues

- Actual revenues in total were \$39,226,960 more than budgeted revenues
 - Actual receipts from customers and others were \$3,568,278 or 1.66% less than the budgeted amount
 - Investment income was \$205,238 more than budgeted
 - Non-operating revenues were not budgeted for in any year and received only in 2009. This non-operating revenue was a \$14,632,000 grant from the State.
 - Payments from (to) other funds of \$27,958,000 were not budgeted for in any year and represent an advance from the City's pooled cash when capital expenditures to be paid from debt financing had been incurred, but the bonds had not yet been issued

Operating Expenditures

- Operating expenditures were \$611,835 or 0.67% more than budgeted

- Employee service expenditures were \$615,063 or 1.41% more than budgeted
- Services and Supplies expenditures were \$3,228 or 0.01% less than budgeted

Non-Operating Expenses

- Non-operating expenses showed significant variation with actual debt service payments being \$28,886,683 greater than budgeted amounts. This variation is a result of the timing in the issuance and payment of BANS and permanent debt not controlled by the Sewer Maintenance Fund.

Transfers

- There was no variation between budgeted transfers and actual transfers

Capital Improvements

- Actual capital expenditures were \$16,571,000 less than budgeted. Given the nature of these expenditures this amount does not seem unreasonable. The estimated cost of a capital expenditure in a City's Capital Improvement Program (CIP) is typically based on very preliminary data with minimal engineering design and analysis. Often the cost is based on previous similar expenditures adjusted for current market conditions. Because of this, the actual cost can vary from 30% less to 50% more than the amount in the CIP.

Total Budget

- Total expenditures were \$12,880,588 or 3.49% greater than budgeted expenditures

New Borrowing

- New borrowing was \$40,392,000 less than budgeted

Increase (decrease) in cash

- Actual decrease in cash (not counting the \$27,958,000 allocated to the fund from the City's pooled cash) was \$13,645,628 more than budgeted

The variations listed above reveal that the budget has been accurate within acceptable limits for those items under the control of the Sewer Maintenance Fund. The items outside the control of the Sewer Maintenance Fund provide the largest variations in the cash position of the fund. The yearly comparison of budget to actual is shown on the following pages.

	2004		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 31,882,233	\$ 31,809,000	\$ 73,233
Investment income	\$ 83,000	\$ 326,000	\$ (243,000)
Non-operating revenues			-0.76%
Payments from (to) other funds	\$ -	\$ -	\$ -
Total Revenues	\$ 31,965,233	\$ 32,135,000	\$ (169,767)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 2,136,109	\$ -	\$ 2,136,109
Underground Decision Unit	\$ 4,651,382	\$ -	\$ 4,651,382
Total Employee Services	\$ 6,787,491	\$ 6,525,000	\$ 262,491
Services & Supplies			
Environmental Decision Unit	\$ 3,824,990	\$ -	\$ 3,824,990
Underground Decision Unit	\$ 5,470,800	\$ -	\$ 5,470,800
Total Services & Supplies	\$ 9,295,790	\$ 6,676,000	\$ 2,619,790
Total Operating Expenditures	\$ 16,083,281	\$ 13,201,000	\$ 2,882,281
Non-Operating Expenses			
Debt Service	\$ 3,861,952	\$ 3,862,000	\$ (48)
Amortization	\$ 20,000	\$ -	\$ 20,000
Other	\$ 4,200,000	\$ 4,209,000	\$ (9,000)
Total Non Operating	\$ 8,081,952	\$ 8,071,000	\$ 10,952
Transfers	\$ -	\$ -	\$ -
Capital Contributions	\$ -	\$ -	\$ -
Capital Improvements	\$ 21,500,000	\$ 21,634,000	\$ (134,000)
Total budget	\$ 45,665,233	\$ 42,906,000	\$ 2,759,233
New Borrowing	\$ 13,700,000	\$ -	\$ 13,700,000
Increase (decrease) in cash calculated	\$ -	\$ (10,771,000)	
Budget Amount/C.A.F.R Amount	\$ -	\$ (10,771,000)	
Check should be 0	\$ -	\$ -	

	2005		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 31,208,554	\$ 30,735,000	\$ 473,554
Investment income	\$ 217,887	\$ 325,000	\$ (107,113)
Non-operating revenues			-0.35%
Payments from (to) other funds	\$ -	\$ 8,416,000	\$ (8,416,000)
Total Revenues	\$ 31,426,441	\$ 39,476,000	\$ (8,049,559)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 2,157,709	\$ -	\$ 2,157,709
Underground Decision Unit	\$ 4,791,557	\$ -	\$ 4,791,557
Total Employee Services	\$ 6,949,266	\$ 7,418,000	\$ (468,734)
Services & Supplies			
Environmental Decision Unit	\$ 2,779,250	\$ -	\$ 2,779,250
Underground Decision Unit	\$ 4,992,800	\$ -	\$ 4,992,800
Total Services & Supplies	\$ 7,772,050	\$ 9,351,000	\$ (1,578,950)
Total Operating Expenditures	\$ 14,721,316	\$ 16,769,000	\$ (2,047,684)
Non-Operating Expenses			
Debt Service	\$ 5,852,000	\$ 5,152,000	\$ 700,000
Amortization	\$ 50,000	\$ -	\$ 50,000
Other	\$ 4,200,000	\$ 4,314,000	\$ (114,000)
Total Non Operating	\$ 10,102,000	\$ 9,466,000	\$ 636,000
Transfers	\$ 7,000,000	\$ 7,000,000	\$ -
Capital Contributions	\$ -	\$ -	\$ -
Capital Improvements	\$ 22,706,000	\$ 19,089,000	\$ 3,617,000
Total budget	\$ 54,529,316	\$ 52,324,000	\$ 2,205,316
New Borrowing	\$ 22,706,000	\$ -	\$ 22,706,000
Increase (decrease) in cash calculated	\$ (396,875)	\$ (12,848,000)	
Budget Amount/C.A.F.R Amount	\$ (396,875)	\$ (12,848,000)	
Check should be 0	\$ -	\$ -	

	2006		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 34,416,873	\$ 33,395,000	\$ 1,021,873
Investment income	\$ 252,425	\$ 372,000	\$ (119,575)
Non-operating revenues			-0.36%
Payments from (to) other funds		\$ (8,416,000)	\$ 8,416,000
Total Revenues	\$ 34,669,298	\$ 25,351,000	\$ 9,318,298
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 2,449,950	\$ -	\$ 2,449,950
Underground Decision Unit	\$ 5,170,575	\$ -	\$ 5,170,575
Total Employee Services	\$ 7,620,525	\$ 7,251,000	\$ 369,525
Services & Supplies			
Environmental Decision Unit	\$ 2,637,085	\$ -	\$ 2,637,085
Underground Decision Unit	\$ 5,462,755	\$ -	\$ 5,462,755
Total Services & Supplies	\$ 8,099,840	\$ 7,066,000	\$ 1,033,840
Total Operating Expenditures	\$ 15,720,365	\$ 14,317,000	\$ 1,403,365
Non-Operating Expenses			
Debt Service	\$ 8,025,365	\$ 5,147,000	\$ 2,878,365
Amortization	\$ 75,000	\$ -	\$ 75,000
Other	\$ 4,600,000	\$ 4,600,000	\$ -
Total Non Operating	\$ 12,700,365	\$ 9,747,000	\$ 2,953,365
Transfers	\$ 7,000,000	\$ 7,000,000	\$ -
Capital Contributions	\$ -	\$ -	\$ -
Capital Improvements	\$ 23,500,000	\$ 15,540,000	\$ 7,960,000
Total budget	\$ 58,920,730	\$ 46,604,000	\$ 12,316,730
New Borrowing	\$ 23,500,000	\$ 33,990,000	\$ (10,490,000)
Increase (decrease) in cash calculated	\$ (751,432)	\$ 12,737,000	
Budget Amount/C.A.F.R Amount	\$ (751,432)	\$ 12,737,000	
Check should be 0	\$ -	\$ -	

	2007		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 37,294,488	\$ 35,351,000	\$ 1,943,488
Investment income	\$ 255,150	\$ 393,000	\$ (137,850)
Non-operating revenues			-0.39%
Payments from (to) other funds	\$ -	\$ 5,451,000	\$ (5,451,000)
Total Revenues	\$ 37,549,638	\$ 41,195,000	\$ (3,645,362)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 2,519,192	\$ -	\$ 2,519,192
Underground Decision Unit	\$ 5,152,731	\$ -	\$ 5,152,731
Total Employee Services	\$ 7,671,923	\$ 7,171,000	\$ 500,923
Services & Supplies			
Environmental Decision Unit	\$ 3,365,902	\$ -	\$ 3,365,902
Underground Decision Unit	\$ 5,274,346	\$ -	\$ 5,274,346
Total Services & Supplies	\$ 8,640,248	\$ 11,018,000	\$ (2,377,752)
Total Operating Expenditures	\$ 16,312,171	\$ 18,189,000	\$ (1,876,829)
Non-Operating Expenses			
Debt Service	\$ 9,400,000	\$ 27,964,000	\$ (18,564,000)
Amortization	\$ 75,000	\$ -	\$ 75,000
Other	\$ 4,600,000	\$ 4,600,000	\$ -
Total Non Operating	\$ 14,075,000	\$ 32,564,000	\$ (18,489,000)
Transfers	\$ 9,000,000	\$ 9,000,000	\$ -
Capital Contributions	\$ -	\$ -	\$ -
Capital Improvements	\$ 24,500,000	\$ 19,250,000	\$ 5,250,000
Total budget	\$ 63,887,171	\$ 79,003,000	\$ (15,115,829)
New Borrowing	\$ 24,500,000	\$ 26,194,000	\$ (1,694,000)
Increase (decrease) in cash calculated	\$ (1,837,533)	\$ (11,614,000)	
Budget Amount/C.A.F.R Amount	\$ (1,837,533)	\$ (11,614,000)	
Check should be 0	\$ -	\$ -	

	2008		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 38,755,800	\$ 39,831,000	\$ (1,075,200)
Investment income	\$ 290,000	\$ 331,000	\$ (41,000)
Non-operating revenues	\$ -	\$ -	-0.10%
Payments from (to) other funds	\$ -	\$ 7,429,000	\$ (7,429,000)
Total Revenues	\$ 39,045,800	\$ 47,591,000	\$ (8,545,200)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 2,176,455	\$ -	\$ 2,176,455
Underground Decision Unit	\$ 5,421,364	\$ -	\$ 5,421,364
Total Employee Services	\$ 7,597,819	\$ 7,829,000	\$ (231,181)
Services & Supplies			
Environmental Decision Unit	\$ 2,924,000	\$ -	\$ 2,924,000
Underground Decision Unit	\$ 4,755,800	\$ -	\$ 4,755,800
Total Services & Supplies	\$ 7,679,800	\$ 6,801,000	\$ 878,800
Total Operating Expenditures	\$ 15,277,619	\$ 14,630,000	\$ 647,619
Non-Operating Expenses			
Debt Service	\$ 10,500,000	\$ 27,347,000	\$ (16,847,000)
Amortization	\$ 75,000	\$ -	\$ 75,000
Other	\$ 5,000,000	\$ 5,000,000	\$ -
Total Non Operating	\$ 15,575,000	\$ 32,347,000	\$ (16,772,000)
Transfers	\$ 9,310,000	\$ 9,310,000	\$ -
Capital Contributions	\$ -	\$ 200,000	\$ (200,000)
Capital Improvements	\$ 29,950,000	\$ 26,326,000	\$ 3,624,000
Total budget	\$ 70,112,619	\$ 82,813,000	\$ (12,700,381)
New Borrowing	\$ 27,700,000	\$ 36,217,000	\$ (8,517,000)
Increase (decrease) in cash calculated	\$ (3,366,819)	\$ 1,395,000	
Budget Amount/C.A.F.R Amount	\$ (3,366,819)	\$ 1,395,000	
Check should be 0	\$ -	\$ -	

	2009		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 46,537,330	\$ 45,406,000	\$ 1,131,330
Investment income	\$ 370,300	\$ (73,000)	\$ 443,300
Non-operating revenues	\$ -	\$ 14,632,000	\$ (14,632,000)
Payments from (to) other funds	\$ -	\$ 15,078,000	\$ (15,078,000)
Total Revenues	\$ 46,907,630	\$ 75,043,000	\$ (28,135,370)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 1,955,095	\$ -	\$ 1,955,095
Underground Decision Unit	\$ 5,098,818	\$ -	\$ 5,098,818
Total Employee Services	\$ 7,053,913	\$ 8,102,000	\$ (1,048,087)
Services & Supplies			
Environmental Decision Unit	\$ 2,025,800	\$ -	\$ 2,025,800
Underground Decision Unit	\$ 4,645,700	\$ -	\$ 4,645,700
Total Services & Supplies	\$ 6,671,500	\$ 7,244,000	\$ (572,500)
Total Operating Expenditures	\$ 13,725,413	\$ 15,346,000	\$ (1,620,587)
Non-Operating Expenses			
Debt Service	\$ 11,700,000	\$ 8,754,000	\$ 2,946,000
Amortization	\$ 75,000	\$ -	\$ 75,000
Other	\$ 10,097,930	\$ 10,098,000	\$ (70)
Total Non Operating	\$ 21,872,930	\$ 18,852,000	\$ 3,020,930
Transfers	\$ 9,300,000	\$ 9,300,000	\$ -
Capital Contributions	\$ -	\$ -	\$ -
Capital Improvements	\$ 31,450,000	\$ 35,196,000	\$ (2,345,657)
Total budget	\$ 76,348,343	\$ 78,694,000	\$ (2,345,657)
New Borrowing	\$ 28,550,000	\$ 3,863,000	\$ 24,687,000
Increase (decrease) in cash calculated	\$ (890,713)	\$ 212,000	
Budget Amount/C.A.F.R Amount	\$ (890,713)	\$ 212,000	
Check should be 0	\$ -	\$ -	

	2004 - 2009 Summary		
	Budget	C.A.F.R.	Budget - C.A.F.R.
Revenues			
Receipts from customers and others	\$ 220,095,278	\$ 216,527,000	\$ 3,568,278
Investment income	\$ 1,468,762	\$ 1,674,000	\$ (205,238)
Non-operating revenues	\$ -	\$ 14,632,000	\$ (14,632,000)
Payments from (to) other funds	\$ -	\$ 27,958,000	\$ (27,958,000)
Total Revenues	\$ 221,564,040	\$ 260,791,000	\$ (39,226,960)
Operating Expenditures			
Employee services			
Environmental Decision Unit	\$ 13,394,510	\$ -	\$ -
Underground Decision Unit	\$ 30,286,427	\$ -	\$ -
Total Employee Services	\$ 43,680,937	\$ 44,296,000	\$ (615,063)
Services & Supplies			
Environmental Decision Unit	\$ 17,557,027	\$ -	\$ -
Underground Decision Unit	\$ 30,602,201	\$ -	\$ -
Total Services & Supplies	\$ 48,159,228	\$ 48,156,000	\$ 3,228
Total Operating Expenditures	\$ 91,840,165	\$ 92,452,000	\$ (611,835)
Non-Operating Expenses			
Debt Service	\$ 49,339,317	\$ 78,226,000	\$ (28,886,683)
Amortization	\$ 370,000	\$ -	\$ 370,000
Other	\$ 32,697,930	\$ 32,821,000	\$ (123,070)
Total Non Operating	\$ 82,407,247	\$ 111,047,000	\$ (28,639,753)
Transfers	\$ 41,610,000	\$ 41,610,000	\$ -
Capital Contributions	\$ -	\$ 200,000	\$ (200,000)
Capital Improvements	\$ 153,606,000	\$ 137,035,000	\$ 16,571,000
Total budget	\$ 369,463,412	\$ 382,344,000	\$ (12,880,588)
New Borrowing	\$ 140,656,000	\$ 100,264,000	\$ 40,392,000
Increase (decrease) in cash calculated	\$ (7,243,372)	\$ (20,889,000)	\$ 13,645,628
Budget Amount/C.A.F.R Amount	\$ (7,243,372)	\$ (20,889,000)	\$ 13,645,628
Check should be 0	\$ -	\$ -	\$ -

We also prepared a summary of the cash flows for the Sewer Maintenance Fund for this same period, fiscal years 2004 through 2009. Overall, cash flow from all sources was insufficient to cover the cash expenditures. This resulted primarily for two reasons; 1) capital expenditures exceeding new borrowing by \$36,771,000, and 2) the repayment of BANS that were issued. To cover this cash deficit, a series of three cash allocations in the years 2007, 2008 and 2009 totaling \$27,958,000 were made from the City's pooled cash to the Sewer Maintenance Fund. These cash advances resulted in an unrestricted cash balance of zero and a restricted cash balance of \$10,492,000 in the fund as of December 31, 2009. It is anticipated the cash allocation from the City's pooled cash will be repaid from a future financing for the capital assets acquired. The summary of cash flow is shown in the table below.

Summary of Cash Flow 2004 - 2009

Operating cash flow	\$ 124,075,000
Cash flow from noncapital financing activities	\$ (59,799,000)
Cash Flows from capital and related financing activities	\$ (114,797,000)
Cash flow from investing activities	\$ 1,674,000
Change in cash	\$ (48,847,000)
Beginning Cash 1/1/2004	\$ 31,381,000
Ending Cash 12/31/2009 without float from pooled cash	\$ (17,466,000)
Cash float from pooled cash	\$ 27,958,000
Ending 12/31/2009 cash with cash float from pooled cash	\$ 10,492,000

The year-to-year cash flows show the Sewer Maintenance fund has had unrestricted cash available in only two years, 2004 and 2006. At the end of 2009, the fund had restricted cash of \$10,492,000 as shown above and no unrestricted cash. This is important because this cash position is the starting point for our forward financial projections including rate increases.

The Sewer Maintenance Fund had \$13,097,000 in unrestricted cash at the end of 2004. The annual budgets for 2004 through 2009 anticipated using \$7,243,372 of this cash over this period. This would have left the fund with unrestricted cash of \$5,853,628 at the end of 2009.

The historical cash flows are shown on the following page.

Historical Cash Flows

	2004	2005	2006	2007	2008	2009	2004 - 2009 Summary
Beginning cash	\$ 31,381,000	\$ 20,610,000	\$ 7,762,000	\$ 20,499,000	\$ 8,885,000	\$ 10,280,000	\$ 31,381,000
Other operating cash flow	\$ 18,608,000	\$ 13,966,000	\$ 19,078,000	\$ 17,162,000	\$ 25,201,000	\$ 30,060,000	\$ 124,075,000
Float from pooled cash	\$ -	\$ 8,416,000	\$ (8,416,000)	\$ 5,451,000	\$ 7,429,000	\$ 15,078,000	\$ 27,958,000
Cash flow from operating activities	\$ 18,608,000	\$ 22,382,000	\$ 10,662,000	\$ 22,613,000	\$ 32,630,000	\$ 45,138,000	\$ 152,033,000
Cash flow from noncapital financing activities							
Miscellaneous non-operating revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,632,000	\$ 14,632,000
Other non-operating expenses	\$ (4,209,000)	\$ (11,314,000)	\$ (4,600,000)	\$ (4,600,000)	\$ (5,000,000)	\$ (10,098,000)	\$ (39,821,000)
Transfers to other funds	\$ -	\$ -	\$ (7,000,000)	\$ (9,000,000)	\$ (9,310,000)	\$ (9,300,000)	\$ (34,610,000)
Cash flow from noncapital financing activities	\$ (4,209,000)	\$ (11,314,000)	\$ (11,600,000)	\$ (13,600,000)	\$ (14,310,000)	\$ (4,766,000)	\$ (59,799,000)
Cash Flows from capital and related financing activities							
Acquisition of property, plant and equipment	\$ (21,634,000)	\$ (19,089,000)	\$ (15,540,000)	\$ (19,250,000)	\$ (26,326,000)	\$ (35,196,000)	\$ (137,035,000)
Capital Contributions	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ 200,000
Proceeds from sale of bonds	\$ -	\$ -	\$ 33,990,000	\$ 26,194,000	\$ 36,217,000	\$ 3,863,000	\$ 100,264,000
Retirement of bonds, notes, revenues bonds	\$ (1,035,000)	\$ (2,390,000)	\$ (2,480,000)	\$ (24,750,000)	\$ (23,284,000)	\$ (5,021,000)	\$ (58,960,000)
Interest paid	\$ (2,827,000)	\$ (2,762,000)	\$ (2,667,000)	\$ (3,214,000)	\$ (4,063,000)	\$ (3,733,000)	\$ (19,266,000)
Cash Flows from capital and related financing activities	\$ (25,496,000)	\$ (24,241,000)	\$ 13,303,000	\$ (21,020,000)	\$ (17,256,000)	\$ (40,087,000)	\$ (114,797,000)
Cash flow from investing activities	\$ 326,000	\$ 325,000	\$ 372,000	\$ 393,000	\$ 331,000	\$ (73,000)	\$ 1,674,000
Change in cash	\$ (10,771,000)	\$ (12,848,000)	\$ 12,737,000	\$ (11,614,000)	\$ 1,395,000	\$ 212,000	\$ (20,889,000)
Ending Cash	\$ 20,610,000	\$ 7,762,000	\$ 20,499,000	\$ 8,885,000	\$ 10,280,000	\$ 10,492,000	\$ 10,492,000
Restricted Cash	\$ 7,513,000	\$ 7,762,000	\$ 8,116,000	\$ 8,885,000	\$ 10,280,000	\$ 10,492,000	\$ 10,492,000
Unrestricted Cash	\$ 13,097,000	\$ -	\$ 12,383,000	\$ -	\$ -	\$ -	\$ -
Cash Due to pooled cash	\$ -	\$ 8,416,000	\$ -	\$ 5,451,000	\$ 12,880,000	\$ 27,958,000	\$ 27,958,000

Recommended Changes to Align Financial Statements with Budget

The inherent differences between the budget and the CAFR previously described in this report will always be somewhat problematic when reconciling them. In addition, the need for the Comptroller's Office to issue debt at the time that is most beneficial to the City overall will likely continue to present challenges to the Sewer Maintenance Fund cash flow. Historically, the City's pooled cash has provided operating cash flow for the Sewer Maintenance Fund making the timing of the issuance of debt somewhat irrelevant to the Sewer Maintenance Fund in terms of its cash flow for operating, capital and debt service needs. However, this has made it difficult for the management of the Sewer Maintenance Fund to know the cash position of the fund when establishing the budget and planning capital improvements.

We recommend the Comptroller's Office meet with the management of the Sewer Maintenance Fund on a semi-annual basis to review the status of the cash position in the Sewer Maintenance Fund and to discuss the financing of their capital improvements. This will enable the Sewer Fund managers to better understand and track the fund's cash flow and cash position each year. It will also provide an opportunity to ensure that bonds to be issued to fund capital expenditures will be consistent with the approved budget for the Sewer Maintenance Fund. Ideally, one meeting should take place during the construction period after most of the project bids have been awarded and the other meeting sometime after the close of the fiscal year when the actual revenues and expenditures for the Fund have been accounted for allowing a reconciliation of the Fund's actual cash position. The reconciliation presented in this report provides both a starting position and a process that could be continued going forward.

Debt service estimates for budgeting purposes is an ongoing problem in evaluating the needs of the SMF for each upcoming budget year. The budget staff must estimate the amounts that will be paid both for projects that have been approved but not yet financed, and for projects that will be included in the capital budget for the upcoming year for which debt service might be incurred in the upcoming budget year. The inability to accurately forecast these costs is due to uncertainty as to when amounts will be borrowed, and what form the borrowing will take. Short-term financing by the Comptroller's office may move debt service costs to a subsequent year, or alternatively, a financing could accelerate debt service payments into the budget year. To avoid inaccuracies in the budgeting process, we recommend that a systematic debt service forecasting process be developed jointly by the Comptroller's debt management staff and the budget staff for purposes of including agreed on estimates into the budget for the coming cycle. If budgeting accuracy is to be improved, the agreed on process should be orderly and specific. If actual issuance activity will cause changes in

these numbers, the semi-annual discussions will serve as a point at which mid-year corrections can be identified as needed, and their impact can be assessed.

6. Sewer Maintenance Fund

Capital Outlay

To determine the appropriate fees and rates needed for the operation of the Sewer Maintenance Fund over the planning period, we have projected future revenue and expenditures and we have incorporated the anticipated future capital outlay needs provided by the City in their CIP for the period from 2010 through 2016. The capital costs are projected to be \$209,097,000 as shown in the table below.

	Totals
2010	23,937,000
2011	38,370,000
2012	37,890,000
2013	38,900,000
2014	34,500,000
2015	35,500,000
2016	-
Total	209,097,000

These capital projects are primarily related to repair and maintenance of existing infrastructure. The capital will be funded with new debt which will be repaid from user fees.

A detailed listing of the anticipated capital improvements are shown on the following page.

Year	Project	Totals
2010	Pump Facilities	500,000
2010	I&I Reduction Projects	6,350,000
2010	Sewer Maintenance Relay Program	15,162,000
2011	Pump Facilities	1,000,000
2011	I&I Reduction Projects	6,370,000
2011	Sewer Maintenance Relay Program	29,000,000
2012	Pump Facilities	1,000,000
2012	I&I Reduction Projects	4,890,000
2012	Sewer Maintenance Relay Program	30,000,000
2013	Pump Facilities	1,000,000
2013	I&I Reduction Projects	4,900,000
2013	Sewer Maintenance Relay Program	31,000,000
2014	Pump Facilities	500,000
2014	I&I Reduction Projects	3,000,000
2014	Sewer Maintenance Relay Program	31,000,000
2015	Pump Facilities	500,000
2015	I&I Reduction Projects	3,000,000
2015	Sewer Maintenance Relay Program	32,000,000
2010	BMP for TSS Reductions	1,925,000
2011	BMP for TSS Reductions	2,000,000
2012	BMP for TSS Reductions	2,000,000
2013	BMP for TSS Reductions	2,000,000
TOTALS		\$ 209,097,000

Projected Change in Water & Storm Water Rate Base

The City provided Springsted with consumption history of sewer accounts. A trend analysis of this data from 1998-2009 indicates that sewage treated has declined on average 2.9% per year. Total sewer usage and the annual change are shown in the table below.

	Sewer Use (Ccf)	Annual Change
1998	33,826,596	
1999	32,756,105	-3.2%
2000	31,765,858	-3.0%
2001	31,021,711	-2.3%
2002	30,763,512	-0.8%
2003	29,134,516	-5.3%
2004	27,483,433	-5.7%
2005	27,200,102	-1.0%
2006	26,090,157	-4.1%
2007	25,547,165	-2.1%
2008	25,304,520	-0.9%
2009	24,557,153	-3.0%
Average		-2.9%

The stormwater utility was established in 2006. Total stormwater equivalent residential units (ERUs) have remained relatively stable since that time. The annual count of ERUs and the average change since 2006 is shown in the table below.

	Stormwater ERUs (last 3 months of the year)	Annual Change
2006	386,719	
2007	396,070	2.4%
2008	400,493	1.1%
2009	394,190	-1.6%
Average		0.7%

Based on this information and discussions with the City, we have assumed that annual sewer use will decrease by 2.50% in 2011 and 2012, 2.20% in 2013, and 2.00% annually thereafter. Stormwater consumption is projected to remain flat over the entire planning period.

Projected Growth in Operating Revenues and Expenditures

The growth of operating revenues is dependent on both the change in the rate base (usage/consumption) by customers and the change in the rates charged by the City. The financial projections are based on a decrease in the rate base each year for sewer based on historical trends. The rate of decrease is projected to be -2.50% in 2011 and 2012, decrease to -2.20% in 2013 then to -2.00% from 2014 through 2016. The stormwater rate base is projected to remain unchanged over the planning period while overall charges for services in the Sewer Maintenance Fund are projected to increase 3% each year.

The historical change in individual categories of operating expenditures from year-to-year has been somewhat volatile as the City has included additional services within the Sewer Maintenance Fund. We have projected net salaries and benefits to grow at an annual rate of 4% and fringe benefits to grow at an annual rate of 6%. The line items labeled operating expenditures and equipment are projected to grow at an annual rate of 1%.

The projected annual changes in operating revenues and expenditures are shown in the table below.

REVENUE PROJECTIONS	2011	2012	2013	2014	2015	2016
Growth in sewer usage/consumption	-2.50%	-2.50%	-2.20%	-2.00%	-2.00%	-2.00%
Growth in stormwater consumption	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Charges for Service	3.00%	3.00%	3.00%	3.00%	3.00%	0.00%
Miscellaneous						
EXPENDITURE PROJECTIONS						
Environmental Decision Unit						
Net Salaries & Wages	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Fringe Benefits	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Operating Expenditures	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Equipment	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Underground Decision Unit						
Net Salaries & Wages	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Fringe Benefits	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Operating Expenditures	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Equipment	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Interest Rate (interest earned)	1.00%	2.00%	2.00%	3.00%	3.00%	3.00%

Financial Projections at Current Rates

To determine the adequacy of current rates, we have developed a financial projection of the Sewer Maintenance Fund assuming no rate increases, over the planning period 2010-2016. The projections incorporate all the anticipated capital outlay in the City's CIP for the Sewer Maintenance Fund and the growth in revenues and expenditures as previously discussed. The projections show operating income would be positive through the end of the planning period, although declining from \$32.4 million in 2010 to \$21.1 million in 2016. The cash balance in the Sewer Maintenance Fund, which includes both restricted and unrestricted cash, is projected to go from \$10,492,000 in the beginning of 2010 to (\$18,978,944) in 2016. The fund would run out of cash in 2015.

These financial projections are shown on the following pages.

Sewer Maintenance Fund Financial Projections – NO RATE INCREASES

Projected Rate Adjustment		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Operating Revenues							
Sewer Fee	28,591,500	27,876,713	27,179,795	26,581,839	26,050,202	25,529,198	25,018,614
Stormwater Fee	22,316,000	22,316,000	22,316,000	22,316,000	22,316,000	22,316,000	22,316,000
Charges for Service	1,286,000	1,324,580	1,364,317	1,405,247	1,447,404	1,490,826	1,490,826
Miscellaneous	-	-	-	-	-	-	-
Total Operating Revenue	52,193,500	51,517,293	50,860,112	50,303,086	49,813,607	49,336,025	48,825,441
Operating Expenses							
Environmental Decision Unit							
Gross Salaries & Wages	2,682,038	2,789,320	2,900,892	3,016,928	3,137,605	3,263,109	3,393,634
Fringe Benefits	1,017,365	1,078,407	1,143,111	1,211,698	1,284,400	1,361,464	1,443,152
Operating Expenditures	480,000	484,800	489,648	494,544	499,490	504,485	509,530
Equipment	38,500	38,885	39,274	39,667	40,063	40,464	40,869
Total Environmental Decision Unit	4,217,903	4,391,411	4,572,925	4,762,837	4,961,558	5,169,522	5,387,184
Underground Decision Unit							
Gross Salaries & Wages	3,672,138	3,819,024	3,971,784	4,130,656	4,295,882	4,467,717	4,646,426
Fringe Benefits	1,623,822	1,721,251	1,824,526	1,933,998	2,050,038	2,173,040	2,303,423
Operating Expenditures	5,191,000	5,346,730	5,507,132	5,672,346	5,842,516	6,017,792	6,198,325
Equipment	121,500	122,715	123,942	125,182	126,433	127,698	128,975
Total Underground Decision Unit	10,608,460	11,009,720	11,427,385	11,862,181	12,314,870	12,786,247	13,277,149
Existing Depreciation	4,996,950	4,747,103	4,509,747	4,284,260	4,070,047	3,866,545	3,673,217
New Depreciation	-	626,967	1,627,883	2,616,800	3,630,967	4,505,967	5,405,967
Total Operating Expenses	19,823,313	20,775,200	22,137,941	23,526,078	24,977,441	26,328,280	27,743,516
Operating Income (Loss)	32,370,187	30,742,092	28,722,171	26,777,008	24,836,165	23,007,745	21,081,924

Sewer Maintenance Fund Financial Projections – NO RATE INCREASES (continued)

Projected Rate Adjustment		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Non Operating Revenues (Expenses)							
State or Federal Grants	868,000						
Interest Income	258,000	107,527	220,948	226,557	257,666	75,033	-
Interest Expense Existing Debt	(5,433,132)	(4,963,232)	(4,507,872)	(4,038,792)	(3,583,082)	(3,142,260)	(2,704,386)
Interest Expense New Debt	(133,482)	(603,928)	(2,546,670)	(3,588,272)	(4,614,694)	(5,461,128)	(6,293,030)
Amortization Expense	-						
Reimbursables for Salaries & Wages	1,351,588	1,405,652	1,461,878	1,520,353	1,581,167	1,644,413	1,710,190
Payment to General Fund	(12,190,000)	(12,555,700)	(12,932,371)	(13,320,342)	(13,719,952)	(14,131,551)	(14,555,497)
Other	(1,016,000)						
Total Non Operating Revenues (Expenses)	(16,295,026)	(16,609,681)	(18,304,088)	(19,200,496)	(20,078,896)	(21,015,492)	(21,842,724)
Income (Loss) Before Transfers & Contributions	16,075,161	14,132,411	10,418,083	7,576,512	4,757,270	1,992,252	(760,799)
Capital Contributions	-						
Transfers In	-						
Transfers (Out) - Water Administration	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)
Transfers (Out) - Capital Fund	(2,678,000)	(2,478,000)	(2,278,000)	(2,078,000)	(1,878,000)	(1,878,000)	(1,878,000)
Transfers (Out)	-						
Total Operating Transfers	(3,028,000)	(2,828,000)	(2,628,000)	(2,428,000)	(2,228,000)	(2,228,000)	(2,228,000)
Net Income (Loss)	13,047,161	11,304,411	7,790,083	5,148,512	2,529,270	(235,748)	(2,988,799)
Beginning Cash & Investments	10,492,000	10,752,740	11,047,398	11,327,848	8,588,855	2,501,103	(6,794,070)
Net Income	13,047,161	11,304,411	7,790,083	5,148,512	2,529,270	(235,748)	(2,988,799)
Depreciation	4,996,950	5,374,069	6,137,631	6,901,060	7,701,014	8,372,511	9,079,184
Amortization	-	-	-	-	-	-	-
Acquisition and Construction of Assets	(23,937,000)	(38,370,000)	(37,890,000)	(38,900,000)	(34,500,000)	(35,500,000)	-
Proceeds from New Bonds & State Loans	23,117,431	56,475,934	37,890,000	38,900,000	34,500,000	35,500,000	-
Proceeds from BANs	46,000,000	-	-	-	-	-	-
Repayment of BANs	(23,117,431)	(22,882,569)	-	-	-	-	-
Payments on New Long-Term Debt		(932,636)	(3,022,460)	(4,527,662)	(6,115,931)	(7,588,438)	(9,142,694)
Payments on Existing Long-Term Debt	(11,045,371)	(10,674,552)	(10,624,804)	(10,260,903)	(10,202,105)	(9,843,498)	(9,132,566)
Payments on Leases	(844,000)						
Float (to)/from Pooled Cash	(27,957,000)						
Ending Cash Balance	10,752,740	11,047,398	11,327,848	8,588,855	2,501,103	(6,794,070)	(18,978,944)
Minimum Cash Balance							
For ongoing operations (# months)	3	4,955,828	5,193,800	5,534,485	5,881,520	6,244,360	6,582,070
For debt service	50%	8,587,174	10,350,903	11,207,814	12,257,906	13,017,662	13,636,338
RESTRICTED for capital projects							
RESTRICTED for debt service reserve fund		10,492,000	10,492,000	10,492,000	10,492,000	10,492,000	10,492,000
Minimum Cash Balance Required		24,035,002	26,036,703	27,234,299	28,631,425	29,754,022	30,710,408
Amount Over (Under) Minimum		(13,282,262)	(14,989,305)	(15,906,451)	(20,042,570)	(27,252,920)	(37,504,478)



Financial Projections

A financial projection for the Sewer Maintenance Fund was developed to determine the percentage increases in revenues needed each year to provide positive operating income and to provide an unrestricted cash balance of at least 3 months of operating expenditures and 50% of the following year's debt service by the end of 2015. These projections show a 4.70% increase in 2011 through 2015 is needed to reach this level of liquidity by 2015. They also show total ending cash in the fund would increase from \$10.8 million in 2010 to \$32.0 million at the end of the planning period in 2016. Unrestricted cash would increase from zero in 2010 to \$21.5 million at the end of 2016.

The projections incorporate all the anticipated capital outlay in the City's CIP for the Sewer Maintenance Fund and the growth in revenues and expenditures as previously discussed.

The financial projections are shown on the following pages.

Sewer Maintenance Fund Financial Projections

Projected Rate Adjustment		4.70%	4.70%	4.70%	4.70%	4.70%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Operating Revenues							
Sewer Fee	28,591,500	29,186,918	29,794,736	30,508,796	31,303,855	32,119,634	31,477,241
Stormwater Fee	22,316,000	23,364,852	24,463,000	25,612,761	26,816,561	28,076,939	28,076,939
Charges for Service	1,286,000	1,324,580	1,364,317	1,405,247	1,447,404	1,490,826	1,490,826
Miscellaneous	-	-	-	-	-	-	-
Total Operating Revenue	52,193,500	53,876,350	55,622,053	57,526,804	59,567,821	61,687,400	61,045,007
Operating Expenses							
Environmental Decision Unit							
Gross Salaries & Wages	2,682,038	2,789,320	2,900,892	3,016,928	3,137,605	3,263,109	3,393,634
Fringe Benefits	1,017,365	1,078,407	1,143,111	1,211,698	1,284,400	1,361,464	1,443,152
Operating Expenditures	480,000	484,800	489,648	494,544	499,490	504,485	509,530
Equipment	38,500	38,885	39,274	39,667	40,063	40,464	40,869
Total Environmental Decision Unit	4,217,903	4,391,411	4,572,925	4,762,837	4,961,558	5,169,522	5,387,184
Underground Decision Unit							
Gross Salaries & Wages	3,672,138	3,819,024	3,971,784	4,130,656	4,295,882	4,467,717	4,646,426
Fringe Benefits	1,623,822	1,721,251	1,824,526	1,933,998	2,050,038	2,173,040	2,303,423
Operating Expenditures	5,191,000	5,346,730	5,507,132	5,672,346	5,842,516	6,017,792	6,198,325
Equipment	121,500	122,715	123,942	125,182	126,433	127,698	128,975
Total Underground Decision Unit	10,608,460	11,009,720	11,427,385	11,862,181	12,314,870	12,786,247	13,277,149
Existing Depreciation	4,996,950	4,747,103	4,509,747	4,284,260	4,070,047	3,866,545	3,673,217
New Depreciation	-	626,967	1,627,883	2,616,800	3,630,967	4,505,967	5,405,967
Total Operating Expenses	19,823,313	20,775,200	22,137,941	23,526,078	24,977,441	26,328,280	27,743,516
Operating Income (Loss)	32,370,187	33,101,150	33,484,112	34,000,726	34,590,379	35,359,119	33,301,490

Sewer Maintenance Fund Financial Projections (continued)

Projected Rate Adjustment		4.70%	4.70%	4.70%	4.70%	4.70%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Non Operating Revenues (Expenses)							
State or Federal Grants	868,000						
Interest Income	258,000	107,527	268,129	369,921	693,723	816,799	930,738
Interest Expense Existing Debt	(5,433,132)	(4,963,232)	(4,507,872)	(4,038,792)	(3,583,082)	(3,142,260)	(2,704,386)
Interest Expense New Debt	(133,482)	(603,928)	(2,546,670)	(3,588,272)	(4,614,694)	(5,461,128)	(6,293,030)
Amortization Expense	-						
Reimbursables for Salaries & Wages	1,351,588	1,405,652	1,461,878	1,520,353	1,581,167	1,644,413	1,710,190
Payment to General Fund	(12,190,000)	(12,555,700)	(12,932,371)	(13,320,342)	(13,719,952)	(14,131,551)	(14,555,497)
Other	(1,016,000)						
Total Non Operating Revenues (Expenses)	(16,295,026)	(16,609,681)	(18,256,906)	(19,057,133)	(19,642,838)	(20,273,726)	(20,911,986)
Income (Loss) Before Transfers & Contributions	16,075,161	16,491,469	15,227,205	14,943,593	14,947,541	15,085,393	12,389,505
Capital Contributions	-						
Transfers In	-						
Transfers (Out) - Water Administration	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)
Transfers (Out) - Capital Fund	(2,678,000)	(2,478,000)	(2,278,000)	(2,078,000)	(1,878,000)	(1,878,000)	(1,878,000)
Transfers (Out)	-						
Total Operating Transfers	(3,028,000)	(2,828,000)	(2,628,000)	(2,428,000)	(2,228,000)	(2,228,000)	(2,228,000)
Net Income (Loss)	13,047,161	13,663,469	12,599,205	12,515,593	12,719,541	12,857,393	10,161,505
Beginning Cash & Investments	10,492,000	10,752,740	13,406,455	18,496,028	23,124,116	27,226,636	31,024,604
Net Income	13,047,161	13,663,469	12,599,205	12,515,593	12,719,541	12,857,393	10,161,505
Depreciation	4,996,950	5,374,069	6,137,631	6,901,060	7,701,014	8,372,511	9,079,184
Amortization	-	-	-	-	-	-	-
Acquisition and Construction of Assets	(23,937,000)	(38,370,000)	(37,890,000)	(38,900,000)	(34,500,000)	(35,500,000)	-
Proceeds from New Bonds & State Loans	23,117,431	56,475,934	37,890,000	38,900,000	34,500,000	35,500,000	-
Proceeds from BANs	46,000,000	-	-	-	-	-	-
Repayment of BANs	(23,117,431)	(22,882,569)	-	-	-	-	-
Payments on New Long-Term Debt		(932,636)	(3,022,460)	(4,527,662)	(6,115,931)	(7,588,438)	(9,142,694)
Payments on Existing Long-Term Debt	(11,045,371)	(10,674,552)	(10,624,804)	(10,260,903)	(10,202,105)	(9,843,498)	(9,132,566)
Payments on Leases	(844,000)						
Float (to)/from Pooled Cash	(27,957,000)						
Ending Cash Balance	10,752,740	13,406,455	18,496,028	23,124,116	27,226,636	31,024,604	31,990,033
Minimum Cash Balance							
For ongoing operations (# months)	3	4,955,828	5,193,800	5,534,485	5,881,520	6,244,360	6,582,070
For debt service	50%	8,587,174	10,350,903	11,207,814	12,257,906	13,017,662	13,636,338
RESTRICTED for capital projects							
RESTRICTED for debt service reserve fund		10,492,000	10,492,000	10,492,000	10,492,000	10,492,000	10,492,000
Minimum Cash Balance Required		24,035,002	26,036,703	27,234,299	28,631,425	29,754,022	30,710,408
Amount Over (Under) Minimum		(13,282,262)	(12,630,248)	(8,738,272)	(5,507,309)	(2,527,387)	314,196

Realizing that the City has had significant increases in water rates in 2010, the desire to keep sewer rates flat in 2011 is also an option but would require 7.0% (approximately) annual rate increases in 2012-2015 to fund operations, recommended reserve levels, and future capital requirements.

These financial projections are shown on the following pages

Projected Rate Adjustment		0.00%	7.03%	7.03%	7.03%	7.03%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Operating Revenues							
Sewer Fee	28,591,500	27,876,713	29,089,880	30,449,246	31,937,314	33,498,103	32,828,141
Stormwater Fee	22,316,000	22,316,000	23,884,278	25,562,768	27,359,215	29,281,909	29,281,909
Charges for Service	1,286,000	1,324,580	1,364,317	1,405,247	1,447,404	1,490,826	1,490,826
Miscellaneous	-	-	-	-	-	-	-
Total Operating Revenue	52,193,500	51,517,293	54,338,475	57,417,261	60,743,933	64,270,839	63,600,877
Operating Expenses							
Environmental Decision Unit							
Gross Salaries & Wages	2,682,038	2,789,320	2,900,892	3,016,928	3,137,605	3,263,109	3,393,634
Fringe Benefits	1,017,365	1,078,407	1,143,111	1,211,698	1,284,400	1,361,464	1,443,152
Operating Expenditures	480,000	484,800	489,648	494,544	499,490	504,485	509,530
Equipment	38,500	38,885	39,274	39,667	40,063	40,464	40,869
Total Environmental Decision Unit	4,217,903	4,391,411	4,572,925	4,762,837	4,961,558	5,169,522	5,387,184
Underground Decision Unit							
Gross Salaries & Wages	3,672,138	3,819,024	3,971,784	4,130,656	4,295,882	4,467,717	4,646,426
Fringe Benefits	1,623,822	1,721,251	1,824,526	1,933,998	2,050,038	2,173,040	2,303,423
Operating Expenditures	5,191,000	5,346,730	5,507,132	5,672,346	5,842,516	6,017,792	6,198,325
Equipment	121,500	122,715	123,942	125,182	126,433	127,698	128,975
Total Underground Decision Unit	10,608,460	11,009,720	11,427,385	11,862,181	12,314,870	12,786,247	13,277,149
Existing Depreciation	4,996,950	4,747,103	4,509,747	4,284,260	4,070,047	3,866,545	3,673,217
New Depreciation	-	626,967	1,627,883	2,616,800	3,630,967	4,505,967	5,405,967
Total Operating Expenses	19,823,313	20,775,200	22,137,941	23,526,078	24,977,441	26,328,280	27,743,516
Operating Income (Loss)	32,370,187	30,742,092	32,200,534	33,891,183	35,766,492	37,942,559	35,857,361

Projected Rate Adjustment		0.00%	7.03%	7.03%	7.03%	7.03%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Non Operating Revenues (Expenses)							
State or Federal Grants	868,000						
Interest Income	258,000	107,527	220,948	296,124	577,529	732,402	921,312
Interest Expense Existing Debt	(5,433,132)	(4,963,232)	(4,507,872)	(4,038,792)	(3,583,082)	(3,142,260)	(2,704,386)
Interest Expense New Debt	(133,482)	(603,928)	(2,546,670)	(3,588,272)	(4,614,694)	(5,461,128)	(6,293,030)
Amortization Expense	-						
Reimbursables for Salaries & Wages	1,351,588	1,405,652	1,461,878	1,520,353	1,581,167	1,644,413	1,710,190
Payment to General Fund	(12,190,000)	(12,555,700)	(12,932,371)	(13,320,342)	(13,719,952)	(14,131,551)	(14,555,497)
Other	(1,016,000)						
Total Non Operating Revenues (Expenses)	(16,295,026)	(16,609,681)	(18,304,088)	(19,130,929)	(19,759,033)	(20,358,124)	(20,921,412)
Income (Loss) Before Transfers & Contributions	16,075,161	14,132,411	13,896,447	14,760,254	16,007,459	17,584,436	14,935,949
Capital Contributions	-						
Transfers In	-						
Transfers (Out) - Water Administration	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)
Transfers (Out) - Capital Fund	(2,678,000)	(2,478,000)	(2,278,000)	(2,078,000)	(1,878,000)	(1,878,000)	(1,878,000)
Transfers (Out)	-						
Total Operating Transfers	(3,028,000)	(2,828,000)	(2,628,000)	(2,428,000)	(2,228,000)	(2,228,000)	(2,228,000)
Net Income (Loss)	13,047,161	11,304,411	11,268,447	12,332,254	13,779,459	15,356,436	12,707,949
Beginning Cash & Investments	10,492,000	10,752,740	11,047,398	14,806,211	19,250,960	24,413,397	30,710,408
Net Income	13,047,161	11,304,411	11,268,447	12,332,254	13,779,459	15,356,436	12,707,949
Depreciation	4,996,950	5,374,069	6,137,631	6,901,060	7,701,014	8,372,511	9,079,184
Amortization	-	-	-	-	-	-	-
Acquisition and Construction of Assets	(23,937,000)	(38,370,000)	(37,890,000)	(38,900,000)	(34,500,000)	(35,500,000)	-
Proceeds from New Bonds & State Loans	23,117,431	56,475,934	37,890,000	38,900,000	34,500,000	35,500,000	-
Proceeds from BANs	46,000,000	-	-	-	-	-	-
Repayment of BANs	(23,117,431)	(22,882,569)	-	-	-	-	-
Payments on New Long-Term Debt		(932,636)	(3,022,460)	(4,527,662)	(6,115,931)	(7,588,438)	(9,142,694)
Payments on Existing Long-Term Debt	(11,045,371)	(10,674,552)	(10,624,804)	(10,260,903)	(10,202,105)	(9,843,498)	(9,132,566)
Payments on Leases	(844,000)						
Float (to)/from Pooled Cash	(27,957,000)						
Ending Cash Balance	10,752,740	11,047,398	14,806,211	19,250,960	24,413,397	30,710,408	34,222,282
Minimum Cash Balance							
For ongoing operations (# months)	3	4,955,828	5,193,800	5,534,485	5,881,520	6,244,360	6,935,879
For debt service	50%	8,587,174	10,350,903	11,207,814	12,257,906	13,017,662	13,006,072
RESTRICTED for capital projects							
RESTRICTED for debt service reserve fund		10,492,000	10,492,000	10,492,000	10,492,000	10,492,000	10,492,000
Minimum Cash Balance Required		24,035,002	26,036,703	27,234,299	28,631,425	29,754,022	30,433,952
Amount Over (Under) Minimum		(13,282,262)	(14,989,305)	(12,428,088)	(9,380,465)	(5,340,625)	(0) 3,788,330

The Comptroller's Office determined that if the City bonds for the entire amount of capital projects the Sewer Maintenance Fund unrestricted cash position would be approximately \$7.3 million. If the City chooses to issue an additional \$7.3 million in bonds in 2011 to reimburse the fund for these capital expenditures paid for with cash, the projected rate increase needed to meet the minimum cash reserves while also making the additional debt service payments would be 4.15% annually over the next five years as opposed to 4.70%. Verification with City bond counsel would be also necessary to insure that proper reimbursement resolutions are in place.

These financial projections are shown on the following pages.

Projected Rate Adjustment		4.15%	4.15%	4.15%	4.15%	4.15%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Operating Revenues							
Sewer Fee	28,591,500	29,033,596	29,482,528	30,030,520	30,651,251	31,284,812	30,659,116
Stormwater Fee	22,316,000	23,242,114	24,206,662	25,211,238	26,257,505	27,347,191	27,347,191
Charges for Service	1,286,000	1,324,580	1,364,317	1,405,247	1,447,404	1,490,826	1,490,826
Miscellaneous	-	-	-	-	-	-	-
Total Operating Revenue	52,193,500	53,600,290	55,053,507	56,647,005	58,356,160	60,122,829	59,497,133
Operating Expenses							
Environmental Decision Unit							
Gross Salaries & Wages	2,682,038	2,789,320	2,900,892	3,016,928	3,137,605	3,263,109	3,393,634
Fringe Benefits	1,017,365	1,078,407	1,143,111	1,211,698	1,284,400	1,361,464	1,443,152
Operating Expenditures	480,000	484,800	489,648	494,544	499,490	504,485	509,530
Equipment	38,500	38,885	39,274	39,667	40,063	40,464	40,869
Total Environmental Decision Unit	4,217,903	4,391,411	4,572,925	4,762,837	4,961,558	5,169,522	5,387,184
Underground Decision Unit							
Gross Salaries & Wages	3,672,138	3,819,024	3,971,784	4,130,656	4,295,882	4,467,717	4,646,426
Fringe Benefits	1,623,822	1,721,251	1,824,526	1,933,998	2,050,038	2,173,040	2,303,423
Operating Expenditures	5,191,000	5,346,730	5,507,132	5,672,346	5,842,516	6,017,792	6,198,325
Equipment	121,500	122,715	123,942	125,182	126,433	127,698	128,975
Total Underground Decision Unit	10,608,460	11,009,720	11,427,385	11,862,181	12,314,870	12,786,247	13,277,149
Existing Depreciation	4,996,950	4,747,103	4,509,747	4,284,260	4,070,047	3,866,545	3,673,217
New Depreciation	-	626,967	1,627,883	2,616,800	3,630,967	4,505,967	5,405,967
Total Operating Expenses	19,823,313	20,775,200	22,137,941	23,526,078	24,977,441	26,328,280	27,743,516
Operating Income (Loss)	32,370,187	32,825,090	32,915,566	33,120,927	33,378,718	33,794,549	31,753,617

Projected Rate Adjustment		4.15%	4.15%	4.15%	4.15%	4.15%	0.00%
	2010	2011	2012	2013	2014	2015	2016
Non Operating Revenues (Expenses)							
State or Federal Grants	868,000						
Interest Income	258,000	107,527	408,608	491,095	836,612	911,510	965,239
Interest Expense Existing Debt	(5,433,132)	(4,963,232)	(4,507,872)	(4,038,792)	(3,583,082)	(3,142,260)	(2,704,386)
Interest Expense New Debt	(133,482)	(603,928)	(2,838,670)	(3,870,466)	(4,886,690)	(5,722,518)	(6,543,390)
Amortization Expense	-						
Reimbursables for Salaries & Wages	1,351,588	1,405,652	1,461,878	1,520,353	1,581,167	1,644,413	1,710,190
Payment to General Fund	(12,190,000)	(12,555,700)	(12,932,371)	(13,320,342)	(13,719,952)	(14,131,551)	(14,555,497)
Other	(1,016,000)						
Total Non Operating Revenues (Expenses)	(16,295,026)	(16,609,681)	(18,408,428)	(19,218,152)	(19,771,945)	(20,440,405)	(21,127,844)
Income (Loss) Before Transfers & Contributions	16,075,161	16,215,409	14,507,138	13,902,774	13,606,773	13,354,144	10,625,772
Capital Contributions	-						
Transfers In	-						
Transfers (Out) - Water Administration	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)
Transfers (Out) - Capital Fund	(2,678,000)	(2,478,000)	(2,278,000)	(2,078,000)	(1,878,000)	(1,878,000)	(1,878,000)
Transfers (Out)	-						
Total Operating Transfers	(3,028,000)	(2,828,000)	(2,628,000)	(2,428,000)	(2,228,000)	(2,228,000)	(2,228,000)
Net Income (Loss)	13,047,161	13,387,409	11,879,138	11,474,774	11,378,773	11,126,144	8,397,772
Beginning Cash & Investments	10,492,000	10,752,740	20,430,395	24,554,754	27,887,071	30,383,671	32,174,634
Net Income	13,047,161	13,387,409	11,879,138	11,474,774	11,378,773	11,126,144	8,397,772
Depreciation	4,996,950	5,374,069	6,137,631	6,901,060	7,701,014	8,372,511	9,079,184
Amortization	-	-	-	-	-	-	-
Acquisition and Construction of Assets	(23,937,000)	(38,370,000)	(37,890,000)	(38,900,000)	(34,500,000)	(35,500,000)	-
Proceeds from New Bonds & State Loans	23,117,431	63,775,934	37,890,000	38,900,000	34,500,000	35,500,000	-
Proceeds from BANs	46,000,000	-	-	-	-	-	-
Repayment of BANs	(23,117,431)	(22,882,569)	-	-	-	-	-
Payments on New Long-Term Debt		(932,636)	(3,267,607)	(4,782,614)	(6,381,081)	(7,864,195)	(9,429,481)
Payments on Existing Long-Term Debt	(11,045,371)	(10,674,552)	(10,624,804)	(10,260,903)	(10,202,105)	(9,843,498)	(9,132,566)
Payments on Leases	(844,000)						
Float (to)/from Pooled Cash	(27,957,000)						
Ending Cash Balance	10,752,740	20,430,395	24,554,754	27,887,071	30,383,671	32,174,634	31,089,543

Minimum Cash Balance

For ongoing operations (# months)	3	4,955,828	5,193,800	5,534,485	5,881,520	6,244,360	6,582,070	6,935,879
For debt service	50%	8,587,174	10,619,476	11,476,388	12,526,479	13,286,235	13,904,911	13,274,646
RESTRICTED for capital projects								
RESTRICTED for debt service reserve fund		10,492,000	10,492,000	10,492,000	10,492,000	10,492,000	10,492,000	10,492,000
Minimum Cash Balance Required		24,035,002	26,305,277	27,502,873	28,899,999	30,022,596	30,978,981	30,702,525
Amount Over (Under) Minimum		(13,282,262)	(5,874,881)	(2,948,119)	(1,012,928)	361,076	1,195,652	387,019

Recommended Rate Increases We recommend the City increase its sewer and stormwater rates by 4.70% annually, 2011 through 2015, consistent with our first financial projection. This recommendation places the fund in a position to achieve the recommended liquidity by 2015. It also allows the Sewer Maintenance Fund managers and the Comptroller's office to establish a process to better coordinate the budget and the financial statements which should result in a better ability to adjust the projected rate increases in future years based on the funds actual financial performance to reach the recommended level of cash by 2015.

Impact on Sewer Charges The impact on sewer and stormwater user rates resulting from the recommended rate increases are shown below. The proposed user rates were determined by increasing existing rates by the 4.70% each year.

	Sewer (per Ccf)	Stormwater (per ERU)
2011	\$1.21	\$14.66
2012	\$1.27	\$15.35
2013	\$1.33	\$16.07
2014	\$1.39	\$16.83
2015	\$1.46	\$17.62
2016	\$1.46	\$17.62

A comparison of an average residential bill resulting from the recommended user rates with the City's current rate structure to those of the Cities of Racine, West Allis and Wauwatosa is shown in the table below. Also shown are sample bills for one typical "big box" retailer, a brewery company, one typical hospital, one typical church and a city-owned parking structure.

	ERUs	Water Consumption Quarterly (ccf)	Current Quarterly Bill*	Proposed Bill	\$ Change	% Change
Residential						
Current Milwaukee Rates	1	17	\$ 33.72	\$ 35.23	\$ 1.51	4.5%
West Allis	1	17	\$ 33.08			
Racine	1	17	\$ 70.84			
Wauwatosa	1	17	\$ 37.32			
Non-Residential						
Brewery Company	2,085	1,870	\$ 31,359	\$ 32,828	\$ 1,470	4.7%
"Big Box" Retailer	406	1,631	\$ 7,576	\$ 7,925	\$ 350	4.6%
Hospital	259	5,498	\$ 10,004	\$ 10,450	\$ 446	4.5%
Church	115	520	\$ 2,213	\$ 2,315	\$ 102	4.6%
City-owned Parking Structure	14	-	\$ 196	\$ 205	\$ 9	4.7%

* Does not include MMSD charges

Sensitivity Analyses

The financial projections previously presented are based on well developed assumptions relative to projected increases in operating expenses, the cost of anticipated capital expenditures from the City's CIP, and no additional costs being borne by the Sewer Maintenance Fund. This section of the report provides three sensitivity analyses to show the impact on the projected rate increase caused by incorporating different, less favorable, assumptions into the projections. Three sensitivity analyses were performed as follows:

- Capital expenditures are 20% greater than projected in the CIP
- Operating expenditures increase at double the rate used in the previous financial projections
- The cost of curb and gutter replacement is added to this fund

Capital Expenditures Sensitivity Analysis

The capital expenditures used in the previous financial projections are from the City's CIP. The estimated cost of a capital expenditure in a City's Capital Improvement Program (CIP) is typically based on very preliminary data with minimal engineering design and analysis. Often the cost is based on previous similar expenditures adjusted for current market conditions. Because of this, the actual cost can vary from 30% less to 50% more than the amount in the CIP. To show the sensitivity of capital expenditures on rates, the cost of all the anticipated capital expenditures was increased by 20% and the rate increases necessary to meet the recommended minimum cash requirements by 2016 were determined. The projected total capital expenditures in this analysis are \$250,916,400, an increase of \$41,819,400. A comparison of the City's CIP and the CIP increased by 20% is shown in the table below.

Year	CIP Capital Expenditures	CIP Capital Expenditures Plus 20%
2010	\$ 23,937,000	\$ 28,724,400
2011	\$ 38,370,000	\$ 46,044,000
2012	\$ 37,890,000	\$ 45,468,000
2013	\$ 38,900,000	\$ 46,680,000
2014	\$ 34,500,000	\$ 41,400,000
2015	\$ 35,500,000	\$ 42,600,000
2016	\$ -	\$ -
Total	\$ 209,097,000	\$ 250,916,400

All the capital expenditures are assumed to be financed with debt as in the previous financial projections. The sensitivity analysis shows rates would need to be increased by 14.95% in 2011 and then by 2.20% each year from 2012 through 2016 if construction costs are 20% greater than their estimated cost in the City's CIP. A comparison of the rate increases needed, the sewer charges

per Ccf and the stormwater charges per ERU in this analysis with the previously recommended financial projection is shown in the tables below.

Year	Projected Rate Increases With Construction Cost 20% Greater Than CIP Amount	Projected Rate Increases With Construction Cost at CIP Amount
2011	14.95%	4.70%
2012	2.20%	4.70%
2013	2.20%	4.70%
2014	2.20%	4.70%
2015	2.20%	4.70%
2016	2.20%	0.00%

Year	Sewer per CCF With Construction at CIP Amount	Sewer per CCF With Construction Cost 20% Greater Than CIP Amount	Stormwater per ERU With Construction at CIP Amount	Stormwater per ERU with Construction Cost 20% Greater Than CIP Amount
2011	\$ 1.21	\$ 1.33	\$ 14.66	\$ 16.09
2012	\$ 1.27	\$ 1.36	\$ 15.35	\$ 16.44
2013	\$ 1.33	\$ 1.39	\$ 16.07	\$ 16.80
2014	\$ 1.39	\$ 1.42	\$ 16.83	\$ 17.17
2015	\$ 1.46	\$ 1.45	\$ 17.62	\$ 17.55
2016	\$ 1.46	\$ 1.48	\$ 17.62	\$ 17.94

The table below shows an average residential bill for sewer and stormwater services based on the City's current rate structure and the rate structure needed in 2011 if construction costs are 20% greater than the amounts in the CIP. The comparison shows the average residential customer's bill would increase \$4.98 going from \$33.72 to \$38.70. A comparison is also provided with the current bill for a residential customer in the cities of Racine, West Allis and Wauwatosa. For non-residential customers, sample bills for one typical "big box" retailer, a brewery company, one typical hospital, one typical church and a city-owned parking structure are provided.

	ERUs	Water Consumption Quarterly (ccf)	Current Quarterly Bill*	Proposed Bill*	\$ Change	% Change
Residential						
Current Milwaukee Rates	1	17	\$ 33.72	\$ 38.70	\$ 4.98	14.8%
West Allis	1	17	\$ 33.08			
Racine	1	17	\$ 70.84			
Wauwatosa	1	17	\$ 37.32			
Non-Residential						
Brewery Company	2,085	1,870	\$ 31,359	\$ 36,034	\$ 4,676	14.9%
"Big Box" Retailer	406	1,631	\$ 7,576	\$ 8,702	\$ 1,126	14.9%
Hospital	259	5,498	\$ 10,004	\$ 11,480	\$ 1,476	14.8%
Church	115	520	\$ 2,213	\$ 2,542	\$ 329	14.9%
City-owned Parking Structure	14	-	\$ 196	\$ 225	\$ 29	14.9%

Does not include MMSD charges

Operating Expenditures Sensitivity Analysis

The operating expenditures used in the recommended financial projections were projected to grow from 1.0% - 6.0% each year. While these growth rates were based on historical trends, they are still projections that may or may not reflect the actual growth of these expenditures going forward. To show the sensitivity of operating expenditures, a financial projection was made assuming the growth in these was double the amount initially projected. The projected rates of growth are shown in the table below.

Environmental Decision Unit	Projected Growth Recommended Financial Projection	Projected Growth at Double the Recommended Financial Projection
Net Salaries & Wages	4.00%	8.00%
Fringe Benefits	6.00%	12.00%
Operating Expenditures	1.00%	2.00%
Equipment	1.00%	2.00%
Underground Decision Unit		
Net Salaries & Wages	4.0%	8.00%
Fringe Benefits	6.0%	12.00%
Operating Expenditures	3.0%	6.00%
Equipment	1.0%	2.00%

The sensitivity analysis shows rates would need to be increased by 5.95% in 2011 through 2015 and then by 1% in 2016 if operating costs grow at double the rate projected in the recommended financial projection. A comparison of the rate increases needed, the sewer charges per Ccf and the stormwater charges per ERU in this analysis with the previously recommended financial projection is shown in the tables below.

Year	Projected Rate Increases With Operating Cost Growth Double the Recommended Financial Projection Level	Projected Rate Increases With Operating Cost Growth at the Recommended Financial Projection Level
2011	5.95%	4.70%
2012	5.95%	4.70%
2013	5.95%	4.70%
2014	5.95%	4.70%
2015	5.95%	4.70%
2016	1.00%	0.00%

Year	Sewer per CCF Operating Cost Growth at Recommended Financial Projection Level	Sewer per CCF Operating Cost Growth at Double the Recommended Financial Projection Level	Stormwater per ERU Operating Cost Growth at the Recommended Financial Projection Level	Stormwater per ERU Operating Cost Growth at Double the Recommended Financial Projection Level
2011	\$ 1.21	\$ 1.23	\$ 14.66	\$ 14.83
2012	\$ 1.27	\$ 1.30	\$ 15.35	\$ 15.71
2013	\$ 1.33	\$ 1.38	\$ 16.07	\$ 16.64
2014	\$ 1.39	\$ 1.46	\$ 16.83	\$ 17.63
2015	\$ 1.46	\$ 1.55	\$ 17.62	\$ 18.68
2016	\$ 1.46	\$ 1.57	\$ 17.62	\$ 18.87

The table below shows an average residential bill for sewer and stormwater services based on the City's current rate structure and the rate structure needed in 2011 if operating costs grow at double the rate projected in the recommended financial projection. The comparison shows the average residential customer's bill would increase \$2.02 going from \$33.72 to \$35.74. A comparison is also provided with the current bill for a residential customer in the cities of Racine, West Allis and Wauwatosa. For non-residential customers, sample bills for one typical "big box" retailer, a brewery company, one typical hospital, one typical church and a city-owned parking structure are provided.

	ERUs	Water Consumption Quarterly (ccf)	Current Quarterly Bill*	Proposed Bill*	\$ Change	% Change
Residential						
Current Milwaukee Rates	1	17	\$ 33.72	\$ 35.74	\$ 2.02	6.0%
West Allis	1	17	\$ 33.08			
Racine	1	17	\$ 70.84			
Wauwatosa	1	17	\$ 37.32			
Non-Residential						
Brewery Company	2,085	1,870	\$ 31,359	\$ 33,220	\$ 1,861	5.9%
"Big Box" Retailer	406	1,631	\$ 7,576	\$ 8,027	\$ 451	6.0%
Hospital	259	5,498	\$ 10,004	\$ 10,604	\$ 600	6.0%
Church	115	520	\$ 2,213	\$ 2,345	\$ 132	6.0%
City-owned Parking Structure	14	-	\$ 196	\$ 208	\$ 12	5.9%

Does not include MMSD charges

Cost of Curb and Gutter Replacement is Added to Sewer Maintenance Fund

The last sensitivity analysis evaluates the impact on rates of adding the cost of curb and gutter replacement to the Sewer Maintenance Fund. Curb and gutter channel stormwater runoff to the catch basins and are an integral part of the stormwater collection system so there is logic in adding the replacement cost to this fund. The cost of curb and gutter replacement is projected by the City to be \$739,000 in 2011. These costs were increased by 3% each year for inflation based on the construction cost index portion developed by American City and County. The projected costs for each year are shown in the table below.

Year	Projected Curb & Gutter Replacement Cost
2011	\$ 739,200
2012	\$ 761,376
2013	\$ 784,217
2014	\$ 807,744
2015	\$ 831,976
2016	\$ 856,935

It was assumed these costs would be paid for from stormwater charges. The sensitivity analysis showed that stormwater charges would need to be increased 8.00% in 2011 and 4.70% in 2012 through 2015 to provide the revenue needed. The increase in sewer charges would not be affected. A comparison of the rate increases needed, the sewer charges per Ccf and the stormwater charges per ERU in this analysis with the previously recommended financial projection is shown in the tables below.

Year	Stormwater Projected Rate Increases Per ERU with Curb & Gutter Replacement Cost Added	Stormwater Projected Rate Increases Per ERU without Curb & Gutter Replacement Cost Added	Sewer Projected Rate Increases Per Ccf
2011	8.00%	4.70%	4.70%
2012	4.70%	4.70%	4.70%
2013	4.70%	4.70%	4.70%
2014	4.70%	4.70%	4.70%
2015	4.70%	4.70%	4.70%
2016	0.00%	0.00%	0.00%

Year	Sewer per CCF	Stormwater per ERU With Curb & Gutter Cost Added	Stormwater per ERU Without Curb & Gutter Cost Added
2011	\$ 1.21	\$ 15.12	14.66
2012	\$ 1.27	\$ 15.83	15.35
2013	\$ 1.33	\$ 16.57	16.07
2014	\$ 1.39	\$ 17.35	16.83
2015	\$ 1.46	\$ 18.17	17.62
2016	\$ 1.46	\$ 18.17	17.62

The table below shows an average residential bill for sewer and stormwater services based on the City's current rate structure and the rate structure needed in 2011 if curb and gutter replacement costs are added to the Sewer Maintenance Fund. The comparison shows the average residential customer's bill would increase \$1.97 going from \$33.72 to \$35.69. A comparison is also provided with the current bill for a residential customer in the cities of Racine, West Allis and Wauwatosa. For non-residential customers, sample bills for one typical "big box" retailer, a brewery company, one typical hospital, one typical church and a city-owned parking structure are provided.

	ERUs	Water Consumption Quarterly (ccf)	Current Quarterly Bill*	Proposed Bill	\$ Change	% Change
Residential						
Current Milwaukee Rates	1	17	\$ 33.72	\$ 35.69	\$ 1.97	5.8%
West Allis	1	17	\$ 33.08			
Racine	1	17	\$ 70.84			
Wauwatosa	1	17	\$ 37.32			
Non-Residential						
Brewery Company	2,085	1,870	\$ 31,359	\$ 33,788	\$ 2,429	7.7%
"Big Box" Retailer	406	1,631	\$ 7,576	\$ 8,112	\$ 536	7.1%
Hospital	259	5,498	\$ 10,004	\$ 10,569	\$ 565	5.6%
Church	115	520	\$ 2,213	\$ 2,368	\$ 155	7.0%
City-owned Parking Structure	14	-	\$ 196	\$ 212	\$ 16	8.0%

Does not include MMSD charges

Summary of Sensitivity Analyses

The percentage increase in rates needed each year varies between the sensitivity analyses based on the cash flow needs in the fund making it difficult to compare them on this basis. However, the total revenue needed over the planning period does provide a basis for evaluation. Of the three sensitivity variables evaluated, operating costs increasing at double the rate projected would require the most revenue at \$364.1 million over the planning period. Capital expenditures 20% greater than planned would require the second most revenues at \$363.1 million and adding the cost of curb and gutter replacement to the fund would require the least at \$354.3 million. The revenue required for each sensitivity analysis is shown below.

Year	Operating Cost Increase at Double the Rate	Capital Expenditures Are 20% Greater	Cost of Curb and Gutter Replacement Added to Fund
2011	\$ 54,503,759	\$ 59,021,103	\$ 54,612,778
2012	\$ 56,925,339	\$ 59,511,433	\$ 56,393,093
2013	\$ 59,560,982	\$ 60,113,673	\$ 58,334,083
2014	\$ 62,393,492	\$ 60,795,071	\$ 60,413,042
2015	\$ 65,367,628	\$ 61,490,781	\$ 62,572,346
2016	\$ 65,317,913	\$ 62,156,399	\$ 61,929,953
Total	\$ 364,069,114	\$ 363,088,459	\$ 354,255,295

7. Conclusions and Recommendations

This study was undertaken to review and analyze the City's Sewer Maintenance Fund to determine the appropriate rate structure needed to pay for anticipated operating expenditures, to provide for anticipated capital improvements, to provide operating cash flow, and to ensure an adequate level of cash reserves. In addition, recommendations are provided regarding current budgeting procedures in an effort to more closely align the budgeted expenditures, primarily capital expenditures, with the financial statements.

In addition to the financial review and rate recommendations for the Sewer Maintenance Fund, the scope of work for this project included the reconciliation of the City's Comprehensive Annual Financial Report (CAFR) with the budget expense and revenue statements. The need for this reconciliation is to enable the managers of the Sewer Maintenance Fund to understand the reasons for differences between the budget documents and the City's CAFR.

The conclusions were determined as a result of this study and the financial projections prepared. They are set forth in the Executive Summary at the front of this study.

The full model which has been constructed to project revenues, expenses, balances of the SMF, and to forecast rate increase requirements has been provided to the City staff. This will enable the City to update forecasts and to vary assumptions to reflect emerging patterns and new conditions over time. As the City uses it, please note that models are representations of expectations, but don't provide precise answers. Forecasts, whether made by models or by human judgment are subject to subsequent events and assumptions that can change over time, and will cause the results to vary from current expectations. Therefore, the City will need to monitor the performance of the utility fund and make any necessary adjustments based upon actual performance and on the actual construction costs of the anticipated capital improvements.