

Water Rate Study



Villa Park, Illinois

June 2013



Stanley Consultants INC.

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

Water 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.

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6/7/2013
06/07/2013

My license renewal date is December 31, 2013.

Pages or sheets covered by this seal: Entire Report



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Executive Summary

General

The Village of Villa Park (Village) receives water from the DuPage Water Commission (DWC) who purchases Lake Michigan water, treated at the Jardine Water Purification Plant, from the City of Chicago. DWC monitors water through three feeds into the Village which is the basis for charges to the Village. The Village subsequently distributes the water to its customers through a network of water mains, storage facilities, and pumping stations. The Village's Water Utility is responsible for distribution of the water received from DWC and for the operation and maintenance of the conveyance and storage system. DWC's cost is factored into the rates that the Village charges its customers.

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

- Clean water.
- Adequate water supply.
- Sufficient fire protection.
- A high level of utility service.

Current water operating and capital expenses are projected to exceed water revenues with present water rates. A water rate increase is required to maintain services due to:

- Rate increases programmed by DuPage Water Commission.
- Declining water usage due to ongoing water conservation efforts.
- Increasing Water Utility spending due to inflation and increased maintenance costs.
- Capital expenses related to proposed Capital Improvement Plan projects.

The Water Utility's rates have been adjusted to keep pace with DWC's rate increase of 30 percent in 2012 and 20 percent in 2013. However, additional large rate adjustments must be made because of future planned DWC rate increases of 18 percent in 2014 and 17 percent in 2015. The amount paid to DWC for purchase of water currently accounts for about 57 percent of the total Water Utility's operating expenditures. Revenues will lag behind increasing operating expenses resulting from reduced water usage and the increasing DWC water rates. Also, programmed major capital improvements, estimated at \$8.8 million over the next 10 years, and water meter replacements, estimated at \$2.05 million, require additional revenues beyond the current operating and capital expenses to cover loan principal and interest payments.

Funding expenses from the Water Utility Fund's cash balance will be necessary if rates are not adjusted. The current Water Utility Fund balance is projected to drop from about \$1.9 million in Fiscal Year 2012 to about \$1.0 million in Fiscal Year 2014 and to be depleted in Fiscal Year 2015 with present rates.

The Village's water rate increase occurred on February 1, 2013.

Existing Water Rate Schedule

The basic components of the existing Water Utility's rate schedule include:

- A uniform flow charge for customers within Village corporate limits.
- A uniform flow charge for customers outside Village corporate limits.
- A cross connection charge for all non-residential accounts.
- A radio read charge for customers that require onsite radio read of their water meter.
- A billing charge of \$1.50 per account per month that goes directly to the Village's corporate fund. This revenue covers the cost of producing, mailing, and collecting the bills.

Operating Expenses

Operating expenses are those operation and maintenance (O&M) expenses that occur while providing water service. Expenses are projected to increase from \$3.4 million in Fiscal Year 2013 to \$4.3 million in Fiscal Year 2018. These increases are due to rate increases programmed by DuPage Water Commission, inflation and increased maintenance costs.

Capital Improvements

Capital improvements are necessary to repair and improve the aging water distribution components.

Table ES-1 presents the estimated cost of remaining capital improvement projects from the current Water Utility's 10-year Master Plan. These projects include mostly water main replacements and extensions and were programmed for completion in Fiscal Years 2006 through 2016. The rate analysis is based on funding \$8.8 million of programmed capital improvement projects with debt service provided by IEPA loans and extending completion of the projects over

the next 10 years to reduce the impact on rates. Annual principal and interest payments are based on \$880,000 IEPA loan each year for 10 years with 20 year payback and 1.0 percent interest rate.

An additional \$2.05 million is required for a water main replacement program. Annual principal and interest payments for this project are based on 20 year payback and 3.5 percent interest rate.

Principal and interest payments for all loans are paid semi-annually with water charges revenue.

Table ES-1 Capital Improvements Cost

Fiscal Year	Programmed Projects	CIP Costs
2014	Water Main Replacements and Extensions	\$3,244,716
2015	Water Main Replacements and Extensions	\$1,321,170
2016	Water Main Replacements and Extensions	\$2,806,438
2017	Water Main Replacements and Extensions	\$1,372,630
	Subtotal CIP	\$8,744,954
2014	Water Meter Replacements	\$2,050,000

Source: Village of Villa Park CIP

Additional capital costs are funded from annual water charges revenue. \$55,000 per year is projected for operations capital and non-capital outlay. An additional 20 percent of estimated construction costs is required for engineering design and construction phase services.

Street improvements programmed in the Village’s Capital Improvement Program beyond Fiscal Year 2017 will involve replacements or relocations of water mains. These projects will require additional Water 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 Water 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 water usage.

Implementation of an inclining customer charge is recommended. An inclining customer charge means that the charge increases with the size of the water meter. 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 water. The inclining customer charge recognizes that the readiness to serve capital investment expenses increase as the anticipated water demand (meter size) increases. The customer charge also recognizes some of the fixed administration costs which do not vary based on water 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 when no water is used.

A cost-of-service rate analysis was performed to develop recommended water rates that accurately reflect the cost to serve customers. A cost-of-service rate analysis develops water 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 quantities including Volume, Customer Charge, Cross Connection, and Radio Reads. Operating expenses increase in Fiscal Years 2013 through 2015 primarily due to the programmed increases in DuPage Water Commission rates.

Capital financing expenses decrease in Fiscal Year 2013 because of a decrease in the operations capital outlay. The capital expenses decrease again in Fiscal Year 2015 due to expiration of the ABC Water Main SRF loan and in Fiscal Years 2017 and 2018 due to conclusion of engineering design and construction phase services, respectively, for the last of the programmed capital improvement projects. Total utility expenses increase each year from 2016 through 2017 and decrease in Fiscal Year 2018 after completion of the last programmed capital improvement projects.

Table ES-2 presents present water rates and proposed cost-of-service rates to meet Fiscal Years 2014 through 2018 projected expenses. Rate increases are required over the next five years to cover the DuPage Water Commission rate increases and the debt service increases. A uniform annual increase of 3.7 percent is proposed for the volume charge in Fiscal Years 2014 through 2018 to evenly distribute the rate increase impact. This approach results in a deficit in Fiscal Years 2015 through 2017 that will be covered by the Water Utility Fund's available cash balance. The proposed rates are projected to build to a healthy fund balance of about \$2.6 million in Fiscal Year 2018.

The operating Administrative Services and DuPage Water Commission Debt Service expenses are allocated to the fixed inclining customer charge. This charge increases in Fiscal Years 2014 through 2018 in proportion to the inflationary increase used for projecting the Administrative Services expense.

The cross connection charge is projected to remain at the same level in Fiscal Years 2014 through 2018 as the expense is projected to remain revenue neutral.

The present radio read charge is adequate to cover costs associated with the program. Therefore, maintaining the charge at the same level in Fiscal Years 2014 through 2018 is proposed. The radio read charge will be eliminated in the future when all meters are replaced.

The billing charge is also projected to remain the same in Fiscal Years 2014 through 2018.

Table ES-2 Proposed Water Rates

	Present Rates	Proposed Rates			
		FY15 (Jan 1, 2014)	FY16 (Jan 1, 2015)	FY17 (Jan 1, 2016)	FY18 (Jan 1, 2017)
Volume Charge (per 1,000 gallons)					
Customers within Corporate Limits	\$7.63	\$7.92	\$8.22	\$8.53	\$8.85
Customers outside Corporate Limits	\$15.26	\$15.84	\$16.44	\$17.06	\$17.70
Customer Charge (per account per month)					
¾" meter	--	\$4.47	\$4.56	\$4.65	\$4.74
1" meter	--	\$8.05	\$8.21	\$8.37	\$8.54
1 ¼" meter	--	\$12.52	\$12.77	\$13.02	\$13.28
1 ½" meter	--	\$17.88	\$18.24	\$18.60	\$18.96
2" meter	--	\$31.74	\$32.38	\$33.02	\$33.66
3" meter	--	\$71.52	\$72.96	\$74.40	\$75.84
4" meter	--	\$126.95	\$129.51	\$132.06	\$134.62
Unknown	--	\$4.47	\$4.56	\$4.65	\$4.74
Cross Connection Charge (per non-residential account per month)					
	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20
Radio Read Charge (per radio read per billing)					
	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Billing Charge (per account per month)					
	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50

Source: Stanley Consultants, Inc.

Table ES-3 summarizes the resulting water rate impact on a typical residential customer with implementation of the proposed cost-of-service water rates. The resulting water rate impact for a typical residential customer using 4,500 gallons of water per month, or 150 gallons of water per day, is an increase in their quarterly bill from \$103.01 to \$120.33 in Fiscal Year 2014 or an increase of \$17.32 per quarter, \$5.77 per month and \$0.19 per day.

Table ES-3 Typical Water Bill for Average Family

	Monthly Usage (gallons)	Volume Charge (per 1,000 gallons)	Customer Charge (per account per month)	Quarterly Bill	Quarterly Increase
Present	4,500	\$7.63		\$103.01	
FY 2015 Proposed	4,500	\$7.92	\$4.47	\$120.33	\$17.32
FY 2016 Proposed	4,500	\$8.22	\$4.56	\$124.65	\$4.32
FY 2017 Proposed	4,500	\$8.53	\$4.65	\$129.11	\$4.46
FY 2018 Proposed	4,500	\$8.85	\$4.74	\$133.70	\$4.59

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 expenditures or about \$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

Water Usage Decline per Year	Change from Proposed Rate (per 1,000 gallons)
3%	+\$0.24
4%	+0.48
5%	+0.74

Source: Stanley Consultants, Inc.

Fund Balance

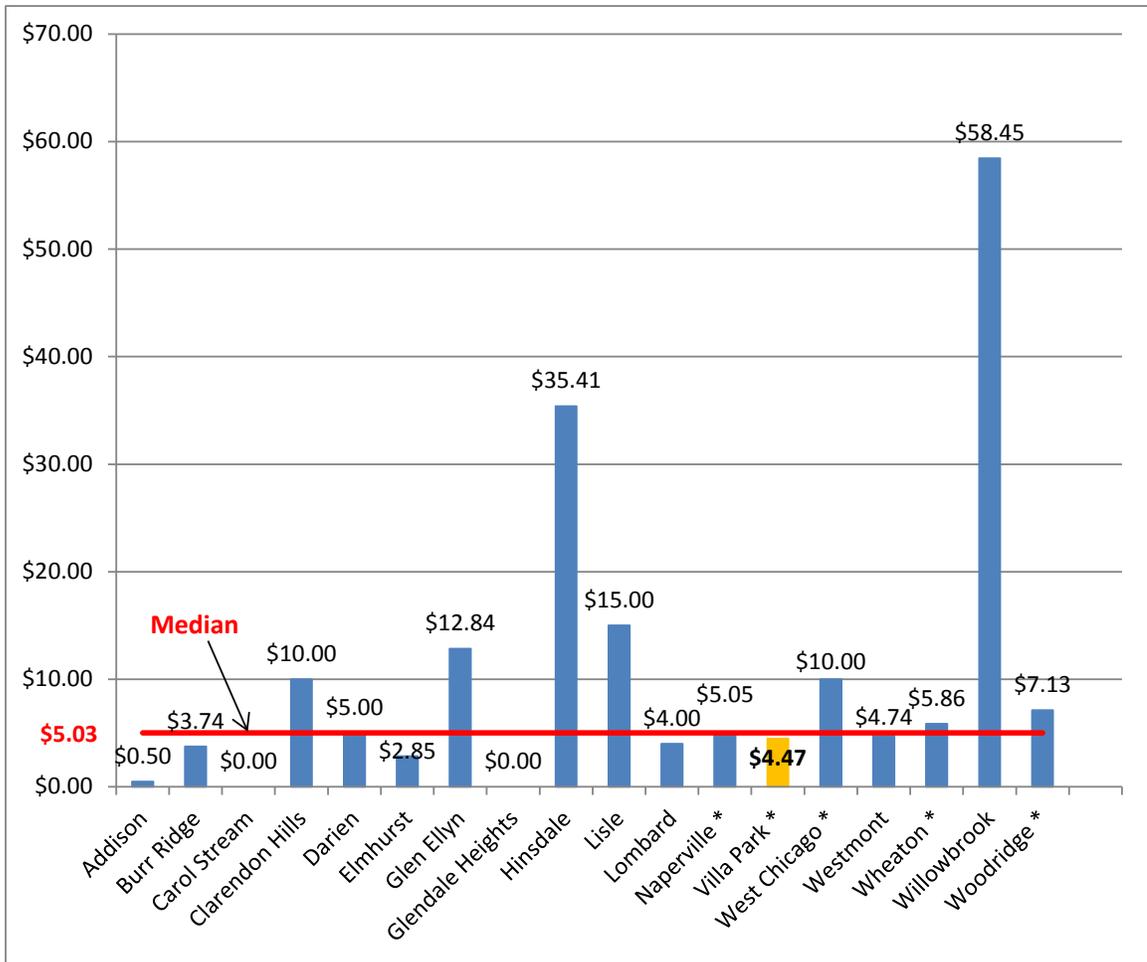
The proposed rate increases are projected to maintain a positive cash balance in the Water Utility Fund. A healthy fund balance provides adequate cash reserve to cover variations in cash flow and emergencies. The Water Utility currently has a fund balance that is sufficient to cover 90 days of operating costs.

The Water Utility has no established fund reserve. A capital fund reserve is recommended for the Water Utility 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 future capital improvement projects. A projected fund balance of \$2.6 million in Fiscal Year 2018 provides revenue in excess of the amount required to cover 90 days of operating costs. The excess revenue could be used for building the capital fund reserve.

Water Rate Comparison with Other DuPage County Communities

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

The figures present a comparison with Villa Park's proposed Fiscal Year 2015 water rates. Figure ES-1 presents the monthly minimum bills, Figure ES-2 presents charges for 4,500 gallons per month and Figure ES-3 presents charges for 7,500 gallons per month. Villa Park's proposed minimum bills are in the lower 40 percent of the graph. Residential water rates are in the upper 20 percent and upper 12 percent of the graph for monthly volumes of 4,500 and 7,500 gallons, respectively.

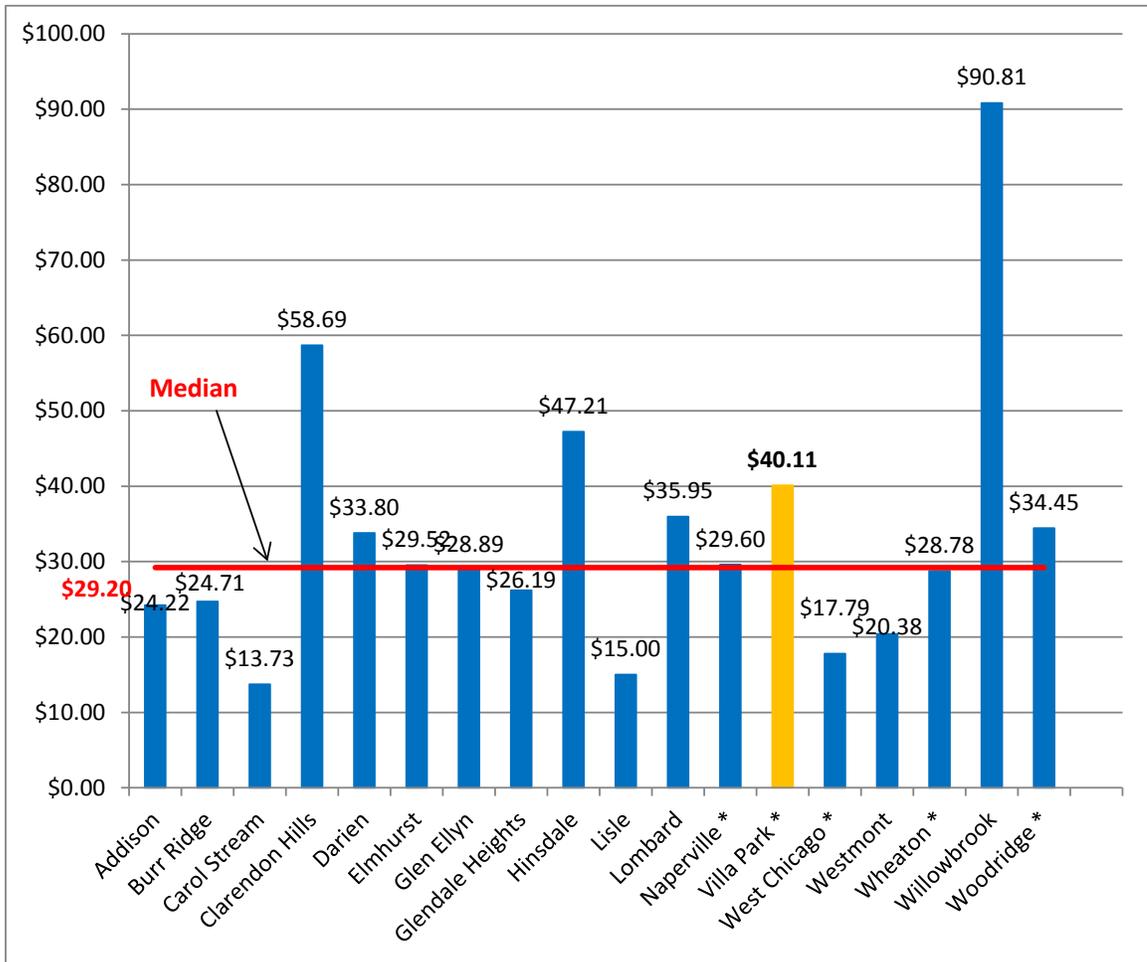


Median = \$5.03

Proposed FY 2015 Villa Park Rate = \$4.47

* Minimum bill based on meter size.

Monthly Minimum Bills
Figure ES-1



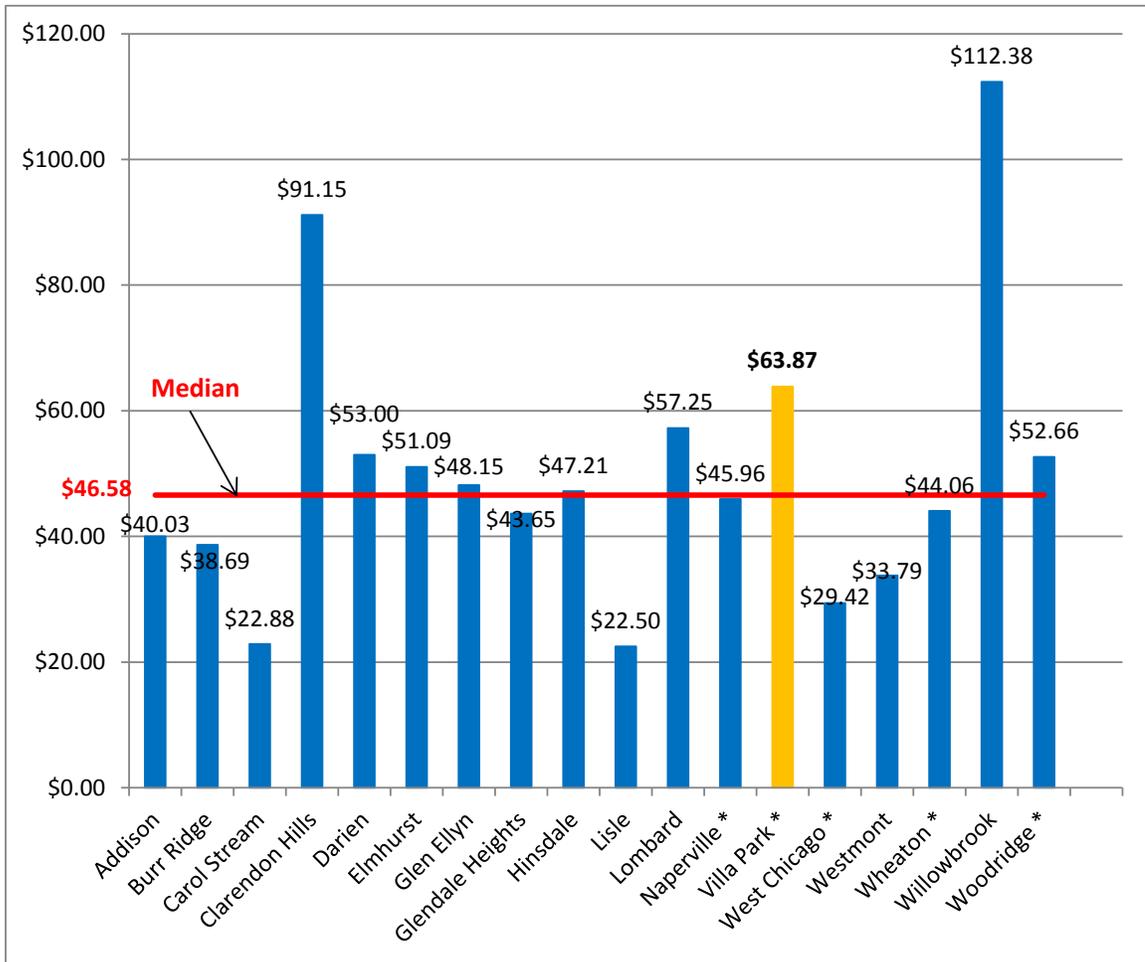
Median = \$29.20

Proposed FY 2015 Villa Park Rate = \$40.11

* Includes customer charge based on meter size.

Charge for 4,500 Gallons per Month

Figure ES-2



Median = \$46.58

Proposed FY 2015 Villa Park Rate = \$63.87

* Includes fixed customer charge based on meter size.

Charge for 7,500 Gallons per Month

Figure ES-3

Conclusions/Recommendations

Implementation of an inclining customer charge, based on meter size, is recommended to recover some of the “readiness to serve” costs and fixed administration costs which do not vary based on water 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 when no water is used.

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

Re-evaluation of rates every year is recommended to assess the adequacy of rates for keeping pace with inflation, capital improvement expenditures, actual capital improvement funding sources, and any DWC rate adjustments. Completion of the proposed capital improvements will provide more accurate project cost estimates. Also, revenues due to water increases will be

known. The current Water Utility's 10-year Master Plan identifies projects programmed for completion in Fiscal Years 2006 through 2016. Rates should be reassessed after the Water Utility's Master Plan is updated so that costs of future projects can be included. 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 bi-monthly versus quarterly basis is recommended. Most municipalities bill on a 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.

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Introduction

General

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

The Water 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 Water 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 receives water from the DuPage Water Commission (DWC) who purchases Lake Michigan water, treated at the Jardine Water Purification Plant, from the City of Chicago. The Village subsequently distributes the water to its customers through a network of water mains, storage facilities, and pumping stations. The Village's Water Utility is responsible for distribution of the water received from DWC and for the operation and maintenance of the conveyance and storage system.

The Water Utility enterprise fund finances the following major activities:

- Water Distribution System Operation and Maintenance
- Water Distribution System Capital Investments (Projects)

The recommended water rates are developed based on a cost-of-service rate analysis. The cost-of-service rate analysis approach allocates the Water Utility's expenses (costs) for purchasing the water and distributing the water to the appropriate customer billing categories. These costs are

then divided by the billing quantities (volume and number of meter readings) 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 water 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 water 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 water 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.

Water Rate Analysis Spreadsheets

Appendix A contains the water 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 Water 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. Water rates increases should be effective January 1 so that the water revenue increases are available in May.

Existing Water Rate Schedule

Appendix B contains the existing Water Utility rate ordinance. The basic components of the existing rate schedules include:

- A uniform flow charge for customers within Village corporate limits.
- A uniform flow charge for customers outside Village corporate limits.

- A cross connection charge for all non-residential accounts.
- A radio read charge for customers that require a drive-by for radio read of their water meter.
- A billing charge of \$1.50 per account per month that goes directly to the Village's corporate fund. This revenue covers the cost of producing, mailing, and collecting the bills.

Appendix B also contains a schedule of water rate increases planned by the City of Chicago and DuPage Water Commission.

Historical and Budget Operating Expenditures

Appendix C contains a summary of the Water Utility's historical and budget operating expenditures received from the Village that was 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 water rate adjustments.

Study Parameters

Table 1-1 presents the parameters used in the development of the Water 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 actual billable volume of water usage has decreased an average of 2.1 percent per year since Fiscal Year 2009. The billable volume quantities are projected to continue to decline by two percent on an annual basis due to ongoing water conservation efforts.

Table 1-1 Study Parameters (Fiscal Year 2014)

Parameter	Number of Accounts	Annual Processed Billings	Projected Escalation
Annual Processed Billings			
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%
Total	<hr/> 7,124	<hr/> 30,866	
Billable Volume		529,135,000 gallons	- 2%
Operating Expenses		\$3,531,865	Varied

Source: Village of Villa Park

Acknowledgements

Background information for this water rate study was obtained from the Water 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 water rate study.

Philosophical Issues

General

This section summarizes the major philosophical issues which significantly influence the water rate study conducted by Stanley Consultants Inc. Fundamental philosophical issues built into the current water rate structure were evaluated for applicability to the current Water 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.

Administration Fee

Water Utility customers are charged an administration fee of \$1.50 per account per month that goes directly to the Village's corporate fund. This fee covers the cost of producing, mailing, and collecting the bills. A cost-of-service analysis will not be conducted on this fee since it is not a source of revenue for the Water Utility.

Uniform Water Volume Rate

The Water 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 water usage.

Unincorporated Rate Structure

Currently, unincorporated customers pay two times the incorporated volume charge. The surcharge is based on the concept that customers inside the Village are "owners" of the Water Utility and they bear the risks and responsibilities of that utility ownership. Owners of a Water Utility are entitled to an appropriate return on the investment for the portion of the Water Utility that serves customer outside the Village.

Cross Connection Charge

The Water Utility assesses a monthly cross connection charge to all non-residential customers. The charge recovers the cost of maintaining a database of backflow preventers as they are certified by the EPA each year.

Radio Read Charge

The Water Utility assesses a radio read charge for each meter reading for customers who do not use a telephone land line for transmitting meter read information. These accounts require onsite meter reading by Village personnel. The charge recovers the cost for the individual's time and vehicle usage required to complete this task plus some administrative time for scheduling the work. The radio read charge will be eliminated in the future when all meters are replaced.

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 water rate stability standpoint. To stabilize water rates for the highly fluctuating capital improvement expenditures, a healthy Water Utility Fund balance is required. A positive fund balance contains unspent money for working capital when revenues are down.

Currently, the Water Utility Fund balance is about \$1.9 million. The fund will 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 Water Utility Fund.

Conclusions/Recommendations

Major philosophical water rate issues were evaluated when conducting the water 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 water rate structure are typical for municipalities. Therefore, the rate structure will continue to be used for the Water Utility's customer base.

Other Recommendations

Other recommendations have been identified in addition to the water rate increases. 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.

- **Inclining Customer Charge**

Implementation of an inclining customer charge is recommended. An inclining customer charge means that the charge increases with the size of the water meter. 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 water. The inclining customer charge recognizes that the readiness to serve capital investment expenses increase as the anticipated water demand (meter size) increases. The customer charge also recognizes some of the fixed administration costs which do not vary based on water 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 when no water is used.

- **Bi-Monthly Billings**

Billing all customers on a bi-monthly versus quarterly amount basis is recommended. Most municipalities bill on a 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 Water Rate Reviews**

Re-evaluation of rates every year is recommended to assess the adequacy of rates for keeping pace with inflation, capital improvement expenditures, actual capital improvement funding sources, and any DWC rate adjustments. Completion of the proposed capital improvements will provide more accurate project cost estimates. Also, revenues due to water increases will be known. The Water Utility's current 10-year Master Plan identifies projects programmed for completion in Fiscal Years 2006 through 2016. Rates should be reassessed after the Water Utility's Master Plan is updated so that future projects can be included. 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 Water Utility currently has a fund balance that is sufficient to cover 90 days of operating costs.

The Water Utility has no established fund reserve. A capital fund reserve is recommended for the Water Utility 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 future 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 Water Utility to use in assessing water rates. The basis for assessing existing and recommended charges for Villa Park includes:

- Number of processed billings.
- Number of accounts.
- Number of accounts by meter size.
- Metered water usage.

For the Village of Villa Park, metered water use is the basis for assessing the quantity of water 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 Water 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 Water Utility customer accounts.

The number of bills was steady for each category in the past three years and is projected to remain the same into the future as Fiscal Year 2011 since the Village is not currently experiencing any significant growth.

The table also identifies the number of annual radio read billings that will be used for assessing the radio read charge. This billing quantity is based on the number of monthly and quarterly radio read accounts identified in Table A2.

Number of Accounts

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

The number of cross connection accounts is a subset of the number of accounts that includes apartment, commercial, government and industrial customers. This billing quantity is used to assess the cross connection charge. This charge recovers the cost of maintaining a database verifying backflow preventers are certified by the EPA on an annual basis. The number of cross connection customers remained steady for the past three years and is projected to remain the same into the future as Fiscal Year 2011.

Another subset of the number of customers is the number of monthly and quarterly radio read accounts. This number is used to determine the number of radio read billings to use for assessing the radio read charge. The number of radio read accounts is projected to increase by 10 percent per year as the number of telephone land lines decrease. However, the radio read charge will be eliminated in the future when all meters are replaced.

Number of Accounts by Meter Size

Table A3 in Appendix A presents the total number of customer accounts by meter size. The meter billing quantities are used to assess the customer charge by respective meter size. Each meter size is categorized by number of residential, apartment, commercial, industrial, municipal, and government accounts. All existing 5/8", 5/8" x 3/4", 3/4", and 1" residential meters will be replaced with 3/4" or 1" meters as part of the replacement program with 80 percent anticipated to be 3/4" and 20 percent anticipated to be 1". The existing quantities of 5/8", 5/8" x 3/4", and 3/4" meters are grouped together as 3/4" meters for each customer class for this water rate study. The actual quantities of meters by size should be used to re-assess the meter charge after the meter replacements are completed.

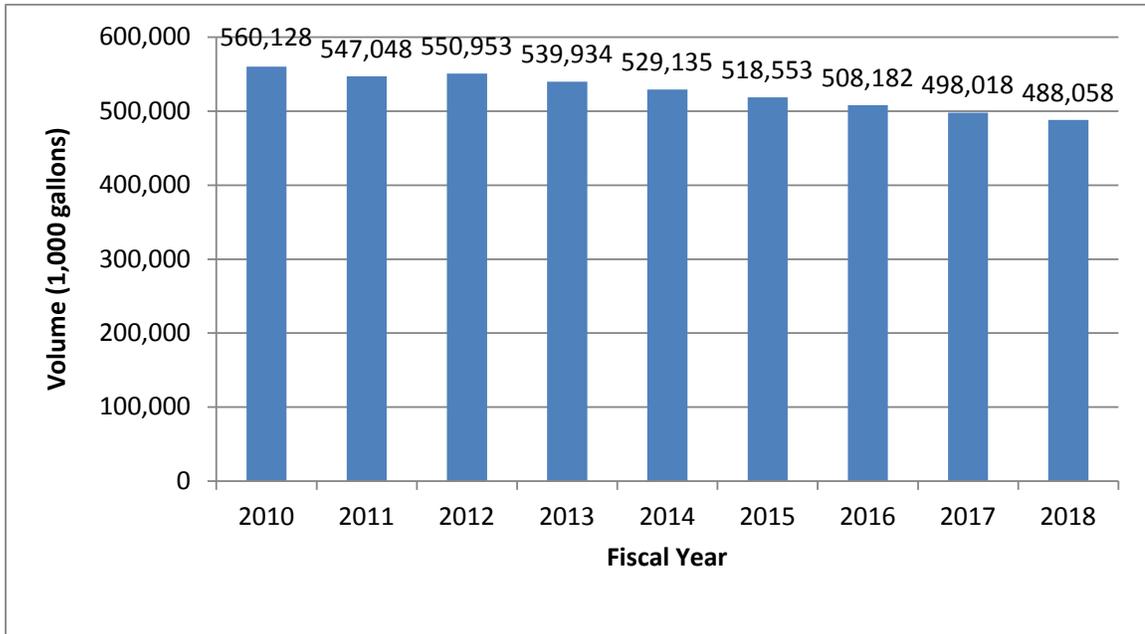
Table A4 in Appendix A presents the 3/4" line size equivalent number of customer accounts. The number of 3/4" line size equivalent number of accounts must be determined to develop an inclining customer charge. The purpose of the inclining customer charge is to recognize that fixed billing charges increase with meter size. The applied equivalent factors shown in Table A4 are based on pipe area which is directly proportional to flow capacity.

Table A5 in Appendix A presents the subtotals of the equivalent accounts by meter size.

Billable Volume

Table A6 in Appendix A presents the total volume of billable water, in 1,000 gallons per year. This billing quantity is used to assess the fixed volume water charge.

Figure 3-1 presents the past and projected volume of billable water. The actual billable volume of water usage has decreased an average of 2.1 percent per year 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 Billable Water Volumes
Figure 3-1

Revenues and Expenses

General

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

Present Rates

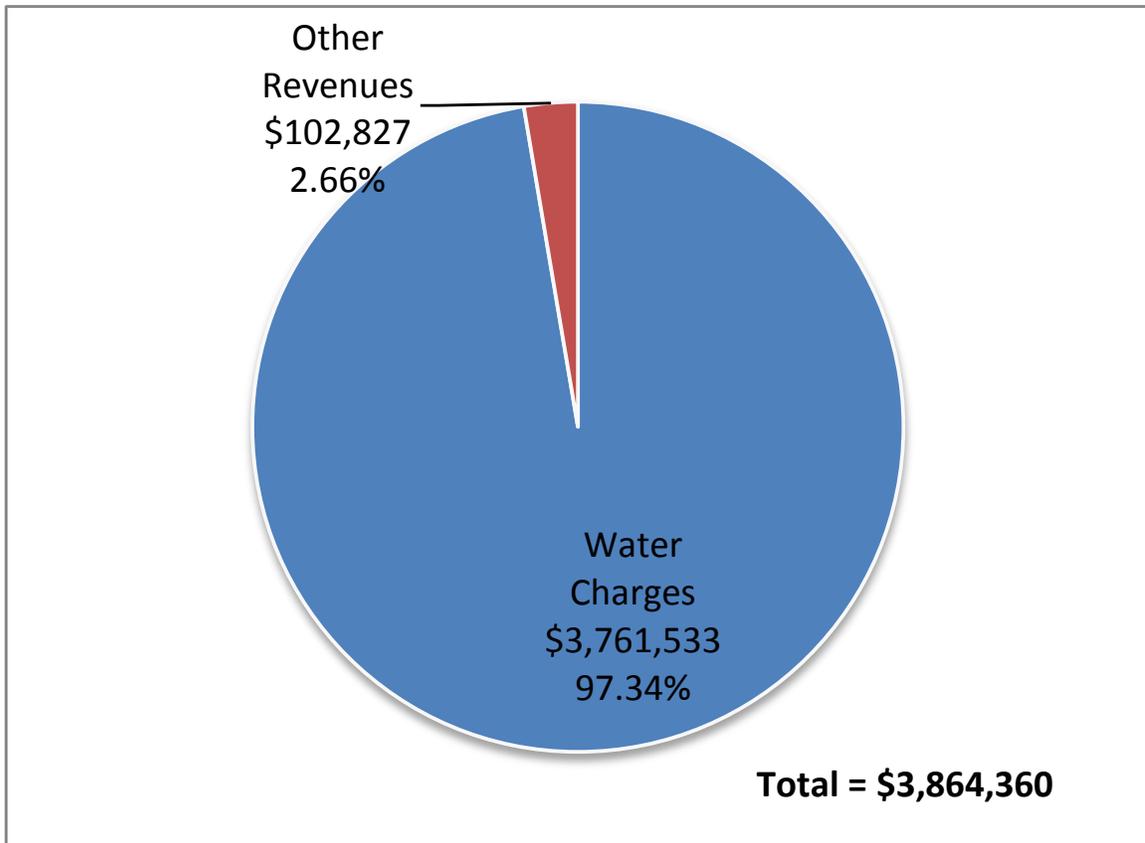
Table B1 in Appendix A presents the present rates for the Water Utility. Future water revenues are projected by multiplying the existing rates by the billing quantities previously discussed.

Revenues from Present Rates

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

Figure 4-1 illustrates projected Fiscal Year 2014 revenue with present rates. Volume charges represent the revenues generated from water billing to monthly and quarterly accounts. The water charge revenue accounts for 97 percent of the total revenue. The projected water 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, Water Tap Fees, Meter Installation, Permit Fees, Connection Charges, Late Charges, Water Inspection Fees, Interest, and Miscellaneous. 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 Water Utility. Appendix C contains a breakdown summary of the Water Utility’s historical and budget operating expenses and percent escalations 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 water service. The Water Utility operating expenses are summarized into two major accounts, Administration and Operations.

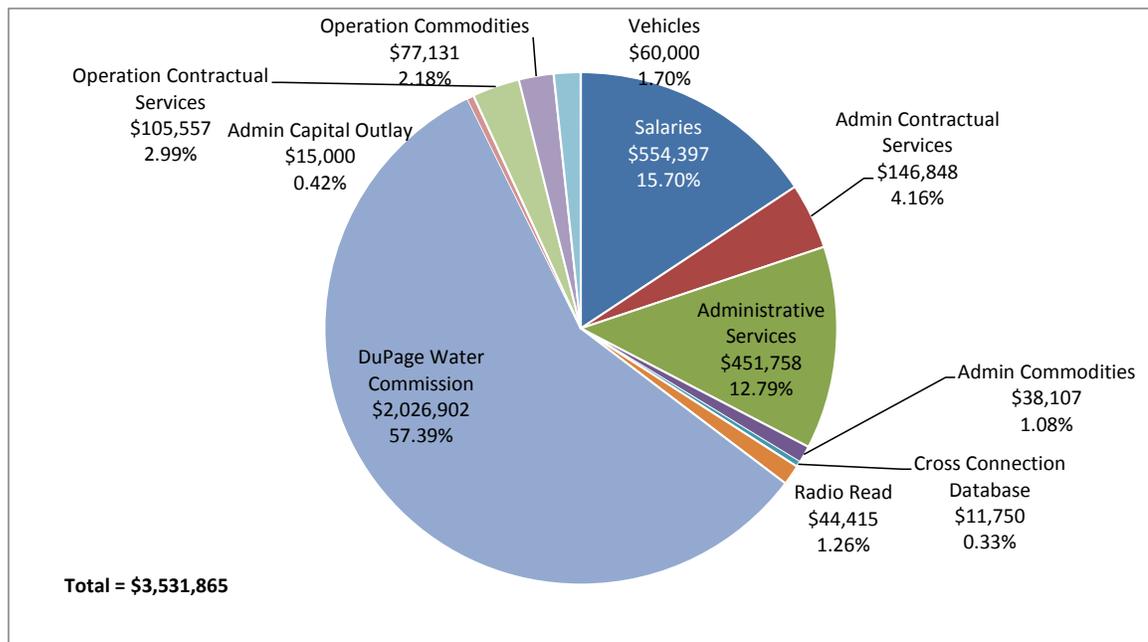
The Administration account includes the following categories to track the type of expenses.

- 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 consists of employee life and health insurance benefits. An annual 10 percent increase is used for projecting Employee Benefits in future years.

- Engineering Services includes transfers to other Village departments. This category is projected to remain at \$10,000 in future years.
- Other Contractual Services. An annual one percent increase is used for projecting this category in future years. The amount included with this category is reduced by the cross connection and radio read expense in Fiscal Years 2014 through 2018 to account for these expenses and calculate the related charges separately.
- Cross Connection Database. This expense is for maintaining a database of backflow preventers as they are certified by the EPA. This expense is included with other contractual services for past years as the maintenance was done by Village staff. However, the Village plans to contract this service to an outside vendor in the future. This expense is projected to remain revenue neutral in the future; that is, the cost is equivalent to the amount of revenue collected.
- Radio Read. This expense accounts for the manpower and vehicle cost for drive-by reads of water meters, and some administrative cost for scheduling the work. An increase of 10 percent is used for projecting this expense in the future as the number of radio reads increase. An inflationary increase of 2 percent is used for projecting manpower expense and 3 percent is used for projecting fuel costs in future years. Administrative cost is 10 percent of other related costs.
- 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. An inflationary increase of 3 percent is used for projecting this expense in future years. This category includes uniforms, professional memberships and certifications, fuel, vehicle parts, and office supplies.
- Purchase of Water.
 - The greatest portion of this expense is the cost of water paid to DuPage Water Commission (DWC) based on meter readings at three feeds into the Village. The cost of water is projected to increase with DWC's programmed rate increases of 20 percent in 2013, 18 percent in 2014 and 17 percent in 2015. These rate increases will go into effect on January 1 of each year. The amount paid to DWC for purchase of water currently accounts for about 57 percent of the total Water Utility's operating expenditures.
 - DuPage Water Commission Debt Service. This expense is a fixed annual amount paid to DWC to cover the Village's share of DWC's debt service. The DWC debt service cost currently accounts for less than 1 percent of the total Water Utility's operating expenditures.
- 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 \$10,000 for Capital Outlay and at \$5,000 for Non-Capital Outlay in future years.

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

- **Contractual Services.** This category is sub-divided into Other Contractual Services and Other. Other Contractual Services includes items such as cathodic protection, leak detection, equipment repair, traffic control, physicals, main repair, valve maintenance, street restoration, consumer confidence reports, and generator maintenance. An annual 3 percent increase is used for projecting these services in the future with escalated amounts of about \$22,000 and about \$70,000 in alternating years. Other includes electrical and gas utilities, meter repairs, disposal expense, and laboratory testing. An annual 3 percent increase is used for projecting these services in future years.
- **Commodities.** This category includes chemicals, hand tools, asphalt mix, stone, concrete redi-mix, valves, watermain repair parts, service connection materials, water meters, fire hydrant repair parts and other supplies. The expense for stone is projected to remain at \$18,000 in future years. The expense for water meters is projected to remain at \$10,000 in the future, which covers routine replacement of meters. An increase of 3 percent is used for projecting all other commodity expenses in future years.
- **Vehicle Replacement.** The Village is projecting to spend \$300,000 over the next five years for purchase of vehicles. \$60,000 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 Water Utility. Capital financing includes those expenses that are required for significant repairs and improvements to the Water Utility facilities.

Figure 4-3 on page 4-6 illustrates 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 Water Utility enters to finance large capital improvements. The Water Utility has the following two outstanding Illinois Environmental Protection Agency (IEPA) State Revolving Fund (SRF) loans.

- \$2.13 million loan issued in 2008 at 2.5 percent interest rate with payoff in June 2013 to fund the ABC water main.
- \$1.28 million loan issued in 2011 at zero percent interest rate with payoff in October 2030 to fund the North Side/South Villa water main.

The current Water Utility's 10-year Master Plan identifies projects programmed for completion in Fiscal Years 2006 through 2016. The remaining projects have an estimated construction cost of \$8.8 million. These projects include mostly water main replacements and extensions. Costs for completion of these projects is extended over the next ten years to reduce the impact on rates. These projects are projected to be funded through debt service with a uniform \$880,000 spent each year starting in Fiscal Year 2014. Principal and interest payments for these loans are based on a 20 year payback period and 1.0 percent interest rate.

The Water Utility also has a planned water meter replacement program. This project is expected to cost \$2.0 million and to be completed over a five year period. An estimated additional \$50,000 will be required in the first year for planning, towers, antennas, and software. This project is projected to be funded through debt service with payments beginning in Fiscal Year 2014. Principal and interest payments for these loans are based on a 20 year payback period and 3.5 percent interest.

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

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

IEPA SRF loans do not require any debt service reserve.

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

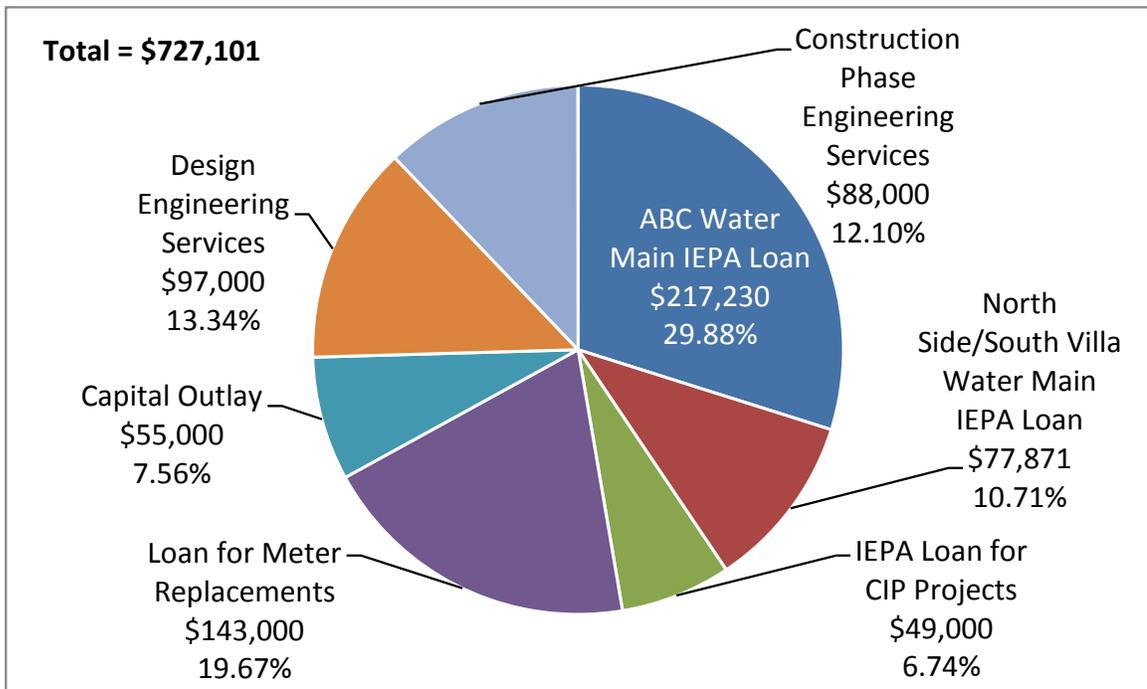
- Operations Non-Capital Outlay includes project costs that are less than \$10,000. This expense is projected to remain at \$5,000 in future years.
- Operations Capital Outlay includes items that cost between \$10,000 and \$50,000. This expense is projected to remain at \$50,000 in future years to cover the cost of unplanned capital replacements.
- Operations Engineering Services (Design) is the engineering cost associated with design development based on 10 percent of annual \$880,000 construction costs. An additional

\$9,000 is included each year to cover IEPA loan application expenses. \$97,000 is allocated for Fiscal Years 2013 through 2018 to cover these costs.

- Operations Engineering Services (Construction Phase) is the engineering construction phase services based on 10 percent of construction costs. \$88,000 is allocated for Fiscal Years 2014 through 2018 to cover this cost.

A healthy fund balance covers fluctuating cash flow and allows actual expenditures to exceed actual revenues during a fiscal year. The Water Utility currently has a fund balance that is sufficient to cover 90 days of operating costs but will be depleted if no adjustment is made to rates.

The Water Utility has no established fund reserve. Annual allocation of funds to a capital fund reserve is recommended for the Water Utility. 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. No revenue is projected for this reserve to reduce the impact of the water rate increases. However, revenue in excess of 90 days of operating expenses could be used for building the capital fund reserve.

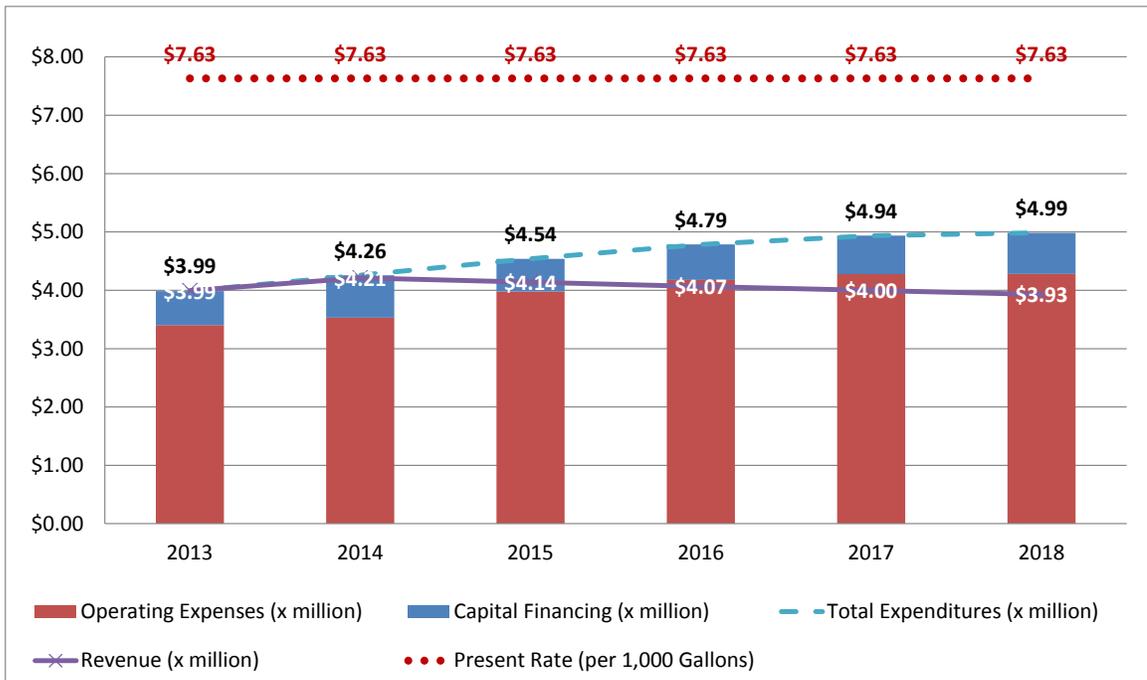


**Projected FY 2014 Capital Financing
Figure 4-3**

Projected Operating Results with Present Rates

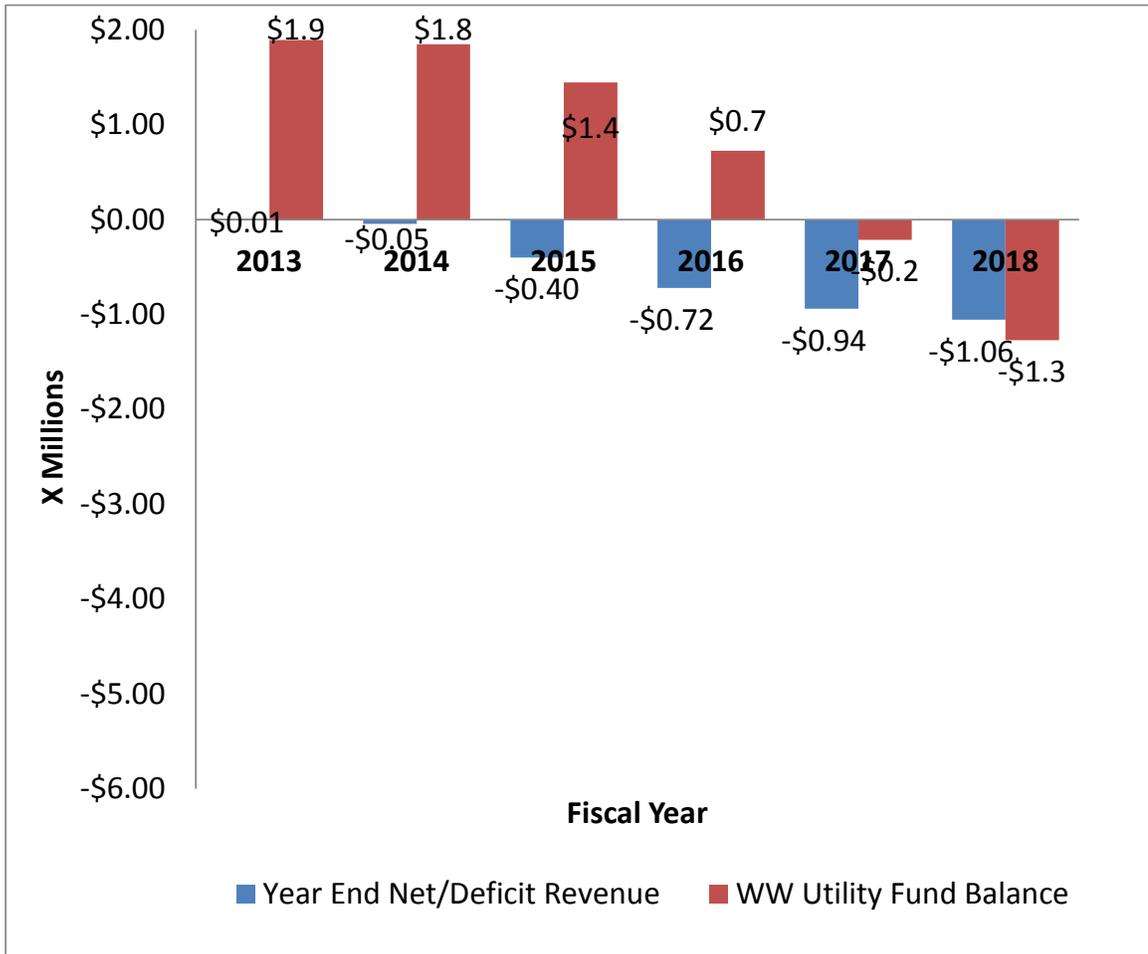
Table B5 in Appendix A presents the operating results with present rates for the Water Utility. This table summarizes the billing quantities, revenues, operating expenses, and capital financing previously discussed.

Figure 4-4 on page 4-7 illustrates the projected expenses and revenue with present rates. Operating expenses increase in Fiscal Years 2013 through 2015 primarily due to the programmed increases in DuPage Water Commission rates. The expenses decrease in Fiscal Year 2015 due to expiration of the ABC Water Main SRF loan and then increase in Fiscal Years 2016 through 2018 due to new principal and interest payments added each year for the programmed capital improvement projects. The figure illustrates that the total expenses are projected to increase from \$4.0 million in Fiscal Year 2013 to \$5.0 million in Fiscal Year 2018. These expenses will exceed decreasing revenues if no adjustment is made to present rates. Revenue is projected to decrease from \$4.2 million in Fiscal Year 2014 to \$3.9 million in Fiscal Year 2018 if no adjustment is made to present rates due to projected decline in water usage.



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. The Water Utility is projected to face a cash deficit that increases from \$45,400 in Fiscal Year 2014 to \$1.1 million in Fiscal Year 2018. The Water Utility Fund balance of about \$1.9 million in Fiscal Year 2012 is projected to be depleted in Fiscal Year 2017. The cumulative shortfall grows to an estimated \$1.3 million in Fiscal Year 2018.



Projected Deficit and Fund Shortfall 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 Water Utility's expenses, including variable and fixed costs, incurred in meeting various obligations of providing water service. The cost-of-service approach evaluates each of the current water 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 water system components. These components include distribution and storage facilities.

The Capital Financing rate generates revenues for significant repairs and improvements to the Water 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, Customer Charge, Cross Connection, and Radio Read 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 and DuPage Water Commission Debt Service expenses are allocated to the fixed Customer Charge. Cross connection and radio read expenses are allocated to each respective 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, Customer Charge, Cross Connection and Radio Read expense allocations by the appropriate billing quantities from Tables A1, A2, A5 and A6.

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

	Volume	Customer Charge	Cross Connection	Radio Read
User Charge				
User Charge Allocated Expenses	\$2,908,198	\$464,675	\$11,750	\$44,415
Billing Quantity	529,135 (1,000 gallons/Yr)	106,014 (Equiv Meters x 12 months)	9,792 (No. Cross Conn Accts x 12 months)	12,342 (Annual Radio Reads)
User Charge Unit Rates	\$5.50 Per 1,000 gallons	\$4.38 Per Equiv Meter Per Month	\$1.20 Per Cross Conn Per Month	\$3.60 Per Radio Read Per Billing
Capital Financing				
Capital Financing Allocated Expenses	\$727,101	\$0.00	\$0.00	\$0.00
Billing Quantity	529,135 (1,000 gallons/Yr)	106,014 (Equiv Meters x 12 months)	9,792 No. Cross Conn Accts x 12 months)	12,342 (Annual Radio Reads)
Capital Financing Unit Rates	\$1.37 Per 1,000 gallons	\$0.00 Per Equiv Meter Per Month	\$0.00 Per Cross Conn Per Month	\$0.00 Per Radio Read Per Billing
Total Unit Rates				
	\$6.87 Per 1,000 gallons	\$4.38 Per Equiv Meter Per Month	\$1.20 Per Cross Conn Per Month	\$3.60 Per Radio Read Per Billing

Source: Stanley Consultants, Inc.

Cost-of-Service Unit Rates

Table C2 in Appendix A presents a summary of the unit cost-of-service water 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 water rates in Fiscal Years 2015 through 2018.

Proposed Rates

Table D1 in Appendix A presents the proposed water rates for the Water Utility. A uniform 3.7 percent increase is proposed for the volume charge in Fiscal Years 2015 through 2018 to evenly distribute the rate increase impact. The rates are projected to be implemented January 1, previous to the start of each fiscal year.

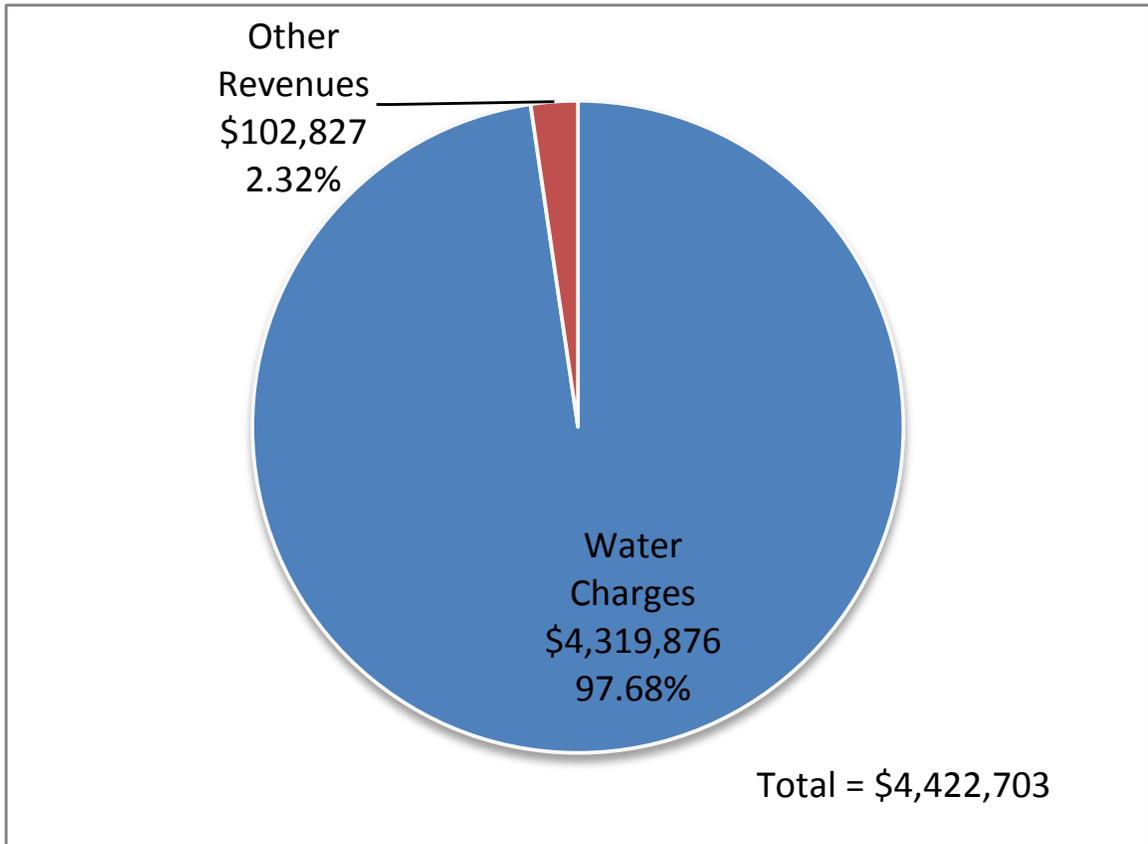
The customer charge increases proportionally to the projected increase in the Administrative Services expenses that are allocated to this charge along with DWC's debt service expense. The customer charge for each meter size is based on the cross-sectional area of the meter in proportion to a 5/8" meter.

These water rates are multiplied by the billing quantities identified in Table A1, A2, A5, and A6 to project water charge revenues from proposed water rates.

Revenues from Proposed Rates

Table D2 in Appendix A presents the actual, budget, and projected water charges. The projected water charges are calculated by multiplying the previously identified quantities by the proposed water rates presented in Table D1. The revenue is based on January 1 implementation date in the previous fiscal year.

Figure 6-1 illustrates projected Fiscal Year 2015 revenue with proposed rates.



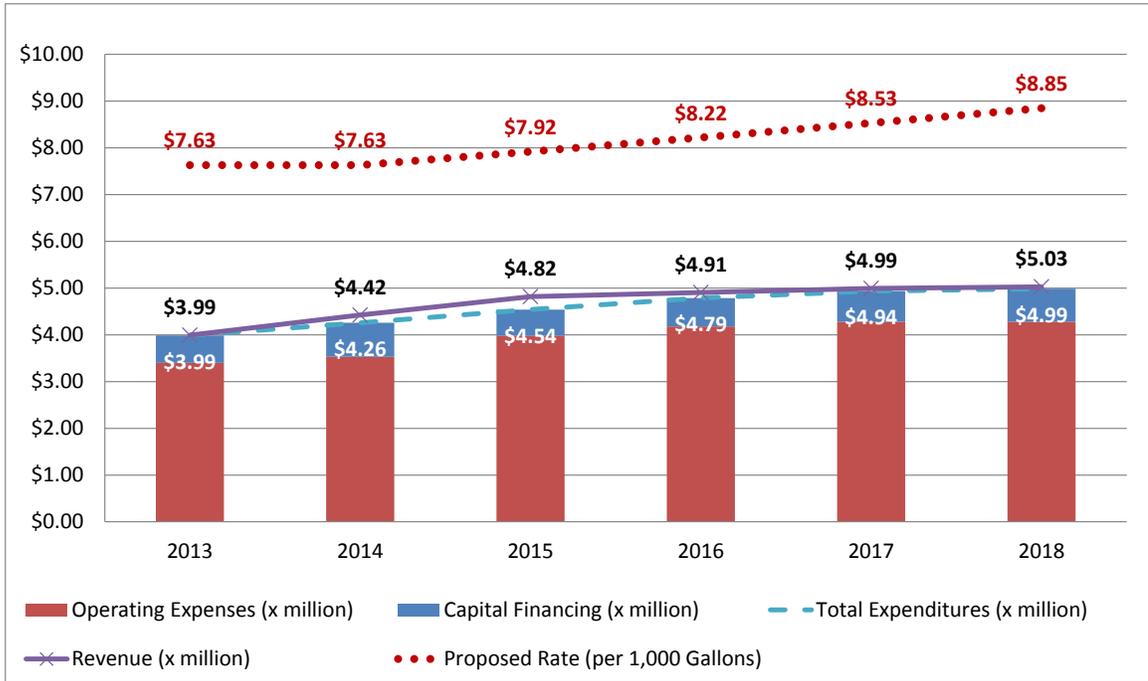
Projected FY 2014 Revenues with Proposed Rates

Figure 6-1

Operating Results with Proposed Rates

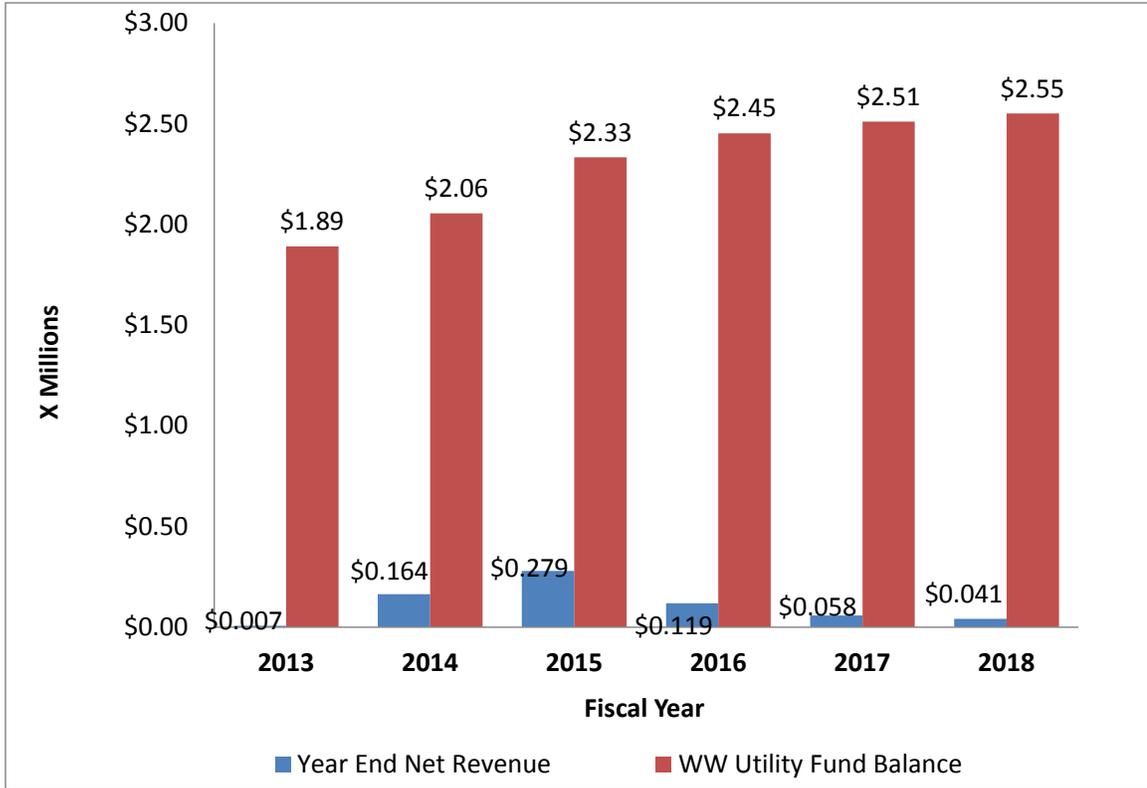
Table D3 in Appendix A presents the operating results with proposed rates for the Water Utility. This table summarizes the billing quantities, revenues, operating expenses, and capital financing previously discussed.

Figure 6-2 illustrates the projected expenses and revenue with proposed rates. The figure illustrates revenue increasing as rates increase. Revenue is projected to increase from \$4.0 in Fiscal Year 2013 to \$5.0 million in Fiscal Year 2018 to meet increasing expense requirements.



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 Water utility is projected to end each year with a positive cash balance in Fiscal Years 2014 through 2018. The Water Utility Fund cash balance is projected to increase from \$1.9 million in Fiscal Year 2013 to \$2.6 million in Fiscal Year 2018.



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

Implementing Rate Adjustments

General

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

The Water 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 water rates.

Implementing Rate Adjustments

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

- The Water Utility's rates have been adjusted over the years to keep pace with DuPage Water Commission's (DWC) rate increases. Additional large rate adjustments must be made because of future DWC rate increases and planned capital projects. Implementation of annual water 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 water 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 Water Utility is incurring additional costs to maintain or improve the aging water system.

Appendix A

Water Rate Analysis Spreadsheets

Table A1
Billing Quantities - Billings
Water 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 ⁽¹⁾	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 ⁽¹⁾	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	
1.3 Radio Read Billings (Bills/Year) ⁽²⁾										
1.3.1 Monthly	2,400	2,400	2,400	2,640	2,904	3,194	3,514	3,865	4,252	
1.3.2 Quarterly	7,800	7,800	7,800	8,580	9,438	10,382	11,420	12,562	13,818	
1.3.3 Total Radio Read Billings	10,200	10,200	10,200	11,220	12,342	13,576	14,934	16,427	18,070	

- Notes (1) Starting April 30, 2012, Municipal accounts were moved from quarterly to monthly cycle.
(2) 12 billings per monthly account + 4 billings per quarterly account. Number of accounts on Table A2.
(3)
(4)
(5)

Table A2
Billing Quantities - Number of Accounts
Water 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 ⁽¹⁾	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	
2.2 Number of Cross Connection Accounts ⁽²⁾	797	796	816	816	816	816	816	816	816	
2.3 Number of Radio Read Accounts										
2.3.1 Monthly	200	200	200	220	242	266	293	322	354	10%
2.3.2 Quarterly	1,950	1,950	1,950	2,145	2,360	2,595	2,855	3,140	3,455	10%

- Notes (1) Starting April 30, 2012, Municipal accounts were moved from quarterly to monthly cycle.
(2) Includes non-residential accounts (Apartment, Commercial, Government and Industrial).
(3)
(4)
(5)

Table A3
 Metered Service Accounts
 Water Rate Study
 Village of Villa Park, Illinois
 June 2013

Description	Fiscal Year Ending April 30						
	Actual 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018
3.1 Meter Size							
3.1.1 3/4" (1)							
3.1.1.1 Residential	6,200	6,200	6,200	6,200	6,200	6,200	6,200
3.1.1.2 Apartment	72	72	72	72	72	72	72
3.1.1.3 Commercial	334	334	334	334	334	334	334
3.1.1.4 Industrial	71	71	71	71	71	71	71
3.1.1.5 Municipal	12	12	12	12	12	12	12
3.1.1.6 Government	3	3	3	3	3	3	3
3.1.1.7 Subtotal	6,692	6,692	6,692	6,692	6,692	6,692	6,692
3.1.2 1" (1)							
3.1.2.1 Residential	45	45	45	45	45	45	45
3.1.2.2 Apartment	43	43	43	43	43	43	43
3.1.2.3 Commercial	43	43	43	43	43	43	43
3.1.2.4 Industrial	15	15	15	15	15	15	15
3.1.2.5 Municipal	2	2	2	2	2	2	2
3.1.2.6 Government	0	0	0	0	0	0	0
3.1.2.7 Subtotal	148	148	148	148	148	148	148
3.1.3 1 1/4"							
3.1.3.1 Residential	0	0	0	0	0	0	0
3.1.3.2 Apartment	1	1	1	1	1	1	1
3.1.3.3 Commercial	0	0	0	0	0	0	0
3.1.3.4 Industrial	0	0	0	0	0	0	0
3.1.3.5 Municipal	0	0	0	0	0	0	0
3.1.3.6 Government	0	0	0	0	0	0	0
3.1.3.7 Subtotal	1	1	1	1	1	1	1
3.1.4 1 1/2"							
3.1.4.1 Residential	3	3	3	3	3	3	3
3.1.4.2 Apartment	41	41	41	41	41	41	41
3.1.4.3 Commercial	46	46	46	46	46	46	46
3.1.4.4 Industrial	13	13	13	13	13	13	13
3.1.4.5 Municipal	5	5	5	5	5	5	5
3.1.4.6 Government	5	5	5	5	5	5	5
3.1.4.7 Subtotal	113	113	113	113	113	113	113
3.1.5 2"							
3.1.5.1 Residential	4	4	4	4	4	4	4
3.1.5.2 Apartment	13	13	13	13	13	13	13
3.1.5.3 Commercial	47	47	47	47	47	47	47
3.1.5.4 Industrial	5	5	5	5	5	5	5
3.1.5.5 Municipal	4	4	4	4	4	4	4
3.1.5.6 Government	2	2	2	2	2	2	2
3.1.5.7 Subtotal	75	75	75	75	75	75	75
3.1.6 3"							
3.1.6.1 Residential	1	1	1	1	1	1	1
3.1.6.2 Apartment	11	11	11	11	11	11	11
3.1.6.3 Commercial	14	14	14	14	14	14	14
3.1.6.4 Industrial	1	1	1	1	1	1	1
3.1.6.5 Municipal	1	1	1	1	1	1	1
3.1.6.6 Government	3	3	3	3	3	3	3
3.1.6.7 Subtotal	31	31	31	31	31	31	31
3.1.7 4"							
3.1.7.1 Residential	0	0	0	0	0	0	0
3.1.7.2 Apartment	2	2	2	2	2	2	2
3.1.7.3 Commercial	4	4	4	4	4	4	4
3.1.7.4 Industrial	1	1	1	1	1	1	1
3.1.7.5 Municipal	2	2	2	2	2	2	2
3.1.7.6 Government	3	3	3	3	3	3	3
3.1.7.7 Subtotal	12	12	12	12	12	12	12
3.1.8 Unknown							
3.1.8.1 Residential	44	44	44	44	44	44	44
3.1.8.2 Apartment	1	1	1	1	1	1	1
3.1.8.3 Commercial	5	5	5	5	5	5	5
3.1.8.4 Industrial	0	0	0	0	0	0	0
3.1.8.5 Municipal	1	1	1	1	1	1	1
3.1.8.6 Government	1	1	1	1	1	1	1
3.1.8.7 Subtotal	52	52	52	52	52	52	52
3.2 Total Number of Meters	7,124	7,124	7,124	7,124	7,124	7,124	7,124

Notes (1) Includes all existing 5/8", 5/8" x 3/4" and 3/4" meters.
 (2)
 (3)
 (4)
 (5)

Table A4
 3/4" Line Equivalent Accounts
 Water Rate Study
 Village of Villa Park, Illinois
 June 2013

Description	Fiscal Year Ending April 30							Equivalent Factor
	Actual 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018	
4.1 Meter Size								
4.1.1 3/4"								1.0
4.1.1.1 Residential	6,200	6,200	6,200	6,200	6,200	6,200	6,200	
4.1.1.2 Apartment	72	72	72	72	72	72	72	
4.1.1.2 Commercial	334	334	334	334	334	334	334	
4.1.1.3 Industrial	71	71	71	71	71	71	71	
4.1.1.3 Municipal	12	12	12	12	12	12	12	
4.1.1.4 Government	3	3	3	3	3	3	3	
4.1.1.4 Subtotal	6,692	6,692	6,692	6,692	6,692	6,692	6,692	
4.1.2 1"								1.8
4.1.2.1 Residential	81	81	81	81	81	81	81	
4.1.2.2 Apartment	77	77	77	77	77	77	77	
4.1.2.3 Commercial	77	77	77	77	77	77	77	
4.1.2.4 Industrial	27	27	27	27	27	27	27	
4.1.2.5 Municipal	4	4	4	4	4	4	4	
4.1.2.6 Government	0	0	0	0	0	0	0	
4.1.2.7 Subtotal	266	266	266	266	266	266	266	
4.1.3 1 1/4"								2.8
4.1.3.1 Residential	0	0	0	0	0	0	0	
4.1.3.2 Apartment	3	3	3	3	3	3	3	
4.1.3.3 Commercial	0	0	0	0	0	0	0	
4.1.3.4 Industrial	0	0	0	0	0	0	0	
4.1.3.5 Municipal	0	0	0	0	0	0	0	
4.1.3.6 Government	0	0	0	0	0	0	0	
4.1.3.7 Subtotal	3	3	3	3	3	3	3	
4.1.4 1 1/2"								4.0
4.1.4.1 Residential	12	12	12	12	12	12	12	
4.1.4.2 Apartment	164	164	164	164	164	164	164	
4.1.4.3 Commercial	184	184	184	184	184	184	184	
4.1.4.4 Industrial	52	52	52	52	52	52	52	
4.1.4.5 Municipal	20	20	20	20	20	20	20	
4.1.4.6 Government	20	20	20	20	20	20	20	
4.1.4.7 Subtotal	452	452	452	452	452	452	452	
4.1.5 2"								7.1
4.1.5.1 Residential	28	28	28	28	28	28	28	
4.1.5.2 Apartment	92	92	92	92	92	92	92	
4.1.5.3 Commercial	334	334	334	334	334	334	334	
4.1.5.4 Industrial	36	36	36	36	36	36	36	
4.1.5.5 Municipal	28	28	28	28	28	28	28	
4.1.5.6 Government	14	14	14	14	14	14	14	
4.1.5.7 Subtotal	533	533	533	533	533	533	533	
4.1.6 3"								16.0
4.1.6.1 Residential	16	16	16	16	16	16	16	
4.1.6.2 Apartment	176	176	176	176	176	176	176	
4.1.6.3 Commercial	224	224	224	224	224	224	224	
4.1.6.4 Industrial	16	16	16	16	16	16	16	
4.1.6.5 Municipal	16	16	16	16	16	16	16	
4.1.6.6 Government	48	48	48	48	48	48	48	
4.1.6.7 Subtotal	496	496	496	496	496	496	496	
4.1.7 4"								28.4
4.1.7.1 Residential	0	0	0	0	0	0	0	
4.1.7.2 Apartment	57	57	57	57	57	57	57	
4.1.7.3 Commercial	114	114	114	114	114	114	114	
4.1.7.4 Industrial	28	28	28	28	28	28	28	
4.1.7.5 Municipal	57	57	57	57	57	57	57	
4.1.7.6 Government	85	85	85	85	85	85	85	
4.1.7.7 Subtotal	341	341	341	341	341	341	341	
4.1.8 Unknown								1.0
4.1.8.1 Residential	44	44	44	44	44	44	44	
4.1.8.2 Apartment	1	1	1	1	1	1	1	
4.1.8.3 Commercial	5	5	5	5	5	5	5	
4.1.8.4 Industrial	0	0	0	0	0	0	0	
4.1.8.5 Municipal	1	1	1	1	1	1	1	
4.1.8.6 Government	1	1	1	1	1	1	1	
4.1.8.7 Subtotal	52	52	52	52	52	52	52	
4.2 Total Number of Meters	8,835	8,835	8,835	8,835	8,835	8,835	8,835	

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

Table A5
 Summary 3/4" Equivalent Accounts
 Water Rate Study
 Village of Villa Park, Illinois
 June 2013

Description	Fiscal Year Ending April 30						
	Actual 2012	Budget 2013	Projected 2014	Projected 2015	Projected 2016	Projected 2017	Projected 2018
5.1 Meter Size							
5.1.1 3/4"	6,692	6,692	6,692	6,692	6,692	6,692	6,692
5.1.1 1"	266	266	266	266	266	266	266
5.1.2 1 1/4"	3	3	3	3	3	3	3
5.1.3 1 1/2"	452	452	452	452	452	452	452
5.1.4 2"	533	533	533	533	533	533	533
5.1.5 3"	496	496	496	496	496	496	496
5.1.6 4"	341	341	341	341	341	341	341
5.1.7 Unknown	52	52	52	52	52	52	52
5.2 Total Number of Meters	8,835	8,835	8,835	8,835	8,835	8,835	8,835

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

Table A6
 Billing Quantities - Volume (1,000 Gallons)
 Water 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				
6.1 Billable Volume (1,000 Gallons/Year)										
6.1.1 Total	560,128	547,048	550,953	539,934	529,135	518,553	508,182	498,018	488,058	-2%

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

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

Description			February 1, 2012	February 1, 2013
1.1	Unit Rates			
1.1.1	Volume Charge			
1.1.1.1	Property Owners within Village Corporate Limits	Per 1,000 gallons	\$6.97	\$7.63
1.1.1.2	Property Owners outside Village Corporate Limits	Per 1,000 gallons	\$13.94	\$15.26
1.1.2	Cross Connection Fee ⁽¹⁾	Per account per month	\$1.20	\$1.20
1.1.3	Radio Read Fee ⁽²⁾	Per radio read per billing	\$5.00	\$5.00

- Notes
- (1) Charge to commercial and industrial customers to maintain database verifying backflow preventers are certified by EPA each year.
 - (2) Charge for radio meter reading required when the customer does not have a functioning landline phone connection.
 - (3)
 - (4)
 - (5)

Table B2
Revenues From Present Rates
Water 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	
2.1 Water Charges										
2.1.1 Volume Charge ⁽¹⁾	\$3,122,907	\$3,291,281	\$3,542,100	\$3,854,469	\$4,037,302	\$3,956,556	\$3,877,425	\$3,799,876	\$3,723,879	
2.2.8 Cross Connection Fee ⁽²⁾	\$11,350	\$11,376	\$11,804	\$11,350	\$11,750	\$11,750	\$11,750	\$11,750	\$11,750	
2.1.2 Radio Read Fee					\$61,710	\$67,881	\$74,669	\$82,136	\$90,350	
2.1.3 Total Water Charges	\$3,134,257	\$3,302,657	\$3,553,904	\$3,865,819	\$4,110,762	\$4,036,187	\$3,963,844	\$3,893,763	\$3,825,979	
2.2 Other Revenues										
2.2.1 Resident Fees	\$75	\$3,845	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	
2.2.2 Miscellaneous Revenue	\$61,490	\$66,596	\$52,263	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	0%
2.2.3 Water Tap Fees	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
2.2.4 Meter Installation	\$5,600	\$7,853	\$8,053	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	0%
2.2.5 Permit Fees	\$1,645	\$160	\$230	\$240	\$240	\$240	\$240	\$240	\$240	0%
2.2.6 Connection Charges	\$7,030	\$9,806	\$9,141	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	0%
2.2.7 Late Charges	\$28,138	\$30,911	\$31,472	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	0%
2.2.8 Water Inspection Fees	\$100	\$850	\$850	\$850	\$850	\$850	\$850	\$850	\$850	0%
2.2.9 Interest	\$15,042	\$6,829	\$3,549	\$2,587	\$2,587	\$2,587	\$2,587	\$2,587	\$2,587	
2.2.10 Transfer From TIF #2			\$116,993							
2.2.11 State Grant			\$1,832							
2.2.12 Block Grant				\$25,066						
2.2.13 Subtotal Other Revenues	\$119,520	\$126,850	\$226,033	\$127,893	\$102,827	\$102,827	\$102,827	\$102,827	\$102,827	
2.3 Total Revenues	\$3,253,777	\$3,429,507	\$3,779,937	\$3,993,712	\$4,213,589	\$4,139,014	\$4,066,671	\$3,996,590	\$3,928,806	

- Notes (1) Historical revenue includes radio read fee.
(2) Number of non-residential accounts x monthly fee for FY2014 and beyond.
(3)
(4)
(5)

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

Description	Fiscal Year Ending April 30					Projected 2015	Projected 2016	Projected 2017	Projected 2018	Percent Escalation
	Actual 2010	Actual 2011	Year-End 2012	Budget 2013	Projected 2014					
3.1 Administration										
3.1.1 Salaries and Benefits										
3.1.1.1 Salaries	\$608,062	\$518,077	\$468,539	\$449,179	\$458,163	\$467,326	\$476,672	\$486,206	\$495,930	2%
3.1.1.2 Salary Contributions ⁽¹⁾	\$105,084	\$104,921	\$99,893	\$94,347	\$96,234	\$98,159	\$100,122	\$102,124	\$104,167	2%
3.1.1.3 Subtotal Salaries and Benefits	\$713,146	\$622,998	\$568,432	\$543,526	\$554,397	\$565,484	\$576,794	\$588,330	\$600,097	
3.1.2 Contractual Services										
3.1.2.1 Employee Benefits (Insurance)	\$139,088	\$147,713	\$141,190	\$114,916	\$126,408	\$139,048	\$152,953	\$168,249	\$185,073	10%
3.1.2.2 Engineering Services	\$213	\$24,604	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	0%
3.1.2.3 Other Contractual Services ⁽²⁾	\$54,254	\$49,301	\$53,050	\$54,596	\$10,440	\$10,545	\$10,650	\$10,757	\$10,864	1%
3.1.2.4 Cross Connection Database ⁽³⁾	\$11,350	\$11,376	\$11,804	\$11,350	\$11,750	\$11,750	\$11,750	\$11,750	\$11,750	
3.1.2.5 Radio Read ⁽⁴⁾										
3.1.2.5.1 Salary					\$25,000	\$28,000	\$31,360	\$35,123	\$39,338	12%
3.1.2.5.2 Fuel and Vehicle Usage					\$15,377	\$17,376	\$19,635	\$22,187	\$25,072	13%
3.1.2.5.3 Administrative Cost					\$4,038	\$4,538	\$5,099	\$5,731	\$6,441	
3.1.2.5.4 Subtotal Radio Read					\$44,415	\$49,914	\$56,094	\$63,042	\$70,851	
3.1.2.6 Administrative Services ⁽⁵⁾	\$442,900	\$468,000	\$468,000	\$442,900	\$451,758	\$460,793	\$470,009	\$479,409	\$488,997	2%
3.1.2.7 Subtotal Contractual Services	\$647,805	\$700,994	\$674,044	\$633,762	\$654,771	\$682,050	\$711,457	\$743,207	\$777,536	
3.1.4 Commodities	\$23,379	\$30,167	\$29,549	\$36,997	\$38,107	\$39,250	\$40,428	\$41,640	\$42,890	3%
3.1.6 Purchase of Water										
3.1.6.1 Purchase of Water ⁽⁶⁾	\$1,080,482	\$1,315,269	\$1,438,660	\$1,899,986	\$2,013,985	\$2,369,029	\$2,570,808	\$2,570,808	\$2,570,808	
3.1.6.2 DWC Debt Service	\$12,917	\$12,917	\$12,917	\$12,917	\$12,917	\$12,917	\$12,917	\$12,917	\$12,917	0%
3.1.6.3 Subtotal Purchase of Water	\$1,093,399	\$1,328,186	\$1,451,577	\$1,912,903	\$2,026,902	\$2,381,946	\$2,583,725	\$2,583,725	\$2,583,725	
3.1.7 Capital Outlay										
3.1.7.1 Capital Outlay ⁽⁷⁾	\$0	\$0	\$59,770	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	0%
3.1.7.2 Non-Capital Outlay ⁽⁸⁾	\$1,940	\$123	\$4,248	\$3,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	0%
3.1.7.3 Subtotal Capital Outlay	\$1,940	\$123	\$64,018	\$13,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
3.1.8 Subtotal Administration	\$2,479,669	\$2,682,468	\$2,787,620	\$3,140,188	\$3,289,177	\$3,683,731	\$3,927,404	\$3,971,902	\$4,019,247	
3.2 Operations										
3.2.1 Contractual Services ⁽⁹⁾										
3.2.1.1 Other Contractual Services ⁽¹⁰⁾	\$29,181	\$76,685	\$20,983	\$69,900	\$21,612	\$71,997	\$22,261	\$74,157	\$22,929	3%
3.2.1.2 Other	\$74,508	\$46,227	\$65,916	\$81,590	\$83,945	\$86,463	\$89,057	\$91,729	\$94,481	3%
3.2.1.3 Subtotal Contractual Services	\$103,689	\$122,912	\$86,899	\$151,490	\$105,557	\$158,460	\$111,318	\$165,886	\$117,410	
3.2.2 Commodities										
3.2.2.1 Stone	\$16,490	\$10,591	\$6,618	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	0%
3.2.2.2 Water Meters	\$37,926	\$25,586	\$50,360	\$45,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	0%
3.2.2.3 Other Commodities	\$40,379	\$31,535	\$36,350	\$47,700	\$49,131	\$50,605	\$52,123	\$53,687	\$55,297	3%
3.2.2.4 Subtotal Commodities	\$94,795	\$67,712	\$93,328	\$110,700	\$77,131	\$78,605	\$80,123	\$81,687	\$83,297	
3.2.3 Vehicle Replacement ⁽¹¹⁾					\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
3.2.4 Subtotal Operations	\$198,484	\$190,624	\$180,227	\$262,190	\$242,688	\$297,065	\$251,441	\$307,573	\$260,707	
3.3 Total Operating Expenses	\$2,678,153	\$2,873,092	\$2,967,847	\$3,402,378	\$3,531,865	\$3,980,796	\$4,178,845	\$4,279,474	\$4,279,954	

Notes (1) Includes IMRF, Social Security, and Medicare contributions. Expenses were funded from Operations account in FY2010.
(2) Cross Connection expense and Radio Read expense subtracted from Other Contractual Services
(3) Cost for maintaining database verifying backflow preventers are certified by EPA each year.
(4) 50% of one persons salary (\$25,000/yr FY 2013) with 10% annual increase as number of radio reads increase; plus 10% for administering the program.
(5) Transfer to Village Corporate account to cover fixed administrative costs.
(6) Cost of water from DuPage Water Commission. Projected expense reflects January 1 increases programmed by DWC: 30% in 2012; 20% in 2013; 18% in 2014; 17% in 2015.
(7) Items with individual cost of \$500 or more including computer equipment, GIS upgrade, etc.
(8) Items with individual cost between \$100 & \$500 including IT hardware, furniture, shelving.
(9) Contractual expense, Engineering Services (Engineering Design and Construction Phase Services), is included on Table B4 with Capital Financing.
(10) Alternating amounts each year with escalation.
(11) Projected to spend \$300,000 over next 5 years.

Table B4
Capital Financing
Water 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 ABC Water Main L17-2781 ⁽¹⁾	\$455,833	\$455,833	\$455,833	\$455,833	\$217,230	\$0	\$0	\$0	\$0	
4.1.1.1 North Side Water Main/South Villa Water Main L17-3396 ⁽²⁾	\$0	\$0	\$77,871	\$77,871	\$77,871	\$77,871	\$77,871	\$77,871	\$77,871	
4.1.1.2 2013 IEPA Loan ⁽³⁾	\$0	\$0	\$0	\$0	\$49,000	\$49,000	\$49,000	\$49,000	\$49,000	\$880,000
4.1.1.3 2014 IEPA Loan ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$49,000	\$49,000	\$49,000	\$49,000	\$880,000
4.1.1.4 2015 IEPA Loan ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$0	\$49,000	\$49,000	\$49,000	\$880,000
4.1.1.5 2016 IEPA Loan ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,000	\$49,000	\$880,000
4.1.1.6 2017 IEPA Loan ⁽³⁾	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,000	\$880,000
4.1.1.7 Water Meter Replacements ⁽⁴⁾	\$0	\$0	\$0	\$0	\$143,000	\$143,000	\$143,000	\$143,000	\$143,000	\$2,050,000
4.1.1.8 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.1.9 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.1.10 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.1.11 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.1.12 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.1.1.13 Subtotal Debt Service	\$455,833	\$455,833	\$533,704	\$533,704	\$487,101	\$318,871	\$367,871	\$416,871	\$465,871	
4.2 Other Disbursements										
4.2.1 Debt Service Reserve ⁽⁵⁾										
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 ⁽⁶⁾			\$2,458	\$1,200	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	
4.2.2.2 Operations Capital Outlay ⁽⁷⁾	\$67,223	(\$54,259)	\$390,256	\$49,787	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
4.2.2.3 Operations Engineering Services (Design) ⁽⁸⁾	\$0	\$0	\$0	\$0	\$97,000	\$97,000	\$97,000	\$97,000	\$97,000	
4.2.2.4 Operations Engineering Services (Constr Phase) ⁽⁹⁾	\$0	\$0	\$0	\$0	\$88,000	\$88,000	\$88,000	\$88,000	\$88,000	
4.2.2.5 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.6 Future	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4.2.2.7 Subtotal Capital Outlay from Revenue	\$67,223	-\$54,259	\$392,714	\$50,987	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	
4.2.3 Fund Reserve										
4.2.4 Subtotal Other Disbursements	\$67,223	-\$54,259	\$392,714	\$50,987	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	
4.3 Total Capital Financing	\$523,056	\$401,574	\$926,418	\$584,691	\$727,101	\$558,871	\$607,871	\$656,871	\$705,871	

Notes (1) 2008 IEPA loan for \$2,130,000 at 2.5% interest rate; payoff June 2013.
(2) 2011 IEPA loan for \$1,279,964 at 0% interest; payoff October 2030.
(3) \$8.8 M of projects identified in Master Plan projected to be completed with uniform amount over 10 years. Projected at 1.0% interest rate with 20 year payback period.
(4) Projected cost of \$2,000,000 for meter replacement plus additional \$50,000 for planning, towers, antennas, software. Assume 3.5% interest rate with 20 year payback period.
(5) No Debt Service Reserve required for IEPA loans.

Table B5
 Operating Results With Present Rates
 Water 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
5.1.2	Billable Volume (1,000 Gallons/Year)	560,128	547,048	550,953	539,934	529,135	518,553	508,182	488,058
5.2	Revenues								
5.2.1	Water Charges	\$3,134,257	\$3,302,657	\$3,553,904	\$3,865,819	\$4,110,762	\$4,036,187	\$3,963,844	\$3,893,763
5.2.2	Other Revenues	\$119,520	\$126,850	\$226,033	\$127,893	\$102,827	\$102,827	\$102,827	\$102,827
5.2.3	Total Revenues	\$3,253,777	\$3,429,507	\$3,779,937	\$3,993,712	\$4,213,589	\$4,139,014	\$4,066,671	\$3,996,590
5.3	Operating Expenses								
5.3.1	Administration	\$2,479,669	\$2,682,468	\$2,787,620	\$3,140,188	\$3,289,177	\$3,683,731	\$3,927,404	\$3,971,902
5.3.2	Operations	\$198,484	\$190,624	\$180,227	\$262,190	\$242,688	\$297,065	\$251,441	\$307,573
5.3.3	Total Operating Expenses	\$2,678,153	\$2,873,092	\$2,967,847	\$3,402,378	\$3,531,865	\$3,980,796	\$4,178,845	\$4,279,474
5.4	Capital Financing								
5.4.1	Debt Service	\$455,833	\$455,833	\$533,704	\$533,704	\$487,101	\$318,871	\$367,871	\$416,871
5.4.2	Other Disbursements								
5.4.2.1	Debt Service Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5.4.2.2	Capital Outlay from Revenues	\$67,223	-\$54,259	\$392,714	\$50,987	\$240,000	\$240,000	\$240,000	\$240,000
5.4.2.3	Fund Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5.4.3	Total Capital Financing	\$523,056	\$401,574	\$926,418	\$584,691	\$727,101	\$558,871	\$607,871	\$656,871
5.5	Total Expenses	\$3,201,209	\$3,274,666	\$3,894,265	\$3,987,069	\$4,258,966	\$4,539,667	\$4,786,716	\$4,936,345
5.6	Cash Balance (Deficit)								
5.6.1	Annual Net Revenue ⁽¹⁾				\$6,643	(\$45,377)	(\$400,653)	(\$720,045)	(\$939,756)
5.6.2	Percent of Water Sales				0%	-1%	-10%	-18%	-24%
5.7	Account Balance ⁽²⁾	\$1,991,198	\$1,515,216	\$1,885,087	\$1,891,730	\$1,846,353	\$1,445,700	\$725,656	(\$214,100)

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

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

		Fiscal Year Ending April 30, 2014								
Description	Expenditures \$	%	Volume	Customer Charge		Cross Connection		Radio Read		
			\$	%	\$	%	\$	%	\$	
1.1	User Charge									
1.1.1	Administration Salaries	\$554,397	100%	\$554,397	0%	\$0	0%	\$0	0%	\$0
1.1.1	Administration Contractual Services	\$146,848	100%	\$146,848	0%	\$0	0%	\$0	0%	\$0
1.1.2	Administrative Services	\$451,758	0%	\$0	100%	\$451,758	0%	\$0	0%	\$0
1.1.3	Cross Connection	\$11,750	0%	\$0	0%	\$0	100%	\$11,750	0%	\$0
1.1.4	Radio Read	\$44,415	0%	\$0	0%	\$0	0%	\$0	100%	\$44,415
1.1.5	Administration Commodities	\$38,107	100%	\$38,107	0%	\$0	0%	\$0	0%	\$0
1.1.6	Administration Capital Outlay	\$15,000	100%	\$15,000	0%	\$0	0%	\$0	0%	\$0
1.1.5	Purchase of Water	\$2,013,985	100%	\$2,013,985	0%	\$0	0%	\$0	0%	\$0
1.1.6	Dupage Water Commission Debt Service	\$12,917	0%	\$0	100%	\$12,917	0%	\$0	0%	\$0
1.1.7	Operations	\$242,688	100%	\$242,688	0%	\$0	0%	\$0	0%	\$0
1.1.8	Other Revenue	(\$102,827)	100%	(\$102,827)	0%	\$0	0%	\$0	0%	\$0
1.1.9	Subtotal User Charge	\$3,429,038		\$2,908,198		\$464,675		\$11,750		\$44,415
1.1.10	Billing Quantity			529,135		106,014		9,792		12,342
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.1.11	User Charge Unit Rate			\$5.50		\$4.38		\$1.20		\$3.60
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.2	Capital Financing									
1.2.1	Debt Service	\$487,101	100%	\$487,101	0%	\$0	0%	\$0	0%	\$0
1.2.2	Other Disbursements									
1.2.2.1	Debt Service Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.2.2	Capital Outlay from Revenues	\$240,000	100%	\$240,000	0%	\$0	0%	\$0	0%	\$0
1.2.2.3	Fund Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.3	Subtotal Capital Financing	\$727,101		\$727,101		\$0		\$0		\$0
1.2.4	Billing Quantity			529,135		106,014		9,792		12,342
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.2.5	Capital Financing Unit Rate			\$1.37		\$0.00		\$0.00		\$0.00
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.3	Total Unit Rate			\$6.87		\$4.38		\$1.20		\$3.60

- Notes (1)
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Table C1 - FY2015
Unit Cost-of-Service
Water Rate Study
Village of Villa Park, Illinois
June 2013

		Fiscal Year Ending April 30, 2015								
Description	Expenditures	Volume		Customer Charge		Cross Connection		Radio Read		
	\$	%	\$	%	\$	%	\$	%	\$	
1.1	User Charge									
1.1.1	Administration Salaries	\$565,484	100%	\$565,484	0%	\$0	0%	\$0	0%	\$0
1.1.1	Administration Contractual Services	\$159,593	100%	\$159,593	0%	\$0	0%	\$0	0%	\$0
1.1.2	Administrative Services	\$460,793	0%	\$0	100%	\$460,793	0%	\$0	0%	\$0
1.1.3	Cross Connection	\$11,750	0%	\$0	0%	\$0	100%	\$11,750	0%	\$0
1.1.4	Radio Read	\$49,914	0%	\$0	0%	\$0	0%	\$0	100%	\$49,914
1.1.5	Administration Commodities	\$39,250	100%	\$39,250	0%	\$0	0%	\$0	0%	\$0
1.1.6	Administration Capital Outlay	\$15,000	100%	\$15,000	0%	\$0	0%	\$0	0%	\$0
1.1.5	Purchase of Water	\$2,369,029	100%	\$2,369,029	0%	\$0	0%	\$0	0%	\$0
1.1.6	Dupage Water Commission Debt Service	\$12,917	0%	\$0	100%	\$12,917	0%	\$0	0%	\$0
1.1.7	Operations	\$297,065	100%	\$297,065	0%	\$0	0%	\$0	0%	\$0
1.1.8	Other Revenue	(\$102,827)	100%	(\$102,827)	0%	\$0	0%	\$0	0%	\$0
1.1.9	Subtotal User Charge	\$3,877,969		\$3,342,595		\$473,710		\$11,750		\$49,914
1.1.10	Billing Quantity			518,553		106,014		9,792		13,576
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.1.11	User Charge Unit Rate			\$6.45		\$4.47		\$1.20		\$3.68
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.2	Capital Financing									
1.2.1	Debt Service	\$318,871	100%	\$318,871	0%	\$0	0%	\$0	0%	\$0
1.2.2	Other Disbursements									
1.2.2.1	Debt Service Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.2.2	Capital Outlay from Revenues	\$240,000	100%	\$240,000	0%	\$0	0%	\$0	0%	\$0
1.2.2.3	Fund Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.3	Subtotal Capital Financing	\$558,871		\$558,871		\$0		\$0		\$0
1.2.4	Billing Quantity			518,553		106,014		9,792		13,576
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.2.5	Capital Financing Unit Rate			\$1.08		\$0.00		\$0.00		\$0.00
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.3	Total Unit Rate			\$7.52		\$4.47		\$1.20		\$3.68

- Notes (1)
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Table C1 - FY2016
Unit Cost-of-Service
Water Rate Study
Village of Villa Park, Illinois
June 2013

		Fiscal Year Ending April 30, 2016								
Description	Expenditures \$	%	Volume	Customer Charge		Cross Connection		Radio Read		
			\$	%	\$	%	\$	%	\$	
1.1	User Charge									
1.1.1	Administration Salaries	\$576,794	100%	\$576,794	0%	\$0	0%	\$0	0%	\$0
1.1.1	Administration Contractual Services	\$173,603	100%	\$173,603	0%	\$0	0%	\$0	0%	\$0
1.1.2	Administrative Services	\$470,009	0%	\$0	100%	\$470,009	0%	\$0	0%	\$0
1.1.3	Cross Connection	\$11,750	0%	\$0	0%	\$0	100%	\$11,750	0%	\$0
1.1.4	Radio Read	\$56,094	0%	\$0	0%	\$0	0%	\$0	100%	\$56,094
1.1.5	Administration Commodities	\$40,428	100%	\$40,428	0%	\$0	0%	\$0	0%	\$0
1.1.6	Administration Capital Outlay	\$15,000	100%	\$15,000	0%	\$0	0%	\$0	0%	\$0
1.1.5	Purchase of Water	\$2,570,808	100%	\$2,570,808	0%	\$0	0%	\$0	0%	\$0
1.1.6	Dupage Water Commission Debt Service	\$12,917	0%	\$0	100%	\$12,917	0%	\$0	0%	\$0
1.1.7	Operations	\$251,441	100%	\$251,441	0%	\$0	0%	\$0	0%	\$0
1.1.8	Other Revenue	(\$102,827)	100%	(\$102,827)	0%	\$0	0%	\$0	0%	\$0
1.1.9	Subtotal User Charge	\$4,076,018		\$3,525,247		\$482,926		\$11,750		\$56,094
1.1.10	Billing Quantity			508,182		106,014		9,792		14,934
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.1.11	User Charge Unit Rate			\$6.94		\$4.56		\$1.20		\$3.76
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.2	Capital Financing									
1.2.1	Debt Service	\$367,871	100%	\$367,871	0%	\$0	0%	\$0	0%	\$0
1.2.2	Other Disbursements									
1.2.2.1	Debt Service Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.2.2	Capital Outlay from Revenues	\$240,000	100%	\$240,000	0%	\$0	0%	\$0	0%	\$0
1.2.2.3	Fund Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.3	Subtotal Capital Financing	\$607,871		\$607,871		\$0		\$0		\$0
1.2.4	Billing Quantity			508,182		106,014		9,792		14,934
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.2.5	Capital Financing Unit Rate			\$1.20		\$0.00		\$0.00		\$0.00
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.3	Total Unit Rate			\$8.13		\$4.56		\$1.20		\$3.76

- Notes (1)
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Table C1 - FY2017
Unit Cost-of-Service
Water Rate Study
Village of Villa Park, Illinois
June 2013

		Fiscal Year Ending April 30, 2017								
Description	Expenditures \$	%	Volume	Customer Charge		Cross Connection		Radio Read		
			\$	%	\$	%	\$	%	\$	
1.1	User Charge									
1.1.1	Administration Salaries	\$588,330	100%	\$588,330	0%	\$0	0%	\$0	0%	\$0
1.1.1	Administration Contractual Services	\$189,005	100%	\$189,005	0%	\$0	0%	\$0	0%	\$0
1.1.2	Administrative Services	\$479,409	0%	\$0	100%	\$479,409	0%	\$0	0%	\$0
1.1.3	Cross Connection	\$11,750	0%	\$0	0%	\$0	100%	\$11,750	0%	\$0
1.1.4	Radio Read	\$63,042	0%	\$0	0%	\$0	0%	\$0	100%	\$63,042
1.1.5	Administration Commodities	\$41,640	100%	\$41,640	0%	\$0	0%	\$0	0%	\$0
1.1.6	Administration Capital Outlay	\$15,000	100%	\$15,000	0%	\$0	0%	\$0	0%	\$0
1.1.5	Purchase of Water	\$2,570,808	100%	\$2,570,808	0%	\$0	0%	\$0	0%	\$0
1.1.6	Dupage Water Commission Debt Service	\$12,917	0%	\$0	100%	\$12,917	0%	\$0	0%	\$0
1.1.7	Operations	\$307,573	100%	\$307,573	0%	\$0	0%	\$0	0%	\$0
1.1.8	Other Revenue	(\$102,827)	100%	(\$102,827)	0%	\$0	0%	\$0	0%	\$0
1.1.9	Subtotal User Charge	\$4,176,647		\$3,609,529		\$492,326		\$11,750		\$63,042
1.1.10	Billing Quantity			498,018		106,014		9,792		16,427
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.1.11	User Charge Unit Rate			\$7.25		\$4.64		\$1.20		\$3.84
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.2	Capital Financing									
1.2.1	Debt Service	\$416,871	100%	\$416,871	0%	\$0	0%	\$0	0%	\$0
1.2.2	Other Disbursements									
1.2.2.1	Debt Service Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.2.2	Capital Outlay from Revenues	\$240,000	100%	\$240,000	0%	\$0	0%	\$0	0%	\$0
1.2.2.3	Fund Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.3	Subtotal Capital Financing	\$656,871		\$656,871		\$0		\$0		\$0
1.2.4	Billing Quantity			498,018		106,014		9,792		16,427
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.2.5	Capital Financing Unit Rate			\$1.32		\$0.00		\$0.00		\$0.00
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.3	Total Unit Rate			\$8.57		\$4.64		\$1.20		\$3.84

- Notes (1)
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Table C1 - FY2018
Unit Cost-of-Service
Water Rate Study
Village of Villa Park, Illinois
June 2013

		Fiscal Year Ending April 30, 2018								
Description	Expenditures	Volume		Customer Charge		Cross Connection		Radio Read		
	\$	%	\$	%	\$	%	\$	%	\$	
1.1	User Charge									
1.1.1	Administration Salaries	\$600,097	100%	\$600,097	0%	\$0	0%	\$0	0%	\$0
1.1.1	Administration Contractual Services	\$205,938	100%	\$205,938	0%	\$0	0%	\$0	0%	\$0
1.1.2	Administrative Services	\$488,997	0%	\$0	100%	\$488,997	0%	\$0	0%	\$0
1.1.3	Cross Connection	\$11,750	0%	\$0	0%	\$0	100%	\$11,750	0%	\$0
1.1.4	Radio Read	\$70,851	0%	\$0	0%	\$0	0%	\$0	100%	\$70,851
1.1.5	Administration Commodities	\$42,890	100%	\$42,890	0%	\$0	0%	\$0	0%	\$0
1.1.6	Administration Capital Outlay	\$15,000	100%	\$15,000	0%	\$0	0%	\$0	0%	\$0
1.1.5	Purchase of Water	\$2,570,808	100%	\$2,570,808	0%	\$0	0%	\$0	0%	\$0
1.1.6	Dupage Water Commission Debt Service	\$12,917	0%	\$0	100%	\$12,917	0%	\$0	0%	\$0
1.1.7	Operations	\$260,707	100%	\$260,707	0%	\$0	0%	\$0	0%	\$0
1.1.8	Other Revenue	(\$102,827)	100%	(\$102,827)	0%	\$0	0%	\$0	0%	\$0
1.1.9	Subtotal User Charge	\$4,177,127		\$3,592,612		\$501,914		\$11,750		\$70,851
1.1.10	Billing Quantity			488,058		106,014		9,792		18,070
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.1.11	User Charge Unit Rate			\$7.36		\$4.73		\$1.20		\$3.92
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.2	Capital Financing									
1.2.1	Debt Service	\$465,871	100%	\$465,871	0%	\$0	0%	\$0	0%	\$0
1.2.2	Other Disbursements									
1.2.2.1	Debt Service Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.2.2	Capital Outlay from Revenues	\$240,000	100%	\$240,000	0%	\$0	0%	\$0	0%	\$0
1.2.2.3	Fund Reserve	\$0	100%	\$0	0%	\$0	0%	\$0	0%	\$0
1.2.3	Subtotal Capital Financing	\$705,871		\$705,871		\$0		\$0		\$0
1.2.4	Billing Quantity			488,058		106,014		9,792		18,070
				(1,000 Gallons/Year)		(Equivalent Meters x 12 months)		(# Cross Connection Accts x 12 mos)		(Annual Radio Read Billings)
1.2.5	Capital Financing Unit Rate			\$1.45		\$0.00		\$0.00		\$0.00
				Per 1,000 Gallons		Per Equivalent Meter per month		Per Cross Conn Customer per month		Per Radio Read per billing
1.3	Total Unit Rate			\$8.81		\$4.73		\$1.20		\$3.92

- Notes (1)
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Table C2
 Unit Cost-of-Service Rates
 Water Rate Study
 Village of Villa Park, Illinois
 June 2013

Description	Projected 2015	Projected 2016	Projected 2017	Projected 2018
2.1 Unit Rates				
2.1.1 Volume Charge				
2.1.1.1 Property Owners within Village Corporate Limits Per 1,000 gallons	\$7.52	\$8.13	\$8.57	\$8.81
2.1.2 Customer Charge Per account per month				
2.1.2.1 3/4"	\$4.47	\$4.56	\$4.64	\$4.73
2.1.2.2 1"	\$8.04	\$8.20	\$8.36	\$8.52
2.1.2.3 1 1/4"	\$12.51	\$12.75	\$13.00	\$13.26
2.1.2.4 1 1/2"	\$17.87	\$18.22	\$18.58	\$18.94
2.1.2.5 2"	\$31.73	\$32.34	\$32.97	\$33.61
2.1.2.6 3"	\$71.49	\$72.88	\$74.30	\$75.75
2.1.2.7 4"	\$126.90	\$129.37	\$131.89	\$134.46
2.1.2.8 Unknown	\$4.47	\$4.56	\$4.64	\$4.73
2.1.3 Cross Connection Fee ⁽¹⁾ Per cross connection account per month	\$1.20	\$1.20	\$1.20	\$1.20
2.1.4 Radio Read Fee ⁽²⁾ Per radio read per billing	\$3.68	\$3.76	\$3.84	\$3.92

Notes (1) Charge to commercial and industrial customers to maintain database verifying backflow preventers are certified by EPA each year.
 (2) Charge for radio meter reading required when the customer does not have a functioning landline phone connection.
 (3)
 (4)
 (5)

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

Description			Present January 1, 2013	Projected (FY 2015) January 1, 2014	Projected (FY 2016) January 1, 2015	Projected (FY 2017) January 1, 2016	Projected (FY 2018) January 1, 2017
1.1	Unit Rates						
1.1.1	Volume Charge	Percentage Increase		3.70%	3.70%	3.70%	3.70%
1.1.1.1	Property Owners within Village Corporate Limits	Per 1,000 gallons	\$7.63	\$7.92	\$8.22	\$8.53	\$8.85
1.1.1.2	Property Owners outside Village Corporate Limits	Per 1,000 gallons	\$15.26	\$15.84	\$16.44	\$17.06	\$17.70
1.1.2	Customer Charge	Per account per month					
1.1.2.1	3/4"			\$4.47	\$4.56	\$4.65	\$4.74
1.1.2.2	1"			\$8.05	\$8.21	\$8.37	\$8.54
1.1.2.3	1 1/4"			\$12.52	\$12.77	\$13.02	\$13.28
1.1.2.4	1 1/2"			\$17.88	\$18.24	\$18.60	\$18.96
1.1.2.5	2"			\$31.74	\$32.38	\$33.02	\$33.66
1.1.2.6	3"			\$71.52	\$72.96	\$74.40	\$75.84
1.1.2.7	4"			\$126.95	\$129.51	\$132.06	\$134.62
1.1.2.8	Unknown			\$4.47	\$4.56	\$4.65	\$4.74
1.1.3	Cross Connection Fee ⁽¹⁾	Per cross connection account per month	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20
1.1.4	Radio Read Fee ⁽²⁾	Per radio read per billing	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00

- Notes (1) Charge to commercial and industrial customers to maintain database verifying backflow preventers are certified by EPA each year.
(2) Charge for radio meter reading required when the customer does not have a functioning landline phone connection.
(3)
(4)
(5)

Table D2
 Revenues From Proposed Rates
 Water 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					\$4,088,452	\$4,158,791	\$4,229,764	\$4,301,214	\$4,319,309
2.1.2 Customer Charge					\$157,964	\$477,072	\$486,611	\$496,155	\$502,527
2.1.3 Cross Connection Fee					\$11,750	\$11,750	\$11,750	\$11,750	\$11,750
2.1.4 Radio Read Fee					\$61,710	\$67,881	\$74,669	\$82,136	\$90,350
2.1.5 Total Water Charges	\$3,134,257	\$3,302,657	\$3,553,904	\$3,865,819	\$4,319,876	\$4,715,495	\$4,802,795	\$4,891,256	\$4,923,936

- Notes (1) Projected revenue based on January 1 implementation of rate increases (i.e. FY2014 revenue includes 8 months with present rates + 4 months with January 1, 2014 proposed rate.)
 (2) Fiscal Year 2018 revenue based on entire year with January 1, 2017 rates.
 (3)
 (4)
 (5)

Table D3
Operating Results With Proposed Rates
Water 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	30,886
3.1.2 Billable Volume (1,000 Gallons/Year)	560,128	547,048	550,953	539,934	529,135	518,553	508,182	498,018	488,058
3.2 Revenues									
3.2.1 Water Charges	\$3,134,257	\$3,302,657	\$3,553,904	\$3,865,819	\$4,319,876	\$4,715,495	\$4,802,795	\$4,891,256	\$4,923,936
3.2.2 Other Revenues	\$119,520	\$126,850	\$226,033	\$127,893	\$102,827	\$102,827	\$102,827	\$102,827	\$102,827
3.2.3 Total Revenues	\$3,253,777	\$3,429,507	\$3,779,937	\$3,993,712	\$4,422,703	\$4,818,322	\$4,905,622	\$4,994,083	\$5,026,763
3.3 Operating Expenses									
3.3.1 Administration	\$2,479,669	\$2,682,468	\$2,787,620	\$3,140,188	\$3,289,177	\$3,683,731	\$3,927,404	\$3,971,902	\$4,019,247
3.3.2 Operations	\$198,484	\$190,624	\$180,227	\$262,190	\$242,688	\$297,065	\$251,441	\$307,573	\$260,707
3.3.3 Total Operating Expenses	\$2,678,153	\$2,873,092	\$2,967,847	\$3,402,378	\$3,531,865	\$3,980,796	\$4,178,845	\$4,279,474	\$4,279,954
3.4 Capital Financing									
3.4.1 Debt Service	\$455,833	\$455,833	\$533,704	\$533,704	\$487,101	\$318,871	\$367,871	\$416,871	\$465,871
3.4.2 Other Disbursements									
3.4.2.1 Debt Service Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.4.2.2 Capital Outlay from Revenues	\$67,223	-\$54,259	\$392,714	\$50,987	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000
3.4.2.3 Fund Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.4.3 Total Capital Financing	\$523,056	\$401,574	\$926,418	\$584,691	\$727,101	\$558,871	\$607,871	\$656,871	\$705,871
3.5 Total Expenses	\$3,201,209	\$3,274,666	\$3,894,265	\$3,987,069	\$4,258,966	\$4,539,667	\$4,786,716	\$4,936,345	\$4,985,825
3.6 Cash Balance (Deficit)									
3.6.1 Annual Net Revenue ⁽¹⁾				\$6,643	\$163,737	\$278,655	\$118,906	\$57,738	\$40,938
3.6.2 Percent of Water Sales				0%	3.79%	5.91%	2.48%	1.18%	0.83%
3.7 Account Balance ⁽²⁾	\$1,991,198	\$1,515,216	\$1,885,087	\$1,891,730	\$2,055,467	\$2,334,122	\$2,453,028	\$2,510,766	\$2,551,703

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

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

Description		Present Rates	Proposed Rates (FY 2015) January 1, 2014	Proposed Rates (FY 2016) January 1, 2015	Proposed Rates (FY 2017) January 1, 2016	Proposed Rates (FY 2018) January 1, 2017	
4.1	Unit Rates						
4.1.1	Volume Charge	Per 1,000 gallons	\$7.63	\$7.92	\$8.22	\$8.53	\$8.85
4.1.2	Customer Charge	Per account per month		\$4.47	\$4.56	\$4.65	\$4.74
		Monthly Usage (Gallons)	Bill (\$)	Bill (\$)	Bill (\$)	Bill (\$)	Bill (\$)
4.2	Quarterly Billings						
4.2.1	Small Family	4,500	\$103.01	\$120.33	\$124.65	\$129.11	\$133.70
4.2.2	Average Family	7,500	\$171.68	\$191.61	\$198.63	\$205.88	\$213.35
4.2.3	Large Family	11,250	\$257.51	\$280.71	\$291.11	\$301.84	\$312.91

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

Appendix B

Existing Water 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 acknowledgement 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: $CW = (Vu) CU + CS + CB$:

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 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).

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(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

Planned Water Rate Increases

The City of Chicago plans to raise water rates from \$2.01 per 1,000 gallons to \$2.51 per 1,000. This will increase 15% each year to the year 2015 on the following schedule.

Chicago Water Department rate Increase Schedule

Year	Rate/1,000
2011	\$2.01
2012	\$2.51
2013	\$2.89
2014	\$3.32
2015	\$3.82

To cover these costs the DuPage Water Commission is increasing their costs that they sell to communities, including Villa Park. Their proposed rate increase is as follows:

DWC Rate Increase

Year	Increase
2012	30%
2013	20%
2014	18%
2015	17%

The current Villa Park rate is \$6.20 per 1,000 gallons for water and \$2.81 per 1,000 gallons for sewer plus a separate billing for the Salt Creek Sanitary District plus an administrative fee of \$4.50 each billing cycle. Billing is sent quarterly, or 4 times per year.

Appendix C

Historical and Budget Operating Expenditures

VILLA PARK WATER UTILITY REVENUE		ACTUAL FY2010	ACTUAL FY2011	YEAR END FY2012	BUDGET FY2013
USER CHARGES					
82.48000	USER CHARGES	\$3,122,907	\$3,291,281	\$3,542,100	\$3,854,469
82.48010	CROSS CONNECTION FEE	\$11,350	\$11,376	\$11,804	\$11,350
OTHER REVENUE					
82.45105	INTEREST ON INVESTMENTS	\$15,042	\$6,829	\$3,549	\$2,587
82.45108	RESIDENT FEES	\$75	\$3,845	\$1,650	\$1,650
82.45117	STATE GRANT			\$1,832	
82.45128	MICELLANEOUS REVENUE	\$61,490	\$66,596	\$52,263	\$50,000
82.45163	TRANSFER FROM TIF#2			\$116,993	
82.48001	WATER TAP FEES	\$400	\$0	\$0	\$0
82.48002	METER INSTALLATION CHARGES	\$5,600	\$7,853	\$8,053	\$7,500
82.48003	WATER & SEWER PERMIT FEES	\$1,645	\$160	\$230	\$240
82.48004	CONNECTION CHARGES	\$7,030	\$9,806	\$9,141	\$10,000
82.48005	LATE CHARGES	\$28,138	\$30,911	\$31,472	\$30,000
82.48007	BLOCK GRANT				\$25,066
82.48015	WATER INSPECTION FEES	\$100	\$850	\$850	\$850
SUBTOTAL OTHER REVENUES		\$119,520	\$126,850	\$226,034	\$127,893
SUBTOTAL UTILITY REVENUE		\$3,253,777	\$3,429,507	\$3,779,938	\$3,993,712
WATER UTILITY FUND BALANCE		\$1,991,198	\$1,972,581	\$2,202,723	

Sources:

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

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

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

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

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

VILLA PARK WATER UTILITY EXPENSES		ACTUAL FY2010	ACTUAL FY2011	YEAR END FY2012	BUDGET FY2013	ESCALATION	PROJECTED FY2014	CATEGORY
ADMINISTRATION EXPENSES								
82.502.01.101	SALARIES: FULL-TIME	\$529,810	\$443,883	\$426,583	\$377,637	2%	\$385,190	SALARIES AND WAGES
82.502.01.105	SALARIES: PART-TIME	\$0	\$45	\$13		2%	\$0	SALARIES AND WAGES
82.502.01.106	SALARIES: OVERTIME FULL-TIME	\$58,525	\$56,515	\$23,213	\$45,000	2%	\$45,900	SALARIES AND WAGES
82.502.01.108	SALARIES: TEMPORARY	\$19,727	\$17,634	\$18,730	\$22,075	2%	\$22,517	SALARIES AND WAGES
82.502.01.150	SALARY CONTINGENCY	\$0	\$0	\$0	\$4,467	2%	\$4,556	SALARIES AND WAGES
SUBTOTAL ADMINISTRATION SALARIES		\$608,062	\$518,077	\$468,539	\$449,179		\$458,163	
82.502.01.621	IMRF CONTRIBUTIONS	\$61,010	\$63,357	\$61,246	\$59,832	2%	\$61,029	SALARIES AND WAGES
82.502.01.622	SOCIAL SECUR CONTRIBUTIONS	\$35,549	\$33,669	\$31,322	\$27,973	2%	\$28,532	SALARIES AND WAGES
82.502.01.623	MEDICARE CONTRIBUTIONS	\$8,525	\$7,895	\$7,325	\$6,542	2%	\$6,673	SALARIES AND WAGES
SUBTOTAL ADMINISTRATION SALARY CONTRIBUTIONS		\$105,084	\$104,921	\$99,893	\$94,347		\$96,234	
82.502.01.201	LEGAL NOTICES	\$6,267	\$0	\$391	\$500	1%	\$505	CONTRACTUAL SERVICES
82.502.01.202	TRAINING & CONFERENCES	\$1,789	\$480	\$682	\$2,000	1%	\$2,020	CONTRACTUAL SERVICES
82.502.01.210	TELEPHONE	\$8,025	\$7,986	\$8,215	\$8,420	1%	\$8,504	CONTRACTUAL SERVICES
82.502.01.250	EMPLOYEE BENEFITS (INSURANCE)	\$139,088	\$147,713	\$141,190	\$114,916	10%	\$126,408	CONTRACTUAL SERVICES
82.502.01.261	INSURANCE CLAIM LOSSES	\$4,716	\$4,291	\$249	\$6,000	1%	\$6,060	CONTRACTUAL SERVICES
82.502.01.265	MAINT OF MOBILE EQUIPMENT	\$19,485	\$21,970	\$21,970	\$21,970	1%	\$22,190	CONTRACTUAL SERVICES
82.502.01.266	CONTR/MAINT OF MOBIL EQUIP	\$324	\$1,700	\$1,700	\$1,700	1%	\$1,717	CONTRACTUAL SERVICES
82.502.01.270	MAINT OF OFFICE EQUIPMENT	\$2,412	\$2,593	\$1,387	\$2,800	1%	\$2,828	CONTRACTUAL SERVICES
82.502.01.271	MAINT OF RADIO EQUIPMENT	\$0	\$0	\$0	\$1,100	1%	\$1,111	CONTRACTUAL SERVICES
82.502.01.275	UNCOLLECTIBLES	\$6,000	\$6,000	\$6,000	\$6,000	1%	\$6,060	CONTRACTUAL SERVICES
82.502.01.281	RENTAL OF EQUIPMENT	\$234	\$295	\$154	\$200	1%	\$202	CONTRACTUAL SERVICES
82.502.01.292	ENGINEERING SERVICES	\$213	\$24,604	\$0	\$10,000	0%	\$10,000	CONTRACTUAL SERVICES
82.502.01.299	OTHER CONTRACTUAL SERVICES	\$16,352	\$15,362	\$24,106	\$15,256	1%	\$15,409	CONTRACTUAL SERVICES
SUBTOTAL ADMINISTRATION CONTRACTUAL SERVICES		\$204,905	\$232,994	\$206,044	\$190,862		\$203,013	
82.502.01.294	ADMINISTRATIVE SERVICES	\$442,900	\$468,000	\$468,000	\$442,900	2%	\$451,758	ADMINISTRATIVE SERVICES
SUBTOTAL ADMINISTRATIVE SERVICES		\$442,900	\$468,000	\$468,000	\$442,900		\$451,758	
82.502.01.301	UNIFORMS	\$2,476	\$3,458	\$3,276	\$3,613	3%	\$3,721	COMMODITIES
82.502.01.303	DUES & PUBLICATIONS	\$221	\$346	\$440	\$2,109	3%	\$2,172	COMMODITIES
82.502.01.307	GASOLINE	\$11,832	\$18,262	\$18,262	\$23,375	3%	\$24,076	COMMODITIES
82.502.01.310	MOTOR VEHICLE PARTS & ACCESS	\$6,419	\$6,000	\$6,000	\$6,000	3%	\$6,180	COMMODITIES
82.502.01.317	OFFICE SUPPLIES	\$771	\$860	\$1,097	\$900	3%	\$927	COMMODITIES
82.502.01.399	OTHER SUPPLIES	\$1,660	\$1,241	\$474	\$1,000	3%	\$1,030	COMMODITIES
SUBTOTAL ADMINISTRATION COMMODITIES		\$23,379	\$30,167	\$29,549	\$36,997		\$38,107	
82.502.01.321	PURCHASE OF WATER	\$1,093,399	\$1,328,186	\$1,451,577	\$1,912,903		\$2,026,902	PURCHASE OF WATER
	PURCHASE OF WATER	\$1,080,482	\$1,315,269	\$1,438,660	\$1,899,986		\$2,013,985	
	DWC DEBT SERVICE FIXED COST	\$12,917	\$12,917	\$12,917	\$12,917	0%	\$12,917	
82.502.01.401	CAPITAL OUTLAY	\$0	\$0	\$59,770	\$10,000	0%	\$10,000	CAPITAL OUTLAY
82.502.01.402	NON-CAPITAL OUTLAY	\$1,940	\$123	\$4,248	\$3,000		\$5,000	CAPITAL OUTLAY
SUBTOTAL ADMINISTRATION CAPITAL OUTLAY		\$1,940	\$123	\$64,018	\$13,000		\$15,000	
SUB-TOTAL ADMINISTRATION EXPENSES		\$2,479,669	\$2,682,468	\$2,787,619	\$3,140,188		\$3,289,176	

VILLA PARK WATER UTILITY EXPENSES	ACTUAL FY2010	ACTUAL FY2011	YEAR END FY2012	BUDGET FY2013	ESCALATION	PROJECTED FY2014	CATEGORY
OPERATIONS EXPENSES							
82.502.02.219 UTILITY - ELECTRIC	\$25,253	\$24,574	\$35,202	\$30,000	3%	\$30,900	CONTRACTUAL SERVICES
82.502.02.220 UTILITY - GAS	\$4,970	\$4,623	\$4,082	\$5,000	3%	\$5,150	CONTRACTUAL SERVICES
82.502.02.273 MAINT OF CONTROLS	\$0	\$0	\$0	\$2,000	3%	\$2,060	CONTRACTUAL SERVICES
82.502.02.274 METER REPAIRS	\$9,398	\$150	\$10,593	\$11,000	3%	\$11,330	CONTRACTUAL SERVICES
82.502.02.285 DISPOSAL EXPENSE	\$30,045	\$10,333	\$11,076	\$27,500	3%	\$28,325	CONTRACTUAL SERVICES
82.502.02.292 ENGINEERING SERVICES	\$112,096	\$114,605	\$7,265	\$40,000			CONTRACTUAL SERVICES
82.502.02.293 LABORATORY TESTING	\$4,842	\$6,547	\$4,963	\$6,000	3%	\$6,180	CONTRACTUAL SERVICES
82.502.02.299 OTHER CONTRACTUAL SERVICES	\$29,181	\$76,685	\$20,983	\$69,990	3%	\$21,613	CONTRACTUAL SERVICES
SUBTOTAL OPERATION CONTRACTUAL SERVICES	\$215,785	\$237,517	\$94,164	\$191,490		\$105,558	
82.502.02.302 CHEMICALS	\$30	\$14	\$170	\$200	3%	\$206	COMMODITIES
82.502.02.322 HAND TOOLS	\$166	\$103	\$222	\$500	3%	\$515	COMMODITIES
82.502.02.342 ASPHALT MIX	\$7,315	\$6,305	\$5,825	\$8,000	3%	\$8,240	COMMODITIES
82.502.02.343 STONE	\$16,490	\$10,591	\$6,618	\$18,000	0%	\$18,000	COMMODITIES
82.502.02.344 CONCRETE - REDI MIX	\$3,154	\$2,252	\$3,845	\$5,000	3%	\$5,150	COMMODITIES
82.502.02.351 VALVES	\$2,118	\$4,697	\$7,064	\$5,000	3%	\$5,150	COMMODITIES
82.502.02.352 WATERMAIN REPAIR PARTS	\$10,738	\$2,433	\$6,232	\$6,500	3%	\$6,695	COMMODITIES
82.502.02.353 SERVICE CONNECTION MATERIALS	\$1,879	\$781	\$3,900	\$3,500	3%	\$3,605	COMMODITIES
82.502.02.354 WATER METERS	\$37,926	\$25,586	\$50,360	\$45,000		\$10,000	COMMODITIES
82.502.02.355 FIRE HYDRANT REPAIR PARTS	\$2,969	\$3,918	\$1,413	\$7,000	3%	\$7,210	COMMODITIES
82.502.02.399 OTHER SUPPLIES	\$12,010	\$11,032	\$7,680	\$12,000	3%	\$12,360	COMMODITIES
SUBTOTAL OPERATION COMMODITIES	\$94,795	\$67,712	\$93,328	\$110,700		\$77,131	
82.502.02.401 CAPITAL OUTLAY			\$390,256	\$49,787		\$50,000	CAPITAL OUTLAY
82.502.02.402 NON-CAPITAL OUTLAY			\$2,458	\$1,200		\$5,000	CAPITAL OUTLAY
SUBTOTAL OPERATION CAPITAL OUTLAY	\$67,223	(\$54,259)	\$392,713	\$50,987		\$55,000	
SUB-TOTAL OPERATIONS EXPENSES	\$377,803	\$250,970	\$580,205	\$353,177		\$237,689	
TOTAL ADMINISTRATION + OPERATIONS EXPENSES	\$2,857,472	\$2,933,438	\$3,367,824	\$3,493,365		\$3,526,865	

Sources:

FY2010: Excel file, "WATER.xlsx" from Vydas Juskelis
FY2011: Excel file, "WATER.xlsx" from Vydas Juskelis
FY2012: Villa Park Monthly Treasurer's Report April 30, 2012 page 92-93
FY2013: Villa Park Monthly Treasurer's Report Sept 30, 2012 page 86-87
FY2014: Based on input from Vydas Juskelis

Appendix D

Frequently Asked Questions Regarding Water Rate Increases

Frequently Asked Questions Regarding Villa Park Water 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 bill from \$103.01 to \$120.33 in Fiscal Year 2014 or an increase of \$17.32 per quarter, \$5.77 per month and \$0.19 per day.

Table D-1 Typical Water Bill for Average Family

	Monthly Usage (gallons)	Volume Charge (per 1,000 gallons)	Customer Charge (per account per month)	Quarterly Bill	Quarterly Increase
Present	4,500	\$7.63		\$103.01	
FY 2015 Proposed	4,500	\$7.92	\$4.47	\$120.33	\$17.32
FY 2016 Proposed	4,500	\$8.22	\$4.56	\$124.65	\$4.32
FY 2017 Proposed	4,500	\$8.53	\$4.65	\$129.11	\$4.46
FY 2018 Proposed	4,500	\$8.85	\$4.74	\$133.70	\$4.59

Source: Stanley Consultants, Inc.

2. Why is a rate increase required?
 - To cover programmed rate increases by DuPage Water Commission of 20 percent in 2013, 18 percent in 2014 and 17 percent in 2015.
 - 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 loan principal and interest payments required for capital improvement projects.

3. Can we delay the rate increase or implement a smaller rate increase?
 - The Village is faced with annual increased water rates from DuPage Water Commission. Significant rate increases are required over the next five years to cover this increase and the increase in principal and interest payments for debt service for programmed capital projects. Revenue generated with smaller rate increases would fall short of covering expenses and risk reduction in the Utility Fund's cash reserve. A 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 Water Utility improvements are required for the following reasons:
 - To repair and improve the aging water distribution components.
 - To replace aging and outdated water meters.
 - The estimated cost of the capital improvements that will be paid with debt service is summarized below:
 - \$8.8 million for water main replacements and extensions to be completed over the next 10 years.

Frequently Asked Questions Regarding Villa Park Water Rates

- \$2.0 million for water main replacements in Fiscal Years 2013 through 2018.
 - Loan principal and interest payments are paid with water funds.
5. How will the new capital improvements benefit the Village of Villa Park?
- The Water Utility improves the quality of life by providing:
 - Clean water.
 - Adequate water supply.
 - Sufficient fire protection.
 - A high level of utility service.