



TOWNSHIP OF BILLINGS

WATER SYSTEM FINANCIAL PLAN 2021-2027

Municipal Drinking Water Licence No. 255-101

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1. INTRODUCTION

1.1 Background

The Township of Billings (Township) provides drinking water to approximately 184 customers, including municipal connections, through its Drinking Water System and recovers its costs through annual flat fees charged to customers. The Township retains the services of the Ontario Clean Water Agency (OCWA) to operate the facility.

Under O. Reg 188/07, the Township obtained Drinking Water System Licence number 255-101 on May 24, 2011. The *Safe Drinking Water Act, 2002*, required the owner of a municipal system to apply for a renewal licence on or before November 21, 2015. This submission required an updated financial plan for at least six years beginning in 2016. The current Permit to Take Water for the Kagawong Drinking Water System was issued May 16, 2011 and expires on May 15, 2021. The deadline to renew the application is November 19, 2020. This is an updated financial plan for at least six years beginning in 2022.

1.2 Purpose

The primary purpose of this document is to present a water financial plan in accordance with the requirements of the licensing of the water system, as defined in O.Reg. 453/07 to allow the Township of Billings to fulfil its obligations under the drinking water licensing regulations for its Drinking Water System (Licence no. 255-101).

2. REGULATORY REQUIREMENTS

Regulation 188/07 under the *Safe Drinking Water Act, 2002*, requires Ontario municipalities to apply for and obtain drinking water system licences as part of their overall Drinking Water Quality Management System (DWQMS). One of the requirements for obtaining and renewing drinking water licences is preparing a financial plan in accordance with O.Reg. 453/07. In general, the financial plan must include financial statements for the following:

- The proposed or projected financial position of the drinking water system;
- The proposed or projected gross cash receipts and gross cash payments;
- The proposed or projected financial operations of the drinking water system; and
- Details on the extent to which the above information applies to the replacement of lead service pipes, if applicable.

Appendix A lists each requirement of the regulation and references the respective financial statements and other items that contain relevant information required under each item. The financial plan must apply to a period of at least six (6) years with the first year being the year the existing licence expires. In the Township's case the updated plan covers the period 2021 to 2027 inclusive. It is anticipated that this financial plan would be made available to the public at no charge and posted on the Township's website following final approval of the plan by resolution of Council. This will be confirmed through separate correspondence at the time of submission to the Ministry of Municipal Affairs and Housing (MMAH).

3. KEY CONSIDERATIONS

3.1 Projections

This section presents the projections for key items over the seven (7) year period and the assumptions used in order to prepare the financial plan. These include:

- Operations and Maintenance (O&M) cost projections;
- Capital Budget forecasts;
- Revenue requirements
- Debt Repayments;
- Tangible Capital Asset (TCA) projections; and
- Reserve Projections.

It should be noted that the Township does not have a current Water Rate Study from which future rates and other relevant information could be obtained. Therefore, a high-level assessment of the revenue that would be required to cover costs was undertaken for the seven (7) year period for the sole purpose of preparing the financial projections in this report. These projections do not consider all factors that may need to be fully assessed in a comprehensive rate study (e.g. life cycle costs, asset replacement requirements, water conservation etc.) Accordingly, it is recommended that the Township undertake a water rate study to fully assess and develop future rates and charges that consider all of the factors that influence the full cost of managing the water system and allow for sustainable financing over the long-term

3.2 Customer Growth and Consumption

The Township's existing 184 customers (including municipal connections) are projected to consume approximately 104,050 m³ of water in 2021, which is approximately 565 m³ per customer. The historical consumption in 2018 was 118,478.1 m³ (2019 projected consumption is 102,000 m³). The assumption made in preparing this financial plan is taking into consideration average consumption over the last five years.

Growth is expected to be approximately one (1) new customer added to the Billings Drinking Water System each year. These would consist of all flat fee customers and estimating a 1.01% increase in consumption per year due to growth.

Customer Growth Table

Description	2021	2022	2023	2024	2025	2026	2027
Total Customers	186	187	188	189	190	191	192
No of new customers	1	1	1	1	1	1	1

Consumption estimate

	2021	2022	2023	2024	2025	2026	2027
Annual Consumption	104050	105090	106140	107200	10828	109360	110450
% Increase	1%	1%	1%	1%	1%	1%	1%

3.3 Operations & Maintenance (O&M) Cost Projections

The Township's annual operating budget includes costs related to the following;

- Water system operations and maintenance costs;
- Transfers to capital reserves; and
- Debt servicing costs

A portion of these costs is offset by various non-rate revenues and recoveries.

The assumptions used in arriving at the projection of the gross costs and non-rate revenues over the seven (7) year period from 2021 to 2027 are as follows:

- The gross annual costs increase by approximately 2% per year and maintenance projections were provided by Ontario Clean Water Agency (OCWA);
- Any year-end surplus would be transferred to the water capital bank account at the end of the year. A deficit would be offset by a transfer from the same account only if there are sufficient funds available;
- The existing capital bank account would be used to finance future capital expenditures. An annual averaged amount of \$95,790 would accumulate in the water capital bank account or investment account. This would allow for a more stable revenue and rate increase in the future. However, as previously noted, a more comprehensive rate study would be necessary to properly identify future rates and reserve contributions including those required for life cycle asset replacement. *It is estimated that capital expenditures over the next seven (7) years for the Water Treatment Plant will be \$181,000 and capital expenditures for the water distribution system will be \$1,385,100 with \$369,406 being funded by the water users; and,*
- The non-rate revenues are expected to fluctuate slightly due to changes in water account interest revenue.

The following table summarizes the gross operating costs and net costs to be recovered from the annual flat rate fees:

Operation and Maintenance Cost Projections

	2021	2022	2023	2024	2025	2026	2027
Total O&M	181600	177511	182182	174663	173854	198306	180788
Annual increase %							
Transfer to Capital account	80875	87716	88364	101304	108866	90100	113303
Gross Annual Costs	262486	265227	270546	275967	282720	288406	294091

Non-Rate Revenues

Non-Rate Revenue	3800	3850	3850	3860	3910	3910	3915
Capital Account Interest	2600	200	200	200	1500	1500	1500
Water Levy Interest	4800	4800	4800	4850	4850	4900	4900
Water Capital Interest							
Non Rate Revenues	11200	8850	8850	8910	10310	10260	10315

Net Operating Expenses to be covered by rates

251286 256377 281377 267057 272410 278146 283776

3.4 Capital Plan

The Township's capital budget forecast identifies projects to be undertaken between 2021 and 2027. The water treatment plant projects and costs noted are taken from the Ontario Clean Water Agency's capital budget forecast. The assumption is that the Township will be successful in their funding application for the replacement of the water line on Old Mill Road.

Eight Year Capital Forecast

	2021	2022	2023	2024	2025	2026	2027	2028
Treatment Plant Capital					21,000		100,000	60,000
Waterline Upgrades/replace	1,144,335	207,765						

3.5 Revenue Projections

Each year the township adjusts its fees and charges to customers such that the annual costs are covered. The flat rate fees for 2020 were \$1331. User fees are set to increase at 1.5% per year.

Flat Rate Fees 2021 – 2027

	2021	2022	2023	2024	2025	2026	2027	2028
Flat Rate Per Unit	1351	1371	1392	1413	1434	1456	1478	1500
Annual % Increase	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%

The annual revenues required were projected by increasing prior year’s revenue such that the annual costs would be recovered and an annual surplus set aside for capital projects would be achieved.

Annual Revenues Required

	2021	2022	2023	2024	2025	2026	2027	2028
Water Rate Revenues	251,286	256,377	261,696	267,057	272,460	278,096	283,776	289,500

3.6 Debt Repayment

The Township has no existing debt related to the water system. It is assumed that no debt would be incurred during the period (i.e. no internal or exterior loans for capital projects) in keeping with the Township’s current approach to capital financing.

3.7 Tangible Capital Asset (TCA) Analysis

The Township’s PSAB 3150 TCA data was used to develop the financial information related to the Township water assets which include:

- Linear Assets;
- Service Connections;

- Fire Hydrants; and,
- Facilities

The TCA projections for the study period are presented based on the following assumptions:

- Amortization of existing assets is based on the Township’s Tangible Capital Asset Policies and Procedures. Amortization of new assets is based on straight line depreciation beginning the year of acquisition;
- Historical costs, life expectancy and useful remaining life as per the PSAB 3150 data;
- Fully depreciated assets continue to be used in service, *i.e.*, no asset removals; and,
- It should be noted that the Township does not have a comprehensive rate study that would typically be analyzed as part of TCA analysis.

TCA Projections

TCA	2021	2022	2023	2024	2025	2026	2027
Historical Cost	7,478,241	8,863,340	8,863,340	8,863,340	8,863,340	8,863,340	8,863,340
Accumulated Depreciation Jan 1	1,810,638	1,975,999	2,153,266	2,330,533	2,507,800	2,685,800	2,862,867
Depr. Exp	165,361	177,267	177,267	177,267	177,267	177,067	177,067
Acc Depr Dec 31	1,975,999	2,153,266	2,330,533	2,507,800	2,685,067	2,862,867	3,039,934
Net Book Value	7,052,703	6,710,074	6,532,807	6,255,540	6,178,273	6,000,473	5,823,406

3.8 Reserve Balances

The projected transfers to and from the Capital Reserve and the Operating Reserve and their respective balances are presented below. As noted, the revenue increases over the period are set to achieve an annual surplus that would be transferred to the water capital account at year end. The operating surplus and the capital surplus are combined into the water capital account for ease of administration.

Reserve Balances

Water Bank Account

	2021	2022	2023	2024	2025	2026	2027
Opening Balance	286,470	53,200	85,641	174,205	275,709	365,095	456,695
Transfer In	80,875	87,716	88,364	101,304	108,886	90,100	113,300
Funding Fed/Prov	862,990	152,290	0	0	0		0
Interest In	200	200	200	200	1500	1500	1500
Transfer out - capital	1,177,335	207,765	0	0	21,000	0	100,000
Closing balance	53,200	85,641	174,205	275,709	365,095	456,695	471,495

3.9 Lead Service Pipe Removal

Based on information provided by Township records, there are no lead pipes to be replaced. Therefore, the financial statements do not include costs associated with pipe removal.

4. FINANCIAL STATEMENTS

The financial plan involves the review, analysis and assessment of financial information relevant to the Township's water system including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 to 2027 as required under O.Reg. 453/07:

- Statement of Financial Position;
- Statement of Operations; and,
- Statement of Cash Flow

4.1 Statement of Financial Position

The Statement of Financial Position is presented in the following table. This statement summarizes the Township's water-related financial and non-financial assets (Tangible Capital Assets- TCA), liabilities and provides the net debt position and accumulated surplus related to managing the water system. The financial assets are primarily cash balances in the water account at the beginning of 2021.

The non-financial assets (TCA) include the Township's water infrastructure and facilities. The historical costs are amortized over the asset life to arrive at the net book value (NBV) each year from 2021 to 2027. New assets are added in the years acquired or built. Contributed assets are primarily new infrastructure and facilities transferred to the Township's ownership and control by developers as they are completed. A precise value and timing of contributed assets are unknown and future adjustments may be required to the Township's TCA value as these assets are contributed. It is assumed that other non-financial assets such as inventory and prepaid expenses are zero.

In general, the Statement of Financial Position (*i.e.*, the accumulated surplus) provides an indication of the financial resources available to the Township for managing its water system. The accumulated surplus is projected to decrease from approximately \$7,103,000 in 2021 to \$6,291,000 in 2027. These projections assume that no debt would be incurred over the period.

Statement of Financial Position

	2021	2022	2023	2024	2025	2026	2027
Financial Assets							
Cash, Receivables and Investment	53,200	85,641	174,205	275,709	365,975	456,695	471,495
Total Financial Assets	53,200	85,641	174,205	275,709	365,095	456,695	471,495
Financial Liabilities							
Accounts Payable & Deferred Rev							
Long Term Liabilities							
Total Financial Liabilities							
Net Financial Assets (Net Debt)	53,200	85,641	174,205	275,709	365,095	456,695	471,495
Non-Financial Assets							
Tangible Capital Assets	7,478,241	8,863,340	8,863,340	8,863,340	8,863,340	8,863,340	8,863,340
Accumulated Amortization	1,975,999	2,153,266	2,330,533	2,507,800	2,685,273	2,862,868	3,039,934
Total Non Financial Assts	7,105,903	6795715	6707012	6531049	6541868	6454168	6291901
Accumulated Surplus	7,105,903	6,795,715	6,707,012	6,531,049	6,541,868	6,454,168	6,291,091

4.2 Statement of Operations

The Statement of Operations is presented in the table below. It summarizes the annual revenues and expenses associated with managing the Township's water system. It provides a report on the main transactions that occur during each year that have an influence on the accumulated surplus. The annual surplus/deficit are also shown. These main revenue items included are:

- Revenues for the flat fees; and,
- Other revenues (administration fees, government grants, interest, etc.)

The main expense items are:

- The annual cost of operating and maintaining the water systems; and
- Amortization expenses on existing and added TCA

This statement suggests that the current rates and revenues do not include amounts to offset the annual depreciation of assets which is approximately \$177,267 per year.

Statement of Operations

	2021	2022	2023	2024	2025	2026	2027
Water Revenue							
Flat Rate Revenue	251,286	256,377	261,696	267,057	272,460	278,096	283,776
Other Revenue	11,200	8,850	8,850	8,910	10,260	10,260	10,315
Total Revenue	262,486	265,227	270,546	275,967	282,720	288,406	294,091
Water Expenses							
Gross O & M Expenses	262,486	265,227	270,546	275,967	282,770	288,406	294,091
Non TCA Capital Expenses							
Total Operating Expenses	262,486	265,227	270,546	275,967	282,770	288,406	294,091
Interest on Debt	0	0	0	0	0	0	0
Amortization (depreciation)	165,361	177,267	177,267	177,267	177,267	177,267	177,267
Total Expenses	427,847	442,494	447,813	452,813	460,037	465,623	471,358
Annual surplus/ Deficit	-165,361	-177,267	-177,267	-177,267	-177,267	-177,267	-177,267
Accu. Surplus Deficit Jan 1	5,667,603	7,052,703	6,875,436	6,532,807	6,532,807	6,178,273	6,000,473
Accu. Surplus Deficit Year end	7,052,703	6,710,074	6,532,807	6,255,540	6,178,273	6,000,473	5,823,406

4.3 Statement of Cash Flow

The Statement of Cash Flow is presented below. This statement summarizes the main cash inflows and outflows related to the water system in four (4) main areas – operations and maintenance, capital, investing and financing, and shows changes in cash.

The operations and maintenance cash transactions begin with the surplus or deficit in revenues identified in the Statement of Operations. This figure is adjusted to remove the non-cash items that were included as revenues or expenses (*e.g.*, amortization expenses). The capital section indicates the amounts spent to acquire capital assets (TCA) or received from the sale of assets. In the Township's case, it is assumed that there will be no assets sold to generate cash. The financing section identifies the funds received from long-term debt as cash inflows and the portion of debt repaid as outflows. In the

Township’s case there is no debt or proceeds from debt. The cash and cash equivalents are projected to increase by \$418,000 from 2021 to the end of 2027. As previously noted, it is recommended that a rate study be undertaken to assess the full costs of managing the water system and establish rates and revenues that are designed to recover the full costs and sustain water system financing over the long term.

Statement of Cash Flows

	2021	2022	2023	2024	2025	2026	2027
Cash Provided by:							
Operating Activities							
Annual Surplus/Deficit	-165,361	-177,267	-177,267	-177,267	-177,267	-177,267	-177,267
Non-Cash Items							
Amortization	165,361	177,267	177,267	177,267	177,267	177,267	177,267
Net Change Operation Activities cash	0	0	0	0	0	0	0
Capital Activities							
Purchase of TCA	1,177,335	207,765	0	0	21,000	0	100,000
Net Change in Cash used in Capital Activities	1,177,335	207,765	0	0	21,000		100,000
Financing Activities							
Proceeds from Gov funding	862,990	152,290	0	0	0	0	0
Repayment of Long term debt	0	0	0	0	0	0	0
Net Change in Cash Used for future TCA	81,075	87,916	88,564	101,504	110,386	91,600	114,800
Net Change in Cash	81,075	87,916	88,564	101,504	110,386	91,600	114,800
Net Change Cash & cash equiv.	0	0		0			
Cash & Equiv at beginning of Year	286,470	53,200	85,641	174,205	275,709	365,075	456,675
Cash & Equiv at End of Year	53,200	85,641	174,205	275,709	365,075	456,675	471,475

4.4 Data Sources

The primary sources of data used to prepare this financial plan are listed in the following table. In addition, information was developed with information from Township staff, as required.

Financial Plan Data Sources

Item	Data Source
Asset Life Expectancy	Township TCA Policy Information provided by Township Financial Report
Asset Value	Township TCA Policy Information provided by Township records (auditor)
Customers	Information provided by Township records
Water Volumes	Information provided by yearly Kagawong water report
Growth	Estimate provided by Township staff
O & M Costs	Township's Annual Budget and staff and OCWA forecast
Capital Costs	Township's capital budget forecast Information provided by OCWA
Debt	Information from Township records
Investments, Reserve Balanced	Information from Township records

5. CONCLUSIONS & RECOMMENDATIONS

The following are the main conclusions and recommendations:

- The annual net cost to be covered from water charges is projected to increase from \$251,000 in 2021 to \$284,000 by 2027;
- The bank account balances are projected to increase from \$53,200 in 2021 to \$471,000 in 2027;
- The net book value (NBV) of the Township's water system is projected to increase from approximately \$5,667,603 in 2021 to \$5,823,406 in 2027.
- Water Asset Consumption ratio increases by approximately six percent between 2021 and 2027;
- That the Water Financial Plan No. 255-101 be approved and submitted to the Ministry of Municipal Affairs and Housing (MMAH) in accordance with the Drinking Water System Licence renewal requirements and O. Reg. 453/07; and
- That a copy of the Water Financial Plan No. 255-101 be posted on the Township's website.

Appendix A: Requirements of Ontario Regulation 453/07

	Requirements	How Requirements are Met
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1.	<p>The financial plans must be approved by a resolution that is passed by,</p> <p>i. The council of the municipality if the owner of the drinking water system is a municipality.</p> <p>ii. The governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality</p>	<ul style="list-style-type: none"> • It is expected that Council will approve the updated financial plan • N/A
2.	<p>The financial plans must apply to a period of at least six years.</p>	<ul style="list-style-type: none"> • Applies for six years from 2021 to 2027 inclusive
3.	<p>The first year to which the financial plans must apply must be the year determined in accordance with the following rules:</p> <p>i. If the financial plans are required by subsection 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.</p> <p>ii. If the financial plans are required by a condition that was included in the 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.</p>	<ul style="list-style-type: none"> • The first year of the updated financial plan is 2021. • N/A
4.	<p>Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following</p> <p>i. Details of the proposed or projected financial position of the drinking water system itemized by:</p> <p>a. Total financial assets</p> <p>b. Total Liabilities</p> <p>c. Net financial assets (debt)</p> <p>d. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses.</p>	<ul style="list-style-type: none"> • See Statement of Financial Position table for the water system • See Statement of Financial Position for the water system • See Statement of Financial Position for the water system • See Statement of Financial Position • See Statement of Financial Position • See Statement of Financial Position

<p>e. Changes in tangible capital assets that are additions, donations, write downs and disposals.</p> <p>ii. Details of the proposed or projected financial operations of the drinking water system itemized by,</p> <p>a. Total revenues, further itemized by water rates, user charges and other revenues</p> <p>b. Total expenses, further itemized by amortization expenses, interest expenses and other expenses</p> <p>c. Annual surplus or deficit</p> <p>d. Accumulated surplus or deficit</p> <p>iii. Details of the drinking water system’s proposed or projected gross cash receipts and gross cash payments itemized by,</p> <p>a. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges</p> <p>b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets</p> <p>c. Investing transactions that are acquisitions and disposal of investments</p> <p>d. Financing transactions that are proceeds from the issuance of debt and debt repayment</p> <p>e. Changes in cash and cash equivalents during the year</p> <p>f. Cash and cash equivalents at the beginning and end of the year.</p> <p>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.</p>	<ul style="list-style-type: none"> • See Statement of Financial Position • See Statement of Operations • See Statement of Operations • See Statement of Operations • See Statement of Operations • See Statement of Operations • See Statement of Operations • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • See Statement of Cash Flow • There are no lead service pipes to be changed in the Township of Billings. Therefore, the information in the Financial Plan does not include lead service pipe replacement
<p>5. The owner of the drinking water system must</p>	

	<p>i. Make financial plans available, on request, to members of the public who are served by the drinking water system without charge,</p> <p>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</p> <p>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.</p>	<ul style="list-style-type: none"> • This will be done by the municipality following Council approval. • The financial plan will be placed on the website following Council approval and made available at no charge. • A notice will be issued following Council approval
6.	<p>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)</p> <p>Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is know to the owner at the time the financial plans are prepared.</p> <p>1. Sub-subparagraphs 4 i A, B and C of subsection (1)</p> <p>2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1) O. Reg. 453/07, s.3 (2)</p>	<ul style="list-style-type: none"> • Will be submitted following Council approval. • The Financial Plan was prepared using available information and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan. • The Financial Plan was prepared using available information and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan. • The Financial Plan was prepared using available information and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.