



Meeting Date: 2/24/14
Agenda Item: #6d

Mission Statement

To provide our residents with a safe, friendly, attractive and active community by aggressively pursuing innovative ways to deliver valuable services.

VILLAGE BOARD MEETING STAFF REPORT

REPORT TO: President Burt McIntyre and Village Board of Trustees
REPORT FROM: Chris Haltom, Executive Director of Administrative Services
AGENDA ITEM: Review and take action on Ordinance 2014-03 Regarding Sanitary Sewer User Charge System Rates for 2014

POLICY ISSUE

Should the Village Board increase sewer rates to enable the utility to absorb the Green Bay Metropolitan Sewerage District (GBMSD) rate increase in 2014?

RECOMMENDED ACTION BY VILLAGE BOARD

Village staff recommends the Village Board approve Ordinance 2014-03. If the board decides to approve the ordinance, the following motion could be made:

"I move to approve Ordinance 2014-03 regarding sewer rates for 2014."

POLICY ALTERNATIVE(S)

The Village Board could take the following action:

- Leave rates unchanged by not approving the ordinance.
- Table the item and request additional information.

FISCAL IMPACT:

1. Is There A Fiscal Impact? Yes
2. Is it Currently Budgeted? Yes
3. If Budgeted, Which Line? Sewer Revenues

PRIOR ACTION/REVIEW

July 22, 2013: Board approved new sewer rates for second half of 2013.

BACKGROUND INFORMATION

Each year, the village board adopts new sewer surcharge rates for industrial customers to mirror the rates charged to the sewer utility by the GBMSD. For 2014, the GBMSD is changing their billing method for all customers as they are instituting a new fixed component in the fee structure. The GBMSD also continues to pass through substantial rate increases to their customers due to a large planned plant expansion. The village hired consultant Schenck S.C. to prepare a rate study for the sewer utility to determine the appropriate village sewer charges in 2014.

The consultants from Schenck have informed staff that the existing rates put into place in July 2013 are almost sufficient to cover the rates being charged by the GBMSD; however, the new rate component of a fixed charge will need to be accounted for in 2014 and the GBMSD has lowered the surcharge rates for industrial customers to offset the new fixed fee. The consultants have proposed maintaining higher surcharge rates and increasing all customers' fixed monthly fee by \$0.50.

The new rates are included in the attached Ordinance 2014-03. The ordinance contains both the old rates (noted with a ~~striketrough~~) and proposed new rates for 2014. All customers will see a \$0.50 increase each month in their fixed fee as a result of this change, and the three industrial customers will see an increase in their surcharge rates from 2013.

The sewer rate study prepared by our rate consultants is enclosed for your review.

ATTACHED INFORMATION

- I. Ordinance 2014-03
- II. Sewer Rate Study

ORDINANCE 2014-03

**AN ORDINANCE REPEALING AND RECREATING SECTION 36-326(2) and
36-326(3) OF THE MUNICIPAL CODE OF THE VILLAGE OF HOWARD
FOR USER CHARGE SYSTEM FOR THE SANITARY SEWER UTILITY**

THE VILLAGE BOARD OF THE VILLAGE OF HOWARD, BROWN COUNTY, WISCONSIN,
HEREBY ORDAINS THAT SECTIONS 36-326(2)(a) and 36-326(3) OF THE MUNICIPAL CODE OF THE
VILLAGE OF HOWARD, BE REPEALED AND RECREATED TO READ AS FOLLOWS:

SECTION 1. 36-326(2)(a) POLICY AND USER CHARGE SYSTEM

2. **a. Category A Sewage:** The term "category A" means normal or domestic strength wastewater having the following:
1. Organic concentrations of biochemical oxygen demand (BOD) no greater than 266 milligrams per liter (mg/l), total suspended solids (TSS) no greater than 266 mg/l, phosphorus (P) no greater than ten mg/l, and total Kjeldahl nitrogen (TKN) no greater than 46 mg/l.
 2. Monthly facilities charge for all customers shall be charged ~~\$4.00~~ \$3.50 per month.
 3. Volume charge for all customers shall be charged \$4.40 per 1,000 gallons used each month.

SECTION 2. 36-326 (3) POLICY AND USER CHARGE SYSTEM

3. **Category B Sewage:**
(BOD>266 mg/l, TSS>266 mg/l, P>10 mg/l, TKN>46 mg/l):

Monthly Facilities Charge: Same as for Category A customers

Volume Charge: Same as for Category A customers.

<u>Surcharge per lb. over</u>	2014	2013
<u>Domestic Strength Sewage:</u>	<u>Surcharge</u>	<u>Surcharge</u>
BOD (\$/lb.)	\$.41275	\$.30901
TSS (\$/lb.)	\$.37322	\$.34795
P (\$/lb.)	\$.66558	\$.62393
TKN (\$/lb.)	\$.83747	\$.78995

SECTION 3. All ordinances or parts of ordinances, in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect for sewer invoices billed after February 1, 2014 upon its adoption and publication.

Adopted this 24th day of February, 2014.

Burt R. McIntyre, Village President

Christopher A. Haltom, Village Clerk

Date of Publication: 2/28/2014

VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY

Prepared as of
January 24, 2014

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

TABLE OF CONTENTS

	<u>Page No.</u>
Accountants' Compilation Report	1
Management Information	2 – 5
Summary of Significant Accounting Policies	6 – 7
Schedules	
1 Monthly Bill Comparison	8
2 Revenue Requirement Summary	9
3a Consumer Analysis – Actual Year Ended December 31, 2013	10
3b Consumer Analysis – Forecasted Year Ended December 31, 2014	11
4 Operation and Maintenance Expenses – Actual 2010 – 2013 and Forecasted 2014	12 - 13
5b Analysis of GBMSD Charges – Actual 1999 – 2013 and Forecasted 2014	14 - 15
6 Annual Debt Service	16
7 Summary of Cost of Service and Proposed Rates	17

ACCOUNTANTS' COMPILATION REPORT

Village Board
Village of Howard, Wisconsin

We have compiled the accompanying forecasted Schedules 1 through 8 as identified in the table of contents of the Village of Howard, Wisconsin's Sewer Utility Rate Study for the test year ended December 31, 2013 in accordance with applicable guidelines for a compilation of a financial forecast established by the American Institute of Certified Accountants.

The accompanying schedules present, to the best of management's knowledge and belief, the results of operations of the Village's sewer utility for the forecast period. This report was prepared to support an analysis of sewer rates and should not be used for any other purposes.

A compilation is limited to presenting, in the form of a forecast, information that is the representation of management and does not include evaluation of the support for the assumptions underlying the forecast. We have not examined the forecast and, accordingly, do not express an opinion or any other form of assurance on the accompanying statements or assumptions. Furthermore, there will usually be differences between the forecast and actual results since some assumptions inevitably will not materialize and unanticipated events and circumstances may occur, and the variations may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report, though we are available to do so.

The summarized historical financial information presented with the forecast for comparative purposes was compiled by us from audited financial statements of the Village of Howard, Wisconsin's Sewer Utility for the years ended December 31, 2010 through 2012.

Certified Public Accountants
Green Bay, Wisconsin
January 24, 2014

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

MANAGEMENT INFORMATION

PURPOSE AND SCOPE

In order for a utility to operate effectively and on a self-sustaining basis, rates must be developed sufficient to meet operating and capital needs. The process of developing rates in this report involves three steps:

1. Determine the amount of revenue needed from user rates (revenue requirement as detailed in Schedule 2) to cover the financial needs of the utility's predicted operations. These financial costs include operation and maintenance costs, Green Bay Metropolitan Sewerage Commission ("GBMSD") treatment charges, debt service (principal and interest), and capital improvements of the utility. This includes analyzing prior costs and forecasting expected results for the 2014 test year.
2. Prepare a cost of service study to determine the cost to serve each customer class.
3. Design rates based on the cost of service study and/or other management objectives.

ASSUMPTIONS AND ACCOUNTING POLICIES

The assumptions used in this forecast represent management's estimate of the cost of operations, capital improvements and customer use statistics.

This report includes a summary of significant accounting policies. Except as noted, this forecast applies the same accounting policies as the historical financial statements of the sewer utility.

RESULTS AND CONCLUSIONS

The results of this study are summarized below. Additional schedules are included in this study to support the forecast and rate design.

FORECASTED REVENUE REQUIREMENT

The revenue requirement is based on forecasted expenses for the test year ended December 31, 2014. The test year expenses are based on 2010 through 2013 actual expenses adjusted for inflation and changes as projected by management. The following costs are included in the revenue requirement:

1. Annual operation and maintenance expenses
2. Capital additions financed by available utility resources
3. Annual debt service
4. Green Bay Metropolitan Sewerage District (GBMSD) treatment services and annexation charges

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

MANAGEMENT INFORMATION

FORECASTED REVENUE REQUIREMENT (Continued)

The forecasted revenue requirement is as follows:

	Forecasted 2014 Revenue Required
Operation and maintenance expenses	\$ 529,000
Utility financed capital additions	520,000
Debt service (including GBMSD annexation charges)	80,323
GBMSD billable sewage	1,744,146
Less: Other revenues	<u>(35,000)</u>
Total Revenue Requirement	<u>\$ 2,838,469</u>
Revenue at Current Rates	<u>\$ 3,018,914</u>
Calculated Increase	<u>0.00%</u>

Operation and maintenance, which consist primarily of Village staff and system operating costs have increased less than 2% per year since 2010 and currently represent approximately 18% of the revenue requirement for test year 2014. This indicates the Village is managing their operational costs to inflationary increases.

In test year 2014, the utility needs to reinvest in its infrastructure primarily in the area of lift station replacements. The Village's debt service portion has decreased as system improvements constructed by the utility have been financed by system revenues rather than debt proceeds.

The final component of the revenue requirement is the GBMSD treatment charges which has been increasing over 10% the last couple of years. Because the billing is based on flows, the amount billed each year can fluctuate based on the concentration of flows from industrial customers. The Village's policy is to sample these customers and include a surcharge based on their concentrations in excess of normal strength sewerage. In Schedule 5, the billing parameters can fluctuate significantly but the surcharge billings, based on GBMSD billing parameter rates, will result in increasing revenues to the utility. Accordingly, it is important that the GBMSD billing parameter rates be adjusted annually to pass through these charges to the customer.

Conclusion: The rate increases approved by the Village during 2013 are projected to generate adequate revenues to recover the forecasted 2014 revenue requirement. The Village needs to adjust the billing parameters for the high strength billings to agree with the rates used by the GBMSD, as noted on Schedule 5. In addition, an increase in the fixed charge of \$.50 per month will recover additional costs related to customer service and administrative costs through 2014.

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

MANAGEMENT INFORMATION

COST OF SERVICE STUDY

A cost of service study is an apportionment of the revenue requirements to those wastewater related parameters which cause the expense to be incurred. The study proceeds through the identification of cost by parameters, the calculation of unit costs for each parameter, and the development of rates which, when applied to the sewer utility volume and loadings, will produce the required revenues.

Elements of the revenue requirement are assigned to components related to volume and strength of wastewater. The total revenue requirement has been allocated to six parameters. These are:

- Flow (Volume)
- Strength (BOD, Suspended Solids, Phosphorus and TKN)
- Fixed (Customer Charge)

The cost of service model for this study is based on a model developed for the design of existing rates. This approach is the functional cost procedure, where costs are allocated based on the function performed. The functions are volume (flow), BOD removal and treatment, suspended solids (SS) removal and treatment, Phosphorus removal and treatment, Total Kjeldahl Nitrogen (TKN) removal and treatment, and customer costs.

Volume costs are defined as those costs which vary directly with the rate of flow and consist of the capital and operating costs related to systems facilities sized on the basis of wastewater flow.

Volume costs are allocated to the customer classes based on the volume of wastewater handled by the system. The strength related costs of BOD, SS, Phosphorus and TKN are allocated to the customer classes based in proportion to their estimated contributed strength loadings. Customer costs include the costs associated with billing, collecting and accounting and are distributed to the customer classes based on the number of bills.

RATE DESIGN

The objective of the rate design is to generate the revenue requirement forecasted on Schedule 2. Rates have been designed using the surcharge method.

The surcharge method is the rate method currently used by the utility. This method includes the same volume charge for all customers. In addition to the volume charge, customers exceeding defined thresholds of BOD, SS, phosphorus and TKN are billed added charges to treat these items.

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

MANAGEMENT INFORMATION

RATE DESIGN (Continued)

Proposed rates designed in this study are shown below:

	Existing Rate Structure	Proposed Rates
Volume	\$ 4.40	\$ 4.40
Non-quantity/quality customers		
Quantity/quality customers		
High Strength Rates		
BOD per pound > 266 mg/l	0.30901	0.41275
SS per pound > 266 mg/l	0.34795	0.37322
Phosphorus per pound > 10 mg/l	0.62393	0.66558
TKN per pound > 46 mg/l	0.78995	0.83747
Monthly Fixed Charge	3.50	4.00

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

The Village of Howard, Wisconsin's sewer utility is a separate enterprise fund of the Village. The sewer utility is managed by the Village board and provides wastewater service to properties within the Village. Wastewater treatment is provided by Green Bay Metropolitan Sewerage District. The Village board has authority to set rates for the utility.

REVENUE RECOGNITION

Sewer revenues are recorded for service rendered based on water meter readings, with billings made to customers quarterly.

EXPENSES

Historical operation and maintenance expenses are reported on the accrual basis. Forecasted 2014 expenses are also generally reported on the accrual basis.

PLANT

Additions to and replacements of utility plant are recorded at original cost, which includes material, labor, overhead, and an allowance for the cost of funds used during construction when significant. The cost of renewals and betterments relating to retirement units is added to plant accounts. The cost of property replaced, retired or otherwise disposed of, is deducted from the plant accounts and, generally, together with removal costs less salvage, is charged to accumulated depreciation.

Capital contributions from customers and developers are offset against the cost of plant.

TAXES

Taxes included in the forecast include social security taxes and a portion of the property tax equivalent on water meters. These are included in the forecasted operating and maintenance expense. Municipal utilities are exempt from income taxes.

**VILLAGE OF HOWARD, WISCONSIN
SEWER UTILITY RATE STUDY**

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF THE FORECAST

The financial forecast presents, to the best of management's knowledge and belief, the utility's expected results of operations for the forecast period. Accordingly, the forecast reflects its judgment as of January 24, 2014, the date of this forecast, of expected conditions and courses of action. The assumptions disclosed herein are those that management believes are significant to the forecast. There will be differences between the forecasted and actual results, because events and circumstances do not occur as expected, and those differences may be material.

OPERATING AND OTHER REVENUES

The following assumptions are based on discussions with utility management, analysis of historical data for 2010 through 2013, and expected changes for 2014.

METERED SALES

Forecasted metered sales are based on average volume of flow per customer times the number of customers. The number of customers is forecasted based on known additions and analysis of prior years. The sales forecast included on Schedule 3 is based on a forecast of customers and volume of flow. The forecasted included on Schedule 4b details the basis for the forecast of high strength removal and treatment levels.

The forecasted 2010 gallons are based on the assumption that the method used for determining consumption in the summer periods is based on the consumption for the winter periods.

CUSTOMER FORFEITED DISCOUNTS

Customer penalties are forecasted based on the percentage of metered sales in 2013 to metered sales in 2014.

OPERATING EXPENSES

Operation and maintenance expenses are forecasted as noted on Schedule 4. The most significant operation and maintenance expense included in the revenue requirement is treatment charges by GBMSD. An analysis of their rate history and charges to the Village for 2010 through 2014 (forecast) can be found on Schedules 5a and 5b.

DEBT

Please see Schedule 6 for debt repayment schedules.

VILLAGE OF HOWARD, WISCONSIN
 Sewer Utility Rate Study
 Schedule 1 - Monthly Bill Comparison

	Current Monthly Charge	Proposed Monthly Charge
Fixed customer charge	3.50	4.00
Volume charge	4.40	4.40

	Volume	Present	Proposed	Increase	%
Small Residential	3,000	16.70	17.20	0.50	2.99%
Average Residential	6,000	29.90	30.40	0.50	1.67%
Large Residential	12,000	56.30	56.80	0.50	0.89%
Commercial/Industrial/Public Authority	20,000	91.50	92.00	0.50	0.55%
Commercial/Industrial/Public Authority	60,000	267.50	268.00	0.50	0.19%
Commercial/Industrial/Public Authority	100,000	443.50	444.00	0.50	0.11%
Sanimax (Average monthly volume)	9,786,000	43,061.90	43,062.40	0.50	0.00%
{Note: Industrial surcharges would increase based on loadings to the GBMSD rate}					

VILLAGE OF HOWARD, WISCONSIN
Sewer Utility Rate Study
Schedule 2 - Revenue Requirement Summary

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Current Rates Forecasted 2014	Proposed Rates Forecasted 2014
Operating Revenue						
Charges for services						
Residential	\$ 876,514	\$ 966,361	\$ 1,012,265	\$ 1,201,435	\$ 1,290,016	\$ 1,322,416
Commercial	405,246	472,381	493,016	612,466	653,618	657,734
Industrial	516,657	612,932	864,456	941,463	987,239	1,018,251
Public authorities	32,143	40,085	42,455	53,403	57,053	57,233
Total Charges for Services	<u>1,830,560</u>	<u>2,091,759</u>	<u>2,412,192</u>	<u>2,808,767</u>	<u>2,987,926</u>	<u>3,055,634</u>
Other						
Forfeited discounts	15,500	14,238	13,771	16,049	15,000	15,000
Miscellaneous	1,000	19	695	3,345	1,000	1,000
Total Other	<u>16,475</u>	<u>14,257</u>	<u>14,466</u>	<u>19,394</u>	<u>16,000</u>	<u>16,000</u>
Total Operating Revenues	<u>1,847,035</u>	<u>2,106,016</u>	<u>2,426,658</u>	<u>2,828,161</u>	<u>3,003,926</u>	<u>3,071,634</u>
Other Revenues						
Interest revenue	30,000	23,906	19,862	18,976	19,000	19,000
Total Available Annual Resources	<u>\$ 1,877,035</u>	<u>\$ 2,129,922</u>	<u>\$ 2,446,520</u>	<u>\$ 2,847,137</u>	<u>\$ 3,022,926</u>	<u>\$ 3,090,634</u>
Revenue Requirement						
Operation and maintenance	\$ 491,476	\$ 491,957	\$ 527,229	\$ 524,338	\$ 529,000	\$ 529,000
Plant additions (utility)	250,000	241,589	233,241	250,000	520,000	520,000
Debt service	183,596	184,757	80,323	80,323	80,323	80,323
GBMSD fees	1,015,163	1,065,386	1,778,572	1,571,811	1,744,146	1,744,146
Total Revenue Requirement	<u>\$ 1,940,235</u>	<u>\$ 1,983,689</u>	<u>\$ 2,619,365</u>	<u>\$ 2,426,472</u>	<u>\$ 2,873,469</u>	<u>\$ 2,873,469</u>
Excess Revenues (Deficiency)	<u>\$ (63,200)</u>	<u>\$ 146,233</u>	<u>\$ (172,845)</u>	<u>\$ 420,665</u>	<u>\$ 149,457</u>	<u>\$ 217,165</u>
Excess Revenues (as a percentage of charges for services)					<u>5.00%</u>	

VILLAGE OF HOWARD, WISCONSIN

Sewer Utility Rate Study

Schedule 3a - Customer Analysis - Actual Year Ended December 31, 2013

Ave Customers	Fixed Charge			Volume Charges	High Strength Billings	Total Revenues	
	Rates		Total				
	1/13 - 6/13	7/13 - 12/13					
Charges for services							
Residential	5,370	2.75	3.50	\$ 201,375	\$ 1,000,060	\$ -	\$ 1,201,435
Commercial	680	2.75	3.50	25,500	586,966	-	612,466
Industrial	4	2.75	3.50	150	726,120	215,135	941,405
Public authorities	30	2.75	3.50	1,125	52,278	-	53,403
	<u>6,084</u>			<u>\$ 228,150</u>	<u>\$ 2,365,424</u>	<u>\$ 215,135</u>	<u>\$ 2,808,709</u>

	Volume Charges					
	Usage			Rates		Total
	1/13 - 6/13	7/13 - 12/13	Total	1/13 - 6/13	7/13 - 12/13	
Residential	116,930	122,315	239,245	3.95	4.40	1,000,060
Commercial	70,400	70,200	140,600	3.95	4.40	586,966
Industrial	84,800	88,900	173,700	3.95	4.40	726,120
Public authorities	6,560	5,992	12,552	3.95	4.40	52,278
	<u>278,690</u>	<u>287,407</u>	<u>566,097</u>			<u>\$ 2,365,424</u>

	High Strength Billings		
	Lbs	Rates	Amount
EKA Chemicals			
Suspended Solids	235,488	0.29365	69,151
Anamax			
BOD	32,229	0.30901	9,959
Suspended Solids	165,732	0.34795	57,666
Phosphorus	960	0.62393	599
TKN	98,437	0.78995	77,760
			<u>\$ 215,135</u>

VILLAGE OF HOWARD, WISCONSIN

Sewer Utility Rate Study

Schedule 1a - Customer Analysis - Forecasted Year Ended December 31, 2014

	Ave Customers	Fixed Charge			Volume Charges	High Strength Billings	Total Revenues
		Rates		Total			
		2014	2014				
Charges for services							
Residential	5,400	\$ 4.00	\$ 4.00	\$ 259,200	\$ 1,063,216	\$ -	\$ 1,322,416
Commercial	686	4.00	4.00	32,928	624,806	-	657,734
Industrial	4	4.00	4.00	192	771,936	246,123	1,018,251
Public authorities	30	4.00	4.00	1,440	55,793	-	57,233
	<u>6,120</u>			<u>\$ 293,760</u>	<u>\$ 2,515,751</u>	<u>\$ 246,123</u>	<u>\$ 3,055,634</u>

	Volume Charges					
	Usage			Rates		Total
	2014	2014	Total	1/13 - 6/13	7/13 - 12/13	
Residential	118,100	123,540	241,640	\$ 4.40	\$ 4.40	\$ 1,063,216
Commercial	71,100	70,900	142,000	4.40	4.40	624,806
Industrial	85,650	89,790	175,440	4.40	4.40	771,936
Public authorities	6,630	6,050	12,680	4.40	4.40	55,793
	<u>281,480</u>	<u>290,280</u>	<u>571,760</u>			<u>\$ 2,515,751</u>

	High Strength Billings		
	Lbs	Rates	Amount
EKA Chemicals			
Suspended Solids	235,488	\$ 0.37322	\$ 87,889
Anamax			
BOD	32,229	0.41275	13,303
Suspended Solids	165,732	0.37322	61,854
Phosphorus	960	0.66558	639
TKN	98,437	0.83747	82,438
			<u>\$ 246,123</u>

VILLAGE OF HOWARD, WISCONSIN
Sewer Utility Rate Study
Schedule 4 - Operation and Maintenance Expenses

	Actual 2010	Actual 2011	Actual 2012
Plant Operation and Maintenance			
Supervision and labor	\$ 20,541	\$ 26,982	\$ 27,157
Power and fuel for pumping	2,100	2,988	4,575
Other operating supplies and expenses	-	46	-
Transportation expenses	15,000	24,113	21,429
Maintenance of sewage collection system	84,200	96,919	117,981
Maintenance of collection system pumping equipment	22,800	17,900	19,864
Maintenance of treatment and disposal plant equipment	-	1,015	-
Maintenance of general plant structures and equipment	600	3,586	3,967
Total Plant Operation and Maintenance	145,241	173,549	194,973
Customer Accounting and Collection			
Billing, collecting and accounting	59,400	66,405	63,528
Meter reading	53,700	47,610	32,373
Uncollectible accounts	500	-	-
Total Customer Accounting and Collection	113,600	114,015	95,901
Administrative and General Expenses			
Administrative and general salaries	117,730	98,710	106,319
Office supplies and expenses	22,000	28,128	20,630
Outside services employed	28,000	21,144	50,811
Insurance	23,305	15,526	17,254
Miscellaneous general expenses	2,000	-	450
Rents	33,000	33,000	33,000
Taxes	6,600	7,885	7,891
Total Administrative and General Expenses	232,635	204,393	236,355
Total Operation and Maintenance Expenses	\$ 491,476	\$ 491,957	\$ 527,229
Percentage Change		0.10%	6.69%
Average Increase - 2010 to 2014			
Percentage of Revenue Requirement	25.3%	24.8%	20.1%

Actual 2013	Forecasted 2014	Allocation Percentage		Allocated Costs	
		Volume	Customer	Volume	Customer
\$ 28,754	\$ 28,900	100		28,900	-
4,135	4,900	100		4,900	-
42	-	100		-	-
20,286	22,500	100		22,500	-
109,982	108,900	100		108,900	-
24,984	25,000	100		25,000	-
-	-	100		-	-
-	1,000	100		1,000	-
<u>188,183</u>	<u>191,200</u>			<u>191,200</u>	-
66,783	67,500		100	-	67,500
30,123	29,900		100	-	29,900
96	500		100	-	500
<u>97,002</u>	<u>97,900</u>			<u>-</u>	<u>97,900</u>
111,599	110,000	65	35	71,500	38,500
27,231	21,000	65	35	13,700	7,300
34,752	50,000	65	35	32,500	17,500
24,760	17,300	65	35	11,200	6,100
75	500	65	35	300	200
33,000	33,000	65	35	21,500	11,500
7,736	8,100	65	35	5,300	2,800
<u>239,153</u>	<u>239,900</u>			<u>156,000</u>	<u>83,900</u>
<u>\$ 524,338</u>	<u>\$ 529,000</u>			<u>\$ 347,200</u>	<u>\$ 181,800</u>
<u>-0.55%</u>	<u>0.88%</u>				
	<u>1.91%</u>				
<u>21.6%</u>	<u>18.4%</u>				

VILLAGE OF HOWARD, WISCONSIN
 Sewer Utility Rate Study
 Schedule 5 - Green Bay Metropolitan Sewerage District Rates and Billings
 Actual 1999 - 2013 and Forecast 2014

Year	Volume			BOD			Suspended Solids			Phosphorus		
	Units	Rate	Amount	Units	Rate	Amount	Units	Rate	Amount	Units	Rate	Amount
{Actual}												
1999	637,719	\$0.45902	\$292,726	1,301,146	\$0.18185	\$236,613	1,697,226	\$0.18266	\$310,015	37,897	\$0.67783	\$25,688
2000	610,218	0.46284	282,433	820,698	0.16979	139,346	1,370,467	0.16443	225,346	38,312	0.63490	24,324
2001	659,814	0.44912	296,336	1,187,809	0.16950	201,334	1,629,498	0.17849	290,849	53,924	0.64071	34,550
2002	696,319	0.45932	319,833	1,049,229	0.17399	182,555	1,777,249	0.16500	293,246	56,199	0.63704	35,801
2003	693,840	0.46991	326,042	786,436	0.18650	146,670	1,364,150	0.17388	237,198	73,238	0.65035	47,630
2004	754,981	0.47951	362,021	872,403	0.19156	167,118	1,372,220	0.18378	252,187	57,178	0.58922	33,690
2005	736,380	0.48149	354,560	1,050,950	0.18915	198,787	1,472,548	0.18534	272,922	55,435	0.59931	33,223
2006	783,673	0.47604	373,060	727,321	0.20901	152,017	1,291,938	0.18995	245,404	32,862	0.62599	20,571
2007	757,018	0.48093	364,073	2,241,957	0.20830	467,000	2,026,465	0.19374	392,607	41,647	0.77477	32,267
2008	740,005	0.51271	379,408	453,739	0.19526	88,597	1,186,468	0.20291	240,746	26,164	0.83148	21,755
2009	742,322	0.53679	398,471	780,872	0.21044	164,327	1,551,796	0.20719	321,517	35,877	0.85349	30,621
2010	695,586	0.61640	428,759	610,506	0.20702	126,387	1,262,751	0.23233	293,375	30,948	0.82980	25,681
2011	807,390	0.71112	574,151	375,585	0.23594	88,616	825,408	0.27021	223,033	23,894	0.70424	16,827
2012	832,768	0.86632	721,444	881,956	0.27382	241,493	1,856,984	0.29956	556,286	32,170	0.49918	16,059
2013	829,595	0.85682	710,814	610,480	0.30901	188,644	1,299,970	0.34795	452,325	23,313	0.62393	14,546
{Projected}												
2014	830,000	0.76333	633,564	621,304	0.33466	207,926	1,321,946	0.29867	394,826	28,973	0.62124	17,999

	Green Bay Metropolitan Sewerage District Budgets											
	Volume			BOD			Suspended Solids			Phosphorus		
	Units	Rate	Amount	Units	Rate	Amount	Units	Rate	Amount	Units	Rate	Amount
Original	800,000	\$0.90964	\$727,712	621,304	\$0.41275	\$256,443	1,321,946	\$0.37322	\$493,377	28,973	\$0.66558	\$19,284
Final	800,000	0.76333	610,664	621,304	0.33466	207,926	1,321,946	0.29867	394,826	28,973	0.62124	17,999
Change		<u>\$0.14631</u>	<u>\$117,048</u>		<u>\$0.07809</u>	<u>\$48,517</u>		<u>\$0.07455</u>	<u>\$98,551</u>		<u>\$0.04434</u>	<u>\$1,285</u>

VILLAGE OF HOWARD, WISCONSIN
 Sewer Utility Rate Study
 Schedule 5 - Green Bay Metropolitan Sewerage District Rates and Billings
 Actual 1999 - 2013 and Forecast 2014

Year	TKN			I & I			Fixed Amount	Total Amount	% Inc.
	Units	Rate	Amount	Units	Rate	Amount			
{Actual}									
1999	385,769	\$ 0.54689	\$ 210,973	27,621	\$ 0.45902	\$ 12,679	\$ -	\$ 1,088,694	
2000	260,251	0.49350	128,434	29,021	0.46284	13,432	-	813,315	
2001	287,662	0.46354	133,343	27,946	0.44912	12,551	-	968,963	
2002	249,747	0.47482	118,585	28,454	0.45932	13,069	-	963,089	
2003	165,537	0.47032	77,855	29,124	0.46991	13,686	-	849,081	
2004	161,700	0.47433	76,699	30,077	0.47951	14,422	-	906,137	
2005	264,907	0.47319	125,351	28,279	0.48149	13,616	-	998,459	
2006	187,967	0.47071	88,478	32,671	0.47604	15,553	-	895,083	
2007	439,479	0.43893	192,901	31,953	0.48093	15,367	-	1,464,215	
2008	212,443	0.46411	98,597	35,028	0.51271	17,959	-	847,062	
2009	231,626	0.53473	123,857	32,719	0.53679	17,563	-	1,056,356	
2010	194,652	0.61325	119,370	35,028	0.61640	21,591	-	1,015,163	
2011	163,832	0.86507	141,726	29,577	0.71112	21,033	-	1,065,386	
2012	276,114	0.78595	217,012	31,182	0.84274	26,278	-	1,778,572	
2013	217,135	0.78995	171,526	39,630	0.85682	33,956	-	1,571,811	
{Projected}									
2014	211,086	0.68741	145,103	35,755	0.76333	27,293	317,435	1,744,146	11.0%

During 2014, the Green Bay Metropolitan Sewerage District amended their rate structure and reduced their billing parameters for volume, BOD, Suspended Solids, Phosphorus, and TKN to create a fixed charge which will be billed monthly. This fixed charge is calculate based on flows and loads received from each municipal customer. The Village allocated the fixed charge for each billing parameter based on GBMSD budgets to ensure fixed charges related to high strength concentrations are recovered from the related industrial customer.

Green Bay Metropolitan Sewerage District Budgets								
	TKN			I & I			Fixed Amount	Total Amount
	Units	Rate	Amount	Units	Rate	Amount		
Original	211,086	\$ 0.83747	\$ 176,778	35,755	\$ 0.90964	\$ 32,524	\$ -	\$ 1,706,118
Final	211,086	0.68741	145,103	35,755	0.76333	27,293	317,435	1,721,246
Change		<u>\$ 0.15006</u>	<u>\$ 31,675</u>		<u>\$ 0.14631</u>	<u>\$ 5,231</u>	<u>\$(317,435)</u>	<u>\$ (15,128)</u>

VILLAGE OF HOWARD, WISCONSIN

Sewer Utility Rate Study

Schedule 6 - Annual Debt Service

	1998 Mortgage Revenue Bonds		Sewer Line Charges GBMSD		Sewer Line Charges GBMSD	
	Principal	Interest	Principal	Interest	Principal	Interest
2010	\$ 85,975	\$ 8,281	\$ 64,973	\$ 15,350	\$ 9,017	\$ -
2011	91,134	4,283	67,311	13,012	9,017	-
2012			69,733	10,590		
2013			72,242	8,081		
2014			74,841	5,482		
2015			77,533	2,790		
Total	\$ 177,109	\$ 12,564	\$ 426,633	\$ 55,305	\$ 18,034	\$ -

	Total Debt Service		
	Principal	Interest	Total
2010	\$ 159,965	\$ 23,631	\$ 183,596
2011	167,462	17,295	184,757
2012	69,733	10,590	80,323
2013	72,242	8,081	80,323
2014	74,841	5,482	80,323
2015	77,533	2,790	80,323
Total	\$ 621,776	\$ 67,869	\$ 689,645

VILLAGE OF HOWARD, WISCONSIN
 Sewer Utility Rate Study
 Schedule 7 - Summary of Costs of Service and Proposed Rates

	Volume	BOD	Suspended Solids	Phosphorus	TKN	Fixed	Customer Costs	Total
Revenue Requirement								
Operation and maintenance	\$ 347,200	\$ -	\$ -	\$ -	\$ -		\$ 181,800	\$ 529,000
Plant additions	520,000	-	-	-	-		-	520,000
Debt service	-	-	-	-	-		80,323	80,323
GBMSD fees	660,857	207,926	394,826	17,999	145,103	317,435	-	1,744,146
GBMSD fixed fee allocation	137,407	48,517	98,551	1,285	31,675	(317,435)	-	-
Total	\$1,665,464	\$ 256,443	\$ 493,377	\$ 19,284	\$176,778	\$ -	\$ 262,123	\$ 2,873,469

Determination of Customer Monthly Charge

Customer Costs	Projected Customers	Annual per Customer	Months	Proposed Monthly Charge	Current Monthly Charge	Percentage Increase
\$ 262,123	6,120	\$ 42.83	12	3.57	3.50	2.00%

Determination of Volume Charge

Total costs	\$ 2,611,346
Other revenues	16,000

	Projected High Strength	Green Bay MSD Rate	
BOD	32,229	0.41275	13,303
Suspended Solids	401,220	0.37322	149,743
Phosphorus	960	0.66558	639
TKN	98,437	0.83747	82,438
Estimated Billings - High Strength			<u>246,123</u>

	Estimated Volume	Proposed Monthly Charge	Current Monthly Charge	Percentage Increase	
Amount to be recovered from standard volume rate - domestic concentration	\$ 2,349,223	571,760	4.11	4.40	-6.60%