

# Wastewater Rate Study



Villa Park, Illinois

June 2013



**Stanley Consultants** INC.

A Stanley Group Company  
Engineering, Environmental and Construction Services - Worldwide

# Wastewater Rate Study



Villa Park, Illinois

June 2013

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Illinois.

*Debra K Mathias*  
Debra K. Mathias

*6/7/2013*  
06/07/2013

My license renewal date is December 31, 2013.

Pages or sheets covered by this seal: Entire Report



A Stanley Group Company  
Engineering, Environmental and Construction Services - Worldwide

©Stanley Consultants 2013

# Executive Summary

## General

The Village of Villa Park's Wastewater Utility is responsible for operation and maintenance of the Village's separate sanitary sewer, combined sewer, and separate storm sewer systems that include five sanitary lift stations. The Village's wastewater is discharged to the Salt Creek Sanitary District Wastewater Treatment Plant (SCSD WWTP) located in Villa Park, Illinois. The WWTP is owned and operated by Salt Creek Sanitary District. The Village's Wastewater Utility works in unison with SCSD and monitors the connections and flows to the SCSD WWTP. SCSD bills customers directly for the services that they provide. The Village's Wastewater Utility is also responsible for operation and maintenance of the Wet Weather Flow Treatment Facility (WWFTF). The WWFTF provides auxiliary treatment when storm events and periods of snow and ice melting place additional load on the sewer systems and on the SCSD WWTP. Customers are charged directly by SCSD for wastewater treatment.

The Village of Villa Park Wastewater Utility (Wastewater Utility) improves the quality of life by:

- Maintaining a high level of utility service.
- Contributing to healthy neighborhoods.
- Providing clean waterways.
- Protecting wildlife.

Current wastewater operating and capital expenses are projected to exceed wastewater revenues with present wastewater rates. Revenues will lag behind increasing operating expenses primarily resulting from reduced water usage and inflationary cost increases. Major capital improvements, estimated at \$2.035 million, are programmed to be completed over the next five years. This increase in expenses requires additional revenues beyond the current operating and capital expenses.

Funding expenses from the Wastewater Utility Fund's cash balance will be necessary if rates are not adjusted. The current Wastewater Utility reserve balance is projected to drop from about \$0.96 million at the end of Fiscal Year 2012 to about \$0.2 million in Fiscal Year 2013 and to be depleted in Fiscal Year 2014 with present rates.

A wastewater rate increase is required to maintain services due to:

- Declining water usage due to ongoing water conservation efforts.
- Increasing Wastewater Utility spending due to inflation and increased maintenance costs.
- Capital expenses related to the proposed Capital Improvement Plan projects.

The last wastewater rate increase occurred May 1, 2010.

### **Existing Wastewater Rate Schedule**

The basic component of the existing Wastewater Utility's rate schedule is a uniform flow charge based on water meter readings.

Customers are also charged an administration fee of \$1.50 per month that goes directly to Village's corporate fund. This fee covers the cost of producing, mailing, and collecting the bills. This charge is discussed as part of the Water Rate Study.

### **Operating Expenses**

Operating expenses are those operation and maintenance (O&M) expenses that occur while providing wastewater service. Expenses are projected to increase from \$1.1 million in Fiscal Year 2013 to \$1.3 million in Fiscal Year 2018.

### **Capital Improvements**

Capital improvements are necessary to repair and improve the aging collection system and WWFTF components.

Table ES-1 presents the current and projected capital financing expenses. Three previous capital improvement projects were funded with debt service. The principal and interest payments for the Illinois Environmental Protection Agency (IEPA) State Revolving Fund (SRF) loans are paid semi-annually with wastewater charges revenue.

The rate analysis is based on funding \$2.035 million of programmed capital improvement projects with debt service provided by IEPA loans. Table ES-1 presents the estimated construction costs and the projected financing expenses. Annual principal and interest payments are based on 20 year payback and 1.0 percent interest rate.

An amount of \$100,000 is allocated per year for capital expenses at the Wet Weather Flow Treatment Facility. An additional \$100,000 is allocated for separation of combined sewers.

**Table ES-1 Capital Financing Expenses**

	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
<b>Previously Completed Projects</b>	<b>Principal &amp; Interest (P&amp;I) Payments</b>					
South Myrtle Relief IEPA SRF P&I	\$47,922	\$47,922	\$47,922	\$47,922	\$47,922	\$47,922
North Villa Lift Station IEPA Loan P&I	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147
Sanitary Sewer Rehab IEPA SRF P&I	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938
<b>Programmed CIP Projects</b>	<b>P&amp;I Payments</b>					
2013 IEPA Loan (\$362,910) <sup>(1)</sup>	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
2014 IEPA Loan (\$487,560)		\$27,000	\$27,000	\$27,000	\$27,000	\$27,000
2015 IEPA Loan (\$397,340)			\$22,000	\$22,000	\$22,000	\$22,000
2016 IEPA Loan (\$125,000)				\$7,000	\$7,000	\$7,000
2017 IEPA Loan (\$260,000)					\$14,000	\$14,000
2018 IEPA Loan (\$402,200)						\$22,000
<b>Capital Outlay From Revenues</b>						
WWTF	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Combined Sewer Separation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

<sup>(1)</sup> Includes \$125,000 for Route 83 Lift Station

Source: Villa Park Capital Improvement Program

Additional projected capital-related costs funded from wastewater charges revenue include the following:

- Operations non-capital outlay.
- Engineering design and construction phase services.

- WWTP Reserve Fund

Street improvements programmed in the Village's Capital Improvement Program beyond Fiscal Year 2017 will involve replacements or relocations of sewer mains. These projects will require additional Wastewater Utility revenue. Capital costs associated with any of these projects that may be completed earlier than planned are not accounted for with this rate study.

## **Rate Analysis**

The Wastewater Utility uses a uniform volume rate structure. A uniform rate structure means that the cost per volume charge remains the same regardless of the volume of usage. This rate structure results in increased customer bills with increased usage.

Implementation of a fixed customer charge is recommended. The customer charge is based on the concept that there are "readiness to serve" capital investment expenses. Recovery of this readiness to serve cost involves expenses whether or not the customer actually uses wastewater services. The customer charge also recognizes some of the fixed administration costs which do not vary based on wastewater usage. Allocating some fixed costs to the customer charge reduces the volume charge increase that is required. This charge would be assessed on a monthly basis to all accounts and serve as a minimum charge even if no water is used

A cost-of-service rate analysis was performed to recommend wastewater rates that accurately reflect the cost to serve customers. A cost-of-service rate analysis develops wastewater rates by assigning expenses to services that are provided. Customers are then charged an amount equal to the cost-of-service provided to them. This approach charges fair and equitable rates to all customers.

Expenses, including operating costs and financing for capital improvements, were allocated to billing quantities for Volume and Customer Charge.

Table ES-2 summarizes present wastewater rates and proposed cost-of-service rates to meet Fiscal Years 2014 through 2018 projected expenses.

A 12 percent volume rate increase is proposed for August 1, 2013. A uniform annual volume rate increase of 3 percent is proposed to be implemented on January 1 of 2014 through 2017 to evenly distribute the rate increase impact and achieve the rate required to cover projected expenses through Fiscal Year 2017.

The customer charge increases proportionally to the projected increase in the Administrative Services expenses that are allocated to this charge.

**Table ES-2 Proposed Wastewater Rates**

	Proposed Rates					
	FY14	FY15	FY16	FY17	FY18	
Present Rates	(Aug 1, 2013)	(Jan 1, 2014)	(Jan 1, 2015)	(Jan 1, 2016)	(Jan 1, 2017)	
<b>Volume Charge (per 1,000 gallons)</b>						
	\$2.81	\$3.15	\$3.25	\$3.35	\$3.46	\$3.57
<b>Customer Charge (per account per month)</b>						
	--	\$1.53	\$1.56	\$1.59	\$1.62	\$1.66

Source: Stanley Consultants, Inc.

Table ES-3 summarizes the resulting wastewater rate impact on a typical residential customer with implementation of the proposed August 1, 2013 cost-of-service wastewater rates. The resulting wastewater rate impact for a typical residential customer using 4,500 gallons of wastewater per month, or 150 gallons of wastewater per day, is an increase in their quarterly bill from \$37.94 to \$47.12 in Fiscal Year 2014 or an increase of \$9.18 per quarter, \$3.06 per month, or \$0.10 per day.

**Table ES-3 Typical Wastewater Bill for Average Family**

	<b>Monthly Usage (gallons)</b>	<b>Volume Charge (per 1,000 gallons)</b>	<b>Customer Charge (per account per month)</b>	<b>Quarterly Bill</b>	<b>Quarterly Increase</b>
<b>Present</b>	4,500	\$2.81		\$37.94	
August 1, 2013 Proposed	4,500	\$3.15	\$1.53	\$47.12	\$9.18
January 1, 2014 Proposed	4,500	\$3.25	\$1.56	\$48.56	\$1.44
January 1, 2015 Proposed	4,500	\$3.35	\$1.59	\$50.00	\$1.44
January 1, 2016 Proposed	4,500	\$3.46	\$1.62	\$51.57	\$1.58
January 1, 2017 Proposed	4,500	\$3.57	\$1.66	\$53.18	\$1.60

Source: Stanley Consultants, Inc.

For estimating purposes, the impact on rates is summarized below:

1. A change of \$200,000 on a one percent, 20 year bond or loan results in about \$11,000 change in annual expenditures.
2. A change of \$11,000 in annual expenditures results in about a \$0.02 per 1,000 gallons or \$0.09 per month change on a typical residential bill.
3. A change of one percent in interest rate for a 20 year, \$200,000 bond or loan is about \$1,100 change in annual expense or less than \$0.002 per 1,000 gallons.

DuPage Water Commission and the Illinois Department of Natural Resources are projecting a two percent decline in water usage on an annual basis. Table ES-4 presents the impact on rates if the actual decline is greater than projected.

**Table ES-4 Rate Change with Varied  
Decline in Water Usage**

<b>Water Usage Decline per Year</b>	<b>Change from Proposed Rate (per 1,000 gallons)</b>
3%	+ 0.16
4%	+ 0.23
5%	+ 0.30

Source: Stanley Consultants, Inc.

**Fund Balance**

The proposed rate increases are projected to maintain a positive cash balance in the Wastewater Utility Fund. A healthy fund balance provides adequate cash reserve to cover variations in cash

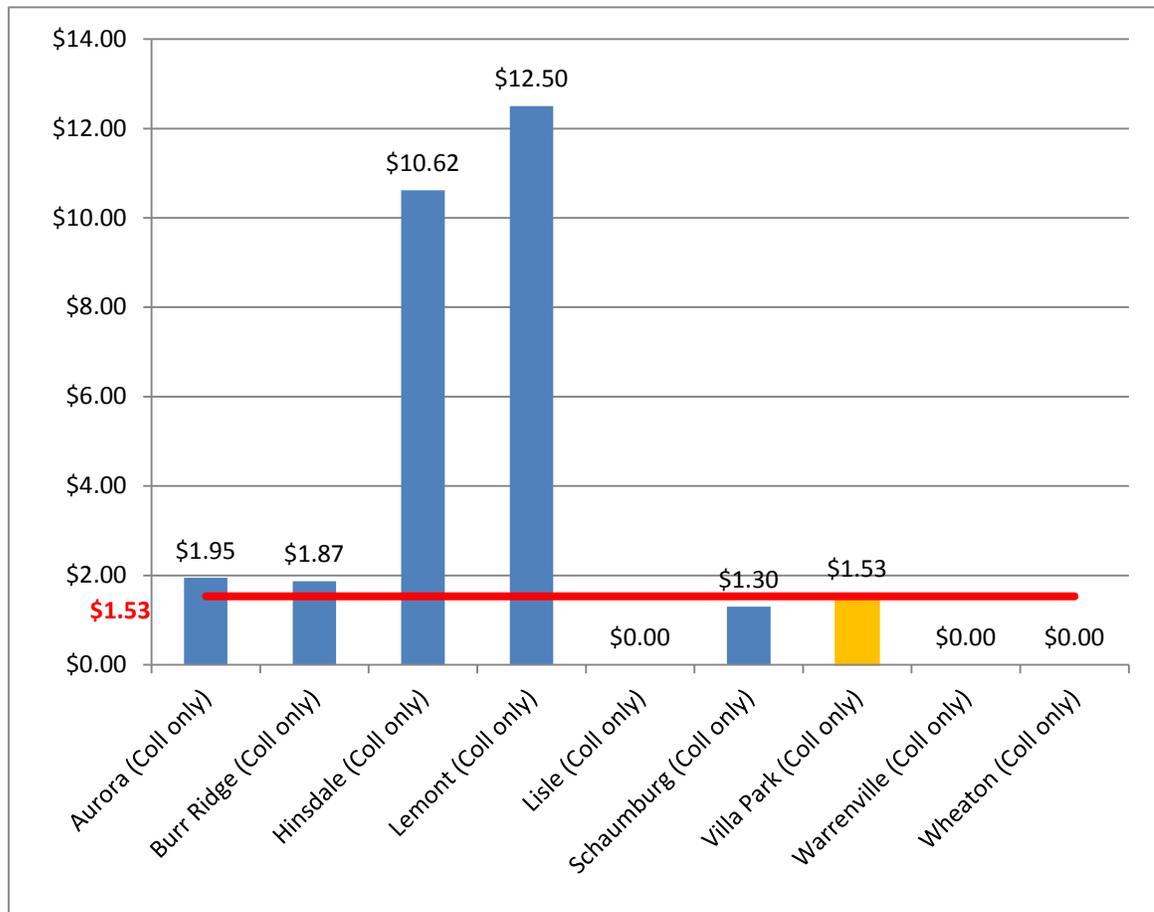
flow and emergencies. The Wastewater Utility currently has a fund balance that is sufficient to cover 90 days of operating costs.

The Wastewater Utility has no established fund reserve. A capital fund reserve is recommended for the Wastewater Utility’s Wet Weather Flow Treatment Facility to provide a contingency for unexpected maintenance or replacement costs that may arise. The fund can also be allowed to grow with unspent moneys earmarked for capital improvement projects.

### Wastewater Rate Comparison with Other DuPage County Communities

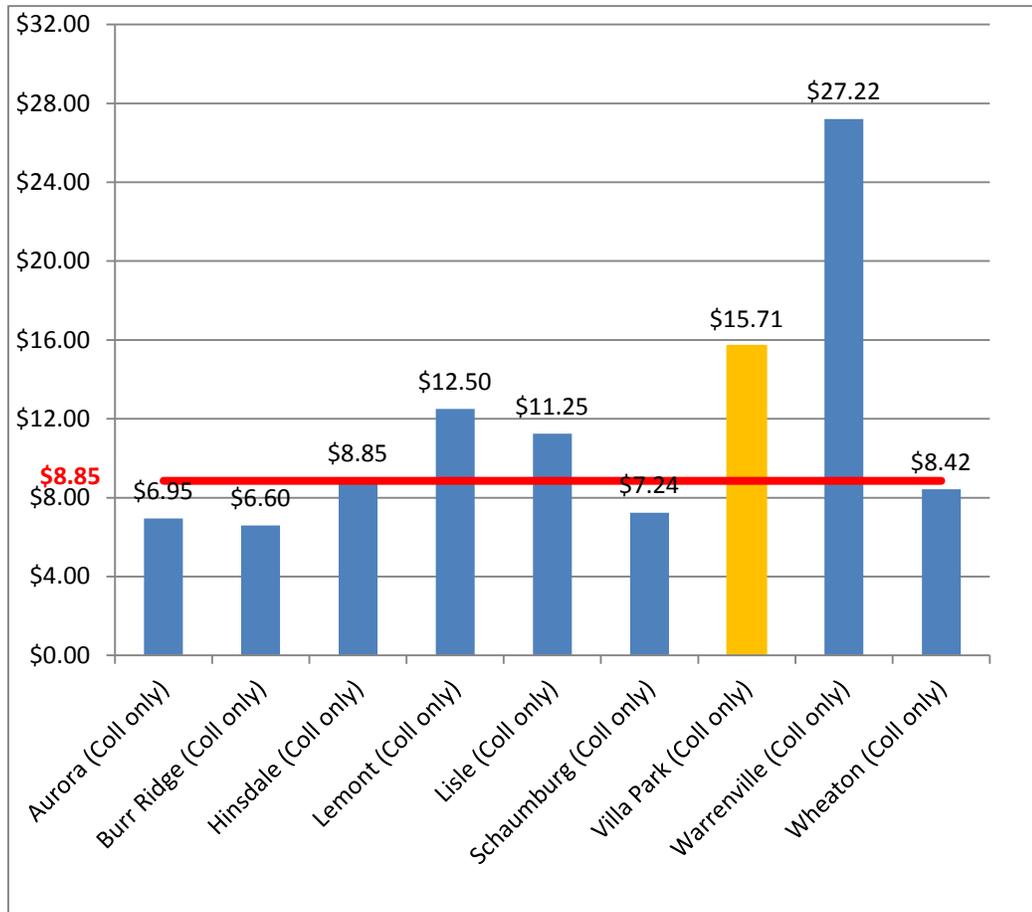
Figures ES-1, ES-2, and ES-3 present a comparison of Villa Park’s proposed residential wastewater rates to other DuPage County communities. The figures represent the most current known rate data. Numerous communities are facing higher wastewater utility expenses and are also anticipating a raise in their rates.

The figures present a comparison with Villa Park’s proposed Fiscal Year 2014 wastewater rates. Figure ES-1 presents the monthly minimum bills. Figure ES-2 presents charges for 4,500 gallons per month. Figure ES-3 presents charges for 7,500 gallons per month. The rates for all communities that are represented include the cost of wastewater collection only.



Median = \$1.53  
 Proposed August 1, 2013 Villa Park Rate = \$1.53

**Monthly Minimum Bill**  
**Figure ES-1**

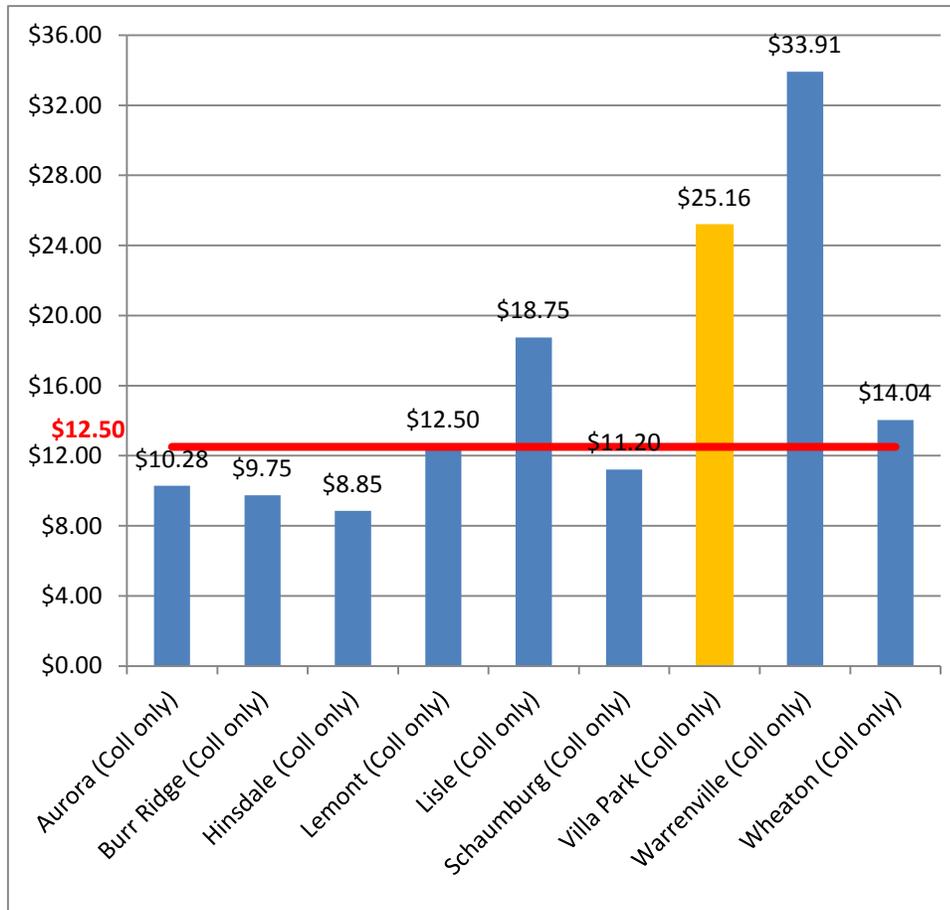


Median = \$8.85

Proposed August 1, 2013 Villa Park Rate = \$15.98

**Charges for 4,500 Gallons per Month**

**Figure ES-2**



Median = \$12.50

Proposed August 1, 2013 Villa Park Rate = \$25.61

**Charges for 7,500 Gallons per Month**

**Figure ES-3**

## Conclusions/Recommendations

Implementation of proposed Fiscal Years 2014 through 2016 wastewater rate increases is recommended. The proposed rates will cover expenses, maintain a healthy Utility Fund balance, and build additional fund reserves.

Implementation of a fixed customer charge is recommended to recover some of the readiness to serve and fixed administration costs which do not vary based on water usage. Allocating some fixed costs to the customer charge reduces the volume charged increase that is required. The charge would be assessed to all customers on a monthly basis and serve as a minimum charge even if no water is used.

Re-evaluation of rates every year is recommended to assess the adequacy of rates for keeping pace with inflation, capital improvement expenditures, and actual capital improvement funding sources. Completion of the proposed capital improvements will provide more accurate project cost estimates. Also, revenues due to wastewater increases will be known. Implementation of rate adjustments at least every three years is recommended so that proper adjustments to changing conditions can be made.

In addition to the recommended rate and rate structure adjustments, billing all customers on a monthly versus quarterly basis is recommended. Most municipalities bill on a monthly basis. Billing monthly will result in some additional billing expenses. However, billing monthly will reduce the billed amount by three and help customer's cash flow. Monthly billing also reduces the amount of uncollectible billings.

# Table of Contents

Executive Summary .....	i
General.....	i
Existing Wastewater Rate Schedule .....	ii
Operating Expenses .....	ii
Capital Improvements.....	ii
Rate Analysis .....	iv
Fund Balance .....	vi
Wastewater Rate Comparison with Other DuPage County Communities.....	vii
Conclusions/Recommendations .....	ix
Section 1 Introduction.....	1-1
General.....	1-1
Wastewater Rate Analysis Spreadsheets.....	1-2
Existing Wastewater Rate Schedule .....	1-3
Historical and Budget Operating Expenditures .....	1-3
Frequently Asked Questions .....	1-3
Study Parameters .....	1-3
Acknowledgements.....	1-4
Section 2 Philosophical Issues .....	2-1
General.....	2-1
Uniform Wastewater Volume Rate.....	2-1
Fund Balance .....	2-1
Conclusions/Recommendations .....	2-2
Other Recommendations.....	2-2
Section 3 Billing Quantities .....	3-1
General.....	3-1
Number of Processed Billings .....	3-1
Number of Accounts .....	3-2
Billable Volume .....	3-2
Section 4 Revenues and Expenses .....	4-1
General.....	4-1

Present Rates.....	4-1
Revenues from Present Rates.....	4-1
Operating Expenses .....	4-2
Capital Financing.....	4-4
Projected Operating Results with Present Rates.....	4-6
Section 5 Unit Cost-of-Service .....	5-1
General.....	5-1
Cost-of-Service Analysis .....	5-1
Operating Expense and Capital Financing Allocation.....	5-1
Cost-of-Service Unit Rates .....	5-2
Section 6 Rate Design.....	6-1
General.....	6-1
Proposed Rates.....	6-1
Revenues from Proposed Rates .....	6-1
Operating Results with Proposed Rates.....	6-2
Typical Customer Bills .....	6-4
Section 7 Implementing Rate Adjustments.....	7-1
General.....	7-1
Implementing Rate Adjustments.....	7-1

## TABLES

Table ES-1 Capital Financing Expenses.....	iii
Table ES-2 Proposed Wastewater Rates.....	v
Table ES-3 Typical Wastewater Bill for Average Family.....	vi
Table ES-4 Rate Change with Varied Decline in Water Usage.....	vi
Table 1-1 Study Parameters (Fiscal Year 2014).....	1-4
Table 5-1 Unit Cost-of-Service Allocations and Rate Development – Fiscal Year 2014.....	5-2

## FIGURES

Figure ES-1 Monthly Minimum Bill .....	vii
Figure ES-2 Charges for 4,500 Gallons per Month .....	viii
Figure ES-3 Charges for 7,500 Gallons per Month .....	ix
Figure 3-1 Projected Wastewater Volumes .....	3-2
Figure 4-1 Projected FY 2014 Revenues with Present Rates .....	4-2
Figure 4-2 Projected FY 2014 Operating Expenses.....	4-4
Figure 4-3 Projected FY 2014 Capital Financing .....	4-6
Figure 4-4 Operating Results with Existing Rates – Scenario 2.....	4-7
Figure 4-5 Projected Deficit and Fund Balance with Existing Rates.....	4-8
Figure 6-1 Projected FY 2014 Revenues with Proposed Rates .....	6-2
Figure 6-2 Operating Results with Proposed Rates .....	6-3

Figure 6-3 Proposed Net Revenue and Fund Balance with Proposed Rates.....6-4

APPENDICES

Appendix A Wastewater Rate Analysis Spreadsheets .....A-1  
Appendix B Existing Wastewater Rate Ordinance ..... B-1  
Appendix C Historical and Budget Operating Expenditures ..... C-1  
Appendix D Frequently Asked Questions Regarding Wastewater Rate Increases .....D-1

# Introduction

### General

This report presents the results of the 2013 Wastewater Rate Study for the Village of Villa Park Wastewater Utility, located in Villa Park, Illinois (Village). This Wastewater Rate Study includes evaluation of the current wastewater rate schedule and a cost-of-service rate analysis to determine rate adjustments necessary to properly fund the utility using fair and equitable wastewater rates.

The Wastewater Utility accounts for its revenues and expenses separately as a self-supported “Enterprise Fund”. An enterprise fund assesses a charge for services provided. The revenue obtained by the Wastewater Utility stays in the enterprise fund to pay the utility's operation, maintenance, and capital financing costs. The enterprise fund is kept separate from the City's Corporate Fund.

The Village's Wastewater Utility is responsible for operation and maintenance of the Village's separate sanitary sewer, combined sewer, and separate storm sewer systems that include five sanitary lift stations. The Village's wastewater is discharged to the Salt Creek Sanitary District Wastewater Treatment Plant (SCSD WWTP) located in Villa Park, Illinois. The SCSD WWTP is owned and operated by Salt Creek Sanitary District. The Village's Wastewater Utility works in unison with SCSD and monitors the connections and flows to the SCSD WWTP. The Village's Wastewater Utility is also responsible for operation and maintenance of the Wet Weather Flow Treatment Facility (WWFTF). The WWFTF provides auxiliary treatment when storm events and periods of snow and ice melting place additional load on the sewer systems and on the SCSD WWTP. The WWFTF is licensed to operate any time rain occurs.

The Wastewater Utility enterprise fund finances the following major activities:

- Sewer Collection System Operation and Maintenance.
- WWFTF Operation and Maintenance.

- IEPA loan repayment.
- Sewer System Capital Investments (Projects).
- WWFTF Capital Investments (Projects).
- Emergency response to flooding and other storm events.

The recommended wastewater rates are developed based on a cost-of-service rate analysis. The cost-of-service rate analysis approach allocates the Wastewater Utility's expenses (costs) for providing service to the appropriate billing categories. These costs are then divided by the billing quantities (volume and number of accounts) to determine the unit rates. The cost-of-service approach compares the recommended rates to the present rates being charged. Typically, this approach affects each of the present rates to a different degree and results in varying financial impacts on different customer groups.

This report includes the following:

- Section 1 presents a general overview of the rate study report.
- Section 2 presents an overview and analysis of the major philosophical issues built into the current wastewater rate structure and recommendations for changes to the rate structure.

Sections 3 through 7 include the following discussions corresponding to the rate development tables.

- Section 3 presents the billing quantities that provide a measurable amount of service for assessing the wastewater rates.
- Section 4 presents the revenues based on present rates and past and projected operating and capital financing expenses. The projected operating results with present rates are also discussed.
- Section 5 presents the development of the unit cost-of-service rate analysis performed to determine the wastewater rates that are required to cover expenses.
- Section 6 presents the rate design. Rate design is actual proposed rates. The operating results with the proposed rates are also presented. A comparison of typical bills, for present and proposed rates is also discussed.
- Section 7 presents rate-setting guidelines to help reduce negative reactions by customers.

## **Wastewater Rate Analysis Spreadsheets**

Appendix A contains the wastewater rate analysis spreadsheets prepared for this study.

The text in this report follows the rate development tables closely and explains points of interest and/or assumptions as they occur. The rate analysis spreadsheets document the billing quantities, revenues and expenses, unit cost-of-service analysis, and rate design for the Wastewater Utility for past Fiscal Years 2010 through 2012, budget Fiscal Year 2013, and projected Fiscal Years 2014 through 2018. The Fiscal Year for Villa Park's Water Utility is May 1 through April 30.

## **Existing Wastewater Rate Schedule**

Appendix B contains the existing Wastewater Utility rate ordinance. The basic component of the existing rate schedule is a uniform flow charge.

## **Historical and Budget Operating Expenditures**

Appendix C contains a summary of the Wastewater Utility's historical and budget operating expenditures received from the Village and that were used in developing this rate study.

## **Frequently Asked Questions**

Appendix D contains answers to frequently asked customer questions that Village Board members should expect in regards to wastewater rate adjustments.

## **Study Parameters**

Table 1-1 presents the parameters used in the development of the Wastewater Rate Study.

The projected annual processed billings are actual quantities from Fiscal Year 2012. These quantities are projected to remain the same (zero escalation in future) since the Village is not currently experiencing any significant growth. The billable volume quantities are projected to decline by two percent on an annual basis due to ongoing water conservation efforts.

**Table 1-1 Study Parameters (Fiscal Year 2014)**

<b>Parameter</b>	<b>Number of Accounts</b>	<b>Annual Processed Billings</b>	<b>Projected Escalation</b>
<b>Annual Processed Billings</b>			
Monthly			
Apartment	105	1,260	0%
Commercial	142	1,705	0%
Government	31	210	0%
Industrial	42	504	0%
Quarterly			
Residential	6,308	25,226	0%
Apartment	79	315	0%
Commercial	349	1,394	0%
Government	4	16	0%
Industrial	64	256	0%
<b>Total</b>	<hr/> 7,124	<hr/> 30,866	
<b>Billable Volume</b>		519,576,000 gallons	- 2%
<b>Operating Expenses</b>		\$1,201,131	Varied

Source: Village of Villa Park

**Acknowledgements**

Background information for this wastewater rate study was obtained from the Wastewater Utility annual reports and information obtained through conversations and correspondence with Vydas Juskelis, Director of Public Works; Rick Cermak, Sewer Division Superintendent; and Dale Hessel, Public Works Department MIS Specialist. A number of meetings and telephone conversations were held with Village of Villa Park personnel to discuss and review the results of the wastewater rate study.

# Philosophical Issues

### **General**

This section summarizes the major philosophical issues which significantly influence the wastewater rate study conducted by Stanley Consultants Inc. Fundamental philosophical issues built into the current wastewater rate structure were evaluated for applicability to the current Wastewater Utility's customer base. The purpose of this evaluation was to perform a cost-of-service rate analysis which appropriately charges customers for the services they receive. The intent of the cost-of-service rate analysis is to charge fair and equitable rates to all customers which generate the projected funding needs of the utility.

### **Uniform Wastewater Volume Rate**

The Wastewater Utility uses a uniform volume rate structure. A uniform rate structure means that the cost per volume charge remains the same regardless of the volume of water usage. This rate structure results in increased customer bills with increased usage.

### **Fund Balance**

Significant capital improvements are anticipated over the next several years. While actual annual capital improvement expenses will vary from year to year, somewhat uniform expenses are very desirable from a wastewater rate stability standpoint. To stabilize wastewater rates for fluctuating capital improvement expenditures, a healthy Wastewater Utility Fund balance is required. A positive fund balance contains unspent money for working capital when revenues are down.

Currently, the Wastewater Utility Fund balance is about \$0.6 million. The fund is projected to be significantly reduced in Fiscal Year 2014 and depleted in Fiscal Year 2015 if rates remain the same because expenses will be greater than revenue collected. This report presents a five year plan to cover expenses and maintain a positive cash balance in the Wastewater Utility Fund.

## **Conclusions/Recommendations**

Major philosophical wastewater rate issues were evaluated when conducting the wastewater rate study. These issues have varying financial impact on different customer groups. The guiding principle when considering philosophical issues is to determine the “fair and equitable” charge for the services that each customer receives.

Based on the analysis conducted, the fundamental philosophical issues built into the current wastewater rate structure are typical for municipalities. Therefore, the uniform volume rate structure will continue to be used for the Wastewater Utility’s customer base.

## **Other Recommendations**

Other recommendations have been identified in addition to the wastewater rate increase. Some of these recommendations will generate additional revenue, though not significant amounts. The primary purpose of the recommendations is to provide fair and equitable rate charges. Additional charges do allow recovery of costs related to specific services. These recommendations are discussed below.

- **Customer Charge**

Implementation of a fixed customer charge is recommended. The customer charge is based on the concept that there are “readiness to serve” capital investment expenses. Recovery of this readiness to serve cost involves expenses whether or not the customer actually discharges wastewater. The customer charge also recognizes some of the fixed administration costs which do not vary based on wastewater usage. Allocating some fixed costs to the customer charges reduces the volume charge increase that is required. This charge would be assessed on a monthly basis to all accounts and serve as a minimum charge even when no wastewater is used.

- **Bi-Monthly Billings**

Billing all customers on a bi-monthly versus quarterly basis is recommended. Most municipalities bill on a bi-monthly basis. Billing bi-monthly will result in some additional billing expenses. However, billing bi-monthly will reduce the billed amount and help customer’s cash flow. Bi-monthly billing also reduces the amount of uncollectible billings.

- **Annual Wastewater Rate Reviews**

Re-evaluation of rates every year is recommended to assess the adequacy of rates for keeping pace with inflation, capital improvement expenditures, and actual capital improvement funding sources. Completion of the proposed capital improvements will provide more accurate project cost estimates. Also, revenues due to wastewater increases will be known. The Wastewater Utility’s current 10-year Master Plan identifies projects programmed for completion through Fiscal Year 2018. Implementation of rate adjustments at least every three years is recommended so that proper adjustments to changing conditions can be made.

- Fund Reserve

A healthy fund balance covers fluctuating cash flow and allows actual expenditures to exceed actual revenues during a fiscal year. The Wastewater Utility currently has a fund balance that is sufficient to cover 90 days of operating costs.

The Wastewater Utility has no established fund reserve. A capital fund reserve is recommended for the Wastewater Utility's Wet Weather Flow Treatment Facility to provide a contingency for unexpected maintenance or replacement cost that may arise. The fund can also be allowed to grow with unspent moneys earmarked for capital improvement projects.

# Billing Quantities

### General

Appendix A contains the Billing Quantities spreadsheets that were prepared for this study. Billing quantities provide a measurable amount of service provided by the Wastewater Utility to use in assessing wastewater rates. The basis for assessing existing and recommended charges for Villa Park includes:

- Number of accounts.
- Metered water usage.

For the Village of Villa Park, metered water use is the basis for assessing the quantity of wastewater services for all customers.

All residential customers are billed on a quarterly basis. Customers identified as apartment, commercial, government, or industrial customers are billed either on a monthly or quarterly basis.

### Number of Processed Billings

Table A1 in Appendix A presents the total number of annual bills processed for Wastewater Utility customers. The number of processed bills is broken down into monthly and quarterly categories. Each of these categories is further broken down into number of apartment, commercial, government, industrial, and residential bills. These quantities of billings are used to determine the number of Wastewater Utility customer accounts.

The number of bills was steady for each category in the past three years and is projected to remain the same in the future since the Village is not currently experiencing any significant growth.

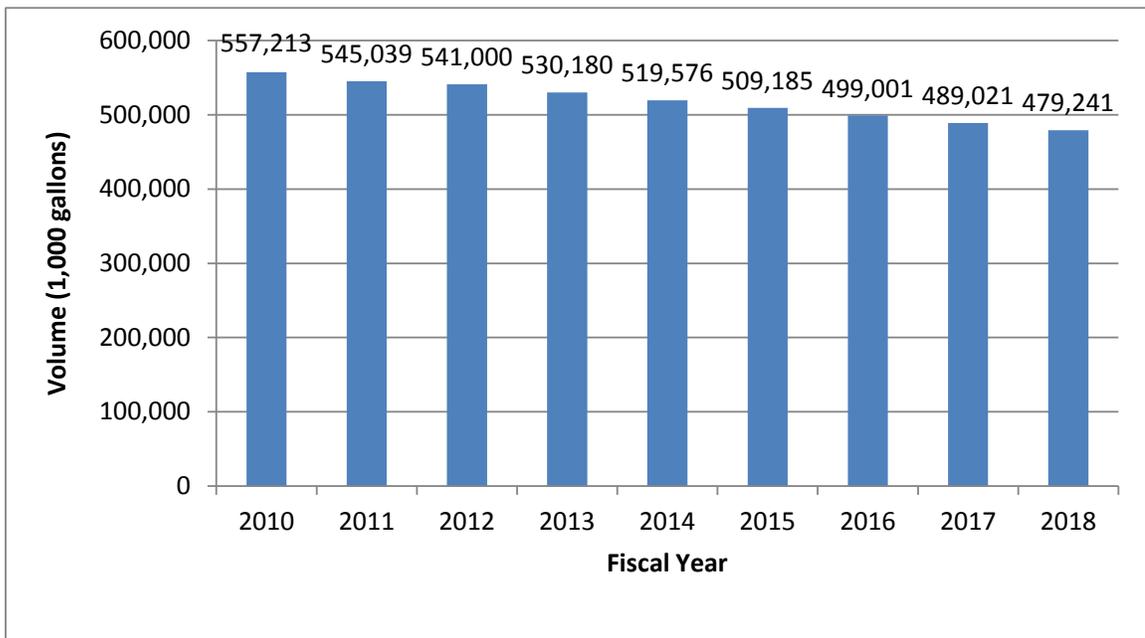
## Number of Accounts

Table A2 in Appendix A presents the number of customers billed by the Wastewater Utility. The number of customers billed is broken down into apartment, commercial, government, industrial, and residential customers.

## Billable Volume

Table A3 in Appendix A presents the total volume of wastewater billed, in 1,000 gallons per year. This billing quantity is used to assess the fixed volume wastewater charge.

Figure 3-1 presents the past and projected volume of billed wastewater. The total billable volume has been declining an average of 2.4 percent since Fiscal Year 2009 primarily due to ongoing water conservation efforts. DuPage Water Commission and the Illinois Department of Natural Resources are projecting a continued two percent decline in water usage on an annual basis. This decline in volume means reduced revenue if rates are not adjusted.



**Projected Wastewater Volumes**  
**Figure 3-1**

# Revenues and Expenses

### **General**

Appendix A contains the Revenue and Expense spreadsheets that were prepared for this study.

### **Present Rates**

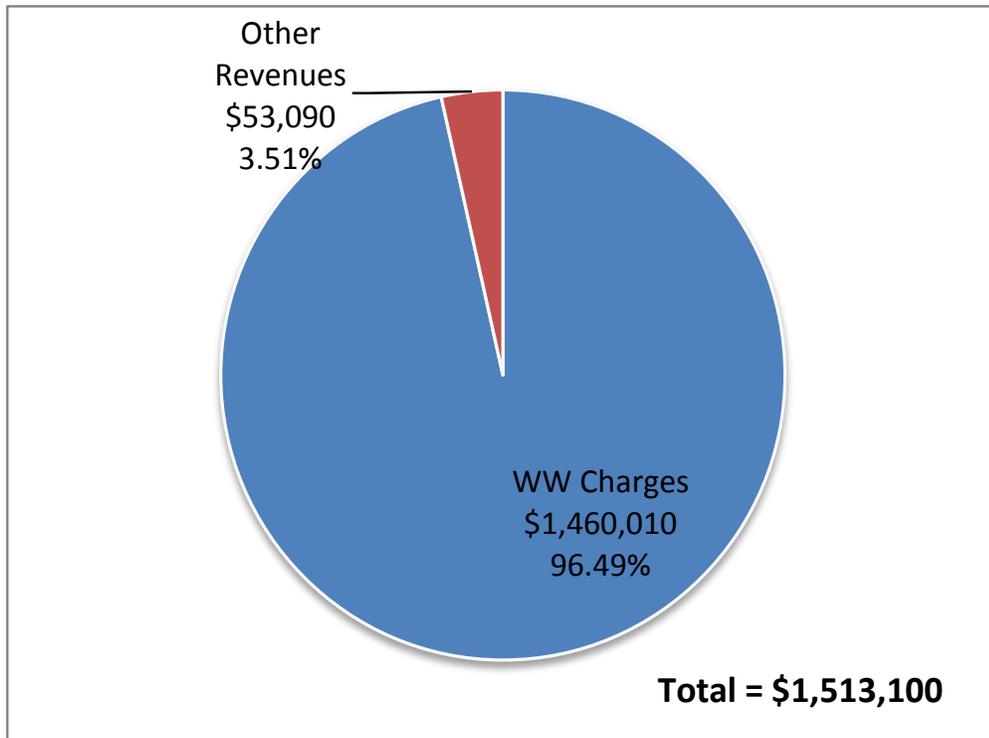
Table B1 in Appendix A presents the present rates for the Wastewater Utility. Future wastewater revenues are projected by multiplying the existing rates by the billing quantities previously discussed.

### **Revenues from Present Rates**

Table B2 in Appendix A presents revenues with present wastewater rates. The revenues are summarized into two major categories, sewer charges and other revenues. Most of the revenues come from sewer charges that involve billing for services provided, although some additional revenue sources also exist.

Figure 4-1 illustrates projected Fiscal Year 2014 revenue with present rates. Volume charges represent the revenues generated from wastewater billing to monthly and quarterly accounts. The volume charge revenue accounts for 96 percent of the total revenue. The projected volume charge revenues are calculated by multiplying the projected billing quantities previously identified by the present rates presented in Table B1. A decrease in volume charge revenue is projected as the billable volume is projected to decline and rates remain the same.

Sources of other revenue sources include Resident Fees, Permit Fees, Connection Charges, Late Charges, Sewer Inspection Fees, Interest, and Miscellaneous. Resident fees include revenue collected from the North Avenue Townhouses that are not provided water by the Village and therefore must be billed separately. Other revenues are projected to remain the same as budgeted Fiscal Year 2013 values.



**Projected FY 2014 Revenues with Present Rates**  
**Figure 4-1**

### Operating Expenses

Table B3 in Appendix A presents operating expenses for the Wastewater Utility. Appendix C contains a breakdown summary of the Wastewater Utility’s historical and budget operating expenses and percent escalations that were used for projecting future expenses.

Figure 4-2 on page 4-4 illustrates projected Fiscal Year 2014 operating expenses. Operating expenses are those operation and maintenance (O&M) expenses that occur while providing wastewater service. The Wastewater Utility operating expenses are summarized into two major accounts, Administration and Operation.

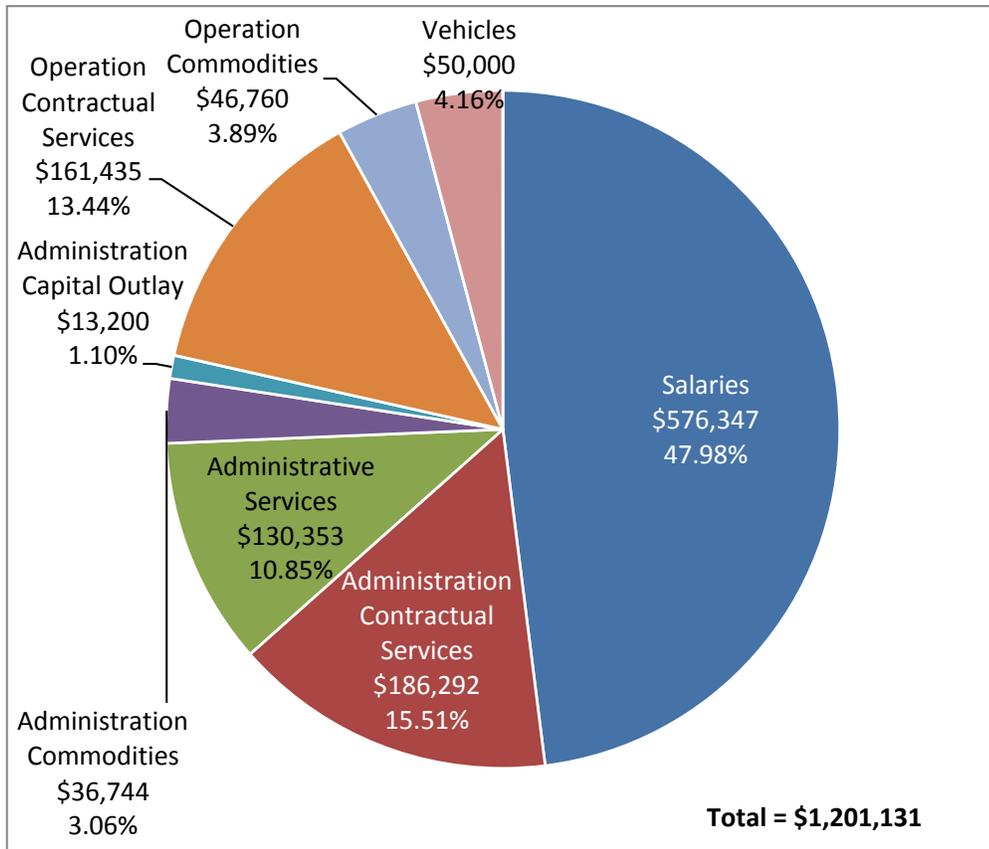
The Administration account includes the following categories to track the type of expenses.

- Salaries and Benefits. An annual 2 percent increase is used for projecting salaries and IMRF, Social Security, and Medicare contributions in future years.
- Contractual Services. This category is sub-divided into the following sub-categories:
  - Employee Benefits consist of employee life and health insurance benefits. This expense is projected to remain the same in future years as budget Fiscal Year 2013.
  - Engineering Services includes transfers to other Village departments. This category is projected to remain at \$16,000 in future years.
  - Other Contractual Services is projected to remain at \$14,606 in future years.

- An annual two percent increase is used for projecting the remaining Contractual Services in future years.
- Administrative Services. This category involves a transfer to the Village Corporate fund to cover fixed administrative costs that include overhead salaries, billing, auditing, etc. An inflationary increase of 2 percent is used for projecting this expense in future years.
- Commodities. This category includes uniforms, professional memberships, and certifications, fuel, vehicle parts, and office supplies. An inflationary increase of 2 percent is used for projecting this expense in future years.
- Capital Outlay. This expense includes purchase of items that are categorized based on cost. Capital Outlay includes items that cost \$500 or more, such as computer equipment, GIS upgrades, etc. Non-Capital Outlay includes items that cost between \$100 and \$500 such as IT hardware and office furniture. This expense is projected to remain at \$5,000 for Capital Outlay and at \$8,200 for Non-Capital Outlay in future years.

The Operation account includes the following categories to track the type of expenses.

- Contractual Services. This category is sub-divided into Other Contractual Services, and Remaining Contractual Services (Other).
  - Other Contractual Services include items such as arc flash compliance, generator and radio maintenance, root foaming, sewer inspections, street repairs, and contracted repairs for the WWFTF, lift stations, and collection system. Other Contractual Services is projected to remain the same as budget Fiscal Year 2013, at \$90,800, in future years.
  - Remaining Contractual Services includes electrical and gas utilities, Lombard sewer service, maintenance of controls, rental of equipment, disposal expense and laboratory testing. Lombard sewer service is reimbursement to the Village of Lombard for homes on Villa Park water but on Lombard sewer. An annual 2 percent increase is used for projecting the remaining Contractual Services in future years.
- Commodities. This category includes chemicals, hand tools, asphalt mix, stone, concrete redi-mix, manhole materials, sewer main repair parts, and other supplies. The expense for stone is projected to remain at \$8,000 in future years. An increase of 2 percent is used for projecting all other commodity expenses in future years.
- Vehicle Replacement. The Village is projecting to spend \$250,000 over the next five years for purchase of vehicles. \$50,000 is allocated per year for purchase of small and large trucks, backhoes, and front-end loaders.



**Projected FY 2014 Operating Expenses  
Figure 4-2**

### Capital Financing

Table B4 in Appendix A presents the projected capital financing expenses for the Wastewater Utility. Capital financing includes those expenses that are required for significant repairs and improvements to the Wastewater Utility facilities.

Figure 4-3 on page 4-6 illustrate Fiscal Year 2014 projected capital financing expenses. Capital financing expense accounts consist of Debt Service and Other Disbursements.

Debt Services are agreements into which the Wastewater Utility enters to finance large capital improvements. The Wastewater Utility has the following three outstanding Illinois Environmental Protection Agency (IEPA) State Revolving (SRF) Fund loans.

- \$732,157 loan issued in 2009 at 2.5 percent interest to fund the South Myrtle relief sewer with loan payoff in April 2029.
- \$238,271 loan issued in 2009 at 2.5 percent interest to fund the North Villa lift station rehabilitation with payoff in July 2024.
- \$1.6 million loan issued in 2010 at zero percent interest to fund sanitary sewer rehabilitation with payoff in October 2030.

Total principal and interest payment for these three outstanding loans is \$147,000.

The Wastewater Utility's Master Plan identifies \$2.035 million of sewer collection projects to be completed through Fiscal Year 2018. Principal and interest payments for these loans are projected as a capital financing expense paid with annual wastewater revenue charges. Payments for these loans are based on a 20 year payback period and 1.0 percent interest rate.

Other Disbursements include Debt Service Reserve, Capital Outlay from Revenues, and Reserve Fund.

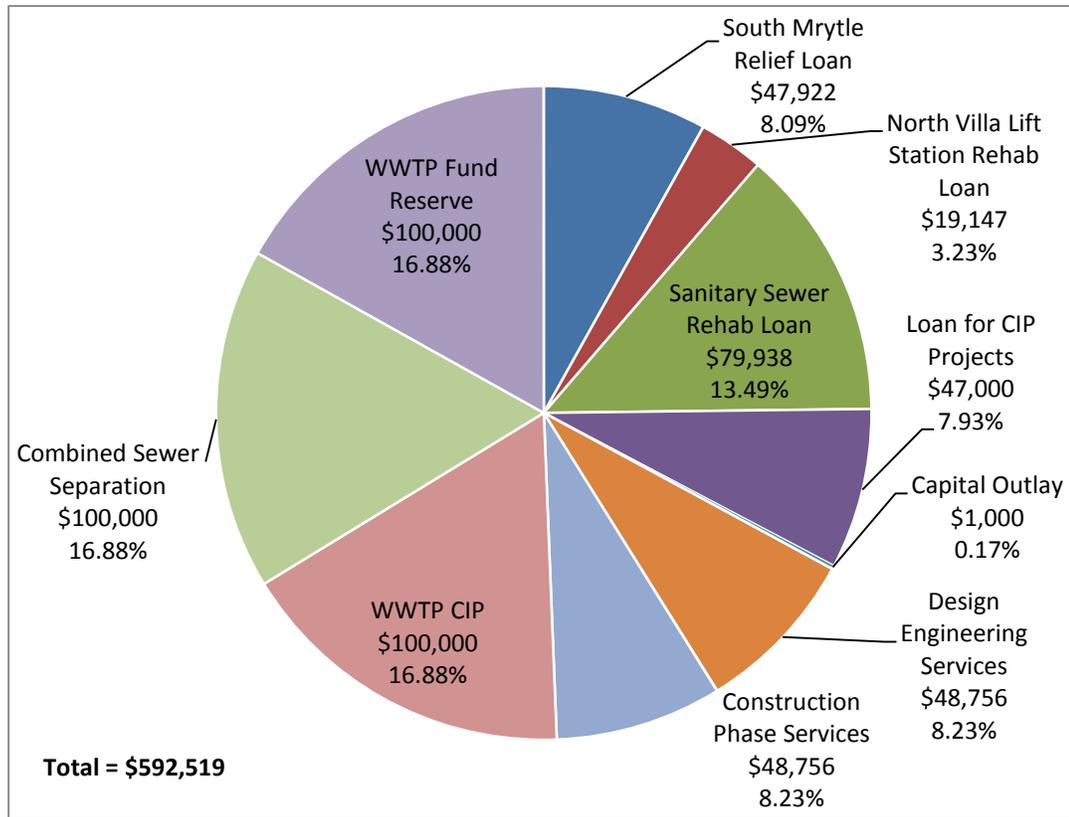
IEPA SRF loans do not require any debt service reserve.

Capital Outlay from Revenues includes the following sub-categories that are funded from annual wastewater charges revenue.

- Operations Non-Capital Outlay includes project costs that are less than \$10,000. This expense is projected to remain at \$1,000 in future years.
- Operations Engineering Services (Design) is the engineering associated with design development based on 10 percent of estimated construction costs.
- Operations Engineering Services (Construction Phase) is the engineering construction phase services based on 10 percent of estimated construction costs.
- Some of the costs associated with separating combined sewers will be allocated to the Wastewater Utility. \$100,000 is projected on an annual basis for Fiscal Years 2014 through 2018.
- An amount of \$100,000 is allocated per year for capital expenses at the Wet Weather Flow Treatment Facility.

Some street improvements scheduled beyond Fiscal Year 2017 will involve replacements or relocations of sewer mains. Capital costs associated with any of these projects that may be completed earlier than planned are not accounted for with this rate study.

Annual allocation of funds to a capital fund reserve is recommended for the Wet Weather Flow Treatment Facility. The purpose of a fund reserve is to provide a contingency for unexpected maintenance or replacement cost that may arise. The fund can also be allowed to grow with unspent moneys earmarked for capital improvement projects. Allocation to the capital fund reserve is projected in the amount of \$100,000 for Fiscal Years 2014 through 2018.



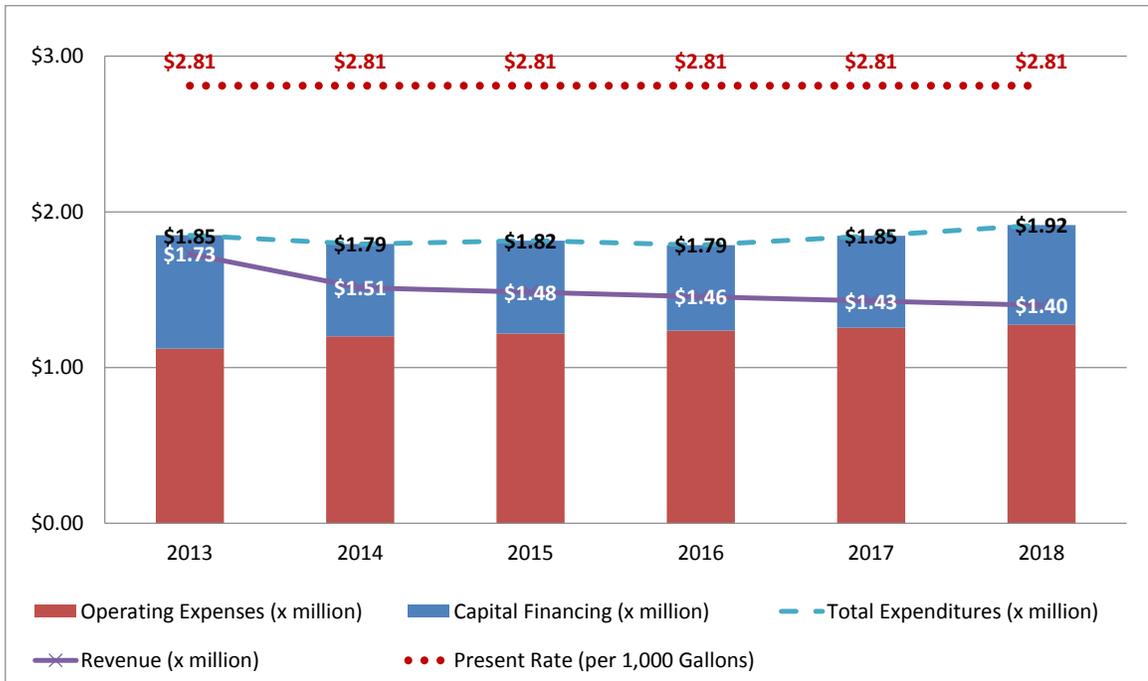
**Projected FY 2014 Capital Financing  
Figure 4-3**

**Projected Operating Results with Present Rates**

Table B5 in Appendix A presents the operating results with present rates for the Wastewater Utility. This table summarizes the billing quantities, revenues, operating expenses, and capital financing previously discussed.

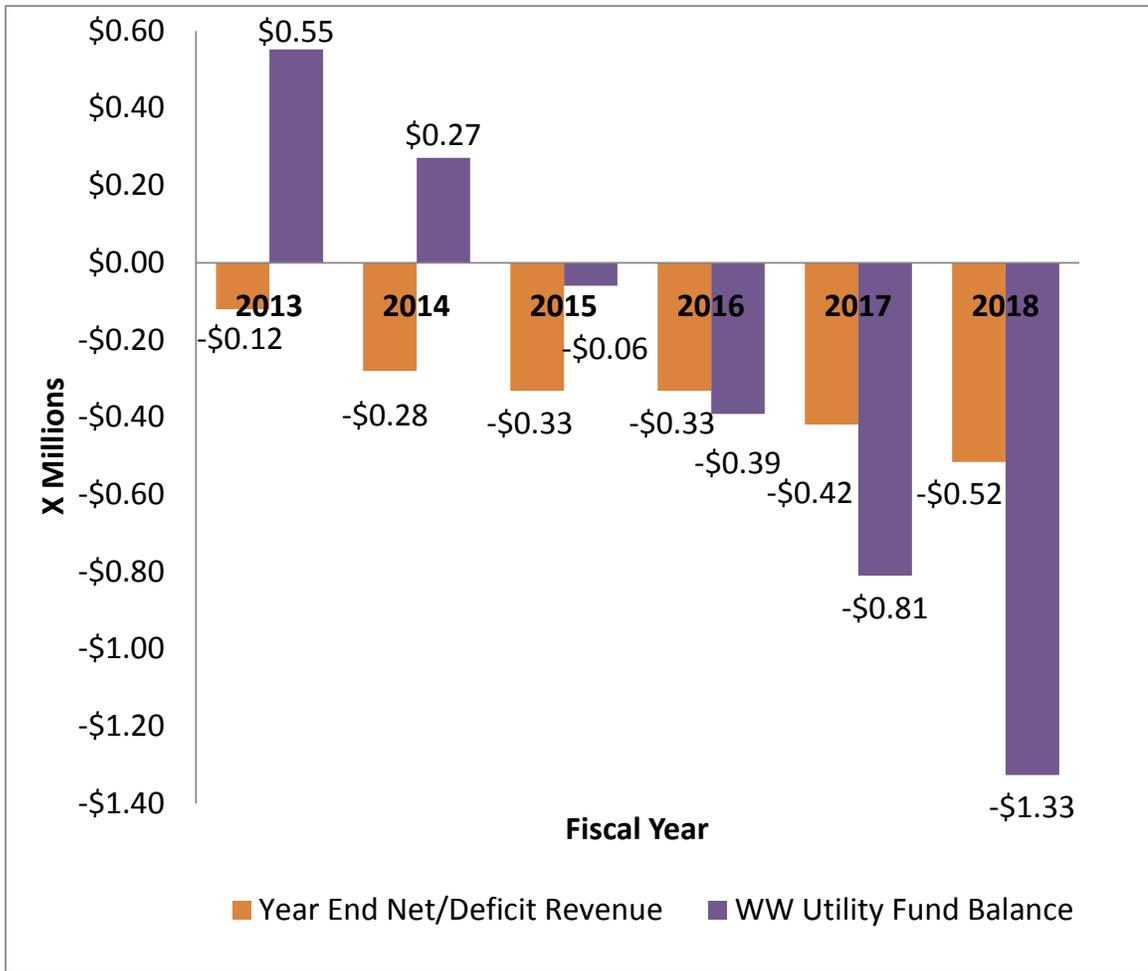
Figure 4-4 on page 4-7 illustrates the projected revenues and expenses with present rates. Revenue is projected to decrease from \$1.7 million in Fiscal Year 2013 to \$1.4 million in Fiscal Year 2018 if no adjustment is made to present rates due to projected decline in water usage.

Capital expenses are projected to decrease in Fiscal Year 2014 because of operations capital outlay that was budgeted to be funded with annual wastewater charges revenue in Fiscal Year 2013. Capital expenses, beyond Fiscal Year 2014, vary with engineering design and construction costs. Total expenses are projected to increase from \$1.8 million in Fiscal Year 2014 to \$1.9 million in Fiscal Year 2018. Expenses will exceed decreasing revenues if no adjustment is made to present rates.



**Operating Results with Existing Rates**  
**Figure 4-4**

Figure 4-5 on page 4-8 illustrates projected deficits and cumulative shortfall of available fund balance in Fiscal Years 2013 through 2018 with present rates and projected expenses. The Wastewater Utility is projected to face a cash deficit that increases from about \$120,400 in Fiscal Year 2013 to about \$516,000 in Fiscal Year 2018. The Wastewater Utility Fund balance is projected to be depleted in Fiscal Year 2015. The cumulative shortfall grows to an estimated \$1.3 million in Fiscal Year 2018.



**Projected Deficit and Fund Balance with Existing Rates**  
**Figure 4-5**

# Unit Cost-of-Service

### **General**

Appendix A contains the Unit Cost-of-Service spreadsheets that were prepared for this study.

### **Cost-of-Service Analysis**

The cost-of-service rate analysis approach allocates the Wastewater Utility's expenses, including variable and fixed costs, incurred in meeting various obligations of providing wastewater service. The cost-of-service approach evaluates each of the current wastewater rates being charged. Typically, this approach affects each of the current rates to a different degree and results in varying financial impacts to different customer groups. The cost-of-service is performed for both the User Charge and Capital Financing.

### **Operating Expense and Capital Financing Allocation**

Tables C1-FY2014, C1-FY2015, C1-FY2016, C1-FY2017, and C1-FY2018 in Appendix A present the User Charge and Financing Capital allocations and unit cost-of-service rates.

The User Charge rate generates revenues for operating and maintaining the wastewater system components. These components include collection and wet weather treatment.

The Capital Financing rate generates revenues for significant repairs and improvements to the Wastewater Utility facilities. The capital financing charge includes repayment of principal and interest for debt service and any capital improvements funded out of the revenue stream.

User Charge (operating expense) and Capital Financing Expenditures are allocated to Volume and Customer Charge to determine the cost to each customer for providing the particular service.

Table 5-1 illustrates a summary of the development of the cost-of-service unit rates. Expenses allocated to User Charge and Capital Financing are Fiscal Year 2014 costs. The Administrative

Services expenses are allocated to the fixed Customer Charge. All other operating expenses and all the capital financing costs are allocated to the volume charge. Proposed cost-of-service unit rates are developed by dividing Volume and Customer Charge expense allocations by the appropriate billing quantities from Tables A2 and A3.

The User Charge and the Capital Financing unit rates are combined into total unit rates.

**Table 5-1 Unit Cost-of-Service Allocations and Rate Development – Fiscal Year 2014**

	<b>Volume</b>	<b>Customer Charge</b>
<b>User Charge</b>		
User Charge Allocated Expenses	\$1,017,688	\$130,353
Billing Quantity	519,576	85,488
	(1,000 gallons/Yr)	(Number Accounts x 12 months)
<b>User Charge Unit Rates</b>	\$1.96	\$1.52
	Per 1,000 gallons	Per Account Per Month
<b>Capital Financing</b>		
Capital Financing Allocated Expenses	\$592,519	\$0.00
Billing Quantity	519,576	85,488
	(1,000 gallons/Yr)	(Number Accounts x 12 months)
<b>Capital Financing Unit Rates</b>	\$1.14	\$0.00
	Per 1,000 gallons	Per Account Per Month
<b>Total Unit Rates</b>	\$3.10	\$1.52
	Per 1,000 gallons	Per Account Per Month

Source: Stanley Consultants, Inc.

### **Cost-of-Service Unit Rates**

Table C2 in Appendix A presents a summary of the unit cost-of-service wastewater rates developed in the C1 Tables to cover Fiscal Years 2014 through 2018 allocated expenses.

# Rate Design

### **General**

Appendix A contains the Rate Design spreadsheets that were prepared for this study. The tables project impacts of implementing proposed wastewater rates in Fiscal Years 2014 through 2018.

### **Proposed Rates**

Table D1 in Appendix A presents the proposed wastewater rates for the Wastewater Utility.

A 12 percent volume rate increase is proposed for August 1, 2013. A uniform charge annual volume increase of 3 percent is proposed to be implemented on January 1 of 2014 through 2017 to evenly distribute the rate increase impact.

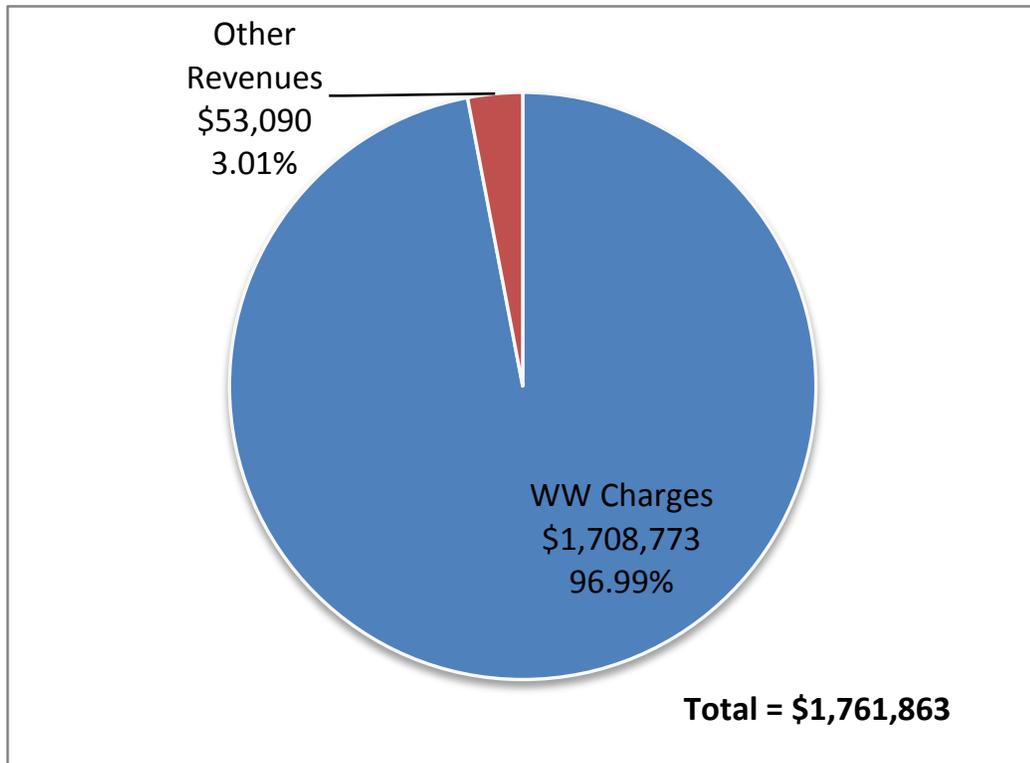
The customer charge increase proportionally to the projected increase in the Administrative Services expenses that are allocated to this charge.

These wastewater rates are multiplied by the billing quantities identified in Table A2 and A3 to project wastewater charge revenues from proposed wastewater rates.

### **Revenues from Proposed Rates**

Table D2 in Appendix A presents the actual, budget, and projected wastewater volume and customer charges. The projected wastewater charges are calculated by multiplying the previously identified quantities by the proposed wastewater rates presented in Table D1. The projected revenue is based on August 1 implementation in each fiscal year.

Figure 6-1 illustrates projected Fiscal Year 2014 revenue with proposed rates.



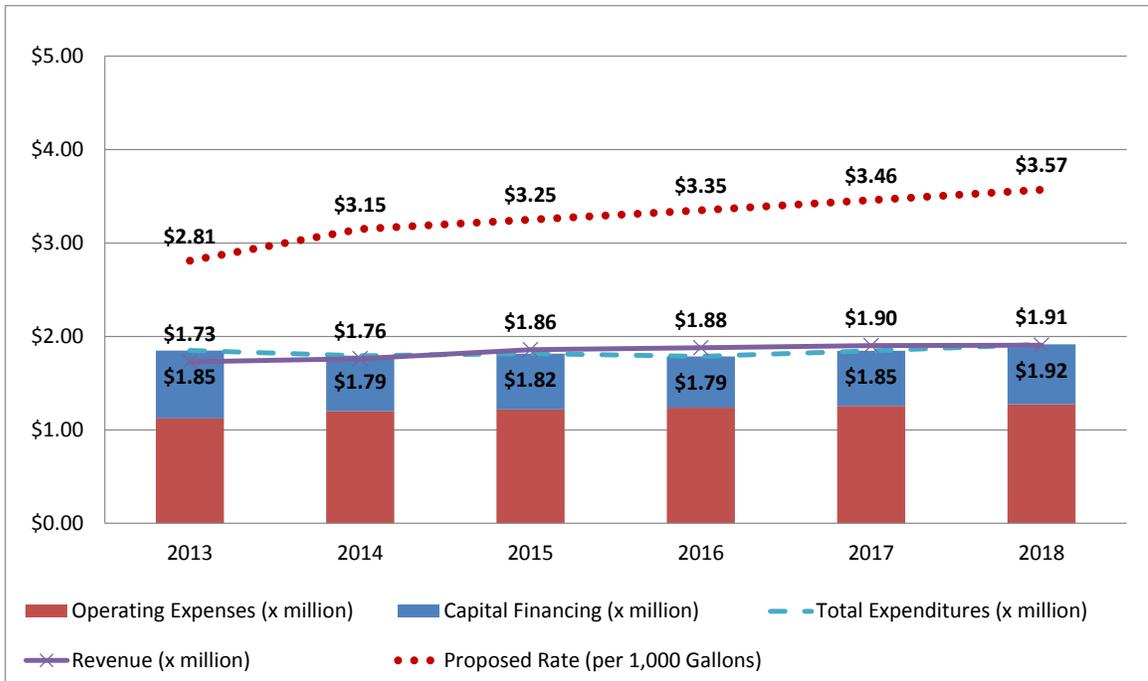
**Projected FY 2014 Revenues with Proposed Rates**

**Figure 6-1**

### **Operating Results with Proposed Rates**

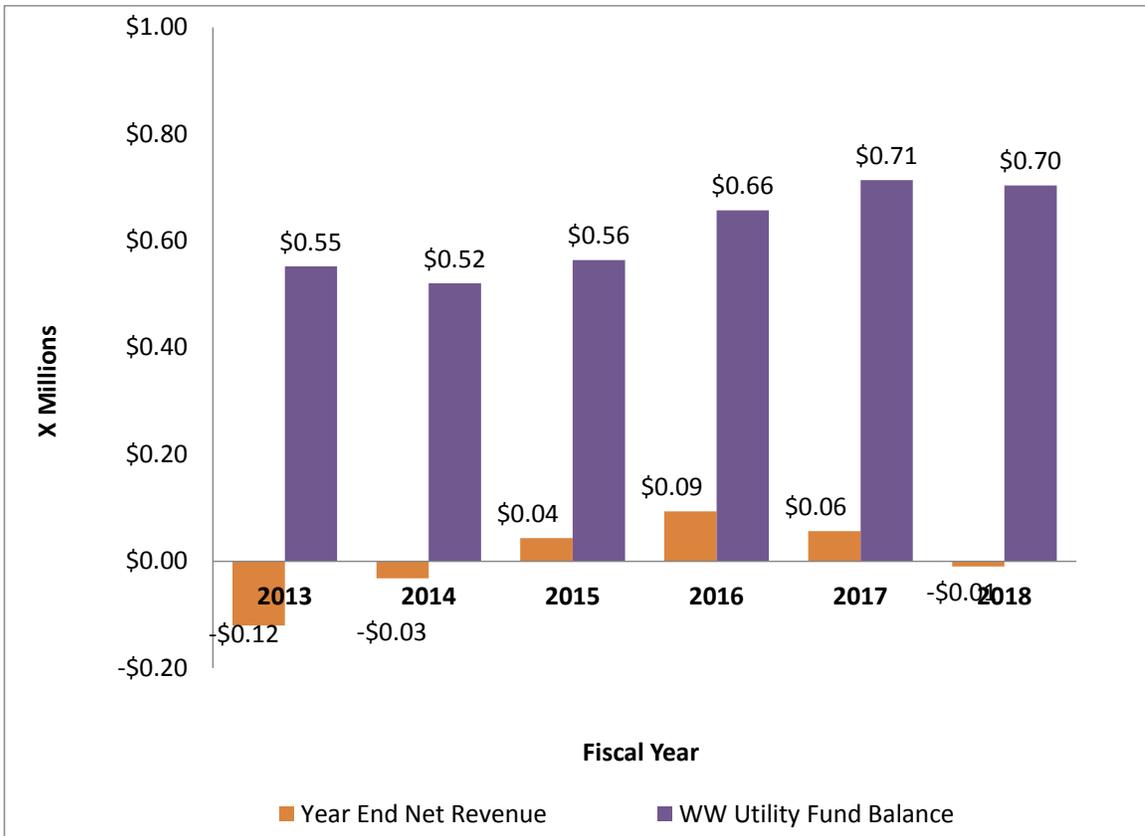
Table D3 in Appendix A presents the operating results with proposed rates for the Wastewater Utility. This table summarizes the billing quantities, revenues, operating expenses, and capital financing previously discussed.

Figure 6-2 illustrates the projected expenses and revenue with proposed rates. The figure illustrates revenue increasing as rates increase. The purpose of using uniform rate increase in Fiscal Years 2014 through 2018 is to evenly distribute the rate increase impact and to achieve the rate required in Fiscal Year 2018. Revenue is projected to increase from \$1.7 million in Fiscal Year 2014 to \$1.9 million in Fiscal Year 2018.



**Operating Results with Proposed Rates**  
**Figure 6-2**

Figure 6-3 illustrates projected net revenue and cumulative fund balance in Fiscal Years 2013 through 2018 with proposed rates. The Wastewater Utility is projected to end each year with a positive cash balance in Fiscal Years 2015 through 2018. The Wastewater Utility Fund cash balance is projected to increase from \$0.6 million in Fiscal Year 2013 to \$0.7 million in Fiscal Year 2018.



**Projected Net Revenue and Fund Balance with Proposed Rates**  
**Figure 6-3**

**Typical Customer Bills**

Table D4 in Appendix A presents a comparison of typical customer water utility bills for present and proposed rates for Fiscal Years 2014 through 2018.

# Implementing Rate Adjustments

### General

Implementing wastewater rate adjustments are often overlooked when analyzing wastewater rates. Some customer resistance to wastewater rate increases can be anticipated.

The Wastewater Utility must inform the public of the need for the increase and provide explanations concerning the changes and improvements that have occurred over time and why. Special emphasis should be placed on the capital projects being implemented and how those projects are being funded through the wastewater rates.

### Implementing Rate Adjustments

To reduce negative reactions to rate changes, the following rate-setting guidelines may be useful:

- The Wastewater Utility has not increased rates since May 2010. Therefore, a large rate adjustment must be made. Implementation of annual wastewater rate increases are recommended in the future to allow rates to increase as costs increase. Smaller, more frequent rate increases are easier for customers to absorb than periodic large increases. A gradual increase will help to lessen "rate shock" over time since customers will expect minor annual wastewater rate increases.
- Implement rate increases during non-peak seasons (winter, early spring or late fall). Increasing rates during peak usage months will add to the impact of higher utility bills.
- Program a series of rate increases to reduce customer objections.
- Tie capital improvement planning and expenditures to the rate requirements. During public hearings, make sure the public understands that the Wastewater Utility is incurring additional costs to maintain or improve the aging wastewater system.

## Appendix A

# Wastewater Rate Analysis Spreadsheets

Table A1  
Billing Quantities - Billings  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30									Percent Escalation
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018	
1.1 Processed Billings (Bills/Year)										
1.1.1 Monthly										
1.1.1.1 Apartment	1,260	1,259	1,260	1,260	1,260	1,260	1,260	1,260	1,260	0%
1.1.1.2 Commercial	1,665	1,678	1,705	1,705	1,705	1,705	1,705	1,705	1,705	0%
1.1.1.3 Government <sup>(1)</sup>	156	156	210	210	210	210	210	210	210	0%
1.1.1.4 Industrial	504	504	504	504	504	504	504	504	504	0%
1.1.1.5 Residential	0	0	0	0	0	0	0	0	0	0%
1.1.1.6 Subtotal Monthly	3,585	3,597	3,679	3,679	3,679	3,679	3,679	3,679	3,679	
1.1.2 Quarterly										
1.1.2.1 Apartment	316	316	315	315	315	315	315	315	315	0%
1.1.2.2 Commercial	1,397	1,401	1,394	1,394	1,394	1,394	1,394	1,394	1,394	0%
1.1.2.3 Government <sup>(1)</sup>	20	18	16	16	16	16	16	16	16	0%
1.1.2.4 Industrial	256	256	256	256	256	256	256	256	256	0%
1.1.2.5 Residential	25,210	25,224	25,226	25,226	25,226	25,226	25,226	25,226	25,226	0%
1.1.2.6 Subtotal Quarterly	27,199	27,215	27,207	27,207	27,207	27,207	27,207	27,207	27,207	
1.2 Total Billings	30,784	30,812	30,886	30,886	30,886	30,886	30,886	30,886	30,886	

Notes (1) Starting April 30, 2012, Municipal accounts were moved from quarterly to monthly cycle.  
(2)  
(3)  
(4)  
(5)

Table A2  
Billing Quantities - Number of Accounts  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30									Percent Escalation
	Actual 2010	Actual 2011	Actual 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018	
2.1 Number of Accounts										
2.1.1 Apartment	184	184	184	184	184	184	184	184	184	0%
2.1.2 Commercial	489	489	491	491	491	491	491	491	491	0%
2.1.3 Government <sup>(1)</sup>	18	17	35	35	35	35	35	35	35	0%
2.1.4 Industrial	106	106	106	106	106	106	106	106	106	0%
2.1.5 Residential	6,307	6,308	6,308	6,308	6,308	6,308	6,308	6,308	6,308	0%
2.1.6 Total Number of Accounts	7,104	7,104	7,124	7,124	7,124	7,124	7,124	7,124	7,124	

- Notes (1) Starting April 30, 2012, Municipal accounts were moved from quarterly to monthly cycle.  
(2)  
(3)  
(4)  
(5)

Table A3  
Billing Quantities - Volume (1,000 Gallons)  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Actual 2010	Actual 2011	Year-End 2012	Fiscal Year Ending April 30			Projected 2016	Projected 2017	Projected 2018	Percent Escalation
				Budget 2013	Projected 2014	Projected 2015				
1.1 Billable Volume (1,000 Gallons/Year)										
1.1.1 Total	557,213	545,039	541,000	530,180	519,576	509,185	499,001	489,021	479,241	-2%

Notes (1) Dupage Water Commission is projecting a 2% decline in water usage per year beginning FY 2013.  
(2)  
(3)  
(4)  
(5)

Table B1  
Present Rates  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	
1.1	Unit Rates
1.1.1	Volume Charge

May 1, 2010  
\$2.81

- Notes (1)  
(2)  
(3)  
(4)  
(5)

Table B2  
Revenues From Present Rates  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30						Projected 2016	Projected 2017	Projected 2018	Percent Escalation
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015				
2.1 Sewer Charges										
2.1.1 Volume Charge	\$1,434,628	\$1,527,207	\$1,510,510	\$1,466,321	\$1,460,010	\$1,430,809	\$1,402,193	\$1,374,149	\$1,346,666	
2.2 Other Revenues										
2.2.1 Resident Fees	\$21,299	\$19,964	\$14,963	\$16,285	\$16,285	\$16,285	\$16,285	\$16,285	\$16,285	
2.2.2 Miscellaneous Revenue	\$17,838	\$6,129	\$2,208	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	0%
2.2.3 Water & Sewer Permit Fees	\$3,435	\$320	\$410	\$500	\$500	\$500	\$500	\$500	\$500	0%
2.2.4 Connection Charges	\$5,447	\$13,711	\$13,270	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	0%
2.2.5 Late Charges	\$13,316	\$15,483	\$14,541	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	0%
2.2.6 Sewer Inspection Fees	\$888	\$10,000	\$9,570	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500	0%
2.2.7 State Grant			\$1,832							
2.2.8 Block Grant				\$210,000						
2.2.9 Interest	\$2,969	\$2,078	\$1,255	\$805	\$805	\$805	\$805	\$805	\$805	
2.2.10 Subtotal Other Revenues	\$65,192	\$67,685	\$58,049	\$263,090	\$53,090	\$53,090	\$53,090	\$53,090	\$53,090	
2.3 Total Revenues	\$1,499,820	\$1,594,892	\$1,568,559	\$1,729,411	\$1,513,100	\$1,483,899	\$1,455,283	\$1,427,239	\$1,399,756	

- Notes (1)  
(2)  
(3)  
(4)  
(5)

Table B3  
 Operating Expenses  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description	Fiscal Year Ending April 30									Percent Escalation
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018	
3.1 Administration										
3.1.1 Salaries and Benefits										
3.1.1.1 Salaries	\$448,788	\$430,659	\$445,966	\$466,482	\$475,812	\$485,328	\$495,034	\$504,935	\$515,034	2%
3.1.1.2 Salary Contributions <sup>(1)</sup>	\$82,235	\$69,495	\$92,294	\$98,564	\$100,535	\$102,546	\$104,597	\$106,689	\$108,823	2%
3.1.1.3 Subtotal Salaries and Benefits	\$531,023	\$500,154	\$538,260	\$565,046	\$576,347	\$587,874	\$599,631	\$611,624	\$623,856	
3.1.2 Contractual Services										
3.1.2.1 Employee Benefits (Insurance)	\$82,976	\$63,577	\$62,782	\$108,638	\$108,638	\$108,638	\$108,638	\$108,638	\$108,638	0%
3.1.2.2 Engineering Services	\$96	\$0	\$0	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	0%
3.1.2.3 Other Contractual Services	\$16,094	\$81,113	\$20,219	\$14,606	\$14,606	\$14,606	\$14,606	\$14,606	\$14,606	0%
3.1.2.4 Other	\$41,615	\$37,223	\$35,249	\$46,125	\$47,048	\$47,988	\$48,948	\$49,927	\$50,926	2%
3.1.2.5 Subtotal Contractual Services	\$140,781	\$181,913	\$118,250	\$185,369	\$186,292	\$187,232	\$188,192	\$189,171	\$190,170	
3.1.3 Administrative Services <sup>(2)</sup>	\$127,797	\$132,000	\$132,000	\$127,797	\$130,353	\$132,960	\$135,619	\$138,332	\$141,098	2%
3.1.4 Commodities	\$26,630	\$28,359	\$29,035	\$36,024	\$36,744	\$37,479	\$38,229	\$38,994	\$39,773	2%
3.1.5 Capital Outlay										
3.1.5.1 Capital Outlay <sup>(3)</sup>	\$0	\$0	\$2,086	\$0	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	0%
3.1.5.2 Non-Capital Outlay <sup>(4)</sup>	\$980	\$947	\$4,248	\$3,000	\$8,200	\$8,200	\$8,200	\$8,200	\$8,200	0%
3.1.5.3 Subtotal Capital Outlay	\$980	\$947	\$6,334	\$3,000	\$13,200	\$13,200	\$13,200	\$13,200	\$13,200	
3.1.6 Subtotal Administration	\$827,211	\$843,373	\$823,879	\$917,236	\$942,936	\$958,746	\$974,872	\$991,320	\$1,008,098	
3.2 Operation										
3.2.1 Contractual Services <sup>(5)</sup>										
3.2.1.1 Other Contractual Services	\$78,672	\$164,488	\$134,043	\$90,800	\$90,800	\$90,800	\$90,800	\$90,800	\$90,800	0%
3.2.1.2 Other	\$61,630	\$55,965	\$52,589	\$69,250	\$70,635	\$72,048	\$73,489	\$74,958	\$76,458	2%
3.1.2.3 Subtotal Contractual Services	\$140,302	\$220,453	\$186,632	\$160,050	\$161,435	\$162,848	\$164,289	\$165,758	\$167,258	
3.2.2 Commodities										
3.2.2.1 Stone	\$13,907	\$4,880	\$0	\$7,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	0%
3.2.2.2 Other Commodities	\$36,719	\$34,056	\$32,998	\$38,000	\$38,760	\$39,535	\$40,326	\$41,132	\$41,955	2%
3.2.2.3 Subtotal Commodities	\$50,626	\$38,936	\$32,998	\$45,000	\$46,760	\$47,535	\$48,326	\$49,132	\$49,955	
3.2.3 Vehicle Replacement <sup>(6)</sup>					\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	3%
3.2.4 Subtotal Operation	\$190,928	\$259,389	\$219,630	\$205,050	\$258,195	\$260,383	\$262,615	\$264,891	\$267,213	
3.3 Total Operating Expenses	\$1,018,139	\$1,102,762	\$1,043,509	\$1,122,286	\$1,201,131	\$1,219,129	\$1,237,486	\$1,256,211	\$1,275,310	

- Notes
- (1) Includes IMRF, Social Security, and Medicare contributions. Expenses were funded from Operations account in FY2010.
  - (2) Transfer to Village Corporate account to cover fixed administrative costs.
  - (3) Items with individual cost of \$500 or more including computer equipment, GIS upgrade, etc.
  - (4) Items with individual cost between \$100 & \$500 including IT hardware, furniture, shelving.
  - (5) Contractual expense, Engineering Services (Engineering Design and Construction Phase Services), is included on Table B4 with Capital Financing.
  - (6) Projected to spend \$250,000 over next 5 years.

Table B4  
Capital Financing  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30									CIP Cost
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018	
4.1 Debt Service										
4.1.1 South Myrtle Relief L17-298700 <sup>(1)</sup>	\$27,949	\$37,935	\$47,922	\$47,922	\$47,922	\$47,922	\$47,922	\$47,922	\$47,922	
4.1.2 North Villa Lift Station Rehab L17-2788 <sup>(2)</sup>	\$11,148	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147	\$19,147	
4.1.3 Sanitary Sewer Rehab 1 L17-3049 <sup>(3)</sup>	\$0	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938	\$79,938	
4.1.4 2013 IEPA Loan <sup>(4)</sup> \$237,910	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$362,910
4.1.5 2014 IEPA Loan <sup>(4)</sup> \$487,560	\$0	\$0	\$0	\$0	\$27,000	\$27,000	\$27,000	\$27,000	\$27,000	\$487,560
4.1.6 2015 IEPA Loan <sup>(4)</sup> \$397,340	\$0	\$0	\$0	\$0	\$0	\$22,000	\$22,000	\$22,000	\$22,000	\$397,340
4.1.7 2016 IEPA Loan <sup>(4)</sup> \$125,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$7,000	\$7,000	\$125,000
4.1.8 2017 IEPA Loan <sup>(4)</sup> \$260,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,000	\$14,000	\$260,000
4.1.9 2018 IEPA Loan <sup>(4)</sup> \$402,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,000	\$402,200
4.1.10 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,035,010
4.1.11 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.12 Subtotal Debt Service	\$39,097	\$137,020	\$147,007	\$167,007	\$194,007	\$216,007	\$223,007	\$237,007	\$259,007	
4.2 Other Disbursements										
4.2.1 Debt Service Reserve <sup>(5)</sup>										
4.2.1.1 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.1.2 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.1.3 Subtotal Debt Service Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2 Capital Outlay from Revenues										
4.2.2.1 Operations Non-Capital Outlay <sup>(6)</sup>	\$3,106	\$3,804	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
4.2.2.2 Operations Capital Outlay <sup>(7)</sup>	\$114,397	(\$153,913)	\$132,412	\$459,000						
4.2.2.3 Operations Engineering Services (Design) <sup>(8)</sup>	\$201,044	\$38,899	\$27,091	\$25,500	\$48,756	\$39,734	\$12,500	\$26,000	\$40,220	
4.2.2.4 Operations Engineering Services (Constr Phase) <sup>(9)</sup>					\$48,756	\$39,734	\$12,500	\$26,000	\$40,220	
4.2.2.5 Wet Weather Flow Treatment Facility <sup>(10)</sup>	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
4.2.2.6 Sewer Rehabilitation, Repairs and Lining	\$382,060	\$491,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.7 Combined Sewer Separation	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
4.2.2.8 Overage From Proposed Budget	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	
4.2.2.9 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.10 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.11 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.12 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.13 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.14 Subtotal Capital Projects from Revenues	\$700,607	\$379,915	\$159,503	\$560,500	\$298,512	\$280,468	\$226,000	\$253,000	\$281,440	
4.2.3 WWTP Reserve Fund <sup>(11)</sup>					\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
4.2.4 Subtotal Other Disbursements	\$700,607	\$379,915	\$159,503	\$560,500	\$398,512	\$380,468	\$326,000	\$353,000	\$381,440	
4.3 Total Capital Financing	\$739,704	\$516,935	\$306,510	\$727,507	\$592,519	\$596,475	\$549,007	\$590,007	\$640,447	

- Notes
- (1) 2009 IEPA loan for \$732,156.83 at 2.5% interest rate; payoff April 2029.
  - (2) 2009 IEPA loan for \$238,271 at 2.5% interest rate; payoff July 2024.
  - (3) 2010 IEPA loan for \$1,558,786 at 0% interest rate; payoff October 2030.
  - (4) \$1.9 million of projects identified in Master Plan for FY2014-2018. Projects projected to be completed with IEPA loans at 1.0% interest rate & 20 year payback period.
  - (5) No Debt Service Reserve required for IEPA loans.
  - (6) Items with individual cost less than \$10,000.
  - (7) CIP projects - Items with individual cost between \$10,000 and \$50,000. Future projects to be funded with IEPA loans.
  - (8) 10% of estimated construction cost for Design Engineering Services.
  - (9) Construction Phase Engineering Services is projected at 10% of estimated construction cost.
  - (10) Includes \$240,000 for WWFTF projects; \$80,000 per year in FY2015-2017.
  - (11) Annualized cost based on original capital investment.

Table B5  
 Operating Results With Present Rates  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description	Fiscal Year Ending April 30								
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018
5.1 Billing Quantities									
5.1.1 Billings	30,784	30,812	30,886	30,886	30,886	30,886	30,886	30,886	30,886
5.1.2 Billable Volume (1,000 Gallons/Year)	557,213	545,039	541,000	530,180	519,576	509,185	499,001	489,021	479,241
5.2 Revenues									
5.2.1 Sewer Charges	\$1,434,628	\$1,527,207	\$1,510,510	\$1,466,321	\$1,460,010	\$1,430,809	\$1,402,193	\$1,374,149	\$1,346,666
5.2.2 Other Revenues	\$65,192	\$67,685	\$58,049	\$263,090	\$53,090	\$53,090	\$53,090	\$53,090	\$53,090
5.2.3 Total Revenues	\$1,499,820	\$1,594,892	\$1,568,559	\$1,729,411	\$1,513,100	\$1,483,899	\$1,455,283	\$1,427,239	\$1,399,756
5.3 Operating Expenses									
5.3.1 Administration	\$827,211	\$843,373	\$823,879	\$917,236	\$942,936	\$958,746	\$974,872	\$991,320	\$1,008,098
5.3.2 Operation	\$190,928	\$259,389	\$219,630	\$205,050	\$258,195	\$260,383	\$262,615	\$264,891	\$267,213
5.3.3 Total Operating Expenses	\$1,018,139	\$1,102,762	\$1,043,509	\$1,122,286	\$1,201,131	\$1,219,129	\$1,237,486	\$1,256,211	\$1,275,310
5.4 Capital Financing									
5.4.1 Debt Service	\$39,097	\$137,020	\$147,007	\$167,007	\$194,007	\$216,007	\$223,007	\$237,007	\$259,007
5.4.2 Other Disbursements									
5.4.2.1 Debt Service Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5.4.2.2 Capital Outlay from Revenues	\$700,607	\$379,915	\$159,503	\$560,500	\$298,512	\$280,468	\$226,000	\$253,000	\$281,440
5.4.2.3 Fund Reserve	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
5.4.3 Total Capital Financing	\$739,704	\$516,935	\$306,510	\$727,507	\$592,519	\$596,475	\$549,007	\$590,007	\$640,447
5.5 Total Expenses	\$1,757,843	\$1,619,697	\$1,350,019	\$1,849,793	\$1,793,650	\$1,815,604	\$1,786,493	\$1,846,218	\$1,915,757
5.6 Cash Balance (Deficit)									
5.6.1 Annual Net Revenue <sup>(1)</sup>				(\$120,382)	(\$280,550)	(\$331,704)	(\$331,210)	(\$418,979)	(\$516,001)
5.6.2 Percent of Water Sales				-8%	-19%	-23%	-24%	-30%	-38%
5.7 Account Balance <sup>(2)</sup>	\$545,987	\$730,841	\$960,491	\$552,336	\$271,786	(\$59,918)	(\$391,128)	(\$810,107)	(\$1,326,108)

Notes (1) Revenues - Expenses  
 (2) Previous Fund Reserve Balance + Net Revenue  
 (3)  
 (4)  
 (5)

Table C1 - FY2014  
Unit Cost-of-Service  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30, 2014				
	Expenditures \$	Volume %	\$	Customer Charge %	\$
1.1 User Charge					
1.1.1 Administration <sup>(1)</sup>	\$812,583	100%	\$812,583	0%	\$0
1.1.2 Administrative Services	\$130,353	0%	\$0	100%	\$130,353
1.1.3 Operation	\$258,195	100%	\$258,195	0%	\$0
1.1.4 Other Revenue	(\$53,090)	100%	(\$53,090)	0%	\$0
1.1.5 Subtotal User Charge	\$1,148,041		\$1,017,688		\$130,353
1.1.6 Billing Quantity			519,576		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.1.7 User Charge Unit Rate			\$1.96		\$1.52
			Per 1,000 Gallons		Per Account per month
1.2 Capital Financing					
1.2.1 Debt Service	\$194,007	100%	\$194,007	0%	\$0
1.2.2 Other Disbursements					
1.2.2.1 Debt Service Reserve	\$0	100%	\$0	0%	\$0
1.2.2.2 Capital Outlay from Revenues	\$298,512	100%	\$298,512	0%	\$0
1.2.2.3 WWTP Reserve Fund	\$100,000	100%	\$100,000	0%	\$0
1.2.3 Subtotal Capital Financing	\$592,519		\$592,519		\$0
1.2.4 Billing Quantity			519,576		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.2.5 Capital Financing Unit Rate			\$1.14		\$0.00
			Per 1,000 Gallons		Per Account per month
1.3 Total Unit Rate			\$3.10		\$1.52

- Notes (1) Includes all Administration expenses except fixed costs associated with Administrative Services.  
(2)  
(3)  
(4)  
(5)

Table C1 - FY2015  
Unit Cost-of-Service  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30, 2015				
	Expenditures \$	Volume %	\$	Customer Charge %	\$
1.1 User Charge					
1.1.1 Administration <sup>(1)</sup>	\$825,786	100%	\$825,786	0%	\$0
1.1.2 Administrative Services	\$132,960	0%	\$0	100%	\$132,960
1.1.3 Operation	\$260,383	100%	\$260,383	0%	\$0
1.1.4 Other Revenue	(\$53,090)	100%	(\$53,090)	0%	\$0
1.1.5 Subtotal User Charge	\$1,166,039		\$1,033,079		\$132,960
1.1.6 Billing Quantity			509,185		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.1.7 User Charge Unit Rate			\$2.03		\$1.56
			Per 1,000 Gallons		Per Account per month
1.2 Capital Financing					
1.2.1 Debt Service	\$216,007	100%	\$216,007	0%	\$0
1.2.2 Other Disbursements					
1.2.2.1 Debt Service Reserve	\$0	100%	\$0	0%	\$0
1.2.2.2 Capital Outlay from Revenues	\$280,468	100%	\$280,468	0%	\$0
1.2.2.3 WWTP Reserve Fund	\$100,000	100%	\$100,000	0%	\$0
1.2.3 Subtotal Capital Financing	\$596,475		\$596,475		\$0
1.2.4 Billing Quantity			509,185		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.2.5 Capital Financing Unit Rate			\$1.17		\$0.00
			Per 1,000 Gallons		Per Account per month
1.3 Total Unit Rate			\$3.20		\$1.56

Notes (1) Includes all Administration expenses except fixed costs associated with Administrative Services.

(2)

(3)

(4)

(5)

Table C1 - FY2016  
Unit Cost-of-Service  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Fiscal Year Ending April 30, 2016				
	Expenditures \$	Volume %	\$	Customer Charge %	\$
1.1 User Charge					
1.1.1 Administration <sup>(1)</sup>	\$839,253	100%	\$839,253	0%	\$0
1.1.2 Administrative Services	\$135,619	0%	\$0	100%	\$135,619
1.1.3 Operation	\$262,615	100%	\$262,615	0%	\$0
1.1.4 Other Revenue	(\$53,090)	100%	(\$53,090)	0%	\$0
1.1.5 Subtotal User Charge	\$1,184,396		\$1,048,777		\$135,619
1.1.6 Billing Quantity			499,001		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.1.7 User Charge Unit Rate			\$2.10		\$1.59
			Per 1,000 Gallons		Per Account per month
1.2 Capital Financing					
1.2.1 Debt Service	\$223,007	100%	\$223,007	0%	\$0
1.2.2 Other Disbursements					
1.2.2.1 Debt Service Reserve	\$0	100%	\$0	0%	\$0
1.2.2.2 Capital Outlay from Revenues	\$226,000	100%	\$226,000	0%	\$0
1.2.2.3 WWTP Reserve Fund	\$100,000	100%	\$100,000	0%	\$0
1.2.3 Subtotal Capital Financing	\$549,007		\$549,007		\$0
1.2.4 Billing Quantity			499,001		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.2.5 Capital Financing Unit Rate			\$1.10		\$0.00
			Per 1,000 Gallons		Per Account per month
1.3 Total Unit Rate			\$3.20		\$1.59

- Notes (1) Includes all Administration expenses except fixed costs associated with Administrative Services.  
(2)  
(3)  
(4)  
(5)

Table C1 - FY2017  
Unit Cost-of-Service  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Expenditures \$	Fiscal Year Ending April 30, 2017		Customer Charge	
		Volume %	\$	%	\$
1.1 User Charge					
1.1.1 Administration <sup>(1)</sup>	\$852,989	100%	\$852,989	0%	\$0
1.1.2 Administrative Services	\$138,332	0%	\$0	100%	\$138,332
1.1.3 Operation	\$264,891	100%	\$264,891	0%	\$0
1.1.4 Other Revenue	(\$53,090)	100%	(\$53,090)	0%	\$0
1.1.5 Subtotal User Charge	\$1,203,121		\$1,064,790		\$138,332
1.1.6 Billing Quantity			489,021		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.1.7 User Charge Unit Rate			\$2.18		\$1.62
			Per 1,000 Gallons		Per Account per month
1.2 Capital Financing					
1.2.1 Debt Service	\$237,007	100%	\$237,007	0%	\$0
1.2.2 Other Disbursements					
1.2.2.1 Debt Service Reserve	\$0	100%	\$0	0%	\$0
1.2.2.2 Capital Outlay from Revenues	\$253,000	100%	\$253,000	0%	\$0
1.2.2.3 WWTP Reserve Fund	\$100,000	100%	\$100,000	0%	\$0
1.2.3 Subtotal Capital Financing	\$590,007		\$590,007		\$0
1.2.4 Billing Quantity			489,021		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.2.5 Capital Financing Unit Rate			\$1.21		\$0.00
			Per 1,000 Gallons		Per Account per month
1.3 Total Unit Rate			\$3.38		\$1.62

Notes (1) Includes all Administration expenses except fixed costs associated with Administrative Services.

(2)

(3)

(4)

(5)

Table C1 - FY2018  
Unit Cost-of-Service  
Wastewater Rate Study  
Village of Villa Park, Illinois  
June 2013

Description	Expenditures \$	Fiscal Year Ending April 30, 2018		Customer Charge	
		Volume %	\$	%	\$
1.1 User Charge					
1.1.1 Administration <sup>(1)</sup>	\$867,000	100%	\$867,000	0%	\$0
1.1.2 Administrative Services	\$141,098	0%	\$0	100%	\$141,098
1.1.3 Operation	\$267,213	100%	\$267,213	0%	\$0
1.1.4 Other Revenue	(\$53,090)	100%	(\$53,090)	0%	\$0
1.1.5 Subtotal User Charge	\$1,222,220		\$1,081,122		\$141,098
1.1.6 Billing Quantity			479,241		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.1.7 User Charge Unit Rate			\$2.26		\$1.65
			Per 1,000 Gallons		Per Account per month
1.2 Capital Financing					
1.2.1 Debt Service	\$259,007	100%	\$259,007	0%	\$0
1.2.2 Other Disbursements					
1.2.2.1 Debt Service Reserve	\$0	100%	\$0	0%	\$0
1.2.2.2 Capital Outlay from Revenues	\$281,440	100%	\$281,440	0%	\$0
1.2.2.3 WWTP Reserve Fund	\$100,000	100%	\$100,000	0%	\$0
1.2.3 Subtotal Capital Financing	\$640,447		\$640,447		\$0
1.2.4 Billing Quantity			479,241		85,488
			(1,000 Gallons/Year)		(Number of Accounts x 12 months)
1.2.5 Capital Financing Unit Rate			\$1.34		\$0.00
			Per 1,000 Gallons		Per Account per month
1.3 Total Unit Rate			\$3.59		\$1.65

- Notes (1) Includes all Administration expenses except fixed costs associated with Administrative Services.  
(2)  
(3)  
(4)  
(5)

Table C2  
 Unit Cost-of-Service Rates  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description			Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018
2.1	Unit Rates						
2.1.1	Volume Charge	Per 1,000 gallons	\$3.10	\$3.20	\$3.20	\$3.38	\$3.59
2.1.2	Customer Charge	Per account per month	\$1.52	\$1.56	\$1.59	\$1.62	\$1.65

Notes (1)  
 (2)  
 (3)  
 (4)  
 (5)

Table D1  
 Proposed Rates  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description		Present	Proposed August 1, 2013	Proposed January 1, 2014	Proposed January 1, 2015	Proposed January 1, 2016	Proposed January 1, 2017
1.1	Unit Rates						
1.1.1	Volume Charge	Per 1,000 gallons	\$2.81	12.00% \$3.15	3.00% \$3.25	3.00% \$3.35	3.00% \$3.46
1.1.2	Customer Charge	Per account per month		\$1.53	\$1.56	\$1.59	\$1.62

- Notes (1)  
 (2)  
 (3)  
 (4)  
 (5)

Table D2  
 Revenues From Proposed Rates  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description	Actual 2010	Actual 2011	Year-End 2012	Fiscal Year Ending April 30		Projected 2015	Projected 2016	Projected 2017	Projected 2018
				Budget 2013	Projected 2014				
2.1 Water Charges									
2.1.1 Volume Charge					\$1,609,821	\$1,671,824	\$1,689,951	\$1,709,944	\$1,710,889
2.1.2 Customer Charge					\$98,952	\$134,216	\$136,781	\$139,630	\$141,910
2.1.3 Total Water Charges	\$1,434,628	\$1,527,207	\$1,510,510	\$1,466,321	\$1,708,773	\$1,806,040	\$1,826,731	\$1,849,574	\$1,852,799

- Notes (1) Revenue based on August 1, 2013 and January 1, 2014 rate implementations for FY2014. Revenue based on January 1 rate implementation for other years.  
 (2) Fiscal Year 2018 revenue based on entire year with January 1, 2017 rates.  
 (3)  
 (4)  
 (5)

Table D3  
 Operating Results With Proposed Rates  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description	Fiscal Year Ending April 30								
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018
3.1	Billing Quantities								
3.1.1	Billings	30,784	30,812	30,886	30,886	30,886	30,886	30,886	30,886
3.1.2	Billable Volume (1,000 Gallons/Year)	557,213	545,039	541,000	530,180	519,576	509,185	499,001	479,241
3.2	Revenues								
3.2.1	Sewer Charges	\$1,434,628	\$1,527,207	\$1,510,510	\$1,466,321	\$1,708,773	\$1,806,040	\$1,826,731	\$1,849,574
3.2.2	Other Revenues	\$65,192	\$67,685	\$58,049	\$263,090	\$53,090	\$53,090	\$53,090	\$53,090
3.2.3	Total Revenues	\$1,499,820	\$1,594,892	\$1,568,559	\$1,729,411	\$1,761,863	\$1,859,130	\$1,879,821	\$1,902,664
3.3	Operating Expenses								
3.3.1	Administration	\$827,211	\$843,373	\$823,879	\$917,236	\$942,936	\$958,746	\$974,872	\$991,320
3.3.2	Operation	\$190,928	\$259,389	\$219,630	\$205,050	\$258,195	\$260,383	\$262,615	\$264,891
3.3.3	Total Operating Expenses	\$1,018,139	\$1,102,762	\$1,043,509	\$1,122,286	\$1,201,131	\$1,219,129	\$1,237,486	\$1,256,211
3.4	Capital Financing								
3.4.1	Debt Service	\$39,097	\$137,020	\$147,007	\$167,007	\$194,007	\$216,007	\$223,007	\$237,007
3.4.2	Other Disbursements								
3.4.2.1	Debt Service Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.4.2.2	Capital Outlay from Revenues	\$700,607	\$379,915	\$159,503	\$560,500	\$298,512	\$280,468	\$226,000	\$253,000
3.4.2.3	Fund Reserve	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$100,000
3.4.3	Total Capital Financing	\$739,704	\$516,935	\$306,510	\$727,507	\$592,519	\$596,475	\$549,007	\$590,007
3.5	Total Expenses	\$1,757,843	\$1,619,697	\$1,350,019	\$1,849,793	\$1,793,650	\$1,815,604	\$1,786,493	\$1,846,218
3.6	Cash Balance (Deficit)								
3.6.1	Annual Net Revenue <sup>(1)</sup>				(\$120,382)	(\$31,787)	\$43,526	\$93,328	\$56,446
3.6.2	Percent of Water Sales					-1.86%	2.41%	5.11%	3.05%
3.7	Account Balance <sup>(2)</sup>	\$545,987	\$730,841	\$960,491	\$552,336	\$520,549	\$564,076	\$657,404	\$713,850

- Notes (1) Revenues - Expenses  
 (2) Previous Fund Reserve Balance + Net Revenue  
 (3)  
 (4)  
 (5)

Table D4  
 Typical Customer Bills  
 Wastewater Rate Study  
 Village of Villa Park, Illinois  
 June 2013

Description		Present Rates	Proposed	Proposed Rates	Proposed Rates	Proposed Rates	Proposed Rates	
			August 1, 2013	January 1, 2014	January 1, 2015	January 1, 2016	January 1, 2017	
4.1	Unit Rates							
4.1.1	Volume Charge	Per 1,000 gallons	\$2.81	\$3.15	\$3.25	\$3.35	\$3.46	\$3.57
4.1.2	Customer Charge	Per account per month		\$1.53	\$1.56	\$1.59	\$1.62	\$1.66
		Monthly Usage (Gallons)	Bill (\$)	Bill (\$)	Bill (\$)	Bill (\$)	Bill (\$)	Bill (\$)
4.2	Quarterly Billings							
4.2.1	Small Family	4,500	\$37.94	\$47.12	\$48.56	\$50.00	\$51.57	\$53.18
4.2.2	Average Family	7,500	\$63.23	\$75.47	\$77.81	\$80.15	\$82.71	\$85.31
4.2.3	Large Family	11,250	\$94.84	\$110.90	\$114.37	\$117.83	\$121.64	\$125.47

- Notes (1)  
 (2)  
 (3)  
 (4)  
 (5)

## Appendix B

### Existing Wastewater Rate Ordinance

MUNICIPAL CODE  
Chapter 25 - WATER, SEWERS AND SEWAGE DISPOSAL  
ARTICLE I. - IN GENERAL

eligibility of the applicant for exemption from the Type "B" sewer connection fee and/or Type "B" water connection fee provided hereinafter, which information and documentation shall include not less than the following:

- a. Most recent Federal Income Tax Return; and
- b. Copy of title policy or equivalent showing ownership in the name of the applicant. In addition, the applicant may be required to furnish items such as utility bills, property tax bills, or an affidavit of ownership and income containing such information as may be necessary to assure that the applicant is eligible for the exemption. All information furnished by the applicant to determine eligibility shall be confidential and, to the maximum extent permitted by law, shall not be disclosed except upon express written consent of all interested persons. Each applicant for connection to the Westlands Phase II and III Sanitary Sewer and Water Main Extension within the project area shall be advised, upon submittal of an application for a permit, of the availability for the exemptions from the Type "B" sanitary sewer and/or Type "B" water connection fees. Each applicant shall submit the necessary documentation to establish eligibility, or in lieu thereof, shall execute an acknowledgment properly notarized that the applicant has been fully and completely advised of the availability of the exemption and declines to furnish the necessary information. Any person executing the acknowledgment shall be deemed eligible for the exemption. No connection to the water main and/or sanitary sewer main shall be permitted unless and until the applicant has submitted the appropriate acknowledgment or has made application for the exemption with all requested information and a determination has been made.

(4) *Eligibility.* Properties which are owned and occupied by a family of low or moderate income, upon furnishing proper and acceptable proof of eligibility, shall be exempt from the Type "B" water connection and/or Type "B" sewer connection fees specified in subsections 25-103(c) and (d) above.

(5) *Compliance with other regulations.* This section and the definitions and terms used herein shall be interpreted and applied in accordance with any federal, state or county rules, regulations, laws or ordinances applicable to the community development block grant program ("other regulations") and in the event of any inconsistency between such other regulations and the provisions of this section, the provisions of such other regulations shall govern.

(l) This section shall not affect, supersede or modify any contract, agreement, annexation agreement or ordinance previously entered into or adopted providing specifically for connection charges to the village sanitary sewer systems and the same shall remain in effect until they expire by their own terms.

(Ord. No. 1809, §§ 1—5, 7, 9-5-78; Ord. No. 2741, §§ 1—6, 12-12-94; Ord. No. 2767, §§ 2, 3, 4-24-95; Ord. No. 2809, § 2, 1-15-96; Ord. No. 2881, §§ 2, 3, 5-12-97; Ord. No. 2962, §§ 2, 3, 10-19-98; Ord. No. 3066, § 2, 11-20-00; Ord. No. 3257, §§ 6, 8, 7-12-04)

**Sec. 25-104. - Rates and charges—Established.**

(a) The wastewater service charge for the use of and for services supplied by the wastewater facilities shall be comprised of operation and maintenance and equipment replacement costs. The total unit service charge shall be computed by apportioning these total costs to a cost per one thousand (1,000) gallons of water consumption. The wastewater service charge shall be computed by the following formula:  $CW = (Vu) CU + CS + CB$ :

MUNICIPAL CODE  
 Chapter 25 - WATER, SEWERS AND SEWAGE DISPOSAL  
 ARTICLE I. - IN GENERAL

Where CW = Amount of waste service charge (\$) per billing period

Vu = Water consumption volume for the billing period

CU = Basic user rate in \$ per 1,000 gallons

CS = Amount of surcharge if applicable

CB = Amount of customer billing and administrative service charge

(b) The following rates and charges are hereby established:

(1) *Water rates:*

a. For property users within the village, a charge per one thousand (1,000) gallons based on the following schedule:

Effective Date	Rate
Current rate:	\$6.20
Bills rendered as of 1/01/12	6.97

b. For property not located within the village corporate limits, a charge per one thousand (1,000) gallons based on the following schedule:

Effective Date	Rate
Current rate:	\$12.40
Bills rendered as of 1/01/12	13.94

(2) *Sewer rates:* For all users of the Village wastewater treatment and collection system, a charge per one thousand (1,000) gallons based on the following schedule:

Effective Date	Rate
Current rate:	\$1.55
Bills rendered as of 5/1/08	2.31
5/1/09	2.56
5/1/10	2.81

(3) *Customer charge:* A customer billing and administrative charge for water and/or sewer service in the amount of one dollar and fifty cents (\$1.50) per month shall be added to rates and charges otherwise provided in this subsection (b).

MUNICIPAL CODE  
Chapter 25 - WATER, SEWERS AND SEWAGE DISPOSAL  
ARTICLE I. - IN GENERAL

(4) *Meter reading charge:* For every onsite meter reading conducted by village personnel, a five dollar (\$5.00) meter reading charge shall be added to the rates and charges to be paid by the customer under subsections (b)(1)a. and (b)(1)b. hereinabove.

(c) The adequacy of both the water and the wastewater service charge shall be reviewed not less often than annually by certified public accountants for the village. The wastewater service charge shall be revised periodically to reflect a change in local capital costs, if applicable, or a change in operation and maintenance cost, including replacement costs. The water service charge shall also be revised periodically to reflect a change in local capital costs or operations, maintenance and replacement costs.

(d) Each user will be notified at least annually in conjunction with a regular bill of the rate and that portion of the user charges which are attributable to wastewater collection and excess flow treatment services.

(e) There shall be no minimum charges.

(f) The owner of the premises and the occupant thereof and the user of either water or sewage service or both water and sewage service shall be jointly and severally liable to pay for the service on said premises; such service is furnished to the premises by the village only upon the condition that the owner of the premises, the occupant and the user of the service are jointly and severally liable therefor.

(g) The rates established in subsection (b) of this section shall be effective for all bills rendered on or after the appropriate effective date, as set forth in subsection (b).

(h) Billing schedule. Except as provided hereinafter, all bills shall be rendered based upon a quarterly billing cycle. Any user being served by a water service (meter) line of two (2) inches or larger in diameter may be billed on a monthly basis, as determined by the village manager, but in all events, such users shall be billed not less than quarterly. The rates and service charges established for users in this article I shall be effective each fiscal year, as of the date set forth hereinabove, for bills to be rendered for the next succeeding month—June (for monthly users) and August (for quarterly users).

(i) The computation of rates and service charges established for user charges in this Article I shall be made available to a user within ten (10) days of receipt of a written request for same. Any disagreement over the method used or the computation thereof shall be addressed by the village treasurer within thirty (30) days after notification of a formal written appeal outlining the discrepancies.

(Ord. No. 1198, § 3, 10-26-70; Ord. No. 1682, § 1, 12-20-76; Ord. No. 2012, § 1, 1-4-82; Ord. No. 2098, § 1, 1-23-84; Ord. No. 2112, § 1, 5-29-84; Ord. No. 2146, § 1, 5-28-85; Ord. No. 2287, § 1, 5-23-88; Ord. No. 2321, § 1, 1-3-89; Ord. No. 2398, § 2, 2-12-90; Ord. No. 2473, § 1, 4-1-91; Ord. No. 2571, §§ 1—4, 5-18-92; Ord. No. 3064, § 2, 11-13-00; Ord. No. 3245, § 2, 5-24-04; Ord. No. 3366, § 3, 7-10-06; Ord. No. 3413, §§ 2—4, 2-19-07; Ord. No. 3465, §§ 2, 3, 3-24-08; Ord. No. 3496, § 2, 7-14-08; Ord. No. 3552, § 2, 4-27-09; Ord. No. 3603, § 2, 4-12-10; Ord. No. 3655, § 2, 5-23-11; Ord. No. 3679, § 2, 12-12-11)

**Sec. 25-105. - Same—Due date; penalty for later payment.**

All bills for service shall be written quarterly and shall be payable within twenty (20) days. If payment of the full amount of the bill is not made within said period, then service charges shall be added to the amount due as hereinafter provided:

(a) If the full amount of the bill is not paid within twenty (20) days, a late fee of five (5) percent

## Appendix C

# Historical and Budget Operating Expenditures

<b>VILLA PARK WASTEWATER UTILITY REVENUE</b>	<b>ACTUAL FY2010</b>	<b>ACTUAL FY2011</b>	<b>YEAR END FY2012</b>	<b>BUDGET FY2013</b>
<b>USER CHARGES</b>				
83.48000 USER CHARGES	\$1,434,628	\$1,527,207	\$1,510,510	\$1,466,321
<b>OTHER REVENUE</b>				
83.45108 RESIDENT FEES	\$21,299	\$19,964	\$14,963	\$16,285
83.45128 MISCELLANEOUS REVENUE	\$17,838	\$6,129	\$2,208	\$1,000
83.48003 WATER & SEWER PERMIT FEES	\$3,435	\$320	\$410	\$500
83.48004 CONNECTION CHARGES	\$5,447	\$13,711	\$13,270	\$11,000
83.48005 LATE CHARGES	\$13,316	\$15,483	\$14,541	\$15,000
83.48015 SEWER INSPECTION FEES	\$888	\$10,000	\$9,570	\$8,500
83.45105 INTEREST ON INVESTMENTS	\$2,969	\$2,078	\$1,255	\$805
83.46117 STATE GRANT	\$0	\$0	\$1,832	\$0
83.48007 BLOCK GRANT	\$0	\$0	\$0	\$210,000
<b>SUBTOTAL OTHER REVENUES</b>	<b>\$65,192</b>	<b>\$67,685</b>	<b>\$58,049</b>	<b>\$263,090</b>
<b>TOTAL REVENUE</b>	<b>\$1,499,820</b>	<b>\$1,594,892</b>	<b>\$1,568,559</b>	<b>\$1,729,411</b>
<b>WASTEWATER UTILITY FUND BALANCE</b>	<b>\$545,987</b>	<b>\$730,841</b>	<b>\$960,491</b>	

Sources:

FY2010: Excel file, "WASTEWATER.xlsx" from Vydas Juskelis

FY2011: Excel file, "WASTEWATER.xlsx" from Vydas Juskelis

FY2012: Villa Park Monthly Treasurer's Report April 30, 2012 page 94

FY2013: Villa Park Monthly Treasurer's Report Sept 30, 2012 page 88

Fund Balance: Annual Operating Budgets, under Budget Summaries (Available Fund Balances)

VILLA PARK WASTEWATER UTILITY EXPENSES		ACTUAL FY2010	ACTUAL FY2011	YEAR END FY2012	BUDGET FY2013	ESCALATION	FY2014	CATEGORY
<b>ADMINISTRATION EXPENSES</b>								
83.502.01.101	SALARIES: FULL-TIME	\$392,913	\$336,987	\$387,422	\$394,821	2%	\$402,717	SALARIES AND WAGES
83.502.01.105	SALARIES: PART-TIME	\$0	\$45	\$12	\$0	2%	\$0	SALARIES AND WAGES
83.502.01.106	SALARIES: OVERTIME FULL-TIME	\$44,766	\$59,313	\$41,586	\$42,849	2%	\$43,706	SALARIES AND WAGES
83.502.01.108	SALARIES: TEMPORARY	\$11,109	\$34,314	\$16,946	\$24,075	2%	\$24,557	SALARIES AND WAGES
83.502.01.150	SALARY CONTINGENCY	\$0	\$0		\$4,737	2%	\$4,832	SALARIES AND WAGES
SUBTOTAL ADMINISTRATION SALARIES		\$448,788	\$430,659	\$445,966	\$466,482		\$475,812	
83.502.02.621	IMRF CONTRIBUTIONS	\$47,389	\$41,085	\$58,638	\$61,960	2%	\$63,199	SALARIES AND WAGES
83.502.02.622	SOCIAL SECUR CONTRIBUTIONS	\$28,379	\$23,021	\$27,213	\$29,666	2%	\$30,259	SALARIES AND WAGES
83.502.02.623	MEDICARE CONTRIBUTIONS	\$6,467	\$5,389	\$6,443	\$6,938	2%	\$7,077	SALARIES AND WAGES
SUBTOTAL ADMINISTRATION SALARY CONTRIBUTIONS		\$82,235	\$69,495	\$92,294	\$98,564		\$100,535	
83.502.01.201	LEGAL NOTICES	\$4,997	\$797	\$1,286	\$1,500	2%	\$1,530	CONTRACTUAL SERVICES
83.502.01.202	TRAINING & CONFERENCES	\$1,574	\$530	\$447	\$2,000	2%	\$2,040	CONTRACTUAL SERVICES
83.502.01.210	TELEPHONE	\$2,430	\$2,281	\$2,804	\$2,650	2%	\$2,703	CONTRACTUAL SERVICES
83.502.01.250	EMPLOYEE BENEFITS	\$82,976	\$63,577	\$62,782	\$108,638		\$108,638	CONTRACTUAL SERVICES
83.502.01.261	INSURANCE CLAIM LOSSES	\$2,500	\$2,126	\$1,782	\$10,000	2%	\$10,200	CONTRACTUAL SERVICES
83.502.01.265	MAINT OF MOBILE EQUIPMENT	\$20,071	\$19,050	\$19,050	\$19,050	2%	\$19,431	CONTRACTUAL SERVICES
83.502.01.266	CONTR/MAINT OF MOBIL EQUIP	\$1,348	\$1,500	\$1,500	\$1,500	2%	\$1,530	CONTRACTUAL SERVICES
83.502.01.270	MAINT OF OFFICE EQUIPMENT	\$2,411	\$2,511	\$1,828	\$2,800	2%	\$2,856	CONTRACTUAL SERVICES
83.502.01.271	MAINT OF RADIO EQUIPMENT	\$0	\$2,247	\$505	\$550	2%	\$561	CONTRACTUAL SERVICES
83.502.01.275	UNCOLLECTIBLES	\$6,000	\$6,000	\$6,000	\$6,000	2%	\$6,120	CONTRACTUAL SERVICES
83.502.01.281	RENTAL OF EQUIPMENT	\$284	\$181	\$47	\$75	2%	\$77	CONTRACTUAL SERVICES
83.502.01.292	ENGINEERING SERVICES	\$96	\$0	\$0	\$16,000		\$16,000	CONTRACTUAL SERVICES
83.502.01.299	OTHER CONTRACTUAL SERVICES	\$16,094	\$81,113	\$20,219	\$14,606		\$14,606	CONTRACTUAL SERVICES
SUBTOTAL ADMINISTRATION CONTRACTUAL SERVICES		\$140,781	\$181,913	\$118,250	\$185,369		\$186,292	
83.502.01.294	ADMINISTRATIVE SERVICES	\$127,797	\$132,000	\$132,000	\$127,797	2%	\$130,353	CONTRACTUAL SERVICES
SUBTOTAL ADMINISTRATIVE SERVICES		\$127,797	\$132,000	\$132,000	\$127,797		\$130,353	
83.502.01.301	UNIFORMS	\$1,357	\$1,423	\$1,085	\$2,763	2%	\$2,818	COMMODITIES
83.502.01.303	DUES & PUBLICATIONS	\$9,395	\$8,118	\$9,336	\$9,910	2%	\$10,108	COMMODITIES
83.502.01.307	GASOLINE	\$7,011	\$13,235	\$13,235	\$16,941	2%	\$17,280	COMMODITIES
83.502.01.310	MOTOR VEHICLE PARTS & ACCESS	\$6,679	\$4,210	\$4,210	\$4,210	2%	\$4,294	COMMODITIES
83.502.01.317	OFFICE SUPPLIES	\$597	\$499	\$528	\$1,000	2%	\$1,020	COMMODITIES
83.502.01.399	OTHER SUPPLIES	\$1,591	\$874	\$641	\$1,200	2%	\$1,224	COMMODITIES
SUBTOTAL ADMINISTRATION COMMODITIES		\$26,630	\$28,359	\$29,035	\$36,024		\$36,744	
83.502.01.401	CAPITAL OUTLAY	\$0	\$0	\$2,086	\$0		\$5,000	CAPITAL OUTLAY
83.502.01.402	NON-CAPITAL OUTLAY	\$980	\$947	\$4,248	\$3,000		\$8,200	CAPITAL OUTLAY
SUBTOTAL ADMINISTRATION CAPITAL OUTLAY		\$980	\$947	\$6,334	\$3,000		\$13,200	
<b>SUB-TOTAL ADMINISTRATION EXPENSES</b>		\$827,211	\$843,373	\$823,879	\$917,236		\$942,936	

VILLA PARK WASTEWATER UTILITY EXPENSES		ACTUAL FY2010	ACTUAL FY2011	YEAR END FY2012	BUDGET FY2013	ESCALATION	FY2014	CATEGORY
<b>OPERATION EXPENSES</b>								
83.502.02.219	UTILITY - ELECTRIC	\$35,013	\$35,715	\$35,141	\$35,000	2%	\$35,700	CONTRACTUAL SERVICES
83.502.02.220	UTILITY - GAS	\$9,414	\$8,606	\$7,763	\$9,000	2%	\$9,180	CONTRACTUAL SERVICES
83.502.02.221	LOMBARD SEWER SERVICE	\$2,334	\$1,837	\$3,012	\$2,500	2%	\$2,550	CONTRACTUAL SERVICES
83.502.02.273	MAINT OF CONTROLS	\$178	\$0	\$1,011	\$4,500	2%	\$4,590	CONTRACTUAL SERVICES
83.502.02.281	RENTAL OF EQUIPMENT	\$0	\$0	\$0	\$250	2%	\$255	CONTRACTUAL SERVICES
83.502.02.285	DISPOSAL EXPENSE	\$5,855	\$1,713	\$3,130	\$10,000	2%	\$10,200	CONTRACTUAL SERVICES
83.502.02.292	ENGINEERING SERVICES	\$201,044	\$38,899	\$27,091	\$25,500	10-20% of CIP constr cost		CONTRACTUAL SERVICES
83.502.02.293	LABORATORY TESTING	\$8,836	\$8,094	\$2,532	\$8,000	2%	\$8,160	CONTRACTUAL SERVICES
83.502.02.299	OTHER CONTRACTUAL SERVICES	\$78,672	\$164,488	\$134,043	\$90,800		\$90,800	CONTRACTUAL SERVICES
SUBTOTAL OPERATION CONTRACTUAL SERVICES		\$341,346	\$259,352	\$213,723	\$185,550		\$161,435	
83.502.02.302	CHEMICALS	\$6,519	\$10,424	\$9,791	\$11,000	2%	\$11,220	COMMODITIES
83.502.02.322	HAND TOOLS	\$22	\$566	\$0	\$500	2%	\$510	COMMODITIES
83.502.02.342	ASPHALT MIX	\$4,875	\$5,180	\$3,939	\$4,000	2%	\$4,080	COMMODITIES
83.502.02.343	STONE	\$13,907	\$4,880	\$0	\$7,000		\$8,000	COMMODITIES
83.502.02.344	CONCRETE - REDI MIX	\$2,116	\$3,577	\$4,423	\$5,000	2%	\$5,100	COMMODITIES
83.502.02.356	MANHOLE MATERIALS	\$5,203	\$2,618	\$0	\$4,500	2%	\$4,590	COMMODITIES
83.502.02.357	SEWERMAIN REPAIR PARTS	\$4,500	\$2,180	\$1,710	\$4,000	2%	\$4,080	COMMODITIES
83.502.02.399	OTHER SUPPLIES	\$13,484	\$9,511	\$13,135	\$9,000	2%	\$9,180	COMMODITIES
SUBTOTAL OPERATION COMMODITIES		\$50,626	\$38,936	\$32,998	\$45,000		\$46,760	
83.502.02.401	CAPITAL OUTLAY	\$114,397	(\$153,913)	\$132,412	\$459,000		CIP projects	CAPITAL OUTLAY
83.502.02.402	NON-CAPITAL OUTLAY	\$3,106	\$3,804	\$0	\$1,000		\$1,000	CAPITAL OUTLAY
SUBTOTAL OPERATION CAPITAL OUTLAY		\$117,503	(\$150,109)	\$132,412	\$460,000		\$1,000	
<b>SUB-TOTAL OPERATIONS EXPENSES</b>		\$509,475	\$148,179	\$379,133	\$690,550		\$209,195	
<b>TOTAL ADMINISTRATION + OPERATIONS EXPENSES</b>		<b>\$1,336,686</b>	<b>\$991,552</b>	<b>\$1,203,012</b>	<b>\$1,607,786</b>		<b>\$1,152,131</b>	

Sources:

FY2010: Excel file, "WASTEWATER.xlsx" from Vydas Juskelis

FY2011: Excel file, "WASTEWATER.xlsx" from Vydas Juskelis

FY2012: Villa Park Monthly Treasurer's Report April 30, 2012

FY2013: Villa Park Monthly Treasurer's Report Sept 30, 2012

page 95-96

page 89-90

## Appendix D

# Frequently Asked Questions Regarding Wastewater Rate Increases

## Frequently Asked Questions Regarding Villa Park Wastewater Rates

1. How much will my rates increase?
  - A typical residential customer using 4,500 gallons of water per month, or 150 gallons of water per day, will see an increase in their quarterly wastewater bill from \$37.94 to \$47.12 in Fiscal Year 2014 or an increase of \$9.18 per quarter, \$3.06 per month and \$0.10 per day.
  - The table below summarizes the impact on a typical residential customer with implementation of the proposed Fiscal Years 2014 through 2018 cost-of-service wastewater rates.

**Table D-1 Typical Wastewater Bill for Average Family**

	Monthly Usage (gallons)	Volume Charge (per 1,000 gallons)	Customer Charge (per account per month)	Quarterly Bill	Quarterly Increase
<b>Present</b>	4,500	\$2.81		\$37.94	
August 1, 2013 Proposed	4,500	\$3.15	\$1.53	\$47.12	\$9.18
January 1, 2014 Proposed	4,500	\$3.25	\$1.56	\$48.56	\$1.44
January 1, 2015 Proposed	4,500	\$3.35	\$1.59	\$50.00	\$1.44
January 1, 2016 Proposed	4,500	\$3.46	\$1.62	\$51.57	\$1.58
January 1, 2017 Proposed	4,500	\$3.57	\$1.66	\$53.18	\$1.60

Source: Stanley Consultants, Inc.

2. Why is a rate increase required?
  - To make up for lost revenue resulting from declining water usage due to ongoing water conservation efforts.
  - To eliminate deficit spending caused by inflation and increasing maintenance expenses.
  - To cover cost of capital improvement projects.
  
3. Can we delay the rate increase or implement a smaller rate increase?
  - The Village is faced with necessary capital improvement projects and decreasing revenue due to declining water usage. A significant rate increase is required in Fiscal Year 2014 primarily to cover engineering and construction cost of programmed capital projects, increasing operating and capital financing expenses, and the decline in water usage. Smaller and uniform rate increases are required in Fiscal Years 2015 through 2018.
  - Revenue generated with smaller rate increases would fall short of covering expenses and risk reduction in the Utility Fund's cash reserve. A healthy fund reserve balance is important to provide adequate cash reserve for capital projects, emergency repairs, and to cover fluctuation and variations in cash flow.
  
4. Why are the capital improvements required?
  - The Wastewater Utility improvements are required for the following reasons:
    - To replace and rehabilitate aging collection components.
    - To provide for relief and additional capacity in the system.

## **Frequently Asked Questions Regarding Villa Park Wastewater Rates**

- The estimated cost of the capital improvements is \$2.035 million for sewer investigative work and rehabilitation over the next 6 years.
5. How will the new capital improvements benefit the Village of Villa Park?
- The Wastewater Utility improves the quality of life by:
    - Maintaining a high level of utility service.
    - Contributing to healthy neighborhoods.
    - Providing clean waterways.
    - Protecting wildlife.