

TOWN OF PARRY SOUND

**WATER AND WASTEWATER
RATE STUDY
AND
ONTARIO REGULATION 453/07
WATER FINANCIAL PLAN**

Draft – For Discussion Purposes

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 **Planning for growth**

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1. INTRODUCTION

1. INTRODUCTION

1.1 Background

The Town of Parry Sound has a present population of approximately 18,000, with a seasonal population of more than 60,000. Approximately 1/3 of these permanent residents are on municipal water and wastewater services with 1,866 residential municipal water customers and 1,780 residential municipal wastewater customers. The lower number of wastewater customer, reflects customers with municipal water systems and private septic sewer systems. In addition to these residential customers the Town also provides municipal water and wastewater services to approximately 410 non-residential customers (i.e. commercial, industrial and institutional).

In addition to the Town's municipal water and wastewater customers, the Town also provides water service to the neighbouring community of McDougall. The Town has a purchase of service agreement based upon an agreed upon rate and the annual amount of water consumed. This agreement provides for annual rate adjustments in accordance with the water rate adjustments imposed by Council for municipal customers.

The Town of Parry Sound recovers the cost of municipal water services and wastewater services (i.e. sanitary sewer and storm sewer) through the imposition of user fees. The Town's municipal water system is partially metered, with the major customers billed on a flat rate basis. A small number of residential and the majority of non-residential customers are billed on a consumptive rate basis. These consumptive rate customers are also billed a monthly base charge amount, differentiated by meter size, for fixed costs of operation and capital. The monthly base charge rates also recognize a minimum consumptive amount.

The water and wastewater rates presently in effect are summarized as follows:

	Water Rates		Wastewater Rates	
	Water	Water Capital	Sewer	Sewer Capital
Residential - Metered				
5/8", 3/4" (1,000 gals allowed)	\$5.78	\$24.47	\$7.66	\$22.14
1" (1,000 gals allowed)	\$4.34	\$27.08	\$5.76	\$24.51
Commerical - Metered				
5/8" (5,000 gals allowed)	\$20.43	\$26.55	\$30.20	\$24.02
3/4" (6,000 gals allowed)	\$22.61	\$29.40	\$33.43	\$26.58
1" (8,000 gals allowed)	\$40.85	\$53.13	\$60.40	\$48.04
1 1/4", 1 1/2" (12,000 gals allowed)	\$69.10	\$89.83	\$102.15	\$81.26
2" (20,000 gals allowed)	\$106.73	\$138.76	\$157.76	\$125.51
3" (48,000 gals allowed)	\$270.18	\$351.28	\$399.38	\$317.72
4" (88,000 gals allowed)	\$502.72	\$653.58	\$743.10	\$591.14
6" (175,000 gals allowed)	\$986.50	\$1,282.55	\$1,458.22	\$1,160.02
Residential - Water Used Over Minimum of 1,000 gallons (per 1,000 gallons)				
Residential - Water Used Over Minimum of 1,000 gallons (per 1,000 gallons)	\$0.61	\$0.80	\$3.85	\$3.06
Non-Res. - Water Used Over Minimum Up to 100,000 gallons (per 1,000 gallons)				
Non-Res. - Water Used Over Minimum Up to 100,000 gallons (per 1,000 gallons)	\$4.03	\$5.24	\$5.97	\$4.75
Non-Res - Water Used Over 100,000 gallons (per 1,000 gallons)				
Non-Res - Water Used Over 100,000 gallons (per 1,000 gallons)	\$2.97	\$3.86	\$4.38	\$3.48
Residential - Flat				
1/2", 5/8", 3/4"	\$18.83	\$24.47	\$27.84	\$22.14
1"	\$20.82	\$27.08	\$30.80	\$24.50
Commercial - Flat				
1/2", 5/8"	\$23.51	\$30.60	\$34.76	\$27.67
3/4"	\$25.72	\$33.43	\$38.01	\$30.23

1.2 Study Process

Watson & Associates Economists Ltd. (Watson), was retained by the Town of Parry Sound to undertake a water and wastewater rate study update. The objectives of the study and the steps involved in carrying out this assignment are summarized below:

- Identify all current and future water and wastewater systems capital needs to assess the immediate and longer-term implications. This information was derived from a lifecycle needs assessment, in consultation with various municipal background studies.
- Identify potential methods of cost recovery from the capital needs listing. These recovery methods include other statutory authorities (e.g. Development Charges, *Municipal Act*, etc.) as an offset to recovery through the water and wastewater rates.

- Identify existing operating costs by component and estimate future operating costs over the next ten years.
- Determine potential rate structure(s) to be considered by the Town.
- Provide discussion papers and policy recommendations to staff and Council, relative to the findings.
- Undertake public meetings to present the findings of the study.

In approaching this study, the following analysis is provided herein:

- Chapter 1 – Introduction
- Chapter 2 – Capital Infrastructure Needs for Water and Wastewater Systems
- Chapter 3 - Lifecycle Costs for Water and Wastewater Systems
- Chapter 4 - Capital Financing Plan
- Chapter 5 - Operating Expenditure Forecast
- Chapter 6 - Rate Structure Options
- Chapter 7 - Forecast Water and Wastewater Rates

1.3 Regulatory Changes in Ontario

Resulting from the water crisis in Walkerton, significant regulatory changes have been made in Ontario over the past few years. These changes arise as a result of the Walkerton Commission and the 93 recommendations made by the Walkerton Inquiry Part II report. Areas of recommendation include:

- watershed management and source protection;
- quality management;
- preventative maintenance;
- research and development;
- new performance standards;
- sustainable asset management; and
- lifecycle costing.

These recommendations have informed legislation, e.g. the *Sustainable Water and Sewage Systems Act* and the *Safe Drinking Water Act*, and current Bills within the legislature. The following sections describe these legislative changes in further detail.

1.4 Summary of the *Sustainable Water and Sewage Systems Act*

As noted earlier, the *Sustainable Water and Sewage Systems Act* (SWSSA) was passed on December 13, 2002. The intent of the Act is to introduce the requirement for municipalities to undertake an assessment of the “full cost” of providing their water and the wastewater services. It is noted that, at the time of writing, the regulations, which accompany the Act, have not been issued. In total, there are 40 areas within the Act to which the Minister may make Regulations. As will be discussed in the next section, regulation 453/07 under the *Safe Drinking Water Act* was introduced which implements many of the principles provided by SWSSA.

Full costs for water service is defined in subsection 3(7) of the Act and includes “source protection costs, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and such other costs which may be specified by regulation.” Similar provisions are made for wastewater services in subsection 4(7) respecting the “collecting, treating or discharging waste water.”

The Act will require the preparation of two reports for submission to the Ministry of the Environment (or such other member of the Executive Council as may be assigned the administration of this Act under the Executive Council Act). The first report is on the “full cost of services” and the second is the “cost recovery plan.” Once these reports have been reviewed and approved by the Ministry, the municipality will be required to implement the plans within a specified time period.

In regard to the “Full Cost of Services” report, the municipality (deemed a regulated entity under the Act) must prepare and approve a report concerning the provision of water and sewage services. This report must include an inventory of the infrastructure, a management plan providing for the long-term integrity of the systems and address the full cost of providing the services (other matters may be specified by the regulations) along with the revenue obtained to provide them. A professional engineer must certify the inventory and management plan portion of the report. The municipality’s auditor will be required to provide a written opinion on the

report. The report must be approved by the municipality and then be forwarded to the Ministry along with the engineer's certification and the auditor's opinion. The regulations will stipulate the timing for this report.

The second report is referred to as a "Cost Recovery Plan" and will address how the municipality intends to pay for the full costs of providing the service. The regulations may specify limitations on what sources of revenue the municipality may use. The regulations may also provide limits as to the level of increases any customer or class of customer may experience over any period of time. Provision is made for the municipality to implement increases above these limits however ministerial approval would be required first. Similar to the first report, the municipal auditor must provide a written opinion on the report prior to Council's adoption, and this opinion must accompany the report when submitted to the Province.

The Act provides the Minister the power to approve or not approve the plans. If the Minister is not satisfied with the report or if a municipality does not submit a plan, the Minister may have a plan prepared. The cost to the Crown for preparing the plan will be recovered from the municipality. As well, the Minister may direct two or more regulated municipalities to prepare a joint plan. This joint plan may be directed at the onset or be directed by the Minister after receiving the individual plans from the municipalities.

The Minister also has the power to order a municipality to generate revenue from a specific revenue source or in a specified manner. The Minister may also order a regulated entity to do or refrain from doing such things as the Minister considers advisable to ensure that the entity pays the full cost of providing the services to the public.

Once the plans are approved and in place, the municipality will be required to submit progress reports. The timing of these reports and the information to be contained therein will be established by the regulations. A municipal auditor's opinion must be provided with the progress report. Municipalities may also revise the plans if they deem the estimate does not reflect the full cost of providing the services, as a result of a change in circumstances, regulatory or other changes that affect their plan, etc. The municipality must then revise its prior plan, provide an auditor's opinion, and submit the plan to the Minister.

As of the time of writing, the regulations to implement this Act have not been passed; hence the Act will not be in effect until these regulations are passed. In the interim, as discussed in

Section 1.5, regulation O.Reg. 453/07 under the *Safe Drinking Water Act* has been introduced by the Province to address water financial plans.

1.5 Financial Plans Regulation

On August 16, 2007, the MOE introduced O.Reg 453/07 which requires the preparation of financial plans for water systems. The MOE has also provided a Financial Plan Guideline to assist in municipalities with preparing the plans. A brief summary of the key elements of the regulation is provided below:

- The financial plan will represent one of the key elements for the Board of Management to obtain its Drinking Water License.
- The plan is to be completed, approved by Board of Management Resolution and submitted to the Ministry of Municipal Affairs and Housing within 6 months of receiving approval of its water license.
- The financial plans shall be for a period of at least six years but longer planning horizons are encouraged.
- As the regulation is under the *Safe Drinking Water Act*, the preparation of the plan is mandatory for water services and encouraged for wastewater services.
- The plan is considered a living document (i.e. will be updated as annual budgets are prepared) but will need to be undertaken at a minimum every five years.
- The plans generally require the forecasting of capital, operating and reserve fund positions, providing detailed inventories, forecasting future users and volume usage and corresponding calculation of rates. In addition, PSAB information on the system must be provided for each year of the forecast (i.e. total non-financial assets, tangible capital asset acquisitions, tangible capital asset construction, betterments, write-downs, disposals, total liabilities and net debt).
- The financial plans must be made available to the public (at no charge) upon request and be available on the municipality's web site. The availability of this information must also be advertised.

In general, the financial principles of this regulation follow the intent of SWSSA to move municipalities towards financial sustainability for water services. However, many of the prescriptive requirements have been removed (e.g. preparation of two separate documents for Provincial approval, auditor opinions, engineer certifications, etc.).

A guideline (“Towards Financially Sustainable Drinking-Water and Wastewater Systems”) has been developed to assist municipalities in understanding the Province’s direction and provides a detailed discussion on possible approaches to sustainability. The Province’s Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4: Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial Plans are “living” documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.
- Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

The preparation of this study document is consistent with the principles of the SWSSA and O.Reg 453/07. The full accrual presentation of the financial plan for Council approval and submission to the Province is included in Appendix E.

1.6 **Water Opportunities Act**

Since the passage of the *Safe Drinking Water Act*, continuing changes and refinements to the legislation has been introduced. Some Bills have found their way into law while others have not been approved. Bill 72, the *Water Opportunities Act* received Royal Assent on November 29, 2010.

The Act provides for the following elements:

- Foster innovative water, wastewater and stormwater technologies, services and practices in the private and public sectors;
- Prepare water conservation plans to achieve water conservation targets established by the regulations;
- Prepare sustainability plans for municipal water services, municipal wastewater services and municipal stormwater services.

With regard to the sustainability plans:

- The Bill extends from the water financial plans and requires a more detailed review of the water financial plan and requires a full plan for wastewater and stormwater services;
- Regulations will provide performance targets for each service – these targets may vary based on the jurisdiction of the regulated entity or the class of entity.

The Financial Plan shall include:

- An asset management plan for the physical infrastructure;
- Financial Plan;
- For water, a water conservation plan;
- Assessment of risks that may interfere with the future delivery of the municipal service, including, if required by the regulations, the risks posed by climate change and a plan to deal with those risks;
- Strategies for maintaining and improving the municipal service, including strategies to ensure the municipal service can satisfy future demand, consider technologies, services

and practices that promote the efficient use of water and reduce negative impacts on Ontario's water resources, and increase co-operation with other municipal service providers.

Performance indicators will be established by service:

- May relate to the financing, operation or maintenance of a municipal service or to any other matter in respect of which information may be required to be included in a plan;
- May be different for different municipal service providers or for municipal services in different areas of the Province.

Regulations will prescribe:

- Timing
- Contents of the plans
- Identifying what portions of the plan will require certification
- Public consultation process
- Limitations, updates, refinements, etc.

1.7 Forecast Growth and Servicing Demands

Information on the number of customers and water consumption volumes was obtained from the Town for the most recent year 2010/11. In addition, the Town provided historic billing records for the period 2009-2011 related to the water purchase agreement with the Town of MacDougall.

As noted in the introduction the Town's municipal water system consists of both metered and unmetered customers. With respect to the metered customers, there are a total of 505 metered water and wastewater customers (142 residential and 363 non-residential). Annual residential water consumption averages approximately 4 million gallons annually, or 28,320 gallons per customer (i.e. 129 m³/customer/yr.). Non-residential customers consume approximately 73 million gallons annually, or 201,280 gallons per customer (i.e. 915 m³/yr.). The Town has 8

large water consuming water customers that account 31% of total water consumption annually (2.8 million gallons).

The Town's unmetered water customers total 1,770 unmetered water customers (1,724 residential, 46 non-residential). As noted previously, there are approximately 86 municipal water customers presently on private septic services. As these customers are presently unmetered, estimating their service demands is difficult. The Town's current rate structure for unmetered customers assumes annual residential consumption of 33,390 gallons annually (i.e. 152 m³/yr.) and non-residential consumption of 65,378 gallons annually (i.e. 297 m³/yr.). Based on our experience these estimates are conservative relative other municipalities in Ontario. Applying these assumed consumption levels; the equivalent unmetered customer's water consumption totals approximately 60.6 million gallons annually. These consumption estimates will be used in the rate structure assessment.

MacDougall water purchases are estimated at 22.5 million gallons annually based on the historic billing records. Table 1-1 summarizes the total profile of water and wastewater customers and 2011 annual water demands.

Table 1-1
Town of Parry Sound
2011 Water Consumption Estimates by Water and Wastewater Customers

User Class	2011 Metered and Unmetered Consumption			Consumption for Wastewater	
	Consumption (gallons)	Customers	Avg. Per User	Metered Customers	Consumption (gallons)
Residential					
Metered	4,021,465	142	28,320	142	4,021,465
Unmetered	57,557,390	1,724	33,390	1,638	54,685,864
Subtotal - Residential	61,578,855	1,866	33,004	1,780	58,707,330
Non-Residential Metered					
5/8"	4,853,721	99	49,249	99	4,853,721
3/4"	6,526,000	85	76,978	85	6,526,000
1"	12,206,125	90	134,957	90	12,206,125
1 1/2"	7,583,206	33	232,931	33	7,583,206
2"	17,966,071	49	369,166	49	17,966,071
3"	8,891,265	5	1,778,253	5	8,891,265
4"	3,438,249	2	1,406,556	2	3,438,249
6"	11,690,540	1	11,690,540	1	11,690,540
Subtotal Non-Residential Metered	73,155,178	363	201,283	363	73,155,178
Non-Residential Unmetered (1/2", 5/8")	1,995,063	32	61,767	32	1,995,063
Non-Residential Unmetered (3/4")	1,025,392	14	73,769	14	1,025,392
Subtotal Non-Residential	76,175,633	410	185,955	410	76,175,633
McDougall - Water Purchases	22,468,318	1	22,468,318	-	-
TOTAL	160,222,806	2,276	70,383	2,189	134,882,963

In consultation with Town staff, it was determined that the analysis should provided for minimal system growth over the forecast period 2011-2020. Factoring in potential for further conservation of this period, no consumption growth has been assumed in the forecast.

2. CAPITAL INFRASTRUCTURE NEEDS

2. CAPITAL INFRASTRUCTURE NEEDS

2.1 Capital Forecast

A 2011-2020 capital forecast has been provided for water and wastewater services. Detailed project needs are included in Table 2-1 for each service (in 2011\$). Watson and Town staff collaborated on the development of the 10-year capital plans, based on the Town 2011 Budget and an assessment of the Town's PSAB 3150 Tangible Capital Asset Inventory. The lifecycle capital needs were reviewed with staff to reflect current replacement/rehabilitation needs. The forecasts identify \$7.2 million in forecast needs for the municipal water system and \$10.8 million for the municipal wastewater system. These forecasts include an annual capital inflation estimate of 2%.

Table 2-1 – Water Capital Budget Forecast

• Water Facilities, Vehicles and Equipment	\$2,663,417
• Hydrants	\$ 166,101
• Watermains	<u>\$4,339,267</u>
• Water Capital Forecast Total	\$7,168,785

Table 2-2 – Wastewater Capital Budget Forecast

• Wastewater Facilities, Vehicles and Equipment	\$8,379,777
• Sanitary Sewers	\$1,704,882
• Storm Sewers	<u>\$ 754,841</u>
• Wastewater Capital Forecast Total	\$10,839,500

**Table 2-1
Town of Parry Sound
Water, Sanitary Sewer and Storm Water Lifecycle Capital Needs Forecast**

	Asset Replacement Timing										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Water											
Water Facilities, Vehicles and Equipment	981,000	561,308	149,057	118,648	113,409	113,409	161,826	113,409	113,409	113,409	2,538,883
Watermains	-	632,231	632,231	356,580	488,859	488,859	342,407	342,407	342,407	342,407	3,968,388
Water Valve Boxes	-	-	-	-	-	-	-	-	-	-	-
Water Hydrants	-	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	150,246
Total Water	981,000	1,210,232	797,982	491,922	618,962	618,962	520,927	472,510	472,510	472,510	6,657,517
Wastewater											
Wastewater Facilities, Vehicles and Equipment	290,000	871,210	817,160	838,820	825,150	908,130	885,090	781,490	706,360	705,330	7,628,740
Sanitary Sewers	-	221,625	403,760	299,798	267,964	150,302	82,001	82,001	82,001	82,001	1,671,453
Wastewater Man Holes	-	-	-	-	-	-	-	-	-	-	-
Storm Mains	-	120,613	79,307	122,265	-	-	-	79,307	-	338,548	740,040
Storm Sewer Man Holes & Catchbasins	-	-	-	-	-	-	-	-	-	-	-
Total Wastewater	290,000	1,213,447	1,300,227	1,260,883	1,093,114	1,058,432	967,091	942,798	788,361	1,125,879	10,040,233
Total	1,271,000	2,423,680	2,098,209	1,752,804	1,712,077	1,677,394	1,488,018	1,415,308	1,260,871	1,598,389	16,697,750

**Table 2-1
Town of Parry Sound
Water, Sanitary Sewer and Storm Water Lifecycle Capital Needs Forecast**

Water Hydrants	Asset Replacement Timing										Total	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Replace Hydrants (2 per year)	-	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	150,246
Sub-Total	-	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	16,694	150,246
TOTAL WATER	981,000	1,210,232	797,982	491,922	618,962	618,962	520,927	472,510	472,510	472,510	6,657,517	
Wastewater Facilities, Vehicles and Equipment	Asset Replacement Timing										Total	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
<u>Pumping Station 1</u>												
Process Equipment		212,640	-	-	-	-	-	-	-	-	-	212,640
Process Electrical		-	-	-	-	-	-	-	124,040	-	-	124,040
Process Instrumentation		62,020	-	-	-	-	-	-	-	-	-	62,020
Building Architectural		79,740	-	-	-	-	-	-	-	-	-	79,740
Building Services		124,040	-	-	-	-	-	-	-	-	-	124,040
<u>Pumping Station 2</u>												
Process Equipment		392,770	-	-	-	-	-	-	-	-	-	392,770
Process Electrical		-	-	-	-	-	-	-	-	-	229,110	229,110
Process Instrumentation		-	114,560	-	-	-	-	-	-	-	-	114,560
Building Architectural		-	147,290	-	-	-	-	-	-	-	-	147,290
Building Services		-	229,110	-	-	-	-	-	-	-	-	229,110
<u>Pumping Station 3</u>												
Process Equipment		-	-	-	-	-	-	-	51,270	-	-	51,270
Process Instrumentation		-	14,950	-	-	-	-	-	-	-	-	14,950
Building Architectural		-	19,230	-	-	-	-	-	-	-	-	19,230
Building Services		-	29,910	-	-	-	-	-	-	-	-	29,910
<u>Pumping Station 4</u>												
Process Equipment		-	-	297,350	-	-	-	-	-	-	-	297,350
Process Electrical		-	173,450	-	-	-	-	-	-	-	-	173,450
Process Instrumentation		-	86,730	-	-	-	-	-	-	-	-	86,730
Process Piping		-	-	-	99,120	-	-	-	-	-	-	99,120
Building Architectural		-	-	111,510	-	-	-	-	-	-	-	111,510
Building Services		-	-	173,450	-	-	-	-	-	-	-	173,450
<u>Pumping Station 5</u>												
Process Instrumentation		-	-	-	-	-	91,090	-	-	-	-	91,090
Building Architectural		-	-	-	-	117,110	-	-	-	-	-	117,110
Building Services		-	-	-	-	182,180	-	-	-	-	-	182,180
<u>Pumping Station 6</u>												
Process Equipment		-	-	-	635,320	-	-	-	-	-	-	635,320
Process Instrumentation		-	-	185,300	-	-	-	-	-	-	-	185,300
Building Architectural		-	-	-	-	238,240	-	-	-	-	-	238,240
Building Services		-	-	-	-	370,600	-	-	-	-	-	370,600
<u>Pumping Station 8</u>												
Process Instrumentation		-	-	-	-	-	-	-	-	-	38,550	38,550
Building Architectural		-	-	-	-	-	-	-	-	-	49,560	49,560
Building Services		-	-	-	-	-	-	-	-	-	77,090	77,090
<u>Pumping Station 9</u>												
Process Equipment		-	-	-	-	-	-	-	-	-	311,020	311,020
Process Instrumentation		-	-	-	90,710	-	-	-	-	-	-	90,710
Building Architectural		-	-	-	-	-	116,630	-	-	-	-	116,630
Building Services		-	-	-	-	-	181,430	-	-	-	-	181,430

**Table 2-1
Town of Parry Sound
Water, Sanitary Sewer and Storm Water Lifecycle Capital Needs Forecast**

Pumping Station 10												
Process Instrumentation			-					58,080	-	-	-	58,080
Building Architectural			-					-	74,680	-	-	74,680
Building Services			-					-	116,170	-	-	116,170
Pumping Station 11												
Process Equipment	290,000							169,700	-	-	-	459,700
Process Electrical			-					268,160	-	-	-	268,160
Process Instrumentation									134,080	-	-	134,080
Building Architectural									172,390	-	-	172,390
Building Services									268,160	-	-	268,160
Pumping Station 12												
Process Instrumentation			-	-						95,650	-	95,650
Building Architectural			-	-						122,980	-	122,980
Building Services			-	-						191,300	-	191,300
Pumping Station 13												
Process Instrumentation	-		-	-						17,690	-	17,690
Building Architectural	-		-	-						22,750	-	22,750
Building Services	-		-	-						35,390	-	35,390
Pumping Station 14												
Process Instrumentation	-		-	-	-	-	-	-		10,570	-	10,570
Building Architectural	-		-	-	-	-	-	-		13,590	-	13,590
Building Services	-		-	-	-	-	-	-		21,130	-	21,130
2008 Chev 4x4 1/2 Ton				35,790								35,790
2008 Chev 1/2 Ton w Plow				35,420								35,420
Software - computer scada system			310									310
Computers - Scada system WWTP			1,620									1,620
Grinder Pump (Gibson St. Project)									16,010			16,010
Sub-Total	290,000	871,210	817,160	838,820	825,150	908,130	885,090	781,490	706,360	705,330	7,628,740	
Sanitary Sewers	Asset Replacement Timing										Total	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
IW - WAU9K-10J(1) Waubeek St				29,416	29,416						58,831	
IW - WAU10J(1)-10J(2) Waubeek St				16,118	16,118						32,236	
IW - WAU10J(2)-10J(3) Waubeek St				31,833	31,833						63,667	
IW - WAU10J(3)-10J(4) Waubeek St				18,133	18,133						36,266	
IW - ARM10L(1)-10L(2) Armstrong Street				22,162	22,162						44,325	
IW - VIC9L(1)-9L(2) Victoria Ave					21,357	21,357					42,713	
IW - VIC9L(2)-9M Victoria Ave					48,354	48,354					96,709	
IW - VIC9M-9N(1) Victoria Ave					80,591	80,591					161,182	
IW - FOR16F-16G Forest Street		90,262	90,262								180,523	
IW - FOR16G-16H Forest Street		131,363	131,363								262,726	
IW - FOR16H-17I Forest Street		-	61,249	61,249							122,498	
IW - WIL12L-14N William Street		-	120,886	120,886							241,772	
BIR14E-14F Birch Street							16,118	16,118	16,118	16,118	64,473	
BOW17I-18I(1) Bowes Street							9,268	9,268	9,268	9,268	37,072	
BOW17I-18I(1) Bowes Street							52,585	52,585	52,585	52,585	210,342	
CHA14E Champaigne Street							4,030	4,030	4,030	4,030	16,118	
Sub-Total	-	221,625	403,760	299,798	267,964	150,302	82,001	82,001	82,001	82,001	1,671,453	

**Table 2-1
Town of Parry Sound
Water, Sanitary Sewer and Storm Water Lifecycle Capital Needs Forecast**

Wastewater Man Holes	Asset Replacement Timing										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Man Holes and Catch Basins											0
Sub-Total	-	-	-	-	-	-	-	-	-	-	-
Storm Mains	Asset Replacement Timing										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
WUA9L(1)-9L(2)	-	11,566	-	-	-	-	-	-	-	-	11,566
WUA9L(2)-9K	-	62,785	-	-	-	-	-	-	-	-	62,785
WUA9K-10J(1)	-	46,262	-	-	-	-	-	-	-	-	46,262
JOS10P(1)	-	-	66,089	-	-	-	-	-	-	-	66,089
NOC11P-10Q	-	-	13,218	-	-	-	-	-	-	-	13,218
WIL14N-15N(1)	-	-	-	41,306	-	-	-	-	-	-	41,306
WIL15N(1)-15N(2)	-	-	-	29,740	-	-	-	-	-	-	29,740
WIL15N(2)-15O(1)	-	-	-	8,261	-	-	-	-	-	-	8,261
WIL15O(1)-15O(2)	-	-	-	26,436	-	-	-	-	-	-	26,436
WIL15O(2)-16O	-	-	-	16,522	-	-	-	-	-	-	16,522
WUA8L(3)-9L(1)	-	-	-	-	-	-	79,307	-	-	-	79,307
HIL14P-15O	-	-	-	-	-	-	-	-	59,480	-	59,480
JAM12J(1)-JAM12J(2)	-	-	-	-	-	-	-	-	-	214,000	214,000
JOS9S(1)-9S(2)	-	-	-	-	-	-	-	-	-	36,149	36,149
WIL12L-14N	-	-	-	-	-	-	-	-	-	28,919	28,919
Sub-Total	-	120,613	79,307	122,265	-	-	-	79,307	-	338,548	740,040
Storm Sewer Man Holes & Catchbasins	Asset Replacement Timing										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Sub-Total											-
TOTAL WASTEWATER	290,000	1,213,447	1,300,227	1,260,883	1,093,114	1,058,432	967,091	942,798	788,361	1,125,879	10,040,233
TOTAL WATER & WASTEWATER	1,271,000	2,423,680	2,098,209	1,752,804	1,712,077	1,677,394	1,488,018	1,415,308	1,260,871	1,598,389	16,697,750

3. LIFE CYCLE COSTING

3. LIFE CYCLE COSTING

3.1 Overview of Life Cycle Costing

3.1.1 *Definition*

For many years, life cycle costing has been used in the field of maintenance engineering and to evaluate the advantages of using alternative materials in construction or production design. The method has gained wider acceptance and use in the areas of industrial decision-making and the management of physical assets.

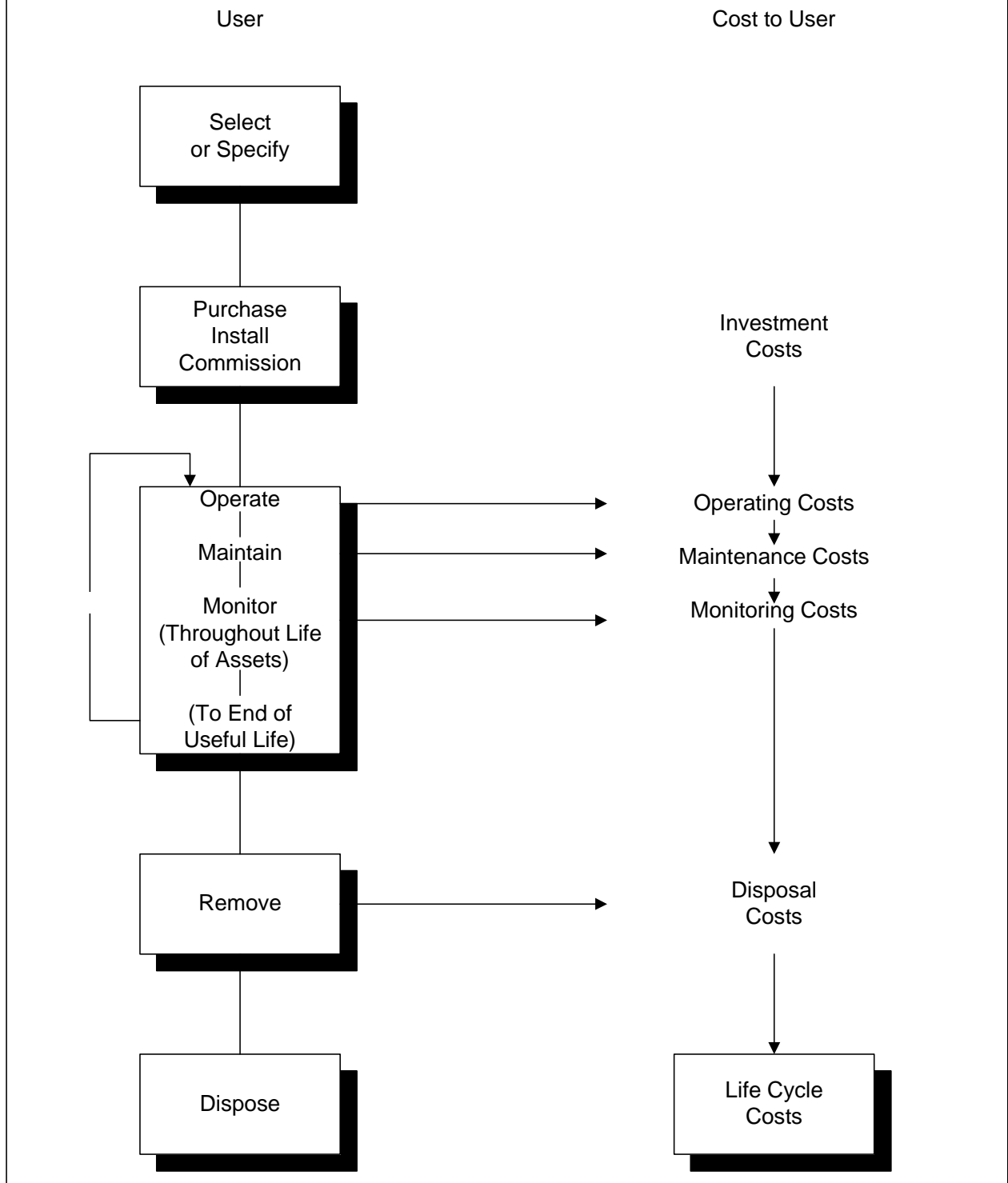
By definition, life cycle costs are all the costs which are incurred during the life cycle of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The stages which the asset goes through in its life cycle are specification, design, manufacture (or build), install, commission, operate, maintain and disposal. Figure 3-1 depicts these stages in a schematic form.

3.1.2 *Financing Costs*

This section will focus on financing mechanisms in place to fund the costs incurred throughout the asset's life.

In a municipal context, services are provided to benefit tax/rate payers. Acquisition of assets is normally timed in relation to direct needs within the community. At times, economies of scale or technical efficiencies will lead to oversizing an asset to accommodate future growth within the municipality. Over the past few decades, new financing techniques such as development charges have been employed based on the underlying principle of having tax/rate payers who benefit directly from the service paying for that service. Operating costs which reflect the cost of the service for that year are charged directly to all existing tax/rate payers who have received the benefit. Operating costs are normally charged through the tax base or user rates.

**Figure 3-1
Life Cycle Costing**



Capital expenditures are recouped through several methods; operating budget contributions, development charges, reserves, developer contributions and debentures, being the most common.

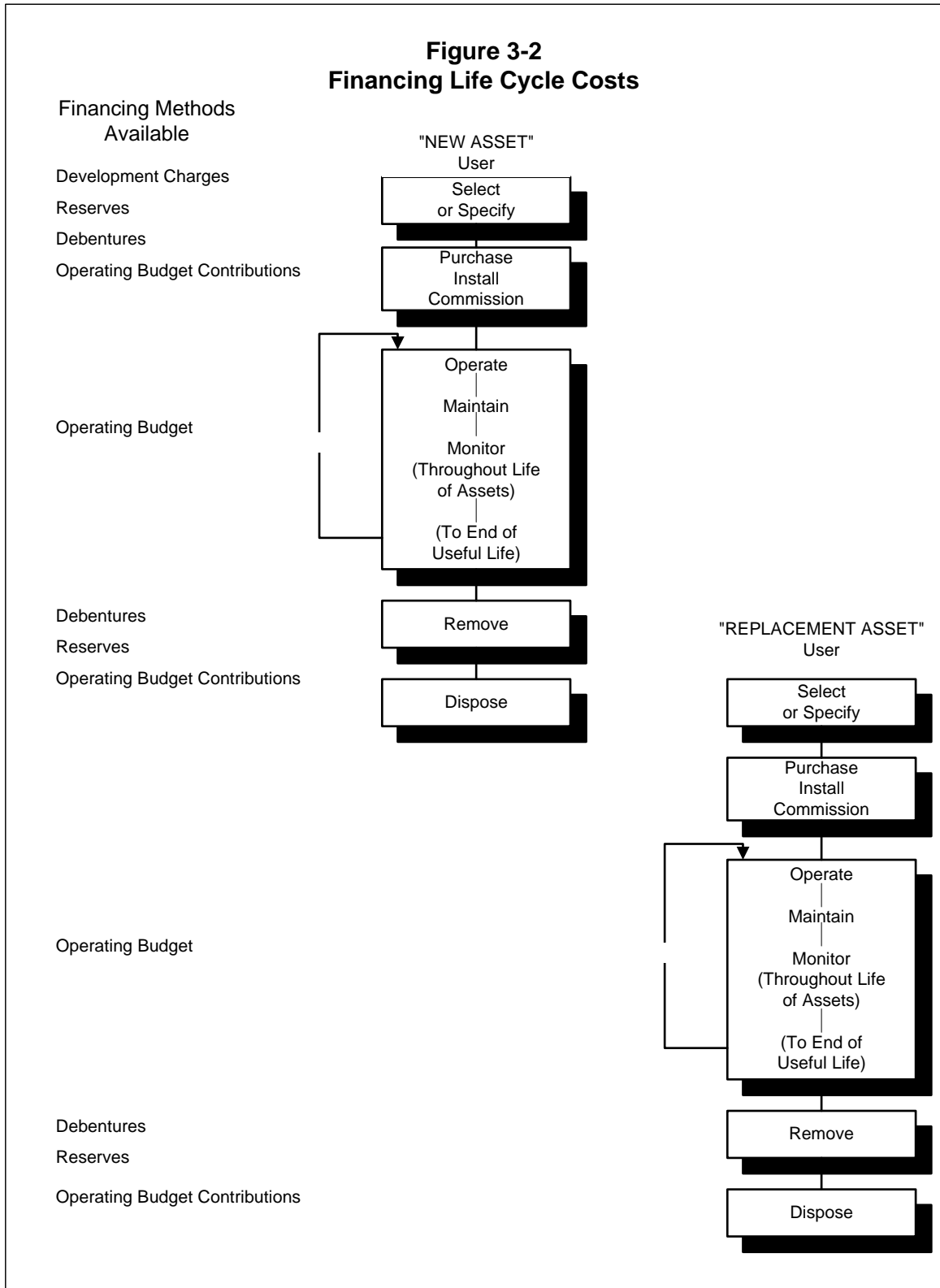
New construction related to growth could produce development charges and developer contributions (e.g. works internal to a subdivision which are the responsibility of the developer to construct) to fund a significant portion of projects, where new assets are being acquired to allow growth within the municipality to continue. As well, debentures could be used to fund such works, with the debt charge carrying costs recouped from taxpayers in the future.

However, capital construction to replace existing infrastructure is largely not growth-related and will therefore not yield development charges or developer contributions to assist in financing these works. Hence, a municipality will be dependent upon debentures, reserves and contributions from the operating budget to fund these works.

Figure 3-2 depicts the costs of an asset from its initial conception through to replacement and then continues to follow the associated costs through to the next replacement.

As referred to earlier, growth-related financing methods such as development charges and developer contributions could be utilized to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of this asset. Other financing methods may be used as well to finance the non-growth related component of this project; reserves which have been collected from past tax/rate payers, operating budget contributions which are collected from existing tax/rate payers and debenturing which will be carried by future tax/rate payers. Ongoing costs for monitoring, operating and maintaining the asset will be charged annually to the existing tax/rate payer.

When the asset requires replacement, the sources of financing will be limited to reserves, debentures and contributions from the operating budget. At this point, the question is raised; "If the cost of replacement is to be assessed against the tax/rate payer who benefits from the replacement of the asset, should the past tax/rate payer pay for this cost or should future rate payers assume this cost?" If the position is taken that the past user has used up the asset, hence he should pay for the cost of replacement, then a charge should be assessed annually, through the life of the asset to have funds available to replace it when the time comes.



If the position is taken that the future tax/rate payer should assume this cost, then debenturing and, possibly, a contribution from the operating budget should be used to fund this work.

Charging for the cost of using up of an asset is the fundamental concept behind depreciation methods utilized by the private sector. This concept allows for expending the asset as it is used up in the production process. The tracking of these costs forms part of the product's selling price and hence end users are charged for the asset's depreciation. The same concept can be applied in a municipal setting to charge existing users for the asset's use and set those funds aside in a reserve to finance the cost of replacing the asset in the future.

3.1.3 Costing Methods

There are two fundamental methods of calculating the cost of the usage of an asset and for the provision of the revenue required when the time comes to retire and replace it. The first method is the Depreciation Method. This method recognizes the reduction in the value of the asset through wear and tear, and aging. There are two commonly used forms of depreciation: the straight-line method and the reducing balance method.

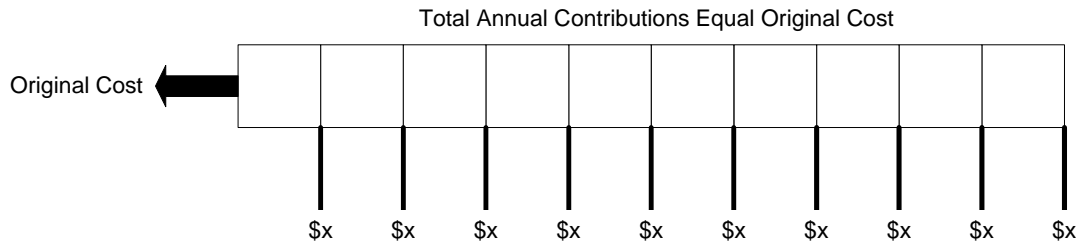
The straight line method is calculated by taking the original cost of the asset, subtracting its estimated salvage value (estimated value of the asset at the time it is disposed of) and dividing this by the estimated number of years of useful life. The reducing balance method is calculated by utilizing a fixed percentage rate and this rate is applied annually to the undepreciated balance of the asset value.

The second method of life cycle costing is the sinking fund method. This method first estimates the future value of the asset at the time of replacement. This is done by inflating the original cost of the asset at an assumed annual inflation rate. A calculation is then performed to determine annual contributions (equal or otherwise) which, when invested, will grow with interest to equal the future replacement cost.

The preferred method used herein is the sinking fund method of life cycle costing.

FIGURE 3-3

STRAIGHT LINE DEPRECIATION

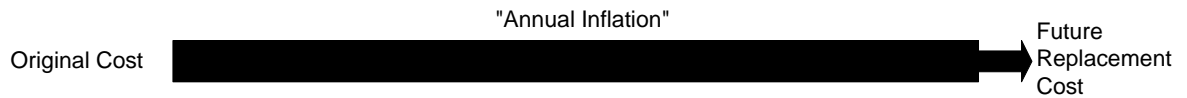


Formula:

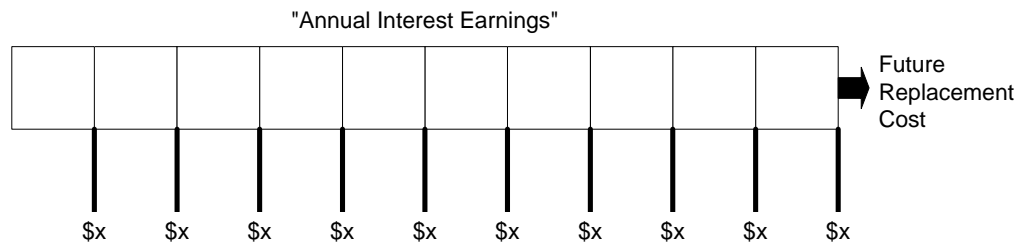
$$\frac{\text{Original Cost} - \text{Salvage Cost}}{\text{Number of Years of Useful Life}}$$

SINKING FUND METHOD

1. "Estimate Future Replacement Cost"



2. "Estimate Annual Contribution which will Grow with Interest to Equal Future Replacement Cost"



3.2 Impact on Budgets

Detailed water and wastewater system asset inventory information was obtained from Town staff, through the Town's PSAB 3150 tangible capital asset inventory. The detailed facilities, equipment, distribution and collection inventories are provided in Appendices A and B to this report. The asset inventory information includes details on approximate infrastructure age, material type, main lengths, diameter of the mains, estimated useful life and estimated replacement costs, etc. As well, the lifecycle "sinking fund" contribution amounts for each piece of infrastructure have also been included. These calculations determine the level of investment the Town may wish to consider as part of its budgeting practices. This information is summarized in Table 3-1.

**Table 3-1
Town of Parry Sound
Summary of Water and Wastewater Infrastructure**

Area	Total Replacement Value	Amount to be funded in 10 year forecast	Net Replacement for Future Lifecycle	Annual Lifecycle Replacement
Water				
Water Facilities, Vehicles and Equipment	19,802,744	2,057,883	17,744,861	684,800
Watermain Inventory	34,563,030	3,968,388	30,594,642	800,308
Water Valve Box Inventory	195,002	-	195,002	8,429
Water Hydrant Inventory	2,464,741	701,159	1,763,582	83,092
Total Water	57,025,517	6,727,430	50,298,087	1,576,629
Wastewater				
Wastewater Facilities, Vehicles and Equipment	24,068,200	7,628,740	16,439,460	723,863
Sanitary Sewers	35,110,298	606,849	34,503,450	930,446
Wastewater Man Holes	599,073	-	599,073	15,645
Storm Main Inventory	8,549,675	740,040	7,809,635	208,490
Storm Sewer Man Holes Inventory	289,030	-	289,030	7,393
Storm Sewer Catch Basins	640,457	-	640,457	20,327
Total Wastewater	69,256,734	8,975,628	60,281,105	1,906,165
Total	126,282,251	15,703,059	110,579,192	3,482,793

4. CAPITAL COST FINANCING OPTIONS

4. CAPITAL COST FINANCING OPTIONS

4.1 Summary of Capital Cost Financing Alternatives

Historically, the powers that municipalities have had to raise alternative revenues to taxation to fund capital services have been restrictive. Over the past few years, legislative reforms have been introduced. Some of these have expanded municipal powers (e.g. Bill 130 providing for natural person powers for fees and charges bylaws); while others appear to restrict them (Bill 98 in 1997 providing amendments to the *Development Charges Act*).

The most recent *Municipal Act* came into force on January 1, 2003, with significant amendment in 2006 through the *Municipal Statute Law Amendment Act*. Part XII of the Act and O.Reg. 584/06, govern a municipalities ability to impose fees and charges. This Act provides municipalities with broadly defined powers and provides the ability to impose fees for both operating and capital purposes. Under s.484 of *Municipal Act, 2001*, the Local Improvement Act was repealed with the in force date of the Municipal Act (January 1, 2003). The municipal powers granted under the Local Improvement Act now fall under the jurisdiction of the *Municipal Act*.

The methods of capital cost recovery available to municipalities are provided as follows:

RECOVERY METHODS	SECTION REFERENCE
<ul style="list-style-type: none"> • <i>Development Charges Act, 1997</i> 	4.2
<ul style="list-style-type: none"> • <i>Municipal Act</i> <ul style="list-style-type: none"> • Fees and Charges • Local Improvements 	4.3

4.2 **Development Charges Act, 1997**

In November, 1996, the Ontario Government introduced Bill 98, a new *Development Charges Act*. The Province's stated intentions were to "create new construction jobs and make home ownership more affordable" by reducing the charges and to "make municipal Council decisions more accountable and more cost effective." The basis for this Act is to allow municipalities to recover the growth-related capital cost of infrastructure necessary to accommodate new growth within the municipality. Generally the new Act provided the following changes to the former Act.

- Replace those sections of the 1989 DCA which govern municipal development charges. (Education development charges are not to be significantly altered at this time.)
- Limit services which can be financed from development charges, specifically excluding parkland acquisition, administration buildings, and cultural, entertainment, tourism, solid waste management and hospital facilities.
- Ensure that the level of service used in the calculation of capital costs will not exceed the average level of service over the previous decade. Level of service is to be measured from both a quality and quantity perspective.
- Provide that uncommitted excess capacity available in existing municipal facilities and benefits to existing residents are removed from the calculation of the charge.
- Ensure that the development charge revenues collected by municipalities are spent only on those capital costs identified in the calculation of the development charge.
- Require municipalities to contribute funds (e.g. taxes, user charges or other non-development charge revenues) to the financing of certain projects primarily funded from development charges. The municipal contribution is 10 percent for services such as recreation, parkland development, libraries, etc.
- Permit (but apparently not require) municipalities to grant developers credits for the direct provision of services identified in the development charge calculation and, when credits are granted, require the municipality to reimburse the developer for the costs the

municipality would have incurred if the project had been financed from the development charge reserve fund.

- Set out provisions for front-end financing capital projects (limited to essential services) required to service new development.
- Set out provisions for appeals and complaints, and transitional rules, including that municipalities will have up to 18 months from the date of proclamation of the new Act to establish new development charge by-laws, otherwise the old by-laws will expire.

The Town does not impose development charges on new development. However, as minimal growth is forecast to occur, there doesn't appear to be significant levels of growth-related capital needs in the forecast, necessitating their use. Future growth-related capital may be funded directly through developer agreement, Municipal Act Capital Charges or area-specific Development Charges.

4.3 Municipal Act

4.3.1 Part XII of the Municipal Act provides municipalities with broad powers to impose fees and charges via passage of a by-law. These powers, as presented in s.391(1), include imposing fees or charges:

- “for services or activities provided or done by or on behalf of it;
- for costs payable by it for services or activities provided or done by or on behalf of any other municipality or local board; and
- for the use of its property including property under its control”

Restrictions are provided to ensure that the form of the charge is not akin to a poll tax. Any charges not paid under this authority may be added to the tax roll and collected in a like manner. The fees and charges imposed under this part are not appealable to the OMB.

4.3.2 s 391(2) of the Municipal Act permits municipalities to impose charges to recover capital costs, by by-law, from owners or occupants of land who receive an immediate benefit or a benefit at some later point in time. For a by-law imposed under this section of the Act:

- A variety of different means could be used to establish the rate, and recovery of the costs could be imposed by a number of methods at the discretion of Council (i.e. lot size, frontage, number of benefiting properties, etc.);
- Rates could be imposed in respect to costs of major capital works, even though an immediate benefit is not enjoyed;
- Non-abutting owners could be charged;
- Recovery could be authorized against existing works, where new infrastructure was added to such works, "notwithstanding that the capital costs of existing works has in whole or in part been paid."
- Charges on individual parcels could be deferred;
- Exemptions could be established; and
- OMB approval is not required.

4.3.3 Under the previous *Local Improvement Act*:

- A variety of different types of works could be undertaken, such as watermain, storm and sanitary sewer projects, supply of electrical light or power, bridge construction, sidewalks, road widening and paving.
- Council could pass a by-law for undertaking such work on petition of a majority of benefiting taxpayers, on a 2/3 vote of Council and on sanitary grounds, based on the recommendation of the Minister of Health. The by-law was required to go to the OMB, which might hold hearings and alter the by-law, particularly if there were objections.
- The entire cost of a work was assessed only upon the lots abutting directly on the work, according to the extent of their respective frontages, using an equal special rate per metre of frontage.
- As noted, this Act was repealed as of April 1, 2003; however, O.Reg. 119/03 was enacted on April 19, 2003 which restores many of the previous *Local Improvement Act* provisions; however, the authority is now provided under the *Municipal Act*.

4.4 Grant Funding Availability

Since the early 1980's, the level of Provincial and Federal assistance toward municipal infrastructure has declined significantly. By the mid 1990's, there were very limited funds available from senior levels of government. In mid-2000, initiatives from the Provincial and Federal level were announced; providing for a new program (OSTAR) to assist small cities, towns and rural areas in addressing infrastructure improvements. In November 2004, another program (COMRIF) was introduced which also provided combined assistance from the senior governments. The final allocation of the COMRIF funding was made in early 2007. Also, in late 2007, and with additional allocation in February 2008, the province made available \$450 million in Infrastructure Ontario Funding.

The capital financial plan has not identified any grant funding beyond the budgeted \$300,000 in grant funding in 2011. To the extent that the Town is successful in achieving grant funding for future infrastructure needs and the financial impacts are material, the rate forecast may be revisited.

4.5 Existing Reserves/Reserve Funds

The Town has established reserve funds for water and wastewater capital costs. The following table summarizes the water and wastewater reserves utilized in this analysis and the respective 2010 year-end closing balances.

Reserve/Reserve Funds	Balance as at December 31, 2010 (\$)
Water System	
- Water Capital Reserve	\$1,454,230
Wastewater System	
- Wastewater Capital Reserve	\$527,481

4.6 Debenture Financing

Although it is not a direct method of minimizing the overall cost to the ratepayer, debentures are used by municipalities to assist in cash flowing large capital expenditures.

The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the *Municipal Act*. Ontario Regulations 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges).

The increased capital needs identified within the forecast to achieve sufficient lifecycle replacement will require the use of debenture financing. Approximately \$1 million or (14% of forecast needs) for water services are anticipated to be debenture financed. For wastewater services, debenture financing is identified for \$6.4 million in capital over the forecast period (59% of forecast needs). Debenture financing is assumed at an interest rate of 5% and 20-year term.

4.7 Recommended Approach

The capital funding plan for water services assumes that the needs will be largely funded from reserves for water, i.e. \$5.8 million or 81% of forecast needs. Approximately \$1.0 million in debt financing and \$0.3 million in grant funding has also been identified for water services. Due to the significant increase in needs for wastewater requires greater debt financing will be required over the period at \$6.4 million (or 59% of forecast needs). The remaining with \$4.5 million (or 41% of forecast needs) will be funded from reserves.

Of the various alternatives provided in this section, the following are recommended for further consideration of the Town of Parry Sound for the capital expenditures provided in Chapter 2:

Description	Water \$ (2011-2020)	Wastewater \$ (2011-2020)	Total \$ (2011-2020)
Grant Funding	\$300,000	\$-	\$300,000
Reserve Funds	\$5,834,348	\$4,473,149	\$10,307,497
Debt	\$1,034,437	\$6,366,351	\$7,400,788
Total	\$7,168,785	\$10,839,500	\$18,008,284

5. OPERATING EXPENDITURE FORECAST

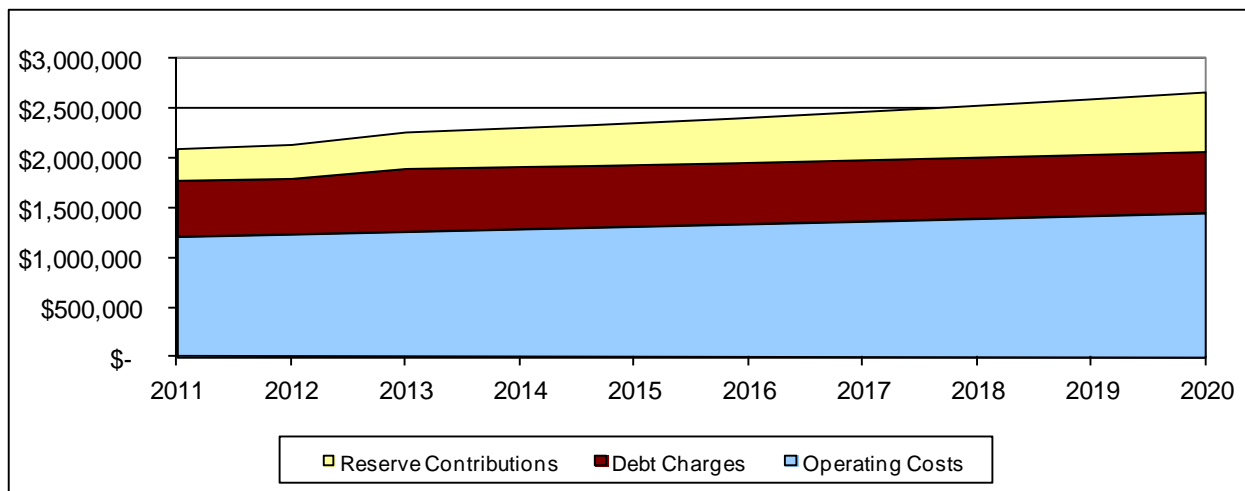
5. OPERATING EXPENDITURE FORECAST

5.1 Operating Expenditures

In this report the forecasted operating budget figures for water and wastewater services are based on the Town's 2011 operating budgets. The costs for each component of the operating budget have been reviewed to establish forecast inflationary adjustments. As a result of the inflationary increases, annual capital funding requirements presented in Chapter 4 and the gradual phase-in of lifecycle reserve fund contributions, the water and wastewater operating expenditures are anticipated increase over the forecast period.

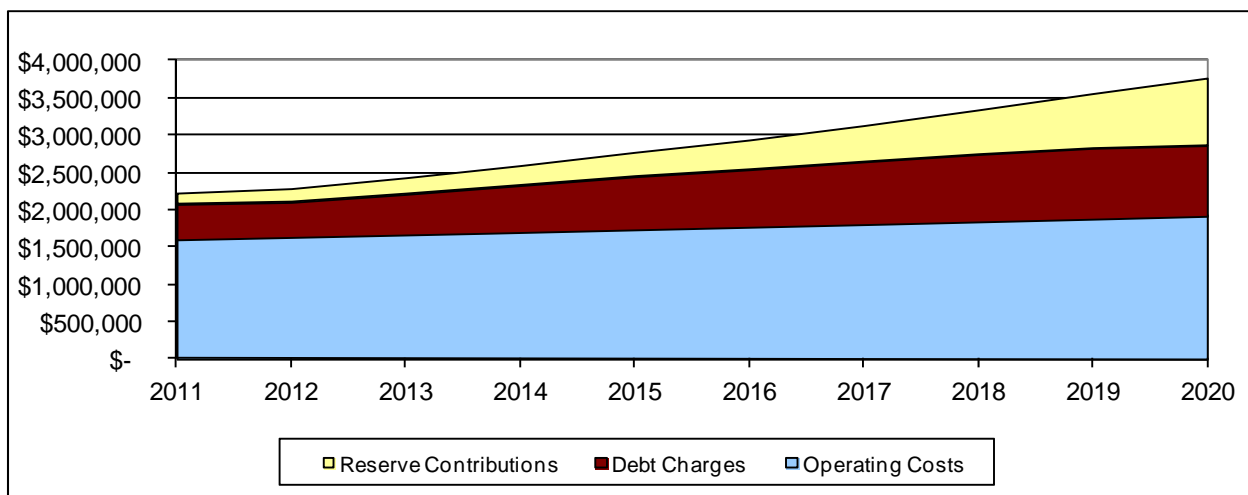
Figure 5-1 illustrates the gross operating expenditure increase over the forecast period by component. Gross operating expenditures for water are anticipated to increase from \$2.09 million annually in 2011 to \$2.67 million by 2020, or 2.7% annually. Water operating expenditure increases are relatively uniform over the forecast period, with a notably higher than average increase in 2013 (i.e. 5.9%) due to added debt carrying costs for 2012 expenditures. This is generally attributable to the use of capital funding from reserves and the gradual phase-in of lifecycle reserve fund development.

Figure 5-1
Town of Parry Sound
2011-2020 Water Gross Expenditure Forecast



Similar to water services, Figure 5-2 illustrates the annual operating forecast for wastewater services by expenditure category. Gross operating expenditures are anticipated to increase from \$2.22 million annually in 2011 to \$3.77 million by 2020, or 6.0% annually. Operating costs related to capital and lifecycle reserve funding represent the majority of the increase in expenditures over the period.

Figure 5-2
Town of Parry Sound
2011-2020 Wastewater Gross Expenditure Forecast



5.2 Operating Revenues

The Town has operating revenue sources such as service calls, water meters, service charges, inspections, and other miscellaneous revenues. This typically account for minor revenue towards the recovery of service costs. Largest source of operating revenue, aside from rate recoveries, is the water purchase agreement with MacDougall. Revenue estimates under the agreement for 2011 total approximately \$90,500. In accordance with the agreement, these revenues are forecast to increase with annual rate recovery revenues for the Town (i.e. 3% annually).

The monthly base charge rate component is also identified under the operating revenues forecast for water and wastewater. The rate analysis, and therefore operating revenue forecast, assumes that the monthly base charge rates will remain constant over the forecast period. Monthly base charge rates are equivalent to current metered rates for all customers, with flat

fees for unmetered customers calculated based on assumed consumption estimates. In total, base charge revenues are estimated at \$1.22 million annually, with total wastewater base charges estimated at \$1.26 million annually.

Accounting for these annual operating revenues, net operating expenditures for water services are forecast to increase from \$0.76 million in 2011 to \$1.30 million by 2020, or 6.2% annually. For wastewater services, net operating expenditures are forecast to increase from \$0.96 million in 2011 to \$2.51 million by 2020, or 11.3% annually. Tables 5-1 and 5-2 provide the water and wastewater operating budget forecasts respectively.

Table 5-1
Town of Parry Sound
Water Services
Operating Budget Forecast
 Inflated \$

Description	Budget 2011	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures										
Operating Costs										
Water Collection System	816,541	832,872	849,529	866,520	883,850	901,527	919,558	937,949	956,708	975,842
Water Treatment PlanT	400,045	408,046	416,207	424,531	433,022	441,682	450,516	459,526	468,716	478,091
Sub Total Operating	1,216,586	1,240,918	1,265,736	1,291,051	1,316,872	1,343,209	1,370,073	1,397,475	1,425,424	1,453,933
Capital-Related										
Existing Debt (Principal) - Non-Growth Related	374,692	371,203	366,492	362,501	358,306	354,849	354,849	354,849	354,849	354,849
Existing Debt (Interest) - Non-Growth Related	184,756	183,036	180,713	178,745	176,676	174,972	174,972	174,972	174,972	174,972
New Non-Growth Related Debt (Principal)	-	-	31,284	32,848	34,491	36,215	38,026	39,927	41,924	44,020
New Non-Growth Related Debt (Interest)	-	-	51,722	50,158	48,515	46,791	44,980	43,079	41,082	38,986
Capital From Current	-	-	-	-	-	-	-	-	-	-
Transfer to Reserves and Reserve Funds	318,876	342,078	366,968	393,669	422,313	453,042	486,006	521,368	559,304	600,000
Sub Total Capital Related	878,324	896,317	997,179	1,017,921	1,040,301	1,065,868	1,098,833	1,134,195	1,172,131	1,212,827
Total Expenditures	2,094,910	2,137,235	2,262,915	2,308,972	2,357,173	2,409,078	2,468,906	2,531,670	2,597,555	2,666,760
Revenues										
Base Charge	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702
McDougall Service Charges	90,462	92,402	98,163	100,274	102,483	104,862	107,605	110,482	113,502	116,674
`	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871
Fees, Service Charges & Inspections	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,339,035	1,340,975	1,346,736	1,348,847	1,351,056	1,353,435	1,356,178	1,359,055	1,362,074	1,365,247
Water Billing Recovery - Total	755,875	796,260	916,180	960,125	1,006,117	1,055,642	1,112,728	1,172,616	1,235,481	1,301,513

Table 5-2
Town of Parry Sound
Wastewater Services
Operating Budget Forecast
 Inflated \$

Description	Budget 2011	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures										
<u>Operating Costs</u>										
Waterwater Plan, Stations & Collection	1,553,904	1,584,982	1,616,682	1,649,015	1,681,996	1,715,636	1,749,948	1,784,947	1,820,646	1,857,059
Storm Sewers & Catchbasins	57,550	58,701	59,875	61,072	62,293	63,539	64,810	66,106	67,428	68,777
Sub Total Operating	1,611,454	1,643,683	1,676,556	1,710,087	1,744,289	1,779,175	1,814,758	1,851,054	1,888,075	1,925,836
<u>Capital-Related</u>										
Existing Debt (Principal) - Non-Growth Related	168,309	167,039	163,887	160,924	158,792	154,829	154,829	154,829	154,829	154,829
Existing Debt (Interest) - Non-Growth Related	302,990	300,704	295,030	289,695	285,857	278,723	278,723	278,723	278,723	278,723
New Non-Growth Related Debt (Principal)	-	-	31,383	67,517	104,784	136,229	168,926	200,974	228,026	239,427
New Non-Growth Related Debt (Interest)	-	-	51,886	107,462	160,119	198,205	234,191	264,765	282,827	271,426
Capital From Current	-	-	-	-	-	-	-	-	-	-
Transfer to Reserves and Reserve Funds	136,272	168,074	207,297	255,673	315,339	388,930	479,694	591,639	729,709	900,000
Sub Total Capital Related	607,571	635,816	749,483	881,271	1,024,892	1,156,915	1,316,363	1,490,929	1,674,113	1,844,404
Total Expenditures	2,219,025	2,279,499	2,426,039	2,591,358	2,769,181	2,936,090	3,131,121	3,341,983	3,562,188	3,770,240
Revenues										
Base Charge	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996
Fees, Service Charges & Inspections	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496
Wastewater Billing Recovery - Total	956,528	1,017,003	1,163,543	1,328,862	1,506,685	1,673,594	1,868,625	2,079,487	2,299,692	2,507,744

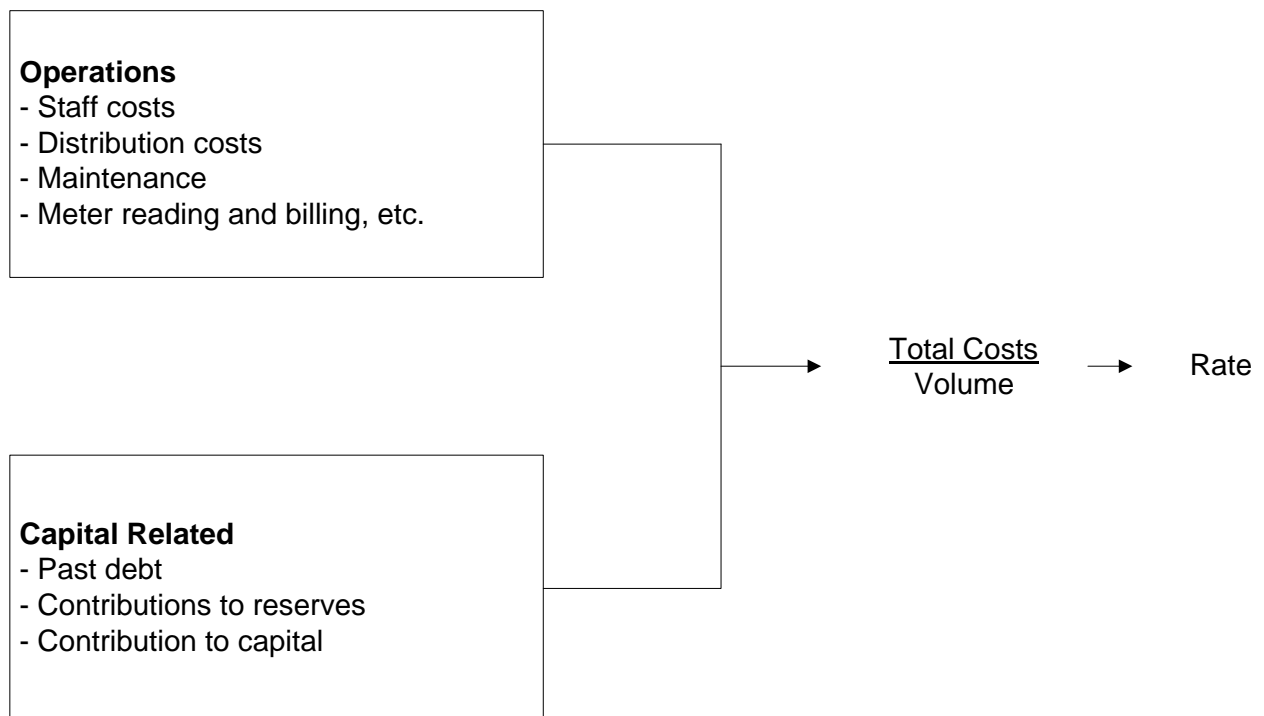
6. PRICING STRUCTURES

6. PRICING STRUCTURES

6.1 Introduction

Rates in their simplest form can be defined as total costs to maintain the utility function divided by the total expected volume to be generated for the period. Total costs are usually a combination of operating costs (e.g. staff costs, distribution costs, maintenance, administration, etc.) and capital-related costs (e.g. past debt to finance capital projects, transfers to reserves to finance future expenditures, etc.). The schematic below provides a simplified illustration of the rate calculation for water.

“ANNUAL COSTS”



These operating and capital expenditures will vary over time. Examples of factors which will affect the expenditures over time are provided below:

Operations

- Inflation
- Increased maintenance as system ages
- Changes to Provincial legislation

Capital Related

- New capital will be built as areas expand
- Replacement capital needed as system ages
- Financing of capital costs are a function of policy regarding reserves and direct financing from rates (pay as you go), debt and user pay methods (development charges, *Municipal Act*)

6.2 Alternative Pricing Structures

Throughout Ontario, and as well, Canada, the use of pricing mechanisms varies between municipalities. The use of a particular form of pricing depends upon numerous factors, including Council preference, administrative structure, surplus/deficit system capacities, economic/demographic conditions, to name a few.

Municipalities within Ontario have two basic forms of collecting revenues for water and sewer purposes, those being through incorporation of the costs within the tax rate charged on property assessment and/or through the establishment of a specific water rate billed to the customer. Within the rate methods, there are four basic rate structures employed:

- Flat Rate
- Constant Rate
- Declining Block Rate
- Increasing (or Inverted) Block Rate.

The definitions and general application of the various methods are as follows:

Property Assessment: This method incorporates the total costs of providing water into the general requisition or the assessment base of the municipality. This form of collection is a "wealth tax", as payment increases directly with the value of property owned and bears no necessary relationship to actual consumption. This form is easy to administer as the costs to be recovered are incorporated in the calculation for all general services, normally collected through property taxes.

Flat Rate: This rate is a constant charge applicable to all customers served. The charge is calculated by dividing the total number of user households and other entities (e.g. businesses) into the costs to be recovered. This method does not recognize differences in actual consumption but provides for a uniform spreading of costs across all users. Some municipalities define users into different classes of similar consumption patterns, that is a commercial user, residential user and industrial user, and charge a flat rate by class. Each user is then billed on a periodic basis. No meters are required to facilitate this method, but an accurate estimate of the number of users is required. This method ensures a set revenue for the collection period but is not sensitive to consumption, hence may cause a shortfall or surplus of revenues collected.

Constant Rate: This rate is a volume-based rate, in which the consumer pays the same price per unit consumed, regardless of the volume. The price per unit is calculated by dividing the total cost of the service by the total volume used by total consumers. The bill to the consumer climbs uniformly as the consumption increases. This form of rate requires the use of meters to record the volume consumed by each user. This method closely aligns the revenue recovery with consumption. Revenue collected varies directly with the consumption volume.

Declining Block Rates: This rate structure charges a successively lower price for set volumes, as consumption increases through a series of "blocks". That is to say that within set volume ranges, or blocks, the charge per unit is set at one rate. Within the next volume range the charge per unit decreases to lower rate, and so on. Typically, the first, or first and second blocks cover residential and light commercial uses. Subsequent blocks normally are used for heavier commercial and industrial uses. This rate structure

requires the use of meters to record the volume consumed by each type of user. This method requires the collection and analysis of consumption patterns by user classification to establish rates at a level which does not over or under collect revenue from rate payers.

Increasing or Inverted Block Rates: The increasing block rate works essentially the same way as the declining block rate, except that the price of water in successive blocks increases rather than declines. Under this method the consumer's bill rises faster with higher volumes used. This rate structure also requires the use of meters to record the volume consumed by each user. This method requires, as with the declining block structure, the collection and analysis of consumption patterns by user classification to establish rates at a level which does not over or under collect from rate payers.

6.3 Assessment of Alternative Pricing Structures

The adoption by a municipality or utility of any one particular pricing structure is normally a function of a variety of administrative, social, demographic and financial factors. The number of factors and the weighting each particular factor receives can vary between municipalities. The following is a review of some of the more prevalent factors:

Cost Recovery

Cost recovery is a prime factor in establishing a particular pricing structure. Costs can be loosely defined into different categories: operations; maintenance; capital; financing; administration. These costs often vary between municipalities and even within a municipality, based on consumption patterns, infrastructure age, economic growth, etc.

The pricing alternatives defined earlier can all achieve the cost recovery goal, but some do so more precisely than others. Fixed pricing structures, such as Property Assessment and Flat Rate, are established on the value of property or on the number of units present in the municipality, but do not adjust in accordance with consumption. Thus, if actual consumption for the year is greater than projected, the municipality incurs a higher cost of production, but the revenue base remains static (since it was determined at the beginning of the year), thus potentially providing a funding shortfall. Conversely, if the consumption level declines below projections, fixed pricing structures will produce more revenue than actual costs incurred.

The other pricing methods (declining block, constant rate, increasing block) are consumption based and generally will generate revenues in proportion to actual consumption.

Administration

Administration is defined herein as the staffing, equipment and supplies required to support the undertaking of a particular pricing strategy. This factor not only addresses the physical tangible requirements to support the collection of the revenues, but also the intangible requirements, such as policy development.

The easiest pricing structure to support is the Property Assessment structure. As municipalities undertake the process of calculating property tax bills and the collection process for their general services, the incorporation of the water costs into this calculation would have virtually no impact on the administrative process and structure.

The Flat Rate pricing structure is relatively easy to administer as well. It is normally calculated to collect a set amount, either on a monthly, quarterly, semi annual or annual basis and is billed directly to the customer. The impact on administration centres mostly on the accounts receivable or billing area of the municipality, but normally requires minor additional staff or operating costs to undertake.

The three remaining methods, those being Increasing Block Rate, Constant Rate and Declining Block Rate, have a more dramatic effect on administration. These methods are dependent upon actual consumption and hence involve a major structure in place to administer. First, meters must be installed in all existing units in the municipality and units to be subsequently built must be required to include these meters. Second, meter readings must be undertaken periodically. Hence staff must be available for this purpose or a service contract must be negotiated. Third, the billings process must be expanded to accommodate this process. Billing must be done per a defined period, requiring staff to produce the bills. Lastly, either through increased staffing or by service contract, an annual maintenance program must be set up to ensure meters are working effectively in recording consumed volumes.

The benefit derived from the installation of meters is that information on consumption patterns becomes available. This information provides benefit to administration in calculating rates

which will ensure revenue recovery. Additionally, when planning what services are to be constructed in future years, the municipality or utility has documented consumption patterns distinctive to its own situation, which can be used to project sizing of growth-related works.

Equity

Equity is always a consideration in the establishment of pricing structures but its definition can vary depending on a municipality's circumstances and based on the subjective interpretation of those involved. For example: is the price charged to a particular class of rate payer consistent with those of a similar class in surrounding municipalities; through the pricing structure does one class of rate payer pay more than another class; should one pay based on ability to pay, or on the basis that a unit of water costs the same to supply no matter who consumes it; etc. There are many interpretations. Equity therefore must be viewed broadly in light of many factors as part of achieving what is best for the municipality as a whole.

Conservation

In today's society, conservation of natural resources is increasingly being more highly valued. Controversy continuously focuses on the preservation of non-renewable resources and on the proper management of renewable resources. Conservation is also a concept which applies to a municipality facing physical limitations in the amount of water which can be supplied to an area. As well, financial constraints can encourage conservation in a municipality where the cost of providing each additional unit is increasing.

Pricing structures such as property assessment and flat rate do not, in themselves, encourage conservation. In fact, depending on the price which is charged, they may even encourage resource "squandering," either because consumers, without the price discipline, consume water at will, or the customer wants to get his money's worth and hence adopts more liberal consumption patterns. The fundamental reason for this is that the price paid for the service bears no direct relationship to the volume consumed and hence is viewed as a "tax," instead of being viewed as the price of a purchased commodity.

The Declining Block Rate provides a decreasing incentive towards conservation. By creating awareness of volumes consumed, the consumer can reduce his total costs by restricting

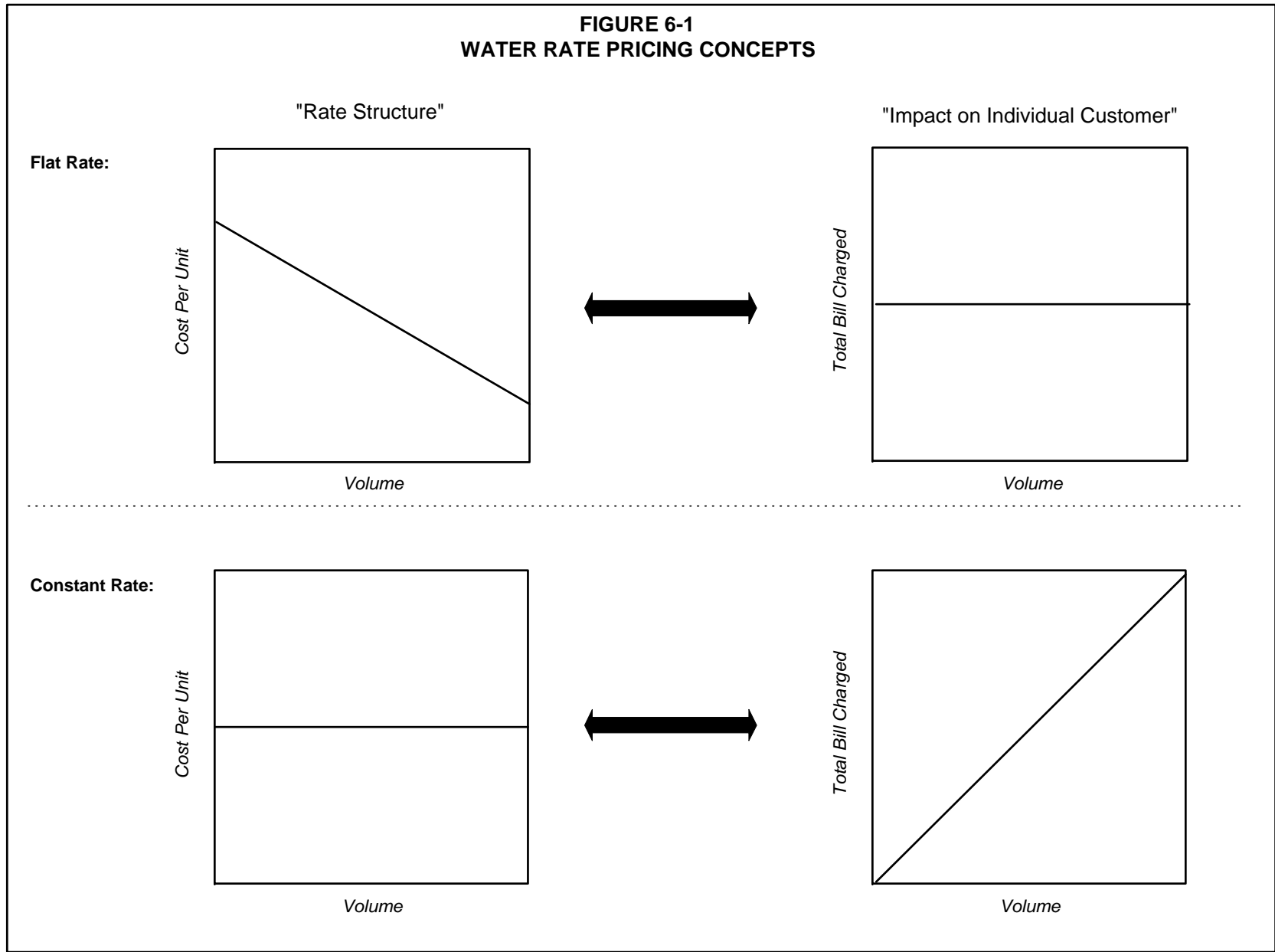
consumption; however the incentive lessens as more water is consumed, because the marginal cost per unit declines as the consumer enters the next block pricing range. Similarly, those whose consumption level is at the top end of a block have reduced incentive to reduce consumption.

The Constant Rate structure presents the customer with a linear relationship between consumption and the cost thereof. As the consumer pays a fixed cost per unit, his bill will vary directly with the amount consumed. This method presents tangible incentive for consumers to conserve water. As metering provides direct feedback as to usage patterns and the consumer has direct control over the total amount paid for the commodity, the consumer is encouraged to use only those volumes that are reasonably required.

The Inverted Block method presents the most effective pricing method for encouraging conservation. Through this method, the price per unit consumed increases as total volumes consumed grow. The consumer becomes aware of consumption through metering with the charges increasing dramatically with usage. Hence, there normally is an awareness that exercising control over usage can produce significant savings. This method not only encourages conservation methods, but may also penalize legitimate high volume users if not properly structured.

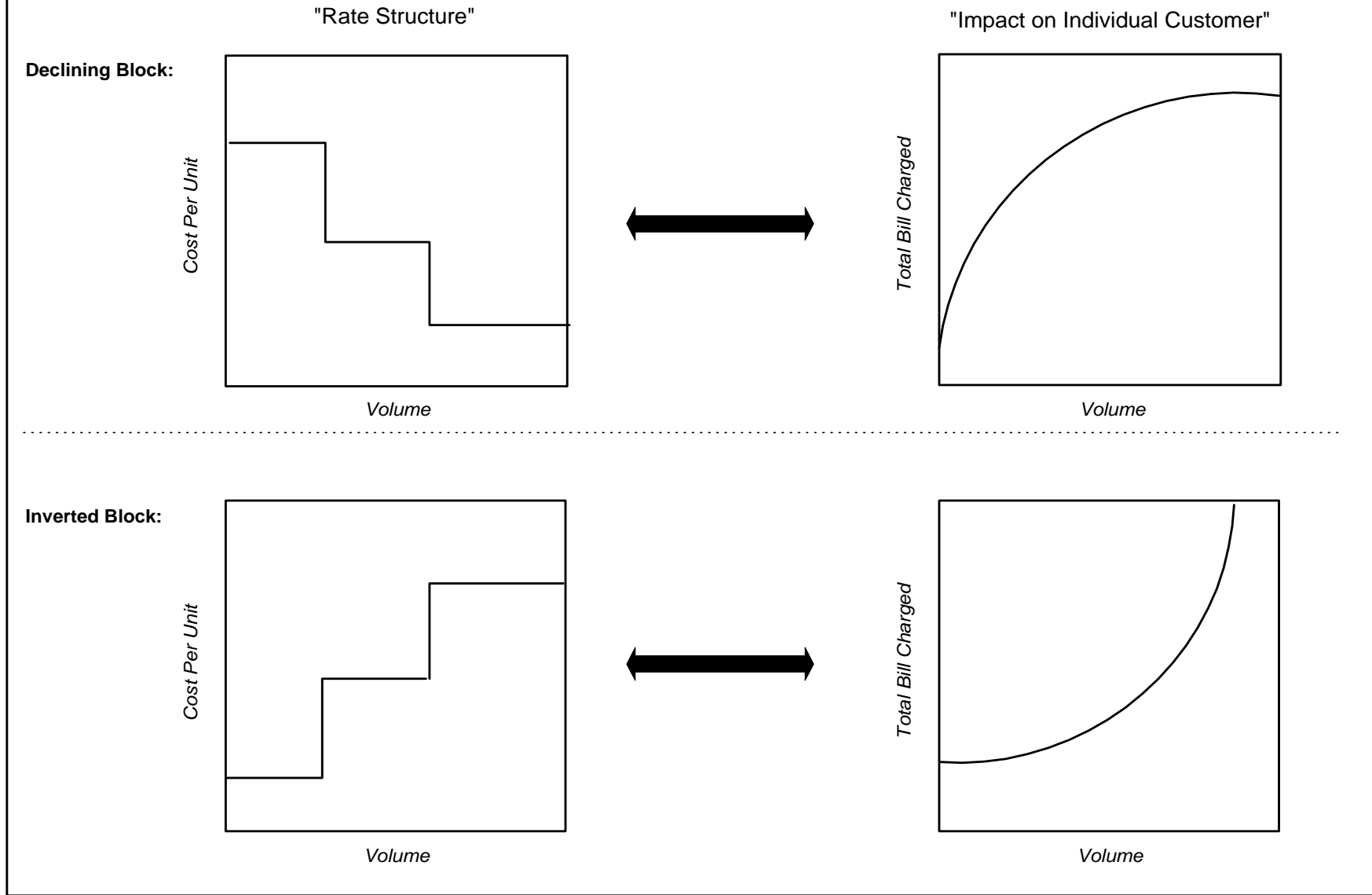
Figure 6-1 provides a schematic representation of the various rate structures (note property tax as a basis for revenue recovery has not been presented for comparison, as the proportion of taxes paid varies in direct proportion to the market value of the property). The graphs on the left-hand side of the figure present the cost per unit for each additional amount of water consumed. The right-hand side of the figure presents the impact on the customer's bill as the volume of water increases. The schematic is summarized below for each rate structure.

**FIGURE 6-1
WATER RATE PRICING CONCEPTS**



Drawing4

**FIGURE 6-1 (Cont'd)
WATER RATE PRICING CONCEPTS**



Drawing5

RATE STRUCTURE	COST PER UNIT AS VOLUME CONSUMPTION INCREASES	IMPACT ON CUSTOMER BILL AS VOLUME CONSUMPTION INCREASES
Flat Rate	Cost per unit decreases as more volume consumed	Bill remains the same no matter how much volume is consumed
Constant Rate	Cost per unit remains the same	Bill increases in direct proportion to consumption
Declining Block	Cost per unit decreases as threshold targets are achieved	Bill increases at a slower rate as volumes increase
Increasing (Inverted) Block	Cost per unit increases as threshold targets are achieved	Bill increases at a faster rate as volumes increase

6.4 Rate Structures in Ontario

In a survey of over 170 municipalities (over half of the municipalities in Ontario who provide water and/or sewer), all forms of rate structures are in use. In reviewing the trends of municipal rate structures, we have analyzed the various residential rate structures by geographic area and municipal population size. As provided in Tables 6-1 through 6-4, residential charges are predominantly recovered using consumptive charges for both water and wastewater services (i.e. approximately 72% of municipal systems). Within the consumptive charge structure options, the most common rate structure is the constant rate. Moreover, for metered residential municipalities approximately 92% impose a base monthly charge (i.e. base charge, minimum charge or both).

Historically, the development of a base charge often reflected either the recovery of meter reading/billing/collection costs, plus administration or those costs plus certain fixed costs (such as fire protection, capital contributions or reserve contributions). More recently, many municipalities have started to establish base charges based on ensuring a secure portion of the revenue stream which does not vary with volume consumption. Selection of the quantum of the base charge in many municipalities is a matter of policy selected by individual municipalities.

Table 6-1
Ontario Residential Water Survey

Geographic Area	Flat Rate	Metered							Total
		Base Charge*	Minimum Bill*	Base Chg and Minimum Bill	No Base and No Minimum Bill	Constant Rate	Increasing Rate	Decreasing Rate	
North West	7	2	-	-	8	3	-	1	11
North East	21	8	1	1	24	7	1	2	31
Central	5	18	2	-	13	21	7	1	34
South West	9	52	12	6	14	39	8	16	72
Eastern	15	31	5	2	18	26	6	5	52
Totals	57	111	20	9	77	96	22	25	200

* includes municipalities with a base charge and minimum bill

Table 6-2
Ontario Residential Wastewater Survey

Geographic Area	Flat Rate	Metered							Total
		Base Charge*	Minimum Bill*	Base Chg and Minimum Bill	No Base and No Minimum Bill**	Constant Rate	Increasing Rate	Decreasing Rate	
North West	6	2	-	-	7	2	-	1	9
North East	19	6	1	1	22	5	1	2	27
Central	3	17	1	-	11	20	5	1	29
South West	13	31	7	2	26	31	4	12	60
Eastern	15	26	3	-	20	28	3	3	49
Totals	56	82	12	3	86	86	13	19	174

* includes municipalities with a base charge and minimum bill

Table 6-3
Ontario Residential Water Survey

Population Threshold	Flat Rate	Metered							Total
		Base Charge*	Minimum Bill*	Base Chg and Minimum Bill	No Base and No Minimum Bill	Constant Rate	Increasing Rate	Decreasing Rate	
< 5,000	31	9	-	-	34	11	1	1	44
5,000 - 10,000	16	27	10	4	20	24	5	7	52
10,000 - 50,000	9	52	5	3	16	42	8	12	71
50,000 - 100,000	1	7	3	2	1	5	1	2	9
100,000 +	-	16	2	-	6	14	7	3	24
Totals	57	111	20	9	77	96	22	25	200

* includes municipalities with a base charge and minimum bill

Table 6-4
Ontario Residential Wastewater Survey

Population Threshold	Flat Rate	Metered							Total
		Base Charge*	Minimum Bill*	Base Chg and Minimum Bill	No Base and No Minimum Bill	Constant Rate	Increasing Rate	Decreasing Rate	
< 5,000	25	6	-	-	28	8	1	-	34
5,000 - 10,000	19	16	7	1	22	17	1	6	43
10,000 - 50,000	11	41	2	1	25	38	8	8	65
50,000 - 100,000	1	4	2	1	4	5	1	2	9
100,000 +	-	15	1	-	7	18	2	3	23
Totals	56	82	12	3	86	86	13	19	174

* includes municipalities with a base charge and minimum bill

6.5 Rate Structures Options

The introduction to this report includes the Town's current fee structure and rate schedule. The Town presently uses a rate structure that consists of a monthly base charge, recovering both operating and capital costs, and a consumptive charge for metered customers. The monthly base charge includes a minimum consumption amount, whereby after the minimum amount is consumed the consumptive rate is imposed on all incremental consumption. This rate structure is imposed on the majority of the non-residential customers. For residential customers the majority of customers are charged a flat rate per month, which presumably includes the monthly base charge amount and a charge based on assumed consumption levels.

In developing fee structure options for the Town, discussions were undertaken with Municipal staff to consider the impacts of the financial plan on the existing fee structure, as well as to derive a fees structure that was equitable to all system users and would provide for a stable and reliable source of revenue. As noted in the discussion on rate structures, metered systems predominately impose rates consisting of a fixed base charge and a consumptive charge. In doing so the rate structure is acknowledging that there are shared fixed costs of operation that should be recovered from all benefiting customers irrespective of their level of consumption. Moreover, this structure provides municipalities with a stable source of funding from which to provide sustainable operations while still providing customers with benefits of a user pay system. The Town currently utilizes this approach in its current rate structure. However, the Town's current rate structure imposes higher charges, both monthly flat rates and consumptive rates, on non-residential customers.

For Council's consideration three separate rate structure options and the corresponding annual bill impacts have been prepared and presented in Chapter 7. All three options are designed to recover the same annual net expenditures for water and wastewater services. These rate structure options include:

- Option 1 – maintaining the Town's current rate structure, with annual increases in costs shared on a pro-rata basis amongst its customers;
- Option 2 – maintaining the Town's current rate structure, whereby the non-residential customer would still pay a premium rate for monthly base charge and consumptive rates, and the monthly flat rate charges would be based on the assumed consumption of

33,390 gallons/year for residential customers and 65,400 gallons/year for non-residential customers. This rate structure option is designed to maintain the existing fee structure policies while maintaining equity within the residential and non-residential classification between metered and unmetered customers.

- Option 3 – imposes a monthly base charge by meter size and consumptive rate that is uniform for all customers (i.e. residential and non-residential). The fee structure also removes the monthly minimum bill consumption, thereby recovering the fixed cost of operation and imposing a consumptive fee for all consumption. Under this structure all customers are treated equitably, with flat rate customer assumed consumption of 33,390 gallons/year for residential customers and 65,400 gallons/year for non-residential customers.

7. FORECAST WATER AND WASTEWATER RATES

7. FORECAST WATER AND WASTEWATER RATES

7.1 Introduction

To summarize the analysis undertaken thus far, Chapter 2 reviewed capital-related issues for all customers within the water and wastewater systems and responds to the lifecycle needs assessment and forecast developed collaboratively with the Town. Chapter 4 provided a review of capital financing options to which internal sources (i.e. operating fund and reserve fund transfers) will be the predominant basis for financing future capital needs for water services, with more reliance on debt for wastewater services. Chapter 5 established the 10-year operating forecast of expenditures for water and wastewater services, incorporating the ongoing operation and maintenance of the system, as well as the capital funding assumptions. Non-rate revenues to assist in offsetting the charges for volumetric rates were also identified in Chapter 5. This chapter will provide for the calculation of the rates over the next 10-year period. These calculations will be based on the net operating expenditures provided in Chapter 5, divided by the volumes forecast provided in Section 1.6 for each of the rate structure options identified in Chapter 6.

7.2 Water and Wastewater Rate Options

The following subsections identified the water and wastewater rate structure for each option presented in Section 6.5 of this report. The annual water and wastewater bill impact and forecast is also provided for each option, including a cross-section of residential metered customer, residential unmetered customer, non-residential metered customer, and non-residential unmetered customer. The detailed calculations of the proposed water and wastewater rate calculations are contained in Appendices C and D to this report, respectively.

7.2.1 *Option 1 – Current Rate Structure Option*

Under this option, the Town's current rate structure is maintained. The annual financial plan increases are imposed on the current user profile for a uniform recovery. Under this rate structure the percentage increase on all customers would be uniform over the forecast period.

Forecast Water Rates

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	5.78	5.78	5.90	6.25	6.38	6.51	6.66	6.83	7.00	7.18	7.38
Monthly Capital Base Charge	24.47	24.47	24.98	26.46	27.01	27.58	28.19	28.90	29.64	30.42	31.24
Total Monthly Base Charge	30.25	30.25	30.87	32.71	33.39	34.09	34.85	35.73	36.64	37.61	38.62
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	1.41	1.41	1.44	1.52	1.55	1.58	1.62	1.66	1.70	1.75	1.80
Unmetered (5/8" Customer)											
Monthly Base Charge	18.83	18.83	19.21	20.36	20.78	21.22	21.69	22.23	22.81	23.40	24.03
Monthly Capital Base Charge	24.47	24.47	24.98	26.46	27.01	27.58	28.19	28.90	29.64	30.42	31.24
Total Monthly Base Charge	43.30	43.30	44.19	46.82	47.79	48.79	49.88	51.13	52.45	53.83	55.28
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	20.43	20.43	20.85	22.09	22.55	23.02	23.54	24.13	24.75	25.40	26.08
Monthly Capital Base Charge	26.55	26.55	27.10	28.71	29.30	29.92	30.59	31.35	32.16	33.01	33.89
Total Monthly Base Charge	46.98	46.98	47.95	50.80	51.85	52.94	54.12	55.48	56.91	58.40	59.97
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	9.27	9.27	9.46	10.03	10.23	10.45	10.68	10.95	11.23	11.53	11.84
Water and Capital (over 100,000 gallons)	6.82	6.82	6.96	7.38	7.53	7.69	7.86	8.06	8.27	8.48	8.71
Unmetered (5/8" Customer)											
Monthly Base Charge	23.51	23.51	23.99	25.42	25.95	26.49	27.08	27.76	28.48	29.23	30.01
Monthly Capital Base Charge	30.60	30.60	31.22	33.08	33.76	34.48	35.24	36.13	37.06	38.03	39.06
Total Monthly Base Charge	54.11	54.11	55.22	58.50	59.71	60.97	62.33	63.89	65.53	67.26	69.07

Forecast Wastewater Rates

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	7.66	7.66	7.87	8.38	8.95	9.56	10.14	10.81	11.54	12.30	13.02
Monthly Capital Base Charge	22.14	22.14	22.74	24.21	25.86	27.63	29.30	31.25	33.35	35.55	37.63
Total Monthly Base Charge	29.80	29.80	30.61	32.58	34.81	37.20	39.44	42.06	44.90	47.86	50.66
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	6.91	6.91	7.10	7.55	8.07	8.62	9.14	9.75	10.41	11.09	11.74
Unmetered (5/8" Customer)											
Monthly Base Charge	27.84	27.84	28.59	30.43	32.51	34.74	36.84	39.29	41.94	44.70	47.32
Monthly Capital Base Charge	22.14	22.14	22.74	24.21	25.86	27.63	29.30	31.25	33.35	35.55	37.63
Total Monthly Base Charge	49.97	49.97	51.34	54.64	58.37	62.38	66.14	70.54	75.29	80.26	84.95
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	30.20	30.20	31.03	33.02	35.28	37.70	39.97	42.63	45.50	48.51	51.34
Monthly Capital Base Charge	24.02	24.02	24.68	26.26	28.05	29.98	31.79	33.90	36.19	38.58	40.83
Total Monthly Base Charge	54.22	54.22	55.70	59.29	63.33	67.68	71.76	76.54	81.69	87.08	92.17
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	10.71	10.71	11.00	11.71	12.51	13.37	14.18	15.12	16.14	17.20	18.21
Water and Capital (over 100,000 gallons)	7.87	7.87	8.08	8.60	9.19	9.82	10.41	11.11	11.86	12.64	13.38
Unmetered (5/8" Customer)											
Monthly Base Charge	34.76	34.76	35.71	38.01	40.60	43.39	46.01	49.07	52.38	55.83	59.09
Monthly Capital Base Charge	27.67	27.67	28.42	30.25	32.32	34.54	36.62	39.06	41.69	44.44	47.03
Total Monthly Base Charge	62.43	62.43	64.14	68.26	72.92	77.93	82.63	88.12	94.06	100.27	106.13

Forecast Annual Water and Wastewater Bill Impact

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	363	370	393	401	409	418	429	440	451	463
Consumptive Charges	23	23	23	25	25	26	26	27	28	29	29
Total Water	386	386	394	417	426	435	445	456	468	480	493
Monthly Base Charges	358	358	367	391	418	446	473	505	539	574	608
Consumptive Charges	113	113	116	123	132	141	149	159	170	181	192
Total Wastewater	470	470	483	514	549	587	622	664	709	755	799
Total Water and Wastewater	856	856	877	932	975	1,022	1,067	1,120	1,176	1,235	1,292
Total Bill Impact (%)	-	0%	2%	6%	5%	5%	4%	5%	5%	5%	5%
Residential Customer (Flat Rate)											
Monthly Base Charges	363	363	370	393	401	409	418	429	440	451	463
Consumptive Charges	157	157	160	169	173	176	180	185	190	195	200
Total Water	520	520	530	562	573	586	599	614	629	646	663
Monthly Base Charges	358	358	367	391	418	446	473	505	539	574	608
Consumptive Charges	242	242	249	265	283	302	320	342	365	389	411
Total Wastewater	600	600	616	656	700	749	794	846	903	963	1,019
Total Water and Wastewater	1,119	1,119	1,146	1,218	1,274	1,334	1,392	1,460	1,533	1,609	1,683
Total Bill Impact (%)	-	0%	2%	6%	5%	5%	4%	5%	5%	5%	5%
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	564	575	610	622	635	649	666	683	701	720
Consumptive Charges	727	727	742	786	803	819	838	859	881	904	928
Total Water	1,291	1,291	1,317	1,396	1,425	1,455	1,487	1,525	1,564	1,605	1,648
Monthly Base Charges	651	651	668	711	760	812	861	918	980	1,045	1,106
Consumptive Charges	840	840	863	918	981	1,048	1,112	1,186	1,265	1,349	1,428
Total Wastewater	1,491	1,491	1,531	1,630	1,741	1,861	1,973	2,104	2,246	2,394	2,534
Total Water and Wastewater	2,782	2,782	2,849	3,026	3,166	3,315	3,460	3,629	3,810	3,999	4,182
Total Bill Impact (%)	-	0%	2%	6%	5%	5%	4%	5%	5%	5%	5%
Non-Residential Customer (Flat Rate)											
Monthly Base Charges	564	564	575	610	622	635	649	666	683	701	720
Consumptive Charges	85	85	87	92	94	96	98	101	104	106	109
Total Water	649	649	663	702	717	732	748	767	786	807	829
Monthly Base Charges	651	651	668	711	760	812	861	918	980	1,045	1,106
Consumptive Charges	99	99	101	108	115	123	130	139	148	158	167
Total Wastewater	749	749	770	819	875	935	992	1,057	1,129	1,203	1,274
Total Water and Wastewater	1,399	1,399	1,432	1,521	1,592	1,667	1,740	1,824	1,915	2,010	2,102
Total Bill Impact (%)	-	0%	2%	6%	5%	5%	4%	5%	5%	5%	5%

7.2.2 Option 2 – Current Rate Structure Option (with assumed flat rate consumption)

Under this option, the Town's current rate structure is maintained, with a premium being applied to non-residential customers. Within the residential and non-residential categories the rates are uniform, based on assumed consumption levels for unmetered customers. This fee structure is designed to treat metered and unmetered customers similarly, at assumed consumption levels. Under this rate structure the flat rate customer rate would be adjusted downward to equate to

the treatment of metered customers. Under this rate scenario, the non-residential metered customers would be the most impacted, which may have implications for future consumption levels, as alternatives may be sought, potentially impacting overall revenue certainty.

Forecast Water Rates

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78
Monthly Capital Base Charge	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47
Total Monthly Base Charge	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	1.41	2.97	3.13	3.60	3.78	3.96	4.15	4.38	4.61	4.86	5.12
Unmetered (5/8" Customer)											
Monthly Base Charge	18.83	11.08	11.36	12.20	12.51	12.83	13.18	13.58	14.00	14.44	14.90
Monthly Capital Base Charge	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47
Total Monthly Base Charge	43.30	35.55	35.84	36.68	36.99	37.31	37.66	38.06	38.48	38.92	39.38
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43
Monthly Capital Base Charge	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55
Total Monthly Base Charge	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	9.27	19.61	20.66	23.77	24.91	26.10	27.39	28.87	30.42	32.05	33.76
Water and Capital (over 100,000 gallons)	6.82	14.43	15.20	17.49	18.33	19.20	20.15	21.24	22.38	23.58	24.84
Unmetered (5/8" Customer)											
Monthly Base Charge	23.51	23.32	23.47	23.93	24.10	24.27	24.46	24.68	24.91	25.15	25.40
Monthly Capital Base Charge	30.60	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55
Total Monthly Base Charge	54.11	49.87	50.03	50.48	50.65	50.83	51.02	51.23	51.46	51.70	51.96

Forecast Wastewater Rates

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66
Monthly Capital Base Charge	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14
Total Monthly Base Charge	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	6.91	10.88	11.57	13.23	15.11	17.14	19.04	21.25	23.65	26.16	28.52
Unmetered (5/8" Customer)											
Monthly Base Charge	27.84	27.05	28.28	31.25	34.60	38.21	41.59	45.55	49.82	54.29	58.50
Monthly Capital Base Charge	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14
Total Monthly Base Charge	49.97	49.19	50.42	53.39	56.74	60.35	63.73	67.69	71.96	76.42	80.64
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20
Monthly Capital Base Charge	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02
Total Monthly Base Charge	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	10.71	16.87	17.94	20.53	23.44	26.58	29.52	32.96	36.68	40.57	44.24
Water and Capital (over 100,000 gallons)	7.87	12.39	13.18	15.08	17.22	19.52	21.69	24.21	26.95	29.80	32.49
Unmetered (5/8" Customer)											
Monthly Base Charge	34.76	32.69	32.84	33.22	33.65	34.12	34.55	35.06	35.60	36.18	36.72
Monthly Capital Base Charge	27.67	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02
Total Monthly Base Charge	62.43	56.71	56.86	57.24	57.67	58.14	58.57	59.08	59.62	60.20	60.74

Forecast Annual Water and Wastewater Bill Impact

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	363	363	363	363	363	363	363	363	363	363
Consumptive Charges	23	49	51	59	62	65	68	71	75	79	84
Total Water	386	412	414	422	425	428	431	434	438	442	447
Monthly Base Charges	358	358	358	358	358	358	358	358	358	358	358
Consumptive Charges	113	178	189	216	247	280	311	347	386	427	466
Total Wastewater	470	535	546	574	604	637	668	704	744	784	823
Total Water and Wastewater	856	947	961	995	1,029	1,065	1,099	1,139	1,182	1,227	1,270
Total Bill Impact (%)	-	11%	1%	4%	3%	3%	3%	4%	4%	4%	3%
Residential Customer (Flat Rate)											
Monthly Base Charges	363	363	363	363	363	363	363	363	363	363	363
Consumptive Charges	157	64	67	77	81	85	89	94	99	104	109
Total Water	520	427	430	440	444	448	452	457	462	467	473
Monthly Base Charges	358	358	358	358	358	358	358	358	358	358	358
Consumptive Charges	242	233	247	283	323	367	407	455	506	559	610
Total Wastewater	600	590	605	641	681	724	765	812	864	917	968
Total Water and Wastewater	1,119	1,017	1,035	1,081	1,125	1,172	1,217	1,269	1,325	1,384	1,440
Total Bill Impact (%)	-	-9%	2%	4%	4%	4%	4%	4%	4%	4%	4%
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	564	564	564	564	564	564	564	564	564	564
Consumptive Charges	727	1,538	1,620	1,864	1,953	2,047	2,147	2,263	2,385	2,513	2,647
Total Water	1,291	2,101	2,183	2,427	2,517	2,610	2,711	2,827	2,949	3,077	3,211
Monthly Base Charges	651	651	651	651	651	651	651	651	651	651	651
Consumptive Charges	840	1,323	1,407	1,609	1,838	2,084	2,315	2,585	2,876	3,181	3,469
Total Wastewater	1,491	1,974	2,057	2,260	2,489	2,735	2,966	3,235	3,527	3,832	4,119
Total Water and Wastewater	2,782	4,075	4,241	4,687	5,006	5,345	5,677	6,063	6,476	6,908	7,331
Total Bill Impact (%)	-	46%	4%	11%	7%	7%	6%	7%	7%	7%	6%
Non-Residential Customer (Flat Rate)											
Monthly Base Charges	564	564	564	564	564	564	564	564	564	564	564
Consumptive Charges	85	35	36	42	44	46	48	51	54	57	60
Total Water	649	598	600	606	608	610	612	615	618	620	623
Monthly Base Charges	651	651	651	651	651	651	651	651	651	651	651
Consumptive Charges	99	30	32	36	41	47	52	58	65	72	78
Total Wastewater	749	680	682	687	692	698	703	709	715	722	729
Total Water and Wastewater	1,399	1,279	1,283	1,293	1,300	1,308	1,315	1,324	1,333	1,343	1,352
Total Bill Impact (%)	-	-9%	0%	1%	1%	1%	1%	1%	1%	1%	1%

7.2.3 Option 3 – Uniform Base Charge and Consumptive Rate Structure

This option alters the Town's current fee structure to impose a uniform fee structure on all residential and non-residential customers. Under this structure the same monthly base charges would be imposed on 5/8" metered customers, if these customers are residential or non-residential, and the same consumptive rate would apply if the customer is a large or small consuming user. The monthly base charges would still be graduated by meter size and the monthly minimum consumption allowance would be removed.

Under this option, the flat rate residential consumption is based on 33,390 gallons per year. Flat rate non-residential customers on 1/2"/5/8" meters and non-residential customers on 3/4" meters, water consumption is based on 61,767 gallons/year and 73,769 gallons/year respectively. The flat rates for these customers would be calculated accordingly. Under this scenario, the premium imposed on no-residential customers is removed, this increasing the rate impact on residential customers. The majority of Town customers, i.e. flat rate residential customers would be significantly impacted by this rate scenario to correct for this fee structure adjustment.

Forecast Water Rates

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MONTHLY BASE CHARGE										
Metered (5/8" Customer)										
Monthly Base Charge	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
Monthly Capital Base Charge	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18
Total Monthly Base Charge	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93
CONSTANT RATE CALCULATION										
CONSTANT RATE (\$/1,000 gallons)	5.49	5.78	6.65	6.97	7.30	7.66	8.08	8.51	8.97	9.45

Forecast Wastewater Rates

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MONTHLY BASE CHARGE										
Metered (5/8" Customer)										
Monthly Base Charge	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55
Monthly Capital Base Charge	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
Total Monthly Base Charge	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35
CONSTANT RATE CALCULATION										
CONSTANT RATE (\$/1,000 gallons)	7.09	7.54	8.63	9.85	11.17	12.41	13.85	15.42	17.05	18.59

Forecast Annual Water and Wastewater Bill Impact

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	23	155	164	188	197	207	217	229	241	254	268
Total Water	386	587	595	620	629	638	648	660	672	685	699
Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	157	183	193	222	233	244	256	270	284	299	315
Total Water	520	614	624	653	664	675	687	701	715	731	747
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	727	759	800	921	965	1,011	1,061	1,118	1,178	1,241	1,308
Total Water	1,291	1,191	1,231	1,352	1,396	1,442	1,492	1,549	1,609	1,673	1,739
Non-Residential Customer (Flat Rate - 67,770 gallons)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	85	372	392	451	472	495	519	547	577	608	640
Total Water	649	803	823	882	904	926	951	979	1,008	1,039	1,071
Non-Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	113	201	214	244	279	316	351	392	437	483	527
Total Wastewater	470	661	674	704	739	777	812	853	897	943	987
Total Water and Wastewater	856	1,248	1,269	1,324	1,368	1,415	1,460	1,512	1,569	1,628	1,685
Total Bill Impact (%)	-	46%	2%	4%	3%	3%	3%	4%	4%	4%	4%
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	157	183	193	222	233	244	256	270	284	299	315
Total Water	520	614	624	653	664	675	687	701	715	731	747
Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	157	183	193	222	233	244	256	270	284	299	315
Total Water	520	614	624	653	664	675	687	701	715	731	747
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	727	759	800	921	965	1,011	1,061	1,118	1,178	1,241	1,308
Total Water	1,291	1,191	1,231	1,352	1,396	1,442	1,492	1,549	1,609	1,673	1,739
Non-Residential Customer (Flat Rate - 67,770 gallons)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	85	372	392	451	472	495	519	547	577	608	640
Total Water	649	803	823	882	904	926	951	979	1,008	1,039	1,071
Non-Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	113	201	214	244	279	316	351	392	437	483	527
Total Wastewater	470	661	674	704	739	777	812	853	897	943	987
Total Water and Wastewater	1,119	1,311	1,336	1,401	1,453	1,508	1,562	1,624	1,690	1,760	1,828
Total Bill Impact (%)	-	17%	2%	5%	4%	4%	4%	4%	4%	4%	4%
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	23	155	164	188	197	207	217	229	241	254	268
Total Water	386	587	595	620	629	638	648	660	672	685	699
Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	157	183	193	222	233	244	256	270	284	299	315
Total Water	520	614	624	653	664	675	687	701	715	731	747
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	727	759	800	921	965	1,011	1,061	1,118	1,178	1,241	1,308
Total Water	1,291	1,191	1,231	1,352	1,396	1,442	1,492	1,549	1,609	1,673	1,739
Non-Residential Customer (Flat Rate - 67,770 gallons)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	85	372	392	451	472	495	519	547	577	608	640
Total Water	649	803	823	882	904	926	951	979	1,008	1,039	1,071
Non-Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	113	201	214	244	279	316	351	392	437	483	527
Total Wastewater	470	661	674	704	739	777	812	853	897	943	987
Total Water and Wastewater	2,782	2,632	2,735	3,006	3,220	3,448	3,669	3,927	4,203	4,493	4,772
Total Bill Impact (%)	-	-5%	4%	10%	7%	7%	6%	7%	7%	7%	6%
Residential Customer (28,320 gallons annually)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	23	155	164	188	197	207	217	229	241	254	268
Total Water	386	587	595	620	629	638	648	660	672	685	699
Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	157	183	193	222	233	244	256	270	284	299	315
Total Water	520	614	624	653	664	675	687	701	715	731	747
Non-Residential Customer (138,410 gallons annually)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	727	759	800	921	965	1,011	1,061	1,118	1,178	1,241	1,308
Total Water	1,291	1,191	1,231	1,352	1,396	1,442	1,492	1,549	1,609	1,673	1,739
Non-Residential Customer (Flat Rate - 67,770 gallons)											
Monthly Base Charges	564	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	85	372	392	451	472	495	519	547	577	608	640
Total Water	649	803	823	882	904	926	951	979	1,008	1,039	1,071
Non-Residential Customer (Flat Rate - 33,390 gallons)											
Monthly Base Charges	363	431	431	431	431	431	431	431	431	431	431
Consumptive Charges	113	201	214	244	279	316	351	392	437	483	527
Total Wastewater	470	661	674	704	739	777	812	853	897	943	987
Total Water and Wastewater	1,399	1,744	1,794	1,927	2,031	2,143	2,252	2,378	2,513	2,655	2,792
Total Bill Impact (%)	-	25%	3%	7%	5%	6%	5%	6%	6%	6%	5%

APPENDIX A
WATER SYSTEM INVENTORY DATA

**Table A-1
Town of Parry Sound
Water Facilities, Vehicles and Equipment**

Item	Year Installed	Estimated Life	Replacement Year	Replacement Cost	Years until Replacement	Annual Lifecycle Contribution	Amount to be included in 10 year Forecast
<u>Water Filtration Plant</u>							
Structure	2001	60	2061	4,520,504	51	105,911	-
Intake Piping	2001	60	2061	987,266	51	23,131	-
Process Tanks	2001	60	2061	1,289,847	51	30,220	-
Yard Piping	2001	60	2061	382,464	51	8,961	-
Process Equipment	2001	40	2041	255,337	31	9,435	-
Process Equipment	2001	10	2011	172,749	1	in capital budget	172,749
Process Equipment	2001	40	2041	64,555	31	2,385	-
Process Equipment	2001	20	2021	81,145	11	7,878	-
Process Mechanical	2001	10	2011	819,025	1	in capital budget	819,025
Instruments and Controls	2001	10	2011	491,379	1	in capital budget	491,379
Process Equipment	2001	20	2021	655,112	11	63,598	-
Process Mechanical	2001	40	2041	1,310,223	31	48,412	-
Process Mechanical	2001	40	2041	763,125	31	28,197	-
Process Equipment	2001	20	2021	298,073	11	28,937	-
Process Mechanical	2001	40	2041	179,241	31	6,623	-
Process Electrical	2001	20	2021	1,023,871	11	99,397	-
Instruments and Controls	2001	20	2021	528,345	11	51,291	-
Instruments and Controls	2001	10	2011	424,119	1	in capital budget	424,119
North Sector Water Tower (Reservoir)	2006	50	2056	2,772,275	46	71,435	-
Bowes Street Water Tower (Reservoir)	1988	50	2038	2,192,124	28	88,900	-
<u>Booster Pumping Station (N. Church/Isabella)</u>							
Structure	2007	60	2067	366,831	57	7,748	-
Process Piping and Mechanical	2007	40	2047	74,523	37	2,343	-
HVAC	2007	10	2017	3,277	7	in capital budget	3,277
Electrical	2007	10	2017	22,886	7	in capital budget	22,886
Pumps	2007	10	2017	22,255	7	in capital budget	22,255
<u>Vehicles</u>							
2004 CHEV SILVERADO	2004	5	2011	53,358	1	in capital budget	53,358
Artic Snow Plow Pkg Installed	2004	5	2011	7,404	1	in capital budget	7,404
2009 FORD F250	2008	5	2013	27,473	3	in capital budget	27,473
added Stahl Challenger Body	2008	5	2013	8,175	3	in capital budget	8,175
<u>Equipment</u>							
Computers - Printer - Scada	2009	5	2014	5,239	4	in capital budget	5,239
Software - scada computers	2009	3	2012	546	2	in capital budget	546
Total				19,802,744		684,800	2,057,883

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - ARM10L(1)-10L(2)	Armstrong Street	69	6"	CIP	1901	80	2011	822	56,691	1	in capital budget	56,691
IW - AVE10J-10L	Avenue Road	186	4"	CIP	1901	80	2011	822	152,820	1	in capital budget	152,820
IW - BRY11N(1)-11N(2)	Bryce Street	51	4"	CIP	1910	80	2011	822	41,902	1	in capital budget	41,902
IW - BUR10N-11N	Burd Street	151	4"	CIP	1910	80	2011	822	124,063	1	in capital budget	124,063
IW - CAS10N-11N(1)	Cascade Street	60	8"	CIP	1920	80	2011	822	49,297	1	in capital budget	49,297
IW - CAS12N-13N	Cascade Street	330	4"	CIP	1922	80	2011	822	271,132	1	in capital budget	271,132
IW - ETH9L-10L	Ethel Street	119	6"	CIP	1912	80	2011	822	97,772	1	in capital budget	97,772
IW - FOR16F-16G	Forest Street	200	6"	CIP	1918	80	2011	822	164,322	1	in capital budget	164,322
IW - FOR16G-16H	Forest Street	360	6"	CIP	1918	80	2011	822	295,780	1	in capital budget	295,780
IW - FOR16H-17I	Forest Street	210	6"	CIP	1918	80	2011	822	172,539	1	in capital budget	172,539
IW - GLE9L-9K	Glen Avenue	112	1.5"	Galv. Steel	1914	80	2011	822	92,021	1	in capital budget	92,021
IW - GRN13I-13H	Great North Road	115	8"	CIP	1920	80	2011	822	94,485	1	in capital budget	94,485
IW - GRN13H-14F	Great North Road	700	6"	CIP	1920	80	2011	822	575,129	1	in capital budget	575,129
IW - MAG10L(1)-10L(2)	Margaret Street	86	6"	CIP	1920	80	2011	822	70,659	1	in capital budget	70,659
IW - RED15K-15J	Redwood Drive	154	4"	CIP	1928	80	2011	822	126,528	1	in capital budget	126,528
IW - VIC9L(1)-9L(2)	Victoria Ave	60	8"	CIP	1901	80	2011	822	49,297	1	in capital budget	49,297
IW - VIC9L(2)-9M	Victoria Ave	115	8"	CIP	1901	80	2011	822	94,485	1	in capital budget	94,485
IW - VIC9M-9N(1)	Victoria Ave	200	8"	CIP	1901	80	2011	822	164,322	1	in capital budget	164,322
IW - WAU9K-10J(1)	Waubeeek St	140	8"	CIP	1900	80	2011	822	115,026	1	in capital budget	115,026
IW - WAU10J(1)-10J(2)	Waubeeek St	40	8"	CIP	1900	80	2011	822	32,864	1	in capital budget	32,864
IW - WAU10J(2)-10J(3)	Waubeeek St	140	8"	CIP	1900	80	2011	822	115,026	1	in capital budget	115,026
IW - WAU10J(3)-10J(4)	Waubeeek St	45	8"	CIP	1900	80	2011	822	36,973	1	in capital budget	36,973
IW - WIL12L-14N	William Street	583	4"	CIP	1918	80	2011	822	479,000	1	in capital budget	479,000
IW - ADD15N-16O(1)	Addie Street	140	6"	CIP	1932	80	2012	822	115,026	2	in capital budget	115,026
IW - GIN15O-16O	Ginnie Street	65	6"	CIP	1932	80	2012	822	53,405	2	in capital budget	53,405
IW - WIO10N(1)-10N(2)	Willow Street	40	6"	CIP	1932	80	2012	822	32,864	2	in capital budget	32,864
IW - WIO10N(2)-10N(3)	Willow Street	55	6"	CIP	1932	80	2012	822	45,189	2	in capital budget	45,189
IW - FOS12O(2)-12P	Foster Avenue	83	4"	CIP	1935	80	2015	822	68,194	5	in capital budget	68,194
IW - JAM12J1-JAM12J2	James Street	180	6"	CIP	1940	80	2020	822	147,890	10	in capital budget	147,890
IW - JAM12J1-JAM12J2	James Street	41	8"	PVC	1940	80	2020	822	33,686	10	in capital budget	33,686
IW - ELI16Q(1)-16Q(2)	Elizabeth Court	56	4"	CIP	1942	80	2022	822	46,010	12	4,112	-
IW - HAW16R-16S	Hawthorne Crescent	74	4"	CIP	1942	80	2022	822	60,799	12	5,433	-
IW - HIG16Q-17R	Highland Crescent	186	4"	CIP	1942	80	2022	822	152,820	12	13,656	-
IW - RIE16R-17R	Riverdale Road	235	4"	CIP	1942	80	2022	822	193,079	12	17,254	-
IW - SUM16Q(1)-16Q(2)	Summit Avenue	75	6"	AC	1942	80	2022	822	61,621	12	5,507	-
IW - SUM16Q(2)-15R	Summit Avenue	82	4"	CIP	1942	80	2022	822	67,372	12	6,021	-
IW - WIL15O(2)-16O	William Street	45	4"	CIP	1942	80	2022	822	36,973	12	3,304	-
IW - WIL16P-17Q	William Street	350	4"	CIP	1942	80	2022	822	287,564	12	25,698	-
IW - SOM14N(1)-14N(2)	South Mann Avenue	43	3/4"	CU	1948	80	2028	822	35,329	18	2,155	-
IW - WIL18S-17T	William Street	40	1 1/2"/2"	CU/PVC	1950	80	2030	822	32,864	20	1,817	-
IW - ISA11O(1)-11O(2)	Isabella Street	110	10"	AC	1954	80	2034	822	90,377	24	4,223	-
IW - ISA11O(2)-12P	Isabella Street	130	10"	AC	1954	80	2034	822	106,810	24	4,990	-
IW - ISA12P-13P	Isabella Street	225	10"	AC	1954	80	2034	822	184,863	24	8,637	-
IW - ISA13P-14P(1)	Isabella Street	200	10"	AC	1954	80	2034	822	164,322	24	7,677	-
IW - ISA14P(1)-14P(2)	Isabella Street	50	10"	AC	1954	80	2034	822	41,081	24	1,919	-
IW - ISA14P(2)-15Q	Isabella Street	245	8"	AC	1954	80	2034	822	201,295	24	9,405	-
IW - ISA15Q-16Q(1)	Isabella Street	105	8"	AC	1954	80	2034	822	86,269	24	4,031	-
IW - CED16K-17K	Cedar Street	109	6"	CIP	1955	80	2035	822	89,556	25	4,030	-

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - LOU15J(2)-16K	Louisa Street	215	6"	CIP	1955	80	2035	822	176,647	25	7,949	-
IW - QUE17K(1)-17K(2)	Queen Street	196	6"	CIP	1955	80	2035	822	161,036	25	7,246	-
IW - SPR16L-17K(1)	Spruce Street	135	6"	CIP	1955	80	2035	822	110,918	25	4,991	-
IW - SPR17K(1)-17K(2)	Spruce Street	80	6"	CIP	1955	80	2035	822	65,729	25	2,958	-
IW - BEA8M(1)-8M(2)	Beaconview Drive	70	4"	DIP	1956	80	2036	822	57,513	26	2,496	-
IW - BET13P-13Q	Beatty Street	175	6"	CIP	1956	80	2036	822	143,782	26	6,241	-
IW - BET13Q-13S	Beatty Street	291	6"	CIP	1956	80	2036	822	239,089	26	10,378	-
IW - HAN13Q(1)-13Q(2)	Hanna Road	135	6"	CIP	1956	80	2036	822	110,918	26	4,814	-
IW - HAA13Q(1)-13Q(2)	Hanna Road Extension	20	5/8"	CU	1956	80	2036	822	16,432	26	713	-
IW - WAU9L(1)-9L(2)	Waubeeek St	35	12"	CIP	1957	80	2037	822	28,756	27	1,206	-
IW - WAU9L(2)-9K	Waubeeek St	190	12", 8"	CIP	1957	80	2037	822	156,106	27	6,545	-
IW - DUF14K(1)-14K(2)	Dufferin Street	10	1 1/4"	CU	1959	80	2039	822	8,216	29	323	-
IW - WAK14J-14K	Wakefield St	180	1 1/4"	CU	1959	80	2039	822	147,890	29	5,808	-
IW - CAS15N-15M	Cascade Street	120	12"	DIP	1960	80	2040	822	98,593	30	3,754	-
IW - CHS10L(1)-10L(2)	Chestnut Drive	10	3/4"	CU	1960	80	2040	822	8,216	30	313	-
IW - GIN16O-16N	Ginnie Street	75	2"	PVC	1960	80	2040	822	61,621	30	2,346	-
IW - WAB9J(1)-9J(2)	Waubuno Cres	100	2"	CU	1961	80	2041	822	82,161	31	3,036	-
IW - WAN9I-9J(1)	Waubuno Road	95	4"	AC	1961	80	2041	822	78,053	31	2,884	-
IW - WAN9J(1)-9J(2)	Waubuno Road	45	2"	CU	1961	80	2041	822	36,973	31	1,366	-
IW - WAN9J(2)-10J	Waubuno Road	165	2"	CU	1961	80	2041	822	135,566	31	5,009	-
IW - CHA13E-14E(1)	Champaigne Street	75	1"	CU	1962	80	2042	822	61,621	32	2,212	-
IW - ALM15R(1)-15R(2)	Almonte Street	80	6"	AC	1963	80	2043	822	65,729	33	2,294	-
IW - ALM15R(2)-15S	Almonte Street	57	6"	AC	1963	80	2043	822	46,832	33	1,634	-
IW - CAS14N(1)-14N(2)	Cascade Street	60	1"	CU	1963	80	2043	822	49,297	33	1,720	-
IW - CAS14N(2)-15N	Cascade Street	134	12"	DIP	1963	80	2043	822	110,096	33	3,842	-
IW - JOH11P-12P	John Street	94	6"	AC	1963	80	2043	822	77,232	33	2,695	-
IW - JOS10P-11O	Joseph Street	210	8"	PVC	1963	80	2043	822	172,539	33	6,022	-
IW - LAI15R(1)-15R(2)	Laird Drive	85	6"	AC	1963	80	2043	822	69,837	33	2,437	-
IW - LAI15R(2)-15R(3)	Laird Drive	80	6"	AC	1963	80	2043	822	65,729	33	2,294	-
IW - NOC11P-10Q	North Church Street	294	6"	AC	1963	80	2043	822	241,554	33	8,430	-
IW - TUD14S-15R	Tudhope Street	125	8"	AC	1963	80	2043	822	102,702	33	3,584	-
IW - TUD15R-15Q(1)	Tudhope Street	220	8"	AC	1963	80	2043	822	180,755	33	6,308	-
IW - TUD15Q(1)-15Q(2)	Tudhope Street	145	8"	AC	1963	80	2043	822	119,134	33	4,158	-
IW - HIL14P-15O	Hillcrest Avenue	326	12"	DIP	1964	80	2044	822	267,846	34	9,097	-
IW - RIV13J-14K	River Street	335	12"	DIP	1964	80	2044	822	275,240	34	9,348	-
IW - RIV14K-15M	River Street	470	12"	DIP	1964	80	2044	822	386,158	34	13,115	-
IW - WIL14N-15N(1)	William Street	125	12"	DIP	1964	80	2044	822	102,702	34	3,488	-
IW - WIL15N(1)-15N(2)	William Street	90	12"	DIP	1964	80	2044	822	73,945	34	2,511	-
IW - WIL15N(2)-15O(1)	William Street	25	12"	DIP	1964	80	2044	822	20,540	34	698	-
IW - WIL15O(1)-15O(2)	William Street	80	12"	DIP	1964	80	2044	822	65,729	34	2,232	-
IW - BIR14E-14F	Birch Street	66	1"	CU	1967	80	2047	822	54,226	37	1,705	-
IW - EMI13A-14C	Emily Street	210	8"	AC	1967	80	2047	822	172,539	37	5,425	-
IW - EMI14C-14D	Emily Street	100	8"	AC	1967	80	2047	822	82,161	37	2,583	-
IW - EMI14D-14E(1)	Emily Street	155	8"	AC	1967	80	2047	822	127,350	37	4,004	-
IW - EMI14E(1)-14E(2)	Emily Street	125	8"	AC	1967	80	2047	822	102,702	37	3,229	-
IW - EMI14E(2)-14F	Emily Street	75	8"	AC	1967	80	2047	822	61,621	37	1,938	-
IW - FOS12O(1)-12O(2)	Foster Avenue	122	6"	AC	1967	80	2047	822	100,237	37	3,152	-
IW - OLI14C(1)-14C(2)	Olive Street	90	1"	Copper	1968	80	2048	822	73,945	38	2,269	-

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - WAU7L-8L(1)	Waubeeek St	15	16"	DIP	1968	80	2048	822	12,324	38	378	-
IW - WAU8L(1)-8L(2)	Waubeeek St	40	16"	DIP	1968	80	2048	822	32,864	38	1,009	-
IW - WAU8L(2)-8L(3)	Waubeeek St	100	16"	DIP	1968	80	2048	822	82,161	38	2,521	-
IW - WAU8L(3)-9L(1)	Waubeeek St	100	12"	CIP	1968	80	2048	822	82,161	38	2,521	-
IW - HIG16R-HIG17R	Highland Crescent	550	3"	pvc	1970	80	2050	822	451,887	40	13,233	-
IW - SUN10H(1)-10H(2)	Sunset Avenue	80	2"	CU	1970	80	2050	822	65,729	40	1,925	-
IW - ADD16O(1)-16O(2)	Addie Street	210	6"	DIP	1972	80	2052	822	172,539	42	4,832	-
IW - ADE10M(1)-10M(2)	Adelaide Street	119	1"	CU	1972	80	2052	822	97,772	42	2,738	-
IW - ANN16P-16O	Annie Street	58	6"	DIP	1972	80	2052	822	47,654	42	1,335	-
IW - MAI8N(1)-8N(2)	Marion Avenue	93	8"	DIP	1972	80	2052	822	76,410	42	2,140	-
IW - STA10M(1)-10M(2)	Station Street	55	2"	PVC	1972	80	2052	822	45,189	42	1,266	-
IW - WAT15M-15N	Water St	80	1/2"	CU	1972	80	2052	822	65,729	42	1,841	-
IW - ARM10L(3)-11L(1)	Armstrong Street	40	3/4"	CU	1973	80	2053	822	32,864	43	901	-
IW - ARM11L(1)-11L(2)	Armstrong Street	38	3/4"	CU	1973	80	2053	822	31,221	43	856	-
IW - CLA15F(1)-15F(2)	Claude Street	54	1"	CU	1973	80	2053	822	44,367	43	1,216	-
IW - GER8L-8M	Georgina Street	110	8"	PVC	1973	80	2053	822	90,377	43	2,477	-
IW - GER8M-8N	Georgina Street	160	8"	PVC	1973	80	2053	822	131,458	43	3,603	-
IW - KAH16O-17O	Katherine Court	102	3"	PVC	1973	80	2053	822	83,804	43	2,297	-
IW - VIC9N(1)-9N(2)	Victoria Ave	50	1"	PVC	1973	80	2053	822	41,081	43	1,126	-
IW - BEV15I-16J	Beaver Street	159	6"	AC	1974	80	2054	822	130,636	44	3,506	-
IW - MAL8S-9S	Mall Drive	250	8"	PVC	1974	80	2054	822	205,403	44	5,513	-
IW - MAP15S-15R	Mapleview Drive	100	6"	AC	1975	80	2055	822	82,161	45	2,160	-
IW - MAP15S-15R	Mapleview Drive	160	8"	AC	1975	80	2055	822	131,458	45	3,456	-
IW - MEA15I-16H	Meadow Street	148	6"	DIP	1975	80	2055	822	121,599	45	3,197	-
IW - WOO8L-8M	Wood Street	305	12"	DIP	1975	80	2055	822	250,592	45	6,589	-
IW - MAK14S-14Q	Macclairm Street	275	8"	PVC	1976	80	2056	822	225,943	46	5,822	-
IW - ISA8N(1)-8N(2)	Isabella Street	97	6"	PVC	1977	80	2057	822	79,696	47	2,013	-
IW - KRI8N-8O	Kristen Heights	147	6"	PVC	1977	80	2057	822	120,777	47	3,051	-
IW - ASH10H-11I(1)	Ashwood Drive	130	8"	DIP	1978	80	2058	822	106,810	48	2,647	-
IW - ASH11I(1)-11I(2)	Ashwood Drive	110	8"	DIP	1978	80	2058	822	90,377	48	2,239	-
IW - BOO17F(1)-17F(2)	Booth Street	101	6"	PVC	1978	80	2058	822	82,983	48	2,056	-
IW - MAC14E-17E	Macfarlane Street	450	6"	PVC	1978	80	2058	822	369,726	48	9,161	-
IW - MEL17E-17F(1)	Melissa Street	180	6"	PVC	1978	80	2058	822	147,890	48	3,664	-
IW - MEL17F(1)-17F(2)	Melissa Street	60	6"	PVC	1978	80	2058	822	49,297	48	1,221	-
IW - RAI17F-17G	Railway Avenue	150	6"	PVC	1978	80	2058	822	123,242	48	3,054	-
IW - CHU10J-11K	Church Lane	64	1"	CU	1979	80	2059	822	52,583	49	1,278	-
IW - MIL12K-12L	Miller Street	290	8"	DIP, PVC	1979	80	2059	822	238,268	49	5,793	-
IW - MAR11K(1)-11K(2)	Mary Street	110	8"	DIP	1980	80	2060	822	90,377	50	2,157	-
IW - MAR11K(2)-12K(1)	Mary Street	120	8"	DIP	1980	80	2060	822	98,593	50	2,353	-
IW - MAR13K-MAR12K	Mary Street	80	4"	CIP	1980	80	2060	822	65,729	50	1,568	-
IW - MAR12K(2)-12K(3)	Mary Street	100	8"	DIP	1980	80	2060	822	82,161	50	1,961	-
IW - PRS14F(1)-14F(2)	Parry Sound Road	65	8"	PVC	1980	80	2060	822	53,405	50	1,274	-
IW - PRS14F(2)-15F	Parry Sound Road	165	8"	PVC	1980	80	2060	822	135,566	50	3,235	-
IW - PRS15F-16F	Parry Sound Road	235	8"	PVC	1980	80	2060	822	193,079	50	4,607	-
IW - PRS16F-17F	Parry Sound Road	130	8"	PVC	1980	80	2060	822	106,810	50	2,549	-
IW - PRS17F-17G	Parry Sound Road	180	8"	PVC	1980	80	2060	822	147,890	50	3,529	-
IW - DEN15Q(1)-15Q(2)	Dennis Drive	22	8"	DIP	1981	80	2061	822	18,075	51	423	-
IW - BOW18I(2)-21J	Bowes Street	675	10"	DIP	1982	80	2062	822	554,588	52	12,762	-

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - BOW21J-22J	Bowes Street	67	10"	DIP	1982	80	2062	822	55,048	52	1,267	-
IW - CHR11L(2)-11M(1)	Church Street	190	8"	PVC	1982	80	2062	822	156,106	52	3,592	-
IW - CHR11M(1)-11M(2)	Church Street	106	8"	PVC	1982	80	2062	822	87,091	52	2,004	-
IW - CHR11M(2)-11N	Church Street	155	8"	PVC	1982	80	2062	822	127,350	52	2,930	-
IW - CHR11N-11O	Church Street	190	8"	PVC	1982	80	2062	822	156,106	52	3,592	-
IW - MEV10J(1)-10J(2)	Melvin Street	46	3/4"	CU	1982	80	2062	822	37,794	52	870	-
IW - MLL18S-19S	Mill Lake Road	46	2"	PVC	1982	80	2062	822	37,794	52	870	-
IW - GEO13H-16G	George Street	300	8"	PVC	1983	80	2063	822	246,484	53	5,572	-
IW - PAR11I(1)-11I(2)	Park Lane	72	2"	PVC	1985	80	2065	822	59,156	55	1,292	-
IW - ALB17H-18I	Albert Street	298	8"	PVC	1986	80	2066	822	244,840	56	5,258	-
IW - LOU15J(1)-15J(2)	Louisa Street	73	6"	DIP	1986	80	2066	822	59,978	56	1,288	-
IW - VIR14O-15O	Virginia Hgths	252	6"	PVC	1986	80	2066	822	207,046	56	4,446	-
IW - WAK14J-14K	Wakefield St	46	6"	PVC	1986	80	2066	822	37,794	56	812	-
IW - WIL17Q-17R	William Street	60	8"	PVC	1986	80	2066	822	49,297	56	1,059	-
IW - WIL17R-18S	William Street	140	8"	PVC	1986	80	2066	822	115,026	56	2,470	-
IW - BOW13I-14J	Bowes Street	135	12"	DIP	1987	80	2067	331	44,748	57	945	-
IW - BOW14J-15J	Bowes Street	295	12"	DIP	1987	80	2067	822	242,376	57	5,119	-
IW - BOW15J-16J	Bowes Street	100	12"	DIP	1987	80	2067	822	82,161	57	1,735	-
IW - BOW16J-16I	Bowes Street	100	12"	DIP	1987	80	2067	822	82,161	57	1,735	-
IW - BOW16I-17I	Bowes Street	60	12"	DIP	1987	80	2067	822	49,297	57	1,041	-
IW - BOW17I-18I(1)	Bowes Street	240	12"	DIP	1987	80	2067	822	197,187	57	4,165	-
IW - BOW18I(1)-18I(2)	Bowes Street	50	12"	DIP	1987	80	2067	822	41,081	57	868	-
IW - CHE15N(1)-15N(2)	Cherry Street	70	6"	PVC	1987	80	2067	822	57,513	57	1,215	-
IW - PRO8K(1)-8K(2)	Prospect Street	60	8"	PVC	1987	80	2067	822	49,297	57	1,041	-
IW - PRO8K(2)-9L	Prospect Street	215	8"	PVC	1987	80	2067	822	176,647	57	3,731	-
IW - GEB8K-9J	Georgian Bay Avenue	82	6"	PVC	1988	80	2068	822	67,372	58	1,400	-
IW - LOU16K-16L	Louisa Street	165	8"	PVC	1988	80	2068	822	135,566	58	2,817	-
IW - MAG10L(2)-10M	Margaret Street	190	6"	PVC	1988	80	2068	822	156,106	58	3,244	-
IW - MAI9N-10M	Marion Avenue	120	6"	PVC	1988	80	2068	822	98,593	58	2,049	-
IW - MIL12I-12K	Miller Street	220	8"	PVC	1988	80	2068	822	180,755	58	3,756	-
IW - QUE16J-17K(1)	Queen Street	152	8"	PVC	1988	80	2068	822	124,885	58	2,595	-
IW - ROS12L(1)-12L(2)	Rosetta Street	97	8"	PVC	1988	80	2068	822	79,696	58	1,656	-
IW - ADD16O(2)-17P	Addie Street	51	6"	PVC	1989	80	2069	822	41,902	59	857	-
IW - BAY10G-11G	Bay Street	183	6"	PVC	1989	80	2069	822	150,355	59	3,074	-
IW - BAY10G-11G	Bay Street	162	8"	PVC	1989	80	2069	822	133,101	59	2,721	-
IW - BAY11G-12H	Bay Street	270	8"	PVC	1989	80	2069	822	221,835	59	4,535	-
IW - BAY10F-BAY10G	Bay Street	200	8"	PVC	1989	80	2069	822	164,322	59	3,360	-
IW - BAY9F-BAY10F	Bay Street	20	4"	PVC	1989	80	2069	822	16,432	59	336	-
IW - BAY9F-BAY10F	Bay Street	100	8"	PVC	1989	80	2069	822	82,161	59	1,680	-
IW - JAM12I-12J	James Street	220	6"	PVC	1989	80	2069	822	180,755	59	3,696	-
IW - SEG12I(2)-13I	Seguin Street	150	12"	SS	1989	80	2069	822	123,242	59	2,520	-
IW - JON12I(1)-12I(2)	Johnson Street	30	8"	PVC	1990	80	2070	822	24,648	60	496	-
IW - SEG12I(1)-12I(2)	Seguin Street	100	12"	PVC	1990	80	2070	822	82,161	60	1,653	-
IW - BRE17K-18K	Brenda Avenue	610	8"	PVC	1991	80	2071	822	501,184	61	9,928	-
IW - CAR19J-19K	Carol Court	72	8"	PVC	1991	80	2071	822	59,156	61	1,172	-
IW - EDW17K(1)-17K(2)	Edward Street	75	8"	PVC	1991	80	2071	822	61,621	61	1,221	-
IW - EDW17K(2)-18K	Edward Street	110	8"	PVC	1991	80	2071	822	90,377	61	1,790	-
IW - EDW18K-18J(1)	Edward Street	125	8"	PVC	1991	80	2071	822	102,702	61	2,034	-

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - EDW18J(1)-18J(2)	Edward Street	115	8"	PVC	1991	80	2071	822	94,485	61	1,872	-
IW - EDW18J(2)-18I	Edward Street	125	8"	PVC	1991	80	2071	822	102,702	61	2,034	-
IW - FAR15N(1)-15N(2)	Farrer Street	120	8"	PVC	1991	80	2071	822	98,593	61	1,953	-
IW - GRE18J(1)-19J	Greenwood Crescent	370	8"	PVC	1991	80	2071	822	303,997	61	6,022	-
IW - GRE19J-18J(2)	Greenwood Crescent	190	8"	PVC	1991	80	2071	822	156,106	61	3,092	-
IW - JAM12H-12I	James Street	232	8"	PVC	1991	80	2071	822	190,614	61	3,776	-
IW - NAN17K(1)-17K(2)	Nancy Crescent	74	8"	PVC	1991	80	2071	822	60,799	61	1,204	-
IW - RAI17E(1)-17E(2)	Railway Avenue	40	6"	PVC	1992	80	2072	822	32,864	62	641	-
IW - RAI17E(2)-17F	Railway Avenue	180	6"	PVC	1992	80	2072	822	147,890	62	2,885	-
IW - BEL10I-10H	Belvedere Heights	295	8"	PVC	1993	80	2073	822	242,376	63	4,656	-
IW - BEL10H-11H(1)	Belvedere Heights	50	8"	PVC	1993	80	2073	822	41,081	63	789	-
IW - BEL11H(1)-11H(2)	Belvedere Heights	155	8"	PVC	1993	80	2073	822	127,350	63	2,446	-
IW - GIB11G-11H(1)	Gibson Street	80	8"	PVC	1993	80	2073	822	65,729	63	1,263	-
IW - GIB11H(1)-11H(2)	Gibson Street	145	8"	PVC	1993	80	2073	822	119,134	63	2,288	-
IW - GIB11H(2)-11I(1)	Gibson Street	95	8"	PVC	1993	80	2073	822	78,053	63	1,499	-
IW - GIB11I(1)-11I(2)	Gibson Street	170	8"	PVC	1993	80	2073	822	139,674	63	2,683	-
IW - GIB11O-11P	Gibson Street	120	8"	PVC	1993	80	2073	822	98,593	63	1,894	-
IW - OAK11H-10H(1)	Oak Avenue	90	8"	PVC	1993	80	2073	822	73,945	63	1,420	-
IW - OAK10H(1)-10H(2)	Oak Avenue	30	8"	PVC	1993	80	2073	822	24,648	63	473	-
IW - OAK10H(2)-11G	Oak Avenue	100	8"	PVC	1993	80	2073	822	82,161	63	1,578	-
IW - CHA14E(1)-14E(2)	Champaigne Street	110	2"	HDPE	1994	80	2074	822	90,377	64	1,710	-
IW - WIL16O-16P	William Street	200	6"	PVC	1994	80	2074	822	164,322	64	3,109	-
IW - BEL10J-10I	Belvedere Heights	100	8"	PVC	1995	80	2075	822	82,161	65	1,532	-
IW - SEG11I(1)-11I(2)	Seguin Street	100	12"	PVC	1995	80	2075	822	82,161	65	1,532	-
IW - SEG11I(2)-12I(1)	Seguin Street	100	12"	PVC	1995	80	2075	822	82,161	65	1,532	-
IW - AVE10J-10L	Avenue Road	300	6"	PVC	1996	80	2076	822	246,484	66	4,527	-
IW - HIH12N(1)-12N(2)	Highview Street	73	8"	PVC	1996	80	2076	822	59,978	66	1,102	-
IW - SUN10H-10G	Sunset Avenue	150	2"	PVC	1996	80	2076	822	123,242	66	2,264	-
IW - WAU10J(4)-11J	Waubeeek St	70	12"	PVC	1996	80	2076	822	57,513	66	1,056	-
IW - BEE11M(1)-11M(2)	Beechwood Drive	28	8"	PVC	1997	80	2077	822	23,005	67	416	-
IW - CAS11N(1)-11N(2)	Cascade Street	55	8"	PVC	1997	80	2077	822	45,189	67	818	-
IW - CHR11I-11J	Church Street	220	8"	PVC	1997	80	2077	822	180,755	67	3,272	-
IW - CHR11J-11K	Church Street	80	8"	PVC	1997	80	2077	822	65,729	67	1,190	-
IW - CHR11K-11L(1)	Church Street	190	8"	PVC	1997	80	2077	822	156,106	67	2,826	-
IW - CHR11L(1)-11L(2)	Church Street	30	8"	PVC	1997	80	2077	822	24,648	67	446	-
IW - GIB11I(2)-11J	Gibson Street	240	8"	PVC	1997	80	2077	822	197,187	67	3,570	-
IW - GRN13H-14F	Great North Road	30	8"	PVC	1997	80	2077	822	24,648	67	446	-
IW - ISA16Q(1)-16Q(2)	Isabella Street	150	8"	PVC	1997	80	2077	822	123,242	67	2,231	-
IW - ISA16Q(2)-17Q	Isabella Street	130	8"	PVC	1997	80	2077	822	106,810	67	1,934	-
IW - PAS7Y-8U	Parry Sound Drive	750	12"	PVC	1997	80	2077	822	616,209	67	11,155	-
IW - PAS8U-9S	Parry Sound Drive	515	12"	PVC	1997	80	2077	822	423,130	67	7,660	-
IW - PAS9S-7W	Parry Sound Drive	300	12"	PVC	1997	80	2077	822	246,484	67	4,462	-
IW - PAS7W-7X	Parry Sound Drive	850	12"	PVC	1997	80	2077	822	698,370	67	12,642	-
IW - ROS11L(1)-11L(2)	Rosetta Street	87	8"	PVC	1997	80	2077	822	71,480	67	1,294	-
IW - STA10M(2)-11M	Station Street	190	8"	PVC	1997	80	2077	822	156,106	67	2,826	-
IW - CAS9N-10N	Cascade Street	70	8"	CIP	1998	80	2078	822	57,513	68	1,026	-
IW - DUF14K(1)-14K(2)	Dufferin Street	90	8"	PVC	1998	80	2078	822	73,945	68	1,319	-
IW - WAU7L-8L(1)	Waubeeek St	15	16"	PVC	2000	80	2080	822	12,324	70	214	-

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Town of Parry Sound
Watermain Inventory**

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IW - ANS12O-13O	Ansley Street	62	8"	PVC	2003	80	2083	1,223	75,807	73	1,261	-
IW - BAV10I-11I	Bayview Road	185	8"	PVC	2003	80	2083	822	151,998	73	2,529	-
IW - BUI13O(1)-13O(2)	Burritt Street	52	8"	PVC	2003	80	2083	911	47,379	73	788	-
IW - BUI13O(2)-14P	Burritt Street	218	8"	PVC	2003	80	2083	1,130	246,419	73	4,100	-
IW - JAM12J-12K	James Street	60	8"	PVC	2003	80	2083	1,158	69,482	73	1,156	-
IW - JAM12K-12L	James Street	195	8"	PVC	2003	80	2083	869	169,370	73	2,818	-
IW - MCM11K(1)-11K(2)	McMurray Street	60	8"	PVC	2003	80	2083	822	49,297	73	820	-
IW - MCM11K(2)-11K(3)	McMurray Street	100	8"	PVC	2003	80	2083	822	82,161	73	1,367	-
IW - MCM11K(3)-12K(1)	McMurray Street	40	8"	PVC	2003	80	2083	822	32,864	73	547	-
IW - MCM12K(1)-12K(2)	McMurray Street	60	8"	PVC	2003	80	2083	822	49,297	73	820	-
IW - NOM13O-14O	North Mann Avenue	130	8"	PVC	2003	80	2083	838	108,972	73	1,813	-
IW - NOT14U-15S	North Tudhope Street	250	8"	PVC	2003	80	2083	818	204,489	73	3,403	-
IW - ROS11L(2)-12L(1)	Rosetta Street	76	6"	PVC	2003	80	2083	1,449	110,143	73	1,833	-
IW - BOW22J	Bowes Street	250	12"	PVC	2004	80	2084	822	205,403	74	3,372	-
IW - KIT9O(1)-9O(2)	Kitchener Avenue	90	6"	PVC	2005	80	2085	462	41,622	75	674	-
IW - KIT9O(2)-10O	Kitchener Avenue	80	6"	PVC	2005	80	2085	446	35,650	75	577	-
IW - LAW9O(1)-9O(2)	Lawrence Street	75	6"	PVC	2005	80	2085	832	62,418	75	1,011	-
IW - MAY10P-10Q	May Street	10	1"	cu	2005	80	2085	822	8,216	75	133	-
IW - MCN9Q-10Q	Mcnaughton Street	20	1"	HDPE	2005	80	2085	822	16,432	75	266	-
IW - PIN21K-21J	Pine Drive	150	8"	PVC	2005	80	2085	118	17,694	75	287	-
IW - PIN21J-22I	Pine Drive	200	8"	PVC	2005	80	2085	177	35,378	75	573	-
IW - WIN9P(2)-9O(1)	Winnifred Avenue	95	8"	PVC	2005	80	2085	594	56,447	75	914	-
IW - WIN9O(1)-9O(2)	Winnifred Avenue	175	8"	PVC	2005	80	2085	594	103,951	75	1,684	-
IW - AVR9P(1)-9P(2)	Avery Court	135	6"	PVC	2006	80	2086	518	69,978	76	1,118	-
IW - BAC7L-8L	Baycrest Drive	200	6"	PVC	2006	80	2086	822	164,322	76	2,626	-
IW - WATTOW1	N. Sector Water Town - mains @ site	0	0	0	2006	80	2086	#DIV/0!	37,744	76	603	-
IW - WIN9P(1)-9P(2)	Winnifred Avenue	25	8"	PVC	2006	80	2086	1,024	25,595	76	409	-
IW - CAS11N(2)-11N(3)	Cascade Street	70	8"	PVC	2007	80	2087	822	57,513	77	907	-
IW - CAS11N(3)-12N	Cascade Street	140	8"	PVC	2007	80	2087	822	115,026	77	1,814	-
IW - ISA8N(2)-9N	Isabella Street	180	12"	PVC	2007	80	2087	923	166,159	77	2,621	-
IW - ISA9N-9O	Isabella Street	50	12"	PVC	2007	80	2087	923	46,155	77	728	-
IW - ISA9O-11O(1)	Isabella Street	315	12"	PVC	2007	80	2087	943	296,996	77	4,685	-
IW - JOH10P-11P	John Street	114	12"	CIP/PVC	2007	80	2087	972	110,773	77	1,747	-
IW - JOS9S(1)-9S(2)	Joseph Street	75	8"	PVC	2007	80	2087	923	69,233	77	1,092	-
IW - JOS9S(2)-10Q(1)	Joseph Street	385	8"	PVC	2007	80	2087	923	355,396	77	5,606	-
IW - JOS10Q(1)-10Q(2)	Joseph Street	85	8"	PVC	2007	80	2087	923	78,464	77	1,238	-
IW - JOS10Q(2)-10P	Joseph Street	130	8"	PVC	2007	80	2087	923	120,004	77	1,893	-
IW - LOG11M-12M	Logan's Lane	160	6"	PVC	2007	80	2087	822	131,458	77	2,074	-
IW - NOC11O-11P	North Church Street	60	8"	PVC	2007	80	2087	923	55,386	77	874	-
IW - PAS7X-7Y	Parry Sound Drive	300	12"	PVC	2007	80	2087	658	197,477	77	3,115	-
IW - PAS7X-7Y	Parry Sound Drive	100	12"	HDPE	2007	80	2087	658	65,826	77	1,038	-
IW - WOO8M-8N	Wood Street	130	12"	DIP	2007	80	2087	1,835	238,597	77	3,764	-
IW - GIB11K-11L	Gibson Street	190	8"	PVC	2008	80	2088	680	129,278	78	2,013	-
IW - GIB11L-11M	Gibson Street	220	8"	PVC	2008	80	2088	668	146,906	78	2,287	-
IW - GIB11M-11N	Gibson Street	255	8"	PVC	2008	80	2088	645	164,535	78	2,562	-
IW - GIB11N-11O	Gibson Street	220	8"	PVC	2008	80	2088	668	146,906	78	2,287	-
IW - BOW20I-INTER	Bowes Street	0	0	0	2008	80	2088	#DIV/0!	19,911	78	310	-
IW - MAC14E-17E	Macfarlane Street	200	6"	PVC	2009	80	2089	618	123,580	79	1,899	-

**Table A-2
Town of Parry Sound
Watermain Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - RIE15R-16R-1	Riverdale Road	165	8"	PVC	2009	80	2089	862	142,286	79	2,187	-
IW - RIE16R-17R-1	Riverdale Road	35	8"	PVC	2009	80	2089	862	30,182	79	464	-
IW - BOW13I-14J	Bowes Street	135	12"	DIP	2009	80	2089	331	44,748	79	688	-
IW - MAI8N(2)-9N	Marion Avenue	93	6"	CIP	2014	80	2094	822	76,410	84	1,102	-
Total		42,366							34,563,030		800,308	3,968,388

**Table A-3
Town of Parry Sound
Water Valve Box Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - ANS12O-13O	Ansley Street	2003	30	2033	980	23	48	-
IW - AVR9P(1)-9P(2)	Avery Court	2006	30	2036	5,446	26	236	-
IW - BUI13O(1)-13O(2)	Burritt Street	2003	30	2033	612	23	30	-
IW - BUI13O(2)-14P	Burritt Street	2003	30	2033	3,185	23	155	-
IW - ISA8N(2)-9N	Isabella Street	2007	30	2037	8,684	27	364	-
IW - ISA9N-9O	Isabella Street	2007	30	2037	2,412	27	101	-
IW - ISA9O-11O(1)	Isabella Street	2007	30	2037	15,198	27	637	-
IW - JAM12J-12K	James Street	2003	30	2033	6,749	23	328	-
IW - JAM12K-12L	James Street	2003	30	2033	16,450	23	799	-
IW - JOH10P-11P	John Street	2007	30	2037	5,790	27	243	-
IW - JOS9S(1)-9S(2)	Joseph Street	2007	30	2037	3,619	27	152	-
IW - JOS9S(2)-10Q(1)	Joseph Street	2007	30	2037	18,575	27	779	-
IW - JOS10Q(1)-10Q(2)	Joseph Street	2007	30	2037	4,101	27	172	-
IW - JOS10Q(2)-10P	Joseph Street	2007	30	2037	6,272	27	263	-
IW - KIT9O(1)-9O(2)	Kitchener Avenue	2005	30	2035	885	25	40	-
IW - KIT9O(2)-10O	Kitchener Avenue	2005	30	2035	758	25	34	-
IW - LAW9O(1)-9O(2)	Lawrence Street	2005	30	2035	1,327	25	60	-
IW - NOC11O-11P	North Church Street	2007	30	2037	2,895	27	121	-
IW - NOM13O-14O	North Mann Avenue	2003	30	2033	1,408	23	68	-
IW - NOT14U-15S	North Tudhope Street	2003	30	2033	13,184	23	641	-
IW - PAS7X-7Y	Parry Sound Drive	2007	30	2037	2,603	27	109	-
IW - PAS7X-7Y	Parry Sound Drive	2007	30	2037	868	27	36	-
IW - PIN21K-21J	Pine Drive	2005	30	2035	795	25	36	-
IW - PIN21J-22I	Pine Drive	2005	30	2035	1,589	25	71	-
IW - ROS11L(2)-12L(1)	Rosetta Street	2003	30	2033	5,975	23	290	-
IW - WIN9P(1)-9P(2)	Winnifred Avenue	2006	30	2036	1,361	26	59	-
IW - WIN9P(2)-9O(1)	Winnifred Avenue	2005	30	2035	1,200	25	54	-
IW - WIN9O(1)-9O(2)	Winnifred Avenue	2005	30	2035	2,211	25	99	-
IW - WOO8M-8N	Wood Street	2007	30	2037	6,272	27	263	-
IW - GIB11K-11L	Gibson Street	2008	30	2038	5,333	28	216	-
IW - GIB11L-11M	Gibson Street	2008	30	2038	6,061	28	246	-
IW - GIB11M-11N	Gibson Street	2008	30	2038	6,788	28	275	-
IW - GIB11N-11O	Gibson Street	2008	30	2038	6,061	28	246	-
IW - BOW201-INTER	Bowes Street	2008	30	2038	3,285	28	133	-
IW - MAC14E-17E	Macfarlane Street	2009	30	2039	6,902	29	271	-
IW - RIE15R-16R-1	Riverdale Road	2009	30	2039	8,677	29	341	-
IW - RIE16R-17R-1	Riverdale Road	2009	30	2039	1,840	29	72	-
IW - BOW13I-14J	Bowes Street	2009	30	2039	8,652	29	340	-
Total					195,002		8,429	-

**Table A-4
Town of Parry Sound
Water Hydrant Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - ALM15R(2)-15S	Almonte	1963	40	2011	8,347	1	in capital budget	8,347
IW - BET13P-13Q	Beatty	1956	40	2011	8,347	1	in capital budget	8,347
IW - BET13Q	Beatty	1956	40	2011	16,694	1	in capital budget	16,694
IW - BEV15I-16J	Beaver	1969	40	2011	8,347	1	in capital budget	8,347
IW - CED16K-17K	Cedar	1955	40	2011	8,347	1	in capital budget	8,347
IW - EMI14B-14C	Emily	1967	40	2011	16,694	1	in capital budget	16,694
IW - EMI14C-14D	Emily	1967	40	2011	8,347	1	in capital budget	8,347
IW - EMI14E(2)-14F	Emily	1967	40	2011	16,694	1	in capital budget	16,694
IW - GIN15O-16O	Ginnie	1932	40	2011	8,347	1	in capital budget	8,347
IW - GRN13H-14F	Great North Road	1920	40	2011	16,694	1	in capital budget	16,694
IW - GRN13I-13H	Great North Road	1920	40	2011	16,694	1	in capital budget	16,694
IW - HAA13Q(1)-13Q(2)	Hanna Rd Extension	1958	40	2011	8,347	1	in capital budget	8,347
IW - HAW16R-16S	Hawthorne Crescent	1942	40	2011	8,347	1	in capital budget	8,347
IW - HIG16Q-17R	Highland	1942	40	2011	16,694	1	in capital budget	16,694
IW - HIL14P-15O	Hillcrest	1964	40	2011	16,694	1	in capital budget	16,694
IW - LOG11M-12M	Logans' Lane	1970	40	2011	16,694	1	in capital budget	16,694
IW - MAP15S-15R	Mapleview	1963	40	2011	16,694	1	in capital budget	16,694
IW - NOC11P-10Q	North Church	1963	40	2011	8,347	1	in capital budget	8,347
IW - QUE17K(1)-17K(2)	Queen	1955	40	2011	8,347	1	in capital budget	8,347
IW - RED15K-15J	Redwood	1928	40	2011	16,694	1	in capital budget	16,694
IW - RIE16R-17R	Riverdale	1942	40	2011	16,694	1	in capital budget	16,694
IW - RIV13J-14K	River	1964	40	2011	16,694	1	in capital budget	16,694
IW - RIV14K-15M	River	1964	40	2011	41,736	1	in capital budget	41,736
IW - SPR17K(1)-17K(2)	Spruce	1955	40	2011	8,347	1	in capital budget	8,347
IW - SUM16Q(1)-16Q(2)	Summit	1942	40	2011	16,694	1	in capital budget	16,694
IW - TUD14S-15R	Tudhope	1963	40	2011	8,347	1	in capital budget	8,347
IW - TUD15Q(1)-15Q(2)	Tudhope	1963	40	2011	16,694	1	in capital budget	16,694
IW - TUD15R-15Q(1)	Tudhope	1963	40	2011	8,347	1	in capital budget	8,347
IW - WAN9J(2)-10J	Waubuno	1961	40	2011	8,347	1	in capital budget	8,347
IW - WAU7L-8L(1)	Waubeek	1968	40	2011	8,347	1	in capital budget	8,347
IW - WAU8L(3)-9L(1)	Waubeek	1968	40	2011	8,347	1	in capital budget	8,347
IW - WAU9K-10J(1)	Waubeek	1968	40	2011	8,347	1	in capital budget	8,347
IW - WAU9L(2)-9K	Waubeek	1968	40	2011	8,347	1	in capital budget	8,347
IW - WIL12L-14N	William	1964	40	2011	16,694	1	in capital budget	16,694
IW - WIL14N-15N(1)	William	1964	40	2011	16,694	1	in capital budget	16,694
IW - WIL15O(1)-15O(2)	William	1964	40	2011	8,347	1	in capital budget	8,347

**Table A-4
Town of Parry Sound
Water Hydrant Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - ANN16P-16O	Annie	1972	40	2012	8,347	2	in capital budget	8,347
IW - ARM10L(2)-10L(3)	Armstrong	1973	40	2013	8,347	3	in capital budget	8,347
IW - VIC9L(1)-9L(2)	Victoria	1973	40	2013	8,347	3	in capital budget	8,347
IW - VIC9M-9N(1)	Victoria	1973	40	2013	16,694	3	in capital budget	16,694
IW - MAL8S-9S	Mall Drive	1974	40	2014	25,041	4	in capital budget	25,041
IW - MAK14S-14Q	Macklaim	1975	40	2015	16,694	5	in capital budget	16,694
IW - WOO8L-8M	Wood Street	1975	40	2015	16,694	5	in capital budget	16,694
IW - KRI8N-8O	Kristen Heights	1977	40	2017	8,347	7	in capital budget	8,347
IW - ASH10H-11I(1)	Ashwood	1978	40	2018	8,347	8	in capital budget	8,347
IW - MAC14E-17E	MacFarlane	1978	40	2018	16,694	8	in capital budget	16,694
IW - RAI17F-17G	Railway	1978	40	2018	16,694	8	in capital budget	16,694
IW - MIL12K-12L	Miller	1979	40	2019	16,694	9	in capital budget	16,694
IW - MAR11K(1)-11K(2)	Mary	1980	40	2020	8,347	10	in capital budget	8,347
IW - MAR12J	Mary	1980	40	2020	8,347	10	in capital budget	8,347
IW - PRS14F(2)-15F	Parry Sound Road	1980	40	2020	16,694	10	in capital budget	16,694
IW - PRS15F-16F	Parry Sound Road	1980	40	2020	8,347	10	in capital budget	8,347
IW - PRS16F-17F	Parry Sound Road	1980	40	2020	16,694	10	in capital budget	16,694
IW - PRS17F-17G	Parry Sound Road	1980	40	2020	8,347	10	in capital budget	8,347
IW - GEO13H-16G	George	1983	40	2023	25,041	13	2,074	-
IW - GEO14H	George	1983	40	2023	8,347	13	691	-
IW - ALB17H-18I	Albert St.	1986	40	2026	25,041	16	1,705	-
IW - LOU15J(2)-16K(Wes)	Louisa	1986	40	2026	8,347	16	568	-
IW - VIR14O-15O	Virginia Heights	1986	40	2026	16,694	16	1,137	-
IW - WIL16P-17Q	William	1986	40	2026	8,347	16	568	-
IW - WIL17R-18S	William	1986	40	2026	16,694	16	1,137	-
IW - BOWI17-BOWI16	Bowes	1987	40	2027	25,041	17	1,611	-
IW - BOWI19-BOWI18	Bowes	1987	40	2027	50,083	17	3,223	-
IW - BOWJ14-BOWJ13	Bowes	1987	40	2027	25,041	17	1,611	-
IW - BOWJ16-BOWJ15	Bowes	1987	40	2027	16,694	17	1,074	-
IW - BOWJ20-BOWI20	Bowes	1987	40	2027	16,694	17	1,074	-
IW - BOWJ22-BOWJ21	Bowes	1987	40	2027	25,041	17	1,611	-
IW - BRE17K-18K	Brenda	1987	40	2027	50,083	17	3,223	-
IW - PRO8K(1)-8K(2)	Prospect	1987	40	2027	8,347	17	537	-
IW - PRO8K(2)-9L	Prospect	1987	40	2027	16,694	17	1,074	-
IW - GER8L-8M	Georgina	1988	40	2028	8,347	18	509	-
IW - GER8M-8N	Georgina	1988	40	2028	8,347	18	509	-

**Table A-4
Town of Parry Sound
Water Hydrant Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - LOU16K-16L(West)	Louisa	1988	40	2028	16,694	18	1,018	-
IW - LOU22J(East)	Louisa	1988	40	2028	8,347	18	509	-
IW - MAG10L(1)-10L(2)	Margaret	1988	40	2028	8,347	18	509	-
IW - MAG10L(2)-10M	Margaret	1988	40	2028	8,347	18	509	-
IW - MAI8N(1)-8N(2)	Marion	1988	40	2028	8,347	18	509	-
IW - MAI9N-10M	Marion	1988	40	2028	8,347	18	509	-
IW - MIL12I-12K	Miller	1988	40	2028	8,347	18	509	-
IW - QUE16J-17K(1)	Queen	1988	40	2028	25,041	18	1,527	-
IW - ADD15N-16O(1)	Addie St.	1989	40	2029	8,347	19	484	-
IW - OAKH10	Oak	1989	40	2029	8,347	19	484	-
IW - JON12I(1)-12I(2)	Johnson	1990	40	2030	8,347	20	462	-
IW - SEG12I(1)-12I(2)	Seguin	1990	40	2030	8,347	20	462	-
IW - BAY10G-11G	Bay	1991	40	2031	25,041	21	1,324	-
IW - BAY11G-12H	Bay	1991	40	2031	16,694	21	882	-
IW - BUR10N-11N	Burd	1991	40	2031	8,347	21	441	-
IW - CAR19J-19K	Carol	1991	40	2031	8,347	21	441	-
IW - EDW17K(2)-18K	Edward	1991	40	2031	25,041	21	1,324	-
IW - EDW18J(1)-18J(2)	Edward	1991	40	2031	8,347	21	441	-
IW - EDW18K-18J(1)	Edward	1991	40	2031	8,347	21	441	-
IW - FAR15N(1)-15N(2)	Farrer	1991	40	2031	8,347	21	441	-
IW - GRE18J(1)-19J	Greenwood	1991	40	2031	16,694	21	882	-
IW - GRE19J-18J(2)	Greenwood	1991	40	2031	16,694	21	882	-
IW - JAM12H-12I	James	1991	40	2031	16,694	21	882	-
IW - JAM12I-12J	James	1991	40	2031	16,694	21	882	-
IW - NAN17K(1)-17K(2)	Nancy	1991	40	2031	8,347	21	441	-
IW - RAI17E(1)-17E(2)	Railway	1992	40	2032	8,347	22	423	-
IW - RAI17E(2)-17F	Railway	1992	40	2032	8,347	22	423	-
IW - GIB11G-11H(1)	Gibson	1993	40	2033	8,347	23	406	-
IW - GIB11H(1)-11H(2)	Gibson	1993	40	2033	16,694	23	811	-
IW - GIB11H(2)-11I(1)	Gibson	1993	40	2033	8,347	23	406	-
IW - GIB11I(1)-11I(2)	Gibson	1993	40	2033	16,694	23	811	-
IW - GIB11I(2)-11J	Gibson	1993	40	2033	16,694	23	811	-
IW - GIB11O-11P	Gibson	1993	40	2033	8,347	23	406	-
IW - WIL16O-16P	William	1994	40	2034	8,347	24	390	-
IW - BEL10H-11H(1)	Belvedere Heights	1995	40	2035	8,347	25	376	-
IW - BEL10I-10H	Belvedere Heights	1995	40	2035	16,694	25	751	-

**Table A-4
Town of Parry Sound
Water Hydrant Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - BEL10J-10I	Belvedere Heights	1995	40	2035	16,694	25	751	-
IW - BEL11H(1)-11H(2)	Belvedere Heights	1995	40	2035	16,694	25	751	-
IW - SEG11I(1)-11I(2)	Seguin	1995	40	2035	8,347	25	376	-
IW - SEG11I(2)-12I(1)	Seguin	1995	40	2035	16,694	25	751	-
IW - AVE10J-10L	Avenue Road	1996	40	2036	16,694	26	725	-
IW - HIH12N(1)-12N(2)	Highview	1996	40	2036	8,347	26	362	-
IW - CAS10N-11N(1)	Cascade	1997	40	2037	8,347	27	350	-
IW - CAS12N-14N(1)	Cascade	1997	40	2037	25,041	27	1,050	-
IW - CAS9N-10N	Cascade	1997	40	2037	8,347	27	350	-
IW - CHR11I-CHR11J	Church	1997	40	2037	16,694	27	700	-
IW - CHR11J	Church	1997	40	2037	8,347	27	350	-
IW - CHR11J-CHR11K	Church	1997	40	2037	25,041	27	1,050	-
IW - IWCHR11K-CHR11L	Church	1997	40	2037	8,347	27	350	-
IW - CHR11L(1)-CHR11L	Church	1997	40	2037	8,347	27	350	-
IW - CHR11M(2)-CHR11N	Church	1997	40	2037	25,041	27	1,050	-
IW - CHR11N-CHR11O	Church	1997	40	2037	16,694	27	700	-
IW - ISA10O(1)(1)-11O(1)	Isabella	1997	40	2037	8,347	27	350	-
IW - ISA11O(1)-11O(2)	Isabella	1997	40	2037	8,347	27	350	-
IW - ISA11O(2)-12O	Isabella	1997	40	2037	16,694	27	700	-
IW - ISA12O-13P	Isabella	1997	40	2037	8,347	27	350	-
IW - ISA13P-14P	Isabella	1997	40	2037	16,694	27	700	-
IW - ISA14P(1)-15P	Isabella	1997	40	2037	8,347	27	350	-
IW - ISA16Q(1)-16Q(2)	Isabella	1997	40	2037	16,694	27	700	-
IW - ISA16Q(2)-17Q	Isabella	1997	40	2037	8,347	27	350	-
IW - PAS7Y-8U	Parry Sound Drive	1997	40	2037	58,430	27	2,450	-
IW - PAS8U-9S	Parry Sound Drive	1997	40	2037	33,389	27	1,400	-
IW - STA10M(2)-11M	Station	1997	40	2037	16,694	27	700	-
IW - GEB8K-9J	Georgian Bay Drive	1998	40	2038	8,347	28	339	-
IW - ANS12O-13O	Ansley St 2002/03	2003	40	2043	6,640	33	232	-
IW - BAV10I-11I	Bayview	2003	40	2043	16,694	33	583	-
IW - BUI13O(2)-14P	Burritt St 2002/03	2003	40	2043	26,559	33	927	-
IW - FOR16F-16G	Forest	2003	40	2043	8,347	33	291	-
IW - FOR16G-16H	Forest	2003	40	2043	16,694	33	583	-
IW - FOR16H-17I	Forest	2003	40	2043	8,347	33	291	-
IW - FOS12O(1)-12O(2)	Forest	2003	40	2043	8,347	33	291	-
IW - FOS12O(2)-12P	Forest	2003	40	2043	8,347	33	291	-

**Table A-4
Town of Parry Sound
Water Hydrant Inventory**

<i>Asset Id</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
IW - JAM12J-12K	James St. 2002/03	2003	40	2043	6,102	33	213	-
IW - JAM12K-12L	James St. 2002/03	2003	40	2043	18,305	33	639	-
IW - NOM13O-14O	North Mann Ave 2002/03	2003	40	2043	13,280	33	463	-
IW - NOT14U-15S	North Tudhope St. 2002/03	2003	40	2043	25,497	33	890	-
IW - ROS11L(2)-12L(1)	Rosetta Street 2002/03	2003	40	2043	6,531	33	228	-
IW - WIN9O(1)-9O(2)	Winnifred Ave. 2004/05	2005	40	2045	5,155	35	170	-
IW - WIN9P-9O(1)	Winnifred Ave. 2004/05	2005	40	2045	5,155	35	170	-
IW - AVR9P(1)-9P(2)	Avery Court 2006	2006	40	2046	6,807	36	219	-
IW - BAC7L-8L	Baycrest	2006	40	2046	25,041	36	807	-
IW - MAC17E-Hydrant W	MacFarlane	2006	40	2046	8,347	36	269	-
IW - WIN9P(1)-9P(2)	Winnifred (2006 Halls Sub)	2006	40	2046	6,807	36	219	-
IW - ISA9N-9O	Isabella St. 2006/07	2007	40	2047	12,473	37	392	-
IW - ISA9O-11O(1)	Isabella St. 2006/07	2007	40	2047	24,945	37	784	-
IW - JOH10P-11P	John	2007	40	2047	8,347	37	262	-
IW - JOS10Q(1)-10Q(2)	Joseph St. 2006/07	2007	40	2047	12,473	37	392	-
IW - JOS10Q(2)-10P	Joseph St. 2006/07	2007	40	2047	24,945	37	784	-
IW - JOS9S(1)-9S(2)	Joseph St. 2006/07	2007	40	2047	12,473	37	392	-
IW - JOS9S(2)-10Q(1)	Joseph St. 2006/07	2007	40	2047	49,890	37	1,569	-
IW - KIT9O(2)-10O	Kitchener Ave. 2004/05	2007	40	2047	4,525	37	142	-
IW - LAW9O(1)-9O(2)	Lawrence St., 2004/05	2007	40	2047	4,525	37	142	-
IW - MCMK11	McMurray Street	2007	40	2047	8,347	37	262	-
IW - NOC11O-11O(1)	North Church St. 2006/07	2007	40	2047	12,473	37	392	-
IW - PAS7Y-8U	Parry Sound Drive 2006/07	2007	40	2047	42,597	37	1,339	-
IW - WOO8M-8N	Wood Street 2006/07	2007	40	2047	12,473	37	392	-
IW - GIB11K-11L	Gibson St. 2007/08	2008	40	2048	15,091	38	463	-
IW - GIB11L-11M	Gibson St. 2007/08	2008	40	2048	15,091	38	463	-
IW - GIB11M-11N	Gibson St. 2007/08	2008	40	2048	15,091	38	463	-
IW - GIB11N-11O	Gibson St. 2007/08	2008	40	2048	15,091	38	463	-
IW - IW-RIE15R-16R-1	Riverdale (2008/09)	2009	40	2049	10,355	39	310	-
Total					2,464,741		83,092	701,159

APPENDIX B
WASTEWATER SYSTEM INVENTORY DATA

**Table B-1
Town of Parry Sound
Wastewater Facilities, Vehicles and Equipment**

<i>Item</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
Vehicles							
2008 Chev 4x4 1/2 Ton	2007	5	2012	35,790	2	in capital budget	35,790
2008 Chev 1/2 Ton w Plow	2007	5	2012	35,420	2	in capital budget	35,420
Equipment							
Grinder Pump (Gibson St. Project)	2008	10	2018	16,010	8	in capital budget	16,010
Computers - Scada system WWTP	2009	5	2014	1,620	4	in capital budget	1,620
Software - computer scada system	2009	3	2012	310	2	in capital budget	310
Wastewater Treatment Plant - Phase I							
Process Equipment	2004	30	2034	363,160	24	16,967	-
Process Electrical	2004	40	2044	87,160	34	2,960	-
Process Instrumentation	2004	20	2024	43,580	14	3,365	-
Process Piping	2004	50	2054	130,740	44	3,509	-
Building and Process Structural	2004	60	2064	552,000	54	12,264	-
Building Architectural	2004	20	2024	145,260	14	11,218	-
Building Services	2004	20	2024	130,740	14	10,096	-
Wastewater Treatment Plant - Phase II							
Process Equipment	2006	30	2036	1,715,950	26	74,482	-
Process Electrical	2006	40	2046	411,830	36	13,277	-
Process Instrumentation	2006	20	2026	205,910	16	14,024	-
Process Piping	2006	50	2056	617,740	46	15,918	-
Building and Process Structural	2006	60	2066	2,608,240	56	56,010	-
Building Architectural	2006	20	2026	686,380	16	46,746	-
Building Services	2006	20	2026	617,740	16	42,071	-
Pumping Station 1							
Process Equipment	1980	30	2011	212,640	1	in capital budget	212,640
Process Equipment	2007	30	2037	13,630	27	571	-
Process Electrical	1980	40	2020	124,040	10	in capital budget	124,040
Process Instrumentation	1980	20	2011	62,020	1	in capital budget	62,020
Process Piping	1980	50	2030	70,880	20	3,920	-
Building and Process Structural	1980	60	2040	212,640	30	8,096	-
Building Architectural	1980	20	2011	79,740	1	in capital budget	79,740
Building Services	1980	20	2011	124,040	1	in capital budget	124,040
Pumping Station 2							
Process Equipment	1980	30	2011	392,770	1	in capital budget	392,770
Process Electrical	1980	40	2020	229,110	10	in capital budget	229,110
Process Instrumentation	1980	20	2011	114,560	1	in capital budget	114,560
Process Piping	1980	50	2030	130,920	20	7,240	-
Building and Process Structural	1980	60	2040	392,770	30	14,954	-
Building Architectural	1980	20	2011	147,290	1	in capital budget	147,290

**Table B-1
Town of Parry Sound
Wastewater Facilities, Vehicles and Equipment**

<i>Item</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
<i>Building Services</i>	1980	20	2011	229,110	1	in capital budget	229,110
<i>Pumping Station 3</i>							
<i>Process Equipment</i>	1990	30	2020	51,270	10	in capital budget	51,270
<i>Process Electrical</i>	1990	40	2030	29,910	20	1,654	-
<i>Process Instrumentation</i>	1990	20	2011	14,950	1	in capital budget	14,950
<i>Process Piping</i>	1990	50	2040	17,090	30	651	-
<i>Building and Process Structural</i>	1990	60	2050	51,270	40	1,501	-
<i>Building Architectural</i>	1990	20	2011	19,230	1	in capital budget	19,230
<i>Building Services</i>	1990	20	2011	29,910	1	in capital budget	29,910
<i>Pumping Station 4</i>							
<i>Process Equipment</i>	1965	30	2011	297,350	1	in capital budget	297,350
<i>Process Equipment</i>	2004	30	2034	7,660	24	358	-
<i>Process Equipment</i>	2003	30	2033	9,670	23	470	-
<i>Process Electrical</i>	1965	40	2011	173,450	1	in capital budget	173,450
<i>Process Instrumentation</i>	1965	20	2011	86,730	1	in capital budget	86,730
<i>Process Piping</i>	1965	50	2015	99,120	5	in capital budget	99,120
<i>Building and Process Structural</i>	1965	60	2025	297,350	15	21,517	-
<i>Building Architectural</i>	1965	20	2011	111,510	1	in capital budget	111,510
<i>Building Services</i>	1965	20	2011	173,450	1	in capital budget	173,450
<i>Pumping Station 5</i>							
<i>Process Equipment</i>	1996	30	2026	312,300	16	21,269	-
<i>Process Equipment</i>	2003	30	2033	95,180	23	4,625	-
<i>Process Equipment</i>	2003	30	2033	13,740	23	668	-
<i>Process Equipment</i>	2003	30	2033	6,170	23	300	-
<i>Process Electrical</i>	1996	40	2036	182,180	26	7,908	-
<i>Process Instrumentation</i>	1996	20	2016	91,090	6	in capital budget	91,090
<i>Process Piping</i>	1996	50	2046	104,100	36	3,356	-
<i>Building and Process Structural</i>	1996	60	2056	312,300	46	8,047	-
<i>Building Architectural</i>	1996	20	2016	117,110	6	in capital budget	117,110
<i>Building Services</i>	1996	20	2016	182,180	6	in capital budget	182,180
<i>Pumping Station 6</i>							
<i>Process Equipment</i>	1981	30	2011	635,320	1	in capital budget	635,320
<i>Process Electrical</i>	1981	40	2021	370,600	11	35,978	-
<i>Process Instrumentation</i>	1981	20	2011	185,300	1	in capital budget	185,300
<i>Process Piping</i>	1981	50	2031	211,770	21	11,193	-
<i>Building and Process Structural</i>	1981	60	2041	635,320	31	23,475	-
<i>Building Architectural</i>	1981	20	2011	238,240	1	in capital budget	238,240
<i>Building Services</i>	1981	20	2011	370,600	1	in capital budget	370,600
<i>Pumping Station 7</i>							

**Table B-1
Town of Parry Sound
Wastewater Facilities, Vehicles and Equipment**

<i>Item</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
<i>Process Equipment</i>	2001	30	2031	253,600	21	13,404	-
<i>Process Electrical</i>	2001	40	2041	147,930	31	5,466	-
<i>Process Instrumentation</i>	2001	20	2021	73,970	11	7,181	-
<i>Process Piping</i>	2001	50	2051	84,530	41	2,420	-
<i>Building and Process Structural</i>	2001	60	2061	253,600	51	5,942	-
<i>Building Architectural</i>	2001	20	2021	95,100	11	9,232	-
<i>Building Services</i>	2001	20	2021	147,930	11	14,361	-
Pumping Station 8							
<i>Process Equipment</i>	2000	30	2030	132,160	20	7,309	-
<i>Process Electrical</i>	2000	40	2040	77,090	30	2,935	-
<i>Process Instrumentation</i>	2000	20	2020	38,550	10	in capital budget	38,550
<i>Process Piping</i>	2000	50	2050	44,050	40	1,290	-
<i>Building and Process Structural</i>	2000	60	2060	132,160	50	3,154	-
<i>Building Architectural</i>	2000	20	2020	49,560	10	in capital budget	49,560
<i>Building Services</i>	2000	20	2020	77,090	10	in capital budget	77,090
Pumping Station 9							
<i>Process Equipment</i>	1990	30	2020	311,020	10	in capital budget	311,020
<i>Process Electrical</i>	1990	40	2030	181,430	20	10,033	-
<i>Process Instrumentation</i>	1990	20	2011	90,710	1	in capital budget	90,710
<i>Process Piping</i>	1990	50	2040	103,670	30	3,947	-
<i>Building and Process Structural</i>	1990	60	2050	311,020	40	9,108	-
<i>Building Architectural</i>	1990	20	2011	116,630	1	in capital budget	116,630
<i>Building Services</i>	1990	20	2011	181,430	1	in capital budget	181,430
Pumping Station 10							
<i>Process Equipment</i>	1994	30	2024	199,150	14	15,379	-
<i>Process Electrical</i>	1994	40	2034	116,170	24	5,428	-
<i>Process Instrumentation</i>	1994	20	2014	58,080	4	in capital budget	58,080
<i>Process Piping</i>	1994	50	2044	66,380	34	2,254	-
<i>Building and Process Structural</i>	1994	60	2054	199,150	44	5,345	-
<i>Building Architectural</i>	1994	20	2014	74,680	4	in capital budget	74,680
<i>Building Services</i>	1994	20	2014	116,170	4	in capital budget	116,170
Pumping Station 11							
<i>Process Equipment</i>	1974	30	2011	459,700	1	in capital budget	459,700
<i>Process Electrical</i>	1974	40	2014	268,160	4	in capital budget	268,160
<i>Process Instrumentation</i>	1974	20	2011	134,080	1	in capital budget	134,080
<i>Process Piping</i>	1974	50	2024	153,230	14	11,833	-
<i>Building and Process Structural</i>	1974	60	2034	459,700	24	21,478	-
<i>Building Architectural</i>	1974	20	2011	172,390	1	in capital budget	172,390
<i>Building Services</i>	1974	20	2011	268,160	1	in capital budget	268,160

**Table B-1
Town of Parry Sound
Wastewater Facilities, Vehicles and Equipment**

<i>Item</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
Pumping Station 12							
<i>Process Equipment</i>	1995	30	2025	327,940	15	23,731	-
<i>Process Electrical</i>	1995	40	2035	191,300	25	8,608	-
<i>Process Instrumentation</i>	1995	20	2015	95,650	5	in capital budget	95,650
<i>Process Piping</i>	1995	50	2045	109,310	35	3,616	-
<i>Building and Process Structural</i>	1995	60	2055	327,940	45	8,622	-
<i>Building Architectural</i>	1995	20	2015	122,980	5	in capital budget	122,980
<i>Building Services</i>	1995	20	2015	191,300	5	in capital budget	191,300
Pumping Station 13							
<i>Process Equipment</i>	1995	30	2025	60,670	15	4,390	-
<i>Process Electrical</i>	1995	40	2035	35,390	25	1,592	-
<i>Process Instrumentation</i>	1995	20	2015	17,690	5	in capital budget	17,690
<i>Process Piping</i>	1995	50	2045	20,220	35	669	-
<i>Building and Process Structural</i>	1995	60	2055	60,670	45	1,595	-
<i>Building Architectural</i>	1995	20	2015	22,750	5	in capital budget	22,750
<i>Building Services</i>	1995	20	2015	35,390	5	in capital budget	35,390
Pumping Station 14							
<i>Process Equipment</i>	1998	30	2028	36,230	18	2,210	-
<i>Process Electrical</i>	1998	40	2038	21,130	28	857	-
<i>Process Instrumentation</i>	1998	20	2018	10,570	8	in capital budget	10,570
<i>Process Piping</i>	1998	50	2048	12,080	38	371	-
<i>Building and Process Structural</i>	1998	60	2058	36,230	48	898	-
<i>Building Architectural</i>	1998	20	2018	13,590	8	in capital budget	13,590
<i>Building Services</i>	1998	20	2018	21,130	8	in capital budget	21,130
Pumping Station 15							
<i>Process Equipment</i>	2003	30	2033	41,870	23	2,034	-
<i>Process Electrical</i>	2003	40	2043	24,420	33	852	-
<i>Process Instrumentation</i>	2003	20	2023	12,210	13	1,011	-
<i>Process Piping</i>	2003	50	2053	13,960	43	383	-
<i>Building and Process Structural</i>	2003	60	2063	41,870	53	947	-
<i>Building Architectural</i>	2003	20	2023	15,700	13	1,300	-
<i>Building Services</i>	2003	20	2023	24,420	13	2,023	-
Total				24,068,200		723,863	7,628,740

**Table B-2
Town of Parry Sound
Sanitary Sewers**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
ADD15N-16O(1)	Addie Street	160	10"	AC	1972	80	2052	806	128,945	42	3,611	-
ADD16O(1)-16O(2)	Addie Street	145	10"	AC	1972	80	2052	806	116,857	42	3,273	-
ADD16O(2)-17P	Addie Street	36	10"	AC	1990	80	2070	806	29,013	60	584	-
ADE10M(1)-10M(2)	Adelaide Street	74	6"	PVC	1972	80	2052	806	59,637	42	1,670	-
ALB17H-18I	Albert Street	300	8"	PVC	1986	80	2066	806	241,772	56	5,192	-
ALB17H-18I	Albert Street	23	10"	PVC	1986	80	2066	806	18,536	56	398	-
ALM15R(2)-15S	Almonte Street	57	8"	AC	1963	80	2043	806	45,937	33	1,603	-
ANS12O-13O	Ansley Street	146	8"	PVC	2003	80	2083	482	70,360	73	1,171	-
ARM10L(1)-10L(2)	Armstrong Street	55	8"	AC	1968	80	2048	806	44,325	38	1,360	-
ARM10L(2)-10L(3)	Armstrong Street	60	8"	CL	1968	80	2048	806	48,354	38	1,484	-
ARM10L(3)-11L(1)	Armstrong Street	40	12"	AC	1968	80	2048	806	32,236	38	989	-
ARM11L(1)-11L(2)	Armstrong Street	55	12"	AC	1968	80	2048	806	44,325	38	1,360	-
ASH10H-11I(1)	Ashwood Drive	130	8"	AC	1978	80	2058	806	104,768	48	2,596	-
ASH11I(1)-11I(2)	Ashwood Drive	110	8"	AC	1978	80	2058	806	88,650	48	2,197	-
AVE10J-10L	Avenue Road	110	8"	AC	1996	80	2076	806	88,650	66	1,628	-
AVE9L-GLEpL	Avenue Road	400	8"	AC/PVC	1985	80	2065	806	322,363	55	7,040	-
AVR9P(1)-9P(2)	Avery Court	135	8"	PVC	2006	80	2086	317	42,840	76	685	-
BAY10G-11G	Bay Street	183	8"	PVC	1989	80	2069	806	147,481	59	3,015	-
BAY10G-11G	Bay Street	76	8"	AC	1961	80	2041	806	61,249	31	2,263	-
BAY11G-12H	Bay Street	82	8"	AC	1989	80	2069	806	66,084	59	1,351	-
BAY11G-12H	Bay Street	126	8"	PVC	1961	80	2041	806	101,544	31	3,752	-
BAY10G	Bay Street	20	8"	PVC	1964	80	2044	806	16,118	34	547	-
BAY10G	Bay Street	160	8"	AC	2002	80	2082	806	128,945	72	2,175	-
BAY9F-BAY10G	Bay Street	200	2"	PVC	1989	80	2069	806	161,182	59	3,295	-
BAC7L-8L	Baycrest Drive	200	8"	PVC	2006	80	2086	806	161,182	76	2,576	-
BAV10I-11I	Bayview Road	185	8"	PVC	2003	80	2083	806	149,093	73	2,481	-
BET13P-13Q	Beatty Street	168	12"	AC	1972	80	2052	806	135,393	42	3,792	-
BET13Q-13S	Beatty Street	106	8"	AC	1972	80	2052	806	85,426	42	2,393	-
BET13Q-13S	Beatty Street	100	8"	CL	1972	80	2052	806	80,591	42	2,257	-
BET13Q-13S	Beatty Street	51	10"	CL	1972	80	2052	806	41,101	42	1,151	-
BET13Q-13S	Beatty Street	91	12"	AC	1972	80	2052	806	73,338	42	2,054	-
BEV15I-MAC16E	Beaver Street	1,500	8"	AC/CIP	1974	80	2054	806	1,208,862	44	32,446	-
BEV15I-16J	Beaver Street	175	12"	AC	1974	80	2054	806	141,034	44	3,785	-
BEE11M(1)-11M(2)	Beechwood Drive	28	12"	PVC	1997	80	2077	806	22,565	67	408	-
BEL10J-10I	Belvedere Heights	80	8"	CA	1964	80	2044	806	64,473	34	2,190	-
BEL10J-10I	Belvedere Heights	60	8"	AC	1964	80	2044	806	48,354	34	1,642	-
BEL10I-10H	Belvedere Heights	30	8"	PVC	1993	80	2073	806	24,177	63	464	-
BEL10H-11H(1)	Belvedere Heights	75	8"	PVC	1993	80	2073	806	60,443	63	1,161	-
BEL11H(1)-11H(2)	Belvedere Heights	137	8"	PVC	1993	80	2073	806	110,409	63	2,121	-
BIR14E-14F	Birch Street	80	6"	AC	1929	80	2011	806	64,473	1	in capital budget	64,473
BOO17F(1)-17F(2)	Booth Street	100	8"	PVC	1978	80	2058	806	80,591	48	1,997	-
BOW13I-14J	Bowes Street	135	8"	PVC	1987	80	2067	806	108,798	57	2,298	-

**Table B-2
Town of Parry Sound
Sanitary Sewers**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
BOW14J-15J	Bowes Street	295	8"	PVC	1987	80	2067	806	237,743	57	5,021	-
BOW15J-16J	Bowes Street	104	8"	AC	1974	80	2054	806	83,814	44	2,250	-
BOW16J-16I	Bowes Street	94	10"	AC	1974	80	2054	806	75,755	44	2,033	-
BOW16I-17I	Bowes Street	64	10"	AC	1974	80	2054	806	51,578	44	1,384	-
BOW17I-18I(1)	Bowes Street	46	10"	AC	1929	80	2011	806	37,072	1	in capital budget	37,072
BOW17I-18I(1)	Bowes Street	261	10"	PVC	1929	80	2011	806	210,342	1	in capital budget	210,342
BOW18I(1)-18I(2)	Bowes Street	45	10"	PVC	1985	80	2065	806	36,266	55	792	-
BOW18I(2)-21J	Bowes Street	625	8"	PVC	1985	80	2065	806	503,692	55	11,000	-
BOW21J-22J	Bowes Street	47	8"	PVC	1985	80	2065	806	37,878	55	827	-
BOW22J	Bowes Street	250	2"	HDPE	2004	80	2084	806	201,477	74	3,307	-
BRE17K-18K	Brenda Avenue	610	8"	PVC	1991	80	2071	806	491,604	61	9,738	-
BRY11N(1)-11N(2)	Bryce Street	51	8"	AC	1964	80	2044	806	41,101	34	1,396	-
BUR10N-11N	Burd Street	151	16"	CL	1964	80	2044	806	121,692	34	4,133	-
BUI13O(1)-13O(2)	Burritt Street	52	8"	PVC	2003	80	2083	846	43,975	73	732	-
BUI13O(2)-14P	Burritt Street	218	8"	PVC	2003	80	2083	1,049	228,713	73	3,806	-
CAR19J-19K	Carol Court	105	8"	PVC	1991	80	2071	806	84,620	61	1,676	-
CAS9N-10N	Cascade Street	28	8"	PVC	1998	80	2078	806	22,565	68	403	-
CAS9N-10N	Cascade Street	42	16"	CL	1998	80	2078	806	33,848	68	604	-
CAS9N	Cascade Street	350	4"	PVC	1998	80	2078	806	282,068	68	5,033	-
CAS10N-11N(1)	Cascade Street	85	14"	CL	1960	80	2040	806	68,502	30	2,608	-
CAS11N(1)-11N(2)	Cascade Street	60	8"	PVC	1997	80	2077	806	48,354	67	875	-
CAS11N(2)-11N(3)	Cascade Street	70	8"	PVC	2007	80	2087	806	56,414	77	890	-
CAS11N(3)-12N	Cascade Street	140	8"	PVC	2007	80	2087	806	112,827	77	1,780	-
CAS12N-13N	Cascade Street	330	8"	CL	1948	80	2028	806	265,950	18	16,223	-
CAS14M # 5 SSFM	Cascade Street	340	8"	AC	1964	80	2044	806	274,009	34	9,306	-
CAS14N(1)-14N(2)	Cascade Street	60	8"	CL	1963	80	2043	806	48,354	33	1,688	-
CAS14N(2)-15N	Cascade Street	122	8"	CL	1963	80	2043	806	98,321	33	3,431	-
CAS15N-15M	Cascade Street	120	8"	CSP	1981	80	2061	806	96,709	51	2,266	-
CED16K-17K	Cedar Street	82	8"	PVC	1988	80	2068	806	66,084	58	1,373	-
CHA13E-14E(1)	Champaign Street	67	8"	AC	1962	80	2042	806	53,996	32	1,938	-
CHA14E	Champaign Street	20	8"	PVC	1929	80	2011	806	16,118	1	in capital budget	16,118
CHS10L(1)-10L(2)	Chestnut Drive	10	5"	AC	1960	80	2040	806	8,059	30	307	-
CHR11J-11K	Church Street	300	12"	PVC	1997	80	2077	806	241,772	67	4,377	-
CHR11K-11L	Church Street	210	12"	PVC	1997	80	2077	806	169,241	67	3,064	-
CHR11L-11M	Church Street	296	12"	PVC	1982	80	2062	806	238,549	52	5,489	-
CHR11M-11N	Church Street	155	12"	PVC	1982	80	2062	806	124,916	52	2,874	-
CHR11N-11O	Church Street	190	12"	PVC	1982	80	2062	806	153,123	52	3,523	-
CLA15F(1)-15F(2)	Claude Street	54	4"	AC	1973	80	2053	806	43,519	43	1,193	-
DUF14K(1)-14K(2)	Dufferin Street	90	8"	AC	1959	80	2039	806	72,532	29	2,848	-
DUF14K(1)-14K(2)	Dufferin Street	10	8"	PVC	1998	80	2078	806	8,059	68	144	-
EDW17K(1)-17K(2)	Edward Street	75	8"	PVC	1991	80	2071	806	60,443	61	1,197	-
EDW17K(2)-18K	Edward Street	110	8"	PVC	1991	80	2071	806	88,650	61	1,756	-

**Table B-2
Town of Parry Sound
Sanitary Sewers**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
EDW18K-18J(1)	Edward Street	125	8"	PVC	1991	80	2071	806	100,738	61	1,996	-
EDW18J(1)-18J(2)	Edward Street	115	8"	PVC	1991	80	2071	806	92,679	61	1,836	-
EDW18J(2)-18I	Edward Street	12	8"	PVC	1991	80	2071	806	9,671	61	192	-
EDW18J(2)-18I	Edward Street	113	8"	PVC	1991	80	2071	806	91,068	61	1,804	-
ELI16Q(1)-16Q(2)	Elizabeth Court	40	8"	AC	1973	80	2053	806	32,236	43	884	-
EMI13A-14C	Emily Street	210	8"	AC	1966	80	2046	806	169,241	36	5,456	-
EMI14B	Emily Street	420	4"	PVC	1966	80	2046	806	338,481	36	10,912	-
EMI14C-14D	Emily Street	120	8"	AC	1966	80	2046	806	96,709	36	3,118	-
EMI14D-14E(1)	Emily Street	167	8"	AC	1966	80	2046	806	134,587	36	4,339	-
EMI14E(1)-14E(2)	Emily Street	125	8"	AC	1966	80	2046	806	100,738	36	3,248	-
EMI14E(2)-14F	Emily Street	75	8"	AC	1966	80	2046	806	60,443	36	1,949	-
ETH9L-10L	Ethel Street	116	8"	AC	1968	80	2048	806	93,485	38	2,869	-
FAR15N(1)-15N(2)	Farrer Street	120	8"	PVC	1990	80	2070	806	96,709	60	1,946	-
FOR16F-16G	Forest Street	224	8"	AC	1974	80	2054	806	180,523	44	4,845	-
FOR16G-16H	Forest Street	326	8"	AC	1974	80	2054	806	262,726	44	7,052	-
FOR16H-17I	Forest Street	152	8"	AC	1974	80	2054	806	122,498	44	3,288	-
FOS12O(1)-12O(2)	Foster Avenue	86	8"	AC	1967	80	2047	806	69,308	37	2,179	-
FOS12O(2)-12P	Foster Avenue	85	8"	CL	1949	80	2029	806	68,502	19	3,973	-
GEO13H-16G	George Street	300	8"	PVC	1983	80	2063	806	241,772	53	5,466	-
GEB8K-9J	Georgian Bay Avenue	76	8"	PVC	1988	80	2068	806	61,249	58	1,273	-
GER8L-8M	Georgina Street	91	8"	AC	1973	80	2053	806	73,338	43	2,010	-
GER8M-8N	Georgina Street	178	8"	AC	1973	80	2053	806	143,452	43	3,932	-
GIB11H(2)-11I(1)	Gibson Street	120	12"	PVC	1993	80	2073	806	96,709	63	1,858	-
GIB11I(1)-11I(2)	Gibson Street	155	12"	PVC	1993	80	2073	806	124,916	63	2,399	-
GIB11I(1)-11I(2)	Gibson Street	51	12"	PVC	1993	80	2073	806	41,101	63	790	-
GIB11I(2)-11J	Gibson Street	165	8"	PVC	1997	80	2077	806	132,975	67	2,407	-
GIN15O-16O	Ginnie Street	65	8"	AC	1960	80	2040	806	52,384	30	1,994	-
GIN16O-16N	Ginnie Street	72	6"	AC	1974	80	2054	806	58,025	44	1,557	-
GLE9L-9K	Glen Avenue	80	12"	CSP	1973	80	2053	806	64,473	43	1,767	-
GLE9L-9K	Glen Avenue	59	8"	CON	1973	80	2053	806	47,549	43	1,303	-
GRN13I-13H	Great North Road	315	8"	CL	1950	80	2030	806	253,861	20	14,039	-
JON13I-MAC16E	Great North Road	125	18"	HDPE	1965	80	2045	806	100,738	35	3,332	-
JON13I-MAC16E	Great North Road	1,300	16"	PVC	1965	80	2045	806	1,047,680	35	34,654	-
GRN13H-14F	Great North Road	240	8"	AC	1964	80	2044	806	193,418	34	6,569	-
GRN13H-14F	Great North Road	240	8"	PVC	2001	80	2081	806	193,418	71	3,308	-
GRN13G-13H	Great North Road	150	3"	PVC	1964	80	2044	806	120,886	34	4,106	-
GRE18J(1)-19J	Greenwood Crescent	370	8"	PVC	1991	80	2071	806	298,186	61	5,907	-
GRE19J-18J(2)	Greenwood Crescent	190	8"	PVC	1991	80	2071	806	153,123	61	3,033	-
HAN13Q(1)-13Q(2)	Hanna Road	135	8"	AC	1956	80	2036	806	108,798	26	4,722	-
HAW16R-16R	Hawthorne Cres.	27	4"	CIP	1964	80	2044	806	21,760	34	739	-
HAW16R-16S	Hawthorne Cres.	50	8"	AC	1942	80	2022	806	40,295	12	3,601	-
HIG16R-HIG17R	Highland Cres.	550	6"	CL	1942	80	2022	806	443,249	12	39,610	-

**Table B-2
Town of Parry Sound
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HIG16Q-17R	Highland Cres.	65	8"	PVC	1998	80	2078	806	52,384	68	935	-
HIG16Q-17R	Highland Cres.	35	8"	PVC	1998	80	2078	806	28,207	68	503	-
HIH12N(1)-12N(2)	Highview Street	350	2"	HDPE	2004	80	2084	806	282,068	74	4,630	-
HIL14P-15O	Hillcrest Avenue	60	8"	CL	1952	80	2032	806	48,354	22	2,448	-
HIL14P-15O	Hillcrest Avenue	180	8"	AC	1970	80	2050	806	145,063	40	4,248	-
HIL14P-15O	Hillcrest Avenue	85	8"	PVC	1990	80	2070	806	68,502	60	1,378	-
ISA8N(1)-8N(2)	Isabella Street	94	8"	PVC	1977	80	2057	806	75,755	47	1,914	-
ISA9N-9O	Isabella Street	50	8"	PVC	2004	80	2084	806	40,295	74	661	-
ISA9O-11O(1)	Isabella Street	97	8"	PVC	1983	80	2063	806	78,173	53	1,767	-
ISA11O(1)-11O(2)	Isabella Street	110	8"	AC	1960	80	2040	806	88,650	30	3,375	-
ISA11O(2)-12P	Isabella Street	93	8"	CO	1949	80	2029	806	74,949	19	4,347	-
ISA12P-13P	Isabella Street	225	8"	AC	1949	80	2029	806	181,329	19	10,517	-
ISA13P-14P(1)	Isabella Street	191	8"	AC	1949	80	2029	806	153,928	19	8,928	-
ISA14P(1)-14P(2)	Isabella Street	50	8"	AC	1949	80	2029	806	40,295	19	2,337	-
ISA14P(2)-15Q	Isabella Street	60	8"	PVC	1981	80	2061	806	48,354	51	1,133	-
ISA15Q-16Q(1)	Isabella Street	55	8"	AC	1960	80	2040	806	44,325	30	1,688	-
ISA16Q(1)-16Q(2)	Isabella Street	114	8"	PVC	1997	80	2077	806	91,874	67	1,663	-
ISA16Q(2)-17Q	Isabella Street	130	8"	PVC	1997	80	2077	806	104,768	67	1,897	-
JAM12H-12I	James Street	232	12"	PVC	1992	80	2072	806	186,971	62	3,647	-
JAM12I-12J	James Street	220	12"	PVC	1989	80	2069	806	177,300	59	3,625	-
JAM12J(1)-JAM12J(2)	James Street	180	12"	CL	1940	80	2020	806	145,063	10	in capital budget	145,063
JAM12J(1)-JAM12J(2)	James Street	41	8"	PVC	1940	80	2020	806	33,042	10	in capital budget	33,042
JAM12J-12K	James Street	80	8"	PVC	2003	80	2083	674	53,887	73	897	-
JAM12K-12L	James Street	195	16"	PVC	2003	80	2083	674	131,355	73	2,186	-
JOH10P-11P	John Street	39	8"	CL	1972	80	2052	806	31,430	42	880	-
JOH11P-12P	John Street	101	8"	AC	1972	80	2052	806	81,397	42	2,280	-
JOS9S(2)-10Q(1)	Joseph Street	297	8"	PVC	1981	80	2061	806	239,355	51	5,608	-
JOS10Q(1)-10Q(2)	Joseph Street	85	8"	PVC	1981	80	2061	806	68,502	51	1,605	-
JOS10Q(2)-10P	Joseph Street	26	8"	PVC	1981	80	2061	806	20,954	51	491	-
KAH16O-17O	Katherine Court	72	8"	AC	1976	80	2056	806	58,025	46	1,495	-
KIT9O(1)-9O(2)	Kitchener Avenue	90	8"	PVC	2005	80	2085	326	29,310	75	475	-
KIT9O(2)-10O	Kitchener Avenue	80	8"	PVC	2005	80	2085	314	25,105	75	407	-
KRI8N-8O	Kristen Heights	147	6"	PVC	1977	80	2057	806	118,468	47	2,993	-
LAI15R(1)-15R(2)	Laird Drive	50	8"	PVC	1981	80	2061	806	40,295	51	944	-
LAW9O(1)-9O(2)	Lawrence Street	100	8"	PVC	2005	80	2085	440	43,955	75	712	-
LOG11M-12M	Logan's Lane	150	8"	PVC	2007	80	2087	806	120,886	77	1,907	-
LOU15J(1)-15J(2)	Louisa Street	83	8"	AC	1974	80	2054	806	66,890	44	1,795	-
LOU15J(2)-16K	Louisa Street	227	8"	AC	1974	80	2054	806	182,941	44	4,910	-
LOU16K-16L	Louisa Street	111	8"	PVC	1988	80	2068	806	89,456	58	1,859	-
LOU16L-19O	Louisa Street	48	8"	PVC	1988	80	2068	806	38,684	58	804	-
MAC14E-17E	Macfarlane Street	254	8"	AC	1978	80	2058	806	204,701	48	5,072	-
MAK14S-14Q	Macklaim Street	275	8"	AC	1976	80	2056	806	221,625	46	5,711	-

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MAL8S-9S	Mall Drive	105	8"	PVC	1986	80	2066	806	84,620	56	1,817	-
MAL8S-9S	Mall Drive	18	8"	PVC	1981	80	2061	806	14,506	51	340	-
MAP15S-15R	Mapleview Drive	194	8"	AC	1975	80	2055	806	156,346	45	4,111	-
MAG10L(1)-10L(2)	Margaret Street	92	8"	AC	1968	80	2048	806	74,144	38	2,275	-
MAG10L(2)-10M	Margaret Street	170	8"	CO	1968	80	2048	806	137,004	38	4,204	-
MAI8N(1)-8N(2)	Marion Avenue	98	8"	AC	1972	80	2052	806	78,979	42	2,212	-
MAI8N(2)-9N	Marion Avenue	66	8"	AC	1972	80	2052	806	53,190	42	1,490	-
MAR11K(2)-12K(1)	Mary Street	120	8"	CL	1980	80	2060	806	96,709	50	2,308	-
MAR13K-MAR12K	Mary Street	80	8"	CL	1921	80	2011	806	64,473	1	in capital budget	64,473
MAR12K(2)-12K(3)	Mary Street	100	8"	CL	1980	80	2060	806	80,591	50	1,923	-
MCM11K(1)-11K(2)	Mcmurray Street	60	8"	PVC	2003	80	2083	806	48,354	73	805	-
MCM11K(2)-11K(3)	Mcmurray Street	100	8"	PVC	2003	80	2083	806	80,591	73	1,341	-
MCM11K(3)-12K(1)	Mcmurray Street	40	8"	PVC	2003	80	2083	806	32,236	73	536	-
MCM12K(1)-12K(2)	Mcmurray Street	60	8"	PVC	2003	80	2083	806	48,354	73	805	-
MCN9Q-10Q	Mcnaughton Street	20	6"	PVC	1981	80	2061	806	16,118	51	378	-
MEA15I-16H	Meadow Street	156	8"	AC	1974	80	2054	806	125,722	44	3,374	-
MEL17E-17F(1)	Melissa Street	97	8"	AC	1978	80	2058	806	78,173	48	1,937	-
MEL17F(1)-17F(2)	Melissa Street	50	8"	AC	1978	80	2058	806	40,295	48	998	-
MEV10J(1)-10J(2)	Melvin Street	42	8"	CO	1982	80	2062	806	33,848	52	779	-
MIL12I-12K	Miller Street	62	8"	PVC	1988	80	2068	806	49,966	58	1,038	-
MIL12K-12L	Miller Street	448	8"	PVC	1979	80	2059	806	361,047	49	8,778	-
NAN17K(1)-17K(2)	Nancy Crescent	90	8"	PVC	1991	80	2071	806	72,532	61	1,437	-
NOC11O-11P	North Church St.	134	10"	PVC	1982	80	2062	806	107,992	52	2,485	-
NOC11P-10Q	North Church St.	325	8"	CL	1973	80	2053	806	261,920	43	7,179	-
NOM13O-14O	North Mann Avenue	122	8"	PVC	2003	80	2083	829	101,142	73	1,683	-
NOT14U-15S	North Mann Avenue	450	8"	PVC	2003	80	2083	219	98,363	73	1,637	-
OAK11H-10H(1)	Oak Avenue	90	5"	PVC	1993	80	2073	806	72,532	63	1,393	-
OAK10H(1)-10H(2)	Oak Avenue	30	5"	PVC	1993	80	2073	806	24,177	63	464	-
OAK10H(2)-11G	Oak Avenue	100	5"	PVC	1993	80	2073	806	80,591	63	1,548	-
PAR11I(1)-11I(2)	Park Lane	90	8"	CL	1962	80	2042	806	72,532	32	2,603	-
PAS8U-9S	Parry Sound Drive	200	2"	PVC	1963	80	2043	806	161,182	33	5,625	-
PRS14F(1)-14F(2)	Parry Sound Road	65	8"	PVC	1978	80	2058	806	52,384	48	1,298	-
PRS14F(2)-15F	Parry Sound Road	163	8"	PVC	1978	80	2058	806	131,363	48	3,255	-
PRS15F-16F	Parry Sound Road	220	8"	PVC	2005	80	2085	806	177,300	75	2,872	-
PRS16F-17F	Parry Sound Road	118	8"	AC	1978	80	2058	806	95,097	48	2,356	-
PIN21K-21J	Pine Drive	150	8"	PVC	2006	80	2086	251	37,609	76	601	-
PIN21J-22I	Pine Drive	51	8"	PVC	2006	80	2086	1,474	75,196	76	1,202	-
PRO8K(1)-8K(2)	Prospect Street	60	15"	PVC	1987	80	2067	806	48,354	57	1,021	-
PRO8K(1)-9L(2)	Prospect Street	138	8", 10", 12"	CO	1968	80	2048	806	111,215	38	3,413	-
PRO8K(2)-9L	Prospect Street	106	15"	PVC	1987	80	2067	806	85,426	57	1,804	-
PRO8K(2)-9L	Prospect Street	84	8"	PVC	1987	80	2067	806	67,696	57	1,430	-
PRO8K-WAU10J	Prospect Street	935	8"	DIP	1987	80	2067	806	753,524	57	15,915	-

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QUE16J-17K(1)	Queen Street	35	8"	PVC	1988	80	2068	806	28,207	58	586	-
QUE16J-17K(1)	Queen Street	252	8"	PVC	1988	80	2068	806	203,089	58	4,220	-
QUE17K(1)-17K(2)	Queen Street	112	8"	PVC	1988	80	2068	806	90,262	58	1,875	-
RAI17E(1)-17E(2)	Railway Avenue	60	8"	AC	1978	80	2058	806	48,354	48	1,198	-
RAI17E(2)-17F	Railway Avenue	197	8"	PVC	1978	80	2058	806	158,764	48	3,934	-
RAI17F-17G	Railway Avenue	98	8"	PVC	1978	80	2058	806	78,979	48	1,957	-
RED15K-15J	Redwood Drive	166	8"	AC	1974	80	2054	806	133,781	44	3,591	-
RIV13J-14K	River Street	335	8"	AC	1964	80	2044	806	269,979	34	9,169	-
RIV14K-15M	River Street	470	10"	PVC	1964	80	2044	806	378,777	34	12,864	-
RIV14K-MAR13K	River Street	122	8"	HDPE	1964	80	2044	806	98,321	34	3,339	-
RIE15R-16R	Riverdale Road	189	8"	PVC	1942	80	2022	806	152,317	12	13,611	-
RIE16R-17R	Riverdale Road	35	8"	CL	1942	80	2022	806	28,207	12	2,521	-
RIE16R-17R	Riverdale Road	270	8"	CL	1982	80	2062	806	217,595	52	5,007	-
ROS11L(1)-11L(2)	Rosetta Street	98	12"	PVC	1982	80	2062	806	78,979	52	1,817	-
ROS11L(2)-12L(1)	Rosetta Street	107	12"	PVC	1982	80	2062	806	86,232	52	1,984	-
ROS12L(1)-12L(2)	Rosetta Street	133	12"	PVC	1982	80	2062	806	107,186	52	2,466	-
SEG11I(1)-11I(2)	Seguin Street	111	14"	PVC	1995	80	2075	806	89,456	65	1,668	-
SEG11I(1)-11I(2)	Seguin Street	91	14"	PVC	1995	80	2075	806	73,338	65	1,367	-
SEG11I(2)-12I(1)	Seguin Street	100	10"	PVC	1995	80	2075	806	80,591	65	1,502	-
SEG12I(1)-12I(2)	Seguin Street	99	12"	PVC	1990	80	2070	806	79,785	60	1,605	-
SEG12I(2)-13I	Seguin Street	23	8"	PVC	1989	80	2069	806	18,536	59	379	-
SEG12I(2)-13I	Seguin Street	76	18"	PVC	1989	80	2069	806	61,249	59	1,252	-
SOM14N(1)-14N(2)	South Mann Avenue	43	5"	PVC	1988	80	2068	806	34,654	58	720	-
SPR16L-17K(1)	Spruce Street	135	8"	PVC	1988	80	2068	806	108,798	58	2,261	-
SPR17K(1)-17K(2)	Spruce Street	80	8"	AC	1955	80	2035	806	64,473	25	2,901	-
STA10M(1)-10M(2)	Station Street	55	6"	CL	1972	80	2052	806	44,325	42	1,241	-
STA10M(2)-11M	Station Street	49	10"	PVC	1997	80	2077	806	39,489	67	715	-
STA10M(2)-11M	Station Street	119	8"	AC	1972	80	2052	806	95,903	42	2,686	-
SUM16Q(1)-16Q(2)	Summit Avenue	79	8"	CO	1966	80	2046	806	63,667	36	2,052	-
SUM16Q(2)-15R	Summit Avenue	70	10"	CO	1966	80	2046	806	56,414	36	1,819	-
SUN10H-10G	Sunset Avenue	150	6"	PVC	1996	80	2076	806	120,886	66	2,220	-
SUN10H(1)-10H(2)	Sunset Avenue	78	8"	AC	1978	80	2058	806	62,861	48	1,558	-
TUD14S-15R	Tudhope Street	25	6"	CL	1976	80	2056	806	20,148	46	519	-
TUD14S-15R	Tudhope Street	100	8"	PVC	1981	80	2061	806	80,591	51	1,888	-
TUD15R-15Q(1)	Tudhope Street	104	8"	PVC	1981	80	2061	806	83,814	51	1,964	-
TUD15Q(1)-15Q(2)	Tudhope Street	135	8"	PVC	1981	80	2061	806	108,798	51	2,549	-
VIC9L(1)-9L(2)	Victoria Avenue	53	8"	AC	1948	80	2028	806	42,713	18	2,605	-
VIC9L(2)-9M	Victoria Avenue	120	8"	CL	1948	80	2028	806	96,709	18	5,899	-
VIC9M-9N(1)	Victoria Avenue	200	8"	CO	1960	80	2040	806	161,182	30	6,137	-
VIC9N(1)-9N(2)	Victoria Avenue	57	8"	AC	1973	80	2053	806	45,937	43	1,259	-
VIR14O-15O	Virginia Heights	242	8"	PVC	1986	80	2066	806	195,030	56	4,188	-
WAK14J-14K	Wakefield Street	46	12"	CL	1959	80	2039	806	37,072	29	1,456	-

**Table B-2
Town of Parry Sound
Sanitary Sewers**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
WAK14J-14K	Wakefield Street	180	10"	CL	1959	80	2039	806	145,063	29	5,697	-
WAU7L-8L(1)	Waubeek Street	44	8"	AC	1972	80	2052	806	35,460	42	993	-
WAU7L-8L	Waubeek Street	288	8"	AC	1964	80	2044	806	232,101	34	7,883	-
WAU8L(1)-8L(2)	Waubeek Street	40	8"	AC	1972	80	2052	806	32,236	42	903	-
WAU8L(2)-8L(3)	Waubeek Street	56	8"	AC	1972	80	2052	806	45,131	42	1,264	-
WAU8L(3)-9L(1)	Waubeek Street	110	12"	AC	1973	80	2053	806	88,650	43	2,430	-
WAU9L(1)-9L(2)	Waubeek Street	31	12"	CO	1948	80	2028	806	24,983	18	1,524	-
WAU9L(2)-9K	Waubeek Street	80	12"	CO	1948	80	2028	806	64,473	18	3,933	-
WAU9L(2)-9K	Waubeek Street	26	12"	CO	1972	80	2052	806	20,954	42	587	-
WAU9L(2)-9K	Waubeek Street	97	8"	CO	1948	80	2028	806	78,173	18	4,768	-
WAU9K-10J(1)	Waubeek Street	66	8"	CO	1967	80	2047	806	53,190	37	1,672	-
WAU9K-10J(1)	Waubeek Street	73	8"	CO	1963	80	2043	806	58,831	33	2,053	-
WAU10J(1)-10J(2)	Waubeek Street	40	8"	CO	1963	80	2043	806	32,236	33	1,125	-
WAU10J(2)-10J(3)	Waubeek Street	79	8"	CO	1948	80	2028	806	63,667	18	3,884	-
WAU10J(3)-10J(4)	Waubeek Street	45	10"	CL	1900	80	2011	806	36,266	1	in capital budget	36,266
WAU10J(4)-11J	Waubeek Street	78	10"	PVC	1996	80	2076	806	62,861	66	1,155	-
WAU10J(4)-11J	Waubeek Street	46	10"	PVC	1996	80	2076	806	37,072	66	681	-
WIL12L-14N	William Street	150	12"	CL	1950	80	2030	806	120,886	20	6,685	-
WIL12L-14N	William Street	300	12"	AC	1964	80	2044	806	241,772	34	8,211	-
WIL14N-15N(1)	William Street	116	16"	PVC	1981	80	2061	806	93,485	51	2,190	-
WIL15N(1)-15N(2)	William Street	94	8"	PVC	1981	80	2061	806	75,755	51	1,775	-
WIL15N(2)-15O(1)	William Street	25	16"	PVC	1981	80	2061	806	20,148	51	472	-
WIL15O(1)-15O(2)	William Street	83	16"	PVC	1981	80	2061	806	66,890	51	1,567	-
WIL15O(2)-16O	William Street	52	16"	PVC	1981	80	2061	806	41,907	51	982	-
WIL16O-16P	William Street	111	16"	PVC	1981	80	2061	806	89,456	51	2,096	-
WIL16O-16P	William Street	78	16"	CL	1964	80	2044	806	62,861	34	2,135	-
WIL16P-17Q	William Street	74	12"	CL	1964	80	2044	806	59,637	34	2,025	-
WIL17Q-16P	William Street	50	10"	AC	1964	80	2044	806	40,295	34	1,369	-
WIL17Q-17R	William Street	60	18"	AC	1964	80	2044	806	48,354	34	1,642	-
WIL17R-18S(EAS)	William Street	300	18"	PVC	1964	80	2044	806	241,772	34	8,211	-
WIO10N(1)-10N(2)	Willow Street	38	10"	CL	1964	80	2044	806	30,625	34	1,040	-
WIO10N(2)-10N(3)	Willow Street	62	15"	CL	1964	80	2044	806	49,966	34	1,697	-
WIN9P(1)-9P(2)	Winnifred Avenue	25	8"	PVC	2003	80	2083	876	21,896	73	364	-
WIN9P(2)-9O(1)	Winnifred Avenue	95	8"	PVC	2005	80	2085	418	39,750	75	644	-
WIN9O(1)-9O(2)	Winnifred Avenue	175	8"	PVC	2005	80	2085	418	73,202	75	1,186	-
WOO8L-8M	Wood Street	137	8"	AC	1973	80	2053	806	110,409	43	3,026	-
WOO8L-8M	Wood Street	162	8"	AC	1973	80	2053	806	130,557	43	3,579	-
WOO8M-8N	Wood Street	124	8"	AC	1973	80	2053	806	99,933	43	2,739	-
BOW20I Intersection	Bowes Street	23	8"	PVC	2008	80	2088	283	6,360	78	99	-
GIB11K-11L	Gibson Street	190	8"	PVC	2008	80	2088	685	130,073	78	2,025	-
GIB11L-11M	Gibson Street	220	8"	PVC	2008	80	2088	672	147,810	78	2,301	-
GIB11M-11N	Gibson Street	255	8"	PVC	2008	80	2088	649	165,547	78	2,577	-

**Table B-2
Town of Parry Sound
Sanitary Sewers**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
GIB11N-11O	Gibson Street	220	8"	PVC	2008	80	2088	672	147,810	78	2,301	-
BIR14E-14F	Birch Street	80	6"	AC	2009	80	2089	785	62,812	79	965	-
CHA14E	Champaigne Street	20	8"	PVC	2009	80	2089	785	15,703	79	241	-
JON13I-MAC16E	Great North Road	125	18"	HDPE	2009	80	2089	1,359	169,922	79	2,611	-
JON13I-MAC16E	Great North Road	1,300	16"	PVC	2009	80	2089	1,359	1,767,185	79	27,158	-
PRS14F(1)-14F(2)	Parry Sound Road	65	8"	PVC	2009	80	2089	785	51,035	79	784	-
PRS14F(2)-15F	Parry Sound Road	163	8"	PVC	2009	80	2089	785	127,979	79	1,967	-
RIV14K-MAR13K	River Street	122	8"	HDPE	2009	80	2089	2,199	268,326	79	4,124	-
RIE15R-16R	Riverdale Road	189	8"	PVC	2009	80	2089	911	172,133	79	2,645	-
RIE16R-17R	Riverdale Road	35	8"	CL	2009	80	2089	1,043	36,513	79	561	-
Total		43,295							35,110,298		930,446	606,849

**Table B-3
Town of Parry Sound
Wastewater Man Holes**

<i>Road Section ID</i>	<i>Street</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
<u>Sanitary Sewers</u>								
ANS12O-13O	Ansley Street	2003	50	2053	15,501	43	425	-
AVR9P(1)-9P(2)	Avery Court	2006	50	2056	12,643	46	326	-
BUI13O(1)-13O(2)	Burritt Street	2003	50	2053	9,688	43	266	-
BUI13O(2)-14P	Burritt Street	2003	50	2053	50,388	43	1,381	-
JAM12J-12K	James Street	2003	50	2053	22,732	43	623	-
JAM12K-12L	James Street	2003	50	2053	55,411	43	1,519	-
KIT9O(1)-9O(2)	Kitchener Avenue	2005	50	2055	4,957	45	130	-
KIT9O(2)-10O	Kitchener Avenue	2005	50	2055	4,246	45	112	-
LAW9O(1)-9O(2)	Lawrence Street	2005	50	2055	7,433	45	195	-
NOM13O-14O	North Mann Avenue	2003	50	2053	22,283	43	611	-
NOT14U-15S	North Mann Avenue	2003	50	2053	108,994	43	2,988	-
PIN21K-21J	Pine Drive	2005	50	2055	6,412	45	169	-
PIN21J-22I	Pine Drive	2005	50	2055	12,820	45	337	-
WIN9P(1)-9P(2)	Winnifred Avenue	2006	50	2056	2,194	46	57	-
WIN9P(2)-9O(1)	Winnifred Avenue	2005	50	2055	6,722	45	177	-
WIN9O(1)-9O(2)	Winnifred Avenue	2005	50	2055	12,380	45	325	-
BOW20I Intersection	Bowes Street	2008	50	2058	8,778	48	218	-
GIB11K-11L	Gibson Street	2008	50	2058	29,586	48	733	-
GIB11L-11M	Gibson Street	2008	50	2058	33,620	48	833	-
GIB11M-11N	Gibson Street	2008	50	2058	37,654	48	933	-
GIB11N-11O	Gibson Street	2008	50	2058	33,620	48	833	-
BIR14E-14F	Birch Street	2009	50	2059	6,540	49	159	-
PRS14F(1)-14F(2)	Parry Sound Road	2009	50	2059	12,119	49	295	-
PRS14F(2)-15F	Parry Sound Road	2009	50	2059	30,391	49	739	-
RIE15R-16R	Riverdale Road	2009	50	2059	44,538	49	1,083	-
RIE16R-17R	Riverdale Road	2009	50	2059	7,423	49	180	-
Total					599,073		15,645	0

**Table B-4
Town of Parry Sound
Storm Main Inventory**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimate d Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
ADD15N-16O(1)	Addie Street	60	18"	CSP	1972	80	2052	482	28,919	42	810	-
ADE10M(1)-10M(2)	Adelaide Street	20	12"	CSP	1972	80	2052	482	9,640	42	270	-
ALB17H-18I	Albert Street	45	12"	BigO	1986	80	2066	482	21,689	56	466	-
ALB17H-18I	Albert Street	55	24"	Boss2000	1990	80	2070	482	26,509	60	533	-
ANS12O-13O	Ansley Street	62	24"	BOSS 2000	2007	80	2087	482	29,883	77	471	-
ARM10L(1)-10L(2)	Armstrong Street	55	12"	CSP	1968	80	2048	482	26,509	38	813	-
ARM10L(2)-10L(3)	Armstrong Street	60	12"	CSP	1968	80	2048	482	28,919	38	887	-
ARM10L(3)-11L(1)	Armstrong Street	40	12"	CSP	1968	80	2048	482	19,279	38	592	-
ARM11L(1)-11L(2)	Armstrong Street	150	18"	BOSS2000	1968	80	2048	482	72,297	38	2,219	-
AVE10J-10L	Avenue Road	60	18"	PVC	1985	80	2065	482	28,919	55	632	-
AVR9P(1)-9P(2)	Avery Court	31	12"	PVC	2006	80	2086	798	24,742	76	395	-
AVR9P(1)-9P(2)	Avery Court	84	14"	PVC	2006	80	2086	798	67,044	76	1,072	-
BAY10G-11G	Bay Street	150	24"	BOSS 2000	2003	80	2083	482	72,297	73	1,203	-
BAY11G-12H	Bay Street	270	24"	PVC	1991	80	2071	482	130,135	61	2,578	-
BAY9F-BAY10F	Bay Street	30	12"	CSP	1989	80	2069	482	14,459	59	296	-
BAC7L-8L	Baycrest Drive	75	12"	PVC	2006	80	2086	482	36,149	76	578	-
BET13P-13Q	Beatty Street	19	24"	CSP	1956	80	2036	482	9,158	26	397	-
BEV15I-16J	Beaver Street	184	24"	CO	1974	50	2024	330	60,802	14	4,695	-
BEE11M(1)-11M(2)	Beechwood Drive	28	12"	BOSS2000	1997	80	2077	482	13,495	67	244	-
BEL10J-10I	Belvedere Heights	30	24"	BOSS2000	1995	80	2075	482	14,459	65	270	-
BEL10I-10H	Belvedere Heights	295	24"	BOSS2000	1993	80	2073	482	142,185	63	2,731	-
BEL10H-11H(1)	Belvedere Heights	50	24"	BOSS2000	1993	80	2073	482	24,099	63	463	-
BEL11H(1)-11H(2)	Belvedere Heights	155	24"	BOSS2000	1993	80	2073	482	74,707	63	1,435	-
BIR14E-14F	Birch Street	20	18"	CSP	1967	80	2047	482	9,640	37	303	-
BOO17F(1)-17F(2)	Booth Street	30	18"	CSP	1978	80	2058	482	14,459	48	358	-
BOW13I-14J	Bowes Street	135	24"	BOSS2000	1987	80	2067	482	65,068	57	1,374	-
BOW14J-15J	Bowes Street	295	24"	BOSS2000	1987	80	2067	482	142,185	57	3,003	-
BOW15J-16J	Bowes Street	50	24"	BOSS2000	1987	80	2067	482	24,099	57	509	-
BOW16J-16I	Bowes Street	100	24"	BOSS2000	1987	80	2067	482	48,198	57	1,018	-
BOW16I-17I	Bowes Street	60	24"	BOSS2000	1987	80	2067	482	28,919	57	611	-
BOW17I-18I(1)	Bowes Street	60	24"	BOSS2000	1987	80	2067	482	28,919	57	611	-
BOW18I(1)-18I(2)	Bowes Street	50	24"	BOSS2000	1987	80	2067	482	24,099	57	509	-
BOW18I(2)-21J	Bowes Street	675	24"	CO	1982	50	2032	330	223,051	22	11,292	-
BOW21J-22J	Bowes Street	67	24"	CO	1982	50	2032	330	22,140	22	1,121	-
BOW22J	Bowes Street	50	18"	CSP	1978	80	2058	482	24,099	48	597	-
BUI13O(2)-14P	Burritt Street	50	24"	BOSS 2000	2002	80	2082	482	24,099	72	407	-
CAS9N-10N	Cascade Street	40	18"	BOSS2000	2000	80	2080	482	19,279	70	334	-
CAS11N(1)-11N(2)	Cascade Street	55	18"	BOSS2000	1997	80	2077	482	26,509	67	480	-
CAS11N(3)-12N	Cascade Street	50	12"	CSP	1963	80	2043	482	24,099	33	841	-
CAS12N-13N	Cascade Street	20	12"	CL	1963	80	2043	482	9,640	33	336	-
CAS14N(1)-14N(2)	Cascade Street	60	12"	CL	1963	80	2043	482	28,919	33	1,009	-
CAS14N(2)-15N	Cascade Street	30	18"	CL	1963	80	2043	482	14,459	33	505	-
CHA13E-14E(1)	Champaigne Street	20	12"	CSP	1962	80	2042	482	9,640	32	346	-
CHR11J-11K	Church Street	146	20"	HDPE	1997	80	2077	482	70,273	67	1,272	-
CHR11J-11K	Church Street	108	18"	HDPE	1997	80	2077	482	51,958	67	941	-
CHR11J-11K	Church Street	60	15"	HDPE	1997	80	2077	482	28,823	67	522	-
CHR11K-11L	Church Street	14	12"	HDPE	1997	80	2077	482	6,603	67	120	-

**Table B-4
Town of Parry Sound
Storm Main Inventory**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
CHR11K-11L	Church Street	23	18"	HDPE	1997	80	2077	482	10,845	67	196	-
CHR11K-11L	Church Street	48	15"	HDPE	1997	80	2077	482	23,039	67	417	-
CHR11K-11L	Church Street	50	12"	HDPE	1997	80	2077	482	24,244	67	439	-
CHR11L-11M	Church Street	30	30"	HDPE	1982	80	2062	482	14,459	52	333	-
CHR11L-11M	Church Street	169	24"	HDPE	1982	80	2062	482	81,455	52	1,874	-
CHR11M-11N	Church Street	120	24"	HDPE	1982	80	2062	482	57,838	52	1,331	-
CHR11M-11N	Church Street	76	18"	HDPE	1982	80	2062	482	36,823	52	847	-
CHR11N-11O	Church Street	269	15"	HDPE	1982	80	2062	482	129,653	52	2,983	-
EMI13A-14C	Emily Street	210	16"	CSP	1967	80	2047	482	101,216	37	3,182	-
EMI14C-14D	Emily Street	100	16"	CSP	1967	80	2047	482	48,198	37	1,515	-
EMI14D-14E(1)	Emily Street	155	16"	CSP	1967	80	2047	482	74,707	37	2,349	-
ETH9L-10L	Ethel Street	120	16"	BOSS2000	1968	80	2048	482	57,838	38	1,775	-
FAR15N(1)-15N(2)	Farrer Street	75	12"	Big "O"	1990	80	2070	482	36,149	60	727	-
FOR16F-16G	Forest Street	20	18"	CO	1980	50	2030	330	6,609	20	365	-
GEO13H-16G	George Street	200	12"	CO	1983	50	2033	330	66,089	23	3,211	-
GEB8K-9J	Georgian Bay Avenue	82	16"	BIG "O"	1988	80	2068	482	39,523	58	821	-
GER8L-8M	Georgina Street	20	12"	CSP	1973	80	2053	482	9,640	43	264	-
GIB11G-11H(1)	Gibson Street	80	16"	BOSS2000	1993	80	2073	482	38,559	63	741	-
GIB11H(1)-11H(2)	Gibson Street	145	16"	BOSS2000	1993	80	2073	482	69,887	63	1,342	-
GIB11H(2)-11I(1)	Gibson Street	95	16"	BOSS2000	1993	80	2073	482	45,788	63	880	-
GIB11I(1)-11I(2)	Gibson Street	170	16"	BOSS2000	1993	80	2073	482	81,937	63	1,574	-
GIN15O-16O	Ginnie Street	65	18"	CSP	1970	80	2050	482	31,329	40	917	-
GRN13I-13H	Great North Road	315	18"	CO	1980	50	2030	330	104,091	20	5,756	-
GRN13H-14F	Great North Road	100	18"	CO	1980	50	2030	330	33,045	20	1,827	-
HIG16Q-17R	Highland Cres.	50	18"	CSP	1985	80	2065	482	24,099	55	526	-
HIH12N(1)-12N(2)	Highview Street	350	24"	PVC	2004	80	2084	482	168,694	74	2,769	-
HIL14P-15O	Hillcrest Avenue	60	24"	CSP	1952	80	2032	482	28,919	22	1,464	-
HIL14P-15O	Hillcrest Avenue	180	24"	CO	1970	50	2020	330	59,480	10	in capital budget	59,480
HIL14P-15O	Hillcrest Avenue	85	24"	BOSS2000	1990	80	2070	482	40,968	60	824	-
ISA9N-9O	Isabella Street	50	18"	CSP	2004	80	2084	482	24,099	74	396	-
ISA9O-11O(1)	Isabella Street	80	18"	CSP	1954	80	2034	482	38,559	24	1,801	-
ISA11O(1)-11O(2)	Isabella Street	110	18"	CSP	1954	80	2034	482	53,018	24	2,477	-
ISA11O(2)-12P	Isabella Street	130	18"	CSP	1954	80	2034	482	62,658	24	2,927	-
ISA12P-13P	Isabella Street	225	18"	CSP	1954	80	2034	482	108,446	24	5,067	-
ISA13P-14P(1)	Isabella Street	200	24"	BOSS2000	2007	80	2087	482	96,396	77	1,521	-
ISA14P(1)-14P(2)	Isabella Street	40	8"	AC	1954	80	2034	482	19,279	24	901	-
ISA16Q(1)-16Q(2)	Isabella Street	150	18"	Big "O"	1997	80	2077	482	72,297	67	1,309	-
ISA16Q(2)-17Q	Isabella Street	130	18"	Big "O"	1997	80	2077	482	62,658	67	1,134	-
JAM12H-12I	James Street	98	15"/18"/20"	CO	1992	50	2042	330	32,384	32	1,162	-
JAM12H-12I	James Street	42	15"/18"/20"	CO	1992	50	2042	330	13,879	32	498	-
JAM12H-12I	James Street	84	15"/18"/20"	CO	1992	50	2042	330	27,757	32	996	-
JAM12I-12J	James Street	230	15"	BOSS2000	1989	80	2069	482	110,856	59	2,266	-
JAM12J(1)-JAM12J(2)	James Street	444	12"	CL	1940	80	2020	482	214,000	10	in capital budget	214,000
JAM12J-12K	James Street	60	15"	BOSS2000	2003	80	2083	695	41,721	73	694	-
JAM12K-12L	James Street	195	15"	BOSS2000	2003	80	2083	522	101,699	73	1,692	-
JOH11P-12P	John Street	94	15"	CSP	1963	80	2043	482	45,306	33	1,581	-
JOS9S(1)-9S(2)	Joseph Street	75	12"	CSP	1940	80	2020	482	36,149	10	in capital budget	36,149

**Table B-4
Town of Parry Sound
Storm Main Inventory**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimate d Life</i>	<i>Replace ment Year</i>	<i>Replace ment Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
JOS10Q(1)-10Q(2)	Joseph Street	85	12"	CSP	1963	80	2043	482	40,968	33	1,430	-
JOS10Q(2)-10P	Joseph Street	130	12"	CSP	1963	80	2043	482	62,658	33	2,187	-
JOS10P-11O	Joseph Street	210	12"	CSP	1963	80	2043	482	101,216	33	3,532	-
JOS10P(1)	Joseph Street	200	48"	CO	1963	50	2013	330	66,089	3	in capital budget	66,089
KAH16O-17O	Katherine Court	102	18"	CSP	1976	80	2056	482	49,162	46	1,267	-
KIT9O(1)-9O(2)	Kitchener Avenue	20	16"	BOSS2000	2005	80	2085	67	1,332	75	22	-
KIT9O(2)-10O	Kitchener Avenue	40	16"	BOSS2000	2005	80	2085	67	2,663	75	43	-
KRI8N-8O	Kristen Heights	30	12"	PVC	1977	80	2057	482	14,459	47	365	-
LAW9O(1)-9O(2)	Lawrence Street	20	16"	BOSS2000	2005	80	2085	67	1,332	75	22	-
LOG11M-12M	Logan's Lane	160	16"	BOSS2000	2007	80	2087	482	77,117	77	1,216	-
LOU15J(1)-15J(2)	Louisa Street	15	18"	CSP	1986	80	2066	482	7,230	56	155	-
LOU15J(2)-16K	Louisa Street	20	12"	CSP	1988	80	2068	482	9,640	58	200	-
LOU19O-22J	Louisa Street	60	18"	CSP	1963	80	2043	482	28,919	33	1,009	-
MAC14E-17E	Macfarlane Street	200	18"	CSP	1978	80	2058	482	96,396	48	2,389	-
MAL8S-9S	Mall Drive	40	16"	CSP	1974	80	2054	482	19,279	44	517	-
MAP15S-15R	Mapleview Drive	30	18"	CSP	1975	80	2055	482	14,459	45	380	-
MAG10L(2)-10M	Margaret Street	160	12"	PVC	1988	80	2068	482	77,117	58	1,602	-
MAI8N(1)-8N(2)	Marion Avenue	20	16"	CSP	1972	80	2052	482	9,640	42	270	-
MAR11K(2)-12K(1)	Mary Street	120	12"	CSP	1980	80	2060	482	57,838	50	1,380	-
MAR13K-MAR12K	Mary Street	80	15"	CSP	1980	80	2060	482	38,559	50	920	-
MAR12K(2)-12K(3)	Mary Street	100	12"	CSP	1980	80	2060	482	48,198	50	1,150	-
MCM11K(1)-11K(2)	Mcmurray Street	20	18"	BOSS2000	2003	80	2083	482	9,640	73	160	-
MCM12K(1)-12K(2)	Mcmurray Street	20	18"	BOSS2000	2003	80	2083	482	9,640	73	160	-
MEA15I-16H	Meadow Street	30	12"	CSP	1975	80	2055	482	14,459	45	380	-
MIL12I-12K	Miller Street	220	15"	BOSS2000	1988	80	2068	482	106,036	58	2,203	-
MIL12K-12L	Miller Street	290	15"	CO	1979	50	2029	330	95,829	19	5,558	-
NOC11O-11P	North Church St.	57	15"	CSP	1963	80	2043	482	27,473	33	959	-
NOC11P-10Q	North Church St.	40	24"	CO	1963	50	2013	330	13,218	3	in capital budget	13,218
OAK11H-10H(1)	Oak Avenue	70	12"	CSP	1978	80	2058	482	33,739	48	836	-
PRS14F(1)-14F(2)	Parry Sound Road	65	18"	CO	1980	50	2030	330	21,479	20	1,188	-
PRS14F(2)-15F	Parry Sound Road	165	18"	CO	1980	50	2030	330	54,524	20	3,015	-
PRS15F-16F	Parry Sound Road	235	18"	CO	1980	50	2030	330	77,655	20	4,294	-
PRS16F-17F	Parry Sound Road	130	18"	CO	1980	50	2030	330	42,958	20	2,376	-
PIN21K-21J	Pine Drive	150	18"	BOSS2000	2005	80	2085	59	8,894	75	144	-
PIN21J-22I	Pine Drive	200	18"	BOSS2000	2005	80	2085	22	4,448	75	72	-
PRO8K(1)-8K(2)	Prospect Street	60	18"	BOSS2000	1987	80	2067	482	28,919	57	611	-
PRO8K(1)-9L(2)	Prospect Street	215	18"	BOSS2000	1987	80	2067	482	103,626	57	2,189	-
PRO8K(2)-9L	Prospect Street	200	24"	HDPE	1987	80	2067	482	96,396	57	2,036	-
QUE16J-17K(1)	Queen Street	20	12"	CSP	1988	80	2068	482	9,640	58	200	-
RIV13J-14K	River Street	335	18"	BOSS2000	1998	80	2078	482	161,464	68	2,881	-
RIV14K-15M	River Street	470	18"	BOSS2000	1998	80	2078	482	226,532	68	4,042	-
ROS11L-ROS13L	Rosetta Street	410	30"	CO	1983	50	2033	330	135,417	23	6,580	-
SEG11I(1)-11I(2)	Seguin Street	100	24"	BOSS2000	1995	80	2075	482	48,198	65	898	-
SEG11I(2)-12I(1)	Seguin Street	100	24"	BOSS2000	1995	80	2075	482	48,198	65	898	-
SEG12I(1)-12I(2)	Seguin Street	100	24"	BOSS2000	1990	80	2070	482	48,198	60	970	-
SEG12I(2)-13I	Seguin Street	150	24"	BOSS2000	1989	80	2069	482	72,297	59	1,478	-
SUM16Q(1)-16Q(2)	Summit Avenue	30	10"	CSP	1966	80	2046	482	14,459	36	466	-

**Table B-4
Town of Parry Sound
Storm Main Inventory**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Replacement Cost / m</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
SUN10H(1)-10H(2)	Sunset Avenue	50	10"	CSP	1970	80	2050	482	24,099	40	706	-
VIC9L(1)-9L(2)	Victoria Avenue	60	10"	CL	1948	80	2028	482	28,919	18	1,764	-
VIC9L(2)-9M	Victoria Avenue	70	10"	CL	1948	80	2028	482	33,739	18	2,058	-
VIR14O-15O	Virginia Heights	200	18"	PVC	1986	80	2066	482	96,396	56	2,070	-
WAU7L-8L(1)	Waubee Street	44	24"	BOSS2000	2006	80	2086	482	21,207	76	339	-
WAU8L(1)-8L(2)	Waubee Street	40	24"	BOSS2000	2006	80	2086	482	19,279	76	308	-
WAU8L(3)-9L(1)	Waubee Street	240	12"	CO	1968	50	2018	330	79,307	8	in capital budget	79,307
WAU9L(1)-9L(2)	Waubee Street	35	12"	CO	1957	50	2011	330	11,566	1	in capital budget	11,566
WAU9L(2)-9K	Waubee Street	190	12"	CO	1957	50	2011	330	62,785	1	in capital budget	62,785
WAU9K-10J(1)	Waubee Street	140	12"	CO	1961	50	2011	330	46,262	1	in capital budget	46,262
WAU10J(3)-10J(4)	Waubee Street	30	12"	AC	1961	80	2041	482	14,459	31	534	-
WAU10J(4)-11J	Waubee Street	90	15"	BOSS2000	1996	80	2076	482	43,378	66	797	-
WAN9I-9J(1)	Waubuno Road	20	15"	BOSS2000	2007	80	2087	482	9,640	77	152	-
WAN9J(1)-9J(2)	Waubuno Road	20	15"	BOSS2000	2007	80	2087	482	9,640	77	152	-
WIL12L-14N	William Street	60	12"	CL	1940	80	2020	482	28,919	10	in capital budget	28,919
WIL14N-15N(1)	William Street	125	18"	CO	1964	50	2014	330	41,306	4	in capital budget	41,306
WIL15N(1)-15N(2)	William Street	90	18"	CO	1964	50	2014	330	29,740	4	in capital budget	29,740
WIL15N(2)-15O(1)	William Street	25	18"	CO	1964	50	2014	330	8,261	4	in capital budget	8,261
WIL15O(1)-15O(2)	William Street	80	18"	CO	1964	50	2014	330	26,436	4	in capital budget	26,436
WIL15O(2)-16O	William Street	50	18"	CO	1964	50	2014	330	16,522	4	in capital budget	16,522
WIN9P(1)-9P(2)	Winnifred Avenue	25	15"	BOSS2000	2006	80	2086	1,307	32,685	76	522	-
WIN9P(2)-9O(1)	Winnifred Avenue	30	15"	BOSS2000	2005	80	2085	67	1,997	75	32	-
WOO8M-8N	Wood Street	30	12"	CSP	1973	80	2053	482	14,459	43	396	-
BOW20I Intersection	Bowes Street	127	12"	BOSS2000	2008	80	2088	861	109,310	78	1,702	-
GIB11K-11L	Gibson Street	159	12"	CO/BOSS2000	2008	80	2088	363	57,623	78	897	-
GIB11K-11L	Gibson Street	31	12"	CO	2008	50	2058	364	11,440	48	283	-
GIB11L-11M	Gibson Street	184	12"	BOSS2000	2008	80	2088	363	66,721	78	1,039	-
GIB11L-11M	Gibson Street	36	12"	CO	2008	50	2058	363	13,246	48	328	-
GIB11M-11N	Gibson Street	213	12"	BOSS2000	2008	80	2088	363	77,336	78	1,204	-
GIB11M-11N	Gibson Street	42	12"	CO	2008	50	2058	363	15,353	48	380	-
GIB11N-11O	Gibson Street	184	12"	BOSS2000	2008	80	2088	363	66,721	78	1,039	-
GIB11N-11O	Gibson Street	36	12"	CO	2008	50	2058	363	13,246	48	328	-
GIB11O-11P	Gibson Street	184	12"	BOSS2000	2008	80	2088	198	36,393	78	567	-
GIB11O-11P	Gibson Street	36	12"	CO	2008	50	2058	198	7,225	48	179	-
EMI14E(1)-14E(2)	Emily Street	125	15"	BOSS2000	2009	80	2089	123	15,351	79	236	-
EMI14E(2)-14F	Emily Street	75	15"	BOSS2000	2009	80	2089	123	9,211	79	142	-
MEL17F(1)-17F(2)	Melissa Street	150	18"	BOSS2000	2009	80	2089	123	18,421	79	283	-
RIE16R-17R	Riverdale Road	35	35"	BOSS2000	2009	80	2089	1,701	59,550	79	915	-
RIE15R-16R	Riverdale Road	192	35"	BOSS2000	2009	80	2089	1,470	282,169	79	4,336	-
Total		19,428							8,549,675		208,490	740,040

**Table B-5
Town of Parry Sound
Storm Sewer Man Holes Inventory**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (km)</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
AVR9P(1)-9P(2)	Avery Court		31	12"	PVC	2006	50	2056	11,598	46	299	-
AVR9P(1)-9P(2)	Avery Court		84	14"	PVC	2006	50	2056	31,428	46	810	-
JAM12J-12K	James Street		60	15"	BOSS2000	2003	50	2053	20,538	43	563	-
JAM12K-12L	James Street		195	15"	BOSS2000	2003	50	2053	50,064	43	1,372	-
PIN21K-21J	Pine Drive		150	18"	BOSS2000	2005	50	2055	10,152	45	267	-
PIN21J-22I	Pine Drive		200	18"	BOSS2000	2005	50	2055	5,077	45	133	-
BOW20I Intersection	Bowes Street		127	12"	BOSS2000	2008	50	2058	22,674	48	562	-
GIB11K-11L	Gibson Street		159	12"	CO/BOSS2000	2008	50	2058	13,608	48	337	-
GIB11K-11L	Gibson Street		31	12"	CO	2008	50	2058	2,701	48	67	-
GIB11L-11M	Gibson Street		184	12"	BOSS2000	2008	50	2058	15,757	48	390	-
GIB11L-11M	Gibson Street		36	12"	CO	2008	50	2058	3,128	48	78	-
GIB11M-11N	Gibson Street		213	12"	BOSS2000	2008	50	2058	18,263	48	453	-
GIB11M-11N	Gibson Street		42	12"	CO	2008	50	2058	3,626	48	90	-
GIB11N-11O	Gibson Street		184	12"	BOSS2000	2008	50	2058	15,757	48	390	-
GIB11N-11O	Gibson Street		36	12"	CO	2008	50	2058	3,128	48	78	-
GIB11O-11P	Gibson Street		184	12"	BOSS2000	2008	50	2058	15,757	48	390	-
GIB11O-11P	Gibson Street		36	12"	CO	2008	50	2058	3,128	48	78	-
RIE16R-17R	Riverdale Road		35	35"	BOSS2000	2009	50	2059	10,661	49	259	-
RIE15R-16R	Riverdale Road		192	35"	BOSS2000	2009	50	2059	31,983	49	778	-
Total			2,179						289,030		7,393	0

**Table B-6
Town of Parry Sound
Storm Sewer Catch Basins**

<i>Road Section ID</i>	<i>Street</i>	<i>Length (m)</i>	<i>Diameter (mm)</i>	<i>Material</i>	<i>Year Installed</i>	<i>Estimated Life</i>	<i>Replacement Year</i>	<i>Total Main Replacement Costs</i>	<i>Years until Replacement</i>	<i>Annual Lifecycle Contribution</i>	<i>Amount to be included in 10 year Forecast</i>
JAM12J-12K	James Street	60	15"	BOSS2000	2003	40	2043	28,919	33	1,009	-
JAM12K-12L	James Street	195	15"	BOSS2000	2003	40	2043	9,640	33	336	-
PIN21K-21J	Pine Drive	150	18"	BOSS2000	2005	40	2045	21,689	35	717	-
PIN21J-22I	Pine Drive	200	18"	BOSS2000	2005	40	2045	26,509	35	877	-
KIT9O(1)-9O(2)	Kitchener Avenue	20	16"	BOSS2000	2005	40	2045	29,883	35	988	-
KIT9O(2)-10O	Kitchener Avenue	40	16"	BOSS2000	2005	40	2045	26,509	35	877	-
LAW9O(1)-9O(2)	Lawrence Street	20	16"	BOSS2000	2005	40	2045	28,919	35	957	-
WIN9P(2)-9O(1)	Winnifred Avenue	30	15"	BOSS2000	2005	40	2045	19,279	35	638	-
WIN9P(1)-9P(2)	Winnifred Avenue	25	15"	BOSS2000	2005	40	2045	72,297	35	2,391	-
BOW20I Intersection	Bowes Street	127	12"	BOSS2000	2008	40	2048	114,734	38	3,521	-
GIB11K-11L	Gibson Street	159	12"	CO/BOSS2000	2008	40	2048	32,142	38	986	-
GIB11K-11L	Gibson Street	31	12"	CO	2008	40	2048	6,381	38	196	-
GIB11L-11M	Gibson Street	184	12"	BOSS2000	2008	40	2048	37,217	38	1,142	-
GIB11L-11M	Gibson Street	36	12"	CO	2008	40	2048	7,388	38	227	-
GIB11M-11N	Gibson Street	213	12"	BOSS2000	2008	40	2048	43,138	38	1,324	-
GIB11M-11N	Gibson Street	42	12"	CO	2008	40	2048	8,564	38	263	-
GIB11N-11O	Gibson Street	184	12"	BOSS2000	2008	40	2048	37,217	38	1,142	-
GIB11N-11O	Gibson Street	36	12"	CO	2008	40	2048	7,388	38	227	-
GIB11O-11P	Gibson Street	184	12"	BOSS2000	2008	40	2048	37,217	38	1,142	-
GIB11O-11P	Gibson Street	36	12"	CO	2008	40	2048	7,388	38	227	-
RIE16R-17R	Riverdale Road	35	35"	BOSS2000	2009	40	2049	4,226	39	127	-
RIE15R-16R	Riverdale Road	192	35"	BOSS2000	2009	40	2049	33,810	39	1,013	-
Total		2,199						640,457		20,327	0

APPENDIX C
DETAILED WATER RATE CALCULATIONS

Table 1
Town of Parry Sound
Water Service
Capital Budget Forecast
 Inflated \$

Description	Total	Forecast									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures											
Water Facilities, Vehicles and Equipment	2,663,417	981,000	572,534	155,079	125,910	122,757	125,213	182,243	130,271	132,877	135,534
Watermains	4,339,267	-	644,875	657,773	378,405	529,157	539,740	385,606	393,318	401,184	409,208
Water Valve Boxes	-	-	-	-	-	-	-	-	-	-	-
Water Hydrants	166,101	-	17,028	17,368	17,716	18,070	18,432	18,800	19,176	19,560	19,951
Total Capital Expenditures	7,168,785	981,000	1,234,437	830,220	522,031	669,985	683,384	586,649	542,765	553,621	564,693
Capital Financing											
Provincial/Federal Grants	300,000	300,000									
Development Charges	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	1,034,437	-	1,034,437	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-
Reserves and Reserve Funds	5,834,348	681,000	200,000	830,220	522,031	669,985	683,384	586,649	542,765	553,621	564,693
Total Capital Financing	7,168,785	981,000	1,234,437	830,220	522,031	669,985	683,384	586,649	542,765	553,621	564,693

Table 2
Town of Parry Sound
Water Service
Schedule of Non-Growth Related Debenture Repayments
 Inflated \$

Debenture Year	Principal (Inflated)	Forecast									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011	-										
2012	1,034,437										
2013	-										
2014	-										
2015	-										
2016	-										
2017	-										
2018	-										
2019	-										
2020	-										
Total Annual Debt Charges	1,034,437	-	-	83,006	83,006	83,006	83,006	83,006	83,006	83,006	83,006

Table 3
Town of Parry Sound
Water Service
Water Reserves/ Reserve Funds Continuity
 Inflated \$

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance		1,454,230	1,124,869	1,304,955	866,954	760,750	528,471	307,073	212,623	196,963	208,726
Transfer from Operating		318,876	342,078	366,968	393,669	422,313	453,042	486,006	521,368	559,304	600,000
Transfer to Capital		681,000	200,000	830,220	522,031	669,985	683,384	586,649	542,765	553,621	564,693
Transfer to Operating		-	-	-	-	-	-	-	-	-	-
Closing Balance	1,454,230	1,092,106	1,266,947	841,703	738,592	513,079	298,129	206,430	191,226	202,646	244,033
Interest		32,763	38,008	25,251	22,158	15,392	8,944	6,193	5,737	6,079	7,321

Table 4
Town of Parry Sound
Water Services
Operating Budget Forecast
Inflated \$

Description	Budget 2011	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures										
Operating Costs										
Water Collection System	816,541	832,872	849,529	866,520	883,850	901,527	919,558	937,949	956,708	975,842
Water Treatment PlanT	400,045	408,046	416,207	424,531	433,022	441,682	450,516	459,526	468,716	478,091
Sub Total Operating	1,216,586	1,240,918	1,265,736	1,291,051	1,316,872	1,343,209	1,370,073	1,397,475	1,425,424	1,453,933
Capital-Related										
Existing Debt (Principal) - Non-Growth Related	374,692	371,203	366,492	362,501	358,306	354,849	354,849	354,849	354,849	354,849
Existing Debt (Interest) - Non-Growth Related	184,756	183,036	180,713	178,745	176,676	174,972	174,972	174,972	174,972	174,972
New Non-Growth Related Debt (Principal)	-	-	31,284	32,848	34,491	36,215	38,026	39,927	41,924	44,020
New Non-Growth Related Debt (Interest)	-	-	51,722	50,158	48,515	46,791	44,980	43,079	41,082	38,986
Capital From Current	-	-	-	-	-	-	-	-	-	-
Transfer to Reserves and Reserve Funds	318,876	342,078	366,968	393,669	422,313	453,042	486,006	521,368	559,304	600,000
Sub Total Capital Related	878,324	896,317	997,179	1,017,921	1,040,301	1,065,868	1,098,833	1,134,195	1,172,131	1,212,827
Total Expenditures	2,094,910	2,137,235	2,262,915	2,308,972	2,357,173	2,409,078	2,468,906	2,531,670	2,597,555	2,666,760
Revenues										
Base Charge	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702
McDougall Service Charges	90,462	92,402	98,163	100,274	102,483	104,862	107,605	110,482	113,502	116,674
-	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871	5,871
Fees, Service Charges & Inspections	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,339,035	1,340,975	1,346,736	1,348,847	1,351,056	1,353,435	1,356,178	1,359,055	1,362,074	1,365,247
Water Billing Recovery - Total	755,875	796,260	916,180	960,125	1,006,117	1,055,642	1,112,728	1,172,616	1,235,481	1,301,513

Table 5
Town of Parry Sound
Water Services
Water Rate Forecast
Inflated \$

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TOTAL EXPENDITURES	2,094,910	2,137,235	2,262,915	2,308,972	2,357,173	2,409,078	2,468,906	2,531,670	2,597,555	2,666,760
Operating Revenues										
McDougall Service Charges	90,462	92,402	98,163	100,274	102,483	104,862	107,605	110,482	113,502	116,674
Other Revenues	30,871	30,871	30,871	30,871	30,871	30,871	30,871	30,871	30,871	30,871
TOTAL OPERATING REVENUES	121,333	123,273	129,034	131,145	133,354	135,733	138,476	141,353	144,373	147,545
Rate Recovery										
Base Charge Recovery	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702	1,217,702
Consumptive Rate Recovery	755,875	796,260	916,180	960,125	1,006,117	1,055,642	1,112,728	1,172,616	1,235,481	1,301,513
Total Consumption (gallons)	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167	71,795,167
Constant Rate (\$/1,000 gallons)	10.53	11.09	12.76	13.37	14.01	14.70	15.50	16.33	17.21	18.13
Calculated Annual Res. Flat Rate	588	600	636	649	663	678	695	712	731	751
Current Flat Rates	520	520	520	520	520	520	520	520	520	520

Table 6
Town of Parry Sound
Water Services
Water Rate Forecast
 Inflated \$

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78
Monthly Capital Base Charge	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47
Total Monthly Base Charge	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25	30.25
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	1.41	2.97	3.13	3.60	3.78	3.96	4.15	4.38	4.61	4.86	5.12
Unmetered (5/8" Customer)											
Monthly Base Charge	18.83	11.08	11.36	12.20	12.51	12.83	13.18	13.58	14.00	14.44	14.90
Monthly Capital Base Charge	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47	24.47
Total Monthly Base Charge	43.30	35.55	35.84	36.68	36.99	37.31	37.66	38.06	38.48	38.92	39.38
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43	20.43
Monthly Capital Base Charge	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55
Total Monthly Base Charge	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98	46.98
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	9.27	19.61	20.66	23.77	24.91	26.10	27.39	28.87	30.42	32.05	33.76
Water and Capital (over 100,000 gallons)	6.82	14.43	15.20	17.49	18.33	19.20	20.15	21.24	22.38	23.58	24.84
Unmetered (5/8" Customer)											
Monthly Base Charge	23.51	23.32	23.47	23.93	24.10	24.27	24.46	24.68	24.91	25.15	25.40
Monthly Capital Base Charge	30.60	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55	26.55
Total Monthly Base Charge	54.11	49.87	50.03	50.48	50.65	50.83	51.02	51.23	51.46	51.70	51.96

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MONTHLY BASE CHARGE										
Metered (5/8" Customer)										
Monthly Base Charge	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
Monthly Capital Base Charge	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18	25.18
Total Monthly Base Charge	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93
CONSTANT RATE CALCULATION										
CONSTANT RATE (\$/1,000 gallons)	5.49	5.78	6.65	6.97	7.30	7.66	8.08	8.51	8.97	9.45

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	5.78	5.78	5.90	6.25	6.38	6.51	6.66	6.83	7.00	7.18	7.38
Monthly Capital Base Charge	24.47	24.47	24.98	26.46	27.01	27.58	28.19	28.90	29.64	30.42	31.24
Total Monthly Base Charge	30.25	30.25	30.87	32.71	33.39	34.09	34.85	35.73	36.64	37.61	38.62
Consumptive Charge (\$/1,000 gallons)											
Water and Capital											
	1.41	1.41	1.44	1.52	1.55	1.58	1.62	1.66	1.70	1.75	1.80
Unmetered (5/8" Customer)											
Monthly Base Charge	18.83	18.83	19.21	20.36	20.78	21.22	21.69	22.23	22.81	23.40	24.03
Monthly Capital Base Charge	24.47	24.47	24.98	26.46	27.01	27.58	28.19	28.90	29.64	30.42	31.24
Total Monthly Base Charge	43.30	43.30	44.19	46.82	47.79	48.79	49.88	51.13	52.45	53.83	55.28
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	20.43	20.43	20.85	22.09	22.55	23.02	23.54	24.13	24.75	25.40	26.08
Monthly Capital Base Charge	26.55	26.55	27.10	28.71	29.30	29.92	30.59	31.35	32.16	33.01	33.89
Total Monthly Base Charge	46.98	46.98	47.95	50.80	51.85	52.94	54.12	55.48	56.91	58.40	59.97
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)											
	9.27	9.27	9.46	10.03	10.23	10.45	10.68	10.95	11.23	11.53	11.84
Water and Capital (over 100,000 gallons)											
	6.82	6.82	6.96	7.38	7.53	7.69	7.86	8.06	8.27	8.48	8.71
Unmetered (5/8" Customer)											
Monthly Base Charge	23.51	23.51	23.99	25.42	25.95	26.49	27.08	27.76	28.48	29.23	30.01
Monthly Capital Base Charge	30.60	30.60	31.22	33.08	33.76	34.48	35.24	36.13	37.06	38.03	39.06
Total Monthly Base Charge	54.11	54.11	55.22	58.50	59.71	60.97	62.33	63.89	65.53	67.26	69.07

APPENDIX D
DETAILED WASTEWATER RATE CALCULATIONS

Table 7
Town of Parry Sound
Wastewater Service
Capital Budget Forecast
 Inflated \$

Description	Total	Forecast									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures											
Wastewater Facilities, Vehicles and Equipment	8,379,777	290,000	888,634	850,173	890,162	893,169	1,002,649	996,755	897,686	827,613	842,935
Sanitary Sewers	1,704,882	-	226,057	411,835	305,794	273,324	153,308	83,641	83,641	83,641	83,641
Wastewater Man Holes	-	-	-	-	-	-	-	-	-	-	-
Storm Mains	754,841	-	123,025	80,893	124,710	-	-	-	80,893	-	345,319
Storm Sewer Man Holes & Catchbasins	-	-	-	-	-	-	-	-	-	-	-
Total Capital Expenditures	10,839,500	290,000	1,237,716	1,342,902	1,320,667	1,166,493	1,155,957	1,080,396	1,062,221	911,254	1,271,895
Capital Financing											
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-
Development Charges	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	6,366,351	-	1,037,716	1,142,902	1,120,667	866,493	855,957	780,396	562,221	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-
Reserves and Reserve Funds	4,473,149	290,000	200,000	200,000	200,000	300,000	300,000	300,000	500,000	911,254	1,271,895
Total Capital Financing	10,839,500	290,000	1,237,716	1,342,902	1,320,667	1,166,493	1,155,957	1,080,396	1,062,221	911,254	1,271,895

Table 8
Town of Parry Sound
Wastewater Service
Schedule of Non-Growth Related Debenture Repayments
 Inflated \$

Debtenture Year	Principal (Inflated)	Forecast									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2011	-	-	-	-	-	-	-	-	-	-	-
2012	1,037,716	-	-	83,269	83,269	83,269	83,269	83,269	83,269	83,269	83,269
2013	1,142,902	-	-	-	91,709	91,709	91,709	91,709	91,709	91,709	91,709
2014	1,120,667	-	-	-	-	89,925	89,925	89,925	89,925	89,925	89,925
2015	866,493	-	-	-	-	-	69,530	69,530	69,530	69,530	69,530
2016	855,957	-	-	-	-	-	-	68,684	68,684	68,684	68,684
2017	780,396	-	-	-	-	-	-	-	62,621	62,621	62,621
2018	562,221	-	-	-	-	-	-	-	-	45,114	45,114
2019	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-
Total Annual Debt Charges	6,366,351	-	-	83,269	174,978	264,904	334,433	403,117	465,738	510,852	510,852

Table 9
Town of Parry Sound
Wastewater Service
Wastewater Reserves/ Reserve Funds Continuity
 Inflated \$

Description	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance		527,481	384,966	363,631	382,055	450,860	480,186	586,189	788,859	906,913	747,129
Transfer from Operating		136,272	168,074	207,297	255,673	315,339	388,930	479,694	591,639	729,709	900,000
Transfer to Capital		290,000	200,000	200,000	200,000	300,000	300,000	300,000	500,000	911,254	1,271,895
Transfer to Operating		-	-	-	-	-	-	-	-	-	-
Closing Balance	527,481	373,753	353,039	370,927	437,729	466,200	569,116	765,883	880,498	725,368	375,234
Interest		11,213	10,591	11,128	13,132	13,986	17,073	22,976	26,415	21,761	11,257

Table 10
Town of Parry Sound
Wastewater Services
Operating Budget Forecast
 Inflated \$

Description	Budget 2011	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures										
<u>Operating Costs</u>										
Waterwater Plan, Stations & Collection	1,553,904	1,584,982	1,616,682	1,649,015	1,681,996	1,715,636	1,749,948	1,784,947	1,820,646	1,857,059
Storm Sewers & Catchbasins	57,550	58,701	59,875	61,072	62,293	63,539	64,810	66,106	67,428	68,777
Sub Total Operating	1,611,454	1,643,683	1,676,556	1,710,087	1,744,289	1,779,175	1,814,758	1,851,054	1,888,075	1,925,836
<u>Capital-Related</u>										
Existing Debt (Principal) - Non-Growth Related	168,309	167,039	163,887	160,924	158,792	154,829	154,829	154,829	154,829	154,829
Existing Debt (Interest) - Non-Growth Related	302,990	300,704	295,030	289,695	285,857	278,723	278,723	278,723	278,723	278,723
New Non-Growth Related Debt (Principal)	-	-	31,383	67,517	104,784	136,229	168,926	200,974	228,026	239,427
New Non-Growth Related Debt (Interest)	-	-	51,886	107,462	160,119	198,205	234,191	264,765	282,827	271,426
Capital From Current	-	-	-	-	-	-	-	-	-	-
Transfer to Reserves and Reserve Funds	136,272	168,074	207,297	255,673	315,339	388,930	479,694	591,639	729,709	900,000
Sub Total Capital Related	607,571	635,816	749,483	881,271	1,024,892	1,156,915	1,316,363	1,490,929	1,674,113	1,844,404
Total Expenditures	2,219,025	2,279,499	2,426,039	2,591,358	2,769,181	2,936,090	3,131,121	3,341,983	3,562,188	3,770,240
Revenues										
Base Charge	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996
Fees, Service Charges & Inspections	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496	1,262,496
Wastewater Billing Recovery - Total	956,528	1,017,003	1,163,543	1,328,862	1,506,685	1,673,594	1,868,625	2,079,487	2,299,692	2,507,744

Table 11
Town of Parry Sound
Wastewater Services
Wastewater Rate Forecast
 Inflated \$

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TOTAL EXPENDITURES	2,219,025	2,279,499	2,426,039	2,591,358	2,769,181	2,936,090	3,131,121	3,341,983	3,562,188	3,770,240
<u>Operating Revenues</u>										
Other Revenues	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
TOTAL OPERATING REVENUES	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
<u>Rate Recovery</u>										
Base Charge Recovery	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996	1,259,996
Total Wastewater Billing Recovery	956,528	1,017,003	1,163,543	1,328,862	1,506,685	1,673,594	1,868,625	2,079,487	2,299,692	2,507,744
Total Consumption (gallons)	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642	69,955,642
Constant Rate (\$/1,000 gallons)	13.67	14.54	16.63	19.00	21.54	23.92	26.71	29.73	32.87	35.85
Calculated Annual Res. Flat Rate	650	669	713	764	818	869	929	993	1,061	1,124
Current Flat Rates	600	600	600	600	600	600	600	600	600	600

Table 12
Town of Parry Sound
Wastewater Services
Wastewater Rate Forecast
 Inflated \$

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66
Monthly Capital Base Charge	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14
Total Monthly Base Charge	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80	29.80
Consumptive Charge (\$/1,000 gallons)											
Water and Capital	6.91	10.88	11.57	13.23	15.11	17.14	19.04	21.25	23.65	26.16	28.52
Unmetered (5/8" Customer)											
Monthly Base Charge	27.84	27.05	28.28	31.25	34.60	38.21	41.59	45.55	49.82	54.29	58.50
Monthly Capital Base Charge	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14	22.14
Total Monthly Base Charge	49.97	49.19	50.42	53.39	56.74	60.35	63.73	67.69	71.96	76.42	80.64
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20	30.20
Monthly Capital Base Charge	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02
Total Monthly Base Charge	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22	54.22
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)	10.71	16.87	17.94	20.53	23.44	26.58	29.52	32.96	36.68	40.57	44.24
Water and Capital (over 100,000 gallons)	7.87	12.39	13.18	15.08	17.22	19.52	21.69	24.21	26.95	29.80	32.49
Unmetered (5/8" Customer)											
Monthly Base Charge	34.76	32.69	32.84	33.22	33.65	34.12	34.55	35.06	35.60	36.18	36.72
Monthly Capital Base Charge	27.67	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02	24.02
Total Monthly Base Charge	62.43	56.71	56.86	57.24	57.67	58.14	58.57	59.08	59.62	60.20	60.74

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MONTHLY BASE CHARGE										
Metered (5/8" Customer)										
Monthly Base Charge	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55
Monthly Capital Base Charge	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
Total Monthly Base Charge	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35
CONSTANT RATE CALCULATION										
CONSTANT RATE (\$/1,000 gallons)	7.09	7.54	8.63	9.85	11.17	12.41	13.85	15.42	17.05	18.59

Description	Current	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	7.66	7.66	7.87	8.38	8.95	9.56	10.14	10.81	11.54	12.30	13.02
Monthly Capital Base Charge	22.14	22.14	22.74	24.21	25.86	27.63	29.30	31.25	33.35	35.55	37.63
Total Monthly Base Charge	29.80	29.80	30.61	32.58	34.81	37.20	39.44	42.06	44.90	47.86	50.66
Consumptive Charge (\$/1,000 gallons)											
Water and Capital											
	6.91	6.91	7.10	7.55	8.07	8.62	9.14	9.75	10.41	11.09	11.74
Unmetered (5/8" Customer)											
Monthly Base Charge	27.84	27.84	28.59	30.43	32.51	34.74	36.84	39.29	41.94	44.70	47.32
Monthly Capital Base Charge	22.14	22.14	22.74	24.21	25.86	27.63	29.30	31.25	33.35	35.55	37.63
Total Monthly Base Charge	49.97	49.97	51.34	54.64	58.37	62.38	66.14	70.54	75.29	80.26	84.95
NON-RESIDENTIAL											
Metered (5/8" Customer)											
Monthly Base Charge	30.20	30.20	31.03	33.02	35.28	37.70	39.97	42.63	45.50	48.51	51.34
Monthly Capital Base Charge	24.02	24.02	24.68	26.26	28.05	29.98	31.79	33.90	36.19	38.58	40.83
Total Monthly Base Charge	54.22	54.22	55.70	59.29	63.33	67.68	71.76	76.54	81.69	87.08	92.17
Consumptive Charge (\$/1,000 gallons)											
Water and Capital (up to 100,000 gallons)											
	10.71	10.71	11.00	11.71	12.51	13.37	14.18	15.12	16.14	17.20	18.21
Water and Capital (over 100,000 gallons)											
	7.87	7.87	8.08	8.60	9.19	9.82	10.41	11.11	11.86	12.64	13.38
Unmetered (5/8" Customer)											
Monthly Base Charge	34.76	34.76	35.71	38.01	40.60	43.39	46.01	49.07	52.38	55.83	59.09
Monthly Capital Base Charge	27.67	27.67	28.42	30.25	32.32	34.54	36.62	39.06	41.69	44.44	47.03
Total Monthly Base Charge	62.43	62.43	64.14	68.26	72.92	77.93	82.63	88.12	94.06	100.27	106.13

APPENDIX E
WATER ONTARIO REGULATION 453/07 FINANCIAL PLAN