



City of Greater Sudbury

Financial Plan for Water and
Wastewater Services

Prepared Pursuant to Ontario
Regulation 453/07

Final Report
March 1st, 2011

ADVISORY

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I Introduction

1.1 Provincial reporting requirements

Pursuant to Section 31(1) of the *Safe Drinking Water Act, 2002* (the "SDWA"), Provincial licenses are required for the operation of municipal drinking water systems in Ontario. In obtaining these licenses, the City of Greater Sudbury is required to meet five conditions under Section 44(1) of the SDWA, including the preparation of a financial plan for the water system. The form and content of financial plans for municipal water systems are prescribed under Ontario Regulation 453/07 (the "Regulation"). Under the terms of the Regulation, the City is required to prepare a financial plan that:

- i. Is approved through a Council resolution that indicates that the drinking water system is financially viable
- ii. Extends over a minimum of six years and includes a statement that the financial impacts of the drinking water system have been considered
- iii. For each year of the financial plan, includes details of the proposed or projected financial operations of the system itemized by:
 - Total revenues, further broken down into water rates, user charges and other revenues
 - Total expenses, further broken down into amortization expenses, interest expenses and other expenses
 - Annual surplus or deficit
 - Accumulated surplus or deficit
- iv. Includes details of the proposed or projected financial position of the system, itemized by:
 - Total financial assets
 - Total liabilities
 - Net debt
 - Non-financial assets
 - Changes in tangible capital assets
- v. Details the proposed or projected gross cash receipts and cash payments itemized by:
 - Operating transactions
 - Capital transactions
 - Investing transactions
 - Financing transactions
 - Changes in cash and cash equivalents during the year
 - Cash and cash equivalents at the beginning and end of year

The disclosure requirements prescribed in the Regulation are consistent with the financial statement requirements as outlined in the Public Sector Accounting Handbook of the Canadian Institute of Chartered Accountants, which comprise:

- A statement of operating results
- A statement of financial position
- A statement of cash flows
- A statement of changes in net financial assets

The Regulation requires a six year financial plan for water. However to be consistent with the principle of adopting an integrated approach to financial planning, the financial plan for the City incorporates both water and wastewater services over a ten year period. The development of a combined water and wastewater financial plan over ten years was viewed as preferable given the interrelation of operations and capital planning, the linkage between the wastewater surcharge and water rates, the tradition of viewing rate increases on a combined water and wastewater basis and the correlation to the long term planning time frame that is used by the City.

In connection with its financial plan, the City is also required to ensure an appropriate level of public communication by:

- Making the financial plans available, on request, to members of the public at no charge
- Making the financial plans available to members of the public at no charge through the internet (if the municipality maintains a website)
- Providing notice as deemed appropriate to advise the public of the availability of the financial plans

1.2 Financial plan methodology

In order to assist municipalities with the preparation of financial plans required under the SDWA, the Ministry of the Environment released a document entitled *Toward Financially Sustainable Drinking-Water and Wastewater Systems* (the "Ministry Document") that outlines suggested principles of financial sustainability for water and wastewater systems as well as possible approaches to implementing these principles.

1.2.1 Sustainability principles

As outlined in the Ministry Document, financial sustainability for water and wastewater systems is intended to ensure that residents enjoy safe drinking water that is provided on a reliable basis over the long-term in a manner that maintains environmental protection. The attainment of financial sustainability, which the Ministry Document recognizes does not necessarily need to occur immediately but rather can involve a transition, can be supported by the adoption of the following nine principles that can be used to inform financial plans:

1. Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
2. An integrated approach to planning among water, wastewater and storm water systems is desirable given the inherent relationship among these services.
3. Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
4. Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
5. An asset management plan is a key input to the development of a financial plan.

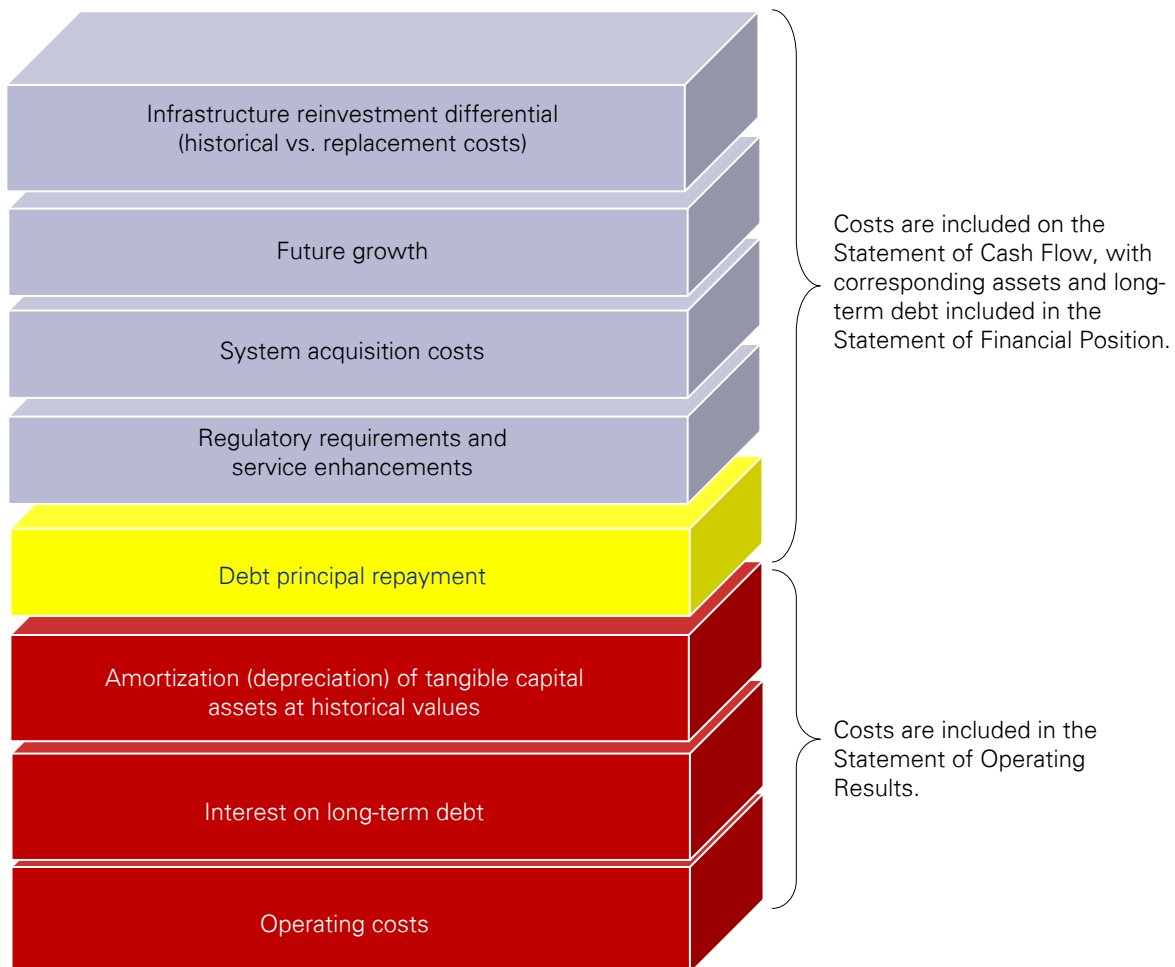
6. A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
7. Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
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.
9. Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff and municipal council.

The financial plan developed by the City embodies each of these principles, as further discussed in Chapter III of this report.

1.2.2 Approach to the financial plan

In developing the financial plan, the City has adopted the “building-block” approach outlined in the Ministry Document, which considers both the current and anticipated operating and capital funding requirements for water and wastewater services. A graphical depiction of the building-block approach utilized in the development of the City’s plan is provided below.

Figure 1 – Building-block approach to developing the financial plan



1.3 Notice to Reader

The financial plan outlined in this report represents a forecast of the financial performance of the City's water and wastewater services under a series of assumptions that are documented within the plan. The financial plan (which has been prepared for the purposes of meeting regulatory requirements established by the Ministry) does not represent a formal, multi-year budget for water and wastewater services. The approval of operating and capital budgets for water and wastewater services is undertaken as part of the City's overall annual budgeting process. Accordingly, the financial performance outlined in this document is subject to change based on future decisions of Council with respect to operating and capital costs, rate increases, consumption changes and unforeseen revenues and expenses. It is the intention of the City to adjust the financial plan on an annual basis to reflect the most recent budgetary decisions made by Council.

The information contained in this report has been compiled from information provided by the City. We have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of such information. Readers are cautioned that this information may not be appropriate for their purposes.

We reserve the right (but will be under no obligation) to amend this report and advise accordingly in the event that, in our opinion, new material information comes to our attention that may be contrary to or different from that which is set out in this document. Comments in this report should not be interpreted to be legal advice or opinion. The contents of this report reflect our understanding of the facts derived from the examination of documents provided to us.

This report includes or makes reference to future oriented financial information. We have not audited or otherwise reviewed the financial information or supporting assumptions and as such, express no opinion as to the reasonableness of the information provided.

The individuals that prepared this report did so to the best of their knowledge, acting independently and objectively. KPMG LLP's compensation is not contingent on any action or event resulting from the use of this report.

This report, including the attached appendices, must be considered in its entirety by the reader.

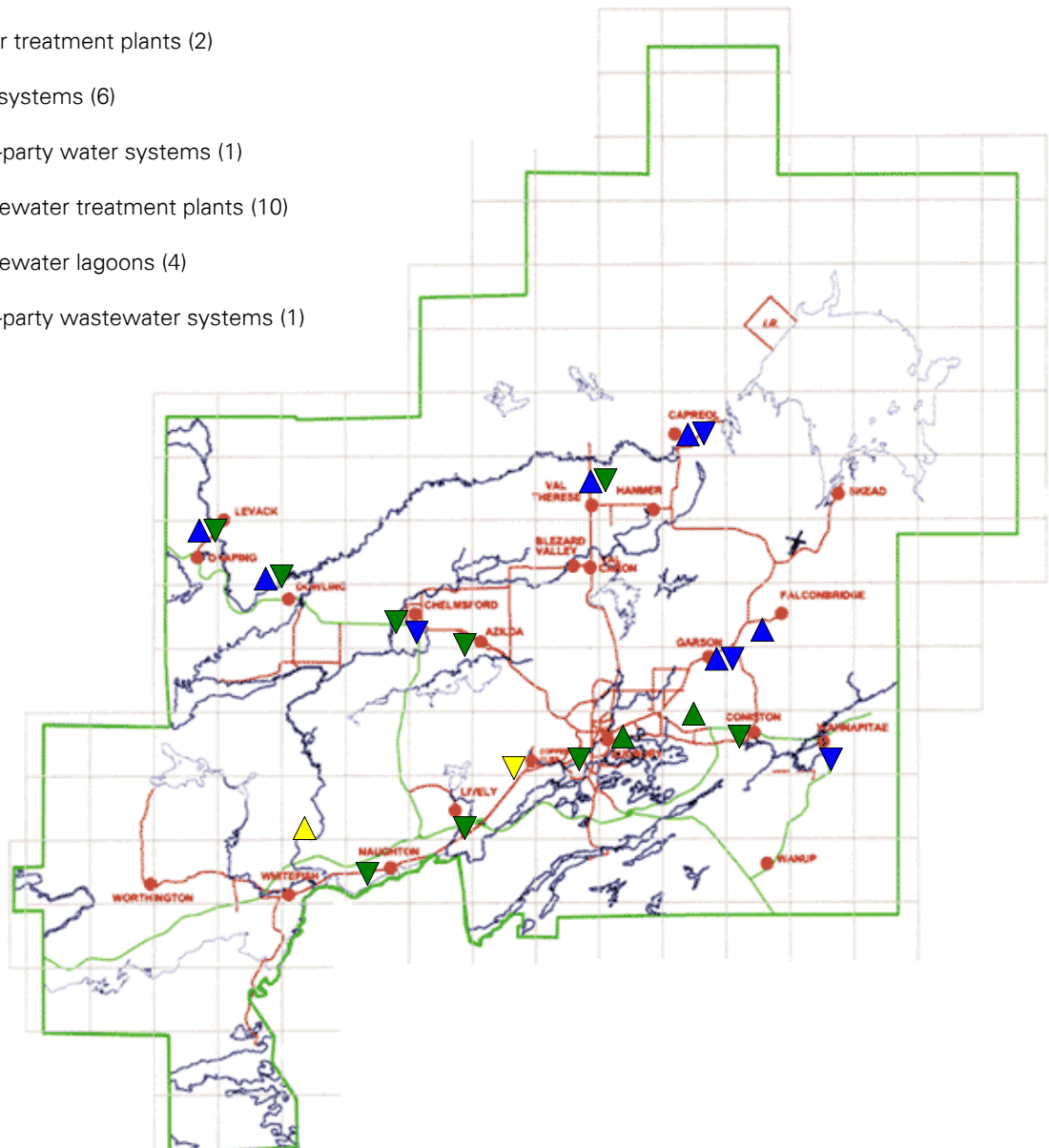
II Overview of the Sudbury Water and Wastewater System

2.1 Infrastructure

Currently, the City operates a total of nine separate water systems and 13 wastewater treatment facilities (plants or lagoons), distributed across Greater Sudbury. The number and distribution of water and wastewater systems (see Figure 2) reflects both the geographical expanse of the City as well as operation of individual community systems prior to the formation of the Regional Municipality of Sudbury in 1972, since which water and wastewater services has been a single-tier service.

Figure 2 - Municipal water and wastewater facilities

- ▲ Water treatment plants (2)
- ▲ Well systems (6)
- ▲ Third-party water systems (1)
- ▼ Wastewater treatment plants (10)
- ▼ Wastewater lagoons (4)
- ▼ Third-party wastewater systems (1)



The City’s water and wastewater infrastructure consists of 2 primary water and 10 wastewater treatment facilities, a distribution network consisting of 1,700 km of water and wastewater mains, 14 booster stations (water), 69 lift stations (wastewater), one water reservoir and eight elevated water storage tanks. The City maintains a significant investment in water and wastewater services, with the replacement value of its infrastructure estimated to be in excess of \$2.3 billion.

Overall, water and wastewater assets are estimated to represent a quarter of the City’s investment in infrastructure.

2.2 Water and wastewater rates

On July 1, 2001, the City adopted a fully user-pay basis for water and wastewater services, whereby the full cost would be funded through user fees except for a percentage of costs that relate to fire protection capacity.

Under the City’s current rate structure, customers are charged a fixed monthly service fee that varies based on the size of the water service as well as a variable consumption charge calculated on a per cubic meter basis, with revenues from the variable charge accounting for approximately two-thirds of user fee revenues. The City’s rate setting process has typically increased the fixed and variable charges by a similar percentage increase. In the absence of meters for wastewater inflows, user fees for wastewater are calculated as a percentage of water rates and as such, incorporate both a fixed and variable component.

As summarized in Figure 3, the variable and fixed component of the City’s water rates for a typical residential customer have increased by a compound annual growth rate of 5.28% and 4.79%, respectively. During the same period, the City’s wastewater rate (expressed as a percentage of water rates) has fluctuated between 112% and 116%.

Figure 3–Residential water and wastewater rates and average monthly costs

Year	Water Rate		Annual Increase		Wastewater Surcharge
	Variable (per m ³)	Fixed (monthly)	Variable Component	Fixed Component	
2005	\$ 0.791	\$11.76			116%
2006	\$ 0.837	\$12.16	5.82%	3.40%	115%
2007	\$ 0.881	\$12.80	5.26%	5.26%	114%
2008	\$ 0.935	\$13.58	6.13%	6.09%	114%
2009	\$ 0.989	\$14.37	5.78%	5.82%	112%
2010	\$ 1.023	\$14.86	3.44%	3.41%	113%

On an annual basis, a residential customer with a monthly consumption of 20 cubic meters (representing the average monthly consumption for residential customers in 2010) would pay \$907.02 for water and wastewater services in 2010 compared to \$714.87 in 2005, representing a compound annual increase of 4.78% (see Figure 4).

Figure 4– Annual water and wastewater costs for typical residential customers

Year	Water Costs			Wastewater Costs	Total	Annual Increase
	Variable	Fixed	Total			
2005	\$189.84	\$141.12	\$330.96	\$383.91	\$714.87	
2006	\$200.88	\$145.92	\$346.80	\$398.82	\$745.62	4.30%
2007	\$211.44	\$153.60	\$365.04	\$416.15	\$781.19	4.77%
2008	\$224.40	\$162.96	\$387.36	\$441.59	\$828.95	6.11%
2009	\$237.36	\$172.44	\$409.80	\$458.98	\$868.78	4.80%
2010	\$245.52	\$178.32	\$423.84	\$478.93	\$902.77	3.90%

2.3 Sustainable capital asset management

With the adoption of a fully user-pay basis for water and wastewater services, City Council also approved a sustainable capital asset management policy (“SCAMP”) whereby funding for capital expenditures would be gradually increased to 2% of the estimated replacement value of water and wastewater assets. This level of funding was considered necessary to support the continuous replacement and rehabilitation of the City’s water and wastewater infrastructure at the end of its useful life (approximately 50 years), thereby allowing the City to address its infrastructure deficit for water and wastewater services¹.

Funding increases under SCAMP commenced in 2002 based on an estimated replacement value \$1.1 billion for water and wastewater assets, with annual capital funding increasing from \$10 million in 2001 to \$21.5 million in 2011. While this increase in capital funding is consistent with the original forecasts under SCAMP, City Council was advised in 2005 that the original funding increases under SCAMP would be insufficient to provide for sustainability due to revisions in the estimated replacement cost of the City’s water and wastewater infrastructure.

With the completion of the implementation of tangible capital asset accounting in 2009, the City has estimated the replacement value of its water and wastewater infrastructure to be in the order of \$2.3 billion, which would require \$46 million in annual capital funding under a sustainable model as compared to the 2011 budgeted capital funding of \$21.5 million. As time progresses, the amount of capital funding required to achieve sustainability will increase as a result of inflation and the expansion of the City’s infrastructure to accommodate growth, reaching \$64 million by 2021.

¹ In determining the level of capital funding required to achieve sustainability, the financial plan considers a number of factors, including the replacement value and useful lives of the City’s water and wastewater assets, the potential impacts of growth and regulatory changes on capital investment requirements, the traditional practice of funding some infrastructure-related operating costs through capital envelopes and the potential for grant revenues to offset some portion of capital expenditures. After consideration of these items, the calculated financial requirement for sustainability in the financial plan is consistent with the level of capital expenditure considered under SCAMP – 2% of the replacement value of tangible capital assets.

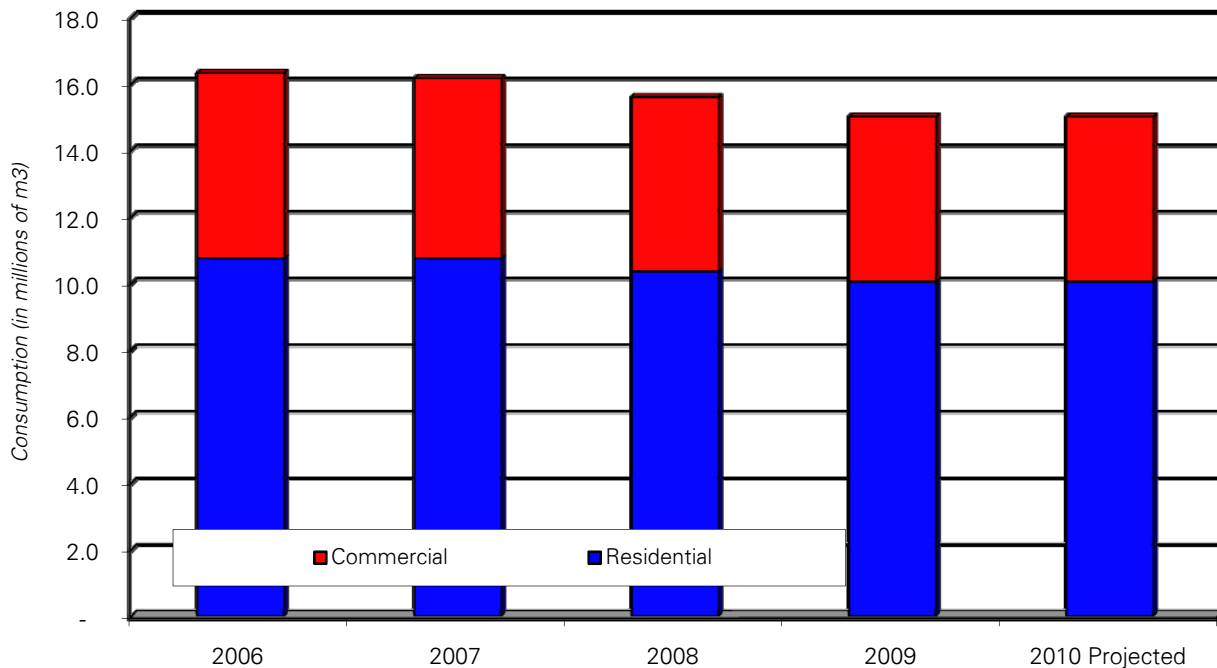
III Key Financial Plan Assumptions

The preparation of a 10-year financial plan for water and wastewater services necessarily requires the use of assumptions concerning future events. In this chapter, we have highlighted the key assumptions that have formed the basis of the forecasted financial performance of the City's water and wastewater services.

3.1 Consolidated financial plan - Water consumption

Since 2006, the City has experienced an 8% decrease in water consumption volumes, with commercial consumption decreasing at a faster rate (11%) than residential consumption (7%) (see Figure 5). Overall, residential customers account for two-thirds of water consumption in Greater Sudbury.

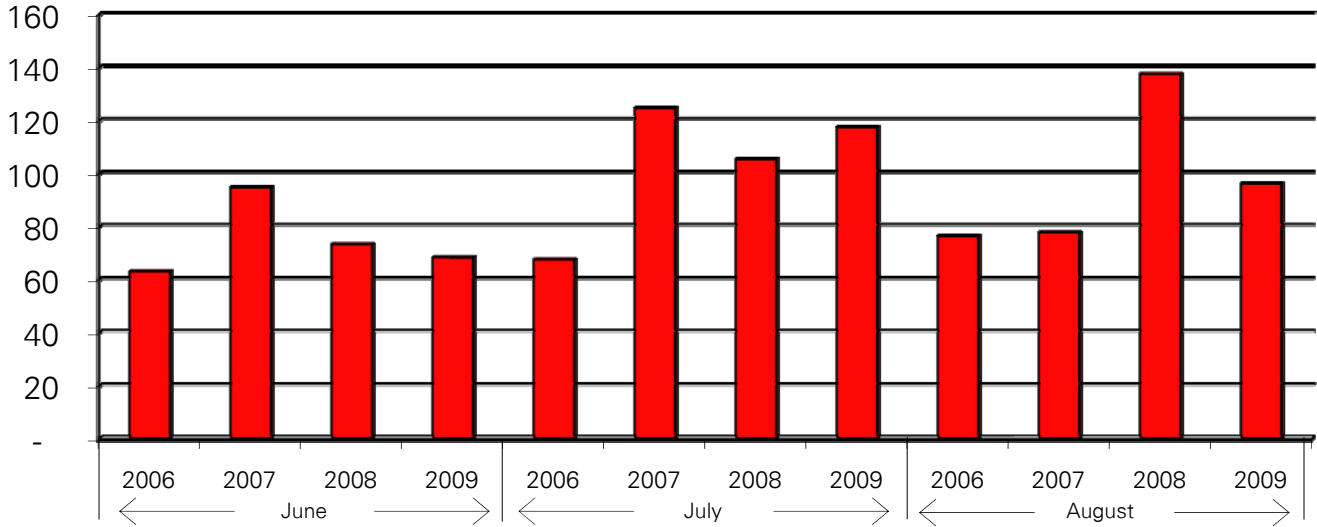
Figure 5 – Water consumption levels



The decrease in water consumption likely reflects a combination of factors, including:

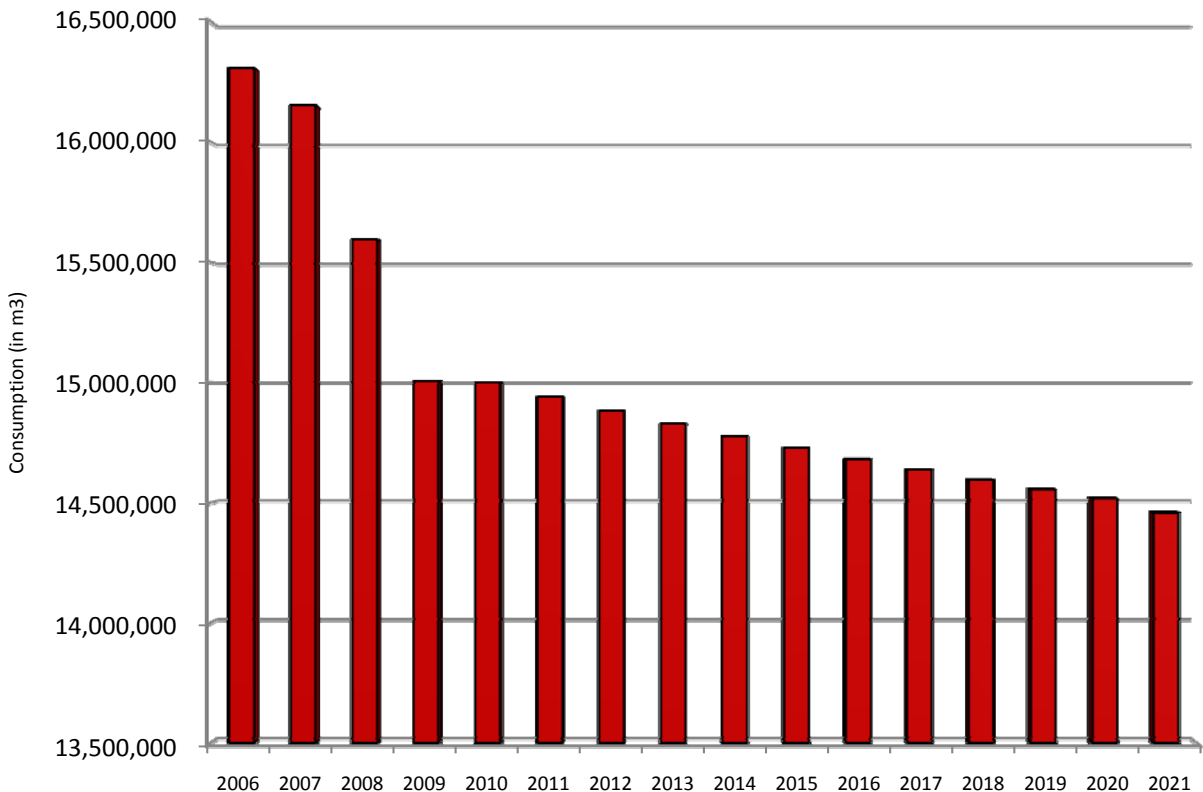
- price elasticity (i.e. reduced consumption in response to higher water rates)
- continued focus on conservation, including the increased use of water saving technologies (e.g. low flow showerheads, low flush toilets)
- incidences of water meter tampering which would artificially understate the amount of water actually consumed by residents and commercial customers
- increased levels of rainfall during summer months (see Figure 6 on the following page), which would reduce water demand associated with lawn watering

Figure 6– Monthly rainfall levels (in mm)



The 2011 budget and financial plan assume that this historical declining trend in water consumption will continue during the projection period, although at a decreasing rate as opportunities for conservation are fully realized and the City increases the level of its meter inspection and enforcement activities. The projected water consumption levels considered in the financial plan are calculated on a monthly basis with consideration given to the historical trend in decreasing consumption (see Figure 7). Overall, the financial plan considers a decrease in consumption of 2.9% from 2012 to 2021.

Figure 7 – Forecasted monthly and annual water consumption levels (2006 to 2021)



3.2 Capital funding

The financial plan phases increases in capital funding over a ten year planning period to a level sufficient to provide for:

- Sustainable reinvestment in the City’s water and wastewater infrastructure
- Anticipated growth in the City’s water and wastewater systems
- A provision for future capital needs arising from regulatory changes or unavoidable service level enhancements

Overall, funding for infrastructure requirements should increase from the 2011 budgeted level of \$21.5 million to \$64 million in 2021, at which point capital expenditures will approximate 2% of the projected replacement value of the City’s water and wastewater assets (see Figure 8). This increase will allow the City to realize its objectives under SCAMP and reducing its replacement cycle (i.e. the number of years required to fully replace its infrastructure) from the current 110 years to 53 years.

Figure 8 – Projected replacement value of water and wastewater infrastructure and annual capital funding (in millions)

Year	Replacement Value of Capital Assets			Forecasted Capital Funding	Funding Percentage	Replacement Cycle (in years)
	Water	Wastewater	Total			
2011	\$1,056	\$1,372	\$2,428	\$22	0.9%	110
2012	\$1,097	\$1,460	\$2,557	\$24	0.9%	106
2013	\$1,135	\$1,507	\$2,642	\$28	1.1%	94
2014	\$1,173	\$1,556	\$2,729	\$32	1.2%	85
2015	\$1,213	\$1,606	\$2,819	\$37	1.3%	76
2016	\$1,253	\$1,657	\$2,910	\$39	1.3%	74
2017	\$1,295	\$1,710	\$3,005	\$43	1.4%	69
2018	\$1,338	\$1,765	\$3,103	\$48	1.5%	64
2019	\$1,382	\$1,821	\$3,203	\$53	1.7%	60
2020	\$1,427	\$1,879	\$3,306	\$59	1.8%	56
2021	\$1,474	\$1,938	\$3,412	\$64	2.0%	53

The replacement values of the water and wastewater assets at December 31, 2009 were taken from the Tangible Capital Asset accounting records and are inflated by 3% each year over the projection period.

The significant increase in capital spending required to achieve sustainability reflects in large part the current infrastructure deficit facing the City and the magnitude of change required to close the gap between infrastructure requirements and available funding.

Achieving a reduction in the length of time to replace water and wastewater assets will require a higher level of annual capital funding for wastewater (\$35.7 million) than water (\$28.7 million) due to the higher replacement value of wastewater infrastructure (see Figure 9).

Figure 9 – Comparison of water and wastewater infrastructure replacement costs (2010)

Asset Category	Replacement Value of Water Assets	Average Estimated Useful Life (years)	Replacement Value of Wastewater Assets	Average Estimated Useful Life
Land	\$2.5 million	Infinite	\$4.2 million	Infinite
Vehicles	\$0.4 million	10	\$3.2 million	7
Machinery and equipment	\$15.1 million	18 - 25	\$1.5 million	12
Plants and facilities	\$130.1 million	20 - 40	\$461.4 million	28
Mains	\$872.5 million	60	\$859.1 million	80
Total replacement value	\$1,020.6 million	49	\$1,329.4 million	48

3.3 Capital expenditures and reserve funds

The City is currently in the process of developing a master plan for water and wastewater services that will identify and quantify infrastructure requirements over the mid to long term. Until such time as the master plan is completed, the quantification of forecasted capital investments based on specific projects for the ten year projection period is speculative and possibly subject to material fluctuation. Future updates of the financial plan will reflect projected capital expenditures identified upon completion of the master plan for water and wastewater services, as well as master plan updates that will occur every five years.

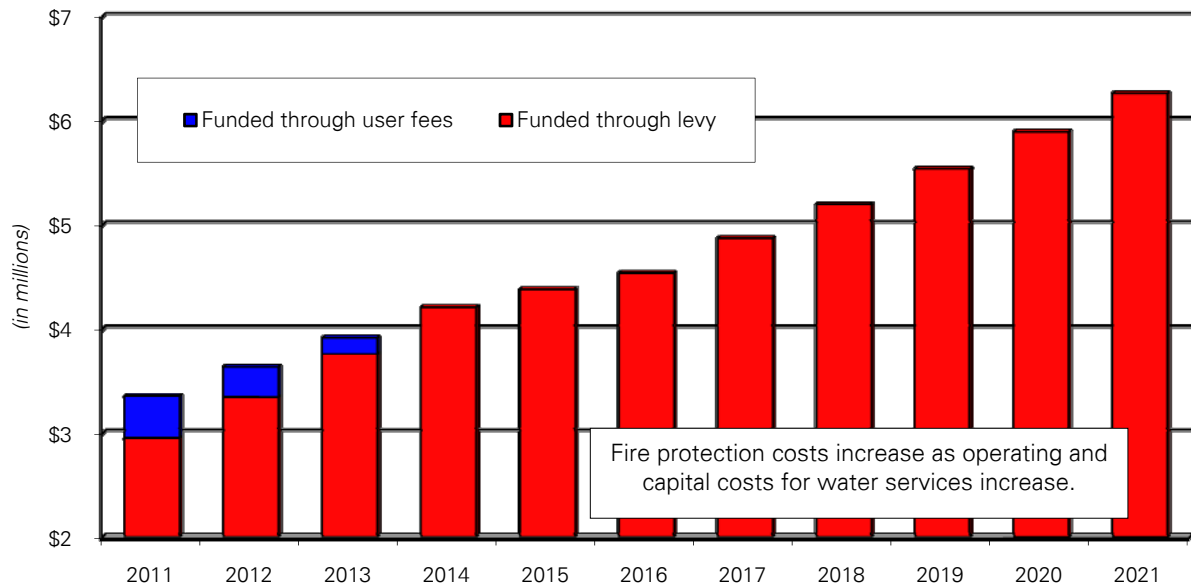
Included in the projected capital expenditures is an estimate of \$40 million for the construction of a biosolids facility as well as related net operating expenses of \$1,000,000 commencing in 2013. The projection includes an estimate of government grants and debt financing for the biosolids facility, as well as the allocation of \$2 million of Federal Gas Tax revenues for wastewater capital financing over the next ten years.

The financial plan assumes that all funds for capital projects raised through user fees and grants will be expended by the City in the year that they are collected. Based on this assumption, the financial plan does not consider an accumulation of capital funding in reserves or reserve funds, although in reality reserves will be accumulated as projects are prefunded under the City’s pay-as-you-go strategy.

3.4 Funding for fire protection costs

The financial plan reflects the continuation of the City’s current practice of funding a portion of water costs relating to fire protection capacity and activities through the municipal levy as opposed to user fees². Typical of municipal water system design, the City’s water system has extra capacity that allows for increased water flows for firefighting purposes and this capacity has a cost in terms of oversized infrastructure (water mains, pumps, storage tanks) and higher operating expenses. The cost of this capacity during 2011 has been calculated at \$3.4 million, of which \$2.9 million is funded through the municipal levy. Given the City’s policy that fire protection costs be funded through the municipal levy as opposed to user fees, the financial plan reflects a three-year phase-in period, at the end of which the City will be funding the full cost of fire protection capacity through the municipal levy (see Figure 10).

Figure 10 – Funding for fire protection capacity costs



3.5 Operating cost increases

Planned operating costs are based on the 2011 budget with provisions for future inflationary increases. Additional costs associated with new requirements, including source water protection for water services and the operation of the new biosolids facility for wastewater services have been included in the financial plan, both commencing in 2013.

A summary of the inflation rates used in the financial plan is included as Figure 11. Generally, inflation is expected to be 3% per annum for water and wastewater costs, with the exception of:

- Energy costs, which are projected to increase by 5% in 2012 due to the impact of smart metering for electricity

² The concept of a fire protection charge funded through the municipal levy as opposed to water user fees was identified in the Ministry Document and the amount to be funded was calculated in accordance with guidance provided by the American Water Works Association in the document *Manual M1 – Principles of Water Rates, Fees and Charges*.

- Purchased services, which are projected to increase by 5% for water services in 2012 due to changes in meter reading costs

Figure 11 – Projected annual inflation rates for operating costs

	2012	2014 to 2021
Wages and benefits (both)	3%	3%
Operating supplies (both)	3%	3%
Energy (both)	5%	3%
Purchased services (water)	5%	3%
Purchased services (wastewater)	3%	3%
Other expenses	3%	3%

Consistent with the principle of adopting an integrated approach to financial planning, the financial plan for the City incorporates both water and wastewater services, notwithstanding the fact that the requirements under the Regulation relate to water services only. The development of a combined water and wastewater financial plan was viewed as preferable given the interrelation of operations and capital planning, the linkage between the wastewater surcharge and water rates and the tradition of viewing rate increases on a combined water and wastewater basis.

3.6 Contingencies

In addition to the key assumptions noted above, there are a number of other variables that have not been reflected in the financial plan. In the event that these variables materialize, whether in whole or in part, the potential exists for significant impacts (either positive or negative) on the projected financial plan.

Contingencies that were identified but not incorporated into the financial plan due to uncertainty as to quantum or probability of occurrence include:

- The acquisition of third-party water and wastewater systems currently in operation.
- The potential discontinuance of the existing water supply agreement in place between the City and third parties.
- Potential operating savings resulting from the projected increase in capital spending. For example, the frequency and cost of repairing water main breaks may decrease as capital funding increases and reduces the overall age of the water main system.
- Potential operating savings related to on-going process reviews and technology enhancements.
- Senior government grant revenues (including Federal Gas Tax revenue) for operating and/or capital purposes above the level of grant revenue noted in the financial plan.
- Unforeseen capital expenditure projects such as sewer and water extensions and development of cost sharing initiatives that exceed the financial resources identified in this plan.
- New Ministry regulations that would have a significant impact on operating costs in excess of cost increases provided for in the financial plan.

IV Financial Plan Highlights

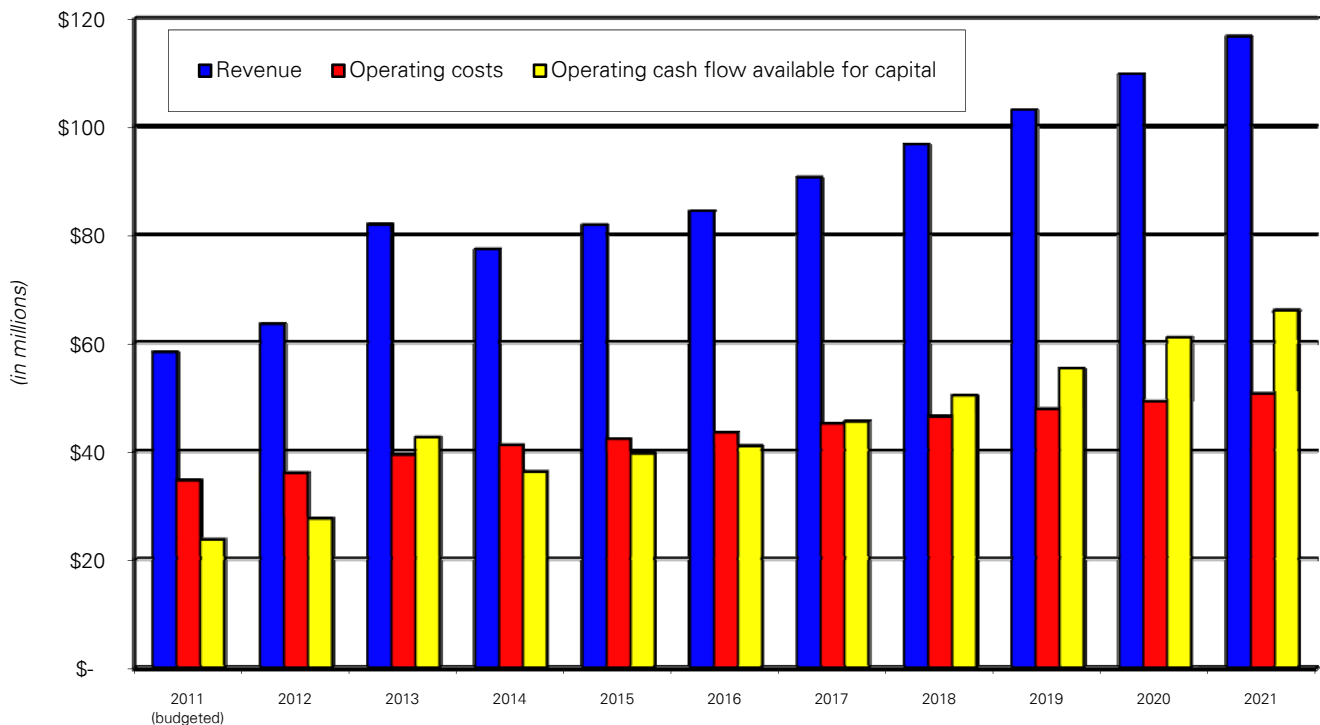
Included as Appendix A is the consolidated financial plan for water and wastewater services, which provides a financial forecast of water and wastewater services from 2012 to 2021, based on the proposed 2011 budget for water and wastewater. The consolidated financial plan is comprised of:

- A consolidated Statement of Projected Operating Results
- A consolidated Statement of Projected Financial Position
- A consolidated Statement of Cash Flow
- A consolidated Statement of Changes in Net Financial Assets
- Explanatory notes outlining key assumptions

Individual plans for water and wastewater services have been included as Appendices B and C respectively.

As noted in the financial plan, total revenues are projected to increase from the budgeted level of \$56 million in 2011 to \$116 million in 2021, providing \$64 million in operating cash flows to support debt servicing obligations and infrastructure renewal (see Figure 12). The level of revenue projected at the end of the forecast period is considered sufficient to attain sustainability for both water and wastewater services.

Figure 12 – Projected revenues, operating costs (excluding amortization) and operating cash flow available for capital



4.1 Projected water and wastewater rates

In order to moderate increases in water and wastewater rates, the financial model reflects a transitional approach to items such as capital reinvestment and fire protection charges whereby changes are phased in over time. However, other factors such as consumption decreases and operating cost elements have not been phased in but rather projected based on the anticipated timing of their occurrence. As a result, the projected water and wastewater rates indicate that without some form of rate smoothing, there will be an initial short-term period of fluctuating annual rate increases, followed by a longer term period of more consistent rate increases (see Figure 13).

To avoid year-over-year variations in water and wastewater rate increases, we recommend that the City average rate increases over the ten year projection period. Based on the analysis in Figure 13, an annual rate increase of 7.4% over ten years would achieve financial sustainability as defined by the assumptions in this financial plan. Should the City adopt this recommendation, some capital spending would need to be deferred until the later part of the ten year projection period.

As indicated in the Introduction, the financial plan (which has been prepared for the purposes of meeting regulatory requirements established by the Ministry) does not represent a formal, multi-year budget for water and wastewater services. The approval of operating and capital budgets for water and wastewater services is undertaken as part of the City's overall annual budgeting process. Accordingly, the financial performance outlined in this document is subject to change based on future decisions of Council with respect to operating and capital costs, rate increases, consumption changes and unforeseen revenues and expenses. It is the intention of the City to update the financial plan on a regular basis to reflect budgetary decisions made by Council.

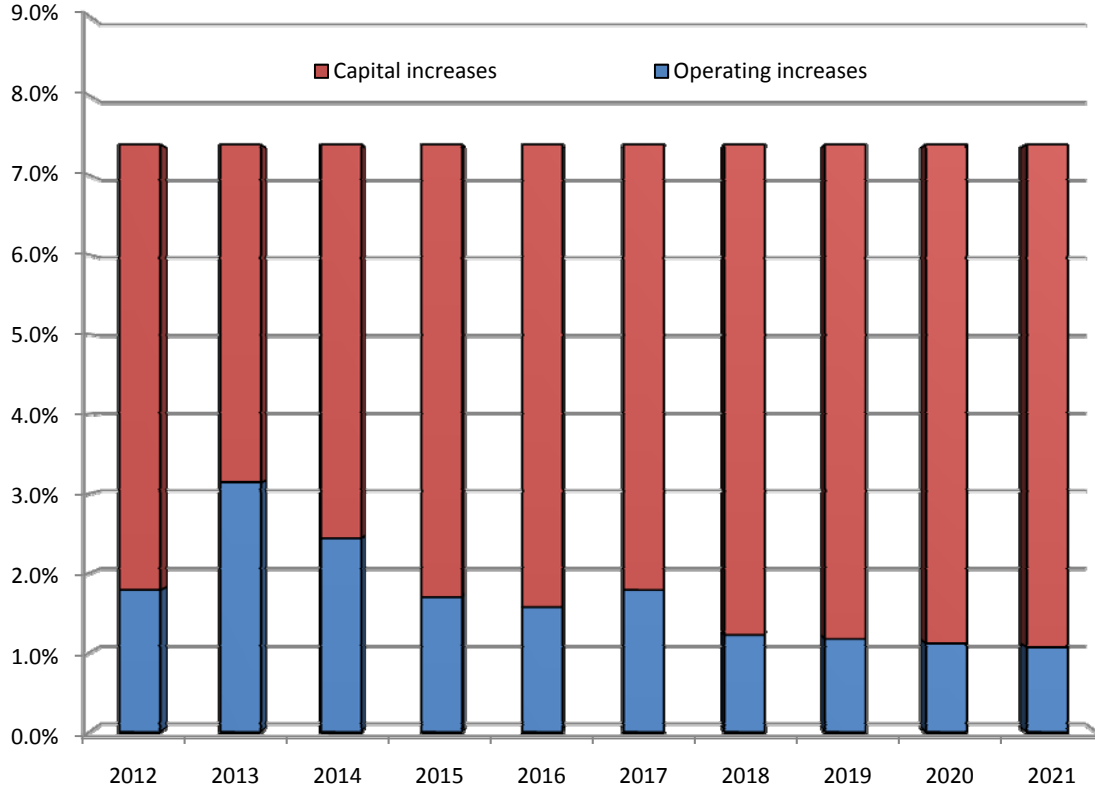
We have summarized in Figure 13 the variable and fixed water rates and the wastewater surcharge as budgeted for 2011 (assuming no rate smoothing), as well as the projected rates for 2012 to 2021. These rates reflect the anticipated total cost of water and wastewater services, other revenue sources and projected levels consumption, as well as the continuation of the City's past policy of escalation fixed and variable water rates by the same percentage increase.

Figure 13 – Residential projected water rates and wastewater surcharge

Year	Water Rates		Wastewater Surcharge	Average Residential Cost (Annual)	Percentage Increase from Prior Year
	Variable (per m ³)	Fixed (monthly)			
2011 (budget)	\$1.08	\$15.63	109%	\$993.73	
2012	\$1.15	\$16.67	112%	\$1,009.20	8.0%
2013	\$1.24	\$17.95	126%	\$1,159.38	14.8%
2014	\$1.33	\$19.30	127%	\$1,250.32	8.0%
2015	\$1.39	\$20.20	131%	\$1,330.56	6.6%
2016	\$1.45	\$21.00	130%	\$1,380.00	3.5%
2017	\$1.56	\$22.60	131%	\$1,491.34	7.9%
2018	\$1.66	\$24.18	131%	\$1,596.12	7.2%
2019	\$1.78	\$25.82	131%	\$1,702.56	7.0%
2020	\$1.89	\$27.54	132%	\$1,824.63	6.9%
2021	\$2.02	\$29.35	132%	\$1,941.84	6.8%
Average annual increase (recommended)					7.4%

As summarized in Figure 14, the majority of the blended increase in water and wastewater costs is due to higher levels of capital funding during the transition period leading to sustainability.

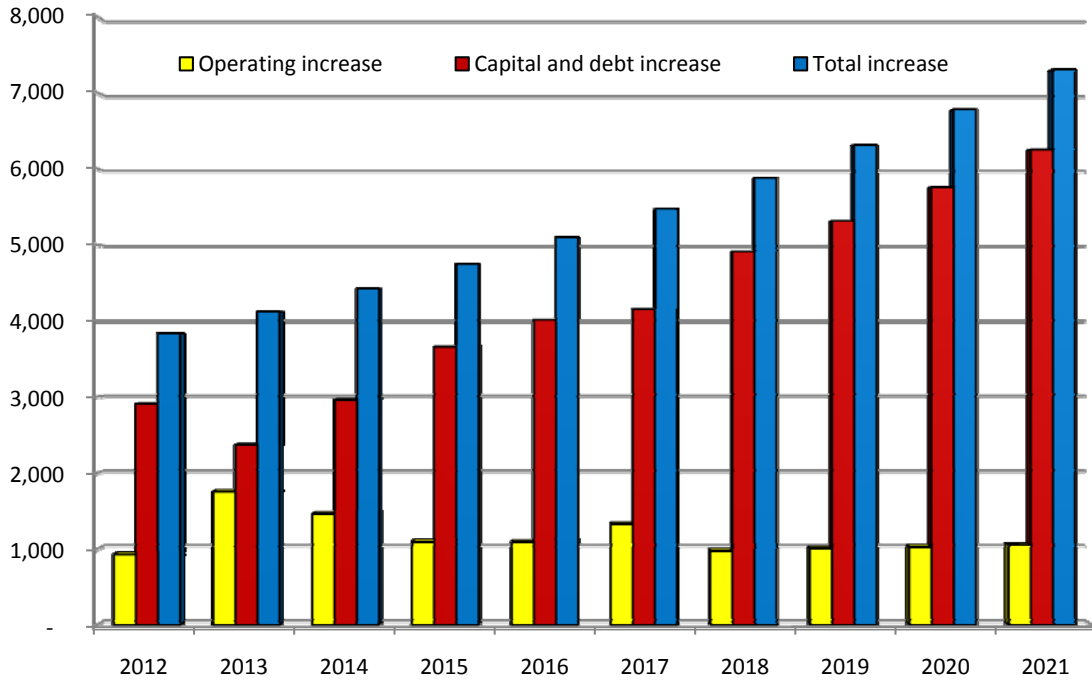
Figure 14 – Components of average residential cost increase (assuming blended rates)



The annual increases in water and wastewater user fees are forecasted to increase over the projection period with the phase-in of capital financing to the level required to achieve sustainability. The major components of the annual water and wastewater user fee increases are presented in Figure 15 and reflect the following:

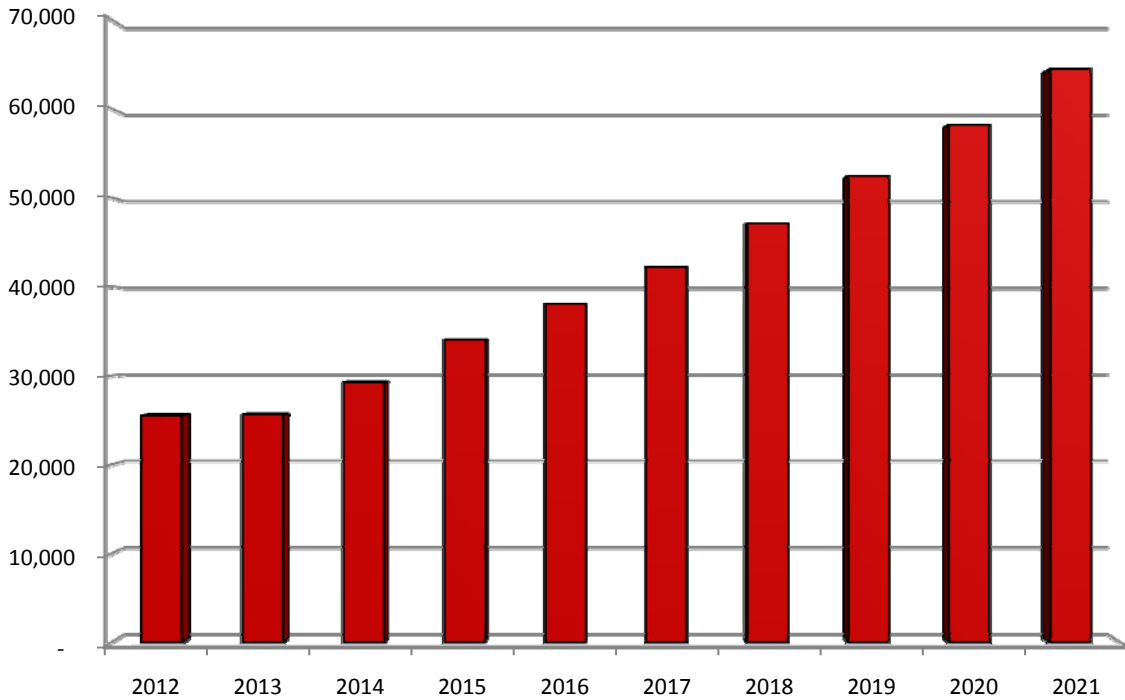
- Increases in wastewater operating costs in 2013 as a result of the commencement of biosolids processing
- Increases in water operating costs in 2014 due to the requirement for source water protection activities
- Increasing levels of infrastructure reinvestment over the projection period

Figure 15 – Annual increases in water and wastewater user fee revenue by component (in thousands)



As summarized in Figure 16, the total amount of capital expenditures (excluding debt servicing) is projected to increase from \$25 million in 2012 to \$64 million in 2021.

Figure 16 – Annual capital funding (excluding debt servicing) assuming rate blending (in thousands)



4.2 Extending the phase-in period for sustainability

A significant factor in the projected increases in water and wastewater rates is the phasing in of increases in capital expenditures. While the financial plans consider a 10 year period over which the increases are introduced, the potential does exist to spread the increases over a longer period, thereby allowing the City to continue towards sustainability while limiting the magnitude of the projected rate increases. Should Council decide to reduce future rate increases by extending the period over which capital spending is increased, the effect on water and wastewater costs is demonstrated in Figure 17.

Figure 17 – Impact on Average Residential Water and Wastewater Costs Assuming Different Phase-in Periods for Capital Increases

Capital Financing Phase-In Period	Average Residential Cost		Average Annual Increase
	2011	2021	
10 years	\$993.73	\$1,941.84	7.4%
15 years	\$993.73	\$1,724.04	6.1%
20 years	\$993.73	\$1,614.24	5.4%

We do not recommend that Council selected a longer period for the phasing in of capital financing due to the impact that this deferral will have on water and wastewater infrastructure, including the potential for higher costs arising from infrastructure in need of replacement and service impacts on water and wastewater customers.

4.3 Comparison to other municipalities

In the past, the City has undertaken a comparison of its water and wastewater rates against other Ontario municipalities for the purposes of assessing the reasonableness of proposed rate increases. While the preparation of financial plans for water and wastewater services would appear to afford the opportunity for a detailed comparison of the City’s operations from a financial perspective, the ability to undertake this type of analysis is limited by a number of factors:

- Municipalities are in different stages with respect to their financial plans, with the timing for completion depending on their specific licensing situation. As a result, certain municipalities have not yet been required to commence work on their financial plans.
- The Ministry has encouraged, but not required, the preparation of financial plans for wastewater services. As a result, some municipalities have limited their planning to water services only.
- The Ministry disclosure requirements are relatively high level and as such, municipalities are not required to provide detailed information concerning water and wastewater rates, consumption levels or operating cost categories.
- Certain municipalities have limited their financial plans to the six year minimum established by the Ministry as opposed to the 10 year projection period adopted by the City. As such, projected rate information beyond 2015 is not available for all municipalities.
- The financial plans for municipalities with high rates of population growth do not form reasonable comparisons given significant increases in consumption and capital investment, both of which impact on revenues, rates and operating costs.

In light of these factors, the comparison of the City’s financial plan is limited to:

- Water operations only as wastewater financial plans are not required by the Ministry

- Municipalities that have relatively low rates of projected population increases
- An analysis of the projected increase in water user fee revenue from 2010 to 2015, representing the minimum planning time frame required by the Ministry. An analysis of water user fee revenue, as opposed to water rates, was undertaken as municipalities are not required to disclose projected water rates.

As noted in Figure 18, the City is projecting an average annual increase in total water user fee revenue of 6.7% from 2010 to 2015, compared to other municipalities which are forecasting increases of 6.9% to 9.9%.

Figure 18 – Comparison of water user fee revenue increases as outlined in financial plans (in thousands)

Community	Projected User Fee Revenue		2010-2015 Change		
	2010	2015	Amount	Total	Annual
Kingston	\$16,102	\$24,058	\$7,956	49.41%	9.9%
Thunder Bay	\$20,910	\$29,430	\$8,520	40.75%	8.1%
Guelph	\$17,363	\$24,138	\$6,775	39.02%	7.8%
Ottawa	\$117,188	\$160,561	\$43,373	37.01%	7.4%
London	\$55,451	\$74,463	\$19,012	34.29%	6.9%
Greater Sudbury	\$24,495	\$32,691	\$8,196	33.46%	6.7%

4.4 Congruence with sustainability principles

At the onset of the financial plan, the nine sustainability principles developed by the Ministry were outlined. Figure 19 (see next page) provides an indication as to the degree of congruence between the City’s financial plan and the guidance provided by the Ministry.

Figure 19 – Congruence with suggested sustainability principles

Principle	How Addressed	Conclusion
1. Public engagement and transparency	<ul style="list-style-type: none"> ▪ Financial plan will be presented at public council meeting ▪ Public access to financial plan will be provided consistent with the Regulation 	Achieved
2. Integrated approach to planning	<ul style="list-style-type: none"> ▪ Financial plan extends beyond water services and includes wastewater services 	Achieved
3. Revenues should be used to meet water and wastewater needs	<ul style="list-style-type: none"> ▪ Financial model is full user pay with no excess cash flow 	Achieved
4. Life cycle planning with mid-course corrections is preferable	<ul style="list-style-type: none"> ▪ Planning is a long-term forecast based on the useful life of infrastructure assets 	Achieved
5. Asset management plan is a key input	<ul style="list-style-type: none"> ▪ The City is commencing asset management planning with consideration given to the useful life of assets 	Achieved
6. Sustainable level of revenue considers operating and capital requirements	<ul style="list-style-type: none"> ▪ Revenue is sufficient to fund all operating costs as well as ongoing capital asset replacement, growth and regulatory changes 	Achieved
7. Users pay for services they receive	<ul style="list-style-type: none"> ▪ No subsidization of water and wastewater services by non-users 	Achieved
8. Financial plans are living documents	<ul style="list-style-type: none"> ▪ City intends to regularly update the financial plan 	Achieved
9. Financial plans benefit from close collaboration	<ul style="list-style-type: none"> ▪ Preparation included involvement from infrastructure and finance groups, as well as external advisors 	Achieved



Appendix A

Consolidated Water
and Wastewater
Financial Plan

CITY OF GREATER SUDBURY
Water and Wastewater Operations

Rate Blending Analysis (in thousands)
For the Years Ending December 31

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial requirement:										
Operating - water	\$ 18,934	19,516	20,867	21,513	22,162	23,040	23,762	24,508	25,275	26,066
Operating - wastewater	16,610	18,187	18,751	19,332	19,912	20,775	21,435	22,117	22,819	23,541
Debt servicing - water	2,186	2,186	1,500	354	354	354	354	354	354	354
Debt servicing - wastewater	-	2,269	2,269	2,269	2,269	2,269	2,269	2,269	2,269	2,269
Biosolids acquisition	-	40,000	-	-	-	-	-	-	-	-
Debt financing - water	-	-	-	-	-	-	-	-	-	-
Debt financing - wastewater	-	(30,000)	-	-	-	-	-	-	-	-
Capital - water	10,927	12,764	14,691	16,711	17,439	19,491	21,641	23,895	26,253	28,713
Capital - wastewater	14,837	16,990	19,258	21,646	22,249	24,681	27,240	29,926	32,751	35,718
	63,494	81,912	77,336	81,825	84,385	90,610	96,701	103,069	109,721	116,661
Revenue:										
Non-user fee revenue - water	(4,890)	(5,297)	(5,752)	(5,887)	(6,030)	(6,447)	(6,857)	(7,283)	(7,729)	(8,191)
Non-user fee revenue - wastewater	(2,539)	(12,539)	(2,539)	(2,539)	(2,539)	(2,539)	(2,539)	(2,539)	(2,539)	(2,539)
	(7,429)	(17,836)	(8,291)	(8,426)	(8,569)	(8,986)	(9,396)	(9,822)	(10,268)	(10,730)
Net financial requirement before rate smoothing	56,065	64,076	69,045	73,399	75,816	81,624	87,305	93,247	99,453	105,931
Prior year's user fee revenue	51,962	55,797	59,915	64,337	69,085	74,183	79,658	85,537	91,850	98,629
Projected increase	7.38%	7.38%	7.38%	7.38%	7.38%	7.38%	7.38%	7.38%	7.38%	7.38%
Projected user fee revenue	55,797	59,915	64,337	69,085	74,183	79,658	85,537	91,850	98,629	105,931
Unfunded (excess) capital requirement	\$ 268	4,161	4,708	4,314	1,633	1,966	1,768	1,397	824	-
Capital expenditure before rate smoothing	\$ 25,764	69,754	33,949	38,357	39,688	44,172	48,881	53,821	59,004	64,431
Differential	(268)	(4,161)	(4,708)	(4,314)	(1,633)	(1,966)	(1,768)	(1,397)	(824)	-
Capital expenditure after rate smoothing	\$ 25,496	65,593	29,241	34,043	38,055	42,206	47,113	52,424	58,180	64,431

CITY OF GREATER SUDBURY

Water and Wastewater Operations

Analysis of Projected Rates

For the Years Ending December 31

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Variable charge (per m3)	\$ 1.08	\$ 1.15	\$ 1.24	\$ 1.33	\$ 1.39	\$ 1.45	\$ 1.56	\$ 1.66	\$ 1.78	\$ 1.89	\$ 2.02
Fixed monthly charge	\$ 15.630	\$ 16.670	\$ 17.950	\$ 19.300	\$ 20.200	\$ 21.000	\$ 22.600	\$ 24.180	\$ 25.820	\$ 27.540	\$ 29.350
Wastewater surcharge	109%	112%	126%	127%	131%	130%	131%	131%	131%	132%	132%
Average monthly cost:											
Water (variable)	\$ 21.52	\$ 22.94	\$ 24.70	\$ 26.56	\$ 27.80	\$ 28.90	\$ 31.10	\$ 33.26	\$ 35.52	\$ 37.88	\$ 40.38
Water (fixed)	15.63	16.67	17.95	19.30	20.20	21.00	22.60	24.18	25.82	27.54	29.35
Wastewater	40.62	44.38	53.73	58.19	62.92	64.86	70.10	75.24	80.60	86.25	92.24
	\$ 77.77	\$ 83.99	\$ 96.38	\$ 104.05	\$ 110.92	\$ 114.76	\$ 123.80	\$ 132.68	\$ 141.94	\$ 151.67	\$ 161.97
Percentage increase:											
Water (variable)		6.6%	7.7%	7.5%	4.7%	4.0%	7.6%	6.9%	6.8%	6.6%	6.6%
Water (fixed)		6.7%	7.7%	7.5%	4.7%	4.0%	7.6%	7.0%	6.8%	6.7%	7.0%
Wastewater		9.3%	21.1%	8.3%	8.1%	3.1%	8.1%	7.3%	7.1%	7.0%	6.9%
Total		8.0%	14.8%	8.0%	6.6%	3.5%	7.9%	7.2%	7.0%	6.9%	6.8%
Components of rate increase (water):											
Consumption changes		0.0%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
Capital costs		5.5%	6.8%	4.3%	2.8%	2.2%	6.0%	5.9%	5.8%	5.7%	5.6%
Operating costs		1.1%	0.6%	3.1%	1.6%	1.5%	1.4%	0.9%	0.8%	0.8%	0.7%
		6.6%	7.7%	7.5%	4.7%	4.0%	7.6%	6.9%	6.8%	6.6%	6.6%
Components of rate increase (wastewater):											
Consumption changes		0.0%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
Capital costs		6.7%	15.3%	6.5%	6.3%	1.5%	5.8%	5.7%	5.5%	5.5%	5.4%
Operating costs		2.5%	5.5%	1.6%	1.5%	1.4%	2.1%	1.5%	1.4%	1.4%	1.3%
		9.3%	21.0%	8.3%	8.1%	3.1%	8.1%	7.3%	7.1%	7.0%	7.0%
Components of rate increase (consolidated):											
Consumption changes		0.0%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
Capital costs		6.1%	11.2%	5.5%	4.7%	1.8%	5.9%	5.8%	5.7%	5.6%	5.5%
Operating costs		1.8%	3.3%	2.3%	1.6%	1.5%	1.8%	1.2%	1.1%	1.1%	1.1%
		8.0%	14.8%	8.0%	6.6%	3.5%	7.9%	7.2%	7.0%	6.9%	6.8%

CITY OF GREATER SUDBURY
Consolidated Water and Wastewater Operations

Statement A

Statement of Projected Operating Results
For the Years Ending December 31
(in thousands)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
						Projected					
Revenues											
Water user fees	25,486	27,157	29,169	31,306	32,691	33,925	36,438	38,900	41,474	44,153	46,942
Wastewater user fees	26,476	28,908	34,907	37,739	40,708	41,891	45,186	48,405	51,773	55,300	58,989
Fire protection levy	2,941	3,339	3,751	4,206	4,378	4,535	4,868	5,194	5,534	5,889	6,258
Other revenues	3,400	4,090	14,085	4,085	4,048	4,034	4,118	4,202	4,288	4,379	4,472
Total revenues	58,303	63,494	81,912	77,336	81,825	84,385	90,610	96,701	103,069	109,721	116,661
Expenses:											
Operating costs	34,146	35,544	37,703	39,618	40,845	42,074	43,815	45,197	46,625	48,094	49,607
Interest on long-term debt	486	405	1,640	1,507	1,401	1,343	1,283	1,220	1,154	1,086	1,026
Amortization of tangible capital assets	15,762	16,471	18,720	19,655	20,599	21,557	22,770	24,108	25,552	27,173	28,946
Total expenses	50,394	52,420	58,063	60,780	62,845	64,974	67,868	70,525	73,331	76,353	79,579
Annual surplus (deficit)	7,909	11,074	23,849	16,556	18,980	19,411	22,742	26,176	29,738	33,368	37,082
Accumulated surplus (deficit), beginning of year	499,500	507,409	518,483	542,332	558,888	577,868	597,279	620,021	646,197	675,935	709,303
Accumulated surplus (deficit), end of year	507,409	518,483	542,332	558,888	577,868	597,279	620,021	646,197	675,935	709,303	746,385
The accumulated surplus is comprised of the following:											
Investment in tangible capital assets	480,901	490,194	541,228	555,522	573,280	591,411	612,813	637,586	665,855	697,686	733,171
Reserve funds and unexpended capital funds	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697
Other net assets	(10,189)	(8,408)	(35,593)	(33,331)	(32,109)	(30,829)	(29,489)	(28,086)	(26,617)	(25,080)	(23,483)
	507,409	518,483	542,332	558,888	577,868	597,279	620,021	646,197	675,935	709,303	746,385

CITY OF GREATER SUDBURY
Consolidated Water and Wastewater Operations

Statement B

Statement of Projected Financial Position
 As at December 31
 (in thousands)

	2011	2012	2013	2014	2015	Projected 2016	2017	2018	2019	2020	2021
Financial Assets											
Cash and short-term investments	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697	36,697
Accounts receivable	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total financial assets	38,697	38,697	38,697	38,697	38,697	38,697	38,697	38,697	38,697	38,697	38,697
Financial Liabilities											
Long-term debt	12,189	10,408	37,593	35,331	34,109	32,829	31,489	30,086	28,617	27,080	25,483
Total financial liabilities	12,189	10,408	37,593	35,331	34,109	32,829	31,489	30,086	28,617	27,080	25,483
Net financial assets	26,508	28,289	1,104	3,366	4,588	5,868	7,208	8,611	10,080	11,617	13,214
Non-Financial Assets											
Tangible capital assets	480,901	490,194	541,228	555,522	573,280	591,411	612,813	637,586	665,855	697,686	733,171
Total non-financial assets	480,901	490,194	541,228	555,522	573,280	591,411	612,813	637,586	665,855	697,686	733,171
Accumulated surplus (deficit)	507,409	518,483	542,332	558,888	577,868	597,279	620,021	646,197	675,935	709,303	746,385

CITY OF GREATER SUDBURY
Consolidated Water and Wastewater Operations

Statement D

Statement of Projected Changes in Net Financial Assets
For the Years Ending December 31

	2011	2012	2013	2014	2015	Projected 2016	2017	2018	2019	2020	2021
Annual surplus (deficit)	\$ 7,909	11,074	23,849	16,556	18,980	19,411	22,742	26,176	29,738	33,368	37,082
Acquisition of tangible capital assets	(21,971)	(25,764)	(69,754)	(33,949)	(38,357)	(39,688)	(44,172)	(48,881)	(53,821)	(59,004)	(64,431)
Amortization of tangible capital assets	15,762	16,471	18,720	19,655	20,599	21,557	22,770	24,108	25,552	27,173	28,946
	(6,209)	(9,293)	(51,034)	(14,294)	(17,758)	(18,131)	(21,402)	(24,773)	(28,269)	(31,831)	(35,485)
Change in net financial assets	1,700	1,781	(27,185)	2,262	1,222	1,280	1,340	1,403	1,469	1,537	1,597
Net financial assets (net debt), beginning of year	24,808	26,508	28,289	1,104	3,366	4,588	5,868	7,208	8,611	10,080	11,617
Net financial assets (net debt), end of year	\$ 26,508	28,289	1,104	3,366	4,588	5,868	7,208	8,611	10,080	11,617	13,214



Appendix B

Financial Plan
Water Services

CITY OF GREATER SUBBURY

Water Operations

Statement A

Statement of Projected Operating Results
For the Years Ending December 31
(in thousands)

	2011	2012	2013	2014	2015	Projected		2017	2018	2019	2020	2021
						2016						
Revenues												
Fixed monthly service charges	\$ 9,457	10,084	10,858	11,679	12,223	12,709	13,677	14,629	15,624	16,661	17,757	
Variable consumption charges	16,029	17,073	18,311	19,627	20,468	21,216	22,761	24,271	25,850	27,492	29,185	
Fire protection levy	2,941	3,339	3,751	4,206	4,378	4,535	4,868	5,194	5,534	5,889	6,258	
Other revenues	1,125	1,551	1,546	1,546	1,509	1,495	1,579	1,663	1,749	1,840	1,933	
Total revenues	29,552	32,047	34,466	37,058	38,578	39,955	42,885	45,757	48,757	51,882	55,133	
Expenses:												
Operating expenses	18,188	18,934	19,516	20,867	21,513	22,162	23,040	23,762	24,508	25,275	26,066	
Interest on long-term debt	486	405	322	232	171	161	150	139	127	115	115	
Amortization of tangible capital assets	6,768	7,051	7,385	7,768	8,202	8,658	9,165	9,722	10,308	10,991	11,739	
Total expenses	25,442	26,390	27,223	28,867	29,886	30,981	32,355	33,623	34,943	36,381	37,920	
Annual surplus (deficit)	4,110	5,657	7,243	8,191	8,692	8,974	10,530	12,134	13,814	15,501	17,213	
Accumulated surplus (deficit), beginning of year	218,970	223,080	228,737	235,980	244,171	252,863	261,837	272,367	284,501	298,315	313,816	
Accumulated surplus (deficit), end of year	\$ 223,080	228,737	235,980	244,171	252,863	261,837	272,367	284,501	298,315	313,816	331,029	
The accumulated surplus is comprised of the following:												
Investment in tangible capital assets	\$ 219,562	223,438	228,817	235,740	244,249	253,030	263,356	275,275	288,862	304,124	321,098	
Reserve funds and unexpended capital funds	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	
Other net assets	(11,189)	(9,408)	(7,544)	(6,276)	(6,093)	(5,900)	(5,696)	(5,481)	(5,254)	(5,015)	(4,776)	
	\$ 223,080	228,737	235,980	244,171	252,863	261,837	272,367	284,501	298,315	313,816	331,029	

CITY OF GREATER SUDBURY
Water Operations

Statement B

Statement of Projected Financial Position
As at December 31
(in thousands)

	2011	2012	2013	2014	2015	Projected 2016	2017	2018	2019	2020	2021
Financial Assets											
Cash and short-term investments	\$ 14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707	14,707
Accounts receivable	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total financial assets	15,707	15,707	15,707	15,707	15,707	15,707	15,707	15,707	15,707	15,707	15,707
Financial Liabilities											
Long-term debt	12,189	10,408	8,544	7,276	7,093	6,900	6,696	6,481	6,254	6,015	5,776
Total financial liabilities	12,189	10,408	8,544	7,276	7,093	6,900	6,696	6,481	6,254	6,015	5,776
Net financial assets	3,518	5,299	7,163	8,431	8,614	8,807	9,011	9,226	9,453	9,692	9,931
Non-Financial Assets											
Tangible capital assets	219,562	223,438	228,817	235,740	244,249	253,030	263,356	275,275	288,862	304,124	321,098
Total non-financial assets	219,562	223,438	228,817	235,740	244,249	253,030	263,356	275,275	288,862	304,124	321,098
Accumulated surplus (deficit)	\$ 223,080	228,737	235,980	244,171	252,863	261,837	272,367	284,501	298,315	313,816	331,029

CITY OF GREATER SUDBURY
Water Operations

Statement D

Statement of Projected Changes in Net Financial Assets
For the Years Ending December 31

	2011	2012	2013	2014	2015	Projected 2016	2017	2018	2019	2020	2021
Annual surplus (deficit)	\$ 4,110	5,657	7,243	8,191	8,692	8,974	10,530	12,134	13,814	15,501	17,213
Acquisition of tangible capital assets	(9,178)	(10,927)	(12,764)	(14,691)	(16,711)	(17,439)	(19,491)	(21,641)	(23,895)	(26,253)	(28,713)
Amortization of tangible capital assets	6,768	7,051	7,385	7,768	8,202	8,658	9,165	9,722	10,308	10,991	11,739
	(2,410)	(3,876)	(5,379)	(6,923)	(8,509)	(8,781)	(10,326)	(11,919)	(13,587)	(15,262)	(16,974)
Change in net financial assets	1,700	1,781	1,864	1,268	183	193	204	215	227	239	239
Net financial assets (net debt), beginning of year	1,818	3,518	5,299	7,163	8,431	8,614	8,807	9,011	9,226	9,453	9,692
Net financial assets (net debt), end of year	\$ 3,518	5,299	7,163	8,431	8,614	8,807	9,011	9,226	9,453	9,692	9,931



Appendix C

Financial Plan
Wastewater Services

CITY OF GREATER SUDBURY
Wastewater Operations

Statement A

Statement of Projected Operating Results
For the Years Ending December 31
(in thousands)

	2011	2012	2013	2014	2015	Projected		2017	2018	2019	2020	2021
						2016						
Revenues												
User fees	\$ 26,476	28,908	34,907	37,739	40,708	41,891	45,186	48,405	51,773	55,300	58,989	
Other revenues	2,275	2,539	12,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	2,539	
Total revenues	28,751	31,447	47,446	40,278	43,247	44,430	47,725	50,944	54,312	57,839	61,528	
Expenses:												
Operating expenses	15,958	16,610	18,187	18,751	19,332	19,912	20,775	21,435	22,117	22,819	23,541	
Interest on long-term debt	-	-	1,318	1,275	1,230	1,182	1,133	1,081	1,027	971	911	
Amortization of tangible capital assets	8,994	9,420	11,335	11,887	12,397	12,899	13,605	14,386	15,244	16,182	17,207	
Total expenses	24,952	26,030	30,840	31,913	32,959	33,993	35,513	36,902	38,388	39,972	41,659	
Annual surplus (deficit)	3,799	5,417	16,606	8,365	10,288	10,437	12,212	14,042	15,924	17,867	19,869	
Accumulated surplus (deficit), beginning of year	280,530	284,329	289,746	306,352	314,717	325,005	335,442	347,654	361,696	377,620	395,487	
Accumulated surplus (deficit), end of year	\$ 284,329	289,746	306,352	314,717	325,005	335,442	347,654	361,696	377,620	395,487	415,356	
The accumulated surplus is comprised of the following:												
Investment in tangible capital assets	\$ 261,339	266,756	312,411	319,782	329,031	338,381	349,457	362,311	376,993	393,562	412,073	
Reserve funds and unexpended capital funds	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	
Other net assets	1,000	1,000	(28,049)	(27,055)	(26,016)	(24,929)	(23,793)	(22,605)	(21,363)	(20,065)	(18,707)	
	\$ 284,329	289,746	306,352	314,717	325,005	335,442	347,654	361,696	377,620	395,487	415,356	

CITY OF GREATER SUDBURY
Wastewater Operations

Statement B

Statement of Projected Financial Position
As at December 31
(in thousands)

	2011	2012	2013	2014	2015	Projected 2016	2017	2018	2019	2020	2021
Financial Assets											
Cash and short-term investments	\$ 21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990	21,990
Accounts receivable	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total financial assets	22,990	22,990	22,990	22,990	22,990	22,990	22,990	22,990	22,990	22,990	22,990
Financial Liabilities											
Long-term debt	-	-	29,049	28,055	27,016	25,929	24,793	23,605	22,363	21,065	19,707
Total financial liabilities	-	-	29,049	28,055	27,016	25,929	24,793	23,605	22,363	21,065	19,707
Net financial assets	22,990	22,990	(6,059)	(5,065)	(4,026)	(2,939)	(1,803)	(615)	627	1,925	3,283
Non-Financial Assets											
Tangible capital assets	261,339	266,756	312,411	319,782	329,031	338,381	349,457	362,311	376,993	393,562	412,073
Total non-financial assets	261,339	266,756	312,411	319,782	329,031	338,381	349,457	362,311	376,993	393,562	412,073
Accumulated surplus (deficit)	\$ 284,329	289,746	306,352	314,717	325,005	335,442	347,654	361,696	377,620	395,487	415,356

CITY OF GREATER SUDBURY
Wastewater Operations

Statement D

Statement of Projected Changes in Net Financial Assets
For the Years Ending December 31

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Annual surplus (deficit)	\$ 3,799	5,417	16,606	8,365	10,288	10,437	12,212	14,042	15,924	17,867	19,869
Acquisition of tangible capital assets	(12,793)	(14,837)	(56,990)	(19,258)	(21,646)	(22,249)	(24,681)	(27,240)	(29,926)	(32,751)	(35,718)
Amortization of tangible capital assets	8,994	9,420	11,335	11,887	12,397	12,899	13,605	14,386	15,244	16,182	17,207
	(3,799)	(5,417)	(45,655)	(7,371)	(9,249)	(9,350)	(11,076)	(12,854)	(14,682)	(16,569)	(18,511)
Change in net financial assets	-	-	(29,049)	994	1,039	1,087	1,136	1,188	1,242	1,298	1,358
Net financial assets (net debt), beginning of year	22,990	22,990	22,990	(6,059)	(5,065)	(4,026)	(2,939)	(1,803)	(615)	627	1,925
Net financial assets (net debt), end of year	\$ 22,990	22,990	(6,059)	(5,065)	(4,026)	(2,939)	(1,803)	(615)	627	1,925	3,283