ITEM REP 00-04204

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
SEPTEMBER 21, 2010 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Water Rate Study Presentation #3	Resolution Ordinance Motion ✓ Discussion Only	Nan Newlon, P.E. Director of Public Works

SYNOPSIS
Discussion is requested regarding the preliminary water rate study report that has been prepared by Municipal and Financial Services Group (M&FSG). Representatives of M&FSG will present information and recommendations.

STRATEGIC PLAN ALIGNMENT
The Five Year Plan and Goals include *Exceptional Communication and Services*. A supporting objective of this statement is *Steward of Financial Sustainability*.

FISCAL IMPACT
N/A

RECOMMENDATION
N/A

BACKGROUND
On April 13, 2010 the Village Council authorized award of a contract with M&FSG to complete a water rate study. The goal of the study is to review current and future water rates to ensure adequate funding is available for current operations and maintenance as well as for identified capital maintenance and improvement projects into the future. The objectives of this project include the following:

1. Propose water rates that:
   - Are fair, objective and ensure that water service is provided on a self-supporting basis
   - Fund capital projects as identified and approved
   - Encourage water conservation, and
   - Take into consideration potential DuPage Water Commission rate increases
2. Review and update miscellaneous water-related fees.
3. Recommend a prudent reserve policy for operations, capital replacement and emergencies.

In July the Village Council heard a presentation by representatives of M&FSG stating that to maintain the financial viability of the Village's water utility, water rate increases would be required each year beginning in 2011 and continuing through 2015. Their presentation identified the elements of the annual revenue requirements of the water utility, and compared those requirements with the annual revenues projected to be collected with current water rates. At the current rates, the water fund would experience an increasing annual shortfall of approximately $2.74 million in 2011 growing to $4.93 million by 2015. As a result, M&FSG initially proposed water rate increases of 13% in 2011, 2012 and 2013, and 8% in 2014 and 2015.

M&SFG also made several key findings and recommendations besides the water rate itself that factor into the future financial well-being of the water utility. These findings and recommendations are summarized below:

1) Capital Improvements
    - There are currently $45 million in buried water system assets (water mains) and $23 million in above ground assets (water towers, well houses, rate stations) exceeding their useful life.
    - Capital investment should be approximately $5 million annually.
    - Financing of capital projects is recommended to keep rates low. Bond financing was recommended for individual projects exceeding $1 million or when the total in one year exceeds $1.5 million.
    - Bond issues of $10.3 million in 2012 and $6.5 million in 2015 have been anticipated in calculating the proposed water rates.

2) Contributions to Reserves
    - Three months of Operating and Maintenance (O&M) expenses was recommended as a minimum target.
    - Institute a Repair, Replacement and Rehabilitation (3R) Reserve. The 3R Reserve is equal to the difference between annual capital spending and the annual required capital investment.

In August representatives from M&FSG made a presentation to the Village Council about alternative water rate structures. This discussion centered on three key policy considerations: who pays, how much, and why. Common rate structure goals and objectives were laid out and staff from M&FSG presented information regarding water usage patterns. Three water rate structure alternatives were explained and information was provided regarding surrounding community rate structures and sample water bills for each alternative. More specifically, the three rate structures that were discussed can be summarized as follows:

1) Alternative A (Current Rate Structure) - The current rate structure provides a minimum amount of fixed revenue in the form of a minimum bill and charges customers a unit rate for all metered water used beyond billing units.

2) Alternative B - Consists of a bi-monthly fixed charge based on meter size and a unit rate volume charge. The rate structure is very similar to Alternative A with the only exception being that the structure includes a fixed charge based on meter size which does not include a minimum quantity of water.

3) Alternative C - Contains a bi-monthly fixed charge based on meter size with multiple class inclining block rate variable charges. Alternative C provides the greatest change from the current rate structure. It includes the same fixed charge approach included in Alternative B but the usage charge includes an inclining block structure. The rate structure is designed to charge each customer class a premium for water used each bi-monthly period that is above what is defined as nondiscretionary use (i.e. winter water usage).

Staff from M&FSG will be present to discuss the attached draft report. The report summarizes the findings and recommendations of the study and sets forth a proposed strategy for setting water rates and fees for 2011 and into the future.

ATTACHMENTS
Draft Report

Draft Report
September 2010

Village of Downers Grove
Comprehensive Water Rate Study Report

Prepared by

Municipal & Financial Services Group

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY 1
1. Findings and Conclusions 1
2. Recommendations 2

B. BASIS FOR THE STUDY 5
1. Background 5
2. Scope of Work 5
3. Assumptions Used in the Study 6

C. USAGE, DEMAND AND CUSTOMER ANALYSIS 8
1. Customer Counts 8
2. Consumption Data 9

D. REVENUE REQUIREMENTS 12
1. Operating and Maintenance Costs 12
2. Capital Costs 13
2.1 Existing Debt 13
2.2 Capital Projects 14
2.3 System Reinvestment 15
3. Reserves 17
3.1 Operating Reserve 17
3.2 Repair, Replacement and Rehabilitation Reserve 17
4. Revenue Requirements 18

E. FINANCIAL PLAN AND COST ALLOCATION 20
1. Financial Plan 20
2. Cost Allocation 21

F. RATE ALTERNATIVES 23
1. Current Rate Structure 23
2. Rate Alternatives 23
2.1 Pricing Goals and Objectives 23
2.2 Alternative Rate Structures 25
2.3 Recommended Rate Structure 30
3. Sample Bills 31

G. CAPITAL AND ANCILLARY SERVICE FEES 33
1. Capital Fees 33
1.1 Tap Fees 33
1.2 Meter Fees 33
1.3 Connection and Capacity Fees 34
2. Ancillary Service Fees 35

APPENDIX

Water and Sewer Cost of Service Model consisting of the following schedules:

Schedule 1 – Control Panel
Schedule 2A – O&M Expenses
Schedule 2B – DuPage Water Purchase
Schedule 3 – O&M Reserve
Schedule 4 – Existing Debt Service
Schedule 5 – Capital Improvement Projects
Schedule 6A – Cash Funded Capital Projects
Schedule 6B – Bond Funded Capital Projects
Schedule 7 – Projected Debt
Schedule 8 – Interest Income
Schedule 9 – Miscellaneous Revenues
Schedule 10A – Capital Asset Raw Data
Schedule 10B – Capital Asset Summary
Schedule 11 – 3R Reserve
Schedule 12A – Revenue Requirements
Schedule 12B – Cost Allocation
Schedule 13A – Customer and Consumption Information
Schedule 13B – Winter Bi-Monthly Analysis
Schedule 13C – Customer and Consumption Projections
Schedule 14A – 2008 Rate Reconciliation
Schedule 14B – 2009 Rate Reconciliation
Schedule 14C – 2010 Rate Reconciliation
Schedule 14D – Rate Analysis
Schedule 15 – Water Rate Projections
Schedule 16A – Inside Village Sample Bills
Schedule 16B – Outside Village Sample Bills
Schedule 17 – Capacity Fees
Schedule 18 – Capital Fees
Schedule 19 – Operating Cash Flow
Schedule 20 – Cash Balance

A. EXECUTIVE SUMMARY

This document was prepared to summarize the work performed by the Municipal & Financial Services Group (MFSG) during the water cost of service and rate study authorized by the Village of Downers Grove ("the Village"). The study is predicated on the use of a cash flow analysis to support the pricing of utility services. The cost of service analysis uses a planning period of 10 years (2011 - 2020). This portion of the report summarizes the findings, conclusions and recommendations developed during the course of the study.

1. Findings and Conclusions

The following findings and conclusions were developed during the course of the study.

- Based on projected water sales, the Village's current water rates will not produce adequate revenues to cover the costs of operating and maintaining the water system in 2010 or during subsequent years.

- The annual shortfalls under existing rates will exhaust the Village's Water Fund cash balance during 2011.

- There are several reasons for the revenue shortfalls, which include the following:

  - The Village has experienced annual reductions in water sales over the last five years which has directly impacted revenues from water sales since the majority of the water system revenue (about 92.5%) is dependent on water sales.

  - The Village has experienced significant increases in the costs of purchased water from the DuPage Water Commission. These increases have been the primary reason for the increasing costs of operating the water system. It is anticipated that the Village will continue to experience significant annual increases (10% per year) in purchased water costs from the Water Commission.

  - Based on a review of the age of the water system buried and above ground assets, a significant portion of the water system has reached its useful life. If the Village does not address these assets, it runs the risk of portions of the system failing leading to significant disruptions in water service. To address the aging water system, the Village will be required to make significant investments in the water system over the next ten to twenty years.

- The level of the required capital investments in the water system will require the Village to issue debt to fund the projects. The use of cash funding for these projects would require triple digit rate increases.

- The Village currently maintains an operating reserve in the Water Fund which is set at a minimum of 90-days of operating expenses. The Village does not currently maintain a capital repair and replacement reserve in the Water Fund.

- The total cost of operating and maintaining the water system are largely fixed at approximately 60%. Under the current rate structure the Village collects approximately 7.5% of its revenues from a fixed minimum bill.

2. Recommendations

The following recommendations were developed during the course of the water rate study. The recommendations are presented to the Village Staff and Council for consideration and adoption.

- We recommended that the Village adopt a repair, renewal and replacement reserve (3R) reserve within the Water Fund to accumulate funds to allow for investment in replace and replacement of the aging water system.

- We recommend that the Village modify the current working capital (O&M) reserve to be based on 90-days of operating expenses rather than operating revenues.

- During the course of the study a number of rate alternatives were developed, based on discussion with Village Staff and our industry expertise we recommend the following rates effective in 2011. The following table presents 2012 and 2013 rates as well for comparison with a phased approach discussed below.

Alternative B - Fixed Charge

Bi-Monthly Fixed Charge	2011	2012	2013
5/8”	$8.25	$9.31	$10.50
1”	$12.40	$13.96	$15.75
1 ½”	$41.25	$46.53	$52.52
2”	$66.00	$74.45	$84.02
3”	$123.70	$139.59	$157.55
4”	$206.15	$232.66	$262.58
6”	$412.30	$465.31	$525.15
10”	$989.50	$1,116.75	$1,260.36

Alternative B - Usage Rate

	2011	2012	2013
Usage Rate per CCF – Inside Village	$3.30	$3.73	$4.25
Usage Rate per CCF – Outside Village	$3.80	$4.34	$4.95

- The rates recommended under Alternative B will result in a significant percentage increase in customer bills for customers who use small quantities of water due to the proposed adoption of the fixed charge. To provide the Village with a means of lessening the impact, a phased approach to Alternative B was developed. The rates under the phased approach are shown in the following tables and will generate the same amount of revenue in 2011 as the non-phased Alternative B rates. However, the structure will collect only 9.5% of revenue from the fixed charge, increasing to 11.5% by 2012 and 14% by 2013, compared to the recommended rates, which will generate 14% of revenue in the fixed charge in 2011.

Phased Alternative B - Fixed Charge

Bi-Monthly Fixed Charge	2011	2012	2013
5/8”	$5.65	$7.71	$10.50
1”	$8.47	$11.57	$15.75
1 ½”	$28.23	$38.57	$52.52
2”	$45.18	$61.72	$84.02
3”	$84.70	$115.72	$157.55
4”	$141.17	$192.87	$262.58
6”	$282.35	$385.74	$525.15
10”	$677.63	$925.78	$1,260.36

Phased Alternative B - Usage Rate

	2011	2012	2013
Usage Rate per CCF – Inside Village	$3.50	$3.85	$4.25
Usage Rate per CCF – Outside Village	$4.00	$4.45	$4.95

- The recommended rate alternative will generate 14% more revenue in 2011. To allow revenues to catch up with water system operating and maintenance expenses we recommend the Village annually increase water rates as shown below.

Proposed Annual Revenue Increases

	2011	2012	2013	2014	2015
Revenue Increases	14%	14%	14%	10%	9%

- The Village currently imposes a number of capital fees intended to recover the cost of providing water service to a new customer. Based our discussions with the Village Staff and our review of the fees we recommend the following capital fees be adopted by the Village effective in 2011.

Current and Recommended Tap Fees

Line Size	Current	2011	2012	2013	2014	2015
1"	$200	$230	$240	$250	$260	$270
1 1/2"	$250	$370	$380	$390	$400	$410
2"	$325	$425	$440	$450	$460	$470
Over 2"	$400	$590	$610	$630	$650	$670

Current and Recommended Meter Charges

Meter Size	Current	2011	2012	2013	2014	2015
5/8” or 3/4"	$250	$260	$270	$280	$290	$300
1"	$325	$370	$380	$390	$400	$410
1 1/2"	$400	$1,500	$1,550	$1,600	$1,650	$1,700
2"	$500	$1,780	$1,830	$1,880	$1,940	$2,000
3”	-	$2,940	$3,030	$3,120	$3,210	$3,310
4”	-	$3,900	$4,020	$4,140	$4,260	$4,390
6”	-	$6,240	$6,430	$6,620	$6,820	$7,020

Current and Recommended Capacity / Connection Fees

Line Size	Current			Proposed Capacity Fee
	Connection Fee	Capacity Fee	Total	
1"	$1,900	$600	$2,500	$2,100
1 1/4"	$-	$-	$-	$2,300
1 1/2"	$2,200	$600	$2,800	$5,200
2"	$2,400	$600	$3,000	$10,300
4"	*$2,900*	*$600*	*$3,500*	*$16,500*
6"	*$6,500*	*$600*	*$7,100*	*$31,000*
8"	*$11,800*	*$600*	*$12,400*	*$51,600*
10"	*$18,300*	*$600*	*$18,900*	*$103,200*
12"	*$26,300*	*$600*	*$26,900*	*$247,600*

- We recommend that the Village adopt the proposed capacity fees shown above for lines sizes 1" – 2" but we recommend that lines exceeding 4" be negotiated based on the discretion of the Village Public Works Director, to allow for consideration of factors such as economic development impact.

- The Village currently imposes a number of ancillary service fees related to providing water service. The fees were reviewed with Village Staff to determine if they recover the costs associated with providing each service. The majority of the fees do recover the costs, our only recommendation regarding the current fees is that the after-hours disconnect/reconnect fee be increased from $55 to $75 to encourage the use of normal business hours.

- Based on the review of the ancillary service fees, several additional fees were identified that will recover the cost of providing various services related to the water system. We recommend that the Village adopt the following new service fees.

Service	Proposed
Public Hydrant Usage Charges	
Water Usage Fee	$5.50 per CCF
Water Fill Up Fee	$5 per fill up at Public Works
Damage to Hydrant Meter, Fire Hydrant or R.O.W	Actual Cost
New Water Service	
Meter Installation and MTU	$60
Service Disconnect	
Damaged Meter or Missing MTU	Actual Cost

B. BASIS FOR THE STUDY

1. Background

The Village of Downers Grove ("the Village") provides clean, safe and reliable water service to residents and commercial establishments in and around the Village. The water system serves a residential population of approximately 50,000 with a service area that includes all areas within the Village limits and a limited area outside the Village. The primary source of water supply for the Village is from the DuPage Water Commission ("the Water Commission"). The Water Commission is supplied with water from the City of Chicago which draws water from Lake Michigan. The Village has invested significant capital to develop the water system which consists of the following major components:

- 7 elevated storage tanks with a total storage volume of 8 million gallons,
- 6 rate control stations which control the flow of water in the distribution system,
- 200+ miles of water distribution mains that range in diameter from 4 to 24 inches (approximately the distance from the Village to Milwaukee and back),
- 2,600 public fire hydrants,
- 2,700 main line distribution valves and
- Supervisory Control and Data Acquisition System (SCADA) that monitors, records and controls the operations of the water system.

The Village does not operate or maintain water treatment facilities but does maintain four backup wells. The wells are not able to meet the total water system demands and therefore serve as emergency backup supply.

As an enterprise fund, the Village does not rely on tax revenues to support the water system operations. The Water Fund is solely dependent on user charges and fees to fund its operations, maintenance and long-term obligations related to the water system. Similar to most municipal water utilities around the country, the Village operates a water system in an environment that presents continual challenges. The need for capital investment in the water system and the ongoing increases in the cost of purchased water from the Water Commission are currently placing significant pressure on the water system finances. These two factors will continue to impact the system for the foreseeable future and therefore at this time it is necessary to develop a detailed forecast of the true cost of operating and maintaining the water system to establish the appropriate level of rates, fees and charges to ensure the continued financial health and stability of the Water Fund.

2. Scope of Work

The scope of services set forth in the contract between the Village of Downers Grove and the Municipal and Financial Services Group ("MFSG") specifies several related tasks:

- **Revenue Requirements** - Determine the true cost of providing water service by developing comprehensive revenue requirements for the water system.

- **Cost of Service and Financial Plan** - Perform a cost of service analysis to determine appropriate cost allocations and develop a financial plan for the Village to ensure that water rates, fees and charges provide adequate revenues over the projection period.

- **Rate Design** - Design a water rate structure that appropriately allocates costs among the Village's customers based on the Village's goals and objectives, specifically addressing water conservation and revenue stability.

- **Customer Impacts** - Document the impact of various rate designs on Village customers to assist in development of recommended rate alternative.

3. Assumptions Used in the Study

The following guiding principles were used to guide the cost of service and rate study and were developed with the assistance of the Village Staff:

- The water system must each be self-supporting. It is assumed that the cost of operating and maintaining the water system must be supported by the water fees and charges collected from water customers.

- One of the Village's principal objectives is to keep rates and fees low over time. It is possible to keep rates low for a period of time by not investing sufficiently in the maintenance of the water system but eventually the system will deteriorate and require substantial investments leading to the need for significant and immediate rate increases. The assumption that the Village will continually reinvest in the system is built into the analysis and allows for timely and predicable rate increases.

- The Village should develop reserves to provide for contingencies and unplanned expenses.

- The expenses related to operating and maintaining the water utility should be equitably distributed among the users of the respective systems.

In addition to the guiding principles for the study, it is necessary to make several assumptions regarding future economic conditions and growth within the Village's service area, to project future revenue requirements and offsetting revenues from water rates. Assumptions (which can be varied as needed from year to year) made regarding various items are shown below:

Element	Assumption
Inflation Rate – Water O&M Expenses	3.0% per year
Inflation in Cost of Purchased Water	10.0% per year
Customer Growth Rate	0.0% per year
Consumption Growth Rate	(-1.0%) per year

Interest Rate on Borrowing	5.0%
Debt Maturity	20 years
Interest Earned on Investments	3.0% per year
Administration Costs on Financing	1.5% of principal

The study was conducted using the adopted budget for Fiscal Year 2010 (the Village functions on a fiscal year of January 1 to December 31) as the base year upon which forecasted figures were developed. The cost of service analysis considers what water rates need to be for the entire planning period (2011 – 2020).

These assumptions were used after discussions with the Village's Staff, utilizing our experience and the Staff's knowledge of its customer base and historical costs. The estimated decline in water consumption is based on historical trends of declining water sales over the past decade.

The Village Staff should monitor the assumptions used in the model over the forecast period. The Village should collect, on an annual basis, the following data items so that it can maintain the financial model and facilitate future rate studies.

- Annual number of new customers by meter size.
- Identification and classification of customers by customer class.
- Monitor customer class usage.
- Collect information on performance of water lines to assist with useful life estimates.

C. USAGE, DEMAND AND CUSTOMER ANALYSIS

To complete the cost of service and rate study it is necessary to gain an understanding of the make up of the customer base served by the Village including the number of customers by type and how customers use water. The following section provides an overview of this analysis.

1. Customer Counts

In 2009, the Village's water system customer base included 16,132 billed customers consisting of 14,546 single-family residential customers, 628 multi-family residential customers, 872 commercial customers and 86 industrial customers. The Village bills all customers on a bi-monthly basis. The Village provides water service to customers located outside of its corporate limits including to areas within Knottingham and Westmont. The following table provides a breakdown of the Village customers by location and customer class.

Table 1 - Village Water Customers

	Single-Family Residential	Multi-Family Residential	Commercial	Industrial
Inside Village	13,031	612	852	86
Outside Village	1,194	16	20	-
Knottingham	249	-	-	-
Westmont	72	-	-	-
Total Customers	**14,546**	**628**	**872**	**86**

The customer classes shown in Table 1 are based on the Village's current customer classifications. It should be noted that for presentation purposes the commercial customer class has been consolidated to include offices, restaurants, churches and schools.

For purposes of evaluating alternative rate structures it is necessary to determine the number of customer by meter size. Table 2 shows the current number of customers located inside and outside the Village (excluding Knottingham and Westmont customers since the Village does not dictate their rate structures).

Table 2 - Village Water Customer Meter Sizes

Meter Size	Single-Family Residential	Multi-Family Residential	Commercial	Industrial
5/8"	13,420	191	328	13
1"	737	80	111	14
1 ½"	62	151	167	26
2"	5	145	135	23
3"	1	37	64	10
4"	-	20	58	-
6"	-	4	8	-
10"	-	-	1	-
Total Customers	**14,225**	**628**	**872**	**86**

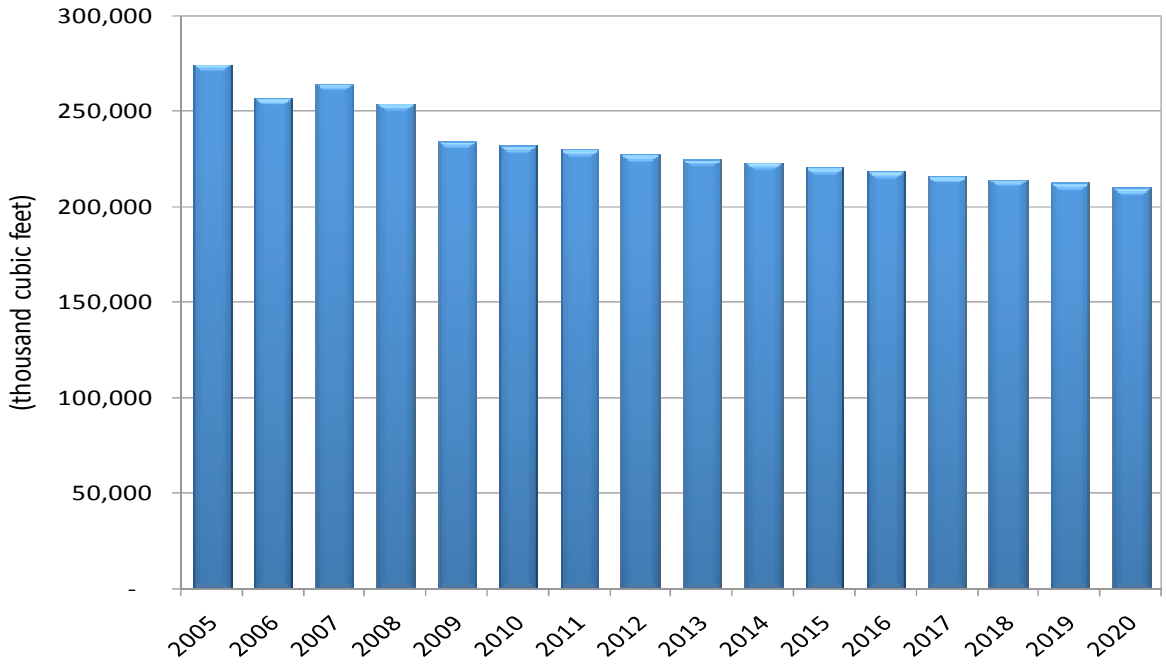
Table 2 demonstrates that the majority of the Village customers have a 5/8" meter which is the standard residential meter size. The use of the various meter sizes is discussed in detail in the rate alternative section of the report.

As mentioned in the previous section of the report, it is assumed that the Village will not experience growth in its customer base and therefore the current number of customers will remain constant throughout the planning period.

2. Consumption Data

The Village sold approximately 1.82 billion gallons of water to its customers during 2009. The water sales in 2009 continued a downward trend over the last few years. Water sales decreased significantly between 2005 and 2006 but then rebounded slightly in 2007. The last two years, 2008 and 2009, have trended downward. It is estimated that a portion of these declines in water usage is due to weather. The region has experienced unusually wet years over the last few years. However based on our experience nationally, individuals are using less and less water due to conservation efforts and water using fixture replacement. For purposes of forecasting future water sales, as discussed earlier in the report, it is assumes that a gradual reduction in water sales will continue at an annual rate of (-1.0%). Exhibit 1 presents the last five years of water sales and our estimate of water sales for the planning period.

Exhibit 1 - Annual Water Sales



It is important to note that since the Village generates the vast majority of its revenues (approximately 92.5%) from the sale of water. As a result, the ongoing reduction in water sales impacts the ability of the Village to fund the operations and maintenance of the system. In general, if the Village experiences a 1% reduction in water sales it will experience about a 1% drop in revenues. In other words, to just keep revenues flat over a period of declining water sales the Village is forced to increase rates or cut costs.

In addition to examining overall water usage trends, to evaluate alternative rate structures it is necessary to review water usage patterns for various customer types within the Village system. Exhibits 2 and 3 show the break-down of customer usage by bi-monthly period for residential and non-residential customers.

Exhibit 2 - Residential Customer Usage

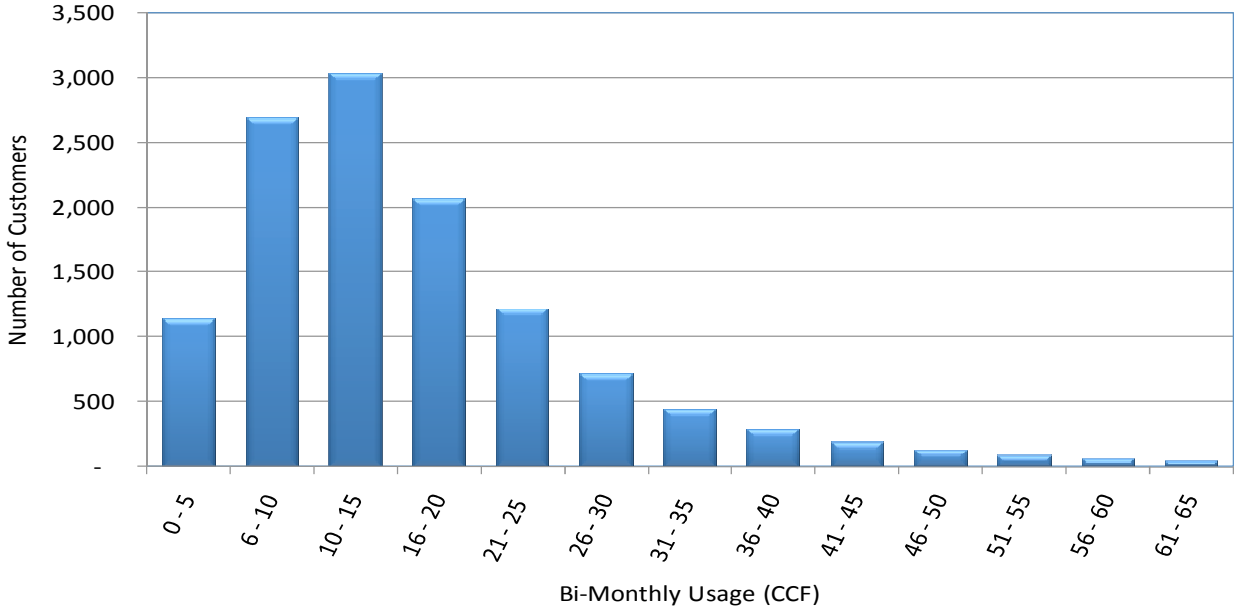


Exhibit 2 shows that the majority residential customers use between 10 - 15 hundred cubic feet (CCF) per bi-monthly period, with the average usage at about 12 CCF. The exhibit demonstrates that customers use below the average and that a small number of customers use well above the average. It should be noted that the exhibit presents only single-family residential customers as defined by the Village.

Exhibit 3 - Non-Residential Customer Usage

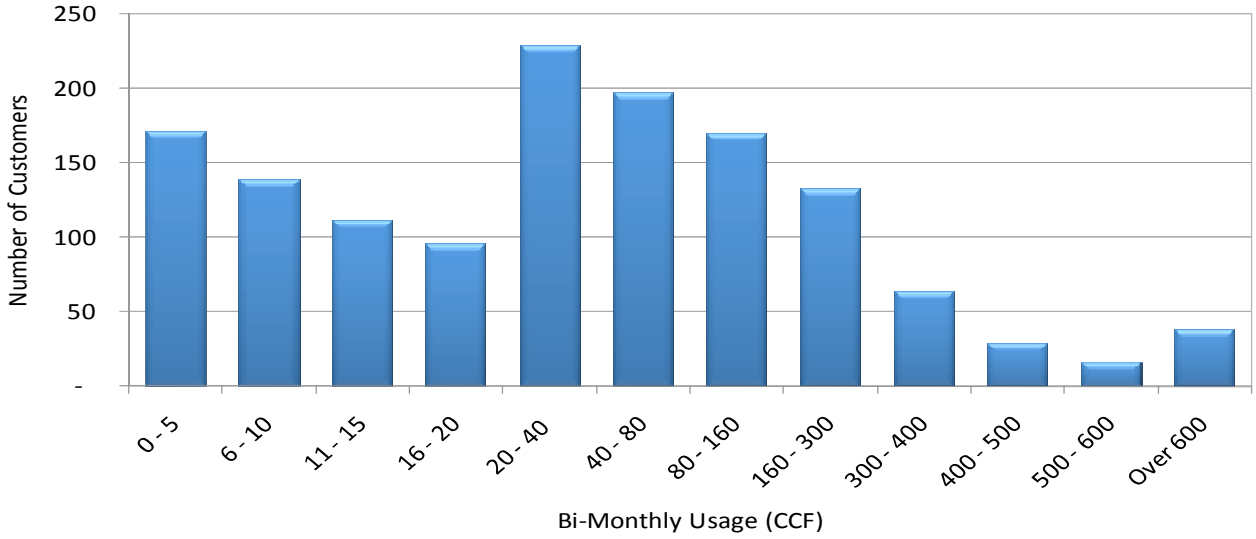


Exhibit 3 shows that the largest number of non-residential customers use between 20 and 40 CCFs per bi-monthly period. However, the distribution of customer usage is not as clearly bell-shaped as demonstrated in the residential usage. This is not surprising given the wide range of types of water users represented in the non-residential customer class. Non-residential customers include commercial, industrial and multi-family residential.

As mentioned previously, one of the key objectives for the rate study was the development and consideration of conservation rate structures. Conservation rate structures are developed to encourage the wise use of water, which typically is focused on reducing the non-discretionary use of water. Non-discretionary water use is most often defined as water used outside the home or business which is not required for actives considered essential for public health and safety. Given the climate for the Village (cold winters), it is safe to assume that most non-discretionary occurs in the spring, summer and fall. Therefore review of the usage of water in the winter compared to the summer provides insight into the seasonal peaking that occurs in the Village system. Exhibit 4 shows the average residential, commercial and industrial customers winter and summer water usage, for 2008 and 2009.

Exhibit 4 - Seasonal Customer Usage Patterns

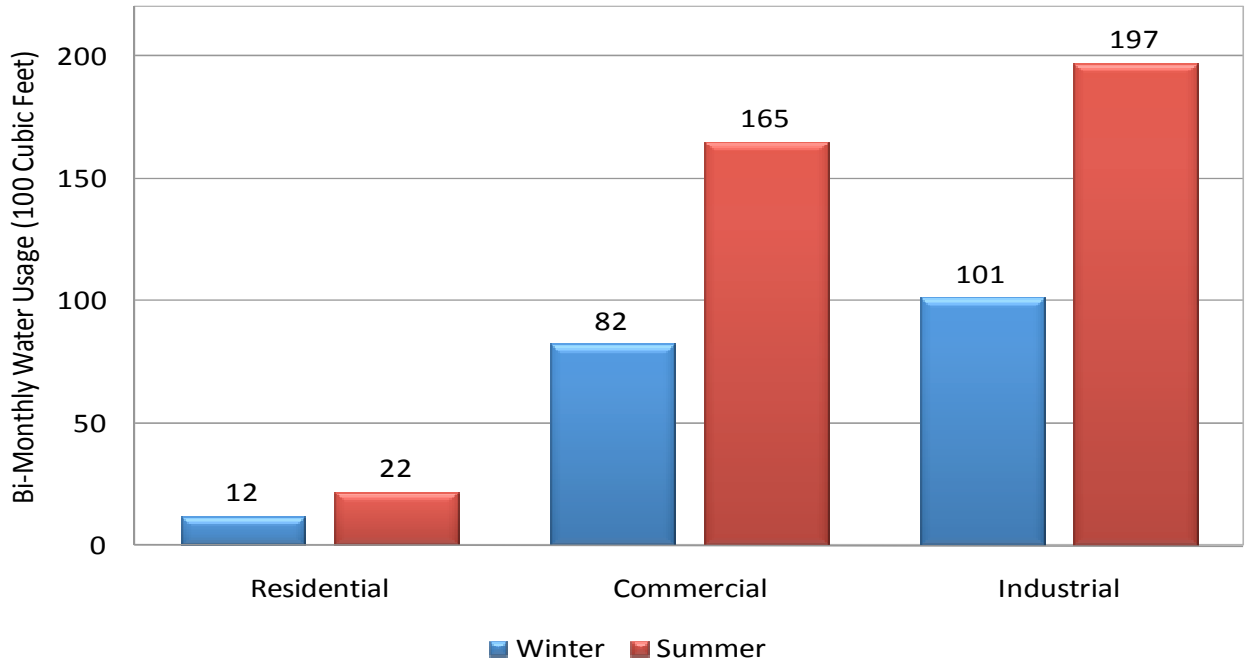
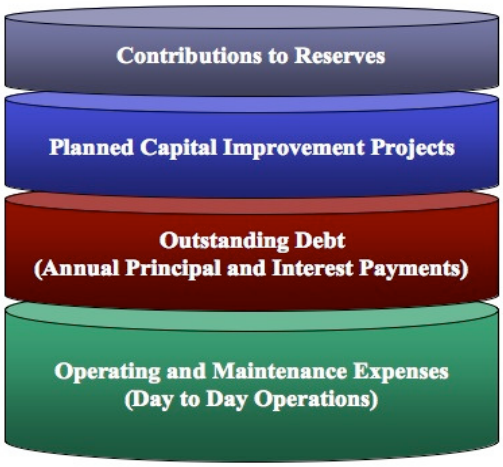


Exhibit 4 shows that there are certainly seasonal variations for all customer classes. For purposes of the exhibit commercial includes multi-family due to the similarity in seasonal usage patterns. For each customer class there is about a 2 times peaking factor in average usage, which equates to a substantial amount of non-discretionary use. On average each customer uses almost twice as much water in the summer as compared to the winter. The analysis shown in Exhibit 4 was completed for 2008 and 2009 which were unusually wet years. Therefore it is assumed that during a dry summer the peaking would be even more substantial. These usage patterns certainly warrant the examination of water conservation rate structures.

D. REVENUE REQUIREMENTS

The next step in the cost of service and rate study was to identify the cost of providing water service, the revenue requirements. Our approach includes a detailed review of each of the costs incurred by the Village (both identified and unidentified) to ensure a true cost of service is developed. The revenue requirements can be broken down into four main categories of costs including; operating and maintenance costs, capital improvements, existing debt service and any contributions to reserves. The following section of the report describes each of the categories of expenses incurred by the Village as it provides water service. The costs are all based on official documents and data provided by the Village. The costs are forecasted as described above in the assumptions.



1. Operating and Maintenance Costs

The Water Fund day-to-day operating and maintenance (O&M) expenses are budgeted in four major categories including water billing/customer service, water administration, pumping and treatment and water distribution. The actual O&M expenses for 2007, 2008 and 2009, the adopted 2010 expenses and estimated budget for 2011 were used as the basis for estimating future operating and maintenance expenses. For the years 2012 through 2020, the majority of O&M expenses were inflated by 3.0% per year. The cost of purchased water, included in the pumping and treatment category, was inflated by 10% per year. Table 3 presents the O&M expenses forecasted over the next five years.

Table 3 - Water O&M Expenses

	2011	2012	2013	2014	2015
Billing / Customer Service	204,158	210,283	216,591	223,089	229,781
Administration	1,739,346	1,791,526	1,845,272	1,900,630	1,957,649
Pumping and Treatment	327,664	357,999	388,569	400,226	412,233
Distribution	1,609,539	1,674,481	1,740,621	1,792,840	1,846,625
Water Purchase	4,300,000	4,730,000	5,203,000	5,723,300	6,295,630
Total O&M Expenses	**$8,180,707**	**$8,764,289**	**$9,394,053**	**$10,040,085**	**$10,741,918**
Annual % Increase	*4.0%*	*7.1%*	*7.2%*	*6.9%*	*7.0%*

Table 3 demonstrates that overall operating expenses are anticipated to increase at around 7% per year over the projection period. The primary reason for the significant increases is a result of the estimated continued increase in the cost of purchased water from the Water Commission. Exhibit 5, shown below, presents the estimated O&M expenses over the entire planning period.

Exhibit 5 - Operating and Maintenance Expense Forecast

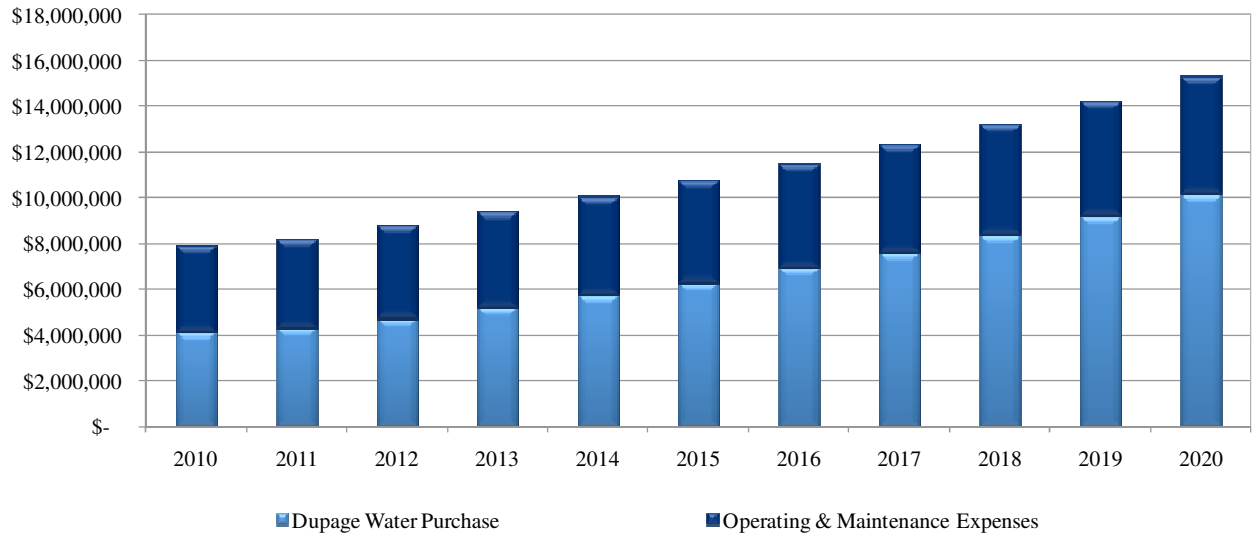


Exhibit 5 shows that the purchases of water from the Water Commission represent approximately 50% of the total O&M expenses in 2010. However by the end of the planning period, water purchases represent about 66% of the total O&M expenses. The historical increases in water purchase costs have been one the primary reasons for increasing cost of operating the water system and as demonstrated in Exhibit 5 this is expected to continue to be the case over the next 10 years.

2. Capital Costs

The ownership of a water system of the size and age of the Village system is extremely capital-intensive. The Village has invested millions of dollars in constructing and maintaining the water system as it stands today. Much of this investment occurred in the 1920's and 1950's as the Village grew and developed. Over the next several decades large portions of the system will have been in the ground for over 100 years. The on-going funding of recent capital investments and future requirements has a significant impact on water rates. While the capital investments have a pronounced impact on rates, the projects are vitally important to ensure the continued operation of the water system. The Village could keep rates low initially by not maintaining the system but would pay a significant price later as system failures spike due to a lack of system maintenance, which would then result in increased costs and ultimately the need for even higher rate increases. Proactively managing of the water system through maintenance and capital investments allows the Village to keep rates stable and lower over time.

The following section of the report presents the capital costs for the water system.

2.1 Existing Debt

The Village Water Fund currently has approximately $1.4 million in principal outstanding debt. The debt consists of one issue that was used to fund the purchase and installation of the water systems automated meter reading (AMR) system. The debt will be fully paid off in 2012. Table 4 show the annual principal and interest payments for the outstanding debt.

Table 4 - Existing Debt Service

	2010	2011	2012
Principal Payment	$450,000	$470,000	$485,000
Interest Payment	$53,708	$33,003	$11,155
Total Due	**$503,708**	**$503,003**	**$496,155**

2.2 Capital Projects

The Village's water system has planned capital projects totaling approximately $20 million for the period from 2011 through 2016. At this time the Village does not have planned capital projects for 2017 through 2020. The following table presents the planned capital projects for the system based on type of project.

Table 5 - Water System Planned Capital Projects

	2011	2012	2013	2014	2015	2016
Water Main Replacement	$125,000	$5,640,000	$2,340,000	$2,925,000	$3,900,000	$0
Water Meter Replacement / AMR	$60,000	$825,000	$660,000	$600,000	$0	$0
Water Tank Maintenance	$100,000	$200,000	$0	$0	$1,700,000	$1,750,000
SCADA	-	$120,000	-	-	-	-
Total	**$285,000**	**$6,785,000**	**$3,000,000**	**$3,525,000**	**$5,600,000**	**$1,750,000**

It should be noted that the timing of the capital projects presented in Table 5 was developed based on the ability of the Village to fund the capital projects. Historically, the Village has used cash derived from operations (pay-as-you-go) to fund capital project, as evidence by the limited amount of outstanding debt service within the Water Fund. If the Village attempts to cash fund the project listed in Table 5, water rates will need to increase close to 100% over the next few years. This will certainly lead to rate shock within the customer base. Therefore, given the capital needs we recommend that the Village debt fund at least a portion of the capital improvements plan. Financing water system capital infrastructure is common practice within the industry for a number of reasons including:

- Water infrastructure consists of assets that will be used for a long period of time (40 to 70 years). The use of debt better matches the use of the asset with the recovery of the cost of the asset.

- The use of only cash to fund capital projects often results in the delay or deferral of project due to limited resources. This often results in significant deferred system maintenance because the utility resorts to a reactive approach to capital projects.

- The cost of financing is relatively low for local governments.

Due to the impact on water rates, we recommend that the Village consider financing capital projects when the individual project or combined projects exceed $1.0 million in any particular year. Over time the Village should reevaluate these guidelines as costs and revenues increase. Applying these guidelines to the capital projects listed in Table 5 results in the following cash and debt financing plan for the next five years.

Table 6 - Capital Project Financing

	2011	2012	2013	2014	2015
Cash Funded Projects	$285,000	$933,300	$660,000	$600,000	$500,000
Bond Funded Projects	$0	$5,851,700	$2,340,000	$2,925,000	$5,100,000
Total	**$285,000**	**$6,785,000**	**$3,000,000**	**$3,525,000**	**$5,600,000**

Based on discussions with the Village Staff, it is assumed that the bond funded water system projects will be funded through two bond issues consistent with the Village's overall plan for issuing new debt. It is assumed that the Village will issue debt in 2012 and 2015. The 2012 issue will fund water system capital projects in 2012, 2013 and 2104 which total approximately $11.2 million. The 2015 issue will fund water capital projects in 2015 and 2016 and total $6.8 million. The 2015 is tentative as additional project may be identified in 2016 and subsequent years.

2.3 System Reinvestment

As mentioned above, the Village has invested millions of dollars to construct and maintain the water system. As the water system ages, it is important that the Village actively manage these assets to ensure that the useful live of the water system is maximized.

To assist the Village in managing its capital assets, MFSG completed a review of the water system buried infrastructure and above ground assets. The goal of the review is to provide the Village with an estimate of the annual investment required in the system to appropriately maintain the system and strive towards maximizing the assets useful life. As part of the system asset review, the ages and costs of various portions of the water distribution system were stratified by decade. The age groupings of the distribution system together with useful life information and unit replacement costs were used to estimate the required reinvestment in the water system. Based on information from Village Staff and industry estimates, water lines in the Village system are estimated to have useful lives of approximately 70 years. It should be noted that this is a longer period than the Village uses for calculating depreciation but is more representative of reality. It was assumed that water system structures and improvements including water storage facilities have useful lives of approximately 60 years. The following exhibits show the estimated replacement costs and decade of replacement for buried and above ground assets.

Exhibit 6 - Water System Buried Asset Review

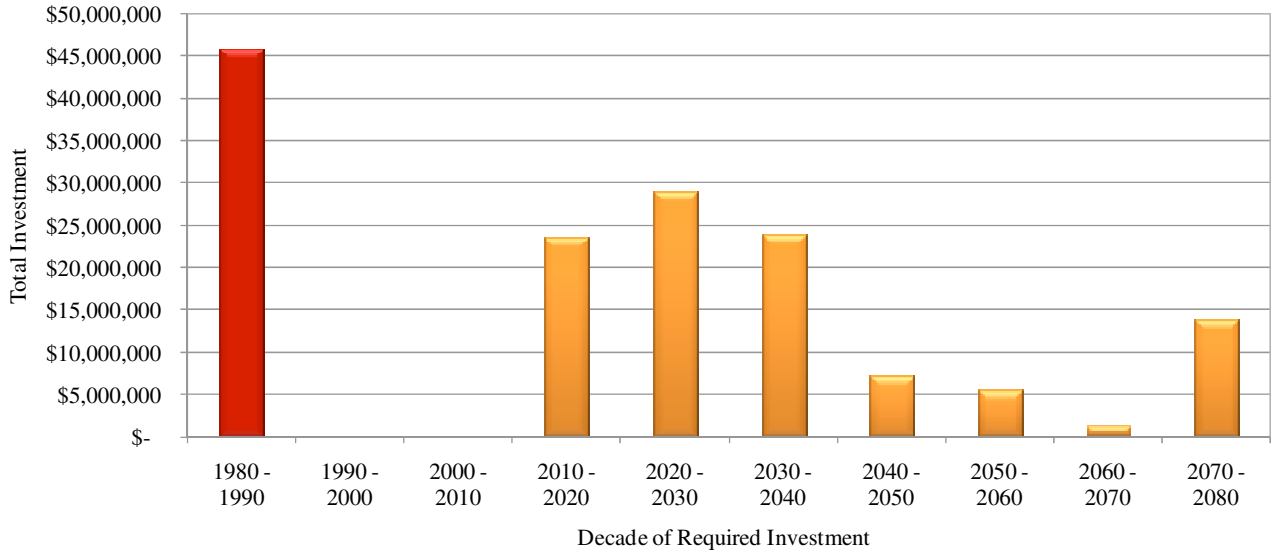


Exhibit 6 demonstrates that the Village has approximately $45 million (in 2010 dollars) worth of buried assets that have already exceeding their useful life, based on an assumed useful life of 70 years. The replacement value is calculated by taking the original cost of the buried assets by installation year and trending them to current dollars using the Engineer New Record (ENR) construction cost index. These assets consist of water main installed in the 1920's. The exhibit also demonstrates that over the next 30 years a significant portion of the remaining buried infrastructure will reach its useful life. Exhibit 7, below, shows the same analysis for above ground assets such as water storage tanks.

Exhibit 7 - Water System Above Ground Asset Review

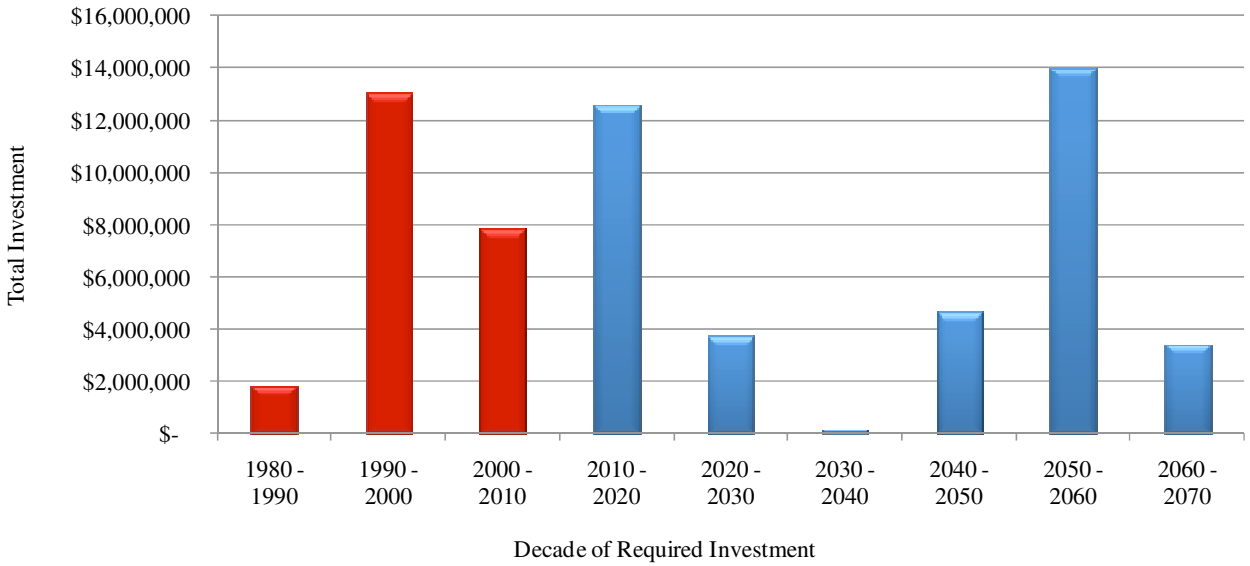


Exhibit 7 shows that the Village has approximately $24 million worth (in 2010 dollars) of above ground assets that have reach their useful lives. It should be noted that the useful life of 70 years and 60 years for buried and above ground assets are theoretical values which are used as a proxy, as

evidence by the fact that a large portion of the Village water mains are well beyond 70 years old and still functioning. However, these assets should be considered a liability because at some point they will fail which will result in significant service interruptions and the need for emergency repairs and/or replacements. We recommend that the Village take proactive steps to address these assets such as developing a "Repair, Replacement and Rehabilitation (3R) Reserve" which is intended to assist in dedicating funds for replacement of system assets.

3. Reserves

Best management practices dictate that cash reserves be accumulated to provide for contingencies and unplanned major expenses. We recommend the establishment and/or maintenance of two types of reserves for the Village's water system: an Operating and Maintenance ("O&M") Reserve and a Repair, Renewal, and Rehabilitation ("3R") Reserve. Each is discussed below.

3.1 Operating Reserve

An operating reserve is important to provide funds for unplanned minor repairs or fluctuations in the budget. This type of reserve is also valuable during unusually wet or dry years, which could result in reduced revenues due to lower than anticipated consumption levels. As these reserves are accumulated, they can be used in future years to offset, decrease or defer rate increases. Operating reserves are typically established as a percentage of a system's O&M budget. The Village currently maintains an O&M reserve that is based on 90 days of operating revenues. This closely mirrors our recommended target with the exception that we recommend a balance of 90-days of operating expenses rather than revenues. We recommend targeting expenses because revenues have a circular relationship with rates (i.e. if the reserve target is not met, rates may need to be increased which increases revenues which increases the reserve target). The Village currently has reserves exceeding the target balance. However due to expenses exceeding revenues in the current year by the end of the year (2010) beginning in 2011 the cash balance will drop below the 90-days of operating expenses and a contribution will be required in 2011. To minimize the impact on rates we recommend capping the contribution to $100,000.

3.2 Repair, Replacement and Rehabilitation Reserve

Many municipal utilities establish Repair, Replacement and Rehabilitation ("3R") reserves to provide funds to pay for unexpected major repairs and planned replacement or rehabilitation of system assets, as mentioned in the previous section. These reserves can be used to pay for capital costs in order to avoid or minimize the amount that would otherwise be recovered through user fees (and possibly result in a significant rate increase). Typically, the annual "3R" reserve contribution is calculated based on the estimated useful life of each asset as described in the previous section of this report. The "3R" contribution is offset by the actual amount of investment planned by the Village in its capital improvement program, as shown in Table 5. We recommend that the Village take a 20-year rolling average of the calculated annual "3R" Reserve contributions for both the buried and above ground infrastructure to even out rate increases and mitigate rate shock caused by varying annual required reinvestment values. The following exhibit presents the recommended annual contribution to the 3R Reserve.

Exhibit 8 - Recommended Annual "3R" Reserve Contribution

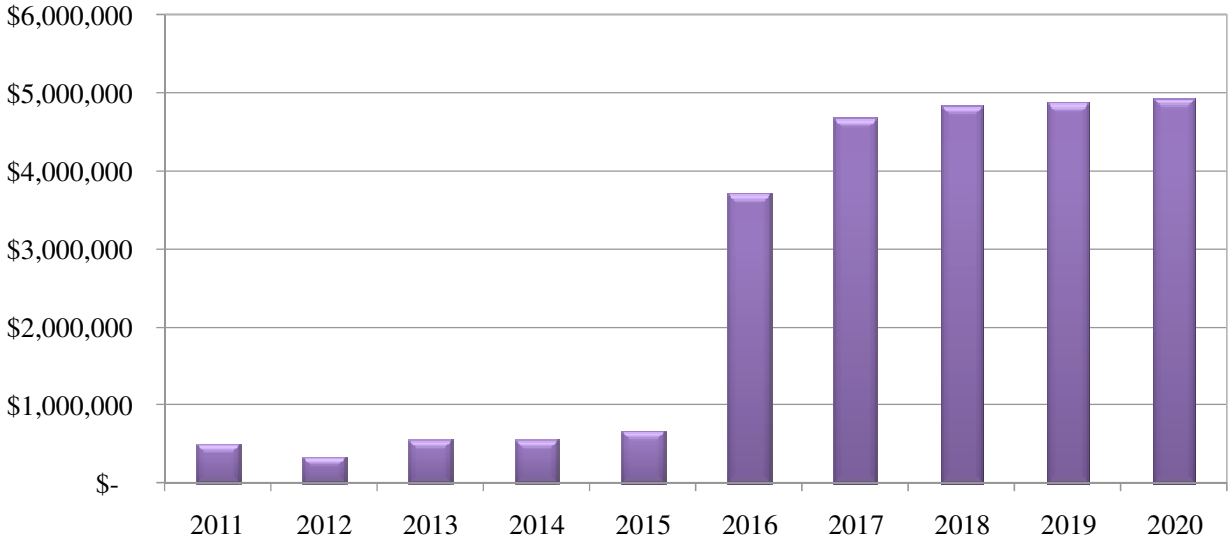


Exhibit 8 presents the recommended annual contribution to the 3R Reserve. The reason for the significant spike in contributions beginning in 2016 is due to the fact that the Village does not have planned capital projects for these years and the contribution is a rolling average what the Village should be spending (per the asset review) compared with what is planned to be spent (per the capital improvements plan). Once the Village develops capital projects for these out-years the recommended contribution will be reduced.

4. Revenue Requirements

The gross revenue requirements (that is, the total cash needed for the water and sewer systems) can be classified into two major categories:

1. Operating Costs:
   Operating and Maintenance Expenses (day to day operations)
   O&M Reserve Contributions

2. Capital Costs:
   Existing Debt Service (annual principal and interest payments)
   Projected New Debt Service
   Cash-funded Capital Projects
   "3R" Reserve Contributions

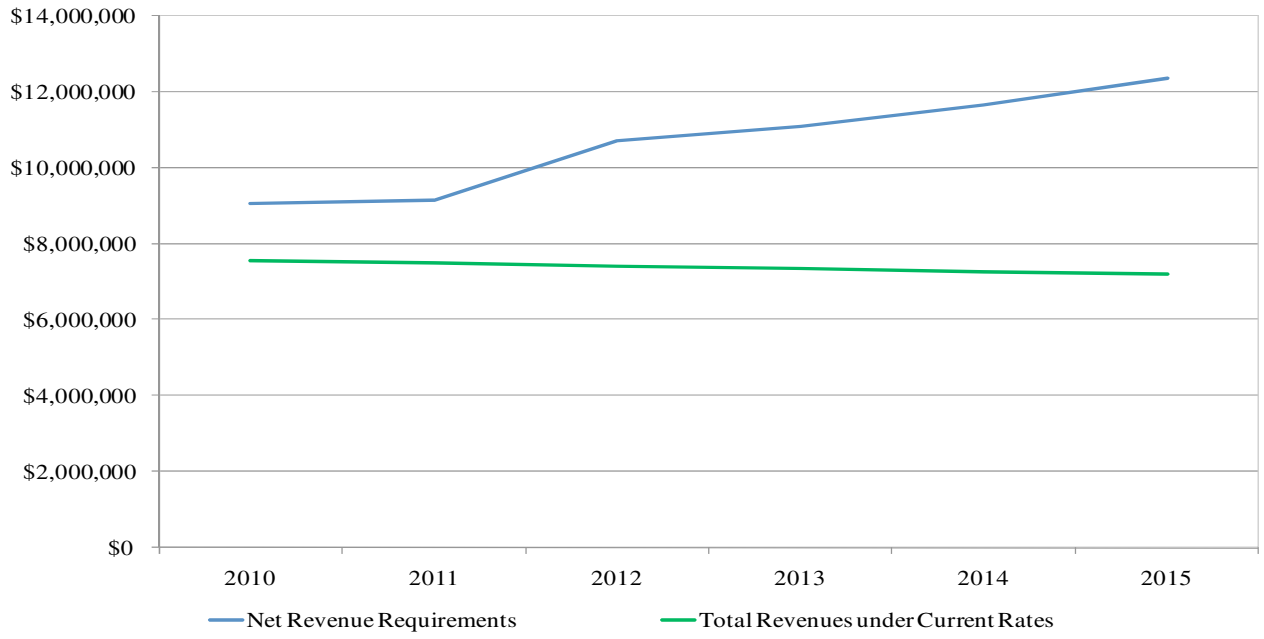
The following table shows the revenue requirements, miscellaneous (non user charges) revenue and the net revenue requirement from user rates for water system.

Table 7 - Water System Revenue Requirements

	2011	2012	2013	2014	2015
Operating Expenses	8,180,707	8,764,289	9,394,053	10,040,085	10,741,918
Operating Reserve Contr.	100,000	100,000	100,000	100,000	100,000
Operating Expenses Subtotal	*8,280,707*	*8,864,289*	*9,494,053*	*10,140,085*	*10,841,918*
Existing Debt Service	503,003	496,155	-	-	-
Cash Funded Cap. Projects	285,000	933,300	660,000	600,000	500,000
Projected Debt Service	-	-	905,413	905,413	905,413
3R Reserve Contribution	489,223	333,867	547,201	547,201	439,427
Total Revenue Requirement	9,557,933	10,627,611	11,606,667	12,192,699	12,686,759
Less Miscellaneous Revenue	414,170	421,917	428,542	441,057	482,466
Net Revenue Requirement from Rates	**$9,143,763**	**$10,205,695**	**$11,177,783**	**$11,751,597**	**$12,204,803**
Projected Revenue with Current Rates	$7,573,804	$7,498,066	$7,423,085	$7,348,855	$7,275,366
Net Surplus (Shortfall)	**($1,569,959)**	**($2,707,629)**	**($3,754,698)**	**($4,402,743)**	**($4,929,437)**
Water Fund End of Year Cash Balance	**($386,184)**	**($3,093,812)**	**($6,848,510)**	**($11,251,253)**	**($16,180,690)**

Table 7 demonstrates that the current water rates will not generate sufficient revenue to cover the revenue requirements in 2011 or during subsequent years. The table also demonstrates that the cash balance within the Water Fund will be exhausted in 2011. Exhibit 9 presents the revenue requirements and the revenues with current rates over the next five years.

Exhibit 9 - Current Revenues and Revenue Requirements



E. FINANCIAL PLAN AND COST ALLOCATION

The development of revenue requirements in the previous section of the report, demonstrates that annual amount of revenue that needs to be generated from rates and fees to ensure that the Water Fund is self-supporting. The following section of the report reviews the required increases in rate necessary to cover the revenue requirements as a proposed financial plan and examines the allocation of costs between those that are fixed and variable to assist in the review and development of alternative rate structures.

1. Financial Plan

As demonstrated in the previous section of the report, the water system will not be self-supporting (revenues will not to cover revenue requirements) in 2010 nor will revenues cover expenses during the subsequent years. To immediately address the shortfall the Village would be required to increase rates fairly dramatically. The breakeven rate increases are shown below.

Table 8 - Water Revenue Adjustments – Breakeven Rates

	2011	2012	2013	2014	2015
Water System Revenue Increase	22%	19%	6%	6%	6%

In an effort to smooth the rate increases and address the shortfalls we propose that the Village consider adjusting water rates over a multi-year period. The recommended annual increases in the water revenues are shown in the following table.

Table 9 - Water Revenue Adjustments - Financial Plan

	2011	2012	2013	2014	2015
Water System Revenue Increase	14%	14%	14%	10%	9%

The proposed revenue increases will allow revenues to catch up to expenses over the next five years. The multiple year increases are proposed to minimize the one-time impact on customer bills. As a result even with the increases shown in Table 8, the Village will use some cash reserves over the next three years as rates are increased. The increases will not result in revenues matching expenses in the first three years. Additional increases will be required in years 2016 - 2020, based on our forecast of revenue requirements for the Water Fund. However, the magnitude of the rate increases will be influenced by a number of factors such as the level of capital investment, purchased water costs from the Water Commission, declining water sales and overall inflation in O&M expenses. The following table presents the estimated cumulative cash balance in the Water Fund based on adoption of the revenue increases shown in Table 9.

Table 10 - Water Fund Ending Cash Balance

	2011	2012	2013	2014	2015
Water Fund End of Year Cash Balance	$1,216,389	$1,148,883	$1,583,457	$2,429,017	$3,666,748

It should be noted that the Village started 2010 with a total Water Fund cash balance of approximately $2.3 million. The Water Fund will experience a significant loss in 2010 (approximately $1.1 million) and will build the fund balance back over the next five years.

2. Cost Allocation

To develop and consider alternative rate structures it is necessary to understand how the Village incurs costs while providing water service to its customers. In particular, what costs of operating the system are fixed (i.e. don't vary with volume of water sold) and those that are variable (dependent on the actual volume of water delivered to customers). To examine the allocation of costs each of the building blocks of the revenue requirements (cost components included in Table 6 in the previous section) were examined.

The allocation of revenue requirements between fixed and variable was completed by considering which expenses are dependent on the actual delivery of water. This is fairly straight forward when considering capital costs. The Village is required to meet its debt service obligations regardless of water sales. Additionally, the volume of water sold will not have any impact on the planned cash funded or bond funded capital projects. This would not be the case if the Village was contemplating expansion related capital projects due to growth in customers and water demand but all projects in the CIP are repair and replacement type projects. The volume of water sold will also not impact the need for operating and 3R reserve contributions. Therefore all capital expenses are assumed to fixed.

Unlike capital costs, operating expenses do vary based on the volume of water sold. To determine the fixed versus variable portion of the operating expenses each line item within the operating budget was reviewed based on our knowledge of whether or not the expense is dependent on the amount of water used or is dependent on the potential demand the customers place on the system. The Water Fund operating budget is broken into four operating categories including, administration, water billing/accounting, treatment and pumping and water distribution. Operating expenses within administration and water billing/account are assumed to be fixed. The Village must manage and oversee the water system and send bills to customer regardless of water usage. The other two categories of expenses will vary with water usage. The key budget items that were deemed variable include overtime, a portion of water purchases, utilities and supplies. The most significant variable expenses include the purchase of water from the Water Commission. However this expense is not completely variable due to the fact that based on the agreement with the Water Commission, the Village is required to pay approximately 17% of the total purchased water expenses regardless of water taken from the Commission.

The methodology discussed above was applied to the 2011 revenue requirements to determine the portion of costs that are fixed and those that are variable. Table 11 presents the costs allocation and the resulting percentage breakdown.

Table 11 - Fixed vs. Variable Cost Allocation

	Fixed Costs	Variable Costs	% Fixed	% Variable
Operating Expenses	$4,499,389	$3,681,318	55%	45%
Operating Reserve Contribution	$100,000	$ -	100%	0%
Existing Debt Service	$503,003	$ -	100%	0%
Cash Funded Capital Projects	$285,000	$ -	100%	0%
Projected Debt Service	$ -	$ -	100%	0%
3R Reserve Contribution	$489,223	$ -	100%	0%
Total	**$5,876,615**	**$3,681,318**	**61%**	**39%**

Table 10 demonstrates that approximately 61% of the costs of operating the Village water system in 2011 will be fixed. Over the projection period, due to increasing capital expenses, the fixed portion increases to approximately 70% by 2015.

F. RATE ALTERNATIVES

The cost of providing water service to the customers of the Village water system has been established in the previous sections of this report. The analysis demonstrates that the Village will need to increase rates to ensure the financial health and stability of the Water Fund. The following section of the report reviews how these costs are recovered from customer by examining the current and alternative rate structures.

1. Current Rate Structure

The current water rate structure includes a fixed minimum bill and a usage rate per hundred cubic (CCF) of meter water usage. The bi-monthly minimum bill includes 2 CCFs of water and the usage rate is applied to all metered water exceeding 2 CCF. The current structure collects approximately 7.5% of revenues from the fixed portion of the rate structure. As a result, the Water Fund is guaranteed approximately 7.5% of the anticipated total current revenues regardless of water usage. The Village provides service to customers outside its corporate limits. These customers are charged a modest surcharge. Table 12 presents the current water rate structure.

Table 12 - Current Water Rates

Monthly Minimum Charge	Current
Inside Village - Minimum Bi-Monthly Charge (2 CCFs)	$6.62
Inside Village - Rate per CCF	$3.31
Outside Village - Minimum Bi-Monthly Charge (2 CCFs)	$7.70
Outside Village - Rate per CCF	$3.85

2. Rate Alternatives

The following section of the report discusses the key policy goals and objectives related to pricing water service and the development of several alternative rate structures designed to address the pricing goals and objectives.

2.1 Pricing Goals and Objectives

To examine alternative rate structures it is necessary to determine the principle pricing goals and objectives for the structure. Based on our industry experience there are a number of common goals and objectives related to pricing water service. The most common considerations include the following:

- Cost of Service Recovery
- Revenue Stability
- Ease of Updating
- Water Conservation
- Economic Development
- Equitably Cost Allocation
- Minimizing Customer Impacts
- Affordability
- Rate Stability
- Ease of Understanding
- Ease of Implementation
- Legality

Each of the pricing goals and objectives were viewed in light of the Village's overall strategies including the Village's Strategic Plan. While all of the objectives mentioned above are deemed important, there are several objectives that were identified to be key for the study.

- *Cost of Service Recovery* - The rate structures must provide the revenues needed to operate the system, provide for capital needs and meet the financial targets for long-term financial health and stability.

- *Minimizing Customer Impact* - The direct impact to Village customers should be minimized, realizing that customer retention and continued water usage is critical for the continued health and stability of the water system.

- *Revenue Stability* - To assist in the financial stability within the Water Fund, the rate structure should provide a reasonable amount of revenue stability.

- *Water Conservation* - The Village has identified in its strategic plan an objective to encourage the wise use of resources which naturally includes water resources. Therefore the ability of the water rate structure to encourage wise use of water was deemed important.

There are a number of ways to address the key pricing goals and objectives mentioned above. The first objective, cost of service recovery, is best accomplished by ensuring that the rates are set at a level that fully recovers the cost of providing water service. While this can be accomplished with any rate structure, the cost of service recovery will be closely related to revenue stability. In other words, it is important to assess the likelihood that the rate structure will generate the anticipated revenues. The second objective, minimizing customer impacts, can be accomplished by minimizing the one-time changes to the rate structure and by phasing in rate increases.

The pricing objective related to revenue stability can be addressed in a number of ways. The most common approach is to increase the fixed portion of the water bill. The more significant the fixed portion of the bill the more guaranteed revenue generated from the water rates. However it is necessary for there to be a clear cost basis for the fixed portion of the bill (the fixed portion should recover fixed costs incurred by the utility). Typical costs included in a fixed charge include, but are not limited to: customer service costs, billing and meter reading, administrative costs and meter maintenance. However as presented in the previous section of the report, approximately 61% of the total cost of operating and maintaining the water system are fixed and therefore it would be possible to include capital costs as well. Another consideration related to the fixed portion of the bill is the basis that would be used to impose the fixed portion of the bill. The Village currently charges the minimum bill (fixed portion) on a per account basis. It is fairly common to impose fixed charges based on meter size. The size of a customers meter represents the potential demand that they can place on the water system (i.e. a residential 5/8" meter can only demand so much water from the system, where as a 6" meter can demand significantly more water). As a result it costs more to maintain the water supply for a larger meter and it also costs significantly more to replace and maintain a larger meter. The basis selected should be consistent with the costs recovered in the fixed charge. If meter maintenance costs, capital costs and/or general system maintenance costs are added to the fixed charge, then the charge should be applied by meter size. On the other hand, if just the

costs for billing and administrative services are included in the fixed charge, there is no basis for using meter size as these costs are the same for all customers regardless of meter size.

The final key pricing objective, water conservation, is most often addressed in a rate structure through the variable portion (the usage rate) of the bill. The usage rate can be designed to encourage the wise use of water by increasing the rate for water used at usage levels that are deemed excessive or discretionary. It is important to note that a conservation type rate structure often results in increased revenue volatility and therefore to some degree counters the idea of revenue stability.

2.2 Alternative Rate Structures

After discussions with the Village Staff and in light of the pricing goals and objectives a number of rate structure alternatives were developed. The alternatives were ultimately narrowed down to two key alternatives which were fully developed and are presented in this section of the report. The two alternatives are presented along side the current rate structure for comparison. Each alternative will produce the same amount of revenue which is 14% more than the revenue produced by the current rates based on the financial plan for the water system shown in Table 8. Each of the alternatives are shown below followed by a review of the structures ability to meet the pricing goals and objectives.

- **Alternative A** (Current Rate Structure) - The current rate structure increased to produced 14% more revenue in 2001.

Alternative A - Fixed Minimum Bill (Current Rate Structure)

	2010 Current Rates	2011 Alternative A
Minimum Bi-Monthly Charge (2 CCFs) - Inside Village	$6.62	$7.55
Minimum Bi-Monthly Charge (2 CCFs) - Outside Village	$7.70	$8.78

Alternative A - Usage Rate (Current Rate Structure)

	2010 Current Rates	2011 Alternative A
Usage Rate per CCF - Inside Village	$3.31	$3.77
Usage Rate per CCF - Outside Village	$3.85	$4.39

The current rate structure is fairly common among water utilities. It provides a minimum amount of fixed revenue in the form of a minimum bill and charges customers a unit rate for all metered water used beyond 2 CCF. The following observations are made in regards to Alternative A's ability to meet the pricing goals and objectives.

- Cost of Service Recovery - The proposed increases in rates included in Alternative A will assist in ensuring that the cost of operating and maintaining the water system is recovered.

- Minimizing Customer Impact - Alternative A will impact all customers of the water system by increasing their bills by 14% since the structure includes a uniform rate increase.

- Revenue Stability - Alternative A will not increase the revenue stability within the Water Fund. The rate structure will continue to provide guaranteed revenues of approximately 7.5% of the total revenues. The current structure should not cause a decrease in revenue stability beyond what the Fund experiences currently.

- Water Conservation - Alternative A does not directly address water conservation. However with the increase in the usage rate customers will pay more (then under the current rates) for each CCF of water consumed which may incentivize the wise use of water.

- **Alternative B** - Consists of a bi-monthly fixed charge based on meter size and a unit rate volume charge.

Alternative B - Fixed Charge

Bi-Monthly Fixed Charge	Alternative B - 2011 Inside and Outside Village
5/8"	$8.25
1"	$12.40
1 ½"	$41.25
2"	$66.00
3"	$123.70
4"	$206.15
6"	$412.30
10"	$989.50

Alternative B - Usage Rate

	Alternative B - 2011	
	Inside Village	Outside Village
Usage Rate per CCF	$3.30	$3.80

Similar to Alternative A, Alternative B is a very common rate structure among water utilities around the country. The rate structure is very similar to Alternative A with the only exception being that the structure includes a fixed charge based on meter size which does not include a minimum quantity of water. A customer who uses 4 CCF of water would be charge the fixed charge plus the usage rate for all 4 CCF of meter water. Additionally, the fixed charge is designed to collection 14% of the revenues compared to the 7.5% under the current structure. The costs recovered by the fixed charge include administration, billing and customer service and meter maintenance. The following observations are made in regards to Alternative B's ability to meet the pricing goals and objectives.

- Cost of Service Recovery - The proposed increases in rates included in Alternative B will assist in ensuring that the cost of operating and maintaining the water system is recovered.

- Minimizing Customer Impact - Alternative B will impact customers differently based on how much water is used. The structure is not drastically different from the current structure so the customer impacts are therefore minimized.

- Revenue Stability - Alternative B will increase the revenue stability within the Water Fund. The rate structure will provide guaranteed revenues of approximately 14% of the total revenues which is nearly double the current amount guaranteed (7.5%, Alternative A).

- Water Conservation - Alternative B will do the least of any of the alternatives to address water conservation. As the result of an increased fixed portion of the bill the incentive to conserve is reduced.

- **Alternative C** - Contains a bi-monthly fixed charge based on meter size with multiple class inclining block rate variable charges.

Alternative C - Fixed Charge

Bi-Monthly Fixed Charge	Alternative C - 2011 Inside and Outside Village
5/8"	$8.25
1"	$12.40
1 ½"	$41.25
2"	$66.00
3"	$123.70
4"	$206.15
6"	$412.30
10"	$989.50

Alternative C - Usage Rate

	Inside Village	Outside Village
Residential Rate Structure		
Level 1: 0 – 15 CCFs	$2.85	$3.40
Level 2: 15 – 30 CCFs	$3.60	$4.25
Level 3: Over 30 CCFs	$4.30	$5.10
Commercial Rate Structure		
Level 1: 0 - 100 CCFs	$2.85	$3.40
Level 2: 100 - 200 CCFs	$3.60	$4.25
Level 3: Over 200 CCFs	$4.30	$5.10
Industrial Rate Structure		
Level 1: 0 - 130 CCFs	$2.85	-
Level 2: 130 - 260 CCFs	$3.60	-
Level 3: Over 260 CCFs	$4.30	-

Alternative C provides the greatest change from the current rate structure. It includes the same fixed charge approach included in Alternative B but the usage charge includes an inclining block structure designed to encourage water conservation. The rate structure is designed to charge each customer class a premium for water used each bi-monthly period that is above what is defined as non-discretionary use (i.e. winter water usage). For each customer class the usage levels are set as follows:

- Level 1 - Usage up to 125% of winter bi-monthly usage
- Level 2 - Usage up to 250% of winter bi-monthly usage
- Level 3 - Usage over 250% of winter bi-monthly usage

It should be noted that the Village does not serve any industrial customers outside of the Village and therefore a rate is not provided for these customers. The following observations are made in regards to Alternative C's ability to meet the pricing goals and objectives.

- Cost of Service Recovery - The proposed increases in rates included in Alternative C will assist in ensuring that the cost of operating and maintaining the water system is recovered.

- Minimizing Customer Impact - Alternative C will impact customers differently based on how much water is used. The structure differs from the current structure most dramatically and therefore will result in some customers experiencing potentially significant increases or decreases to their bills.

- Revenue Stability - Alternative C will increase the revenue stability within the Water Fund. The rate structure will provide guaranteed revenues of approximately 14% of the total revenues which is double the current amount guaranteed. However inclining block rate structures often result in greater revenue volatility due to customer usage and weather conditions. So the 76% of revenues collected from the usage rate will most likely be less stable.

- Water Conservation - Alternative C is designed to encourage water conservation. The variable charge is specifically designed to encourage water. However this is tempered to some degree by the increased fixed charge as discussed with Alternative B. It is assumed however the customers will reduce their water usage in the Level 2 block by 4% and the Level 3 block by 7%, based on price elasticity.

The following exhibits are provided to demonstrate the side-by-side impact on each customer type for each rate alternative. The exhibits present the current bill (under 2010 rates) and the bills for 2011 under each of the alternatives.

Exhibit 10 - Sample Residential Bi-Monthly Bill (5/8" Meter)

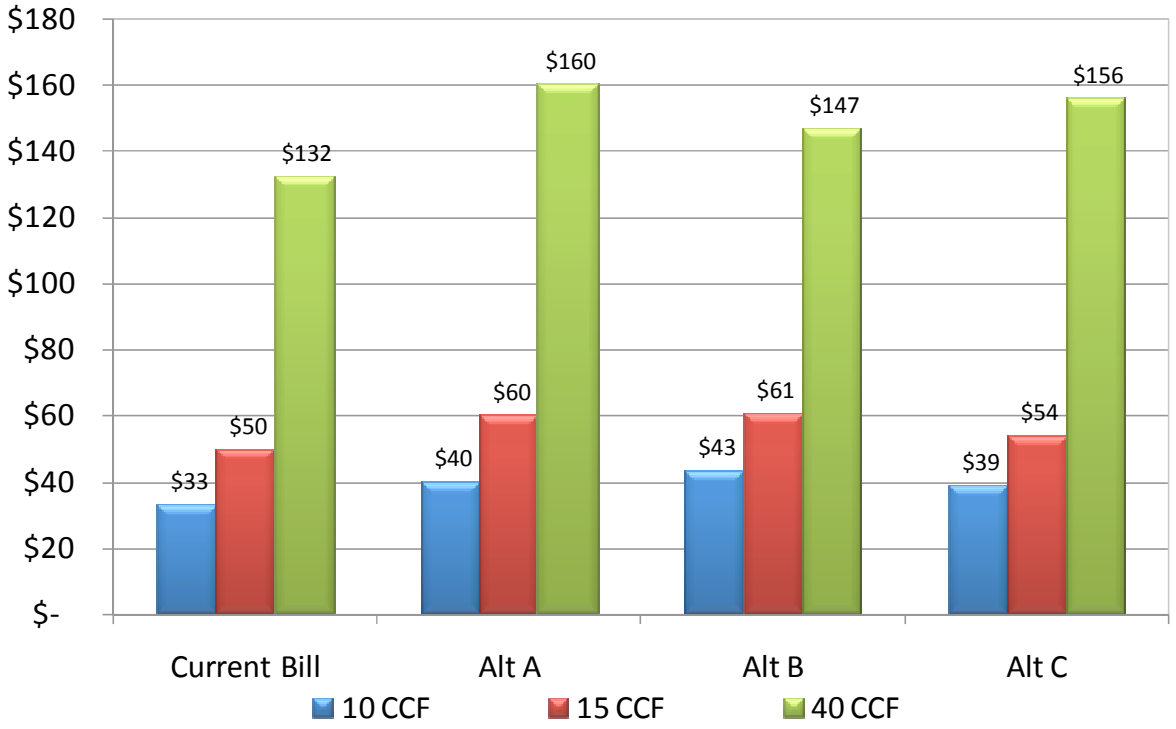
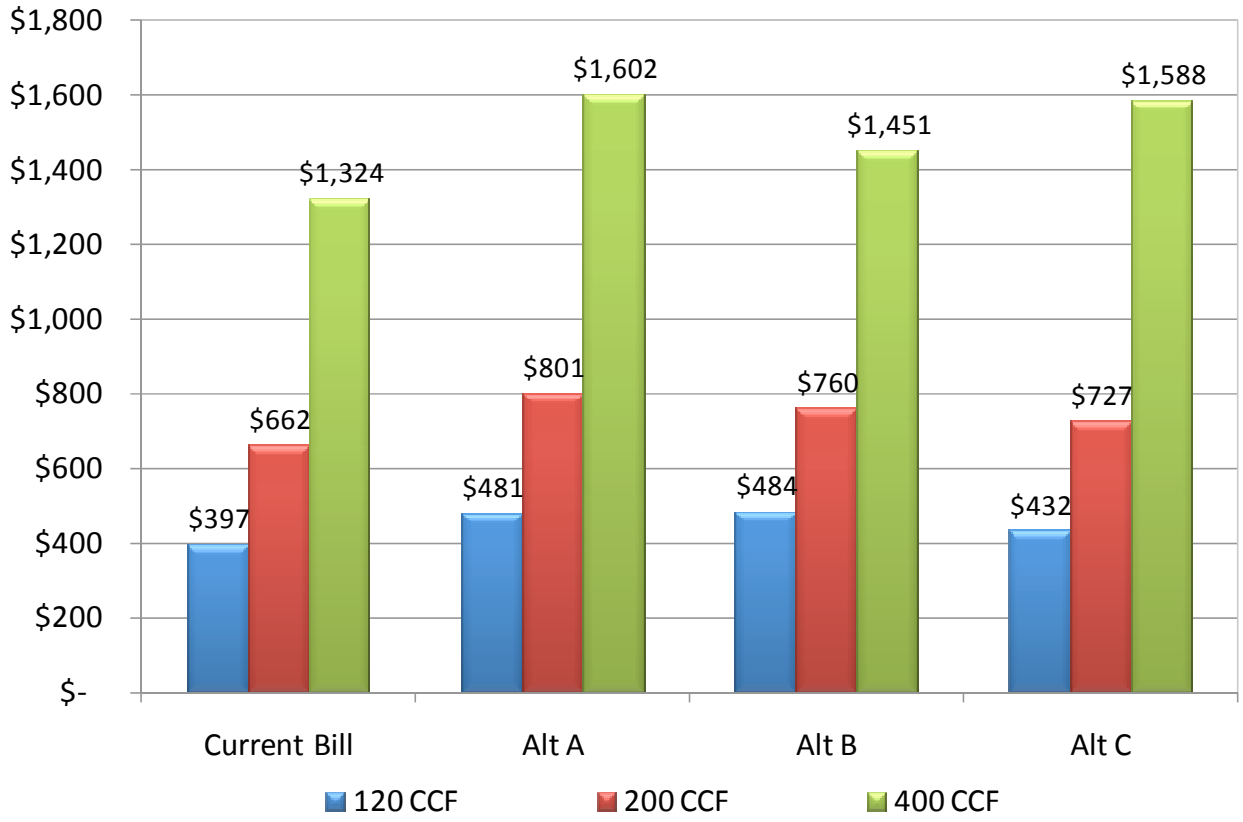


Exhibit 11 - Sample Commercial Bi-Monthly Bill (1 1/2" Meter)

Exhibit 12 - Sample Industrial Bi-Monthly Bill (2" Meter)



The exhibits demonstrate that each alternative will impact customers differently based on usage amounts.

2.3 Recommended Rate Structure

Based on the policy discussions with the Village Staff and review of the rate structures in light of the pricing goals and objectives we recommend that the Village adopt the Alternative B rate structure for the water system with rates effective in 2011. The Alternative B structure is recommended for a number of reasons. The rate structure will:

- Generate approximately 14% more revenue in 2011.
- Collect 14% of revenues in the fixed charges which will assist in increasing stability within the Water Fund.
- Impose the fixed charge based on meter size which better matches the true cost of providing water service to larger sized meters.
- Minimize the impact of the increases for most customers due to the limited change in the rate structure.

The Alternative B structure meets all of the pricing objectives with the exception of water conservation. However based on the ongoing reduction in water sales, it appears that the Village is currently achieving water conservation. The pricing of water is only one of many factors that

influence water conservation. Educational programs, programs offering rain barrels and water using fixture change-out (replacing old water fixtures) all have been shown to encourage the wise use of water. Therefore we would argue that the Village is making strives towards this goal and that at this time a water conservation rate structure would be result in too much change all at once in the rate structure. Over time the Village may want to consider implementing a conservation type structure if conservation does not seem to continue with current practices.

3. Sample Bills

The following tables present sample bills for various customers under the current and recommended Alternative B water rates. The tables are intended to provide an expanding view of the impact on various customers under the proposed alternative along with the cumulative percentage of customers using the demonstrated amount of water.

Table 13 - Sample Inside Village Bi-Monthly Water Bills

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	Recommended 2011 Bill	% Difference
5/8	1	Residential	$6.62	$11.55	74.41%
5/8	2	Residential	$6.62	$14.85	124.26%
5/8	15	Residential	$49.65	$57.75	16.31%
5/8	40	Residential	$132.40	$140.25	5.93%
5/8	5	Commercial	$16.55	$24.75	49.52%
1 1/2	50	Commercial	$165.50	$206.23	24.61%
1 1/2	100	Commercial	$331.00	$371.23	12.15%
1 1/2	250	Commercial	$827.50	$866.23	4.68%
5/8	60	Industrial	$198.60	$206.25	3.85%
2	120	Industrial	$397.20	$461.97	16.31%
2	200	Industrial	$662.00	$725.97	9.66%
2	400	Industrial	$1,324.00	$1,385.97	4.68%

Table 14 - Sample Outside Village Bi-Monthly Water Bills

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	Recommended 2011 Bill	% Difference
5/8	1	Residential	$7.70	$12.05	56.44%
5/8	2	Residential	$7.70	$15.85	105.79%
5/8	15	Residential	$57.75	$65.25	12.98%
5/8	40	Residential	$154.00	$160.25	4.06%
5/8	5	Commercial	$19.25	$27.25	41.54%
1 1/2	50	Commercial	$192.50	$231.23	20.12%
1 1/2	100	Commercial	$385.00	$421.23	9.41%
1 1/2	250	Commercial	$962.50	$991.23	2.98%

Tables 12 and 13 demonstrate that customers that use very little water will see significant percentage increases in their bi-monthly water bills. The actual dollar increases are fairly modest and there are very few customers that use such small quantities of water. The significant percentage increases are due to the change in the rate structure (the increased fixed charge). Given the potential reaction to

these increases, we have developed a phased approach to Alternative B, which will increase the fixed charge over a three year period. The phase-in approach would collect 9.5% of the revenues in the fixed charge in the first year increasing to 11.5% in 2012 and finally at 14% by 2013. This approach would generate the same amount of revenue because the usage rate would be increased to compensate for the phase-in of the fixed charge.

The phased approach to Alternative B is shown in the following table.

Phased Alternative B - Fixed Charge

Bi-Monthly Fixed Charge	2011	2012	2013
5/8”	$5.65	$7.71	$10.50
1”	$8.47	$11.57	$15.75
1 ½”	$28.23	$38.57	$52.52
2”	$45.18	$61.72	$84.02
3”	$84.70	$115.72	$157.55
4”	$141.17	$192.87	$262.58
6”	$282.35	$385.74	$525.15
10”	$677.63	$925.78	$1,260.36

Phased Alternative B - Usage Rate

	2011	2012	2013
Usage Rate per CCF – Inside Village	$3.50	$3.85	$4.25
Usage Rate per CCF – Outside Village	$4.00	$4.45	$4.95

The phase approach would help to lessen the impact on customers using small quantities of water, however we strongly recommend that the Village move towards collecting 14% of revenues in the fixed charge rather than a lesser percentage.

G. CAPITAL AND ANCILLARY SERVICE FEES

Capital fees are collected from new water customers when they connect to the water system or when an existing service is increased in size. Ancillary service fees are imposed upon customers for individual services that are provided and are un-related to the general utility operations or the day-to-day use of the water system. They include items such as penalties, public hydrant use and other one-time type activities related to the water system. As part of the rate study, MFSG reviewed the current fees imposed by the Village to determine if they represent the true cost incurred by the Village while providing the service.

1. Capital Fees

The Village currently collects capital fees from new customers joining the water system. The capital fees are intended to recover the capital costs of providing service to the new customer. The capital fees are currently made up of four components which include a tap fee, a capacity fee, a connection fee and a meter fee. Each of the capital fees are discussed below.

1.1 Tap Fees

The Village's tap fees are intended to recover the actual costs incurred by the Village while taping the water line for connection and providing the corporation stop, B-box and other materials. Currently, the Village charges tap fees based on line size for the tap, which is standard industry practice. It has been a number of years since the Village updated the tap charges. Based on the review of the actual costs of material and labor to provide the tap completed by the Village Staff the current taps fees do not cover the cost of providing a tap to a new customer. We recommend that the Village adopt increased tap fees to ensure that the cost of providing the service is recovered. Additionally we recommend that the fees be increased by 3% per year to reflect inflation. The current and recommended tap fees are presented below.

Table 15 - Current and Recommended Tap Fees

Line Size	Current	2011	2012	2013	2014	2015
1"	$200	$230	$240	$250	$260	$270
1 1/2"	$250	$370	$380	$390	$400	$410
2"	$325	$425	$440	$450	$460	$470
Over 2"	$400	$590	$610	$630	$650	$670

1.2 Meter Fees

The current meter fees imposed by the Village are intended to recover the cost of providing a water meter to a new customer. The fees are based on the size of the meter which is standard industry practice. Similar to the taps fees it has been a number of years since the Village updated the meter fees. Additionally the Village does not currently have a specific charge for meters larger than 2 inches in size. To review the meter fees, the Village Staff provided the actual cost of purchasing water meters for the various sizes of meters. The following table presents the current meter fees and the current actual cost of purchasing meters. We recommend that the meter fees be increased annually by 3% to account for inflation in the cost of meters.

Table 16 - Current and Recommended Meter Fees

Meter Size	Current	2011	2012	2013	2014	2015
5/8” or 3/4"	$250	$260	$270	$280	$290	$300
1"	$325	$370	$380	$390	$400	$410
1 1/2"	$400	$1,500	$1,550	$1,600	$1,650	$1,700
2"	$500	$1,780	$1,830	$1,880	$1,940	$2,000
3”	-	$2,940	$3,030	$3,120	$3,210	$3,310
4”	-	$3,900	$4,020	$4,140	$4,260	$4,390
6”	-	$6,240	$6,430	$6,620	$6,820	$7,020

1.3 Connection and Capacity Fees

The Village currently imposed two additional capital fees; a connection fee based on line size and a capacity fee per connection. Discussions with the Village Staff reveal that the purpose for the separate fees is unclear. However these fees are intended to recover the capital cost of constructing backbone water infrastructure to serve a new customer. To simplify the fees and due to the fact that the rationale for separate fees is unclear, we recommend that the Village combine the fees and call them capacity fees since they are intended recover the purchase of system capacity.

Capacity fees are fairly common within the water industry and are an appropriate means of charging new customers or customers that upsize their service for the cost of constructing water system capacity. To calculate capacity fees it is necessary to examine the historical investments made by the Village to construct the water system and the amount of capacity purchased by a new customer represented by their meter size. The historical investment in the water system used in capacity fee calculations is most often the replacement cost new less depreciation (RCNLD). This value represents the current replacement cost of the non-depreciated assets in the water system. This value serves as a proxy for the cost of providing capacity to new water customers. The Village water system RCNLD value equals approximately $59 million.

In order to calculate the capacity fees, the current amount of the system that is utilized and the ultimate build out have to be calculated. To examine system capacity it is necessary to develop a consistent basis for the various types of customers within the system. For example, a large commercial customer will typically require more system capacity then a residential customer. To put all customers on a similar basis line/meter equivalents are typically used to determine the number of equivalent dwelling units (EDUs) within a system. The American Water Works Association (AWWA) publishes several tables which equate meter sizes to the potential demand that could be placed on the system. Based on the current number of EDU’s and the ultimate build-out of the water system it is estimated that the water system will ultimately serve approximately 24,700 EDU’s based on the current water allocation from the Illinois Department of Natural Resources (IDNR). Therefore the cost of providing capacity is $59 million divided by 24,700 results in a capacity fee of $2,400 per EDU. The following table presents the current and recommended capacity fees for the next five years.

Table 17 - Current and Recommended Capacity / Connection Fees

Line Size	Current			Proposed Capacity Fee
	Connection Fee	Capacity Fee	Total	
1"	$1,900	$600	$2,500	$2,100
1 1/4"	$-	$-	$-	$2,300
1 1/2"	$2,200	$600	$2,800	$5,200
2"	$2,400	$600	$3,000	$10,300
4"	$2,900	$600	$3,500	$16,500
6"	$6,500	$600	$7,100	$31,000
8"	$11,800	$600	$12,400	$51,600
10"	$18,300	$600	$18,900	$103,200
12"	$26,300	$600	$26,900	$247,600

Table 17 demonstrates that the current fees for smaller line sizes are fairly close to the proposed capacity fee. However, as the table demonstrates the current fees significantly under price the cost of providing capacity to larger line sizes (lines 2' to 12"). We recommend that the Village adopt the proposed capacity fees for lines sizes up to 2" but for lines above 2" in size we recommend that the Village should allow for determination of the capacity fee at the discretion of the Public Works Director. The values shown in Table 15 are very substantial and while they do represent the estimated cost of building capacity for large water customers a number of factors should be considered when connecting a large customer particularly the economic impact of a large water user.

Lastly, the majority of development within the Village is redevelopment. As a result, we recommend that the Village impose the capacity fee for existing customers who increase their service connection. The capacity fee should be imposed based the incremental amount of the capacity fee between the line sizes.

2. Ancillary Service Fees

In addition to the water user rates and capital fees, the Village collects ancillary service fees from its customers to offset the cost of providing various services. The Village collects minimal amounts of revenue from these fees. As part of the cost of service study, the current service fees were reviewed to ensure that they set at the appropriate levels. The current and proposed services fees are shown in the following table.

Table 18 - Current and Proposed Ancillary Service Fees

Service	Current	Proposed
Watering Permit - New sod, plants and/or trees	$30	$30
Public Hydrant Usage Security Deposit		
5/8" Meter	$500	$500
1" Meter	$700	$700
3" Meter	$1,800	$1,800
Administrative Fee	$25	$25
Meter Rental Charge (per week)	$10	$10

Service	Current	Proposed
Disconnect/Reconnect		
Service Fee For Shutting Off Water Service (7am to 4pm)	$42	$42
Reconnection Service Fee		
a. Between 7am and 4pm	$42	$42
b. Before 7am or after 4pm	$55	$75
First Offense in Rolling 12-Month Period	$50	$50
Second Offense in Rolling 12-Month Period	$100	$100
Third Offense in Rolling 12-Month Period	$150	$150
Fee For Late Payments	10% of delinquency amount	10% of delinquency amount
Handling and Service Charge	$ 50	$ 50
Disconnection of Water Service Pipes	Actual Cost	Actual Cost
Inspection Fees		
Water Service Tap Inspection Fee	$60	$60
Water Service Disconnect Inspection Fee	$60	$60

As shown in Table 18, the majority of the ancillary service fees are currently set at an appropriate level. The fees were reviewed by the Village Staff to determine if the actual time and material costs are recovered by the current fees. Based on the review the staff concluded that the fees do recover these costs. Out review concluded that the fees are appropriate however we recommend that the reconnection service fees that are completed outside of normal business hours be increased from $55 to $75 to encourage the use of normal utility staff business hours.

The ancillary service fees imposed by the Village are common within the utility industry. However there a few service fees that the Village should implement to further recover the cost of providing water service. These fees were developed by the Village Staff based on cost of providing each service.

Table 19 - New Ancillary Service Fees

Service	Proposed
Public Hydrant Usage Charges	
Water Usage Fee	$5.50 per CCF
Water Fill Up Fee	$5 per fill up at Public Works
Damage to Hydrant Meter, Fire Hydrant or R.O.W	Actual Cost
New Water Service	
Meter Installation and MTU	$60
Service Disconnect	
Damaged Meter or Missing MTU	Actual Cost

The proposed fees are intended to further recover the cost of providing individual services related to the Village water system. The service fees should be reviewed annually to ensure that they match the cost of providing each service.

Appendix – Water Rate Study Model

Village of Downers Grove, IL Water Rate Study
Developed by: Municipal and Financial Services Group, LLC
Last Updated: September 2010

Financial Model Index

I. Global Inputs / Assumptions
Schedule 1 - Control Panel

II. Operating and Capital Expense (Revenue) Data
Schedule 2A - Operating & Maintenance Expenses
Schedule 2B - Dupage Water Purchase
Schedule 3 - Operating & Maintenance Reserve
Schedule 4 - Existing Debt Service
Schedule 5 - Capital Improvement Plan
Schedule 6A - Cash Funded CIP
Schedule 6B - Bond Funded CIP
Schedule 7 - Projected Debt
Schedule 8 - Interest Income
Schedule 9 - Miscellaneous Revenues

III. Asset Management and Reinvestment Plan
Schedule 10A - Capital Asset Raw Data
Schedule 10B - Capital Asset Summary
Schedule 11 - Repair, Renewal, & Replacement Reserve

IV. Revenue Requirements and Financial Plan
Schedule 12 - Revenue Requirements

V. Customer and Consumption Analysis
Schedule 13A - Customer and Consumption Information
Schedule 13B - Winter Bi-Monthly Customer Analysis
Schedule 13C - Customer and Consumption Projections

VI. Water Rate Analysis and Projections
Schedule 14A - FY 08 Rate Reconciliation
Schedule 14B - FY 09 Rate Reconciliation
Schedule 14C - FY 10 Rate Reconciliation
Schedule 14 D - Rate Analysis
Schedule 15 - Rate Projections

VII. Customer Impact and Customer Sample Bills
Schedule 16A - Inside Village Sample Bills
Schedule 16B - Outside Village Sample Bills

VIII. Capital Charges
Schedule 17 - Capacity Fee
Schedule 18 - Capital Fees

X. Cash Flow Statements
Schedule 19 - Operating Cash Flow
Schedule 20 - Cash Balance

SCHEDULE 1 - CONTROL PANEL

Operating Assumptions

		Base Year	Fiscal Year								
	Source	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Overall Operating Expenses Inflation Rate	Industry Estimate			3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Dupage Water Purchase Inflation Rate	Estimate			10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Customer Growth Rate	Village	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Consumption Growth Rate	Village	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%

Capital Assumptions

CIP FUNDING SCENARIO ANALYSIS

		Base Year	Fiscal Year								
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Project Total Maximum Cash Funding	$1,000,000	% Cash Funded										
		100.0%	100.0%	18.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Maximum Yearly Cash Funding	$1,500,000	% Bond Funded										
		0%	0%	82%	0%	0%	0%	0%	0%	0%	0%	0%

*If total Project Funding exceeds Trigger it will be bond funded

Total Cash Funded CIP	$ 1,113,093	$ 285,000	$ 933,300	$ 660,000	$ 600,000	$ 500,000	$ -	$ -	$ -	$ -	$ -

*If total Project Funding does not reach Trigger it will be cash funded

Total Bond Funded CIP	$ -	$ -	$ 5,851,700	$ 2,340,000	$ 2,925,000	$ 5,100,000	$ 1,750,000	$ -	$ -	$ -	$ -

Bond Financing	Bond Issues				
	Bond 1	Bond 2	Bond 3	Bond 4	Bond 5
Fund CIP Beginning Year	2012	2015	2017	2019	2021
Fund CIP Ending Year	2014	2016	2018	2020	2022
Year of Issue	2012	2015	2017	2019	2021
Interest Rate on Borrowings	5.00%	5.00%	5.00%	5.00%	5.00%
Debt Maturity	20	20	20	20	20
Debt Administrative Expense (% of Principal)	1.50%	1.50%	1.50%	1.50%	1.50%
Series Identifier	Bond 1	Bond 2	Bond 3	Bond 4	Bond 5

Model Index

SCHEDULE 2A - OPERATING & MAINTENANCE EXPENSES

1,351,018

Department	Cost Center	Account Number	Account Name	O/A	2007 Actuals	2008 Actuals	2009 Actuals	2010 Adopted	2011 Estimates	2012 Projection	2013 Projection	2014 Projection	2015 Projection	2016 Projection	2017 Projection	2018 Projection	2019 Projection	2020 Projection
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5101.0000	Salaries, Exempt	A	$ 17,681	$ 19,671	$ 19,974	$ 20,084	$ 21,157	$ 21,791	$ 22,445	$ 23,119	$ 23,812	$ 24,526	$ 25,262	$ 26,020	$ 26,801	$ 27,605
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5103.0000	Sick Time	A	$ -	$ 8,184	$ 6,059	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5111.0000	Salaries, Non-Exempt	A	$ 45,933	$ 47,243	$ 46,068	$ 47,212	$ 49,731	$ 51,223	$ 52,759	$ 54,342	$ 55,972	$ 57,652	$ 59,381	$ 61,163	$ 62,997	$ 64,887
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5121.0000	Overtime	A	$ 131	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5131.0000	Imrf Pension Contribs	A	$ 7,964	$ 8,257	$ 7,978	$ 8,775	$ 9,777	$ 10,070	$ 10,372	$ 10,683	$ 11,004	$ 11,334	$ 11,674	$ 12,024	$ 12,385	$ 12,757
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5133.0000	Medicare Contributions	A	$ 876	$ 910	$ 906	$ 903	$ 1,028	$ 1,058	$ 1,090	$ 1,123	$ 1,156	$ 1,191	$ 1,227	$ 1,264	$ 1,302	$ 1,341
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5134.0000	Social Security Contributions	A	$ 3,745	$ 3,891	$ 3,875	$ 3,861	$ 4,395	$ 4,527	$ 4,663	$ 4,803	$ 4,947	$ 5,095	$ 5,248	$ 5,405	$ 5,568	$ 5,735
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5167.0000	Compensated Absences	A	$ 596	$ (288)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5190.0000	Life Insurance	A	$ 158	$ 197	$ 246	$ 251	$ 280	$ 288	$ 297	$ 306	$ 315	$ 325	$ 334	$ 344	$ 355	$ 365
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5191.0000	Health Insurance	A	$ 14,621	$ 17,231	$ 15,965	$ 14,791	$ 18,892	$ 19,458	$ 20,042	$ 20,643	$ 21,263	$ 21,901	$ 22,558	$ 23,234	$ 23,931	$ 24,649
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5195.0000	Optical Insurance	A	$ 195	$ 219	$ 153	$ 149	$ 164	$ 169	$ 174	$ 179	$ 185	$ 190	$ 196	$ 202	$ 208	$ 214
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5197.0000	Dental Insurance	A	$ 1,401	$ 1,692	$ 1,621	$ 1,579	$ 1,735	$ 1,787	$ 1,841	$ 1,896	$ 1,953	$ 2,012	$ 2,072	$ 2,134	$ 2,198	$ 2,264
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5210.0000	Supplies	O	$ -	$ 85	$ 15	$ 30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5303.0000	Seminars, Conferences & Meetings	O	$ 421	$ -	$ 138	$ 500	$ 1,000	$ 1,030	$ 1,061	$ 1,093	$ 1,126	$ 1,159	$ 1,194	$ 1,230	$ 1,267	$ 1,305
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5315.0000	Professional Services	O	$ 29,110	$ 31,574	$ 27,795	$ 70,000	$ 42,000	$ 43,260	$ 44,558	$ 45,895	$ 47,271	$ 48,690	$ 50,150	$ 51,655	$ 53,204	$ 54,800
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5392.0000	Postage	O	$ 45,918	$ 39,833	$ 48,706	$ 34,000	$ 52,000	$ 53,560	$ 55,167	$ 56,822	$ 58,526	$ 60,282	$ 62,091	$ 63,953	$ 65,872	$ 67,848
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5470.0000	Other Equipment Repair and Maintenance	O	$ -	$ -	$ -	$ 4,750	$ 2,000	$ 2,060	$ 2,122	$ 2,185	$ 2,251	$ 2,319	$ 2,388	$ 2,460	$ 2,534	$ 2,610
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5687.0000	Refunds	O	$ -	$ -	$ 193,918	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Finance/Billing	Water Billing/Water Acctg.	481.20.261.5902.0000	Misc Transfers	O	$ -	$ -	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5101.0000	Salaries, Exempt	A	$ 109,642	$ 113,174	$ 112,460	$ 114,128	$ 120,931	$ 124,559	$ 128,296	$ 132,145	$ 136,109	$ 140,192	$ 144,398	$ 148,730	$ 153,192	$ 157,788
Public Works	Water Administration	481.30.391.5103.0000	Sick Time	A	$ -	$ 25,826	$ 19,768	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5111.0000	Salaries, Non-Exempt	A	$ 92,749	$ 97,969	$ 103,012	$ 117,195	$ 109,451	$ 112,734	$ 116,116	$ 119,600	$ 123,188	$ 126,883	$ 130,690	$ 134,610	$ 138,649	$ 142,808
Public Works	Water Administration	481.30.391.5119.0000	Part-Time Employee Wages	A	$ 7,305	$ 7,872	$ 4,080	$ -	$ 6,444	$ 6,637	$ 6,836	$ 7,041	$ 7,253	$ 7,470	$ 7,694	$ 7,925	$ 8,163	$ 8,408
Public Works	Water Administration	481.30.391.5121.0000	Overtime	A	$ 2,923	$ 3,067	$ 948	$ 600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5131.0000	Imrf Pension Contribs	A	$ 26,008	$ 26,925	$ 26,351	$ 29,220	$ 32,492	$ 33,467	$ 34,471	$ 35,505	$ 36,570	$ 37,667	$ 38,797	$ 39,961	$ 41,160	$ 42,394
Public Works	Water Administration	481.30.391.5133.0000	Medicare Contributions	A	$ 2,987	$ 3,123	$ 3,065	$ 3,210	$ 3,416	$ 3,519	$ 3,624	$ 3,733	$ 3,845	$ 3,961	$ 4,079	$ 4,202	$ 4,328	$ 4,458
Public Works	Water Administration	481.30.391.5134.0000	Social Security Contributions	A	$ 12,774	$ 13,354	$ 13,104	$ 13,724	$ 14,606	$ 15,044	$ 15,495	$ 15,960	$ 16,439	$ 16,932	$ 17,440	$ 17,963	$ 18,502	$ 19,057
Public Works	Water Administration	481.30.391.5167.0000	Compensated Absences	A	$ 1,503	$ 10,378	$ (5,759)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5190.0000	Life Insurance	A	$ 607	$ 629	$ 694	$ 750	$ 761	$ 784	$ 807	$ 832	$ 857	$ 882	$ 909	$ 936	$ 964	$ 993
Public Works	Water Administration	481.30.391.5191.0000	Health Insurance	A	$ 31,829	$ 34,898	$ 32,038	$ 31,403	$ 37,821	$ 38,956	$ 40,125	$ 41,328	$ 42,568	$ 43,845	$ 45,161	$ 46,516	$ 47,911	$ 49,348
Public Works	Water Administration	481.30.391.5195.0000	Optical Insurance	A	$ 350	$ 437	$ 423	$ 426	$ 394	$ 405	$ 418	$ 430	$ 443	$ 456	$ 470	$ 484	$ 499	$ 514
Public Works	Water Administration	481.30.391.5197.0000	Dental Insurance	A	$ 4,122	$ 4,719	$ 4,479	$ 4,513	$ 4,164	$ 4,288	$ 4,417	$ 4,550	$ 4,686	$ 4,827	$ 4,971	$ 5,121	$ 5,274	$ 5,432
Public Works	Water Administration	481.30.391.5205.0000	Uniforms	A	$ 229	$ 398	$ -	$ 500	$ 1,055	$ 1,087	$ 1,119	$ 1,153	$ 1,187	$ 1,223	$ 1,260	$ 1,298	$ 1,336	$ 1,377
Public Works	Water Administration	481.30.391.5210.0000	Supplies	A	$ 2,580	$ 4,209	$ 1,621	$ 5,000	$ 10,400	$ 10,712	$ 11,033	$ 11,364	$ 11,705	$ 12,056	$ 12,418	$ 12,791	$ 13,174	$ 13,570
Public Works	Water Administration	481.30.391.5240.0000	Books & Periodicals	A	$ -	$ 63	$ 213	$ 200	$ 500	$ 515	$ 530	$ 546	$ 563	$ 580	$ 597	$ 615	$ 633	$ 652
Public Works	Water Administration	481.30.391.5280.0000	Small Tools & Equipment	A	$ 2,283	$ 511	$ 433	$ 2,400	$ 2,600	$ 2,678	$ 2,758	$ 2,841	$ 2,926	$ 3,014	$ 3,105	$ 3,198	$ 3,294	$ 3,392
Public Works	Water Administration	481.30.391.5302.0000	Dues And Memberships	A	$ 265	$ 480	$ 395	$ 425	$ 425	$ 438	$ 451	$ 464	$ 478	$ 493	$ 507	$ 523	$ 538	$ 555
Public Works	Water Administration	481.30.391.5303.0000	Seminars, Conferences & Meetings	A	$ 960	$ 1,301	$ 840	$ 2,900	$ 2,900	$ 2,987	$ 3,077	$ 3,169	$ 3,264	$ 3,362	$ 3,463	$ 3,567	$ 3,674	$ 3,784
Public Works	Water Administration	481.30.391.5308.0000	Recognition Program-Staff	A	$ 2,090	$ 2,473	$ 1,506	$ 1,324	$ 1,600	$ 1,648	$ 1,697	$ 1,748	$ 1,801	$ 1,855	$ 1,910	$ 1,968	$ 2,027	$ 2,088
Public Works	Water Administration	481.30.391.5315.0000	Professional Services	A	$ 11,429	$ 8,870	$ 7,219	$ 23,861	$ 23,861	$ 24,577	$ 25,314	$ 26,074	$ 26,856	$ 27,661	$ 28,491	$ 29,346	$ 30,226	$ 31,133
Public Works	Water Administration	481.30.391.5322.0000	Personnel Recruitment	A	$ 70	$ 188	$ -	$ -	$ 110	$ 113	$ 117	$ 120	$ 124	$ 128	$ 131	$ 135	$ 139	$ 144
Public Works	Water Administration	481.30.391.5380.0000	Printing Services	O	$ -	$ 64	$ 1,471	$ 200	$ 2,700	$ 2,781	$ 2,864	$ 2,950	$ 3,039	$ 3,130	$ 3,224	$ 3,321	$ 3,420	$ 3,523
Public Works	Water Administration	481.30.391.5391.0000	Telephone	O	$ 30,357	$ 41,299	$ 3,094	$ 1,500	$ 3,960	$ 4,079	$ 4,201	$ 4,327	$ 4,457	$ 4,591	$ 4,728	$ 4,870	$ 5,016	$ 5,167
Public Works	Water Administration	481.30.391.5392.0000	Postage	O	$ 1,268	$ 5,290	$ 1,521	$ 3,700	$ 4,700	$ 4,841	$ 4,986	$ 5,136	$ 5,290	$ 5,449	$ 5,612	$ 5,780	$ 5,954	$ 6,132
Public Works	Water Administration	481.30.391.5470.0000	Other Equipment Repair and Maintenance	O	$ 2,744	$ 725	$ 109	$ 835	$ 835	$ 860	$ 886	$ 912	$ 940	$ 968	$ 997	$ 1,027	$ 1,058	$ 1,089
Public Works	Water Administration	481.30.391.5481.0000	Rentals	O	$ 660	$ 693	$ 1,367	$ 695	$ 695	$ 716	$ 737	$ 759	$ 782	$ 806	$ 830	$ 855	$ 880	$ 907
Public Works	Water Administration	481.30.391.5650.0001	Transfer To ISFs For Allocation	O	$ 4,896	$ 7,860	$ 5,664	$ 5,376	$ 5,422	$ 5,584	$ 5,752	$ 5,925	$ 6,102	$ 6,285	$ 6,474	$ 6,668	$ 6,868	$ 7,074
Public Works	Water Administration	481.30.391.5650.0002	Transfer To ISFs For Allocation	O	$ 900	$ 900	$ 900	$ 1,800	$ 1,800	$ 1,854	$ 1,910	$ 1,967	$ 2,026	$ 2,087	$ 2,149	$ 2,214	$ 2,280	$ 2,349
Public Works	Water Administration	481.30.391.5650.0003	Transfer To ISFs For Allocation	O	$ 19,692	$ 15,612	$ 24,828	$ 8,673	$ 18,342	$ 18,892	$ 19,459	$ 20,043	$ 20,644	$ 21,263	$ 21,901	$ 22,558	$ 23,235	$ 23,932
Public Works	Water Administration	481.30.391.5650.0004	Transfer To ISFs For Allocation	O	$ 55,560	$ 57,444	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5650.0005	Transfer To ISFs For Allocation	O	$ 73,164	$ 75,648	$ 200,004	$ 219,169	$ 220,500	$ 227,115	$ 233,928	$ 240,946	$ 248,175	$ 255,620	$ 263,289	$ 271,187	$ 279,323	$ 287,702
Public Works	Water Administration	481.30.391.5770.0000	Capital Equipment	O	$ -	$ 940	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Administration	481.30.391.5902.0000	Misc Transfers	O	$ 968,916	$ 1,002,840	$ 1,042,944	$ 1,074,235	$ 1,106,462	$ 1,139,656	$ 1,173,846	$ 1,209,061	$ 1,245,333	$ 1,282,693	$ 1,321,173	$ 1,360,809	$ 1,401,633	$ 1,443,682
Public Works	Pumping & Treatment	481.30.392.5103.0000	Sick Time	A	$ -	$ 5,802	$ 4,674	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Pumping & Treatment	481.30.392.5111.0000	Salaries, Non-Exempt	A	$ 44,914	$ 47,433	$ 50,946	$ 52,714	$ 51,862	$ 53,418	$ 55,020	$ 56,671	$ 58,371	$ 60,122	$ 61,926	$ 63,783	$ 65,697	$ 67,668
Public Works	Pumping & Treatment	481.30.392.5119.0000	Part-Time Employee Wages	A	$ 684	$ 3,385	$ 3,640	$ -	$ 4,867	$ 5,013	$ 5,164	$ 5,319	$ 5,478	$ 5,642	$ 5,812	$ 5,986	$ 6,166	$ 6,351
Public Works	Pumping & Treatment	481.30.392.5121.0000	Overtime	A	$ 6,921	$ 3,389	$ 1,486	$ 7,000	$ 15,000	$ 15,450	$ 15,914	$ 16,391	$ 16,883	$ 17,389	$ 17,911	$ 18,448	$ 19,002	$ 19,572
Public Works	Pumping & Treatment	481.30.392.5131.0000	Imrf Pension Contribs	A	$ 8,124	$ 7,386	$ 7,241	$ 9,145	$ 8,588	$ 8,845	$ 9,111	$ 9,384	$ 9,666	$ 9,955	$ 10,254	$ 10,562	$ 10,879	$ 11,205
Public Works	Pumping & Treatment	481.30.392.5133.0000	Medicare Contributions	A	$ 919	$ 881	$ 881	$ 952	$ 973	$ 1,003	$ 1,033	$ 1,064	$ 1,096	$ 1,128	$ 1,162	$ 1,197	$ 1,233	$ 1,270
Public Works	Pumping & Treatment	481.30.392.5134.0000	Social Security Contributions	A	$ 3,929	$ 3,769	$ 3,765	$ 4,072	$ 4,162	$ 4,287	$ 4,416	$ 4,548	$ 4,684	$ 4,825	$ 4,970	$ 5,119	$ 5,272	$ 5,431
Public Works	Pumping & Treatment	481.30.392.5167.0000	Compensated Absences	A	$ 471	$ 417	$ 146	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Pumping & Treatment	481.30.392.5190.0000	Life Insurance	A	$ 83	$ 92	$ 176	$ 191	$ 224	$ 231	$ 238	$ 245	$ 252	$ 260	$ 267	$ 275	$ 284	$ 292
Public Works	Pumping & Treatment	481.30.392.5191.0000	Health Insurance	A	$ 12,580	$ 13,785	$ 12,834	$ 12,493	$ 15,187	$ 15,642	$ 16,111	$ 16,595	$ 17,093	$ 17,605	$ 18,134	$ 18,678	$ 19,238	$ 19,815
Public Works	Pumping & Treatment	481.30.392.5195.0000	Optical Insurance	A	$ 175	$ 175	$ 122	$ 128	$ 131	$ 135	$ 139	$ 143	$ 148	$ 152	$ 157	$ 161	$ 166	$ 171
Public Works	Pumping & Treatment	481.30.392.5197.0000	Dental Insurance	A	$ 1,148	$ 1,353	$ 1,297	$ 1,353	$ 1,388	$ 1,429	$ 1,472	$ 1,517	$ 1,562	$ 1,609	$ 1,657	$ 1,707	$ 1,758	$ 1,811
Public Works	Pumping & Treatment	481.30.392.5205.0000	Uniforms	A	$ 591	$ 334	$ 153	$ 300	$ 655	$ 675	$ 695	$ 716	$ 737	$ 759	$ 782	$ 806	$ 830	$ 855
Public Works	Pumping & Treatment	481.30.392.5210.0000	Supplies	O	$ 3,096	$ 532	$ 1,267	$ 2,000	$ 2,785	$ 2,869	$ 2,955	$ 3,043	$ 3,135	$ 3,229	$ 3,325	$ 3,425	$ 3,528	$ 3,634
Public Works	Pumping & Treatment	481.30.392.5226.0000	Chemicals And Salt	O	$ -	$ -	$ -	$ 300	$ 300	$ 309	$ 318	$ 328	$ 338	$ 348	$ 358	$ 369	$ 380	$ 391
Public Works	Pumping & Treatment	481.30.392.5251.0000	Maintenance Supplies	O	$ 86	$ 3,244	$ -	$ 8,750	$ 1,000	$ 1,030	$ 1,061	$ 1,093	$ 1,126	$ 1,159	$ 1,194	$ 1,230	$ 1,267	$ 1,305
Public Works	Pumping & Treatment	481.30.392.5256.0000	Water Pump Maintenance Supplies	O	$ 983	$ 1,699	$ 1,028	$ 1,000	$ 1,500	$ 1,545	$ 1,591	$ 1,639	$ 1,688	$ 1,739	$ 1,791	$ 1,845	$ 1,900	$ 1,957
Public Works	Pumping & Treatment	481.30.392.5280.0000	Small Tools & Equipment	O	$ 1,166	$ 2,718	$ 3,829	$ 3,900	$ 3,900	$ 4,017	$ 4,138	$ 4,262	$ 4,389	$ 4,521	$ 4,657	$ 4,797	$ 4,940	$ 5,089
Public Works	Pumping & Treatment	**481.30.392.5291.0000**	**Water Purchase**	O	**$ 2,960,799**	**$ 2,774,116**	**$ 3,403,352**	**$ 4,001,127**	**$ 4,300,000**	**$ 4,730,000**	**$ 5,203,000**	**$ 5,723,300**	**$ 6,295,630**	**$ 6,925,193**	**$ 7,617,712**	**$ 8,379,484**	**$ 9,217,432**	**$ 10,139,175**
Public Works	Pumping & Treatment	481.30.392.5302.0000	Dues And Memberships	O	$ 165	$ 232	$ 182	$ 495	$ 200	$ 206	$ 212	$ 219	$ 225	$ 232	$ 239	$ 246	$ 253	$ 261
Public Works	Pumping & Treatment	481.30.392.5303.0000	Seminars, Conferences & Meetings	O	$ 859	$ 895	$ 621	$ 550	$ 600	$ 618	$ 637	$ 656	$ 675	$ 696	$ 716	$ 738	$ 760	$ 783
Public Works	Pumping & Treatment	481.30.392.5315.0000	Professional Services	O	$ 10,000	$ 15,395	$ 8,575	$ 58,224	$ 66,491	$ 88,991	$ 111,491	$ 114,836	$ 118,281	$ 121,829	$ 125,484	$ 129,249	$ 133,126	$ 137,120
Public Works	Pumping & Treatment	481.30.392.5322.0000	Personnel Recruitment	O	$ 45	$ 47	$ 141	$ -	$ 60	$ 62	$ 64	$ 66	$ 68	$ 70	$ 72	$ 74	$ 76	$ 78
Public Works	Pumping & Treatment	481.30.392.5391.0000	Telephone	O	$ 11,264	$ 7,723	$ 2,661	$ 10,100	$ 13,445	$ 13,848	$ 14,264	$ 14,692	$ 15,132	$ 15,586	$ 16,054	$ 16,536	$ 17,032	$ 17,543
Public Works	Pumping & Treatment	481.30.392.5430.0000	Building Maintenance Services	O	$ -	$ 65	$ 685	$ 3,000	$ 6,000	$ 6,180	$ 6,365	$ 6,556	$ 6,753	$ 6,956	$ 7,164	$ 7,379	$ 7,601	$ 7,829
Public Works	Pumping & Treatment	481.30.392.5461.0000	Utilities	O	$ 41,011	$ 40,456	$ 55,435	$ 50,000	$ 50,000	$ 51,500	$ 53,045	$ 54,636	$ 56,275	$ 57,964	$ 59,703	$ 61,494	$ 63,339	$ 65,239
Public Works	Pumping & Treatment	481.30.392.5470.0000	Other Equipment Repair and Maintenance	O	$ 1,188	$ 100	$ 2,792	$ 4,000	$ 8,000	$ 8,240	$ 8,487	$ 8,742	$ 9,004	$ 9,274	$ 9,552	$ 9,839	$ 10,134	$ 10,438
Public Works	Pumping & Treatment	481.30.392.5650.0001	Transfer To ISFs For Allocation	O	$ 2,688	$ 2,748	$ 2,748	$ 2,601	$ 2,631	$ 2,710	$ 2,791	$ 2,875	$ 2,961	$ 3,050	$ 3,141	$ 3,236	$ 3,333	$ 3,433
Public Works	Pumping & Treatment	481.30.392.5650.0002	Transfer To ISFs For Allocation	O	$ 600	$ 2,100	$ 2,100	$ 250	$ 250	$ 258	$ 265	$ 273	$ 281	$ 290	$ 299	$ 307	$ 317	$ 326
Public Works	Pumping & Treatment	481.30.392.5650.0003	Transfer To ISFs For Allocation	O	$ 16,836	$ 5,904	$ 13,128	$ 5,935	$ 7,465	$ 7,689	$ 7,920	$ 8,158	$ 8,402	$ 8,654	$ 8,914	$ 9,181	$ 9,457	$ 9,741
Public Works	Pumping & Treatment	481.30.392.5760.0000	Improvements Other Than Buildings	O	$ 11,863	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Pumping & Treatment	481.30.392.5850.0000	Buildings	O	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Pumping & Treatment	481.30.392.5860.0000	Improvements Other Than Buildings	O	$ -	$ -	$ -	$ 133,664	$ 60,000	$ 61,800	$ 63,654	$ 65,564	$ 67,531	$ 69,556	$ 71,643	$ 73,792	$ 76,006	$ 78,286
Public Works	Water Distribution	481.30.393.5103.0000	Sick Time	A	$ -	$ 30,709	$ 30,717	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public Works	Water Distribution	481.30.393.5111.0000	Salaries, Non-Exempt	A	$ 266,134	$ 251,065	$ 334,807	$ 403,430	$ 404,465	$ 416,599	$ 429,097	$ 441,970	$ 455,229	$ 468,886	$ 482,953	$ 497,441	$ 512,365	$ 527,736
Public Works	Water Distribution	481.30.393.5119.0000	Part-Time Employee Wages	A	$ 14,185	$ 9,370	$ 4,310	$ -	$ 11,750	$ 12,102	$ 12,465	$ 12,839	$ 13,225	$ 13,621	$ 14,030	$ 14,451	$ 14,884	$ 15,331

SCHEDULE 2A - OPERATING & MAINTENANCE EXPENSES

					1,351,018																
Public Works	Water Distribution	481.30.393.5121.0000	Overtime	A	$ 73,069	$ 68,327	$ 54,126	$ 48,000	$ 53,000	$ 54,590	$ 56,228	$ 57,915	$ 59,652	$ 61,442	$ 63,285	$ 65,183	$ 67,139	$ 69,153			
Public Works	Water Distribution	481.30.393.5131.0000	Imrf Pension Contribs	A	$ 48,870	$ 52,612	$ 55,617	$ 39,667	$ 65,826	$ 67,801	$ 69,835	$ 71,930	$ 74,088	$ 76,311	$ 78,600	$ 80,958	$ 83,387	$ 85,888			
Public Works	Water Distribution	481.30.393.5133.0000	Medicare Contributions	A	$ 5,174	$ 5,212	$ 5,878	$ 6,853	$ 6,920	$ 7,128	$ 7,342	$ 7,562	$ 7,789	$ 8,022	$ 8,263	$ 8,511	$ 8,766	$ 9,029			
Public Works	Water Distribution	481.30.393.5134.0000	Social Security Contributions	A	$ 22,127	$ 22,287	$ 25,134	$ 29,300	$ 29,590	$ 30,478	$ 31,392	$ 32,334	$ 33,304	$ 34,303	$ 35,332	$ 36,392	$ 37,484	$ 38,608			
Public Works	Water Distribution	481.30.393.5167.0000	Compensated Absences	A	$ 1,024	$ 8,995	$ 12,134	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
Public Works	Water Distribution	481.30.393.5190.0000	Life Insurance	A	$ 635	$ 732	$ 1,440	$ 1,775	$ 1,611	$ 1,659	$ 1,709	$ 1,760	$ 1,813	$ 1,868	$ 1,924	$ 1,981	$ 2,041	$ 2,102			
Public Works	Water Distribution	481.30.393.5191.0000	Health Insurance	A	$ 74,678	$ 84,627	$ 86,557	$ 98,888	$ 100,634	$ 103,653	$ 106,762	$ 109,965	$ 113,264	$ 116,662	$ 120,162	$ 123,767	$ 127,480	$ 131,304			
Public Works	Water Distribution	481.30.393.5195.0000	Optical Insurance	A	$ 1,031	$ 1,051	$ 709	$ 808	$ 750	$ 773	$ 796	$ 820	$ 844	$ 870	$ 896	$ 923	$ 950	$ 979			
Public Works	Water Distribution	481.30.393.5197.0000	Dental Insurance	O	$ 7,114	$ 8,210	$ 8,826	$ 9,938	$ 9,332	$ 9,612	$ 9,900	$ 10,197	$ 10,503	$ 10,818	$ 11,142	$ 11,477	$ 11,821	$ 12,176			
Public Works	Water Distribution	481.30.393.5205.0000	Uniforms	O	$ 2,933	$ 2,773	$ 3,017	$ 4,760	$ 4,760	$ 4,903	$ 5,050	$ 5,201	$ 5,357	$ 5,518	$ 5,684	$ 5,854	$ 6,030	$ 6,211			
Public Works	Water Distribution	481.30.393.5210.0000	Supplies	O	$ 1,664	$ 1,590	$ 6,710	$ 2,000	$ 2,000	$ 2,060	$ 2,122	$ 2,185	$ 2,251	$ 2,319	$ 2,388	$ 2,460	$ 2,534	$ 2,610			
Public Works	Water Distribution	481.30.393.5251.0000	Maintenance Supplies	O	$ 12,581	$ 49,226	$ 42,578	$ 56,450	$ 61,450	$ 63,294	$ 65,192	$ 67,148	$ 69,163	$ 71,237	$ 73,375	$ 75,576	$ 77,843	$ 80,178			
Public Works	Water Distribution	481.30.393.5257.0000	Trans & Distribution Supplies-New Constr	O	$ 69,882	$ 73,997	$ 45,381	$ 40,000	$ 48,455	$ 49,909	$ 51,406	$ 52,948	$ 54,537	$ 56,173	$ 57,858	$ 59,594	$ 61,381	$ 63,223			
Public Works	Water Distribution	481.30.393.5258.0000	Transmission & Distribution Maintenance	O	$ 49,222	$ 7,350	$ 9,725	$ 15,000	$ 25,126	$ 25,880	$ 26,656	$ 27,456	$ 28,280	$ 29,128	$ 30,002	$ 30,902	$ 31,829	$ 32,784			
Public Works	Water Distribution	481.30.393.5259.0000	Hydrant Maintenance Supplies	O	$ 44,708	$ 31,261	$ 47,562	$ 42,000	$ 68,499	$ 70,554	$ 72,671	$ 74,851	$ 77,096	$ 79,409	$ 81,791	$ 84,245	$ 86,772	$ 89,376			
Public Works	Water Distribution	481.30.393.5270.0000	Asset Maintenance Supplies	O	$ 241	$ -	$ -	$ 6	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
Public Works	Water Distribution	481.30.393.5280.0000	Small Tools & Equipment	O	$ 5,241	$ 7,121	$ 4,470	$ 21,091	$ 14,700	$ 15,141	$ 15,595	$ 16,063	$ 16,545	$ 17,041	$ 17,553	$ 18,079	$ 18,622	$ 19,180			
Public Works	Water Distribution	481.30.393.5302.0000	Dues And Memberships	O	$ 50	$ 90	$ -	$ 50	$ 100	$ 103	$ 106	$ 109	$ 113	$ 116	$ 119	$ 123	$ 127	$ 130			
Public Works	Water Distribution	481.30.393.5303.0000	Seminars, Conferences & Meetings	O	$ 2,033	$ 1,249	$ 120	$ 1,400	$ 1,400	$ 1,442	$ 1,485	$ 1,530	$ 1,576	$ 1,623	$ 1,672	$ 1,722	$ 1,773	$ 1,827			
Public Works	Water Distribution	481.30.393.5315.0000	Professional Services	O	$ 34,670	$ 194,692	$ 207,271	$ 140,830	$ 278,150	$ 303,150	$ 328,150	$ 337,995	$ 348,134	$ 358,578	$ 369,336	$ 380,416	$ 391,828	$ 403,583			
Public Works	Water Distribution	481.30.393.5322.0000	Personnel Recruitment	O	$ 180	$ 94	$ -	$ -	$ 120	$ 124	$ 127	$ 131	$ 135	$ 139	$ 143	$ 148	$ 152	$ 157			
Public Works	Water Distribution	481.30.393.5391.0000	Telephone	O	$ 3,895	$ 2,739	$ 1,810	$ 1,810	$ 2,780	$ 2,863	$ 2,949	$ 3,038	$ 3,129	$ 3,223	$ 3,319	$ 3,419	$ 3,522	$ 3,627			
Public Works	Water Distribution	481.30.393.5431.0000	Contracted Services	O	$ -	$ 10,484	$ -	$ 114,627	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
Public Works	Water Distribution	481.30.393.5455.0000	Waste Disposal	O	$ 40,052	$ 41,700	$ 40,840	$ 28,750	$ 52,500	$ 54,075	$ 55,697	$ 57,368	$ 59,089	$ 60,862	$ 62,688	$ 64,568	$ 66,505	$ 68,501			
Public Works	Water Distribution	481.30.393.5470.0000	Other Equipment Repair and Maintenance	O	$ 78,492	$ 64,194	$ 131,283	$ 15,000	$ 277,950	$ 286,289	$ 294,877	$ 303,723	$ 312,835	$ 322,220	$ 331,887	$ 341,843	$ 352,099	$ 362,662			
Public Works	Water Distribution	481.30.393.5481.0000	Rentals	O	$ 2,247	$ 5,197	$ 1,088	$ 2,500	$ 5,000	$ 5,150	$ 5,305	$ 5,464	$ 5,628	$ 5,796	$ 5,970	$ 6,149	$ 6,334	$ 6,524			
Public Works	Water Distribution	481.30.393.5650.0001	Transfer To ISFs For Allocation	O	$ 33,636	$ 35,112	$ 29,160	$ 44,747	$ 45,122	$ 46,476	$ 47,870	$ 49,306	$ 50,786	$ 52,309	$ 53,878	$ 55,495	$ 57,160	$ 58,874			
Public Works	Water Distribution	481.30.393.5650.0003	Transfer To ISFs For Allocation	O	$ 37,164	$ 36,648	$ 43,824	$ 26,540	$ 34,849	$ 35,894	$ 36,971	$ 38,080	$ 39,223	$ 40,399	$ 41,611	$ 42,860	$ 44,145	$ 45,470			
Public Works	Water Distribution	481.30.393.5740.0000	Infrastructure	O	$ 1,275	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
Public Works	Water Distribution	481.30.393.5770.0000	Capital Equipment	O	$ 23,361	$ -	$ 1,042	$ 2,700	$ 2,700	$ 2,781	$ 2,864	$ 2,950	$ 3,039	$ 3,130	$ 3,224	$ 3,321	$ 3,420	$ 3,523			
Public Works	Water Distribution	481.30.393.5902.0000	Misc Transfers	O	$ 666,585	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			
			Total Operating & Maintenance Expenses		**$ 6,406,952**	**$ 5,803,767**	**$ 7,054,250**	**$ 7,548,011**	**$ 8,180,707**	**$ 8,764,289**	**$ 9,394,053**	**$ 10,040,085**	**$ 10,741,918**	**$ 11,504,870**	**$ 12,334,780**	**$ 13,238,063**	**$ 14,221,769**	**$ 15,293,642**			
			Summary by Budget Category																		
			Billing / Customer Service		168,750	178,699	623,418	206,885	204,158	210,283	216,591	223,089	229,781	236,675	243,775	251,088	258,621	266,380			
			Administration		1,470,861	1,570,180	1,608,790	1,667,962	1,739,346	1,791,526	1,845,272	1,900,630	1,957,649	2,016,379	2,076,870	2,139,176	2,203,351	2,269,452			
			Pumping and Treatment		182,388	172,058	182,554	473,117	327,664	357,999	388,569	400,226	412,233	424,600	437,338	450,458	463,972	477,891			
			Water Distribution		1,624,154	1,108,714	1,236,136	1,198,919	1,609,539	1,674,481	1,740,621	1,792,840	1,846,625	1,902,023	1,959,084	2,017,857	2,078,392	2,140,744			
			Water Purchase		2,960,799	2,774,116	3,403,352	4,001,127	4,300,000	4,730,000	5,203,000	5,723,300	6,295,630	6,925,193	7,617,712	8,379,484	9,217,432	10,139,175			
					$6,406,952	**$5,803,767**	**$7,054,250**	**$7,548,011**	**$8,180,707**	**$8,764,289**	**$9,394,053**	**$10,040,085**	**$10,741,918**	**$11,504,870**	**$12,334,780**	**$13,238,063**	**$14,221,769**	**$15,293,642**			
									8.4%	7.1%	7.2%	6.9%	7.0%	7.1%	7.2%	7.3%	7.4%	7.5%			
			Administrative vs. Operating																		
			Total Administrative O&M Expenses	A	$ 993,471	$ 1,091,258	$ 1,128,524	$ 1,166,453	$ 1,258,671	$ 1,296,431	$ 1,335,324	$ 1,375,384	$ 1,416,646	$ 1,459,145	$ 1,502,919	$ 1,548,007	$ 1,594,447	$ 1,642,281			
			Total Operating O&M Expenses	O	$ 5,413,480	$ 4,712,509	$ 5,925,726	$ 6,381,558	$ 6,922,036	$ 7,467,857	$ 8,058,729	$ 8,664,701	$ 9,325,273	$ 10,045,725	$ 10,831,860	$ 11,690,056	$ 12,627,322	$ 13,651,361			

Village of Downers Grove
Water Rate Study

SCHEDULE 2B - DUPAGE WATER PURCHASE

Account Name	2009 Actuals	2010 Adopted	2011 Projection	2012 Projection	2013 Projection	2014 Projection	2015 Projection	2016 Projection	2017 Projection	2018 Projection	2019 Projection	2020 Projection
Water Purchase - Fixed Charges	$ 504,000	$ 504,000	$ 504,000	$ 554,400	$ 609,840	$ 670,824	$ 737,906	$ 811,697	$ 892,867	$ 982,153	$ 1,080,369	$ 1,188,406
Water Purchase - Variable Charges	$ 2,899,352	$ 3,497,127	$ 3,796,000	$ 4,175,600	$ 4,593,160	$ 5,052,476	$ 5,557,724	$ 6,113,496	$ 6,724,846	$ 7,397,330	$ 8,137,063	$ 8,950,769
Total Water Purchase	**$ 3,403,352**	**$ 4,001,127**	**$ 4,300,000**	**$ 4,730,000**	**$ 5,203,000**	**$ 5,723,300**	**$ 6,295,630**	**$ 6,925,193**	**$ 7,617,712**	**$ 8,379,484**	**$ 9,217,432**	**$ 10,139,175**

Village of Downers Grove
Water Rate Study

SCHEDULE 3 - OPERATING & MAINTENANCE RESERVE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
O&M Expenses	$ 7,548,011	$ 8,180,707	$ 8,764,289	$ 9,394,053	$ 10,040,085	$ 10,741,918	$ 11,504,870	$ 12,334,780	$ 13,238,063	$ 14,221,769	$ 15,293,642
Target Balance (90 days operating)	$ 1,861,153	$ 2,017,161	$ 2,161,058	$ 2,316,342	$ 2,475,637	$ 2,648,692	$ 2,836,817	$ 3,041,453	$ 3,264,180	$ 3,506,737	$ 3,771,035
Begin Year Balance	$ 2,291,968	$ 1,183,775	$ 1,169,113	$ 1,101,606	$ 1,054,911	$ 1,353,269	$ 2,151,573	$ 203,138	$ (2,256,140)	$ (4,409,260)	$ (5,907,595)
Reserve Withdrawals	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water O&M Reserve Contribution	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000

Village of Downers Grove
Water Rate Study

SCHEDULE 4 - EXISTING DEBT SERVICE

Debt Issue		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Series 2001A (to finance AMR)	Principal	$ 450,000	$ 470,000	$ 485,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Series 2001A (to finance AMR)	Interest	$ 53,708	$ 33,003	$ 11,155	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Debt Service Payment		**$ 503,708**	**$ 503,003**	**$ 496,155**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Principal Payment		**$ 450,000**	**$ 470,000**	**$ 485,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Interest Payment		**$ 53,708**	**$ 33,003**	**$ 11,155**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Village of Downers Grove
Water Rate Study

SCHEDULE 5 - CAPITAL IMPROVEMENT PLAN

Project Code	Project	Fund	Project Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total FY 10 - FY 20
WA-015	Watermain Replacement, School Street	481	INF	$ 142,188											$ 142,188
WA-017	Watermain Replacement, Curtiss (Katrine to Belmont)	481	INF			$ 650,000									$ 650,000
WA-018	Watermain Replacement, Wisconsin (Walnut to Janes)	481	INF			$ 650,000									$ 650,000
WA-019	Watermain Replacement, Esterbrook Subdivision, Unit 1	481	INF			$ 730,000									$ 730,000
WA-020	Watermain Replacement, Dawn Place & Stanley Avenue	481	INF	$ 159,962											$ 159,962
WA-021	Watermain Replacement, Sheldon (Florence to Cumnor)	481	INF	$ 479,886											$ 479,886
WA-022	Watermain Replacement, Stanley (Prairie to Rogers)	481	INF	$ 231,056											$ 231,056
WA-023	Watermain Replacement, Lee (Grant to Chicago)	481	INF			$ 235,000									$ 235,000
WA-024	Watermain Replacement, Snowberry (Downers to End)	481	INF			$ 175,000									$ 175,000
WA-025	Watermain Replacement, 40th (Sterling to Fairview)	481	INF			$ 350,000									$ 350,000
WA-026	Watermain Interconnections	481	INF			$ 650,000									$ 650,000
WA-028	Watermain Replacement, Annual Element	481	INF			$ 1,600,000	$ 2,340,000	$ 2,925,000	$ 3,400,000						$ 10,265,000
WA-029	Watermain Relocation, Tollway Widening	481	INF						$ 500,000						$ 500,000
WA-031	Water Meter Replacement Program		CAP		$ 100,000	$ 200,000									$ 300,000
WA-032	Watermain Replacement, KKnottingham		INF		$ 125,000	$ 600,000									$ 725,000
WP-003	Water Tank Painting, Summit	481	BLD				$ 600,000								$ 600,000
WP-005	Water Tank Painting, Maple	481	BLD		$ 60,000	$ 600,000									$ 660,000
WP-006	Storage Building Installation, Maple Tower	481	BLD			$ 225,000									$ 225,000
WP-007	Water Tank Painting, Finley	481	BLD				$ 60,000	$ 600,000							$ 660,000
WP-009	Water System SCADA Improvements	481	SOFT	$ 100,000		$ 120,000									$ 220,000
	Automated Meter Reading		CAP						$ 1,700,000	$ 1,750,000					$ 3,450,000
	Total Capital Improvement Projects			**$ 1,113,093**	**$ 285,000**	**$ 6,785,000**	**$ 3,000,000**	**$ 3,525,000**	**$ 5,600,000**	**$ 1,750,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 22,058,093**
			check	*$1,113,093*	*$285,000*	*$6,785,000*	*$3,000,000*	*$3,525,000*	*$5,600,000*	*$1,750,000*	*$0*	*$0*	*$0*	*$0*	
	Capital Projects By Type														
	Buildings		BLD	$ -	$ 60,000	$ 825,000	$ 660,000	$ 600,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,145,000
	Capital Work in Progress		CWIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Capital Equipment		CAP	$ -	$ 100,000	$ 200,000	$ -	$ -	$ 1,700,000	$ 1,750,000	$ -	$ -	$ -	$ -	$ 3,750,000
	Improvements		IMP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Infrastructure		INF	$ 1,013,093	$ 125,000	$ 5,640,000	$ 2,340,000	$ 2,925,000	$ 3,900,000	$ -	$ -	$ -	$ -	$ -	$ 15,943,093
	Software		SOFT	$ 100,000	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 220,000
	Vehicles		VEH	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
				$ 1,113,093	$ 285,000	$ 6,785,000	$ 3,000,000	$ 3,525,000	$ 5,600,000	$ 1,750,000	$ -	$ -	$ -	$ -	$ 22,058,093

Village of Downers Grove
Water Rate Study

SCHEDULE 6A - CASH FUNDED CAPITAL IMPROVEMENT PROJECTS

Project Code	Project	Fund	Project Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total FY 10 - FY 20
WA-015	Watermain Replacement, School Street	481	INF	$ 142,188	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 142,188
WA-017	Watermain Replacement, Curtiss (Katrine to Belmont)	481	INF	$ -	$ -	$ 117,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 117,000
WA-018	Watermain Replacement, Wisconsin (Walnut to Janes)	481	INF	$ -	$ -	$ 117,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 117,000
WA-019	Watermain Replacement, Esterbrook Subdivision, Unit 1	481	INF	$ -	$ -	$ 131,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 131,400
WA-020	Watermain Replacement, Dawn Place & Stanley Avenue	481	INF	$ 159,962	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 159,962
WA-021	Watermain Replacement, Sheldon (Florence to Cumnor)	481	INF	$ 479,886	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 479,886
WA-022	Watermain Replacement, Stanley (Prairie to Rogers)	481	INF	$ 231,056	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 231,056
WA-023	Watermain Replacement, Lee (Grant to Chicago)	481	INF	$ -	$ -	$ 42,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 42,300
WA-024	Watermain Replacement, Snowberry (Downers to End)	481	INF	$ -	$ -	$ 31,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 31,500
WA-025	Watermain Replacement, 40th (Sterling to Fairview)	481	INF	$ -	$ -	$ 63,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 63,000
WA-026	Watermain Interconnections	481	INF	$ -	$ -	$ 117,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 117,000
WA-028	Watermain Replacement, Annual Element	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-029	Watermain Relocation, Tollway Widening	481	INF	$ -	$ -	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000
WA-031	Water Meter Replacement Program		CAP	$ -	$ 100,000	$ 36,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 136,000
WA-032	Watermain Replacement, KKnottingham		INF	$ -	$ 125,000	$ 108,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 233,000
WP-003	Water Tank Painting, Summit	481	BLD	$ -	$ -	$ -	$ 600,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 600,000
WP-005	Water Tank Painting, Maple	481	BLD	$ -	$ 60,000	$ 108,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 168,000
WP-006	Storage Building Installation, Maple Tower	481	BLD	$ -	$ -	$ 40,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 40,500
WP-007	Water Tank Painting, Finley	481	BLD	$ -	$ -	$ -	$ 60,000	$ 600,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 660,000
WP-009	Water System SCADA Improvements	481	SOFT	$ 100,000	$ -	$ 21,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 121,600
	Automated Meter Reading		CAP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Total Cash Funded Capital Improvement Projects			**$1,113,093**	**$285,000**	**$933,300**	**$660,000**	**$600,000**	**$500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,091,393**
	Capital Projects By Type														
	Buildings		BLD	$ -	$ 60,000	$ 148,500	$ 660,000	$ 600,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,468,500
	Capital Work in Progress		CWIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Capital Equipment		CAP	$ -	$ 100,000	$ 36,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 136,000
	Improvements		IMP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Infrastructure		INF	$ 1,013,093	$ 125,000	$ 727,200	$ -	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 2,365,293
	Software		SOFT	$ 100,000	$ -	$ 21,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 121,600
	Vehicles		VEH	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
				$ 1,113,093	$ 285,000	$ 933,300	$ 660,000	$ 600,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 4,091,393

Village of Downers Grove
Water Rate Study

SCHEDULE 6B - BOND FUNDED CAPITAL IMPROVEMENT PROJECTS

Project Code	Project	Fund	Project Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total FY 10 - FY 20
WA-015	Watermain Replacement, School Street	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-017	Watermain Replacement, Curtiss (Katrine to Belmont)	481	INF	$ -	$ -	$ 533,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 533,000
WA-018	Watermain Replacement, Wisconsin (Walnut to Janes)	481	INF	$ -	$ -	$ 533,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 533,000
WA-019	Watermain Replacement, Esterbrook Subdivision, Unit 1	481	INF	$ -	$ -	$ 598,600	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 598,600
WA-020	Watermain Replacement, Dawn Place & Stanley Avenue	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-021	Watermain Replacement, Sheldon (Florence to Cumnor)	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-022	Watermain Replacement, Stanley (Prairie to Rogers)	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-023	Watermain Replacement, Lee (Grant to Chicago)	481	INF	$ -	$ -	$ 192,700	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 192,700
WA-024	Watermain Replacement, Snowberry (Downers to End)	481	INF	$ -	$ -	$ 143,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 143,500
WA-025	Watermain Replacement, 40th (Sterling to Fairview)	481	INF	$ -	$ -	$ 287,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 287,000
WA-026	Watermain Interconnections	481	INF	$ -	$ -	$ 533,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 533,000
WA-028	Watermain Replacement, Annual Element	481	INF	$ -	$ -	$ 1,600,000	$ 2,340,000	$ 2,925,000	$ 3,400,000	$ -	$ -	$ -	$ -	$ -	$ 10,265,000
WA-029	Watermain Relocation, Tollway Widening	481	INF	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WA-031	Water Meter Replacement Program		CAP	$ -	$ -	$ 164,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 164,000
WA-032	Watermain Replacement, KKnottingham		INF	$ -	$ -	$ 492,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 492,000
WP-003	Water Tank Painting, Summit	481	BLD	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WP-005	Water Tank Painting, Maple	481	BLD	$ -	$ -	$ 492,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 492,000
WP-006	Storage Building Installation, Maple Tower	481	BLD	$ -	$ -	$ 184,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 184,500
WP-007	Water Tank Painting, Finley	481	BLD	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
WP-009	Water System SCADA Improvements	481	SOFT	$ -	$ -	$ 98,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 98,400
	Automated Meter Reading		CAP	$ -	$ -	$ -	$ -	$ -	$ 1,700,000	$ 1,750,000	$ -	$ -	$ -	$ -	$ 3,450,000
	Total Bond Funded Capital Improvement Projects			**$0**	**$0**	**$5,851,700**	**$2,340,000**	**$2,925,000**	**$5,100,000**	**$ 1,750,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 17,966,700**

Future Debt By Future Series Bond	Total Bond Funded Amount	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bond 1	$ 11,116,700	$ -	$ -	$ 5,851,700	$ 2,340,000	$ 2,925,000	$ -	$ -	$ -	$ -	$ -	$ -
Bond 2	$ 6,850,000	$ -	$ -	$ -	$ -	$ -	$ 5,100,000	$ 1,750,000	$ -	$ -	$ -	$ -
Bond 3	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bond 4	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bond 5	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ 17,966,700	**$ -**	**$ -**	**$ 5,851,700**	**$ 2,340,000**	**$ 2,925,000**	**$ 5,100,000**	**$ 1,750,000**	**$ -**	**$ -**	**$ -**	**$ -**

Capital Projects By Type

Buildings	BLD	$ -	$ -	$ 676,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 676,500
Capital Work in Progress	CWIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Equipment	CAP	$ -	$ -	$ 164,000	$ -	$ -	$ 1,700,000	$ 1,750,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,614,000
Improvements	IMP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Infrastructure	INF	$ -	$ -	$ 4,912,800	$ 2,340,000	$ 2,925,000	$ 3,400,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,577,800
Software	SOFT	$ -	$ -	$ 98,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 98,400
Vehicles	VEH	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ 5,851,700	$ 2,340,000	$ 2,925,000	$ 5,100,000	$ 1,750,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 17,966,700

Village of Downers Grove
Water Rate Study

SCHEDULE 7 - PROJECTED DEBT

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bond Series	$ -	$ -	Bond 1	$ -	$ -	Bond 2	$ -	Bond 3	$ -	Bond 4	$ -
Projected Debt	$ -	$ -	$ 11,116,700	$ -	$ -	$ 6,850,000	$ -	$ -	$ -	$ -	$ -
Debt Subtotal	$ -	$ -	$ 11,116,700	$ -	$ -	$ 6,850,000	$ -	$ -	$ -	$ -	$ -
Administrative Costs (% of principal)	0.0%	0.0%	1.5%	0.0%	0.0%	1.5%	0.0%	1.5%	0.0%	1.5%	0.0%
Administrative Costs Subtotal	$ -	$ -	$ 166,751	$ -	$ -	$ 102,750	$ -	$ -	$ -	$ -	$ -
Total Debt	$ -	$ -	$ 11,283,451	$ -	$ -	$ 6,952,750	$ -	$ -	$ -	$ -	$ -
Debt Service											
Interest Rate	0.0%	0.0%	5.0%	0.0%	0.0%	5.0%	0.0%	5.0%	0.0%	5.0%	0.0%
Period (years)	0	0	20	0	0	20	0	20	0	20	0
Total Debt Service	-	-	905,413	-	-	557,907	-	-	-	-	-
Principal Portion	-	-	564,173	-	-	347,638	-	-	-	-	-
Interest Portion	-	-	341,241	-	-	210,269	-	-	-	-	-

Payment Schedule	Year Funded	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bond 1	2012	$ -	$ -	$ -	$ 905,413	$ 905,413	$ 905,413	$ 905,413	$ 905,413	$ 905,413	$ 905,413	$ 905,413
Bond 2	2015	$ -	$ -	$ -	$ -	$ -	$ -	$ 557,907	$ 557,907	$ 557,907	$ 557,907	$ 557,907
Bond 3	2017	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bond 4	2019	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bond 5	2021	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Payment per Year		**$ -**	**$ -**	**$ -**	**$ 905,413**	**$ 905,413**	**$ 905,413**	**$ 1,463,320**	**$ 1,463,320**	**$ 1,463,320**	**$ 1,463,320**	**$ 1,463,320**

Village of Downers Grove
Water Rate Study

SCHEDULE 8 - INTEREST INCOME

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash Investments	$ 2,312,236	$ 1,183,775	$ 1,216,389	$ 1,148,883	$ 1,583,457	$ 2,429,017	$ 3,666,748	$ 5,274,003	$ 7,405,110	$ 10,078,165	$ 13,452,199	$ 17,526,324
Interest Earned on Investments		1.00%	1.00%	1.00%	1.00%	2.00%	2.00%	3.00%	3.00%	4.00%	4.00%	4.00%
TOTAL	**$ -**	**$ 11,838**	**$ 12,164**	**$ 11,489**	**$ 15,835**	**$ 48,580**	**$ 73,335**	**$ 158,220**	**$ 222,153**	**$ 403,127**	**$ 538,088**	**$ 701,053**

Village of Downers Grove
Water Rate Study

SCHEDULE 9 - MISCELLANEOUS REVENUES

	2007 Actuals	2008 Actuals	2009 Actuals	2010 Adopted	2011 Projection	2012 Projection	2013 Projection	2014 Projection	2015 Projection	2016 Projection	2017 Projection	2018 Projection	2019 Projection	2020 Projection
Interest on Investments	$ 319,518	$ 239,321	$ 99,030	$ 26,000	$ 11,838	$ 12,164	$ 11,489	$ 15,835	$ 48,580	$ 73,335	$ 158,220	$ 222,153	$ 403,127	$ 538,088
Watering Permit Fee	$ 1,110	$ 930	$ 1,170	$ 1,600	$ 2,716	$ 2,797	$ 2,881	$ 2,968	$ 3,057	$ 3,149	$ 3,243	$ 3,340	$ 3,441	$ 3,544
Miscellaneous Revenues	$ 3,012,957	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Admin Citation Fee	$ 75	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Water Shut-Off Fee	$ 39,530	$ 47,112	$ 36,344	$ 18,000	$ 36,000	$ 37,080	$ 38,192	$ 39,338	$ 40,518	$ 41,734	$ 42,986	$ 44,275	$ 45,604	$ 46,972
Review & Inspection Fees	$ 15,335	$ 10,295	$ 7,060	$ 6,000	$ 10,000	$ 10,300	$ 10,609	$ 10,927	$ 11,255	$ 11,593	$ 11,941	$ 12,299	$ 12,668	$ 13,048
Costs Recovered for Services	$ (5,078)	$ 1,432	$ 1,416	$ 1,800	$ 1,200	$ 1,236	$ 1,273	$ 1,311	$ 1,351	$ 1,391	$ 1,433	$ 1,476	$ 1,520	$ 1,566
Water System Capacity Charge	$ 80,087	$ 57,273	$ 33,000	$ 25,000	$ 38,000	$ 39,140	$ 40,314	$ 41,524	$ 42,769	$ 44,052	$ 45,374	$ 46,735	$ 48,137	$ 49,581
Water System Connection Charge	$ 125,628	$ 96,565	$ 38,554	$ 40,000	$ 40,000	$ 41,200	$ 42,436	$ 43,709	$ 45,020	$ 46,371	$ 47,762	$ 49,195	$ 50,671	$ 52,191
Water meter & Mike Sales	$ 113,461	$ 71,773	$ 30,964	$ 30,000	$ 35,000	$ 36,050	$ 37,132	$ 38,245	$ 39,393	$ 40,575	$ 41,792	$ 43,046	$ 44,337	$ 45,667
Penalties, etc.	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
Federal, Capital Grants	$ -	$ -	$ -	$ 88,483	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Miscellaneous Revenues	$ 3,852,623	$ 674,701	$ 397,538	$ 386,883	$ 324,754	$ 329,967	$ 334,326	$ 343,857	$ 381,944	$ 412,199	$ 502,750	$ 572,519	$ 759,504	$ 900,656

Village of Downers Grove
Water Rate Study

SCHEDULE 10A -CAPITAL ASSET RAW DATA

Asset #	Description	Asset Status	Asset Class	Asset Category	Asset Life	P Column	Acquire Date	Acquisition Year	Replacement Decade	Original Cost	Accumulated Depreciation	Current Depreciation	Book Value	Last Depreciation Date	Age	Useful Life	Replacement Year	ENR Historical Value	May 2010 ENR	Replacement Cost (Original Cost)	Replacement Cost (Depreciated Value)
000226	PUMP HOUSE BUILT 1962	A	bldg	Buildings	60	p	7/1/1963	1963	2030	$12,683.58	$12,683.58	$143.22	$0.00	12/31/2008	47	60	2023	901	8761	$ 123,331	$ -
000218	PARK STREET RESERVOIR	A	bldg	Buildings	60	p	7/1/1927	1927	1990	$43,293.00	$43,293.00	$0.00	$0.00		83	60	1987	206	8761	$ 1,841,213	$ -
000229	PUMP HOUSE BUILT 1952	A	bldg	Buildings	60	p	7/1/1952	1952	2020	$10,972.80	$10,972.80	$0.00	$0.00	4/30/2005	58	60	2012	569	8761	$ 168,950	$ -
000228	PUMP HOUSE BUILT 1957	A	bldg	Buildings	60	p	7/1/1957	1957	2020	$12,764.71	$12,764.71	$0.00	$0.00	4/30/2006	53	60	2017	724	8761	$ 154,464	$ -
000230	PUBLIC WORKS 5101 WALNUT 4 PARCELS	A	bldg	Buildings	60	p	6/7/1997	1997	2060	$5,547,253.00	$1,395,920.06	$110,948.76	$4,151,332.94	12/31/2009	13	60	2057	5825	8761	$ 8,343,259	$ 6,243,747
000220	PUMP HOUSE BUILT 1977	A	bldg	Buildings	60	p	7/1/1978	1978	2040	$28,701.78	$20,089.63	$637.94	$8,612.15	12/31/2009	32	60	2038	2776	8761	$ 90,582	$ 27,180
000219	PUMP HOUSE BUILT 1971	A	bldg	Buildings	60	p	7/1/1972	1972	2040	$20,561.42	$17,132.91	$457.14	$3,428.51	12/31/2009	38	60	2032	1753	8761	$ 102,760	$ 17,135
000225	PUMP HOUSE BUILT 1969	A	bldg	Buildings	60	p	7/1/1970	1970	2030	$18,297.00	$16,059.13	$406.89	$2,237.87	12/31/2009	40	60	2030	1381	8761	$ 116,075	$ 14,197
000227	PUMP HOUSE BUILT 1968	A	bldg	Buildings	60	p	7/1/1969	1969	2030	$15,606.13	$14,044.07	$347.13	$1,562.06	12/31/2009	41	60	2029	1269	8761	$ 107,743	$ 10,784
000231	WATER TOWER BASE FIRE # 4	A	bldg	Buildings	60	p	7/30/1984	1984	2050	$391,000.00	$220,824.66	$8,689.80	$170,175.34	12/31/2009	26	60	2044	4146	8761	$ 826,230	$ 359,601
000808	WATER SYSTEM SECURITY ENHANCEMENTS	P	cwip	Cap. Work in Progress		p	12/31/2009	2009	2010	$13,033.48	$0.00	$0.00	$13,033.48		1	0	2009	8570	8761	$ 13,324	$ 13,324
000908	2008 FREIGHTLINER MT55/UTILMASTER WATER	P	cwip	Cap. Work in Progress		p	11/14/2008	2008	2010	$153,185.40	$0.00	$0.00	$153,185.40		2	0	2008	8310	8761	$ 161,499	$ 161,499
000263	29-01 AMR METERS	A	cap	Capital Equipment	4	p	4/30/2004	2004	2010	$417,040.78	$417,040.78	$35,448.46	$0.00	12/31/2008	6	4	2008	7115	8761	$ 513,520	$ -
000320	2003 AMR PROJECT IN TOWN WATER METERS	A	cap	Capital Equipment	4	p	4/30/2003	2003	2010	$2,358,021.00	$2,358,021.00	$226,732.79	$0.00	12/31/2007	7	4	2007	6694	8761	$ 3,086,140	$ -
000321	2002 AMR PROJECT IN TOWN WATER METERS	A	cap	Capital Equipment	4	p	4/30/2002	2002	2010	$1,229,226.00	$1,229,226.00	$0.00	$0.00	4/30/2006	8	4	2006	6538	8761	$ 1,647,178	$ -
000252	67TH ST WATER TANK	A	imp	Improvements	7	p	4/3/2001	2001	2010	$1,879,167.00	$1,879,167.00	$71,587.31	$0.00	12/31/2008	9	7	2008	6342	8761	$ 2,595,929	$ -
000249	SUMMIT STREET WATER TANK STEEL	A	imp	Improvements	60	p	7/1/1938	1938	2000	$350,900.00	$350,900.00	$0.00	$0.00	4/30/2006	72	60	1998	236	8761	$ 13,026,419	$ -
000250	DOWNERS DRIVE WATER TANK STEEL	A	imp	Improvements	60	p	7/1/1957	1957	2020	$548,881.20	$548,881.20	$0.00	$0.00	4/30/2006	53	60	2017	724	8761	$ 6,641,917	$ -
000251	71 ST WATER TANK STEEL	A	imp	Improvements	60	p	7/1/1957	1957	2020	$453,300.00	$453,300.00	$0.00	$0.00	4/30/2006	53	60	2017	724	8761	$ 5,485,306	$ -
000259	DOUGLAS & MAIN WTR IMPROV 60-96	A	imp	Improvements	60	p	4/30/2003	2003	2070	$1,105,781.00	$147,413.05	$22,116.18	$958,367.95	12/31/2009	7	60	2063	6694	8761	$ 1,447,228	$ 1,254,297
000258	2000 HYDRANT & WTR IMPROV 04-00	A	imp	Improvements	60	p	4/30/2002	2002	2070	$988,655.00	$151,571.52	$19,773.63	$837,083.48	12/31/2009	8	60	2062	6538	8761	$ 1,324,810	$ 1,121,702
000261	AA- WELL IMPROVEMEMNTS-HIST	A	imp	Improvements	60	p	4/30/1999	1999	2060	$19,864.00	$4,237.17	$397.29	$15,626.83	12/31/2009	11	60	2059	6060	8761	$ 28,718	$ 22,592
000260	AA-WTR TANK IMPROV HISTORY	A	imp	Improvements	60	p	4/30/1999	1999	2060	$3,161,592.00	$674,397.21	$63,233.77	$2,487,194.79	12/31/2009	11	60	2059	6060	8761	$ 4,570,744	$ 3,595,761
000262	AA-HYDRANTS & WTR IMPROV HIST	A	imp	Improvements	60	p	4/30/1999	1999	2060	$714,683.00	$152,448.60	$14,294.10	$562,234.40	12/31/2009	11	60	2059	6060	8761	$ 1,033,224	$ 812,828
000257	MAPLE & BELMONT TANK	A	imp	Improvements	60	p	4/30/1989	1989	2050	$1,124,000.00	$464,552.43	$22,481.17	$659,447.57	12/31/2009	21	60	2049	4615	8761	$ 2,133,773	$ 1,251,879
000256	HIGHLAND/GOOD SAM TANK	A	imp	Improvements	60	p	4/30/1988	1988	2050	$867,000.00	$375,672.85	$17,340.96	$491,327.15	12/31/2009	22	60	2048	4519	8761	$ 1,680,856	$ 952,538
000255	04-98 71 ST ST TANK WASHOUT	A	imp	Improvements	7	p	4/30/2004	2004	2020	$117,060.00	$94,706.62	$16,765.03	$22,353.38	12/31/2009	6	7	2011	7115	8761	$ 144,141	$ 27,525
000248	FINLEY SQUARE WATER TANK STEEL	A	imp	Improvements	60	p	7/1/1970	1970	2030	$523,300.00	$459,295.94	$11,637.10	$64,004.06	12/31/2009	40	60	2030	1381	8761	$ 3,319,791	$ 406,039
000665	HIGHLAND GOOD SAM TANK PAINTING	A	imp	Improvements	60	p	10/24/2006	2006	2070	$581,833.48	$180,877.90	$58,676.43	$400,955.58	12/31/2009	4	60	2066	7751	8761	$ 657,650	$ 453,202
000874	SCADA SYSTEM RADIO	A	imp	Improvements	15	p	12/31/2008	2008	2030	$82,473.20	$5,498.21	$5,498.21	$76,974.99	12/31/2009	2	15	2023	8310	8761	$ 86,949	$ 81,153
000239	WATERMAIN 1950-1959	A	inf	Infrastructure	70	p	4/30/1959	1950	2020	$1,364,648.00	$1,364,648.00	$9,167.93	$0.00	12/31/2009	60	70	2020	510	8761	$ 23,442,512	$ -
000238	WATERMAIN UP TO 1949	A	inf	Infrastructure	70	p	4/30/1949	1920	1990	$1,311,876.00	$1,311,876.00	$0.00	$0.00	4/30/2006	90	70	1990	251	8761	$ 45,790,222	$ -
000872	GIERTZ & WILSON WATERMAIN REPLACEMENT	A	inf	Infrastructure	70	p	10/21/2009	2009	2080	$707,061.51	$2,356.87	$2,356.87	$704,704.64	12/31/2009	1	70	2079	8570	8761	$ 722,820	$ 720,410
000891	WATERMAIN REPLACE AUSTIN ST	A	inf	Infrastructure	70	p	10/21/2009	2009	2080	$323,043.26	$1,076.81	$1,076.81	$321,966.45	12/31/2009	1	70	2079	8570	8761	$ 330,243	$ 329,142
000928	ROGERS ST WATERMAIN REPLACE	A	inf	Infrastructure	70	p	11/11/2009	2009	2080	$640,174.01	$2,133.91	$2,133.91	$638,040.10	12/31/2009	1	70	2079	8570	8761	$ 654,442	$ 652,260
000929	ROGERS STREET RESURFACING	A	inf	Infrastructure	70	p	11/4/2009	2009	2080	$300,000.00	$1,000.00	$1,000.00	$299,000.00	12/31/2009	1	70	2079	8570	8761	$ 306,686	$ 305,664
000247	TCE PROJECT	A	inf	Infrastructure	70	p	4/30/2005	2005	2080	$569,250.00	$53,117.92	$11,385.27	$516,132.08	12/31/2009	5	70	2075	7446	8761	$ 669,782	$ 607,284
000244	WATERMAIN 2000-2003	A	inf	Infrastructure	70	p	4/30/2003	2000	2070	$987,360.00	$131,626.20	$19,747.70	$855,733.80	12/31/2009	10	70	2070	6222	8761	$ 1,390,270	$ 1,204,932
000246	11-03 FAIRVIEW WATERMAIN IMPROVEMENTS	A	inf	Infrastructure	70	p	4/30/2005	2005	2080	$491,729.88	$50,981.40	$10,927.65	$440,748.48	12/31/2009	5	70	2075	7446	8761	$ 578,572	$ 518,587
000245	12-03 WATERMAIN IMPROVEMENTS	A	inf	Infrastructure	70	p	4/30/2005	2005	2080	$737,443.90	$76,456.44	$16,388.12	$660,987.46	12/31/2009	5	70	2075	7446	8761	$ 867,680	$ 777,721
000237	04-98 71 ST WATERMAIN IMPROV	A	inf	Infrastructure	70	p	4/30/2004	2004	2080	$3,625.00	$456.40	$80.56	$3,168.60	12/31/2009	6	70	2074	7115	8761	$ 4,464	$ 3,902
000236	30-01 N. BELMONT WTRMAIN	A	inf	Infrastructure	70	p	4/30/2004	2004	2080	$709,215.07	$89,289.70	$15,760.81	$619,925.37	12/31/2009	6	70	2074	7115	8761	$ 873,286	$ 763,340
000243	WATERMAIN 1990-1999	A	inf	Infrastructure	70	p	4/30/1999	1990	2060	$2,933,505.00	$625,743.75	$58,671.90	$2,307,761.25	12/31/2009	20	70	2060	4732	8761	$ 5,431,200	$ 4,272,675
000242	WATERMAIN 1980-1989	A	inf	Infrastructure	70	p	4/30/1989	1980	2050	$2,623,938.00	$1,084,481.42	$52,481.48	$1,539,456.58	12/31/2009	30	70	2050	3237	8761	$ 7,101,736	$ 4,166,568
000241	WATERMAIN 1970-1979	A	inf	Infrastructure	70	p	4/30/1979	1970	2040	$3,768,405.00	$2,311,131.04	$75,376.24	$1,457,273.96	12/31/2009	40	70	2040	1381	8761	$ 23,906,587	$ 9,244,878
000240	WATERMAIN 1960-1969	A	inf	Infrastructure	70	p	4/30/1969	1960	2030	$2,718,841.00	$2,211,149.36	$54,395.53	$507,691.64	12/31/2009	50	70	2030	824	8761	$ 28,907,483	$ 5,397,920
000667	WATERMAIN REPLACEMENT CORNELL	A	inf	Infrastructure	70	p	10/4/2006	2006	2080	$359,395.96	$22,797.87	$7,199.96	$336,598.09	12/31/2009	4	70	2076	7751	8761	$ 406,227	$ 380,459
000666	WATERMAIN REPLACEMENT 56TH & WILCOX	A	inf	Infrastructure	70	p	10/26/2006	2006	2080	$609,970.72	$37,676.08	$12,219.82	$572,294.64	12/31/2009	4	70	2076	7751	8761	$ 689,453	$ 646,868
000730	PRAIRIE AVENUE RECONSTRUCTION	A	inf	Infrastructure	70	p	12/31/2009	2009	2080	$502,077.68	$0.00	$0.00	$502,077.68		1	70	2079	8570	8761	$ 513,268	$ 513,268
000809	WATERMAIN IMPROVEMENTS SUMMIT ST	A	inf	Infrastructure	70	p	12/31/2007	2007	2080	$709,522.88	$31,534.36	$15,767.18	$677,988.52	12/31/2009	3	70	2077	7966	8761	$ 780,333	$ 745,651
000810	WATERMAIN REPLACE ELMORE AVE	A	inf	Infrastructure	70	p	12/31/2007	2007	2080	$708,783.66	$28,351.34	$14,175.67	$680,432.32	12/31/2009	3	70	2077	7966	8761	$ 779,520	$ 748,339
000811	WATERMAIN REPLACE MAPLE & 55TH	A	inf	Infrastructure	70	p	12/31/2009	2009	2080	$1,585,255.08	$0.00	$0.00	$1,692,936.47		1	70	2079	8570	8761	$ 1,620,586	$ 1,730,667
000813	WATERMAIN REPLACE BROOKBANK RD	A	inf	Infrastructure	70	p	12/31/2008	2008	2080	$351,663.15	$7,033.26	$7,033.26	$344,629.89	12/31/2009	2	70	2078	8310	8761	$ 370,749	$ 363,334
000836	WATERMAIN ACADIA ON THE GREEN	A	inf	Infrastructure	70	p	12/31/2007	2007	2080	$56,843.40	$2,273.74	$1,136.87	$54,569.66	12/31/2009	3	70	2077	7966	8761	$ 62,516	$ 60,016
000873	SUNRIDGE SUB WATERMAIN REPLACEMENT	A	inf	Infrastructure	70	p	12/31/2009	2009	2080	$2,192,192.51	$0.00	$0.00	$2,192,196.76		1	70	2079	8570	8761	$ 2,241,050	$ 2,241,054
000890	59TH STREET WATERMAIN REPLACEMENT	A	inf	Infrastructure	70	p	12/31/2009	2009	2080	$487,775.38	$0.00	$0.00	$487,775.38		1	70	2079	8570	8761	$ 498,646	$ 498,646
000892	WATERMAIN REPLACE CARPENTER ST	A	inf	Infrastructure	70	p	12/31/2008	2008	2080	$809,012.28	$16,180.25	$16,180.25	$792,832.03	12/31/2009	2	70	2078	8310	8761	$ 852,919	$ 835,861
000212	LAND 5101 WALNUT PW	A	land	Land		p	4/30/1989	1989	1990	$2,029,747.90	$0.00	$0.00	$2,029,747.90		21	0	1989	4615	8761	$ 3,853,222	$ 3,853,222
000192	LAND PARCEL PUMPHOUSE DOWNERS DRIVE & OG	A	land	Land		p	4/30/1988	1988	1990	$111,570.00	$0.00	$0.00	$111,570.00		22	0	1988	4519	8761	$ 216,301	$ 216,301
000193	LAND PARCEL PUMPHOUSE 35TH & FINLEY	A	land	Land		p	4/30/1988	1988	1990	$10,700.00	$0.00	$0.00	$10,700.00		22	0	1988	4519	8761	$ 20,744	$ 20,744
000208	LAND PARCEL PUMPHOUSE 71ST CAMDEN	A	land	Land		p	4/30/1988	1988	1990	$3,320.00	$0.00	$0.00	$3,320.00		22	0	1988	4519	8761	$ 6,436	$ 6,436
000209	LAND PARCEL PUMPHOUSE 924 W 67TH ST	A	land	Land		p	4/30/1988	1988	1990	$2,060.00	$0.00	$0.00	$2,060.00		22	0	1988	4519	8761	$ 3,994	$ 3,994
000210	LAND PARCEL PUMPHOUSE 5233 KATRINE	A	land	Land		p	4/30/1988	1988	1990	$10.00	$0.00	$0.00	$10.00		22	0	1988	4519	8761	$ 19	$ 19
000211	LAND PARCEL 1640 W 63RD ST	A	land	Land		p	4/30/1988	1988	1990	$10,950.00	$0.00	$0.00	$10,950.00		22	0	1988	4519	8761	$ 21,229	$ 21,229
000271	GEOGRAPHIC INFORMATION SYSTEM SOFT&EQUIP	A	soft	Software	7	p	4/17/1993	1993	2000	$27,769.00	$27,769.00	$0.00	$0.00	4/30/2006	17	7	2000	5210	8761	$ 46,696	$ -
000747	EDEN FIN SOFTWARE WATER FUND	A	soft	Software	10	p	12/31/2009	2009	2020	$76,312.46	$0.00	$0.00	$76,312.46		1	10	2019	8570	8761	$ 78,013	$ 78,013
000269	1999 FORD F350 #287	A	veh	Vehicles	9	p	1/1/1999	1999	2010	$39,152.00	$35,252.00	$244.81	$3,900.00	12/31/2009	11	9	2008	6060	8761	$ 56,602	$ 5,638
000274	CASE 590 SL BACKHOE #281	A	veh	Vehicles	11	p	1/1/1997	1997	2010	$61,018.00	$61,018.00	$972.32	$0.00	12/31/2007	13	11	2008	5825	8761	$ 91,773	$ -
000265	2000 HONDA CIVIC #105	A	veh	Vehicles	10	p	1/1/2002	2002	2020	$20,238.22	$14,540.53	$1,748.85	$5,697.69	12/31/2009	8	10	2012	6538	8761	$ 27,119	$ 7,635

Model Index

SCHEDULE 10B -CAPITAL ASSET SUMMARY

Asset Category	Values Sum of Original Cost	Sum of Accumulated Depreciation	Sum of Book Value
Buildings	$ 6,101,133	$ 1,763,785	$ 4,337,349
Cap. Work in Progress	$ 166,219	$ -	$ 166,219
Capital Equipment	$ 4,004,288	$ 4,004,288	$ -
Improvements	$ 12,518,490	$ 5,942,920	$ 6,575,570
Infrastructure	$ 28,562,608	$ 9,463,372	$ 19,206,922
Land	$ 2,168,358	$ -	$ 2,168,358
Software	$ 104,081	$ 27,769	$ 76,312
Vehicles	$ 120,408	$ 110,811	$ 9,598
Grand Total	**$ 53,745,586**	**$ 21,312,944**	**$ 32,540,328**

Asset Category	Infrastructure

Sum of Replacement Cost (Original Cost) Replacement Year	Total
1990	$ 45,790,222
2020	$ 23,442,512
2030	$ 28,907,483
2040	$ 23,906,587
2050	$ 7,101,736
2060	$ 5,431,200
2070	$ 1,390,270
2074	$ 877,750
2075	$ 2,116,034
2076	$ 1,095,681
2077	$ 1,622,369
2078	$ 1,223,668
2079	$ 6,887,740
Grand Total	**$ 149,793,251**

Asset Category	(Multiple Items)

Sum of Replacement Cost (Original Cost) Replacement Year	Total
1987	$ 1,841,213
1998	$ 13,026,419
2006	$ 1,647,178
2007	$ 3,086,140
2008	$ 3,109,449
2011	$ 144,141
2012	$ 168,950
2017	$ 12,281,687
2023	$ 210,280
2029	$ 107,743
2030	$ 3,435,866
2032	$ 102,760
2038	$ 90,582
2044	$ 826,230
2048	$ 1,680,856
2049	$ 2,133,773
2057	$ 8,343,259
2059	$ 5,632,685
2062	$ 1,324,810
2063	$ 1,447,228
2066	$ 657,650
Grand Total	**$ 61,298,900**

Model Index

SCHEDULE 11 - REPAIR, RENEWAL AND REPLACEMENT RESERVE (3R RESERVE)

	Useful Life	Rate of Reinvestment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Required Annual Reinvestment - Above Ground Asset Data												
Planned Reinvestment												
Buildings			$ 60,000	$ 825,000	$ 660,000	$ 600,000	$ -	$ -	$ -	$ -	$ -	$ -
Capital Equipment			$ 100,000	$ 200,000	$ -	$ -	$ 1,700,000	$ 1,750,000	$ -	$ -	$ -	$ -
Improvements			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capital Investment			$ 160,000	$ 1,025,000	$ 660,000	$ 600,000	$ 1,700,000	$ 1,750,000	$ -	$ -	$ -	$ -
Book Value of Fixed Assets												
Buildings			$ 6,101,133	$ 6,161,133	$ 6,986,133	$ 7,646,133	$ 8,246,133	$ 8,246,133	$ 8,246,133	$ 8,246,133	$ 8,246,133	$ 8,246,133
Capital Equipment			$ 4,152,465	$ 4,252,465	$ 4,452,465	$ 4,452,465	$ 4,452,465	$ 6,152,465	$ 7,902,465	$ 7,902,465	$ 7,902,465	$ 7,902,465
Improvements			$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490	$ 12,518,490
Total Book Value of Assets			$ 22,772,088	$ 22,932,088	$ 23,957,088	$ 24,617,088	$ 25,217,088	$ 26,917,088	$ 28,667,088	$ 28,667,088	$ 28,667,088	$ 28,667,088
Buildings	50	2.00%	$ 62,023	$ -	$ -	$ -	$ 164,923	$ 164,923	$ 164,923	$ 164,923	$ 164,923	$ 164,923
Capital Equipment	15	6.67%	$ 176,831	$ 83,498	$ 296,831	$ 296,831	$ -	$ -	$ 526,831	$ 526,831	$ 526,831	$ 526,831
Improvements	50	2.00%	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370	$ 250,370
Total Calculated Above Ground Reserve Contribution			**$ 489,223**	**$ 333,867**	**$ 547,201**	**$ 547,201**	**$ 415,292**	**$ 415,292**	**$ 942,123**	**$ 942,123**	**$ 942,123**	**$ 942,123**

Required Annual Reinvestment - Buried Asset Data

Current Year	2010
Annual Inflation Rate	3.0%
Total Cost of Replacement in Arrears (2008 Dollars)	$ 45,790,222
Number of Years to Pay Off	20
Annual Cost for 20 Year Payoff	$ 2,289,511

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Future Annual Replacement Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23,442,512
Remaining Cost of Replacement (Inflated)	$ 2,358,196	$ 2,428,942	$ 2,501,811	$ 2,576,865	$ 2,654,171	$ 2,733,796	$ 2,815,810	$ 2,900,284	$ 2,987,293	$ 3,076,911
Total Required Annual Reinvestment	2,358,196	2,428,942	2,501,811	2,576,865	2,654,171	2,733,796	2,815,810	2,900,284	2,987,293	26,519,423
CIP Planned Reinvestment - Buried Assets	$ 125,000	$ 5,640,000	$ 2,340,000	$ 2,925,000	$ 3,900,000	$ -	$ -	$ -	$ -	$ -
Planned Annual Reinvestment less Required Annual Reinvestment	$ (2,233,196)	$ 3,211,058	$ 3,049,247	$ 3,397,382	$ 4,643,211	$ 1,909,415	$ (906,394)	$ (2,900,284)	$ (2,987,293)	$ (26,519,423)
Total Calculated Buried Assets Reserve Contribution	**-**	**-**	**-**	**-**	**24,134**	**3,140,398**	**3,648,261**	**3,884,051**	**3,930,245**	**3,977,825**
Total Calculated 3R Contribution Above Ground & Buried Assets	$ 489,223	$ 333,867	$ 547,201	$ 547,201	$ 439,427	$ 3,555,690	$ 4,590,385	$ 4,826,175	$ 4,872,369	$ 4,919,949
Phase-In of 3R Reserve Contribution	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Recommended 3R Reserve Conribution	**$ 489,223**	**$ 333,867**	**$ 547,201**	**$ 547,201**	**$ 439,427**	**$ 3,555,690**	**$ 4,590,385**	**$ 4,826,175**	**$ 4,872,369**	**$ 4,919,949**

Village of Downers Grove
Water Rate Study

SCHEDULE 12A - REVENUE REQUIREMENTS

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Operating Costs											
Total Operating Expenses	7,548,011	8,180,707	8,764,289	9,394,053	10,040,085	10,741,918	11,504,870	12,334,780	13,238,063	14,221,769	15,293,642
Operating Reserve	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total Operating Expenses	*7,548,011*	*8,280,707*	*8,864,289*	*9,494,053*	*10,140,085*	*10,841,918*	*11,604,870*	*12,434,780*	*13,338,063*	*14,321,769*	*15,393,642*
Capital Costs											
Existing Debt Service	503,708	503,003	496,155	0	0	0	0	0	0	0	0
Cash Funded Capital Projects	1,113,093	285,000	933,300	660,000	600,000	500,000	0	0	0	0	0
Projected Debt Service	0	0	0	905,413	905,413	905,413	1,463,320	1,463,320	1,463,320	1,463,320	1,463,320
3R Reserve	0	489,223	333,867	547,201	547,201	439,427	3,555,690	4,590,385	4,826,175	4,872,369	4,919,949
Total Capital Expenses	*1,616,801*	*1,277,226*	*1,763,322*	*2,112,614*	*2,052,614*	*1,844,840*	*5,019,010*	*6,053,705*	*6,289,495*	*6,335,689*	*6,383,269*
Total Revenue Requirement	**9,164,812**	**9,557,933**	**10,627,611**	**11,606,667**	**12,192,699**	**12,686,759**	**16,623,880**	**18,488,484**	**19,627,558**	**20,657,458**	**21,776,911**
Miscellaneous Other Revenues	386,883	324,754	329,967	334,326	343,857	381,944	412,199	502,750	572,519	759,504	900,656
Use of Fund Balance											
Revenues from Westmont & Knottingham	84,417	84,417	86,949	89,558	92,244	95,012	97,862	100,798	103,822	106,936	110,145
Revenues from Unmetered Water Sales	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Total Miscellaneous Revenues	476,300	414,170	421,917	428,884	441,102	481,955	515,061	608,548	681,341	871,440	1,015,801
Net Revenue Requirement	**8,688,512**	**9,143,763**	**10,205,695**	**11,177,783**	**11,751,597**	**12,204,803**	**16,108,819**	**17,879,936**	**18,946,217**	**19,786,017**	**20,761,110**
Revenues under Current Rates	7,560,051	7,573,804	7,498,066	7,423,085	7,348,855	7,275,366	7,202,612	7,130,586	7,059,280	6,988,688	6,918,801
Surplus / (Shortfall)	(1,128,461)	(1,569,959)	(2,707,629)	(3,754,698)	(4,402,743)	(4,929,437)	(8,906,207)	(10,749,350)	(11,886,936)	(12,797,330)	(13,842,309)
Required Breakeven Increase		20.73%	36.11%	50.58%	59.91%	67.76%	123.65%	150.75%	168.39%	183.11%	200.07%
Revenues with Annual Increases	$ 7,560,051	$ 7,573,804	$ 9,138,763	$ 10,200,695	$ 11,172,783	$ 11,746,597	$ 12,199,803	$ 16,103,819	$ 17,874,936	$ 18,941,217	$ 19,781,017
Revenues from Unmetered Water Sales	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Surplus / (Shortfall)	$ 7,555,051	$ (1,564,959)	$ (1,061,932)	$ (972,089)	$ (573,814)	$ (453,206)	$ (3,904,016)	$ (1,771,117)	$ (1,066,280)	$ (839,801)	$ (975,092)
Annual Additional Increases		21%	12%	10%	5%	4%	32%	11%	6%	4%	5%

Village of Downers Grove
Water Rate Study

SCHEDULE 12B - COST ALLOCATION

	%	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual Fixed vs. Variable											
Operating Costs	% Fixed										
Total Operating Expenses	55%	$ 4,499,389	$ 4,820,359	$ 5,166,729	$ 5,522,047	$ 5,908,055	$ 6,327,679	$ 6,784,129	$ 7,280,935	$ 7,821,973	$ 8,411,503
Operating Reserve	100%	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Capital Costs											
Existing Debt Service	100%	$ 503,003	$ 496,155	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Funded Capital Projects	100%	$ 285,000	$ 933,300	$ 660,000	$ 600,000	$ 500,000	$ -	$ -	$ -	$ -	$ -
Projected Debt Service	100%	$ -	$ -	$ 905,413	$ 905,413	$ 905,413	$ 1,463,320	$ 1,463,320	$ 1,463,320	$ 1,463,320	$ 1,463,320
3R Reserve	100%	$ 489,223	$ 333,867	$ 547,201	$ 547,201	$ 439,427	$ 3,555,690	$ 4,590,385	$ 4,826,175	$ 4,872,369	$ 4,919,949
Total Fixed Revenue Requirements		$ 5,876,615	$ 6,683,681	$ 7,379,343	$ 7,674,661	$ 7,852,895	$ 11,446,689	$ 12,937,834	$ 13,670,429	$ 14,257,662	$ 14,894,772
Percentage Fixed		***61%***	***63%***	***64%***	***63%***	***62%***	***69%***	***70%***	***70%***	***69%***	***68%***
Operating Costs	% Variable										
Total Operating Expenses	45%	$ 3,681,318	$ 3,943,930	$ 4,227,324	$ 4,518,038	$ 4,833,863	$ 5,177,192	$ 5,550,651	$ 5,957,128	$ 6,399,796	$ 6,882,139
Operating Reserve	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Costs											
Existing Debt Service	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Funded Capital Projects	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Projected Debt Service	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3R Reserve	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Variable Revenue Requirement		$ 3,681,318	$ 3,943,930	$ 4,227,324	$ 4,518,038	$ 4,833,863	$ 5,177,192	$ 5,550,651	$ 5,957,128	$ 6,399,796	$ 6,882,139
Percentage Variable		***39%***	***37%***	***36%***	***37%***	***38%***	***31%***	***30%***	***30%***	***31%***	***32%***
Allocation for Rates											
Net Revenue Requirements		$ 9,143,763	$ 10,205,695	$ 11,177,783	$ 11,751,597	$ 12,204,803	$ 16,108,819	$ 17,879,936	$ 18,946,217	$ 19,786,017	$ 20,761,110
Fixed Costs											
Administrative O&M Expenses		$ 1,258,671	$ 1,296,431	$ 1,335,324	$ 1,375,384	$ 1,416,646	$ 1,459,145	$ 1,502,919	$ 1,548,007	$ 1,594,447	$ 1,642,281
% of Existing Debt	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
% of Capital Improvement Plan	0%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Fixed Costs		**$ 1,258,671**	**$ 1,296,431**	**$ 1,335,324**	**$ 1,375,384**	**$ 1,416,646**	**$ 1,459,145**	**$ 1,502,919**	**$ 1,548,007**	**$ 1,594,447**	**$ 1,642,281**
Total Costs Allocated to User Rates		**$ 7,885,092**	**$ 8,909,263**	**$ 9,842,459**	**$ 10,376,213**	**$ 10,788,158**	**$ 14,649,674**	**$ 16,377,017**	**$ 17,398,210**	**$ 18,191,570**	**$ 19,118,829**

Village of Downers Grove
Water Rate Study

2008 Detail

SCHEDULE 13A- CUSTOMER AND CONSUMPTION INFORMATION

2008 Actuals

Count of Account #

Jurisdiction	Meter Size	Church	Industrial	Multi Family	Office	Park	Pool	Rest	Retail	School	Single Family	Grand Total
Inside Village	5/8	8	13	179	62	4		14	201	3	11,788	12,272
	1	10	14	77	29	2		6	49	6	543	736
	1 1/2	4	22	149	50	3	1	23	62	13	48	375
	2	12	21	126	22	12	1	15	41	18	4	272
	3		10	37	24			6	29	4	1	111
	4			14	22	4		2	20	6		68
	6			4	2				2	4		12
	10									1		1
Inside Total		34	80	586	211	25	2	66	404	55	12,384	13,847
Knottingham	5/8										236	236
	1										5	5
Knottingham Total		0	0	0	0	0	0	0	0	0	241	241
Outside Village	5/8	3		1	3				5		1,036	1,048
	1			1				1		1	84	87
	1 1/2			2	1				1		6	10
	2			12		1				1		14
	4				2							2
Outside Total		3	0	16	6	1	0	1	6	2	1,126	1,161
Westmont	5/8										49	49
	1										15	15
Westmont Total		0	0	0	0	0	0	0	0	0	64	64
Grand Total		**37**	**80**	**602**	**217**	**26**	**2**	**67**	**410**	**57**	**13,815**	**15,313**

*usage in CCFs

Total Usage	
Inside Village Limits	2,223,335
Knottingham	26,866
Outside Village Limits	148,094
Westmont	7,096
Grand Total	**2,405,391**

2009 Actuals

Jurisdiction	Meter Size	Church	Industrial	Multi Family	Office	Park	Pool	Rest	Retail	School	Single Family	Grand Total
Inside Village	5/8	8	13	190	73	4		14	215	3	12,331	12,851
	1	10	14	79	30	3		6	53	6	639	840
	1 1/2	4	26	149	51	3	1	24	69	13	55	395
	2	12	23	133	25	12	1	17	48	18	5	294
	3		10	37	24			6	30	4	1	112
	4			20	22	4		2	22	6		76
	6			4	2				2	4		12
	10									1		1
Inside Total		34	86	612	227	26	2	69	439	55	13,031	14,581
Knottingham	5/8										244	244
	1										5	5
Knottingham Total		0	0	0	0	0	0	0	0	0	249	249
Outside Village	5/8	3		1	3				5		1,089	1,101
	1	1		1				1		1	98	102
	1 1/2			2	1				1		7	11
	2			12		1				1		14
	4				2							2
Outside Total		4	0	16	6	1	0	1	6	2	1,194	1,230
Westmont	5/8										54	54
	1										18	18
Westmont Total		0	0	0	0	0	0	0	0	0	72	72
Grand Total		**38**	**86**	**628**	**233**	**27**	**2**	**70**	**445**	**57**	**14,546**	**16,132**

872

*usage in CCFs

Total Usage			gallon	CCF	% customers
Inside Village Limits	2,181,901		winter hi-month	**8,976**	12	55.7%
Knottingham	22,553	$ 0.51	125%	11220	15	88.7%
Outside Village Limits	130,461			22,440	30	
Westmont	7,343					
Grand Total	**2,342,258**					

2009 Detail

Inside Village - Commercial Customer Information

		# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	100	5385	148,135	355,235	72%	37%
100	200	807	113,597	159,297	11%	17%
Over	200	1264	691,341	438,541	17%	46%
		7456	953,073	953,073	100%	100%

Inside Village - Industrial Customer Information

		# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	130	324	10,913	22,223	79%	42%
130	260	31	6,010	9,260	8%	17%
Over	260	56	36,492	21,932	14%	41%
		411	53,415	53,415	100%	100%

Outside Village - Commercial Customer Information

		# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	100	94	1,678	10,578	51%	32%
100	200	16	2,600	8,300	9%	25%
Over	200	73	28,595	13,995	40%	43%
		183	32,873	32,873	100%	100%

Inside Village

Single Family

From	To	# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	1	474	474	72,146	0.66%	6.05%
1	2	720	1,440	71,672	1.00%	6.01%
2	5	4,891	20,347	208,748	6.78%	17.51%
5	10	14,885	122,371	303,826	20.63%	25.48%
10	20	33,586	504,415	344,455	46.55%	28.89%
20	50	16,401	455,850	163,500	22.73%	13.71%
50	and Over	1,189	87,555	28,105	1.65%	2.36%
		72,146	1,192,452	1,192,452	100%	100%

Multi Family

From	To	# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	1	46	46	3,372	47.92%	11.88%
1	2	27	54	3,326	28.13%	11.72%
2	5	127	518	9,780	132.29%	34.45%
5	10	284	2,322	15,342	295.83%	54.05%
10	20	636	9,900	26,060	662.50%	91.81%
20	50	850	27,626	52,686	885.42%	185.61%
50	and Over	1,402	310,994	240,894	1460.42%	848.64%
		3,372	351,460	351,460	3513%	1238%

Retail

From	To	# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	1	104	104	2,189	4.75%	0.75%
1	2	131	262	2,085	5.98%	0.71%
2	5	244	947	5,589	11.15%	1.92%
5	10	284	2,246	7,956	12.97%	2.73%
10	20	314	4,583	12,563	14.34%	4.31%
20	50	404	12,963	26,123	18.46%	8.96%
50	and Over	708	270,569	235,169	32.34%	80.63%
		2,189	291,674	291,674	100%	100%

Industrial

From	To	# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	1	16	16	439	3.64%	0.69%
1	2	15	30	423	3.42%	0.67%
2	5	22	89	1,203	5.01%	1.90%
5	10	36	268	1,838	8.20%	2.91%
10	20	51	810	3,290	11.62%	5.20%
20	50	97	3,126	7,246	22.10%	11.45%
50	and Over	202	58,931	48,831	46.01%	77.18%
		439	63,270	63,270	100%	100%

Other

From	To	# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	1	58	58	2,200	2.64%	0.68%
1	2	50	100	2,142	2.27%	0.66%
2	5	139	549	6,130	6.32%	1.89%
5	10	206	1,629	9,334	9.36%	2.88%
10	20	209	3,193	16,483	9.50%	5.08%
20	50	415	14,001	39,391	18.86%	12.14%
50	and Over	1,123	304,949	248,799	51.05%	76.68%
		2,200	324,479	324,479	100%	100%

Outside Village

Single Family

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
73	73	6,493	1.12%	6.08%
108	216	6,420	1.66%	6.02%
545	2,259	18,470	8.39%	17.31%
1,517	12,311	25,976	23.36%	24.34%
2,683	39,928	28,768	41.32%	26.96%
1,423	41,158	17,018	21.92%	15.95%
144	10,779	3,579	2.22%	3.35%
6,493	106,724	106,724	100%	100%

Multi Family

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	0	96	0.00%	0.34%
0	0	96	0.00%	0.34%
0	0	288	0.00%	1.01%
0	0	480	0.00%	1.69%
6	85	925	6.25%	3.26%
2	99	2,699	2.08%	9.51%
88	28,202	23,802	91.67%	83.85%
96	28,386	28,386	100%	100%

Retail

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
2	2	35	5.71%	3.51%
1	2	33	2.86%	3.31%
4	13	89	11.43%	8.92%
9	77	127	25.71%	12.73%
11	166	136	31.43%	13.63%
6	217	157	17.14%	15.73%
2	521	421	5.71%	42.18%
35	998	998	100%	100%

Office

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
4	4	35	11.43%	0.43%
0	0	31	0.00%	0.38%
0	0	93	0.00%	1.15%
10	81	136	28.57%	1.68%
5	76	186	14.29%	2.30%
2	56	436	5.71%	5.40%
14	7,855	7,155	40.00%	88.64%
35	8,072	8,072	100%	100%

Church

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
5	5	18	27.78%	22.50%
1	2	13	5.56%	16.25%
3	13	34	16.67%	42.50%
9	60	15	50.00%	18.75%
0	0	0	0.00%	0.00%
0	0	0	0.00%	0.00%
0	0	0	0.00%	0.00%
18	80	80	100%	100%

Other

# of Customer	Total Consumption	Allocated Consumption	% of Customers	% of Consumption
0	0	20	0.00%	0.52%
0	0	20	0.00%	0.52%
0	0	60	0.00%	1.56%
0	0	100	0.00%	2.61%
5	86	186	25.00%	4.85%
7	232	332	35.00%	8.66%
8	3,516	3,116	40.00%	81.27%
20	3,834	3,834	100%	100%

SCHEDULE 13B - BI-MONTHLY CUSTOMER AND CONSUMPTION INFORMATION

2008

Winter Bi-Monthly Multiplier 100%

Customer Over	18.44%	32.89%	55.57%	47.86%	29.87%	37.01%
Consumption Over	5.42%	13.95%	29.93%	28.38%	12.98%	19.51%

Inside Village - Single Family

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		1,980	3,778	6,726	5,748	3,502	**21,734**
# of Customers using Equal/Less than Multiplier	11,808	9,872	8,182	5,367	6,454	8,729	**38,604**
Total Customers	**11,808**	**11,852**	**11,960**	**12,093**	**12,202**	**12,231**	**60,338**
Total Usage Above WQM		6,099	19,686	72,722	55,269	18,993	**172,769**
Total Usage within WQM Limits	191,712	161,667	166,182	172,451	168,169	159,502	**827,971**
Total Usage	**191,712**	**167,766**	**185,868**	**245,173**	**223,438**	**178,495**	**1,000,740**

Inside Village - Multi Family

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		121	178	302	285	190	**1,076**
# of Customers using Equal/Less than Multiplier	551	431	383	269	285	377	**1,745**
Total Customers	**551**	**552**	**561**	**571**	**570**	**567**	**2,821**
Total Usage Above WQM		1,613	6,381	8,426	8,358	5,348	**30,126**
Total Usage within WQM Limits	59,063	51,241	52,468	53,884	53,580	51,098	**262,271**
Total Usage	**59,063**	**52,854**	**58,849**	**62,310**	**61,938**	**56,446**	**292,397**

Inside Village - Retail

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		129	174	182	182	141	**808**
# of Customers using Equal/Less than Multiplier	359	232	192	178	187	233	**1,022**
Total Customers	**359**	**361**	**366**	**360**	**369**	**374**	**1,830**
Total Usage Above WQM		2,122	6,133	15,637	17,940	4,925	**46,757**
Total Usage within WQM Limits	47,189	34,132	40,802	43,532	42,775	36,487	**197,728**
Total Usage	**47,189**	**36,254**	**46,935**	**59,169**	**60,715**	**41,412**	**244,485**

Inside Village - Industrial

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		34	38	45	44	34	**195**
# of Customers using Equal/Less than Multiplier	71	37	33	28	32	43	**173**
Total Customers	**71**	**71**	**71**	**73**	**76**	**77**	**368**
Total Usage Above WQM		1,160	2,202	3,412	2,817	2,192	**11,783**
Total Usage within WQM Limits	9,220	8,595	8,760	8,755	8,702	7,455	**42,267**
Total Usage	**9,220**	**9,755**	**10,962**	**12,167**	**11,519**	**9,647**	**54,050**

Inside Village - Other

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		168	217	231	245	202	**1,063**
# of Customers using Equal/Less than Multiplier	351	186	157	144	129	170	**786**
Total Customers	**351**	**354**	**374**	**375**	**374**	**372**	**1,849**
Total Usage Above WQM		5,732	14,990	33,744	38,086	11,785	**104,337**
Total Usage within WQM Limits	41,494	35,969	36,473	34,986	35,909	35,311	**178,648**
Total Usage	**41,494**	**41,701**	**51,463**	**68,730**	**73,995**	**47,096**	**282,985**

Outside Village - Single

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		157	385	572	466	341	**1,921**
# of Customers using Equal/Less than Multiplier	1,065	907	694	517	630	759	**3,507**
Total Customers	**1,065**	**1,064**	**1,079**	**1,089**	**1,096**	**1,100**	**5,428**
Total Usage Above WQM		1,108	2,108	5,973	4,999	2,231	**16,419**
Total Usage within WQM Limits	16,908	14,121	14,868	15,192	14,784	14,432	**73,397**
Total Usage	**16,908**	**15,229**	**16,976**	**21,165**	**19,783**	**16,663**	**89,816**

Outside Village - Multi

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		1	5	5	4	3	**18**
# of Customers using Equal/Less than Multiplier	16	15	11	11	12	13	**62**
Total Customers	**16**	**16**	**16**	**16**	**16**	**16**	**80**
Total Usage Above WQM		5	77	247	417	122	**868**
Total Usage within WQM Limits	5,317	4,532	4,600	4,505	4,249	4,315	**22,201**
Total Usage	**5,317**	**4,537**	**4,677**	**4,752**	**4,666**	**4,437**	**23,069**

Outside Village - Retail

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		1	1	4	4	3	**13**
# of Customers using Equal/Less than Multiplier	6	4	5	2	2	3	**16**
Total Customers	**6**	**5**	**6**	**6**	**6**	**6**	**29**
Total Usage Above WQM		1	2	12	25	16	**56**
Total Usage within WQM Limits	326	285	88	82	78	83	**616**
Total Usage	**326**	**286**	**90**	**94**	**103**	**99**	**672**

Outside Village - Other

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		2	4	8	10	5	**29**
# of Customers using Equal/Less than Multiplier	12	8	9	5	3	7	**32**
Total Customers	**12**	**10**	**13**	**13**	**13**	**12**	**61**
Total Usage Above WQM		2,208	1,578	1,326	899	59	**6,070**
Total Usage within WQM Limits	1,269	242	962	1,237	1,236	970	**4,647**
Total Usage	**1,269**	**2,450**	**2,540**	**2,563**	**2,135**	**1,029**	**10,717**

Knottingham

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		16	62	113	88	69	**348**
# of Customers using Equal/Less than Multiplier	237	221	176	126	153	172	**848**
Total Customers	**237**	**237**	**238**	**239**	**241**	**241**	**1,196**
Total Usage Above WQM		35	368	1,606	649	326	**2,984**
Total Usage within WQM Limits	4,560	3,659	3,870	3,989	3,865	3,939	**19,322**
Total Usage	**4,560**	**3,694**	**4,238**	**5,595**	**4,514**	**4,265**	**22,306**

Westmont

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		20	32	47	47	18	**164**
# of Customers using Equal/Less than Multiplier	62	42	30	16	16	46	**150**
Total Customers	**62**	**62**	**62**	**63**	**63**	**64**	**314**
Total Usage Above WQM		53	205	702	723	244	**1,927**
Total Usage within WQM Limits	917	876	865	890	863	758	**4,252**
Total Usage	**917**	**929**	**1,070**	**1,592**	**1,586**	**1,002**	**6,179**

15.08 12.0624643

Winter Quarter Multiplier 100%

Customer Over	82.76%	85.55%	87.70%	78.13%	64.23%	79.20%
Consumption Over	23.37%	49.42%	51.56%	40.32%	24.56%	41.80%

Inside Village - Single Family

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		4,020	10,663	11,096	9,943	8,105	**43,827**
# of Customers using Equal/Less than Multiplier	12,247	831	1,803	1,527	2,795	4,668	**11,624**
Total Customers	**12,247**	**4,851**	**12,466**	**12,623**	**12,738**	**12,773**	**55,451**
Total Usage Above WQM		15,851	145,518	139,800	80,819	35,896	**417,884**
Total Usage within WQM Limits	147,729	57,193	143,268	143,051	139,844	135,928	**619,284**
Total Usage	**147,729**	**73,044**	**288,786**	**282,851**	**220,663**	**171,824**	**1,037,168**

Inside Village - Multi Family

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		225	497	527	490	418	**2,157**
# of Customers using Equal/Less than Multiplier	570	40	83	60	102	166	**451**
Total Customers	**570**	**265**	**580**	**587**	**592**	**584**	**2,608**
Total Usage Above WQM		3,772	50,314	26,201	18,995	11,563	**110,845**
Total Usage within WQM Limits	45,346	12,948	44,849	44,817	44,432	44,156	**191,202**
Total Usage	**45,346**	**16,720**	**95,163**	**71,018**	**63,427**	**55,719**	**302,047**

Inside Village - Retail

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		198	320	329	282	263	**1,392**
# of Customers using Equal/Less than Multiplier	372	66	70	61	112	133	**442**
Total Customers	**372**	**264**	**390**	**390**	**394**	**396**	**1,834**
Total Usage Above WQM		7,327	23,075	41,312	29,419	13,951	**115,084**
Total Usage within WQM Limits	30,398	20,407	29,334	29,783	28,596	27,871	**135,991**
Total Usage	**30,398**	**27,734**	**52,409**	**71,095**	**58,015**	**41,822**	**251,075**

Inside Village - Industrial

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		16	71	66	60	55	**268**
# of Customers using Equal/Less than Multiplier	75	4	7	15	18	24	**68**
Total Customers	**75**	**20**	**78**	**81**	**78**	**79**	**336**
Total Usage Above WQM		1,036	7,816	4,056	3,670	2,016	**18,594**
Total Usage within WQM Limits	7,607	1,739	7,530	6,598	6,699	6,314	**28,880**
Total Usage	**7,607**	**2,775**	**15,346**	**10,654**	**10,369**	**8,330**	**47,474**

Inside Village - Other

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		184	328	314	307	284	**1,417**
# of Customers using Equal/Less than Multiplier	359	26	43	66	75	90	**300**
Total Customers	**359**	**210**	**371**	**380**	**382**	**374**	**1,717**
Total Usage Above WQM		6,937	21,761	55,882	35,275	15,233	**135,088**
Total Usage within WQM Limits	31,488	22,242	29,292	26,801	29,348	27,363	**135,046**
Total Usage	**31,488**	**29,179**	**51,053**	**82,683**	**64,623**	**42,596**	**270,134**

Commercial	82.4227517	99.6387009	148.117077	165.656595	136.012427	103.498523	133.6671538
Industrial	101.426667	138.75	196.74359	131.530864	132.935897	105.443038	141.2916667

Customer Over	75.00%	90.69%	87.28%	78.27%	62.19%	79.25%
Consumption Over	21.19%	58.40%	47.36%	36.58%	22.05%	43.66%

Outside Village - Single

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		175	1,024	993	908	723	**3,823**
# of Customers using Equal/Less than Multiplier	1,104	59	101	143	249	441	**993**
Total Customers	**1,104**	**234**	**1,125**	**1,136**	**1,157**	**1,164**	**4,816**
Total Usage Above WQM		744	16,671	12,255	7,343	3,165	**40,178**
Total Usage within WQM Limits	13,213	2,787	12,629	12,470	12,279	11,771	**51,936**
Total Usage	**13,213**	**3,531**	**29,300**	**24,725**	**19,622**	**14,936**	**92,114**

Outside Village - Multi

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		0	16	13	13	12	**54**
# of Customers using Equal/Less than Multiplier	16	0	0	3	3	4	**10**
Total Customers	**16**	**0**	**16**	**16**	**16**	**16**	**64**
Total Usage Above WQM		0	5,674	818	1,333	894	**8,719**
Total Usage within WQM Limits	3,758	0	3,758	3,563	3,506	3,573	**14,400**
Total Usage	**3,758**	**0**	**9,432**	**4,381**	**4,839**	**4,467**	**23,119**

Outside Village - Retail

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		3	4	5	4	3	**19**
# of Customers using Equal/Less than Multiplier	6	1	2	1	2	3	**9**
Total Customers	**6**	**4**	**6**	**6**	**6**	**6**	**28**
Total Usage Above WQM		12	58	44	32	13	**159**
Total Usage within WQM Limits	75	39	75	71	69	67	**321**
Total Usage	**75**	**51**	**133**	**115**	**101**	**80**	**480**

Outside Village - Other

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		5	8	11	8	7	**39**
# of Customers using Equal/Less than Multiplier	12	1	5	2	5	5	**18**
Total Customers	**12**	**6**	**13**	**13**	**13**	**12**	**57**
Total Usage Above WQM		154	1,660	2,149	898	463	**5,324**
Total Usage within WQM Limits	883	558	681	865	802	619	**3,525**
Total Usage	**883**	**712**	**2,341**	**3,014**	**1,700**	**1,082**	**8,849**

Knottingham

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		0	239	200	185	140	**764**
# of Customers using Equal/Less than Multiplier	241	0	2	44	60	108	**214**
Total Customers	**241**	**0**	**241**	**244**	**245**	**248**	**978**
Total Usage Above WQM		0	5,028	2,367	1,228	590	**9,213**
Total Usage within WQM Limits	3,315	0	3,259	3,199	3,139	3,024	**12,621**
Total Usage	**3,315**	**0**	**8,287**	**5,566**	**4,367**	**3,614**	**21,834**

Westmont

	Bi-Month 1	Bi-Month 2	Bi-Month 3	Bi-Month 4	Bi-Month 5	Bi-Month 6	Annual Total
# of Customers using More than WQ Multiplier		52	46	67	56	49	**270**
# of Customers using Equal/Less than Multiplier	65	12	20	2	14	22	**70**
Total Customers	**65**	**64**	**66**	**69**	**70**	**71**	**340**
Total Usage Above WQM		273	177	1,306	712	250	**2,718**
Total Usage within WQM Limits	794	780	761	785	774	731	**3,831**
Total Usage	**794**	**1,053**	**938**	**2,091**	**1,486**	**981**	**6,549**

SCHEDULE 13C - CUSTOMER AND CONSUMPTION PROJECTIONS

Village of Downers Grove
Water Rate Study

Inside Village

	Meter Size	AWWA Equivalents	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected
Single Family Residential	5/8	1.00				11,788	12,331	12,331	12,331	12,331	12,331	12,331	12,331	12,331	12,331	12,331	12,331	12,331
	1	1.50				543	639	639	639	639	639	639	639	639	639	639	639	639
	1 1/2	5.00				48	55	55	55	55	55	55	55	55	55	55	55	55
	2	8.00				4	5	5	5	5	5	5	5	5	5	5	5	5
	3	15.00				1	1	1	1	1	1	1	1	1	1	1	1	1
						12,384	13,031	13,031	13,031	13,031	13,031	13,031	13,031	13,031	13,031	13,031	13,031	13,031
Total EDU's						12,890	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620	13,620
Multi Family																		
	5/8	1.00				179	190	190	190	190	190	190	190	190	190	190	190	190
	1	1.50				77	79	79	79	79	79	79	79	79	79	79	79	79
	1 1/2	5.00				149	149	149	149	149	149	149	149	149	149	149	149	149
	2	8.00				126	133	133	133	133	133	133	133	133	133	133	133	133
	3	15.00				37	37	37	37	37	37	37	37	37	37	37	37	37
	4	25.00				14	20	20	20	20	20	20	20	20	20	20	20	20
	6	50.00				4	4	4	4	4	4	4	4	4	4	4	4	4
						586	612	612	612	612	612	612	612	612	612	612	612	612
Total EDU's						3,153	3,373	3,373	3,373	3,373	3,373	3,373	3,373	3,373	3,373	3,373	3,373	3,373
Retail																		
	5/8	1.00				201	215	215	215	215	215	215	215	215	215	215	215	215
	1	1.50				49	53	53	53	53	53	53	53	53	53	53	53	53
	1 1/2	5.00				62	69	69	69	69	69	69	69	69	69	69	69	69
	2	8.00				41	48	48	48	48	48	48	48	48	48	48	48	48
	3	15.00				29	30	30	30	30	30	30	30	30	30	30	30	30
	4	25.00				20	22	22	22	22	22	22	22	22	22	22	22	22
	6	50.00				2	2	2	2	2	2	2	2	2	2	2	2	2
						404	439	439	439	439	439	439	439	439	439	439	439	439
Total EDU's						1,948	2,124	2,124	2,124	2,124	2,124	2,124	2,124	2,124	2,124	2,124	2,124	2,124
Industrial																		
	5/8	1.00				13	13	13	13	13	13	13	13	13	13	13	13	13
	1	1.50				14	14	14	14	14	14	14	14	14	14	14	14	14
	1 1/2	5.00				22	26	26	26	26	26	26	26	26	26	26	26	26
	2	8.00				21	23	23	23	23	23	23	23	23	23	23	23	23
	3	15.00				10	10	10	10	10	10	10	10	10	10	10	10	10
						80	86	86	86	86	86	86	86	86	86	86	86	86
Total EDU's						462	498	498	498	498	498	498	498	498	498	498	498	498
Other																		
	5/8	1.00				91	102	102	102	102	102	102	102	102	102	102	102	102
	1	1.50				53	55	55	55	55	55	55	55	55	55	55	55	55
	1 1/2	5.00				94	96	96	96	96	96	96	96	96	96	96	96	96
	2	8.00				80	85	85	85	85	85	85	85	85	85	85	85	85
	3	15.00				34	34	34	34	34	34	34	34	34	34	34	34	34
	4	25.00				34	34	34	34	34	34	34	34	34	34	34	34	34
	6	50.00				6	6	6	6	6	6	6	6	6	6	6	6	6
	10	120.00				1	1	1	1	1	1	1	1	1	1	1	1	1
						393	413	413	413	413	413	413	413	413	413	413	413	413
Total EDU's						3,061	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125
Inside City Consumption																		
Residential																		
0 - 1 CCFs							626	620	614	607	601	595	589	583	578	572	566	560
1 - 2 CCFs							1,520	1,505	1,490	1,475	1,460	1,446	1,431	1,417	1,403	1,389	1,375	1,361
Over 2 CCFs							1,173,267	1,161,534	1,149,919	1,138,420	1,127,036	1,115,765	1,104,608	1,093,562	1,082,626	1,071,800	1,061,082	1,050,471
Total Consumption							1,175,413	1,163,659	1,152,022	1,140,502	1,129,097	1,117,806	1,106,628	1,095,562	1,084,606	1,073,760	1,063,022	1,052,392
Non-Residential																		
0 - 1 CCFs							256	253	251	248	246	243	241	239	236	234	232	229
1 - 2 CCFs							422	418	414	409	405	401	397	393	389	386	382	378
Over 2 CCFs							1,005,810	995,752	985,794	975,936	966,177	956,515	946,950	937,481	928,106	918,825	909,637	900,540
Total Consumption							1,006,488	996,423	986,459	976,594	966,828	957,160	947,588	938,113	928,731	919,444	910,250	901,147
Commercial Total Consumption							953,073	943,542	934,107	924,766	915,518	906,363	897,299	888,326	879,443	870,649	861,942	853,323
Industrial Total Consumption							53,415	52,881	52,352	51,829	51,310	50,797	50,289	49,786	49,288	48,796	48,308	47,824
Total Inside Village Consumption							2,181,901	2,160,082	2,138,481	2,117,096	2,095,925	2,074,966	2,054,216	2,033,674	2,013,338	1,993,204	1,973,272	1,953,539

SCHEDULE 13C - CUSTOMER AND CONSUMPTION PROJECTIONS

Village of Downers Grove
Water Rate Study

Outside Village

Single Family Customers	Meter Size		FY 08 Actual	FY 09 Actual	FY 10 Projected	FY 11 Projected	FY 12 Projected	FY 13 Projected	FY 14 Projected	FY 15 Projected	FY 16 Projected	FY 17 Projected	FY 18 Projected	FY 19 Projected	FY 20 Projected
	5/8	1.00	1,036	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089
	1	1.50	84	98	98	98	98	98	98	98	98	98	98	98	98
	1 1/2	5.00	6	7	7	7	7	7	7	7	7	7	7	7	7
			1,126	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194
Total EDU's			1,192	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271	1,271
Multi Family Customers															
	5/8	1.00	1	1	1	1	1	1	1	1	1	1	1	1	1
	1	1.50	1	1	1	1	1	1	1	1	1	1	1	1	1
	1 1/2	5.00	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	8.00	12	12	12	12	12	12	12	12	12	12	12	12	12
			16	16	16	16	16	16	16	16	16	16	16	16	16
Total EDU's			109	109	109	109	109	109	109	109	109	109	109	109	109
Retail Customers															
	5/8	1.00	5	5	5	5	5	5	5	5	5	5	5	5	5
	1	1.50	0	0	0	0	0	0	0	0	0	0	0	0	0
	1 1/2	5.00	1	1	1	1	1	1	1	1	1	1	1	1	1
			6	6	6	6	6	6	6	6	6	6	6	6	6
Total EDU's			10	10	10	10	10	10	10	10	10	10	10	10	10
Other															
	5/8	1.00	6	6	6	6	6	6	6	6	6	6	6	6	6
	1	1.50	2	3	3	3	3	3	3	3	3	3	3	3	3
	1 1/2	5.00	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	8.00	2	2	2	2	2	2	2	2	2	2	2	2	2
	4	25.00	2	2	2	2	2	2	2	2	2	2	2	2	2
			13	14	14	14	14	14	14	14	14	14	14	14	14
Total EDU's			80	82	82	82	82	82	82	82	82	82	82	82	82

Outside City Consumption

Residential														
0 - 1 CCFs		73	72	72	71	70	69	69	68	67	67	66	65	
1 - 2 CCFs		198	196	194	192	190	188	186	185	183	181	179	177	
Over 2 CCFs		97,317	96,344	95,380	94,427	93,482	92,547	91,622	90,706	89,799	88,901	88,012	87,132	
Total Consumption		97,588	96,612	95,646	94,690	93,743	92,805	91,877	90,958	90,049	89,148	88,257	87,374	
Non-Residential														
0 - 1 CCFs		4	4	4	4	4	4	4	4	4	4	4	4	
1 - 2 CCFs		12	12	12	12	12	11	11	11	11	11	11	11	
Over 2 CCFs		32,857	32,528	32,203	31,881	31,562	31,247	30,934	30,625	30,319	30,015	29,715	29,418	
Total Consumption		32,873	32,544	32,219	31,897	31,578	31,262	30,949	30,640	30,333	30,030	29,730	29,432	

Knottingham

Single Family Customers	Meter Size	2008 Actual	2009 Actual	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected
	5/8	236	244	244	244	244	244	244	244	244	244	244	244	244
	1	5	5	5	5	5	5	5	5	5	5	5	5	5
		241	249	249	249	249	249	249	249	249	249	249	249	249
Total Consumption			22,553	22,327	22,104	21,883	21,664	21,448	21,233	21,021	20,811	20,603	20,397	20,193

Westmont

Single Family Customers	Meter Size	2008 Actual	2009 Actual	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected
	5/8	49	54	54	54	54	54	54	54	54	54	54	54	54
	1	15	18	18	18	18	18	18	18	18	18	18	18	18
		64	72	72	72	72	72	72	72	72	72	72	72	72
0 - 1 CCFs			405	401	397	393	389	385	381	377	374	370	366	363
2 - 13 CCFs			3,960	3,920	3,881	3,842	3,804	3,766	3,728	3,691	3,654	3,618	3,581	3,546
Over 13 CCFs			2,978	2,948	2,919	2,890	2,861	2,832	2,804	2,776	2,748	2,720	2,693	2,666
			7,343	7,270	7,197	7,125	7,054	6,983	6,913	6,844	6,776	6,708	6,641	6,574

Total Outside Village

						160,357	158,753	157,166	155,594	154,038	152,498	150,973	149,463	147,969	146,489	145,024	143,574
Total System Consumption (CCF)	2,746,026	2,568,263	2,645,973	2,533,934	2,342,258	2,318,835	2,295,647	2,272,691	2,249,964	2,227,464	2,205,189	2,183,138	2,161,306	2,139,693	2,118,296	2,097,113
Total System Consumption (cubic Feet)	274,602,600	256,826,300	264,597,300	253,393,400	234,225,800	231,883,542	229,564,707	227,269,060	224,996,369	222,746,405	220,518,941	218,313,752	216,130,614	213,969,308	211,829,615	209,711,319
Totally System Consumption (MCF)	274,603	256,826	264,597	253,393	234,226	231,884	229,565	227,269	224,996	222,746	220,519	218,314	216,131	213,969	211,830	209,711
Total System Consumption (gallons)	2,054,027,448	1,921,060,724	1,979,187,804	1,895,382,632	1,752,008,984	1,734,488,894	1,717,144,005	1,699,972,565	1,682,972,840	1,666,143,111	1,649,481,680	1,632,986,863	1,616,656,995	1,600,490,425	1,584,485,520	1,568,640,665
	2054.027448	1921.060724	1979.187804	1895.382632	1752.008984	1734.488894										
	5.63	5.26	5.42	5.19	4.80	4.75	5.261									
	6.59	6.59	6.59	6.59	6.59	6.59										
	0.854070794	0.79878283	0.822952245	0.788105802	0.728490608	0.721205702										

SCHEDULE 14A - FY 08 RATE RECONCILIATION

Village of Downers Grove
Water Rate Study

	2008
Actual Revenues Collected	$ 6,900,114

Consumption Information *in CCFs		2008 Actuals Bills	Consumption
Inside Village		83,082	2,223,335
Outside Village		6,966	148,094
Westmont			7,096
	0 - 1 CCFs		6%
	2 - 13 CCFs		54%
	Over 13 CCFs		41%
Knottingham			26,866

Current Rate Structure

Inside Village		2008	2008	
Minimum Charge				
Cost Allocated =		$ 435,829	$ 451,966	
# of Customers Billed Minimum		83,082	83,082	
Minimum Charge	2.00	$ 5.25	$ 5.44	-3.6%
		FY 10	FY 10	
Consumption =		2,223,335	2,223,335	
Cost Allocated =	90.83%	$ 6,267,374	$ 6,047,471	
Unit Rate (per CCF)	1.00	**$ 2.62**	$ 2.72	-3.6%

Outside Village		2008	2008	
Cost Allocated =		$ 46,160	$ 46,533	
# of Customers Billed Minimum		6,966	6,966	
Minimum Charge	2.00	$ 6.63	$ 6.68	-0.8%
		FY 10	FY 10	
Consumption =		148,094	148,094	
Cost Allocated =	7.78%	$ 536,829	$ 494,634	
Unit Rate (per CCF)	1.00	**$ 3.31**	$ 3.34	-0.8%

Westmont Customers	0.27%	2009	2009	
Level 1: 0 - 1 CCF				
Consumption =		391	391	
Cost Allocated =		$ 1,551	$ 1,566	
Unit Rate (per CCF)	1.00	$ 3.96	$ 4.00	-1.0%
Level 2: 2 - 13 CCFs				
Consumption =		3,827	3,827	
Cost Allocated =		$ 8,528	$ 8,610	
Unit Rate (per CCF)	0.56	$ 2.23	$ 2.25	-1.0%
Level 3: Over 13 CCFs				
Consumption =		2,878	2,878	
Cost Allocated =		$ 8,551	$ 8,633	
Unit Rate (per CCF)	0.75	$ 2.97	$ 3.00	-1.0%

Knottingham	1.12%			
Consumption =		26,866	26,866	
Cost Allocated =		$ 77,281	$ 77,374	
Unit Rate (per CCF)		$ 2.88	$ 2.88	-0.1%

Collected Revenue - Inside Village	$ 6,267,374	$ 6,499,437
Collected Revenue - Outside Village	$ 536,829	$ 541,167
Collected Revenue - Knottingham	$ 18,630	$ 18,809
Collected Revenue - Westmont	$ 77,281	$ 77,374
Total Collected Revenue	$ 6,900,114	$ 7,136,787
	$ 6,900,114	**-3.32%**

Village of Downers Grove
Water Rate Study

SCHEDULE 14B - FY 09 RATE RECONCILIATION

	2009
Actual Revenues Collected	$ 7,164,670

Consumption Information *in CCFs		2009	Consumption
Inside Village		Jan - Apr	415,884
		May - Dec	1,770,927
Outside Village		Jan - Apr	20,807
		May - Dec	110,117
Westmont	0 - 1 CCFs		405
	2 - 13 CCFs		3,960
	Over 13 CCFs		2,978
Knottingham			22,553

Current Rate Structure

Inside Village	92.46%			
Minimum Charge		2009	2009	
Consumption =		415,884	415,884	
Cost Allocated =		$ 1,202,161	$ 1,193,587	
Unit Rate (per CCF)	0.9	$ 2.89	$ 2.87	0.7%
Consumption =		1,770,927	1,770,927	
Cost Allocated =		$ 5,422,292	$ 5,383,618	
Unit Rate (per CCF)	1.0	$ 3.06	$ 3.04	0.7%

Outside Village	6.40%			
		2009	2009	
Consumption =		20,807	20,807	
Cost Allocated =		$ 69,379	$ 69,495	
Unit Rate (per CCF)	0.9	$ 3.33	$ 3.34	-0.2%
Consumption =		110,117	110,117	
Cost Allocated =		$ 389,160	$ 389,814	
Unit Rate (per CCF)	1.0	$ 3.53	$ 3.54	-0.2%

Westmont Customers	0.26%			
		2009	2009	
Level 1: 0 - 1 CCF				
Consumption =		405	405	
Cost Allocated =		$ 1,550	$ 1,620	
Unit Rate (per CCF)	1.00	$ 3.83	$ 4.00	-4.3%
Level 2: 2 - 13 CCFs				
Consumption =		3,960	3,960	
Cost Allocated =		$ 8,527	$ 8,910	
Unit Rate (per CCF)	0.56	$ 2.15	$ 2.25	-4.3%
Level 3: Over 13 CCFs				
Consumption =		2,978	2,978	
Cost Allocated =		$ 8,550	$ 8,934	
Unit Rate (per CCF)	0.75	$ 2.87	$ 3.00	-4.3%

Knottingham	0.88%			
		2009	2009	
Consumption =		22,553	22,553	
Cost Allocated =		$ 63,049	$ 64,953	
Unit Rate (per CCF)		$ 2.80	$ 2.88	-2.9%

Collected Revenue - Inside Village	$ 6,624,454	$ 6,577,205	
Collected Revenue - Outside Village	$ 458,539	$ 459,310	
Collected Revenue - Westmont	$ 18,628	$ 19,464	
Collected Revenue - Knottingham	$ 63,049	$ 64,953	
Total Collected Revenue	$ 7,164,670	$ 7,120,931	
	$ 7,164,670	**0.61%**	

SCHEDULE 14C - FY 10 RATE RECONCILIATION

Village of Downers Grove
Water Rate Study

	2010
Council Adopted Projected Revenues	$ 7,955,137

Consumption Information *in CCFs		2010 (no growth from FY 09)	Consumption
Inside Village		Jan - June	920,650
		July - Dec	1,266,161
Outside Village		Jan - June	58,056
		July - Dec	72,868
Westmont	0 - 1 CCFs		401
	2 - 13 CCFs		3,920
	Over 13 CCFs		2,948
Knottingham			22,553

Current Rate Structure

Inside Village	92.43%	2010 (no growth from FY 09)		
Minimum Charge				
Consumption =		920,650	920,650	
Cost Allocated =		$ 2,944,254	$ 2,798,776	
Unit Rate (per CCF)	0.9	$ 3.20	$ 3.04	5.2%
Consumption =		1,266,161	1,266,161	
Cost Allocated =		$ 4,408,838	$ 4,190,993	
Unit Rate (per CCF)	1.0	$ 3.48	$ 3.31	5.2%

Outside Village	6.45%	2010 (no growth from FY 09)		
Consumption =		58,056	58,056	
Cost Allocated =		$ 216,954	$ 205,518	
Unit Rate (per CCF)	0.9	$ 3.74	$ 3.54	5.6%
Consumption =		72,868	72,868	
Cost Allocated =		$ 296,152	$ 280,542	
Unit Rate (per CCF)	1.0	$ 4.06	$ 3.85	5.6%

Westmont Customers	0.26%	2010 (no growth from FY 09)		
Level 1: 0 - 1 CCF				
Consumption =		401	401	
Cost Allocated =		$ 1,708	$ 1,604	
Unit Rate (per CCF)	1.00	$ 4.26	$ 4.00	6.5%
Level 2: 2 - 13 CCFs				
Consumption =		3,920	3,920	
Cost Allocated =		$ 9,395	$ 8,821	
Unit Rate (per CCF)	0.56	$ 2.40	$ 2.25	6.5%
Level 3: Over 13 CCFs				
Consumption =		2,948	2,948	
Cost Allocated =		$ 9,421	$ 8,845	
Unit Rate (per CCF)	0.75	$ 3.20	$ 3.00	6.5%

Knottingham	0.86%	2010 (no growth from FY 09)		
Consumption =		22,553	22,553	
Cost Allocated =		$ 68,414	$ 64,953	
Unit Rate (per CCF)		$ 3.03	$ 2.88	5.3%

Collected Revenue - Inside Village	$ 7,353,092	$ 6,989,769
Collected Revenue - Outside Village	$ 513,106	$ 486,060
Collected Revenue - Westmont	$ 20,524	$ 19,269
Collected Revenue - Knottingham	$ 68,414	$ 64,953
Total Collected Revenue	$ 7,955,137	$ 7,560,051
	$ 7,955,137	**5.23%**

SCHEDULE 14D - FY 11 RATE ANALYSIS

Village of Downers Grove
Water Rate Study

	2011
Downers Grove Revenue Requirements	$ 9,143,763
Rev. Req. - Fixed Portion	$ 1,258,671
Rev. Req. - Variable Portion	$ 7,885,092

Consumption Information *in CCFs	2011 (no growth from FY 09)	Total EDU's
Inside Village (including min. 2 CCFs)	2,139,346	22,738
Residential (No Min. Usage)	1,152,022	
Non-Residential (No Min. Usage)	986,459	
Commercial	953,073	
Industrial	53,415	
Outside Village (including min. 2 CCFs)	127,940	1,471
Residential (No Min. Usage)	95,646	
Non-Residential (No Min. Usage)	32,219	

Water Conservation	
Alternative C	
Residential Consumption Conservation	
Level 2 Reduction Level	4.0%
Level 3 Reduction Level	7.0%
Alternative D	
Residential Consumption Conservation	
Level 2 Reduction Level	4.0%
Level 3 Reduction Level	7.0%
Commercial Consumption Conservation	
Level 2 Reduction Level	4.0%
Level 3 Reduction Level	7.0%
Industrial Consumption Conservation	
Level 2 Reduction Level	4.0%
Level 3 Reduction Level	7.0%

Alternative A - Current Rate Structure

Inside Village	93.50%	2011	2010 Current	
Consumption =		2,139,346	2,139,346	
Cost Allocated =		$ 8,549,418	$ 7,081,234	
Unit Rate (per CCF)		$ 4.00	$ 3.31	20.7%

Outside Village	6.50%	2011	2010 Current	
Consumption =		127,940	127,940	
Cost Allocated =		$ 594,345	$ 492,570	
Unit Rate (per CCF)		$ 4.65	$ 3.85	20.7%

Collected Revenue - Inside Village	$ 8,549,418	$ 7,081,234
Collected Revenue - Outside Village	$ 594,345	$ 492,570
Total Collected Revenue	$ 9,143,763	$ 7,573,804
	$ 9,143,763	**20.73%**

Alternative B - Fixed Charge Based on Meter Size with Unit Rate Volume Charge

Bi-Monthly Fixed Charge	
Total EDU's	24,209
Cost Allocated =	$ 1,258,671
Bi-Monthly Fixed Charge	$ 8.67

Inside Village	93.50%	2011
Variable Charges		
Consumption =		2,138,481
Cost Allocated =		$ 7,372,561
Unit Rate (per CCF)		$ 3.45

Outside Village	6.50%	2011
Variable Charges		
Consumption =		127,865
Cost Allocated =		$ 512,531
Unit Rate (per CCF)		$ 4.01

Collected Revenue - Fixed Charge	$ 1,258,671
Collected Revenue - Inside Village	$ 7,372,561
Collected Revenue - Outside Village	$ 512,531
Total Collected Revenue	$ 9,143,763
	$ 9,143,763

Alternative B Phase-In - Fixed Charge Based on Meter Size with Unit Rate Volume Charge

Bi-Monthly Fixed Charge			
Total EDU's			24,209
% of Revenue Collected in Fixed Charge =	10.00%	$	914,376
Bi-Monthly Fixed Charge		$	6.30

Inside Village	93.50%		2011	**Outside Village**	6.50%		2011
Variable Charges				Variable Charges			
Consumption =			2,138,481	Consumption =			127,865
Cost Allocated =	90.00%	$	7,694,477	Cost Allocated =		$	534,910
Unit Rate (per CCF)		$	3.60	Unit Rate (per CCF)		$	4.18

Collected Revenue - Fixed Charge	$	914,376
Collected Revenue - Inside Village	$	7,694,477
Collected Revenue - Outside Village	$	534,910
Total Collected Revenue	$	9,143,763
	$	9,143,763

Alternative C - Fixed Charge Based on Meter Size with Residential Inclining Block Rate

Bi-Monthly Fixed Charge			
Total EDU's			24,209
Cost Allocated =		$	1,258,671
Bi-Monthly Fixed Charge		$	8.67

Inside Village	93.50%		2011	**Outside Village**	6.50%		2011
Variable Charges				Variable Charges			
Residential Block Rate Structure	54%			Residential Block Rate Structure	75%		
Level 1: 0 - 15 CCFs				Level 1: 0 - 15 CCFs			
Consumption =	69%		790,801	Consumption =	69%		66,012
Cost Allocated =		$	2,518,730	Cost Allocated =		$	244,428
Unit Rate (per CCF)	1.00	$	3.19	Unit Rate (per CCF)	1.00	$	3.70
Level 2: 15 - 30 CCFs				Level 2: 15 - 30 CCFs			
Consumption =	21%		234,958	Consumption =	20%		18,768
Cost Allocated =		$	935,437	Cost Allocated =		$	86,868
Unit Rate (per CCF)	1.25	$	3.98	Unit Rate (per CCF)	1.25	$	4.63
Level 3: Over 30 CCFs				Level 3: Over 30 CCFs			
Consumption =	10%		108,321	Consumption =	11%		9,378
Cost Allocated =		$	517,509	Cost Allocated =		$	52,089
Unit Rate (per CCF)	1.50	$	4.78	Unit Rate (per CCF)	1.5	$	5.55
Non-Residential Unit Rate	46%			Non-Residential Unit Rate	25%		
Consumption =			986,459	Consumption =			32,219
Cost Allocated =		$	3,400,885	Cost Allocated =		$	129,145
Unit Rate (per CCF)		$	3.45	Unit Rate (per CCF)		$	4.01

Collected Revenue - Fixed Charge	$	1,258,671
Collected Revenue - Inside Village Residential Variable Charges	$	3,971,676
Collected Revenue - Inside Village Non - Residential Variable Charges	$	3,400,885
Collected Revenue - Outside Village Residential Variable Charges	$	383,386
Collected Revenue - Outside Village Non - Residential Variable Charges	$	129,145
Total Collected Revenue	$	9,143,763

$ 9,143,763

Alternative D - Fixed Charge Based on Meter Size with Multiple Class Inclining Block Rates

Bi-Monthly Fixed Charge		
Total EDU's		24,209
Cost Allocated =	$	1,258,671
Bi-Monthly Fixed Charge	$	8.67

Inside Village	93.50%		2011
Variable Charges			
Residential Block Rate Structure			
Level 1: 0 - 15 CCFs			
Consumption =	69%		790,801
Cost Allocated =		$	2,361,309
Unit Rate (per CCF)	1.00	$	2.99
Level 2: 15 - 30 CCFs			
Consumption =	21%		234,958
Cost Allocated =		$	876,972
Unit Rate (per CCF)	1.25	$	3.73
Level 3: Over 30 CCFs			
Consumption =	10%		108,321
Cost Allocated =		$	485,165
Unit Rate (per CCF)	1.50	$	4.48
Commercial Unit Rate			
Level 1: 0 - 100 CCFs			
Consumption =	37%		355,235
Cost Allocated =		$	1,060,722
Unit Rate (per CCF)	1.00	$	2.99
Level 2: 100 - 200 CCFs			
Consumption =	17%		152,925
Cost Allocated =		$	570,788
Unit Rate (per CCF)	1.25	$	3.73
Level 3: Over 200 CCFs			
Consumption =	46%		407,843
Cost Allocated =		$	1,826,712
Unit Rate (per CCF)	1.50	$	4.48
Industrial Unit Rate			
Level 1: 0 - 130 CCFs			
Consumption =	42%		22,223
Cost Allocated =		$	66,357
Unit Rate (per CCF)	1.00	$	2.99
Level 2: 130 - 260 CCFs			
Consumption =	17%		8,890
Cost Allocated =		$	33,180
Unit Rate (per CCF)	1.25	$	3.73
Level 3: Over 260 CCFs			
Consumption =	41%		20,397
Cost Allocated =		$	91,356
Unit Rate (per CCF)	1.50	$	4.48

Outside Village	6.50%		2011
Variable Charges			
Residential Block Rate Structure	75%		
Level 1: 0 - 15 CCFs			
Consumption =	69%		66,012
Cost Allocated =		$	236,921
Unit Rate (per CCF)	1.00	$	3.59
Level 2: 15 - 30 CCFs			
Consumption =	20%		18,768
Cost Allocated =		$	84,200
Unit Rate (per CCF)	1.25	$	4.49
Level 3: Over 30 CCFs			
Consumption =	11%		9,378
Cost Allocated =		$	50,489
Unit Rate (per CCF)	1.50	$	5.38
Commercial Unit Rate			
Level 1: 0 - 100 CCFs			
Consumption =	32%		10,367
Cost Allocated =		$	37,210
Unit Rate (per CCF)	1.00	$	3.59
Level 2: 100 - 200 CCFs			
Consumption =	25%		7,809
Cost Allocated =		$	35,036
Unit Rate (per CCF)	1.25	$	4.49
Level 3: Over 200 CCFs			
Consumption =	43%		12,756
Cost Allocated =		$	68,675
Unit Rate (per CCF)	1.50	$	5.38

Collected Revenue - Fixed Charge	$	1,258,671
Collected Revenue - Inside Village Residential Variable Charges	$	3,723,445
Collected Revenue - Inside Village Commercial Variable Charges	$	3,458,222
Collected Revenue - Inside Village Industrial Variable Charges	$	190,894
Collected Revenue - Outside Village Residential Variable Charges	$	371,610
Collected Revenue - Outside Village Commercial Variable Charges	$	140,921
Total Collected Revenue	$	9,143,763

Village of Downers Grove
Water Rate Study

SCHEDULE 15 - RATE PROJECTIONS

		Current Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Revenue Requirements			$ 9,143,763	$ 10,205,695	$ 11,177,783	$ 11,751,597	$ 12,204,803	$ 16,108,819	$ 17,879,936	$ 18,946,217	$ 19,786,017	$ 20,761,110
Rev. Req. - Fixed Portion	13.8%		$ 1,258,671	$ 1,296,431	$ 1,335,324	$ 1,375,384	$ 1,416,646	$ 1,459,145	$ 1,502,919	$ 1,548,007	$ 1,594,447	$ 1,642,281
Rev. Req. - Variable Portion	86.2%		$ 7,885,092	$ 8,909,263	$ 9,842,459	$ 10,376,213	$ 10,788,158	$ 14,649,674	$ 16,377,017	$ 17,398,210	$ 18,191,570	$ 19,118,829
Total Inside Village EDU's			22,738	22,738	22,738	22,738	22,738	22,738	22,738	22,738	22,738	22,738
Total Outside Village EDU's			1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471
Inside Village Consumption												
0 - 1 CCF			864	856	847	839	830	822	814	806	798	790
Over 1 CCF			2,137,617	2,116,241	2,095,078	2,074,127	2,053,386	2,032,852	2,012,524	1,992,398	1,972,474	1,952,750
Residential (in CCFs)			1,152,022	1,140,502	1,129,097	1,117,806	1,106,628	1,095,562	1,084,606	1,073,760	1,063,022	1,052,392
Non-Residential (in CCFs)			**986,459**	**976,594**	**966,828**	**957,160**	**947,588**	**938,113**	**928,731**	**919,444**	**910,250**	**901,147**
Commercial (in CCFs)			934,107	924,766	915,518	906,363	897,299	888,326	879,443	870,649	861,942	853,323
Industrial (in CCFs)			52,352	51,829	51,310	50,797	50,289	49,786	49,288	48,796	48,308	47,824
Outside Village Consumption												
0 - 1 CCF			75	75	74	73	72	72	71	70	70	69
Over 1 CCF			127,789	126,511	125,246	123,994	122,754	121,526	120,311	119,108	117,917	116,738
Residential (in CCFs)			95,646	94,690	93,743	92,805	91,877	90,958	90,049	89,148	88,257	87,374
Non-Residential (in CCFs)			32,219	31,897	31,578	31,262	30,949	30,640	30,333	30,030	29,730	29,432
Alternative A - Current Rate Structure												
Breakeven Rates												
Inside Village	93.50%											
Unit Rate per CCF		$ 3.31	$ 4.00	$ 4.51	$ 4.98	$ 5.29	$ 5.55	$ 7.40	$ 8.30	$ 8.88	$ 9.37	$ 9.93
			20.7%	12.7%	10.6%	6.2%	4.9%	33.3%	12.1%	7.0%	5.5%	6.0%
Outside Village	6.50%											
Unit Rate per CCF		$ 3.85	$ 4.65	$ 5.24	$ 5.79	$ 6.15	$ 6.45	$ 8.61	$ 9.65	$ 10.33	$ 10.89	$ 11.55
			20.7%	12.7%	10.6%	6.2%	4.9%	33.3%	12.1%	7.0%	5.5%	6.0%
Total Collected Revenue - Inside Village			$ 8,549,418	$ 9,542,325	$ 10,451,227	$ 10,987,744	$ 11,411,491	$ 15,061,746	$ 16,717,740	$ 17,714,712	$ 18,499,926	$ 19,411,638
Total Collected Revenue - Outside Village			$ 594,345	$ 663,370	$ 726,556	$ 763,854	$ 793,312	$ 1,047,073	$ 1,162,196	$ 1,231,504	$ 1,286,091	$ 1,349,472
Total Collected Revenue			$ 9,143,763	$ 10,205,695	$ 11,177,783	$ 11,751,597	$ 12,204,803	$ 16,108,819	$ 17,879,936	$ 18,946,217	$ 19,786,017	$ 20,761,110
Total Required Revenue			**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**
Total Surplus/Shortfall			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
User Defined Rates												
Inside Village												
			14.7%	14.0%	14.0%	10.0%	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Unit Rate per CCF		$ 3.31	$3.80	$4.33	$4.93	$5.43	$5.92	$ 6.51	$ 7.16	$ 7.87	$ 8.66	$ 9.53
Outside Village												
			14.7%	14.0%	14.0%	10.0%	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Unit Rate per CCF		$ 3.85	$4.42	$5.03	$5.74	$6.31	$6.88	$ 7.57	$ 8.33	$ 9.16	$ 10.07	$ 11.08
Total Collected Revenue - Inside Village			$ 8,122,175	$ 9,166,687	$ 10,345,523	$ 11,266,275	$ 12,157,437	$ 13,239,449	$ 14,417,760	$ 15,700,940	$ 17,098,324	$ 18,620,075
Total Collected Revenue - Outside Village			$ 564,978	$ 637,634	$ 719,634	$ 783,681	$ 845,670	$ 920,935	$ 1,002,898	$ 1,092,156	$ 1,189,358	$ 1,295,211
Total Collected Revenue			$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286
Total Required Revenue			**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**
Total Surplus/Shortfall			$ (456,610)	$ (401,374)	$ (112,626)	$ 298,359	$ 798,304	$ (1,948,435)	$ (2,459,278)	$ (2,153,120)	$ (1,498,335)	$ (845,824)

SCHEDULE 15 - RATE PROJECTIONS

Village of Downers Grove
Water Rate Study

Alternative B - Fixed Charge Based on Meter Size with Unit Rate Volume Charge

User Defined Rates

Bi-Monthly Fixed Charge		$8.23	$9.29	$10.49	$11.42	$12.32	$13.42	$14.61	$15.91	$17.33	$18.87
Inside Village	93.5%										
Unit Rate per CCF		$3.28	$3.73	$4.26	$4.68	$5.10	$ 5.61	$ 6.18	$ 6.79	$ 7.47	$ 8.22
Outside Village	6.5%										
Unit Rate per CCF		$3.81	$4.34	$4.95	$5.44	$5.93	$ 6.53	$ 7.18	$ 7.90	$ 8.69	$ 9.56
Total Collected Revenue - Fixed Charge		$ 1,195,817	$ 1,349,600	$ 1,523,158	$ 1,658,719	$ 1,789,924	$ 1,949,227	$ 2,122,708	$ 2,311,629	$ 2,517,364	$ 2,741,410
Total Collected Revenue - Inside Village		$ 7,004,399	$ 7,905,165	$ 8,921,769	$ 9,715,806	$ 10,484,327	$ 11,417,432	$ 12,433,583	$ 13,540,172	$ 14,745,247	$ 16,057,574
Total Collected Revenue - Outside Village		$ 486,937	$ 549,557	$ 620,230	$ 675,430	$ 728,857	$ 793,725	$ 864,367	$ 941,295	$ 1,025,071	$ 1,116,302
Total Collected Revenue		$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286
Total Required Revenue		**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**
Total Surplus/Shortfall		$ (456,610)	$ (401,374)	$ (112,626)	$ 298,359	$ 798,304	$ (1,948,435)	$ (2,459,278)	$ (2,153,120)	$ (1,498,335)	$ (845,824)

Alternative B Phase-In - Fixed Charge Based on Meter Size with Unit Rate Volume Charge

6.50 2.17 11.67

User Defined Rates

% of Revenues Collected in Fixed Charge		9.50%	12%	14%	14%	14%	14%	14%	14%	14%	14%
Bi-Monthly Fixed Charge		$ 5.68	$ 7.76	$ 10.49	$ 11.42	$ 12.32	$ 13.42	$ 14.61	$ 15.91	$ 17.33	$ 18.87
% of Revenues Collected in Variable Charges		91%	89%	86%	86%	86%	86%	86%	86%	86%	86%
Inside Village	93.5%										
Unit Rate per CCF		$ 3.44	$ 3.83	$ 4.26	$ 4.68	$ 5.10	$ 5.61	$ 6.18	$ 6.79	$ 7.47	$ 8.22
Outside Village	6.5%										
Unit Rate per CCF		$ 4.00	$ 4.46	$ 4.95	$ 5.44	$ 5.93	$ 6.53	$ 7.18	$ 7.90	$ 8.69	$ 9.56
Total Collected Revenue - Fixed Charge		$ 825,280	$ 1,127,497	$ 1,523,158	$ 1,658,719	$ 1,789,924	$ 1,949,227	$ 2,122,708	$ 2,311,629	$ 2,517,364	$ 2,741,410
Total Collected Revenue - Inside Village		$ 7,350,852	$ 8,112,831	$ 8,921,769	$ 9,715,806	$ 10,484,327	$ 11,417,432	$ 12,433,583	$ 13,540,172	$ 14,745,247	$ 16,057,574
Total Collected Revenue - Outside Village		$ 511,022	$ 563,994	$ 620,230	$ 675,430	$ 728,857	$ 793,725	$ 864,367	$ 941,295	$ 1,025,071	$ 1,116,302
Total Collected Revenue		$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286
Total Required Revenue		**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**
Total Surplus/Shortfall		$ (456,610)	$ (401,374)	$ (112,626)	$ 298,359	$ 798,304	$ (1,948,435)	$ (2,459,278)	$ (2,153,120)	$ (1,498,335)	$ (845,824)

Alternative C - Fixed Charge Based on Meter Size with Residential Inclining Block Rate

User Defined Rates

Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32	$ 13.42	$ 14.61	$ 15.91	$ 17.33	$ 18.87
Inside Village	93.50%										
Variable Charges											
	Conservation										
Residential Block Rate Structure	54%										
Level 1: 0 - 15 CCFs	69%										
Unit Rate (per CCF)	1.00	$ 3.03	$ 3.45	$ 3.93	$ 4.33	$ 4.72	$ 5.19	$ 5.71	$ 6.28	$ 6.90	$ 7.59
Level 2: 15 - 30 CCFs	21%										
Unit Rate (per CCF)	1.25 4%	$ 3.78	$ 4.31	$ 4.92	$ 5.41	$ 5.89	$ 6.48	$ 7.13	$ 7.84	$ 8.63	$ 9.49
Level 3: Over 30 CCFs	10%										
Unit Rate (per CCF)	1.5 7%	$ 4.54	$ 5.17	$ 5.90	$ 6.49	$ 7.07	$ 7.78	$ 8.56	$ 9.41	$ 10.36	$ 11.39
Non-Residential Unit Rate	46%	$ 3.28	$ 3.73	$ 4.26	$ 4.68	$ 5.10	$ 5.61	$ 6.18	$ 6.79	$ 7.47	$ 8.22

SCHEDULE 15 - RATE PROJECTIONS

Outside Village	6.50%														
Variable Charges															
Residential Block Rate Structure	75%														
Level 1: 0 - 15 CCFs	69%														
Unit Rate (per CCF)	1.00		$ 3.52	$ 4.01	$ 4.57	$ 5.03	$ 5.48	$ 6.03	$ 6.63	$ 7.30	$ 8.03	$ 8.83			
Level 2: 15 - 30 CCFs	20%														
Unit Rate (per CCF)	1.25	4%	$ 4.40	$ 5.01	$ 5.71	$ 6.29	$ 6.85	$ 7.54	$ 8.29	$ 9.12	$ 10.03	$ 11.04			
Level 3: Over 30 CCFs	11%														
Unit Rate (per CCF)	1.5	7%	$ 5.28	$ 6.02	$ 6.86	$ 7.54	$ 8.22	$ 9.04	$ 9.95	$ 10.94	$ 12.04	$ 13.24			
Non-Residential Unit Rate	25%		$ 3.81	$ 4.34	$ 4.95	$ 5.44	$ 5.93	$ 6.53	$ 7.18	$ 7.90	$ 8.69	$ 9.56			
Collected Revenue - Fixed Charge			$ 1,195,817	$ 1,349,600	$ 1,523,158	$ 1,658,719	$ 1,789,924	$ 1,949,227	$ 2,122,708	$ 2,311,629	$ 2,517,364	$ 2,741,410			
Collected Revenue - Inside Village Residential Variable Charges			$ 3,773,343	$ 4,258,595	$ 4,806,251	$ 5,234,007	$ 5,648,017	$ 6,150,691	$ 6,698,102	$ 7,294,233	$ 7,943,420	$ 8,650,384			
Collected Revenue - Inside Village Non - Residential Variable Charges			$ 3,231,056	$ 3,646,569	$ 4,115,518	$ 4,481,799	$ 4,836,310	$ 5,266,741	$ 5,735,481	$ 6,245,939	$ 6,801,828	$ 7,407,190			
Collected Revenue - Outside Village Residential Variable Charges			$ 364,241	$ 411,082	$ 463,947	$ 505,238	$ 545,203	$ 593,726	$ 646,567	$ 704,112	$ 766,778	$ 835,021			
Collected Revenue - Outside Village Non - Residential Variable Charges			$ 122,696	$ 138,475	$ 156,283	$ 170,192	$ 183,654	$ 199,999	$ 217,799	$ 237,184	$ 258,293	$ 281,281			
Total Collected Revenue			$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286			
Total Required Revenue			**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**			
Total Surplus/Shortfall			$ (456,610)	$ (401,374)	$ (112,626)	$ 298,359	$ 798,304	$ (1,948,435)	$ (2,459,278)	$ (2,153,120)	$ (1,498,335)	$ (845,824)			

Alternative D - Fixed Charge Based on Meter Size with Multiple Class Inclining Block Rates

User Defined Rates															
Bi-Monthly Fixed Charge			$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32	$ 13.42	$ 14.61	$ 15.91	$ 17.33	$ 18.87			
Inside Village	93.50%														
Variable Charges		Conservation													
Residential Block Rate Structure															
Level 1: 0 - 15 CCFs	69%														
Unit Rate (per CCF)	1.00		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46	$ 4.91	$ 5.40	$ 5.94	$ 6.54	$ 7.19			
Level 2: 15 - 30 CCFs	21%	4%													
Unit Rate (per CCF)	1.25		$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58	$ 6.14	$ 6.75	$ 7.43	$ 8.17	$ 8.99			
Level 3: Over 30 CCFs	10%														
Unit Rate (per CCF)	1.50	7%	$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70	$ 7.37	$ 8.10	$ 8.91	$ 9.80	$ 10.79			
Commercial Unit Rate															
Level 1: 0 - 100 CCFs	37%														
Unit Rate (per CCF)	1.00		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46	$ 4.91	$ 5.40	$ 5.94	$ 6.54	$ 7.19			
Level 2: 100 - 200 CCFs	17%														
Unit Rate (per CCF)	1.25	4%	$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58	$ 6.14	$ 6.75	$ 7.43	$ 8.17	$ 8.99			
Level 3: Over 200 CCFs	46%														
Unit Rate (per CCF)	1.50	7%	$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70	$ 7.37	$ 8.10	$ 8.91	$ 9.80	$ 10.79			
Industrial Unit Rate															
Level 1: 0 - 130 CCFs	42%														
Unit Rate (per CCF)	1.00		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46	$ 4.91	$ 5.40	$ 5.94	$ 6.54	$ 7.19			
Level 2: 130 - 260 CCFs	17%														
Unit Rate (per CCF)	1.25	4%	$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58	$ 6.14	$ 6.75	$ 7.43	$ 8.17	$ 8.99			
Level 3: Over 260 CCFs	41%														
Unit Rate (per CCF)	1.50	7%	$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70	$ 7.37	$ 8.10	$ 8.91	$ 9.80	$ 10.79			

SCHEDULE 15 - RATE PROJECTIONS

Village of Downers Grove
Water Rate Study

Outside Village	6.50%											
Variable Charges												
Residential Block Rate Structure												
Level 1: 0 - 15 CCFs	69%											
Unit Rate (per CCF)	1.00		$ 3.41	$ 3.89	$ 4.43	$ 4.87	$ 5.31	$ 5.84	$ 6.43	$ 7.07	$ 7.78	$ 8.56
Level 2: 15 - 30 CCFs	20%											
Unit Rate (per CCF)	1.25	4%	$ 4.26	$ 4.86	$ 5.54	$ 6.09	$ 6.64	$ 7.31	$ 8.04	$ 8.84	$ 9.72	$ 10.70
Level 3: Over 30 CCFs	11%											
Unit Rate (per CCF)	1.50	7%	$ 5.11	$ 5.83	$ 6.65	$ 7.31	$ 7.97	$ 8.77	$ 9.64	$ 10.61	$ 11.67	$ 12.84
Commercial Unit Rate												
Level 1: 0 - 100 CCFs	32%											
Unit Rate (per CCF)	1.00		$ 3.41	$ 3.89	$ 4.43	$ 4.87	$ 5.31	$ 5.84	$ 6.43	$ 7.07	$ 7.78	$ 8.56
Level 2: 100 - 200 CCFs	25%											
Unit Rate (per CCF)	1.25	4%	$ 4.26	$ 4.86	$ 5.54	$ 6.09	$ 6.64	$ 7.31	$ 8.04	$ 8.84	$ 9.72	$ 10.70
Level 3: Over 200 CCFs	43%											
Unit Rate (per CCF)	1.50	7%	$ 5.11	$ 5.83	$ 6.65	$ 7.31	$ 7.97	$ 8.77	$ 9.64	$ 10.61	$ 11.67	$ 12.84
Collected Revenue - Fixed Charge			$ 1,195,817	$ 1,349,600	$ 1,523,158	$ 1,658,719	$ 1,789,924	$ 1,949,227	$ 2,122,708	$ 2,311,629	$ 2,517,364	$ 2,741,410
Collected Revenue - Inside Village Residential Variable Charges			$ 3,572,698	$ 4,032,147	$ 4,550,681	$ 4,955,692	$ 5,347,687	$ 5,823,631	$ 6,341,935	$ 6,906,367	$ 7,521,034	$ 8,190,406
Collected Revenue - Inside Village Commercial Variable Charges			$ 3,252,181	$ 3,670,411	$ 4,142,426	$ 4,511,102	$ 4,867,930	$ 5,301,176	$ 5,772,980	$ 6,286,776	$ 6,846,299	$ 7,455,619
Collected Revenue - Inside Village Industrial Variable Charges			$ 179,520	$ 202,606	$ 228,662	$ 249,013	$ 268,709	$ 292,625	$ 318,668	$ 347,030	$ 377,915	$ 411,550
Collected Revenue - Outside Village Residential Variable Charges			$ 353,053	$ 398,456	$ 449,697	$ 489,720	$ 528,457	$ 575,490	$ 626,709	$ 682,486	$ 743,227	$ 809,374
Collected Revenue - Outside Village Commercial Variable Charges			$ 133,884	$ 151,101	$ 170,533	$ 185,710	$ 200,400	$ 218,235	$ 237,658	$ 258,810	$ 281,844	$ 306,928
Total Collected Revenue			$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286
Total Required Revenue			**$ 9,143,763**	**$ 10,205,695**	**$ 11,177,783**	**$ 11,751,597**	**$ 12,204,803**	**$ 16,108,819**	**$ 17,879,936**	**$ 18,946,217**	**$ 19,786,017**	**$ 20,761,110**
Total Surplus/Shortfall			$ (456,610)	$ (401,374)	$ (112,626)	$ 298,359	$ 798,304	$ (1,948,435)	$ (2,459,278)	$ (2,153,120)	$ (1,498,335)	$ (845,824)

Model Index

SCHEDULE 16A - INSIDE VILLAGE SAMPLE BILLS

	Current Rates	2011	2012	2013	2014	2015
Alternative A - Current Rate Structure						
Inside Village - Unit Rate per CCF (Min 2 CCFs)	$ 3.31	$ 3.80	$ 4.33	$ 4.93	$ 5.43	$ 5.92
Alternative B - Fixed Charge Based on Meter Size with Unit Rate Volume Charge						
Inside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Inside Village - Unit Rate per CCF (No Minimum)		$ 3.28	$ 3.73	$ 4.26	$ 4.68	$ 5.10
Alternative C - Fixed Charge Based on Meter Size with Residential Inclining Block Rate						
Inside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Inside Village - Residential Inclining Block Rate						
Level 1: 0 - 15 CCFs per CCF		$ 3.03	$ 3.45	$ 3.93	$ 4.33	$ 4.72
Level 2: 15 - 30 CCFs per CCF		$ 3.78	$ 4.31	$ 4.92	$ 5.41	$ 5.89
Level 3: Over 30 CCFs per CCF		$ 4.54	$ 5.17	$ 5.90	$ 6.49	$ 7.07
Inside Village - Non-Residential Unit Rate per CCF		$ 3.28	$ 3.73	$ 4.26	$ 4.68	$ 5.10
Alternative D - Fixed Charge Based on Meter Size with Multiple Class Inclining Block Rates						
Inside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Inside Village - Residential Inclining Block Rate						
Level 1: 0 - 15 CCFs per CCF		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46
Level 2: 15 - 30 CCFs per CCF		$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58
Level 3: Over 30 CCFs per CCF		$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70
Commercial Unit Rate per CCF						
Level 1: 0 - 100 CCFs per CCF		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46
Level 2: 100 - 200 CCFs per CCF		$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58
Level 3: Over 200 CCFs per CCF		$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70
Industrial Unit Rate						
Level 1: 0 - 130 CCFs		$ 2.87	$ 3.27	$ 3.72	$ 4.10	$ 4.46
Level 2: 130 - 260 CCFs		$ 3.58	$ 4.08	$ 4.65	$ 5.12	$ 5.58
Level 3: Over 260 CCFs		$ 4.30	$ 4.90	$ 5.59	$ 6.14	$ 6.70

Meter Size	Equivalent				
5/8	1.00	$8.20	$5.68	$7.76	$10.49
1	1.50	$12.35	$8.52	$11.64	$15.73
1 1/2	5.00	$41.16	$28.41	$38.81	$52.43
2	8.00	$65.86	$45.45	$62.10	$83.89
3	15.00	$123.49	$85.22	$116.43	$157.29
4	25.00	$205.81	$142.04	$194.06	$262.15
6	50.00	$411.63	$284.08	$388.11	$524.31
10	120.00	$987.91	$681.80	$931.47	$1,258.34

Alternative A

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$6.62	$7.59	14.70%	$ 8.66	14.00%	$ 9.87	14.00%	$ 10.85	10.00%	$ 11.83	9.00%
5/8	10	Residential	$33.10	$37.97	14.70%	$ 43.28	14.00%	$ 49.34	14.00%	$ 54.27	10.00%	$ 59.16	9.00%
5/8	15	Residential	$49.65	$56.95	14.70%	$ 64.92	14.00%	$ 74.01	14.00%	$ 81.41	10.00%	$ 88.74	9.00%
5/8	40	Residential	$132.40	$151.86	14.70%	$ 173.12	14.00%	$ 197.36	14.00%	$ 217.10	10.00%	$ 236.64	9.00%
5/8	5	Commercial	$16.55	$18.98	14.70%	$ 21.64	14.00%	$ 24.67	14.00%	$ 27.14	10.00%	$ 29.58	9.00%
1 1/2	50	Commercial	$165.50	$189.83	14.70%	$ 216.40	14.00%	$ 246.70	14.00%	$ 271.37	10.00%	$ 295.79	9.00%
1 1/2	100	Commercial	$331.00	$379.66	14.70%	$ 432.81	14.00%	$ 493.40	14.00%	$ 542.74	10.00%	$ 591.59	9.00%
1 1/2	250	Commercial	$827.50	$949.14	14.70%	$ 1,082.02	14.00%	$ 1,233.51	14.00%	$ 1,356.86	10.00%	$ 1,478.97	9.00%
5/8	60	Industrial	$198.60	$227.79	14.70%	$ 259.69	14.00%	$ 296.04	14.00%	$ 325.65	10.00%	$ 354.95	9.00%
2	120	Industrial	$397.20	$455.59	14.70%	$ 519.37	14.00%	$ 592.08	14.00%	$ 651.29	10.00%	$ 709.91	9.00%
2	200	Industrial	$662.00	$759.31	14.70%	$ 865.62	14.00%	$ 986.80	14.00%	$ 1,085.48	10.00%	$ 1,183.18	9.00%
2	400	Industrial	$1,324.00	$1,518.63	14.70%	$ 1,731.24	14.00%	$ 1,973.61	14.00%	$ 2,170.97	10.00%	$ 2,366.36	9.00%

Alternative B

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$6.62	$11.51	73.84%	$13.03	13.18%	$14.74	13.19%	$16.10	9.22%	$17.43	8.23%
5/8	10	Residential	$33.10	$40.99	23.83%	$46.63	13.77%	$53.05	13.77%	$58.24	9.78%	$63.36	8.79%
5/8	15	Residential	$49.65	$57.36	15.54%	$65.30	13.84%	$74.34	13.84%	$81.66	9.84%	$88.88	8.85%
5/8	40	Residential	$132.40	$139.25	5.17%	$158.65	13.93%	$180.75	13.93%	$198.72	9.94%	$216.48	8.94%
5/8	5	Commercial	$16.55	$24.61	48.70%	$27.96	13.62%	$31.77	13.62%	$34.83	9.64%	$37.84	8.64%
1 1/2	50	Commercial	$165.50	$204.93	23.83%	$233.15	13.77%	$265.27	13.77%	$291.22	9.78%	$316.80	8.79%
1 1/2	100	Commercial	$331.00	$368.70	11.39%	$419.85	13.87%	$478.10	13.87%	$525.34	9.88%	$571.99	8.88%
1 1/2	250	Commercial	$827.50	$860.02	3.93%	$979.95	13.95%	$1,116.61	13.95%	$1,227.70	9.95%	$1,337.57	8.95%
5/8	60	Industrial	$198.60	$204.76	3.10%	$233.33	13.95%	$265.89	13.95%	$292.36	9.96%	$318.55	8.96%
2	120	Industrial	$397.20	$458.91	15.54%	$522.41	13.84%	$594.70	13.84%	$653.24	9.84%	$711.04	8.85%
2	200	Industrial	$662.00	$720.94	8.90%	$821.12	13.90%	$935.23	13.90%	$1,027.83	9.90%	$1,119.34	8.90%
2	400	Industrial	$1,324.00	$1,376.02	3.93%	$1,567.92	13.95%	$1,786.58	13.95%	$1,964.31	9.95%	$2,140.10	8.95%

Alternative C

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$6.62	$11.26	70.07%	$12.74	13.17%	$14.42	13.17%	$15.75	9.20%	$17.04	8.21%
5/8	10	Residential	$33.10	$38.49	16.29%	$43.79	13.76%	$49.81	13.76%	$54.68	9.77%	$59.47	8.77%
5/8	15	Residential	$49.65	$53.62	8.00%	$61.04	13.82%	$69.47	13.83%	$76.31	9.83%	$83.05	8.84%
5/8	40	Residential	$132.40	$155.75	17.64%	$177.46	13.94%	$202.20	13.94%	$222.30	9.94%	$242.19	8.94%
5/8	5	Commercial	$16.55	$24.61	48.70%	$27.96	13.62%	$31.77	13.62%	$34.83	9.64%	$37.84	8.64%
1 1/2	50	Commercial	$165.50	$204.93	23.83%	$233.15	13.77%	$265.27	13.77%	$291.22	9.78%	$316.80	8.79%
1 1/2	100	Commercial	$331.00	$368.70	11.39%	$419.85	13.87%	$478.10	13.87%	$525.34	9.88%	$571.99	8.88%
1 1/2	250	Commercial	$827.50	$860.02	3.93%	$979.95	13.95%	$1,116.61	13.95%	$1,227.70	9.95%	$1,337.57	8.95%
5/8	60	Industrial	$198.60	$204.76	3.10%	$233.33	13.95%	$265.89	13.95%	$292.36	9.96%	$318.55	8.96%
2	120	Industrial	$397.20	$458.91	15.54%	$522.41	13.84%	$594.70	13.84%	$653.24	9.84%	$711.04	8.85%
2	200	Industrial	$662.00	$720.94	8.90%	$821.12	13.90%	$935.23	13.90%	$1,027.83	9.90%	$1,119.34	8.90%
2	400	Industrial	$1,324.00	$1,376.02	3.93%	$1,567.92	13.95%	$1,786.58	13.95%	$1,964.31	9.95%	$2,140.10	8.95%

Alternative D

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$6.62	$11.10	67.64%	$ 12.56	13.15%	$ 14.21	13.16%	$ 15.52	9.19%	$ 16.79	8.20%
5/8	10	Residential	$33.10	$36.88	11.43%	$ 41.95	13.75%	$ 47.72	13.75%	$ 52.38	9.76%	$ 56.97	8.76%
5/8	15	Residential	$49.65	$51.21	3.14%	$ 58.28	13.82%	$ 66.34	13.82%	$ 72.86	9.83%	$ 79.29	8.83%
5/8	40	Residential	$132.40	$147.91	11.71%	$ 168.52	13.94%	$ 192.00	13.94%	$ 211.09	9.94%	$ 229.96	8.94%
5/8	5	Commercial	$16.55	$22.56	36.30%	$ 25.62	13.58%	$ 29.10	13.59%	$ 31.90	9.60%	$ 34.64	8.61%
1 1/2	50	Commercial	$165.50	$184.42	11.43%	$ 209.77	13.75%	$ 238.60	13.75%	$ 261.89	9.76%	$ 284.84	8.76%
1 1/2	100	Commercial	$331.00	$327.67	-1.01%	$ 373.08	13.86%	$ 424.78	13.86%	$ 466.68	9.86%	$ 508.06	8.87%
1 1/2	250	Commercial	$827.50	$900.69	8.84%	$ 1,026.31	13.95%	$ 1,169.47	13.95%	$ 1,285.84	9.95%	$ 1,400.94	8.95%
5/8	60	Industrial	$198.60	$180.14	-9.30%	$ 205.26	13.95%	$ 233.89	13.95%	$ 257.17	9.95%	$ 280.19	8.95%
2	120	Industrial	$397.20	$409.67	3.14%	$ 466.27	13.82%	$ 530.70	13.82%	$ 582.85	9.83%	$ 634.31	8.83%
2	200	Industrial	$662.00	$689.02	4.08%	$ 784.73	13.89%	$ 893.74	13.89%	$ 982.19	9.90%	$ 1,069.60	8.90%
2	400	Industrial	$1,324.00	$1,505.56	13.71%	$ 1,715.59	13.95%	$ 1,954.93	13.95%	$ 2,149.50	9.95%	$ 2,341.96	8.95%

SCHEDULE 16B - OUTSIDE VILLAGE SAMPLE BILLS

	Current Rates	2011	2012	2013	2014	2015
Alternative A - Current Rate Structure						
Outside Village - Unit Rate per CCF (Min 2 CCFs)	$ 3.85	$ 4.42	$ 5.03	$ 5.74	$ 6.31	$ 6.88
Alternative B - Fixed Charge Based on Meter Size with Unit Rate Volume Charge						
Outside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Outside Village - Unit Rate per CCF (No Minimum)		$ 3.81	$ 4.34	$ 4.95	$ 5.44	$ 5.93
Alternative C - Fixed Charge Based on Meter Size with Residential Inclining Block Rate						
Outside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Outside Village - Residential Inclining Block Rate						
Level 1: 0 - 15 CCFs per CCF		$ 3.52	$ 4.01	$ 4.57	$ 5.03	$ 5.48
Level 2: 15 - 30 CCFs per CCF		$ 4.40	$ 5.01	$ 5.71	$ 6.29	$ 6.85
Level 3: Over 30 CCFs per CCF		$ 5.28	$ 6.02	$ 6.86	$ 7.54	$ 8.22
Outside Village - Non-Residential Unit Rate per CCF		$ 3.81	$ 4.34	$ 4.95	$ 5.44	$ 5.93
Alternative D - Fixed Charge Based on Meter Size with Multiple Class Inclining Block Rates						
Outside Village - Bi-Monthly Fixed Charge		$ 8.23	$ 9.29	$ 10.49	$ 11.42	$ 12.32
Outside Village - Residential Inclining Block Rate						
Level 1: 0 - 15 CCFs per CCF		$3.41	$ 3.89	$ 4.43	$ 4.87	$ 5.31
Level 2: 15 - 30 CCFs per CCF		$4.26	$ 4.86	$ 5.54	$ 6.09	$ 6.64
Level 3: Over 30 CCFs per CCF		$5.11	$ 5.83	$ 6.65	$ 7.31	$ 7.97
Commercial Unit Rate per CCF						
Level 1: 0 - 100 CCFs per CCF		$ 3.41	$ 3.89	$ 4.43	$ 4.87	$ 5.31
Level 2: 100 - 200 CCFs per CCF		$ 4.26	$ 4.86	$ 5.54	$ 6.09	$ 6.64
Level 3: Over 200 CCFs per CCF		$ 5.11	$ 5.83	$ 6.65	$ 7.31	$ 7.97

Meter Size	Equivalent	
5/8	1.00	$8.23
1	1.50	$12.35
1 1/2	5.00	$41.16
2	8.00	$65.86
3	15.00	$123.49
4	25.00	$205.81
6	50.00	$411.63
10	120.00	$987.91

Alternative A

Meter Size	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$7.70	$8.83	14.70%	$ 10.07	14.00%	$ 11.48	14.00%	$ 12.63	10.00%	$ 13.76	9.00%
5/8	15	Residential	$57.75	$66.24	14.70%	$ 75.51	14.00%	$ 86.08	14.00%	$ 94.69	10.00%	$ 103.22	9.00%
5/8	20	Residential	$77.00	$88.32	14.70%	$ 100.68	14.00%	$ 114.78	14.00%	$ 126.26	10.00%	$ 137.62	9.00%
5/8	25	Residential	$96.25	$110.40	14.70%	$ 125.85	14.00%	$ 143.47	14.00%	$ 157.82	10.00%	$ 172.03	9.00%
5/8	5	Commercial	$19.25	$22.08	14.70%	$ 25.17	14.00%	$ 28.69	14.00%	$ 31.56	10.00%	$ 34.41	9.00%
1 1/2	50	Commercial	$192.50	$220.80	14.70%	$ 251.71	14.00%	$ 286.95	14.00%	$ 315.64	10.00%	$ 344.05	9.00%
2	100	Commercial	$385.00	$441.60	14.70%	$ 503.42	14.00%	$ 573.90	14.00%	$ 631.29	10.00%	$ 688.10	9.00%
3	150	Commercial	$577.50	$662.39	14.70%	$ 755.13	14.00%	$ 860.85	14.00%	$ 946.93	10.00%	$ 1,032.15	9.00%
5/8	60	Industrial	$231.00	$264.96	14.70%	$ 302.05	14.00%	$ 344.34	14.00%	$ 378.77	10.00%	$ 412.86	9.00%
1 1/2	120	Industrial	$462.00	$529.91	14.70%	$ 604.10	14.00%	$ 688.68	14.00%	$ 757.54	10.00%	$ 825.72	9.00%
2	200	Industrial	$770.00	$883.19	14.70%	$ 1,006.84	14.00%	$ 1,147.79	14.00%	$ 1,262.57	10.00%	$ 1,376.20	9.00%
3	350	Industrial	$1,347.50	$1,545.58	14.70%	$ 1,761.96	14.00%	$ 2,008.64	14.00%	$ 2,209.50	10.00%	$ 2,408.36	9.00%

Alternative B

	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$7.70	$12.04	56.37%	$13.63	13.22%	$15.44	13.22%	$16.86	9.25%	$18.26	8.26%
5/8	12	Residential	$46.20	$53.93	16.73%	$61.39	13.83%	$69.88	13.83%	$76.75	9.83%	$83.53	8.84%
5/8	20	Residential	$77.00	$84.40	9.61%	$96.12	13.89%	$109.47	13.89%	$120.30	9.89%	$131.00	8.90%
5/8	25	Residential	$96.25	$103.44	7.47%	$117.83	13.91%	$134.22	13.91%	$147.52	9.91%	$160.67	8.92%
5/8	5	Commercial	$19.25	$27.27	41.68%	$31.00	13.66%	$35.23	13.66%	$38.64	9.67%	$41.99	8.68%
1 1/2	50	Commercial	$192.50	$231.57	20.30%	$263.52	13.80%	$299.89	13.80%	$329.30	9.81%	$358.32	8.81%
2	100	Commercial	$385.00	$446.68	16.02%	$508.47	13.83%	$578.81	13.83%	$635.76	9.84%	$691.99	8.84%
3	150	Commercial	$577.50	$694.72	20.30%	$790.57	13.80%	$899.67	13.80%	$987.90	9.81%	$1,074.95	8.81%
5/8	60	Commercial	$231.00	$236.73	2.48%	$269.77	13.96%	$307.44	13.96%	$338.06	9.96%	$368.37	8.96%
1 1/2	120	Commercial	$462.00	$498.15	7.82%	$567.42	13.91%	$646.33	13.91%	$710.39	9.91%	$773.70	8.91%
2	200	Commercial	$770.00	$827.50	7.47%	$942.60	13.91%	$1,073.72	13.91%	$1,180.17	9.91%	$1,285.39	8.92%
3	350	Commercial	$1,347.50	$1,456.36	8.08%	$1,658.85	13.90%	$1,889.50	13.90%	$2,076.72	9.91%	$2,261.75	8.91%

Alternative C

	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$7.70	$11.75	52.60%	$13.30	13.20%	$15.06	13.20%	$16.45	9.23%	$17.80	8.24%
5/8	12	Residential	$46.20	$50.45	9.19%	$57.42	13.81%	$65.35	13.82%	$71.77	9.82%	$78.10	8.83%
5/8	20	Residential	$77.00	$82.99	7.78%	$94.51	13.89%	$107.64	13.89%	$118.29	9.89%	$128.81	8.89%
5/8	25	Residential	$96.25	$104.97	9.06%	$119.58	13.91%	$136.21	13.91%	$149.72	9.92%	$163.07	8.92%
5/8	5	Commercial	$19.25	$27.27	41.68%	$31.00	13.66%	$35.23	13.66%	$38.64	9.67%	$41.99	8.68%
1 1/2	50	Commercial	$192.50	$231.57	20.30%	$263.52	13.80%	$299.89	13.80%	$329.30	9.81%	$358.32	8.81%
2	100	Commercial	$385.00	$446.68	16.02%	$508.47	13.83%	$578.81	13.83%	$635.76	9.84%	$691.99	8.84%
3	150	Commercial	$577.50	$694.72	20.30%	$790.57	13.80%	$899.67	13.80%	$987.90	9.81%	$1,074.95	8.81%
5/8	60	Commercial	$231.00	$236.73	2.48%	$269.77	13.96%	$307.44	13.96%	$338.06	9.96%	$368.37	8.96%
1 1/2	120	Commercial	$462.00	$498.15	7.82%	$567.42	13.91%	$646.33	13.91%	$710.39	9.91%	$773.70	8.91%
2	200	Commercial	$770.00	$827.50	7.47%	$942.60	13.91%	$1,073.72	13.91%	$1,180.17	9.91%	$1,285.39	8.92%
3	350	Commercial	$1,347.50	$1,456.36	8.08%	$1,658.85	13.90%	$1,889.50	13.90%	$2,076.72	9.91%	$2,261.75	8.91%

Alternative D

	Water Consumption (in CCFs)	Customer Class	Current Bill	2011	% Difference	2012	% Difference	2013	% Difference	2014	% Difference	2015	% Difference
5/8	1	Residential	$7.70	$11.64	51.20%	$ 13.18	13.19%	$ 14.92	13.20%	$ 16.29	9.23%	$ 17.64	8.24%
5/8	12	Residential	$46.20	$49.15	6.39%	$ 55.94	13.81%	$ 63.66	13.81%	$ 69.91	9.82%	$ 76.08	8.82%
5/8	20	Residential	$77.00	$80.69	4.79%	$ 91.89	13.88%	$ 104.65	13.88%	$ 115.00	9.89%	$ 125.23	8.89%
5/8	25	Residential	$96.25	$102.00	5.98%	$ 116.19	13.91%	$ 132.35	13.91%	$ 145.47	9.91%	$ 158.44	8.91%
5/8	5	Commercial	$19.25	$25.28	31.33%	$ 28.73	13.63%	$ 32.64	13.63%	$ 35.79	9.65%	$ 38.89	8.65%
1 1/2	50	Commercial	$192.50	$211.66	9.95%	$ 240.82	13.78%	$ 274.00	13.78%	$ 300.83	9.79%	$ 327.28	8.79%
2	100	Commercial	$385.00	$406.85	5.67%	$ 463.05	13.82%	$ 527.03	13.82%	$ 578.81	9.82%	$ 629.91	8.83%
3	150	Commercial	$577.50	$677.59	17.33%	$ 771.04	13.79%	$ 877.40	13.79%	$ 963.41	9.80%	$ 1,048.25	8.81%
5/8	60	Commercial	$231.00	$212.82	-7.87%	$ 242.52	13.96%	$ 276.37	13.96%	$ 303.89	9.96%	$ 331.12	8.96%
1 1/2	120	Commercial	$462.00	$467.39	1.17%	$ 532.36	13.90%	$ 606.36	13.90%	$ 666.42	9.90%	$ 725.78	8.91%
2	200	Commercial	$770.00	$833.08	8.19%	$ 948.96	13.91%	$ 1,080.96	13.91%	$ 1,188.14	9.91%	$ 1,294.07	8.92%
3	350	Commercial	$1,347.50	$1,657.92	23.04%	$ 1,888.62	13.92%	$ 2,151.44	13.92%	$ 2,364.85	9.92%	$ 2,575.82	8.92%

SCHEDULE 17 - CAPACITY FEE

Average Day System Capacity		
IDNR Water Allocation	6.589	MGD
Five Year Average System Daily Usage	5.261	MGD
Percentage of Average Daily Capacity Utilized	79.8%	
Equivalent Dwelling Unit Analysis		
Current Number of EDUs in System	22,738	
Percentage of Average Daily Capacity Utilized	79.8%	
Remaining EDUs Available	5,740	
Total EDU's at Full Capacity Utilization	28,478	

System Buy-In Method

Replacement Cost New Less Depreciation (RCNLD)	$ 58,769,658	Meter Size	Line Size	AWWA Demand Factors	Calculated Capacity Fee	Current Demand Factors	Current Connection Fee	Current Capacity Fee	Total Current Capacity
Cost per EDU	$ 2,064	5/8"	1"	1	$2,100	1	$1,900	$600	$2,500
		3/4"	1 1/4"	1.1	$2,300			$600	
		1"	1 1/2"	2.5	$5,200	1.2	$2,200	$600	$2,800
		1 1/2"	2"	5.0	$10,300	1.3	$2,400	$600	$3,000
		2"	4"	8.0	$16,500	1.5	$2,900	$600	$3,500
		3"	6"	15.0	$31,000	3.4	$6,500	$600	$7,100
		4"	8"	25.0	$51,600	6.2	$11,800	$600	$12,400
		6"	10"	50.0	$103,200	9.6	$18,300	$600	$18,900
		8"	12"	120.0	$247,600	13.8	$26,300	$600	$26,900

Village of Downers Grove
Water Rate Study

SCHEDULE 18 - CAPITAL FEES

	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Tap Fees											
1"	$200	$230	$240	$250	$260	$270	$280	$290	$300	$310	$320
1 1/2"	$250	$370	$380	$390	$400	$410	$420	$430	$440	$450	$460
2"	$325	$425	$440	$450	$460	$470	$480	$490	$500	$520	$540
Over 2"	$400	$590	$610	$630	$650	$670	$690	$710	$730	$750	$770
Meter Fees											
5/8" to 3/4"	$250	$260	$270	$280	$290	$300	$310	$320	$330	$340	$350
1"	$325	$370	$380	$390	$400	$410	$420	$430	$440	$450	$460
1 1/2"	$400	$1,500	$1,550	$1,600	$1,650	$1,700	$1,750	$1,800	$1,850	$1,910	$1,970
2"	$500	$1,780	$1,830	$1,880	$1,940	$2,000	$2,060	$2,120	$2,180	$2,250	$2,320
3"	$0	$2,940	$3,030	$3,120	$3,210	$3,310	$3,410	$3,510	$3,620	$3,730	$3,840
4"	$0	$3,900	$4,020	$4,140	$4,260	$4,390	$4,520	$4,660	$4,800	$4,940	$5,090
6"	$0	$6,240	$6,430	$6,620	$6,820	$7,020	$7,230	$7,450	$7,670	$7,900	$8,140
Capacity Fees											
1"	$1,900	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100	$2,100
1 1/4"	$0	$2,300	$2,300	$2,300	$2,300	$2,300	$2,300	$2,300	$2,300	$2,300	$2,300
1 1/2"	$2,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200	$5,200
2"	$2,400	$10,300	$10,300	$10,300	$10,300	$10,300	$10,300	$10,300	$10,300	$10,300	$10,300
4"	$2,900	$16,500	$16,500	$16,500	$16,500	$16,500	$16,500	$16,500	$16,500	$16,500	$16,500
6"	$6,500	$31,000	$31,000	$31,000	$31,000	$31,000	$31,000	$31,000	$31,000	$31,000	$31,000
8"	$11,800	$51,600	$51,600	$51,600	$51,600	$51,600	$51,600	$51,600	$51,600	$51,600	$51,600
10"	$18,300	$103,200	$103,200	$103,200	$103,200	$103,200	$103,200	$103,200	$103,200	$103,200	$103,200
12"	$26,300	$247,600	$247,600	$247,600	$247,600	$247,600	$247,600	$247,600	$247,600	$247,600	$247,600

Village of Downers Grove
Water Rate Study

SCHEDULE 19 - OPERATING CASH FLOW

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue											
User Fee Revenue	$ 7,560,051	$ 8,687,153	$ 9,804,321	$ 11,065,157	$ 12,049,956	$ 13,003,107	$ 14,160,384	$ 15,420,658	$ 16,793,097	$ 18,287,682	$ 19,915,286
Revenues Collected - Westmont & Knottingham	$ 84,417	$ 84,417	$ 86,949	$ 89,558	$ 92,244	$ 95,012	$ 97,862	$ 100,798	$ 103,822	$ 106,936	$ 110,145
Miscellaneous Revenue	$ 386,883	$ 324,754	$ 329,967	$ 334,326	$ 343,857	$ 381,944	$ 412,199	$ 502,750	$ 572,519	$ 759,504	$ 900,656
Revenues from Unmetered Water Sales	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Use of Available Fund Balance											
Total Operating Revenue	$ 8,036,351	$ 9,101,324	$ 10,226,238	$ 11,494,041	$ 12,491,058	$ 13,485,063	$ 14,675,445	$ 16,029,206	$ 17,474,438	$ 19,159,123	$ 20,931,087
Operating and Capital Expenses											
Total Operating Expenses	$ 7,548,011	$ 8,180,707	$ 8,764,289	$ 9,394,053	$ 10,040,085	$ 10,741,918	$ 11,504,870	$ 12,334,780	$ 13,238,063	$ 14,221,769	$ 15,293,642
Operating Reserve	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Existing Debt Service	$ 503,708	$ 503,003	$ 496,155	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Funded Capital Projects	$ 1,113,093	$ 285,000	$ 933,300	$ 660,000	$ 600,000	$ 500,000	$ -	$ -	$ -	$ -	$ -
Projected Debt Service	$ -	$ -	$ -	$ 905,413	$ 905,413	$ 905,413	$ 1,463,320	$ 1,463,320	$ 1,463,320	$ 1,463,320	$ 1,463,320
3R Reserve	$ -	$ 489,223	$ 333,867	$ 547,201	$ 547,201	$ 439,427	$ 3,555,690	$ 4,590,385	$ 4,826,175	$ 4,872,369	$ 4,919,949
Total Expenses	$ 9,164,812	$ 9,557,933	$ 10,627,611	$ 11,606,667	$ 12,192,699	$ 12,686,759	$ 16,623,880	$ 18,488,484	$ 19,627,558	$ 20,657,458	$ 21,776,911
Net Surplus (Deficit)	**$ (1,128,461)**	**$ (456,610)**	**$ (401,374)**	**$ (112,626)**	**$ 298,359**	**$ 798,304**	**$ (1,948,435)**	**$ (2,459,278)**	**$ (2,153,120)**	**$ (1,498,335)**	**$ (845,824)**

Village of Downers Grove
Water Rate Study

SCHEDULE 20 - CASH BALANCE

	End 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
"3R" Investments												
Begin FY Cash "3R" Cash Reserves	**$0**	$0	$0	$47,276	$47,277	$528,547	$1,075,748	$1,515,174	$5,070,865	$9,661,250	$14,487,425	$19,359,793
Annual Contribution		$0	$489,223	$333,867	$547,201	$547,201	$439,427	$3,555,690	$4,590,385	$4,826,175	$4,872,369	$4,919,949
Operating (Checking Account)												
Begin FY Operating Cash Balance (Checking Account)	**$2,312,236**	$2,312,236	$1,183,775	$1,169,113	$1,101,606	$1,054,911	$1,353,269	$2,151,573	$203,138	($2,256,140)	($4,409,260)	($5,907,595)
Annual Operating Surplus (Shortfall)		($1,128,461)	($456,610)	($401,374)	($112,626)	$298,359	$798,304	($1,948,435)	($2,459,278)	($2,153,120)	($1,498,335)	($845,824)
Transfer from Available "3R" Cash Reserves			**$441,947**	**$333,867**	**$65,931**							
Transfer from O&M Reserve Cash Reserves												
Total Available Cash Balance - Begin FY		**$2,312,236**	**$1,183,775**	**$1,216,389**	**$1,148,883**	**$1,583,457**	**$2,429,017**	**$3,666,748**	**$5,274,003**	**$7,405,110**	**$10,078,165**	**$13,452,199**
Total Available Cash Balance - End FY	**$2,312,236**	**$1,183,775**	**$1,216,389**	**$1,148,883**	**$1,583,457**	**$2,429,017**	**$3,666,748**	**$5,274,003**	**$7,405,110**	**$10,078,165**	**$13,452,199**	**$17,526,324**