## SEWER RATE COST OF SERVICE STUDY

# SEWER DEPARTMENT CITY OF BLOOMINGTON, ILLINOIS



March 4, 2008

AB&H, A Donohue Group 125 S. Wacker Drive, Suite 1850 Chicago, IL 60606

Phone: 312-236-9147 Fax: 312-236-0692 www.abh-donohue.com

### TABLE OF CONTENTS

Chapter	Title	<u>Pages</u>
	Letter of Transmittal	1/1-3
I	Introduction	I/1-2
II	Present Rates and Format	II/1
III	Billable Sewage Flows and Revenues	III/1-3
IV	Sewer Fund Revenue Requirements	IV/1-4
V	Design of Wastewater Charges	V/1-4

March 4, 2008

Mr. Douglas G. Grovesteen, P.E. Director of Engineering and Water City of Bloomington 401-1/2 S. East Street Bloomington, IL 61701

Re: Sewer Rate Study

Dear Mr. Grovesteen:

In accordance with our Contract Agreement, we have examined the records of the Sewer Fund in order to develop an opinion of adequate sewer service rates for the future to the year 2012.

Adequate rates are required to maintain the financial integrity of the sewerage system which provides service to the City of Bloomington.

Before proceeding with the main discussion of our study, we will briefly summarize our principal conclusions and primary recommendations which are as follows:

1. Sewer accounts and billed sewage volumes in units of 100 cubic feet (CCF) are projected to increase as follows:

	2007-2008	<u>2008-2009</u>	<u>2009-2010</u>	2010-2011	2011-2012
Fiscal Year (FY)					
		(Thou	sands of Doll	ars)	
Sewer Accounts:	27,836	28,316	28,796	5 29,276	29,756
Net Billed Sewage: (CCF in thousands)	2,964	2,995	3,026	3,057	3,088

2. The current sewer rate is \$0.68 per hundred cubic feet (CCF) and the current minimum monthly charge for sewer services is \$2.72.

3. Billed sewage revenues based on the current rate are projected to increase as follows:

Fiscal Year (FY)	<u>2007-2008</u>	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>
		(Thou	sands of Dol	lars)	
Billed Sewage Revenues	\$2,016	\$2,037	\$2,058	\$2,079	\$2,100

4. Sewer Fund revenue requirements consisting of operation and maintenance expense (O&M), infrastructure fee, administrative fee, debt service, transfers to equipment replacement fund, transfers to sewer depreciation fund, and capital improvement projects (CIP) are projected to increase as follows:

Fiscal Year (FY)	2007-2008	2008-2009	2009-2010	<u>2010-2011</u>	2011-2012		
	(Thousands of Dollars)						
O&M Expense	\$ 1,543	\$1,583	\$1,627	\$1,673	\$1,722		
Infrastructure Fee	26	27	27	28	29		
Administrative Fee	116	120	123	127	131		
Debt Service	851	848	846	850	418		
Equip. Repl. Fund	157	176	162	141	132		
Sewer Depr. Fund	<u>300</u>	<u>300</u>	300	<u>300</u>	<u>300</u>		
Total Revenue	\$2,993	\$3,054	\$3,085	\$3,119	\$2,732		
Requirements							

5. Sewer revenues under the present rates are projected to be deficient to meet projected revenue requirements as follows:

Fiscal Year (FY)	<u>2007-2008</u>	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>	2011-2012	
	(Thousands of Dollars)					
Revenues	\$2,016	\$2,037	\$2,058	\$2,079	\$2,100	
Revenue Requirements	\$2,993	\$3,054	\$3,085	\$3,119	\$2,732	
Net Income (Loss)	(\$977)	(\$1,017)	(\$1,027)	(\$1,040)	(\$632)	
Retained Earnings	(\$4,742)	(\$5,759)	(\$6,786)	(\$7,826)	(\$8,458)	
End of Year						

- 6. Two options were evaluated to fund the anticipated future revenue requirements through Fiscal Year 2011-2012. Option A considered an annual rate increase beginning in May 2008 through the study period (2011-2012). Option B considered a one time rate increase in May 2008. The increases in both options were designed to avoid the budget deficit increasing beyond present levels at the end of the study period.
- 7. Option A is the recommended option. Under Option A, a 25% uniform annual commodity rate increase will be instituted in order to fund the anticipated future revenue requirements and avoid the projected deficits which would occur under the present rates for Fiscal Years 2007-2008 through 2011-2012. A new rate of \$0.85 per hundred cubic feet (CCF) would be implemented May 1, 2008. The quantity charge for a given volume of sewage under the proposed new rate will increase by 25% (\$0.17/CCF) over the

current \$0.68 per CCF. In May of 2009, the rate would increase by 25% to \$1.06 per CCF. In May of 2010 the rate would increase by 25% to \$1.33 per CCF. In May of 2011, the proposed rate would be approximately 20% over Fiscal Year 2010-2011 rate at \$1.60.

It is also recommended that the minimum monthly billing charge be decreased from \$2.72 to \$1.50, May 1, 2008 in order to soften the impact of the commodity rate increase on low volume customers. The minimum monthly billing charge under the new proposed minimum will decrease by approximately 45% (\$0.77 per month). The new monthly billing charge will not include payment for metered volume usage.

Sewer revenues under the recommended rates for Option A are projected as follows:

Fiscal Year (FY)	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
		(Thousa	ands of Doll	lars)	
Revenues	\$2,016	\$3,056	\$3,734	\$4,587	\$5,476
Revenue Requirements	\$2,993	\$3,054	\$3,085	\$3,119	\$2,732
Net Income (Loss)	(\$977)	\$2	\$649	\$1,468	\$2,745
Retained Earnings	(\$4,742)	(\$4,740)	(\$4,091)	(\$2,623)	\$122
End of Year					

In completing this study, we would like to acknowledge the excellent cooperation received from Kevin Kothe of the City of Bloomington. His assistance in providing information, records and data was essential in arriving at a recommendation for an increase in sewer rates which we believe will provide adequate financial resources to meet anticipated needs of the sewer system while maintaining costs to the citizens of Bloomington at a reasonable level.

Respectfully submitted,

AB&H, A Donohue Group

William G. Nyanue, P.E.

James E. Hagley, P.E.

#### CHAPTER I

#### INTRODUCTION

#### SEWER FUND

The City of Bloomington Sewer Fund was established to provide funds to maintain the City's storm and sanitary wastewater collection system. It is an enterprise fund of the City, which is intended to be self-supporting through the implementation of user charges.

The City of Bloomington collection system consists of sanitary, storm, and combined sewers which provide drainage for the area within the City limits. The City does not currently derive significant revenues from sewer customers outside their City limits and it is not anticipated that this situation will change in the future.

Wastewater from the City of Bloomington's collection system is discharged to interceptor sewers owned and maintained by the Bloomington and Normal Water Reclamation District. The wastewater is then transported to the treatment plant which is maintained and operated by the Water Reclamation District.

#### RATE STUDY

A basic principle in the successful operation of a wastewater system is that sufficient funds should be generated, through charges for the service provided, to sustain a self-supporting and self-perpetuating utility. In order to accomplish this, revenues generated by rates of municipally-owned systems should cover:

- a) Operation and maintenance expense
- b) Principal and interest payments on outstanding debt
- c) System improvements and replacement
- d) Other expenses directly attributable to the system

In other words, revenues should cover the total cost of providing service and, in addition, customers' wastewater rates should be proportional to the service received. It is also important that the utility be able to show sufficient revenue to maintain a sound financial condition in the

event that it is necessary to secure additional capital to meet current and future needs through the sale of bonds or by other capital producing measures.

The principles on which this Rate Study has been prepared are in accordance with generally recognized engineering principles and practices, as presented in "Financing and Charges for Wastewater Systems", published by the American Public Works Association (APWA), American Society of Civil Engineers (ASCE), and Water Environment Federation (WEF). The publication is intended as a general overview of the current practices and procedures that should be considered for financing and developing charges for wastewater collection and treatment systems.

Currently the City of Bloomington has a uniform rate structure. Under a uniform rate structure the charge per each unit of volume is the same regardless of the quantity of usage. This structure is a generally accepted practice considered to comply with existing laws and regulations of federal and state governmental agencies. These regulations are interpreted as requiring a uniform rate as a condition for various types of grants and financing assistance for sewerage and wastewater treatment facilities.

In this rate study, a uniform rate will continue to be utilized as a basis for determination of appropriate charges for providing sewer service to the City's wastewater customers.

While sewer rates based on the strength of the sewage discharged to the system are frequently applicable for agencies providing treatment, such strength charges are not required for the City of Bloomington since it does not treat the sewage, but provides conveyance from the City's sewer customers to the Bloomington & Normal Water Reclamation District.

#### **CHAPTER II**

#### PRESENT RATES AND FORMAT

The current Bloomington Sewage System Rates were established May 8, 1996. The rates are volumetric charges for sewage contributed to the system by each sewer customer, based on their water meter reading. The charges are billed monthly. The current Bloomington Sewage System rate is \$0.68 per one hundred cubic feet. The rate structure also provides for a minimum monthly charge in the event of very little or no water consumption. It currently includes up to four CCF of metered usage. The current minimum monthly charge is \$2.72. Under the uniform rate format, charges per each unit of volume are the same regardless of the total quantity of sewage a customer contributes to the system.

The City collects the sewer charges for the Bloomington and Normal Water Reclamation District. The current Water Reclamation District rate is \$0.82 per one hundred cubic feet and is also based on the metered water reading. The Water Reclamation District has a minimum monthly charge of \$2.20. These are separate charges shown on the current sewer bills and are not considered as a part of this study.

The current Bloomington Sewer charges do not differentiate for the various meter sizes of connections to the system.

#### CHAPTER III

#### BILLABLE SEWAGE FLOWS AND REVENUES

The development of proposed sewage rates to provide for future needs are based upon the experience and trends of past years and adjusted for any changes currently anticipated. For this reason, attention must be paid to events or deviations from past trends which indicate revenues and/or expenses may not follow past experience. In addition, sewer charges based upon water sales will be subject to year to year variations in water usage due to temperature, precipitation, and/or economic conditions that occur or exist in that particular year. However, for the purposes of projecting expected flows and revenues, we are unaware of any pending special circumstances or significant changed conditions which would be expected to create special needs, consumption reductions, or expenses. With that understanding the following estimates are developed.

#### **SEWAGE FLOWS**

Estimates of future sewage discharges were developed after an examination of revenues and customer records provided by the City of Bloomington for the past four years. Billed sewage volumes were estimated based on historical water consumption.

Shown on Table 1 is a summary of the sewer customers served by the City of Bloomington. In Fiscal Year 2003-2004 there were approximately 23,500 customers of the sewer system. The number of customers served by the city of Bloomington sewer system increased to approximately 25,500 in Fiscal Year 2004-2005 and 26,900 in 2005-2006, and budgeted to increase to 27,400 in 2006-2007. While the average increase from 2003-2004 to 2005-2006 has been approximately 1,700 new customers per year, the rate of future growth has been reduced due to the current economic conditions. New customers are projected to be added to the system at a rate of 480 per year, for the five year study period.

To project the volume of billable sewage for the future, the quantity per customer was analyzed. The quantity is estimated by deducting the total volume of deduct meter flows from

the gross bill volume and dividing the result by the number of sewer customers. The quantity per customer has been irregular from year to year as expected due to reasons previously cited. The quantities for the last three years have varied from a high of 118 CCF per year to a low of 96 CCF per year.

The forecast of total net billable sewage in units of 100 cubic feet was secured by multiplying the average volume per customer by the forecasted number of customers; the average volume and number of customers having been determined as indicated above. Forecasts of net billed sewage volumes per customer as summarized on Tables 2, 5A, and 5B range from 104 to 106 CCF per year.

#### **REVENUE**

A Rate Study forecast should be conservative with regard to customer billable sewage volumes and the resulting revenue. It is more desirable to have a surplus of funds due to conservative forecasts than to have a deficit due to rates that have been developed on overly optimistic forecasts. Any surplus revenues can be held to defer future rate increases while deficits can impact the necessary programs of the system.

The 2003-2004 records indicate that there are approximately 23,500 customers of the Bloomington Sewer Fund, which have a total net billed sewage of approximately 225 million cubic feet with an average yearly volume per account of 96 hundred cubic feet. In Fiscal Year 2003-2004, revenue from bills rendered was \$2,209,999 resulting from a rate of \$0.68 per 100 cubic feet and a minimum monthly billing charge of \$2.72. Table 1 includes a summary of this information as well as similar information for 2004-2005 and 2005-2006.

Table 2 illustrates that the present sewage rate will not generate adequate revenues to cover the forecasted Revenue Requirements for future Fiscal Years, based upon projected net billable volumes. Chapter IV describes in detail the derivation of projected Revenue Requirements and Revenue Sources. The projected figures are summarized for the study years of 2007 to 2012 in Tables 2, 5A, and 5B for convenience and comparisons. During the Fiscal

Years from 2003 to 2007 the Bloomington Sewer Fund had a net deficit in each of the four years based upon fully funded depreciation. The Sewer Fund is projected to incur deficits in future years based upon the current rate and usage patterns.

#### **CHAPTER IV**

#### SEWER FUND REVENUE REQUIREMENTS

Revenue requirements need to be adequate to meet all financial obligations of the City of Bloomington Sewer Fund which consists of the following:

- 1. Operation and Maintenance Expense
- 2. Capital Improvements from Revenue
- 3. Debt Service
  - a. Retirement of Bond Principal
  - b. Interest on Bonds
- 4. Infrastructure and Administrative Fees
- 5. Equipment Replacement Fund
- 6. Sewer Depreciation Fund

#### OPERATION AND MAINTENANCE EXPENSE

Operation and Maintenance Expense is the cash outlay required annually for the operation and maintenance of the sewage collection system: laterals, interceptors, and lift stations. There are no treatment expenses because the sewage is processed by the Bloomington-Normal Water Reclamation District, which is billed to customers as a separate item.

The operation and maintenance expenses of the Sewer Fund include the following:

- 1. Personnel Expenses
- 2. Other Professional and Technical Services
- 3. Vehicle Maintenance
- 4. Replacement/Maintenance Equipment
- 5. Sewer Maintenance
- 6. Insurance
- 7. Travel and Training
- 8. Other Contractual Services
- 9. Postage and Supplies
- 10. Utilities

Table 3 is a summary of the Sewer Fund's revenues and expenses as shown on the Sewer Fund Financial statements for the past four Fiscal Years.

Actual operating expenses for the past four years and projected and proposed budgeted operating expense for Fiscal Years 2007-2008 through 2011-2012 were provided by the City of Bloomington. Expenses are estimated to range from approximately \$2,993,000 in 2007-2008 to \$2,732,000 in 2011-2012 as summarized on Table 4.

#### INFRASTRUCTURE AND ADMINISTRATIVE FEES

Infrastructure and Administrative revenue requirements are estimated at 1% and 4.5%, respectively of projected revenues.

#### **GENERAL OBLIGATION BOND**

The City of Bloomington Sewer Fund presently contributes a portion of revenue for the retirement of Bond Issues utilized for sewer improvements. Debt service figures were provided by the Finance Department. Principal and interest attributed to the sewer portion of the 1995 General Obligation Bonds are tabulated below for Fiscal Years 2002-2003 through 2010-2011.

In 2007, the City of Bloomington is planning to issue a general obligation bond of \$6,000,000 at 2.4% interest over 24 years. The estimated principal and interest attributed to the 2007 bond issue are tabulated below for Fiscal Years 2008-2009 through 2011-2012.

#### TO GENERAL FUND ANNUAL BOND AND INTEREST PAYMENTS

Fiscal Year	1995 G.O. Bond P & I	2007 Bond Issue P & I	Total P & I
2002-2003	\$422,708	\$0.00	\$422,708
2003-2004	\$652,324	\$0.00	\$652,324
2004-2005	\$420,155	\$0.00	\$420,155
2005-2006	\$422,334	\$0.00	\$422,334
2006-2007	\$423,442	\$0.00	\$423,442
2007-2008	\$433,143	\$418,063	\$851,206
2008-2009	\$430,406	\$418,063	\$848,469

Fiscal Year	1995 G.O. Bond P & I	2007 Bond Issue P & I	Total P & I
2009-2010	\$427,350	\$418,063	\$845,413
2010-2011	\$431,622	\$418,063	\$849,685
2011-2012	\$0.00	\$418,063	\$418,063

#### CAPITAL IMPROVEMENT PROGRAM

The capital improvement program is funded from the Sewer Depreciation Fund and the Equipment Replacement Fund. These funds are cash requirements because balances have to be maintained in the funds to cover routine replacements and emergency repairs of assets. When there are shortfalls in revenues, contributions to the Depreciation Fund can be held in abeyance. However, the system must be maintained and any reduction in funds available for this purpose should be recognized as a deferral, at best, rather than a savings and the costs will eventually be incurred.

Budget figures for Equipment Replacement Fund contributions during Fiscal Years 2002-2003 through 2011-2012 were provided by the City of Bloomington.

Budgeted and projected figures for Sewer Depreciation Fund contributions during Fiscal Years 2006-2007 through 2011-2012 were also provided by the City of Bloomington. As presented in Table 4, Sewer Depreciation Funding of \$300,000 per year was established for Fiscal Years 2007-2008 through 2011-2012.

#### REVENUE REQUIREMENT SUMMARY

As summarized on Table 4, total revenue requirement of the City of Bloomington is projected to increase from approximately \$2,313,000 in 2005-2006, the last year of historical data, to \$2,732,000 in 2011-2012.

#### REVENUE SOURCES

The estimated sewer fund revenues summarized on Table 2 were calculated applying the present sewer rate per hundred cubic feet of sewage to the forecast of future total customers and sewage volume per customer previously developed in Chapter III.

The difference between the Revenue Requirement and Projected Revenue clearly indicates the need for a sewage rate increase as soon as feasible. As shown on Table 2, there is a deficiency of approximately \$977,000 in 2007-2008 between Revenue Requirements and anticipated Revenue generated. The deficit averages approximately \$1,015,000 per year through 2010-2011. In 2012, the deficit is projected to be \$632,000. The total accumulative deficit by Fiscal Year 2011-2012 is projected to be \$8,458,000.

For the purposes of revenue projections, interest earnings, miscellaneous revenues, and revenue from outside customers are assumed to be zero since they are relatively small, unpredictable as a future source, and variable in magnitude.

#### CHAPTER V

#### **DESIGN OF WASTEWATER CHARGES**

To establish a utility rate it is necessary to define a unit of service and determine the cost for that service. This requires identifying all applicable costs and how to proportion those costs fairly among the users of the system. In the case of Bloomington's Sewer Fund which only transports sewage to the Bloomington-Normal Reclamation District interceptors, the basic unit of service utilized in the past and suitable for the future is a hundred cubic feet (CCF) of sewage. The number of units is determined by the customer's metered water usage. Further, since the system does not have a significant number of outside customers, the costs can be appropriately allocated on a cash rather than a utility basis. Since the owners of the system (Bloomington residents) are also the users, any rate of return on the value of the system would be meaningless. The possible exception to this approach would be if Bloomington were to provide service to outside users.

#### COST OF SEWERAGE SERVICE CASH BASIS

The revenues to be secured from Sewer Fund customers, on a cash basis should at a minimum equal Sewer Fund revenue requirements less other income. Other income to the Sewer Fund historically has been interest income and miscellaneous revenues. Other income cannot be considered a reliable source of funding, due to the uncertainty from year to year, and is not considered in the estimation of revenue.

As shown on Tables 4, 5A, and 5B, the customer total revenue requirement for Fiscal Years 2007-2008 through 2011-2012 will range from a low of \$2,732,000 to a high of \$3,119,000.

The Sewer Fund is projected to post deficits for Fiscal Years 2007-2008 through 2011-2012. If shortfalls in revenues are allowed to continue, the quality of service supplied by the

sewer fund may deteriorate. As shown on Table 2, a rate of \$0.68 per CCF would yield deficits to retained earnings in each of the next five years.

#### OPTION A – 25% ANNUAL INCREASE IN COMMODITY RATE

As shown in Table 5A, it is projected that the sewage rate will have to be increased by 25% per year for the next three years and 20% for the fourth year to yield sufficient funds to maintain the system to the end of the Fiscal Year 2011-2012. This increase in rate would result in retained earnings of \$122,000 at the end of 2011-2012 as compared to a deficit in retained earnings of \$8,458,000 under the present rate. Revenues generated by the rates should be reviewed annually to insure sufficient funds to properly operate the sewerage system.

#### OPTION B – 79% AVERAGE INCREASE IN COMMODITY RATE

As shown in Table 5B, it is projected that the sewage rate will have to be increased by an average of 79% to yield sufficient funds to maintain the system to the end of the Fiscal Year 2011-2012. This increase in rate would result in retained earnings of \$203,000 at the end of 2011-2012 as compared to a deficit in retained earnings of \$8,458,000 under the present rate.

MINIMUM MONTHLY BILLING CHARGE

The monthly service availability charge or minimum monthly bill should recover all expenses related to servicing accounts which do not contribute sewage to the sewage system. Currently the minimum bill is equal to a volumetric charge of 400 cubic feet of usage per month. The commodity-based minimum charge is being discontinued by the City and is being replaced by a non-commodity-based minimum monthly billing charge. The new rate will be adjusted by the City to cover expenses related to servicing sewer Fund accounts.

The proposed minimum monthly charge of \$1.50 for Fiscal Years 2008-2009 through 2011-2012 is an approximately 45% reduction (\$1.22 per month) over the current minimum monthly charge. The reduction is recommended to minimize the impact on small metered

volume customers. The new minimum monthly charge will be a flat rate that is not tied to monthly sewage volumes.

#### **EXAMPLES OF TYPICAL MONTHLY BILLS**

Following are the estimated costs for sewerage services for a typical residential and commercial customer, based on the current rate of \$0.68 per CCF, and the two rate increase options considered. The bills are estimated for 2008-2009 and 2010-2012. These calculations are based upon the assumed average Bloomington sewer customer with a 5/8" water meter connection.

Type of Customer – Residential and Commercial Average Use - 5/8" Meter @ 11 CCF per month

Average Monthly Bill – 2008-2009	
Current Commodity Rate	
Commodity Charge 11 CCF @ \$0.68	\$ 7.48
Monthly Minimum Billing Charge	\$ 2.72
Total Bill	\$ 10.20
25% Annual Commodity Rate Increase – Option A	
Commodity Charge 11 CCF @ \$0.85	\$ 9.35
Monthly Minimum Billing Charge	<u>\$ 1.50</u>
Total Bill	\$ 10.85
79% Average Commodity Rate Increase	
Commodity Charge 11 CCF @ \$1.22	\$ 13.42
Monthly Minimum Billing Charge	\$ 1.50
Total Bill	\$ 14.92
Average Monthly Bill – 2011-2012	
Current Commodity Rate	
Commodity Charge 11 CCF @ \$0.68	\$ 7.48
Monthly Minimum Billing Charge	\$ 2.72
Total Bill	\$ 10.20
25% Annual Commodity Rate Increase – Option A	
Commodity Charge 11 CCF @ \$1.60	\$ 17.60
Monthly Minimum Billing Charge	\$ 1.50
Total Bill	\$ 19.10

79% Average Commodity Rate Increase
Commodity Charge 11 CCF @ \$1.22
Monthly Minimum Billing Charge
Total Bill \$ 13.42 \$ 1.50

\$ 14.92

TABLE 1 HISTORICAL FLOWS AND REVENUES CITY OF BLOOMINGTON, ILLINOIS

	Historical			Budget	Projection
,	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008[4]
Estimated Gross Billed Volume for metered supply (100 Cu.Ft.) [1]	2,509,481	2,771,744	3,369,054	3,129,300	3,159,800
Deduct Meter Consumption Volume (100 Cu.Ft.)	257,375	174,978	207,233	195,352	195,352
Estimated Net Billed Volume for Sewerage Services (100 Cu.Ft.)	2,252,107	2,596,766	3,161,821	2,933,948	2,964,448
Sewer Fund Customers [2]	23,481	25,453	26,876	27,356	27,836
Sewer Fund Revenues [3]	\$2,209,999	\$2,157,255	\$2,265,642	\$2,500,000	\$2,575,000
Volume (100 Cu.Ft.) Per Customer	96	102	118	107	106
Annual Revenue/Customer	\$94.12	\$84.75	\$84.30	\$91.39	\$92.51
Revenues/100 Cu. Ft.	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68

<sup>[1]</sup> Based on water comsumption in City of Bloomington. Does not include Hudson, Towanda, and Bloomington Township.
[2] Based on number of water accounts in City of Bloomington. Does not include Hudson, Towanda, and Bloomington Township.

<sup>[3]</sup> Does not include interest earnings and miscellaneous revenues.
[4] Projection except deduct meter consumption which is assumed to be same as 2006-2007 figure

TABLE 2 PROJECTED REVENUES AND ADEQUACY OF REVENUES UNDER THE PRESENT RATES CITY OF BLOOMINGTON, ILLINOIS

	Actual	Budget			Projection		
Fiscal Year Ending April 30:	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Estimated Net Billed Volume for Sewerage Services (100 Cu.Ft.)	3,161,821	2,933,948	2,964,448	2,995,248	3,026,148	3,057,048	3,087,948
Sewer Fund Customers	26,876	27,356	27,836	28,316	28,796	29,276	29,756
Sewer Fund Revenue Requirement [1]	\$2,312,755	\$2,503,578	\$2,992,884	\$3,054,019	\$3,084,637	\$3,118,940	\$2,731,552
Present Rate /(100 Cu.Ft.)	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68
Volume (100 Cu. Ft.) Per Customer	118	107	106	106	105	104	104
Annual Revenue/Customer	\$84.30	\$91.39	\$72.42	\$71.93	\$71.46	\$71.01	\$70.57
Estimated Sewer Fund Revenues [3]	\$2,265,642	\$2,500,000	\$2,015,825	\$2,036,769	\$2,057,781	\$2,078,793	\$2,099,805
Net Income (Loss)	(\$47,113)	(\$3,578)	(\$977,060)	(\$1,017,251)	(\$1,026,857)	(\$1,040,148)	(\$631,748)
Retained Earnings Beginning of Year	(\$3,713,996)	(\$3,761,109)	(\$3,764,687)	(\$4,741,747)	(\$5,758,997)	(\$6,785,854)	(\$7,826,001)
Retained Earnings End of Year	(\$3,761,109)	(\$3,764,687)	(\$4,741,747)	(\$5,758,997)	(\$6,785,854)	(\$7,826,001)	(\$8,457,749)

<sup>[1]</sup> O&M Cost and CIP costs
[2] 2005-2006 and 2006-2007 figures assumed to be includeed in Estimated Sewer Fund Revenue figures for 2005-2006 and 2006-2007
[3] Interest earnings and miscellaneous revenues assumed to be zero for 2006 through 2011; 2005-2006 and 2006-2007 figures assumed to include minimi

TABLE 3
SEWER FUND HISTORICAL REVENUES AND EXPENSES
CITY OF BLOOMINGTON, ILLINOIS

	2002-2003	2003-2004	2004-2005	2005-2006
Revenue Requirements				
Salaries	\$683,231	\$734,112	\$660,789	\$678,859
Contractual Services	\$304,219	\$344,087	\$331,088	\$334,092
Comodities	\$48,067	\$109,753	\$124,144	\$64,381
Benefits	\$181,502	\$211,838	\$181,687	\$184,451
Depreciation	\$160,200	\$412,350	\$431,297	\$349,033
Interest Expense	\$422,708	\$652,324	\$420,155	\$422,334
Operating Transfers	\$597,697	\$459,194	\$126,697	\$279,605
Debt Service _	\$0	\$0	\$0	\$0
Total Revenue Required	\$2,397,624	\$2,923,658	\$2,275,857	\$2,312,755
Revenues				
Charges for Services	\$2,210,677	\$2,209,999	\$2,157,255	\$2,265,642
Interest	\$0	\$0	\$0	\$0
Miscellaneous	\$1,567	\$0	\$3,419	\$12,370
Total Revenue	\$2,212,244	\$2,209,999	\$2,160,674	\$2,278,012
Extraordininary Items	\$0	\$0	\$0	\$0
Net Income (Loss)	(\$185,380)	(\$713,659)	(\$115,183)	(\$34,743)
Retained Earnings				
Beginning of Year	(\$2,712,144)	(\$2,897,524)	(\$3,611,183)	(\$3,726,366)
Retained Earnings End of Year	(\$2,897,524)	(\$3,611,183)	(\$3,726,366)	(\$3,761,109)

TABLE 4
SEWER FUND HISTORICAL AND PROJECTED EXPENSES
CITY OF BLOOMINGTON, ILLINOIS

								PROJECTION		
							Proposed	111000011011		
	2002-2003	HISTORI 2003-2004	2004-2005	2005-2006	Budget 2006-2007	Projected 2007-2008	Budget 2008-2009	2009-2010	2010-2011	2011-2012
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Personnel Expenses										
Salaries- Full time	\$597,555	\$660,591	\$602,581	\$619,946	\$698,046	\$700,000	\$721,000	\$742,630	\$764,909	\$787,856
Salaries- Part time	\$202	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salaries- Seasonal	\$42,828	\$33,636	\$34,002	\$25,191	\$29,640	\$31,200	\$31,200	\$31,200	\$31,200	\$31,200
Salaries- Overtime	\$41,446	\$39,885	\$24,206	\$33,722	\$34,000	\$34,000	\$34,000	\$34,000	\$34,000	\$34,000
Other Saleries	\$1,200 \$50,316	\$0 \$69,773	\$0 \$56,577	\$0 \$58,611	\$0 \$25,000	\$0 \$60.142	\$0 \$61,946	\$0 \$63,805	\$0	\$07.000
Health Insurance	\$3,012	\$3,401	\$3,499	\$3,336	\$2,730	\$3,865			\$65,719	\$67,690
Dental Insurance Vision Plan	\$652	\$827	\$779	\$766	\$724	\$842	\$3,981 \$867	\$4,100 \$893	\$4,223 \$920	\$4,350 \$948
Health Ins - OSF HMO	\$8.868	\$10,302	\$6,376	\$8,763	\$7,000	\$9,866	\$10,162	\$10,467	\$10,781	\$948 \$11,104
Health Ins - HAMP HMO	\$1,310	\$5,122	\$3,320	\$2,708	\$3,000	\$2,849	\$2,934	\$10,467	\$10,781	\$3,207
Health Ins - 2003 PPO	\$2,487	\$6,249	\$7,520	\$9,653	\$9,000	\$11,539	\$2,934 \$11.885	\$3,023 \$12,242	\$12.609	\$3,207 \$12,987
	\$2,467	\$0,249	\$7,520	\$9,033 \$0	\$1,203	\$1,299	\$1,403	\$1,516	\$1,637	\$1,768
Life Insurance IMRF	\$55,243	\$61.662	\$58,226	\$61,361	\$65.000	\$1,299 \$85,855	\$1,403 \$88.212	\$90,639	\$1,637 \$93,138	\$95,713
FICA	\$52,384	\$53,947	\$44,251	\$42,184	\$50,000	\$58,538	\$60,144	\$61,799	\$63,503	\$65,259
Unemployment Insurance	\$02,384	\$0	\$0	\$42,184	\$2,141	\$2,199	\$2,259	\$2,259	\$2,259	\$2,259
Worker Compensation	\$0	\$0	\$477	-\$3,556	\$2,141	\$0	\$2,239	\$2,259	\$0	\$2,25
Uniform Allowance	\$0	\$500	\$0	\$0,550	\$0	\$0	\$0	\$0	\$0	\$0
Protective Wear	\$1,753	\$55	\$662	\$625	\$1,478	\$1,478	\$1,478	\$1,478	\$1,478	\$1,478
Other Benefits	\$5,477	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Personnel	\$864,733	\$945,950	\$842,476	\$863,310	\$928,962	\$1,003,672	\$1,031,471	\$1,060,051	\$1,089,489	\$1,119,819
	\$004,733	\$940,95U	\$642,476	\$003,310	<b>\$928,902</b>	\$1,003,672	\$1,031,471	\$1,000,051	\$1,089,489	\$1,119,819
Materials, Supplies & Services										
Other Prof & Tech Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle Maintenance	\$165,344	\$159,223	\$150,214	\$179,060	\$157,500	\$157,500	\$157,500	\$157,500	\$157,500	\$157,500
Rep/Mtnce Office & Computer Equip	\$16,901 \$0	\$0 \$0	\$0 \$245	\$0 \$0	\$9,000 \$5,721	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Rep/Mtnce Equip Non-Office	\$31,082	\$56,545	\$245 \$15.009	\$3,755	\$5,721 \$50,000	\$5,721 \$50,000	\$5,721 \$50,000	\$5,721 \$50,000	\$5,721 \$50,000	\$5,721 \$50,000
Sewer Maintenance Other Equipment Mtnce.	\$31,082	\$11,185	\$4,717	\$3,733	\$50,000	\$50,000	\$50,000 \$0	\$50,000	\$0,000	\$50,000
Workers Comp Premium	\$31,109	\$33,259	\$46,563	\$86,111	\$90,000	\$99.000	\$108.900	\$119.790	\$131,769	\$144.946
Liability Insurance	\$25,337	\$27.087	\$37,922	\$7,973	\$9,000	\$9,900	\$10,890	\$11,979	\$13,177	\$14,495
Property/Inland Marine	\$14,034	\$15,003	\$21,004	\$7,973	\$9.000	\$9,900	\$10,890	\$11,979	\$13,177	\$14,495
Auto Liability	\$15,935	\$17,036	\$26,481	\$15,945	\$17,000	\$18,700	\$20,570	\$22,627	\$24,890	\$27,379
Travel	\$301	\$1,102	\$756	\$2,370	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Registration	\$1,050	\$105	\$721	\$1,465	\$650	\$700	\$700	\$700	\$800	\$800
Training	\$0	\$0	\$0	\$690	\$600	\$600	\$600	\$600	\$600	\$600
Other Purchased Serv.	\$9,783	\$23,480	\$27,456	\$28,750	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Postage	\$0	\$65	\$0	\$0	\$13,928	\$13,928	\$13,928	\$13,928	\$13,928	\$13,928
Maint. & Repairs Supplies	\$44,845	\$49,486	\$42,209	\$28,978	\$41,500	\$41,500	\$42,000	\$42,000	\$42,000	\$42,000
Electricity	\$0	\$59,870	\$77,318	\$31,599	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
Water	\$0	\$0	\$29	\$70	\$0	\$0	\$0	\$0	\$0	\$0
Telephone	\$0	\$0	\$30	\$0	\$300	\$300	\$300	\$300	\$300	\$300
Other Supplies	\$3,222	\$332	\$4,558	\$3,734	\$6,250	\$4,250	\$2,500	\$3,000	\$3,000	\$3,000
Sewer Construction	-\$6,657	\$62	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Subtotal Materials, etc.	\$352,286	\$453,840	\$455,232	\$398,473	\$528,449	\$538,999	\$551,499	\$567,124	\$583,862	\$602,164
Subtotal	\$1,217,019	\$1,399,790	\$1,297,708	\$1,261,783	\$1,457,411	\$1,542,671	\$1,582,970	\$1,627,175	\$1,673,351	\$1,721,983
To General - 1% Infrastr Fee	\$24,495	\$25,473	\$23,036	\$23,536	\$37,554	\$25,786	\$26,558	\$27,354	\$28,173	\$29,018
To General - 4.5% Administrative	\$55,114	\$122,308	\$103,661	\$105,911	\$112,661	\$116,036	\$119,512	\$123,093	\$126,781	\$130,579
To General Bond & Interest	\$422,708	\$652,324	\$420,155	\$422,334	\$423,442	\$433,143	\$430,406	\$427,350	\$431,622	\$0
To Sewer Equip Repl Fund	\$518,088	\$149,234	\$0	\$150,158	\$216,651	\$157,185	\$176,510	\$161,602	\$140,950	\$131,909
To Street Sweeping	\$0	\$162,179	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
To Sewer Depreciation	\$160,200	\$412,350	\$299,618	\$349,033	\$255,859	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
To Sewer Fixed Asset Repl.Depreciation 2007 Bond Issue Annual Expense	\$0 \$0	\$0 \$0	\$131,679 \$0	\$0 \$0	\$0 \$0	\$0 \$418,063	\$0 \$418,063	\$0 \$418,063	\$0 \$418,063	\$0 \$418,063
Subtotal	\$1,180,605	\$1,523,868	\$978,149	\$1,050,972	\$1,046,167	\$1,450,213	\$1,471,049	\$1,457,462	\$1,445,589	\$1,009,569
Total	\$2,397,624	\$2,923,658	\$2,275,857	\$2,312,755	\$2,503,578	\$2,992,884	\$3,054,019	\$3,084,637	\$3,118,940	\$2,731,552
	<b>41,007,024</b>	42,020,000	42,210,001	72,012,100	42,000,010	45,005,004	\$0,00 <del>0</del> ,018	40,004,001	φυ, 1 10,040	<b>42,131,332</b>

TABLE 5A PROJECTED REVENUES AND ADEQUACY OF REVENUES UNDER THE PROPOSED RATES ANNUAL 25% INCREASE IN COMMODITY RATE CITY OF BLOOMINGTON, ILLINOIS

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Estimated Net Billed Volume for Sewerage Services (100 Cu.Ft.)	2,964,448	2,995,248	3,026,148	3,057,048	3,087,948
Sewer Fund Customers [1]	27,836	28,316	28,796	29,276	29,756
Sewer Fund Revenue Requirement	\$2,992,884	\$3,054,019	\$3,084,637	\$3,118,940	\$2,731,552
Minimum Monthly Billing Charge (Does not include a usuage charge)	\$0.00	\$1.50	\$1.50	\$1.50	\$1.50
Annual Revenue from Minimum Non-usuage monthly Billing Charge	\$0.00	509,688	518,328	526,968	535,608
Proposed Rate /(100 Cu.Ft.)	\$0.68	\$0.85	\$1.06	\$1.33	\$1.60
Annual Increase in Proposed Rate	0.00%	25.00%	25.00%	25.00%	20.47%
Volume (100 Cu. Ft.) Per Customer	106	106	105	104	104
Revenue/Customer from Commodity Charge	\$72.42	\$89.91	\$111.66	\$138.68	\$166.04
Annual Revenue from Commodity Charge	2,015,825	2,545,961	3,215,282	4,060,142	4,940,717
Estimated Sewer Fund Revenues [2][3]	2,015,825	3,055,649	3,733,610	4,587,110	5,476,325
Net Income (Loss)	(977,060)	1,630	648,973	1,468,170	2,744,773
Retained Earnings Beginning of Year	(3,764,687)	(4,741,747)	(4,740,117)	(4,091,144)	(2,622,974)
Retained Earnings End of Year	(4,741,747)	(4,740,117)	(4,091,144)	(2,622,974)	121,799

Based on water accounts
 Interest earnings and miscellaneous revenues assumed to be zero through 2011
 Includes revenues from minimum monthly billing charge

TABLE 5B PROJECTED REVENUES AND ADEQUACY OF REVENUES UNDER THE PROPOSED RATES AVERAGE 79% INCREASE IN COMMODITY RATE CITY OF BLOOMINGTON, ILLINOIS AVERAGE RATE FOR RATE PERIOD

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Estimated Net Billed Volume for Sewerage Services (100 Cu.Ft.)	2,964,448	2,995,248	3,026,148	3,057,048	3,087,948
Sewer Fund Customers [1]	27,836	28,316	28,796	29,276	29,756
Sewer Fund Revenue Requirement	\$2,992,884	\$3,054,019	\$3,084,637	\$3,118,940	\$2,731,552
Minimum Monthly Billing Charge (Does not include a usuage charge)	\$0.00	\$1.50	\$1.50	\$1.50	\$1.50
Annual Revenue from Minimum Non-usuage monthly Billing Charge	\$0.00	\$509,688	\$518,328	\$526,968	\$535,608
Proposed Rate /(100 Cu.Ft.)	\$0.68	\$1.22	\$1.22	\$1.22	\$1.22
Annual Increase in Proposed Rate	0.00%	79.41%	0.00%	0.00%	0.00%
Volume (100 Cu. Ft.) Per Customer	106	106	105	104	104
Revenue/Customer from Commodity Charge	\$72.42	\$129.05	\$128.21	\$127.39	\$126.61
Annual Revenue from Commodity Charge	2,015,825	3,654,203	3,691,901	3,729,599	3,767,297
Estimated Sewer Fund Revenues [2][3]	2,015,825	4,163,891	4,210,229	4,256,567	4,302,905
Net Income (Loss)	(977,060)	1,109,871	1,125,591	1,137,626	1,571,352
Retained Earnings Beginning of Year	(3,764,687)	(4,741,747)	(3,631,875)	(2,506,284)	(1,368,657)
Retained Earnings End of Year	(4,741,747)	(3,631,875)	(2,506,284)	(1,368,657)	202,695

<sup>[1]</sup> Based on water accounts
[2] Interest earnings and miscellaneous revenues assumed to be zero through 2011
[3] Includes revenues from minimum monthly billing charge