

**Financial Plan for the
Municipality of Southwest
Middlesex
Drinking Water System**

SUBMITTED BY

Ontario Clean Water Agency
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1 Introduction

The Municipality of Southwest Middlesex (the Municipality) has retained the Ontario Clean Water Agency (OCWA) to develop the Financial Plan for the Southwest Middlesex Distribution System (DS) in order to comply with the Financial Plan regulation (O.Reg. 453/07) made under the Safe Drinking Water Act. The first Financial Plan was developed in 2011 and this is an update to that Financial Plan.

The Financial Plan contained herein has been prepared in accordance with O.Reg. 453/07, as well as the provisions of the financial planning guidelines published by the Ministry of the Environment (MOE), now Ministry of the Environment, Conservation and Parks (MECP), in August 2007 entitled “Toward Financially Sustainable Drinking-Water and Wastewater Systems”.

This Financial Plan was prepared for the Southwest Middlesex DS based on information supplied by the Municipality and operational staff, including future capital and major maintenance projects, water system financial information, as well as tangible capital asset information that the Municipality generated in accordance with the Public Sector Accounting Board (PSAB) standard PS 3150 requirements.

The information supplied by the Municipality was used to generate a financial operating plan that forecasted future annual expenditure requirements from the year 2019 to 2025. A revenue plan, relying mostly on user fees was generated to support the expenditure requirements outlined in the operating plan. The information generated in the operating and revenue plans along with the tangible capital asset information was used to develop a Financial Plan for the Southwest Middlesex DS covering a study period from 2019 to 2025 in accordance with O.Reg. 453/07 requirements (minimum 6 year study period).

1.1 Legislative Context to Financial Planning

There have been a number of legislative initiatives affecting water system management and operations over the past two decades. These initiatives were a result of the waterborne illness tragedy in Walkerton in 2000. Following this event, the Government of Ontario established a public inquiry chaired by the Honourable Dennis O’Connor to look into the tragedy. The Inquiry Report recommended a comprehensive approach to the delivery of safe drinking water in Ontario.

The MECP has responded to the Inquiry recommendations by making legislative changes. One change directly related to the development of this Financial Plan was the passage of the Safe Drinking Water Act, 2002 (SDWA). It requires owners of a municipal drinking water system to apply for and obtain a Municipal Drinking Water Licence. There are five elements that must be in place in order for the owner of a drinking water system to obtain a licence:

1. A Drinking Water Works Permit to establish or alter a drinking-water system.
2. An accepted Operational Plan. The Drinking Water Quality Management Standard (DWQMS) is the standard upon which operational plans are based. The plan documents an operating authority’s quality management system (QMS).
3. An Accredited Operating Authority. A third party audit of an operating authority’s QMS will be the basis for accreditation.

4. A Permit to Take Water.
5. A Financial Plan that must be prepared and approved in accordance with the prescribed requirements in the Financial Plans Regulation.

Under section 30 of the SDWA, the Financial Plan element of the licence program must either be prepared in accordance with the Sustainable Water and Sewage System Act, 2002 (SWSSA) or in accordance with the requirements set by the Minister of the Environment. SWSSA regulations have not been published. Accordingly, the requirements set by the Minister of Environment apply as per the 2007 MECP guidelines.

Regulation 453/07 of the Safe Drinking Water Act was passed in 2007 and contains two key provisions that apply to an existing water system:

1. A person who makes an application under the Act for a municipal drinking water licence shall, before making the application, prepare and approve Financial Plans for the system that satisfy the requirements of Reg. 453/07. O. Reg. 453/07, S. 1(1).
2. As a condition in a municipal drinking water licence that is issued in response to an application made under section 33 of the Act for a municipal drinking water licence, the Director shall include a requirement that the owner of the drinking water system prepare and approve Financial Plans for the system that satisfy the requirements prescribed Reg. 453/07. O. Reg. 453, S. 1(3).

Several other provisions are also set out in the regulation that must be met by a municipality operating a water system:

- The Financial Plan must be approved by a resolution that is passed by the Council of the municipality.
- The Financial Plan must apply to a period of at least six years.
- The Financial Plan must be available, upon request, to members of the public at no charge and posted on the internet (if the municipality maintains a website).
- The municipality must provide notice as deemed appropriate to advise the public of the availability of the Financial Plan.

Once a system is licenced, the municipality's Financial Plan is required to be updated every five years, in conjunction with every application for license renewal. A full documentation of the Financial Plan regulation, O.Reg. 453/07 can be found in Appendix A.

In June 2006, the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered accountants approved new municipal financial accounting and reporting standards requiring that tangible capital assets (TCA), including the assets of drinking water systems, be included in municipal financial statements. *Stat 3150* came into effect on January 1, 2009.

The Clean Water Act, 2006 targets the protection of drinking water supplies through the development of collaborative, locally driven, science and watershed based source protection plans. According to the MECP financial planning guidelines, Financial Plans should include source water protection costs related to the provision of water services. Utilities are encouraged to have, at minimum, estimates of any current source protection costs as a separate cost item by the time that their Financial Plans are

required in order to effectively align with the anticipated approval timelines for source protection plans (2010-2012).

In June 2007, the government of Ontario proposed a lead action plan. The Financial Plan regulation requires municipalities' Financial Plans to include the costs associated with replacing lead service pipes that are part of their drinking water system.

1.2 Southwest Middlesex Distribution System

The Southwest Middlesex Distribution System (DS) is owned by the Municipality of Southwest Middlesex and operated by the Ontario Clean Water Agency. The Municipality imports its water from the Municipality of West Elgin.

The DS has no rated capacity and contains one (1) storage reservoir with four (4) booster pumps and a re-chlorination system; two (2) water towers each with a re-chlorination system, and one (1) booster station.

The DS services a municipality of 5,860 residents via approximately 113 km of distribution watermains.

Population growth is not expected in the next six years. For the purpose of this Financial Plan, it is assumed there will be no increase or decrease in residential connections from 2019 to 2025.

2 Financial Operating Plan

The financial operating plan includes the full costs of operating the Southwest Middlesex DS on an on-going basis and includes capital investments, operating costs, maintenance costs, administration costs, and other miscellaneous costs.

A financial operating plan for the Southwest Middlesex DS was developed using historical financial information and projecting the information forward to forecast the annual expenditure requirements, while taking into account inflation and any growth forecast.

2.1 Operating Expenses

Recurring operating expenses for the Southwest Middlesex DS consists of wages for the operator of the DS, utility costs, major maintenance and repair items for the upkeep of the distribution system as well as other miscellaneous costs such as telephone bills, hydro costs, gas costs, materials, etc. All operating costs are projected to increase on an annual basis at a rate of 2% per year up to the end of the study period. The projected operating expenses for the study period fluctuate according to the variance in major maintenance costs.

2.2 Capital Costs

Although on-going yearly maintenance and repair of the Southwest Middlesex DS is forecasted, most of these costs will be considered an expense. There are, however, some items that are considered major capital items during the study period (in 2019-2025). These capital projects include:

- Engineering work to change the chlorine set point at the Melbourne Water Tower for approximately \$50,000 in 2019.
- Reservoir upgrades that include the replacement of a flow meter, alarm dialer and one booster pump as well as rebuilding another pump in 2019 for \$35,000
- Replacement of the flow meter and a waffer check valve at the Glencoe water tower for \$20,000 in 2022.

All capital and major maintenance cost estimates include a 15% contingency.

2.3 Debt Management

The Southwest Middlesex DS has had long term debt for the new Glencoe water tower that was built in 2011. This debt was incurred for the construction of the water tower valued at \$3,000,000. A total of \$125,263 is paid annually towards this loan with the final payment to occur in 2021.

Additional major debt is not forecasted to be incurred during the study period.

2.4 Lead Pipe Replacement Costs

There are no costs associated with lead pipe replacement for the Southwest Middlesex DS.

2.5 Source Water Protection Costs

There are no costs associated with source water protection forecasted for the Southwest Middlesex DS during the study period.

3 Funding Plan

A funding plan was developed to ensure that the annual expenditures forecasted in the financial operating plan can be sustained over the study period. The funding plan relies on operating revenues from the direct users of the drinking water system through water rates to cover any capital and operating costs. Historically, there were also infrastructure and provincial/government grants that could contribute to the funding plan.

3.1 Water Rates

The Southwest Middlesex DS rates are a combination of a flat rate schedule and a metered rate schedule. In both cases, customers are charged a capital surcharge fee. The historical and proposed water rates can be found in Table 3.1.

Table 3.1 – Water Rate Charge per Year

Southwest Middlesex Water Rates										
	Historical Rates			Proposed Rates						
Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Flat Rate	40.52	42.54	44.67	45.56	46.47	47.4	48.35	49.32	50.3064	51.31253
\$/m3	2.003	2.103	2.208	2.252	2.297	2.343	2.39	2.438	2.48676	2.536495
Capital Surcharge (\$)	15	20	20	20	20	20	20	20	20	20
Flat Rate % Change		5.0%	5.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
\$/m3 % Change		5.0%	5.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

The proposed rates were developed by the Municipality (except for 2024 and 2025 which were projected), as shown above. Rate increases in 2019 decrease from 5% annually to 2% annually, which continues for the study period. This is consistent with the Municipality reaching a sustainable revenue rate followed by rate increases to be in-line with the Bank of Canada inflation targets (i.e. 2%).

As shown in section 4 below, the accumulated surplus is steady, which indicates that the increasing reserve is balancing out the decreasing value of the assets due to amortization.

3.2 Debt and Cash Reserves

Based on the current revenue and expenditure forecasts for the study period, there is no present need to raise additional funds to cover excess expenditures at this time. However, from 2019 to 2025, the increase in the existing reserves is expected to be outpaced by the amortization of the Municipality’s non-cash assets, resulting in a slower increase in the Municipality’s accumulated surplus.

4 Financial Plan Summary – Southwest Middlesex

This section provides a summary of principal features concerning the current and projected future state of the Southwest Middlesex DS. The financial information is contained in financial statements covering at least six years (2019-2025) in compliance with O. Reg. 453. Detailed financial statements are set out in tabular form in Section 5. Notes regarding the financial statements are presented at the end of the financial statement section of this report.

4.1 Statement of Financial Position

An important feature of a water system is its net financial assets. A positive net financial asset indicates that the system has resources to deal with future capital and other needs. A negative number indicates that past capital and other investments must be financed from future revenues. The Southwest Middlesex DS’s net financial assets are shown in Figure 4.1 below.

Figure 4.1 – Southwest Middlesex DS Net Financial Assets

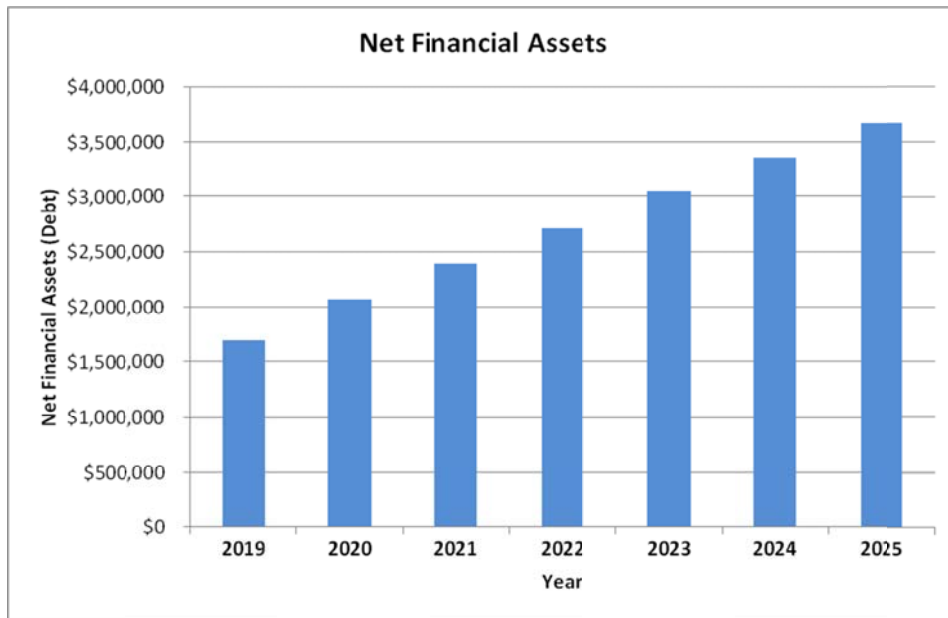


Figure 4.1 shows that the net financial assets are positive and are projected to increase consistently. The positive financial asset position is mainly attributed to the built-up cash reserve for the distribution system. With a net yearly surplus projected for the foreseeable future, it is expected that the Municipality’s water reserves will continue to grow throughout the planning period.

A second feature of the water system is the total value of the system’s tangible capital assets (building, equipment, and watermains). Consideration of the value of tangible capital assets (TCA) is part of PSAB compliance. The current value of the capital assets is termed net book value (NBV). NBV is the difference between the original cost of an asset less its accumulated amortization.

Water systems have a large amount of assets included in tangible capital assets and managing these assets is critical to maintaining current and future levels of service. Tangible capital assets, once installed, are being used and are decreasing in value. An increase in net book value of tangible capital assets is an indication that assets have been renewed faster than they were used. A decrease in net book value indicates that assets are being used, or amortized, faster than they are renewed. The net book value of the assets is set out in Figure 4.2. As shown from 2019 to 2025, the net book value is decreasing at a steady rate. Although there are asset additions in every year, the overall amortization amount outweighs the additions; hence, the overall trend displays a decreasing value of TCA with time.

Figure 4.2 – Southwest Middlesex DS Tangible Capital Assets

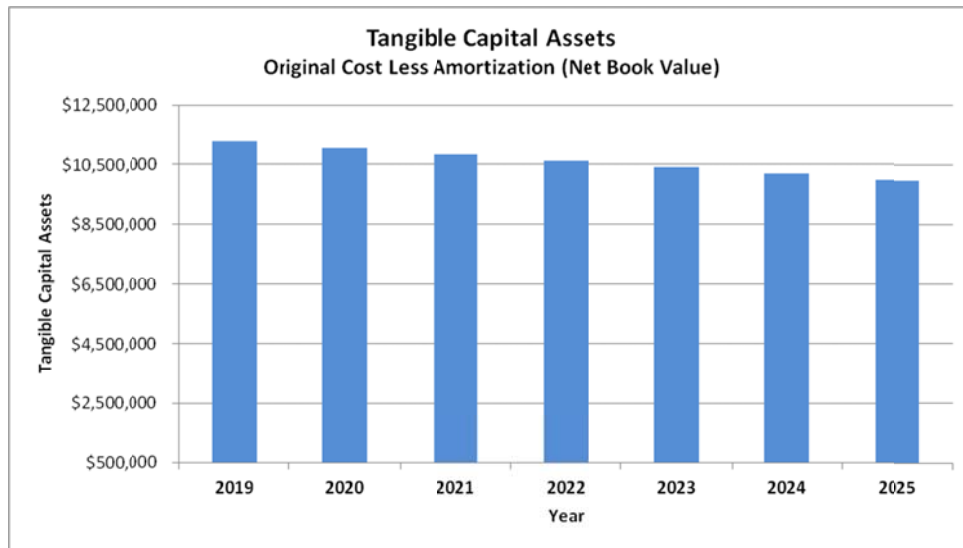
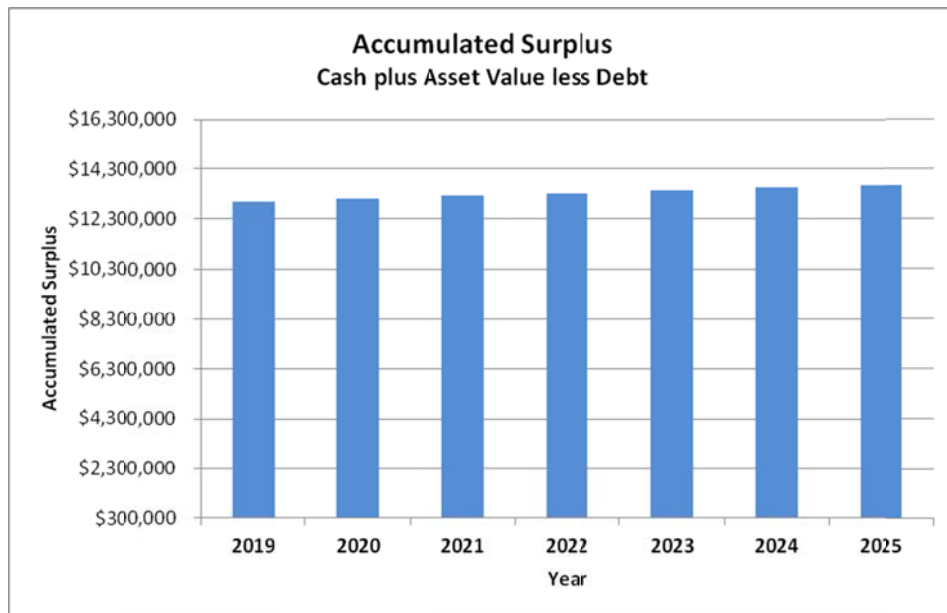


Figure 4.3 below sets out the accumulated surplus, which represents cash on hand plus the net book value of tangible capital assets less debt. The water system is projected to show an accumulated surplus from 2019 to 2025, with relatively steadily neutral trend.

With only minor positive and negative changes from year to year, the steady overall accumulated surplus is a result of the yearly amortization of the capital assets and increase in water reserve and asset betterments balancing out. Overall, this is showing that the combined cash and asset position is steady over the study period. This steady accumulated surplus indicates that sufficient cash is being saved into the reserve to account for future replacements and betterments of the Municipality’s assets.

Figure 4.3 – Southwest Middlesex DS Accumulated Surplus



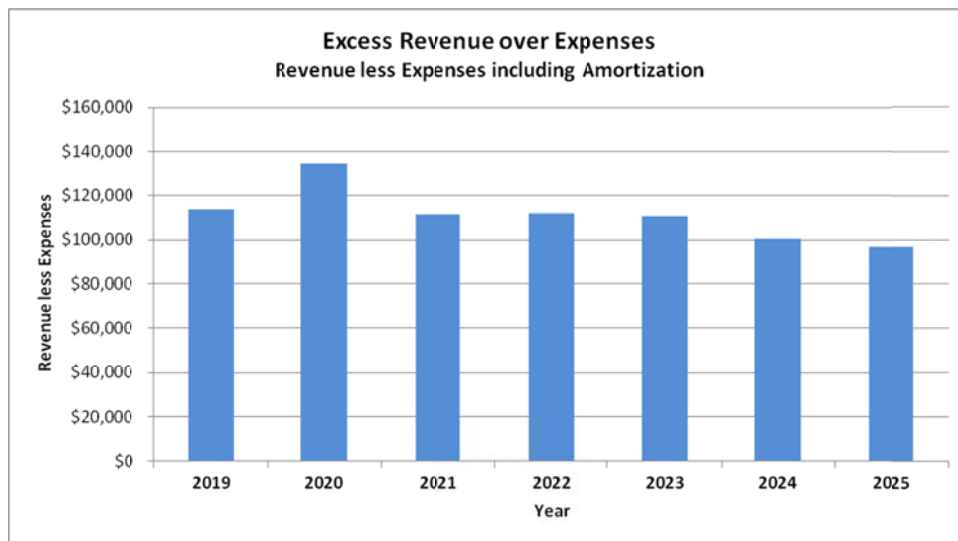
4.2 Statement of Financial Operation

This statement summarizes revenues and expenditures. Revenue includes revenues from connected users and contributions from general revenue. Expenditures include on-going operating costs, debt repayment, and asset amortization.

Figure 4.4 below projects that the system’s excess of revenues over expenses, including amortization, is relatively balanced during the study period, except for 2019 which has a significant excess in expenses during to a large number of capital project planned for that year.

For 2020 to 2025, the amortization and expenses balance out the revenues generated with a slight excess to act as a contingency for unforeseen circumstances. With a positive balance of revenue and expenses, it is projected that the Municipality’s distribution system will continue to remain financially stable through the 2019-2025 planning period.

Figure 4.4 – Southwest Middlesex DS Excess Revenue over Expenses



4.3 Continuous Improvement

The SDWA requires renewal of Municipal Drinking Water Works Licences every five (5) years. The Financial Plan regulation requires the preparation and approval of a Financial Plan before making an application for renewal of a Drinking Water Works Licence. Thus each Financial Plan will require updating at a minimum frequency of every five years. This on-going update will assist in re-visiting the assumptions made in the original Financial Plan, to develop the operating and funding plans as well as re-assessing the need for capital renewal and major maintenance expenditures.

4.4 Conclusion

The Southwest Middlesex DS is currently financially self-sustaining on its own in that it is able to fund the distribution system and account for future expenditures without utilizing general revenues or borrowing to fund the on-going operating and capital costs. This scenario is forecasted to continue until the end of 2025. From 2019 to 2025, the DS would be considered as financially self-sustaining with the

recommended water rate increases to stay consistent with the rate of inflation. The Water Reserve is forecasted to grow from 2019 onwards to account for future expenditures that are beyond the current planning window.

The financial statements reveal that the Southwest Middlesex DS is projected to be in an adequate financial position from 2019 onwards with no need for borrowing over the next few years.

In reviewing these statements, it is important to keep in mind that a number of assumptions have been made concerning inflation, interest rates, and growth projections. Actual numbers may significantly deviate from these over time. In addition, capital and major maintenance cost estimates and schedules may vary from current projections. There is a need to monitor the progress of this plan and make adjustments as needed.

The detailed financial statements are set out in tabular form in the following Section and were the basis for the above summary.

5 Financial Statements

The detailed financial statements are set out in the following tables. Section 6 details the notes that correspond to the “notes” numbers on the right side of the tables.

Statement of Financial Position	2019	2020	2021	2022	2023	2024	2025	Notes
Financial Assets								
Cash/Cash Equivalents								
System Reserve	\$2,090,838	\$2,322,903	\$2,515,755	\$2,823,898	\$3,140,248	\$3,432,067	\$3,744,435	1
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Cash/Cash Equivalents	\$2,090,838	\$2,322,903	\$2,515,755	\$2,823,898	\$3,140,248	\$3,432,067	\$3,744,435	
Investments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Financial Assets	\$2,090,838	\$2,322,903	\$2,515,755	\$2,823,898	\$3,140,248	\$3,432,067	\$3,744,435	
Liabilities								
Accounts Payable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Debt Principal	\$395,384	\$265,816	\$136,247	\$6,679	\$2,373	(\$0)	\$0	2
Working Deficit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Other liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Liabilities	\$395,384	\$265,816	\$136,247	\$6,679	\$2,373	(\$0)	\$0	
Net Financial Assets (Debt)	\$1,695,454	\$2,062,487	\$2,392,408	\$2,713,781	\$3,039,180	\$3,341,199	\$3,660,542	
Non Financial Assets								
Tangible Capital Asset Cost (Closing)	\$12,291,879	\$12,327,879	\$12,377,879	\$12,437,379	\$12,489,879	\$12,557,879	\$12,604,379	3
Changes in Tangible Capital Assets - Additions	\$60,200	\$17,000	\$16,000	\$45,500	\$29,500	\$45,000	\$32,500	4, 5
Changes in Tangible Capital Assets - Betterments	\$28,000	\$0	\$11,000	\$0	\$0	\$3,000	\$4,000	5
Changes in Tangible Capital Assets - Repairs	\$56,000	\$19,000	\$23,000	\$14,000	\$23,000	\$20,000	\$10,000	
Accumulated Amortization (closing)	\$1,014,884	\$1,283,568	\$1,552,128	\$1,821,108	\$2,090,108	\$2,360,017	\$2,629,600	
Total Non Financial Assets	\$11,276,995	\$11,044,311	\$10,825,751	\$10,616,271	\$10,399,771	\$10,197,862	\$9,974,779	
Accumulated Surplus (Deficit)	\$12,972,449	\$13,106,798	\$13,218,159	\$13,330,052	\$13,438,951	\$13,539,060	\$13,635,321	

Statement of Financial Operations		2019	2020	2021	2022	2023	2024	2025	Notes
Total Revenues									
Revenue from Users									
	Water Revenue	\$1,340,189	\$1,377,621	\$1,371,700	\$1,390,433	\$1,407,516	\$1,417,681	\$1,433,314	6
	Customer Fees	\$34,455	\$35,144	\$35,846	\$36,563	\$37,295	\$38,041	\$38,801	6
	Mics. Water Revenue	\$7,269	\$7,415	\$7,563	\$7,714	\$7,869	\$8,026	\$8,186	
	Penalties and interest on water	\$5,255	\$5,361	\$5,468	\$5,577	\$5,689	\$5,802	\$5,918	
	Principal Payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Total Revenue from Users	\$1,387,168	\$1,425,540	\$1,420,577	\$1,440,288	\$1,458,368	\$1,469,550	\$1,486,220	
Interest									
	System Reserve	\$10,016	\$10,454	\$11,615	\$12,579	\$14,119	\$15,701	\$17,160	
Grants									
	Provincial Grants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	7
Total Revenues		\$1,397,184	\$1,435,994	\$1,432,191	\$1,452,867	\$1,472,488	\$1,485,251	\$1,503,381	
Expenses									
	Total Operating	\$806,221.50	\$822,345.93	\$838,792.85	\$855,568.71	\$872,680.08	\$890,133.68	\$907,936.35	8
	Total Major Maintenance	\$192,692	\$196,546	\$200,477	\$204,486	\$208,576	\$212,748	\$217,003	9
	Financial Expenses	\$11,187	\$11,410	\$11,639	\$11,871	\$12,109	\$12,351	\$12,598	
Expenses before interest and amortization		\$1,010,100	\$1,030,302	\$1,050,908	\$1,071,926	\$1,093,365	\$1,115,232	\$1,137,537	
	Debt Interest	\$3,954	\$2,658	\$1,362	\$67	\$24	(\$0)	\$0	
	Amortization	\$269,614	\$268,684	\$268,559	\$268,981	\$268,999	\$269,909	\$269,583	5
Total Expenses		\$1,283,668	\$1,301,645	\$1,320,830	\$1,340,974	\$1,362,388	\$1,385,142	\$1,407,120	
Excess of Revenues over Expenses		\$113,515	\$134,349	\$111,361	\$111,893	\$110,099	\$100,109	\$96,261	
Excess of Revenues over Expenses		\$113,515	\$134,349	\$111,361	\$111,893	\$110,099	\$100,109	\$96,261	
Annual Surplus (Deficit) Beginning of year		\$12,858,933	\$12,972,449	\$13,106,798	\$13,218,159	\$13,330,052	\$13,440,151	\$13,540,260	
Accumulated Surplus (Deficit) End of Year		\$12,972,449	\$13,106,798	\$13,218,159	\$13,330,052	\$13,440,151	\$13,540,260	\$13,636,521	

Statement of Cash Flow	2019	2020	2021	2022	2023	2024	2025	Notes
Operating Transactions								
Cash received from Revenues	\$1,387,168	\$1,425,540	\$1,420,577	\$1,440,288	\$1,458,368	\$1,469,550	\$1,486,220	
Cash paid for Operating Expenses	\$1,010,100	\$1,030,302	\$1,050,908	\$1,071,926	\$1,093,365	\$1,115,232	\$1,137,537	
Cash paid for Financing Charges (Debt Interest)	\$3,954	\$2,658	\$1,362	\$67	\$24	(\$0)	\$0	2
Excess of Operating Revenues Over Operating Expenses	\$373,114	\$392,579	\$368,306	\$368,295	\$364,979	\$354,317	\$348,684	
Working Capital Items								
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Work in Progress	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash provided by Operating Transactions	\$373,114	\$392,579	\$368,306	\$368,295	\$364,979	\$354,317	\$348,684	
Capital								
Acquisition of TCAs	\$144,200	\$41,400	\$57,500	\$68,425	\$60,375	\$78,200	\$53,475	4
Proceeds on Disposal of TCA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash used in Capital Transactions	(\$144,200)	(\$41,400)	(\$57,500)	(\$68,425)	(\$60,375)	(\$78,200)	(\$53,475)	
Investing								
Cash (used in)/Provided by Investing Activities	\$10,016	\$10,454	\$11,615	\$12,579	\$14,119	\$15,701	\$17,160	1
Increase (decrease) Cash Provided by Investing Activities	\$10,016	\$10,454	\$11,615	\$12,579	\$14,119	\$15,701	\$17,160	
Financing								
Repayment of Long Term Debt (principal)	\$129,568	\$129,568	\$129,568	\$4,306	\$2,373	\$0	\$0	2
Cash Provided by (used) in Financing Activities	(\$129,568)	(\$129,568)	(\$129,568)	(\$4,306)	(\$2,373)	\$0	\$0	
Increase (decrease) in Cash Equivalents	\$109,361	\$232,065	\$192,852	\$308,143	\$316,350	\$291,818	\$312,369	
Cash and Cash Equivalents at the Beginning of the Year	\$1,981,476	\$2,090,838	\$2,322,903	\$2,515,755	\$2,823,898	\$3,140,248	\$3,432,067	
Cash and Cash Equivalents at the End of the Year	\$2,090,838	\$2,322,903	\$2,515,755	\$2,823,898	\$3,140,248	\$3,432,067	\$3,744,435	

6 Notes on the Southwest Middlesex Financial Plan

The Southwest Middlesex Distribution System Financial Plan represents a forecast of the financial performance of the drinking water system over a study period starting in the year 2019 through to the year 2025. The following notes are intended to document and/or clarify some of the assumptions made in generating the financial information contained in the tables. The reader is cautioned that the Financial Plan contains un-audited financial information and is subject to change.

1. The reserve fund balance of \$2,090,837.57 is based on the reserve balance that existed at the end of 2017 and the financial statements provided by the Municipality for 2018.
2. There is a principal debt balance of \$395,383.91 at the start of 2019 is based on the Municipal debt repayment schedule for the 2010 county standpipe, Debenture MD 1-2018, Debenture MD 2-2018, Debenture W 1-2018, Debenture W 2-2018, and Debenture W 3-2018. No additional debt is forecasted to be added during the study period.
3. Tangible Capital Assets Cost (Closing) includes all project costs as listed in the OCWA major maintenance and capital plan for the Municipality's DS including (additions, betterments, repairs, and engineering work).
4. TCA Additions – refer to upgrades and replacements of equipment.
5. Tangible Capital Assets (TCA) are assumed to have no residual value when they have reached the end of their projected useful life. Amortization rate was based off an amortization rate provided by the Municipality for the DS for 2018 and then applied to changing value of the assets.
6. Water Revenue and Customer Fees – revenue received from users of the DS.
7. Provincial Grants – at present no grants are presently known to be associated with future capital projects.
8. Total Operating Expense – expenditures (Wages & Benefits, Materials, and Contracted Services) related to the DS.
9. Total Major Maintenance Expense – maintenance expenditures related to the entire water system (water treatment and distribution).

APPENDIX A

Ontario Regulation 453/07

Safe Drinking Water Act, 2002
ONTARIO REGULATION 453/07
FINANCIAL PLANS

1) **Consolidation Period:** From April 1, 2008 to the e-Laws currency date.

Last amendment: O. Reg. 69/08.

This is the English version of a bilingual regulation.

Requirement to prepare financial plans

1. (1) A person who makes an application under clause 32 (1) (b) of the Act for a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 2. O. Reg. 453/07, s. 1 (1).

(2) A person who makes an application under subsection 32 (4) of the Act for the renewal of a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (2).

(3) As a condition in a municipal drinking water licence that is issued in response to an application made under section 33 of the Act for a municipal drinking water licence, the Director shall include a requirement that the owner of the drinking water system, by the later of July 1, 2010 and the date that is six months after the date the first licence for the system is issued, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (3).

(4) The Director shall include, as a condition in a municipal drinking water licence, the requirement set out in subsection (3) in any amendments to a license made after the application, if the condition is not satisfied at the time when the amendment is made. O. Reg. 453/07, s. 1 (4).

Financial plan requirements; new systems

2. For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (1) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that indicates that the drinking water system is financially viable and that is passed by,
 - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
 - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans,
 - i. must include a statement that the financial impacts of the drinking water system have been considered, and
 - ii. must apply for a period of at least six years.
3. The first year to which the financial plan must apply is the year in which the drinking water system is expected to first serve the public.
4. For each year in which the financial plans apply, the financial plans must include details of the proposed or projected financial operations of the drinking water system itemized by,
 - i. total revenues, further itemized by water rates, user charges and other revenues,
 - ii. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
 - iii. annual surplus or deficit, and
 - iv. accumulated surplus or deficit.
5. The owner of the drinking water system must,
 - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
 - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and

- iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 2.

Financial plan requirements; licence renewal

3. (1) For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking water licence under subsection 1 (3) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that is passed by,
 - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
 - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans must apply to a period of at least six years.
3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:
 - i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking water system’s existing municipal drinking water licence would otherwise expire.
 - ii. If the financial plans are required by a condition that was included in a municipal drinking water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.
4. Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:
 - i. Details of the proposed or projected financial position of the drinking water system itemized by,
 - A. total financial assets,
 - B. total liabilities,
 - C. net debt,
 - D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and
 - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
 - ii. Details of the proposed or projected financial operations of the drinking water system itemized by,
 - A. total revenues, further itemized by water rates, user charges and other revenues,
 - B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
 - C. annual surplus or deficit, and
 - D. accumulated surplus or deficit.
 - iii. Details of the drinking water system’s proposed or projected gross cash receipts and gross cash payments itemized by,
 - A. operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges,
 - B. capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,
 - C. investing transactions that are acquisitions and disposal of investments,
 - D. financing transactions that are proceeds from the issuance of debt and debt repayment,
 - E. changes in cash and cash equivalents during the year, and
 - F. cash and cash equivalents at the beginning and end of the year.

- iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.
 5. The owner of the drinking water system must,
 - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
 - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
 - iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
 6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).
- (2) Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:
1. Sub-subparagraphs 4 i A, B and C of subsection (1).
 2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).

Alternative requirements for two or more drinking water systems

4. If section 3 applies to the financial plans of two or more drinking water systems that are solely owned by the same owner, the requirements prescribed by the section may, as an alternative, be satisfied by financial plans that comply with the section but treat those systems as if they were one drinking water system. O. Reg. 453/07, s. 4.

Amendment of financial plans

5. Sections 2 and 3 do not prevent financial plans from being amended. O. Reg. 453/07, s. 5.

Additional information

6. The requirements of this Regulation do not prevent a person from providing additional information in financial plans prepared for the purpose of meeting the requirements of the Act. O. Reg. 453/07, s. 6.

APPENDIX B

Capital & Major Maintenance Expenditures (2019-2029)

Category	Asset	Characteristics (from Permit/CofA)	Installation Year	Proposed Works	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Reservoir		11901 Graham Rd. West Lorne 1975														
Water Storage	Reservoir	1,893 m3		Inspection					8,000							\$8,000
Pumps	Two fixed-speed split-case pump (3A and 3B)	34 L/s (2,943 m³/d) at 61m TDH		Replace --> Rebuild	10,000							5,000				\$15,000
Pumps	Two fixed-speed split-case pump (2A and 2B)	14.2 L/s (1,226 m³/d) at 61m TDH		Rebuild--> Replace	5,000									10,000		\$15,000
Motors	Electric Motors (3A and 3B)	45hp		Replace --> Replace								4,000	4,000			\$8,000
Motors	Electric Motors (2A and 2B)	20hp		Replace x2									6,000			\$6,000
Valves	Flow Control Valves x4			Rebuild x4 --> Rebuild --> Rebuild x3			10,000				4,000	9,000				\$23,000
Valves	Isolation Valves x8			Replace x4 --> Replace x4	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$16,500
Instrumentation	Flow Meter			Replace	10,000											\$10,000
Instrumentation	Level Transmitter			Replace		3,000										\$3,000
Instrumentation	Pressure transmitter			Replace			3,000									\$3,000
Tank	Sodium hypochlorite solution tank	350L		No work												\$0
Pumps	Two chemical metering pumps	7.8 L/hr		Replace --> Replace --> Replace	5,000					5,000	5,000					\$15,000
Analyzer	Free chlorine analyzer			Replace --> new probes	500	500	500	3,000	500	500	500	500	500	500	500	\$8,000
Instrumentation	Pocket Colourimeter			Replace									1,000			\$1,000
Controls	Chlorine pump Controller			Replace				5,000								\$5,000
Panel	Chlorine injection Panel			No work												\$0
HVAC	Chemical room Exhaust Fan, Electric Unit Heater x2			Inspection/Maintenance	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$11,000
Electric	UPS x2 - PLC and Analyzer			Replace x2 --> Replace x2 --> Replace x2	500	500	500	500	500	500	500	500	500	500	500	\$5,500
Electric	PLC Panel & Contents			Upgrade	6,000											\$6,000
Controls	Alarm Dialer			Replace	10,000											\$10,000
Valves	Altitude Valve - Inlet Flow Control			Rebuild --> Rebuild				2,500					3,000			\$5,500
Valves	Check Valve - Swing			Replace						10,000						\$10,000
Pumps	Sump Pump			Replace		500		500		500		500				\$2,000
SCADA	SCADA System			No Work												\$0
Pipes	Pump gallery pipe replacement			Replace corroded piping					10,000							\$10,000
					\$49,500	\$7,000	\$16,500	\$14,000	\$21,500	\$19,000	\$12,500	\$22,000	\$17,500	\$13,500	\$3,500	\$196,500
New Glencoe Water Tower		99 industrial Rd. Glencoe 2011														
Water Storage	Elevated storage tank	3,600 m³ useable volume		Inspection			8,000					8,000				\$16,000
Tank	Sodium hypochlorite solution tank			No Work												\$0
Instrumentation	Flow Meter			Replace				12,000								\$12,000
Instrumentation	Level Transmitter			Replace		2,500					2,500					\$5,000
Instrumentation	Pressure Gauge			Replace					500							\$500
Pumps	Two chemical metering pumps	7 L/hr		Rebuild --> Rebuild	3,000					3,000					3,000	\$9,000
Analyzer	Chlorine analyzer x2 (Inlet and Outlet)			New Probes x 2	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$11,000
Controls	Chlorine pump Controller			Replace				5,000								\$5,000
Controls	Chlorine injection Panel			Replace	500	500	500	500	500	500	500	500	500	500	500	\$5,500
Instrumentation	Pocket Colourimeter															\$0
HVAC	Electric Unit Heater x2			Replace --> Replace --> Replace --> Replace		1,000	1,000			1,000	1,000					\$4,000
HVAC	Louver electric - (x2)			Replace x2				2,000								\$2,000
Electric	Battery Bank/ UPS - PLC			Replace	1,200			500				1,200				\$2,900
Controls	PLC Panel & Contents			Replace			6,000									\$6,000
Valves	Check Valves - Wafler (x2)			Replace				8,000								\$8,000
Controls	Installation of Alarm Dialer			Installation												\$0
					\$5,700	\$5,000	\$16,500	\$29,000	\$1,500	\$6,000	\$5,000	\$10,700	\$1,500	\$1,500	\$4,500	\$86,900

Category	Asset	Characteristics (from Permit/CofA)	Installation Year	Proposed Works	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Melbourne Water Standpipe and Control Bld.																
Water Storage	Melbourne standpipe	6547 Longwoods Rd., Melbourne 1,485 m ³	1978	Inspection		3,000			5,000					5,000		\$13,000
Instrumentation	Flow Meter			Replace						8,000						\$8,000
Instrumentation	Level Transmitter			Replace	3,000						3,000					\$6,000
Instrumentation	Pressure Gauge			Replace					500							\$500
Pumps	Two chemical metering pumps	3.4L/hr		Replace --> Rebuild --> Rebuild	5,000				2,000	2,000				5,000		\$14,000
Tank	Sodium hypochlorite solution tank	200L		No Work												\$0
Controls	Chlorine injection Panel			Replace									5,000			\$5,000
Controls	Change chlorine dosing point			Engineering Work	50,000											\$50,000
Instrumentation	Chlorine Analyzer			Replace	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$11,000
Controls	Alarm Dialer			Replace		5,000					3,000					\$8,000
Controls	PLC Panel & Contents			Replace							5,000					\$5,000
Electric	Battery Bank/ UPS - Instrumentation			Replace	500		500				500				500	\$3,000
Electric	Electric Unit Heater 01			Replace --> Replace				1,000				1,000				\$2,000
Valves	Check Valves - Waffer (x2)			Replace x2						6,000						\$6,000
Building	Prefabricated storage facility	1.8m x 3m x 2.1m high														\$0
					\$59,500	\$9,000	\$1,500	\$2,000	\$9,000	\$17,000	\$12,500	\$2,000	\$6,500	\$11,000	\$1,500	\$131,500
Appin Water Booster Station/Valve Chamber																
Controls	Flow Control Valve	5140 Parkhouse Dr., Appin	1985	Replace						6,000						\$6,000
Pumps	Sump Pump			Replace --> Replace --> Replace	500		500		500		500		500		500	\$3,000
Controls	PLC Panel & Contents			Replace							6,000					\$6,000
Electrical	Battery Bank/ UPS			Replace --> Replace	1,000			500						1,000		\$2,500
					\$1,500	\$0	\$500	\$500	\$500	\$6,000	\$6,500	\$0	\$500	\$1,000	\$500	\$17,500
South West Middlesex Distribution System																
	Hydrant and Secondary valve		1975	Repairs	15,000	10,000	10,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	\$75,000
	Isolation/ Air relief chamber			Repairs	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	\$55,000
	Distribution flow meters and PRVs			Replacements				4,000				5,000				\$9,000
	Distribution System			Testing & Colour Coding					10,000							\$10,000
	Distribution System			Leak detection	8,000					10,000						\$18,000
					\$28,000	\$15,000	\$15,000	\$14,000	\$20,000	\$20,000	\$10,000	\$15,000	\$10,000	\$10,000	\$10,000	\$167,000
Total Major Maintenance and Capital Costs for the Drinking Water System					\$144,200	\$36,000	\$50,000	\$59,500	\$52,500	\$68,000	\$46,500	\$49,700	\$36,000	\$37,000	\$20,000	\$599,400
Contingency 15%					\$21,630	\$5,400	\$7,500	\$8,925	\$7,875	\$10,200	\$6,975	\$7,455	\$5,400	\$5,550	\$3,000	\$89,910
Total with contingency					\$165,830	\$41,400	\$57,500	\$68,425	\$60,375	\$78,200	\$53,475	\$57,155	\$41,400	\$42,550	\$23,000	\$689,310

Note: These costs are estimates only and do not represent a quote for OCWA to undertake the work