

**Bradford
west
Gwillimbury**



**The Corporation of the
Town of Bradford West Gwillimbury**

Drinking Water System Financial Plan

2016-2021

Financial Plan #116-301

1. Introduction

The Ministry of the Environment and Climate Change (MOECC) requires a municipality to obtain a Municipal Drinking Water License (MDWL) for the operation of their municipal drinking water systems in Ontario. In obtaining these licenses, the Town of Bradford West Gwillimbury is required to meet conditions of the Safe Drinking Water Act, 2002, including the preparation of a Financial Plan for the drinking water system. The Financial Plan is a long-term strategic plan developed to ensure the financial sustainability of the drinking water system.

2. Regulatory Context

The Safe Drinking Water Act, 2002, Ontario Regulation 453/07, requires a municipality to prepare a six year financial plan that must be adopted by Town Council and provided to the Ministry of Affairs and Housing. The plan must include the following:

- Statement of operations
- Statement of financial position
- Statement of cash flow
- Statement of projected capital assets acquisitions
- Disposals and accumulated amortization

This consolidated six year Financial Plan has been prepared to comply with the requirements of Ontario Regulation 453/07. Following approval of the Financial Plan by Council, the plan will be published on the Town's website and submitted to the Ministry of Affairs and Housing. Hard copies will be available to the public upon request.

As the drinking water system needs change and evolve, so will this plan. This plan is a living document and will be updated at a minimum of every five years, as required.

3. Description of the Bradford/Bondhead Drinking Water System

The Town of Bradford West Gwillimbury, hereafter referred to as the Town with a population of approximately 27,447 is located in the County of Simcoe, Ontario, Canada. The Town manages, maintains and distributes drinking water to over 9,149 water users. The Town is a largely residential community, with two main areas of commercial, industrial development.

The Bradford/Bondhead drinking water system is categorized as a large municipal residential system. The Town is primarily serviced by two municipal groundwater wells, along with treated surface water from the Town of Innisfil.

The distribution system is comprised of two Standpipes positioned within the footprint of the Town. The Town is split up between two Zones: Zone 1 is comprised of groundwater and Zone 2 is strictly surface water supplied by the Town of Innisfil. One reservoir is located within the Town, which receives treated surface water from the Town of Innisfil.

a. Operating and maintenance

Operating expenses typically detail the ongoing, day to day expenses associated with the treatment and distribution of water. Items such as wages, benefits, chemicals and utilities are included in the systems operating expenses. A major component of the operating budget is water purchased from the Town of Innisfil.

b. Preventative Maintenance

Preventative maintenance is performed as a proactive approach to maintaining the drinking water system. It can often address issues before they cause a major problem or breakdown. Some programs the Town performs are detailed below.

- Hydrant maintenance is conducted year around to ensure they are operable during fire emergencies.
- Valve exercising is performed to ensure functionality and identify deficiencies.
- Watermain flushing is completed to ensure a clean and fresh water supply.
- Watermain swabbing is conducted each year as means to clean the watermain, increase water quality and increase the reliability of the water distribution system.

c. Unplanned Maintenance

Common unplanned maintenance items include repairing watermain breaks, service breaks, and damaged hydrants. It can often be costly and cause a service interruption which is why so much emphasis lies with preventative maintenance.

d. Source Water

The Source Water Protection Plan for the South Georgian Bay Lake Simcoe Source Protection Region (see map) contains policies designed to prevent contaminants from getting into municipal wells and water supplies. The Town works in collaboration with the Risk Management Office in York Region to ensure our municipal wells are protected.

e. Lead

A requirement of the Financial Plan is to include costs associated with replacing lead service pipes that are part of the drinking water system. While the Town conducts lead sampling as per Provincial Legislation, there are no lead distribution pipes within the Drinking Water System. As such, there are no costs associated with replacement.

4. Financial Plan

a. Revenue

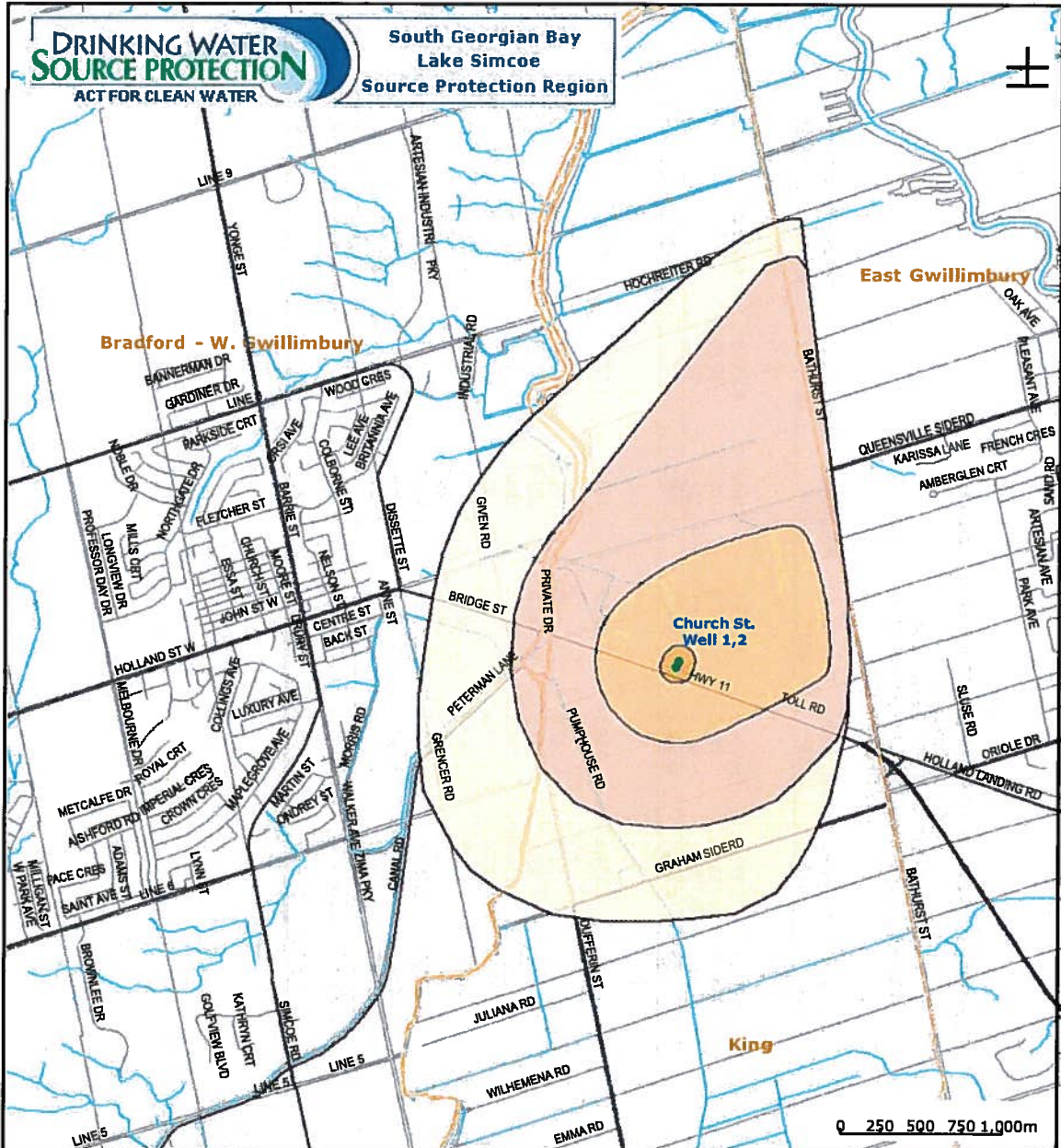
The Town currently maintains a full cost recovery program which ensures sufficient funds are generated to maintain the water infrastructure at a level sufficient to maintain services in a sustainable manner. Full cost pricing analysis was completed by a third party and is relayed in the water rates approved by Council annually through the water rate bylaw.

b. Expenses

Operating costs are generally those costs that relate to the operational issues of supply, distribution, and purchase of water for the current year including the staff, supplies and other costs required for management and maintenance of meters, pumping stations, pipes, and reservoirs. These expenditures do not increase the value of the system or the life of the system but are required to ensure the reliable delivery of safe clean water to the community and realize the anticipated life of the infrastructure components. It is generally accepted that due to the immediate benefit and short term impact of operating expenditures, they will be funded through the collection of user rates within the year the costs are incurred.

c. Reserve funds

The purpose of the reserve fund is to fund replacement and rehabilitation of water assets as well as larger non-growth related projects. Growth related projects are funded through the development charge process and does not impact current system users.



- Municipal Supply Well In Bradford-West Gwillimbury
- WHPA-A (100m)
- WHPA-B (2-years time of travel)
- WHPA-C1 (10-years time of travel)
- WHPA-D (25-years time of travel)
- Municipality Boundary
- Water Course

**Wellhead Protection Areas
Bradford-West Gwillimbury**

Created by: LSRCA Scale: 1:35,000
Date: 2014-04-08 UTM Zone 17N, NAD83



GENIVAR



This map was produced by the Lake Simcoe Region Conservation Authority, lead agency of the South Georgian Bay Lake Simcoe Region Source Protection Region. Base data have been compiled from various sources, under data sharing agreements. While every effort has been made to accurately depict the base data, errors may exist.



Figure 9a-1

THE CORPORATION OF THE TOWN OF BRADFORD WEST GWILLIMBURY
WATER DIVISION
STATEMENT OF OPERATIONS
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
AS AT DECEMBER 31

(IN THOUSANDS \$)

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
REVENUES								
Water billings	4,854.2	5,372.8	5,686.4	6,493.6	6,186.8	6,457.8	6,641.2	6,503.0
Transfer from Reserves	546.7	583.5	375.0	235.0	200.0	200.0	200.0	200.0
Other revenues	1,864.0	390.0	345.0	321.5	321.5	321.5	321.5	321.5
	<u>7,264.9</u>	<u>6,346.3</u>	<u>6,406.4</u>	<u>7,050.1</u>	<u>6,708.3</u>	<u>6,979.3</u>	<u>7,162.7</u>	<u>7,024.5</u>
EXPENSES								
Contractual Services	114.2	134.5	134.5	119.5	119.5	122.4	122.4	122.4
Contributions to Capital	3.0	5.0	-	-	-	-	-	-
Debtenture Costs	53.8	51.0	47.6	44.0	16.0	14.3	12.4	10.5
Insurance	97.6	92.0	98.5	102.0	102.0	102.0	102.0	102.0
Material & Supplies	186.0	214.7	204.5	210.2	216.4	216.4	216.4	216.4
Mileage, Conference & Training	18.6	19.0	19.0	19.0	18.4	8.4	8.4	8.4
Other Expenditures	902.4	943.9	965.3	994.3	1,023.0	1,022.3	1,036.7	898.4
Professional Services	11.7	20.0	20.0	20.0	20.0	30.0	30.0	30.0
Salaries & Benefits	989.0	1,152.6	1,228.5	1,313.2	1,342.8	1,361.5	1,380.6	1,380.6
Utilities	1,270.7	860.0	1,040.0	1,100.0	1,160.5	1,210.5	1,260.5	1,260.5
Amortization	1,418.7	1,301.9	1,386.0	2,080.4	2,363.9	2,359.8	2,356.2	2,350.0
	<u>5,065.8</u>	<u>4,794.6</u>	<u>5,143.9</u>	<u>6,002.6</u>	<u>6,382.4</u>	<u>6,447.6</u>	<u>6,525.6</u>	<u>6,379.2</u>
SURPLUS/(DEFICIT)	<u>2,199.2</u>	<u>1,551.7</u>	<u>1,262.6</u>	<u>1,047.4</u>	<u>325.9</u>	<u>531.7</u>	<u>637.2</u>	<u>645.2</u>

THE CORPORATION OF THE TOWN OF BRADFORD WEST GWILLIMBURY

WATER DIVISION

STATEMENT OF FINANCIAL POSITION

UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY

AS AT DECEMBER 31

(IN THOUSANDS \$)

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
FINANCIAL ASSETS								
Cash & Cash Equivalents	3,352	4,433	6,640	8,847	11,204	13,661	16,318	19,075
Accounts receivable	1,089	1,731	1,794	1,909	2,199	2,195	2,259	2,307
	4,441	6,163	8,433	10,756	13,403	15,856	18,577	21,383
LIABILITIES								
Accounts payable & accrued liabilities	729	507	479	514	600	638	645	653
Long term debt	980	917	851	315	282	248	212	174
	1,709	1,424	1,330	829	883	886	856	826
NET FINANCIAL ASSETS	6,150	7,587	9,764	11,585	14,286	16,742	19,433	22,209
NON-FINANCIAL ASSETS								
Tangible capital assets:								
Work-in-progress	605	-	-	-	-	-	-	-
Land	604	604	604	604	604	604	604	604
Buildings	8,365	10,815	10,368	9,846	9,325	8,803	8,281	7,759
Linear Assets	26,366	25,649	30,186	63,811	77,061	75,257	73,453	71,649
IT Infrastructure	76	63	52	43	34	27	21	16
Fleet & Equipment	548	565	599	577	537	502	471	445
	36,564	37,696	41,809	74,881	87,560	85,192	82,829	80,473
ACCUMULATED SURPLUS	42,714	45,283	51,573	86,466	101,846	101,934	102,262	102,682

THE CORPORATION OF THE TOWN OF BRADFORD WEST GWILLIMBURY
WATER DIVISION
STATEMENT OF CASH FLOWS
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
AS AT DECEMBER 31

(IN THOUSANDS \$)

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
OPERATING TRANSACTIONS								
Annual Surplus/(Deficit)	2,199	1,552	1,263	1,047	326	532	637	645
Non-cash items:								
Amortization	1,419	1,302	1,386	2,080	2,364	2,360	2,356	2,350
Cash used for Operating Transactions	3,618	2,854	2,649	3,128	2,690	2,892	2,993	2,995
FINANCING TRANSACTIONS								
Proceeds from long term debt	60	63	66	536	33	34	36	38
Repayment of long-term debt	60	63	66	536	33	34	36	38
Cash used for financing transactions								
CAPITAL TRANSACTIONS								
Cash used for capital transactions	556	584	375	235	200	200	200	200
	556	584	375	235	200	200	200	200
Projected increase (decrease) in cash and cash equivalents	3,002	2,207	2,207	2,357	2,457	2,657	2,757	2,757
Cash and cash equivalents, beginning of the year	1,430	4,433	6,640	8,847	11,204	13,661	16,318	19,075
Cash and cash equivalents, end of the year	4,433	6,640	8,847	11,204	13,661	16,318	19,075	21,833

THE CORPORATION OF THE TOWN OF BRADFORD WEST GWILLIMBURY
WATER DIVISION
SCHEDULE OF PROJECTED CAPITAL ASSET ACQUISITIONS, DISPOSALS AND ACCUMULATED AMORTIZATION
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
AS AT DECEMBER 31

(IN THOUSANDS \$)	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
CAPITAL COST								
<i>Water Buildings:</i>								
Opening	13,813.0	13,813.0	13,938.0	14,013.0	14,013.0	14,013.0	14,013.0	14,013.0
Additions	-	225.0	75.0	-	-	-	-	-
Disposals	-	(100.0)	-	-	-	-	-	-
Closing	13,813.0	13,938.0	14,013.0	14,013.0	14,013.0	14,013.0	14,013.0	14,013.0
<i>Fleet & Equipment:</i>								
Opening	1,320.5	1,292.1	1,315.6	1,360.6	1,360.6	1,360.6	1,360.6	1,360.6
Additions	25.8	83.5	100.0	35.0	-	-	-	-
Disposals	(54.3)	(60.0)	(55.0)	(35.0)	-	-	-	-
Closing	1,292.1	1,315.6	1,360.6	1,360.6	1,360.6	1,360.6	1,360.6	1,360.6
<i>IT Infrastructure:</i>								
Opening	36.6	106.6	91.4	78.3	67.2	57.6	49.3	42.3
Additions	81.5	-	-	-	-	-	-	-
Disposals	(11.5)	(15.2)	(13.1)	(11.2)	(9.6)	(8.2)	(7.0)	(6.0)
Closing	106.6	91.4	78.3	67.2	57.6	49.3	42.3	36.2
<i>Land:</i>								
Opening	603.6	603.6	603.6	603.6	603.6	603.6	603.6	603.6
Additions	-	-	-	-	-	-	-	-
Disposals	-	-	-	-	-	-	-	-
Closing	603.6	603.6	603.6	603.6	603.6	603.6	603.6	603.6
<i>Linear Assets:</i>								
Opening	34,768.2	35,873.7	35,873.7	40,011.2	75,139.2	90,192.3	90,192.3	90,192.3
Additions	1,157.1	5,337.4	5,337.4	35,128.0	15,053.2	-	-	-
Disposals	(51.6)	(1,200.0)	-	-	-	-	-	-
Closing	35,873.7	35,873.7	40,011.2	75,139.2	90,192.3	90,192.3	90,192.3	90,192.3

THE CORPORATION OF THE TOWN OF BRADFORD WEST GWILLIMBURY
WATER DIVISION
SCHEDULE OF PROJECTED CAPITAL ASSET ACQUISITIONS, DISPOSALS AND ACCUMULATED AMORTIZATION
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
AS AT DECEMBER 31

(IN THOUSANDS \$)

ACCUMULATED AMORTIZATION

Water Buildings:

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
Opening	4,932.0	2,702.5	3,122.9	3,644.8	4,166.7	4,688.5	5,210.4	5,732.3
Additions	515.9	520.4	521.9	521.9	521.9	521.9	521.9	521.9
Disposals	-	(100.0)	-	-	-	-	-	-
Closing	5,447.9	3,122.9	3,644.8	4,166.7	4,688.5	5,210.4	5,732.3	6,254.2

Fleet & Equipment:

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
Opening	811.0	851.0	842.0	839.7	850.9	880.8	907.9	932.3
Additions	94.4	51.0	52.7	46.2	29.9	27.1	24.4	19.1
Disposals	(54.3)	(60.0)	(55.0)	(35.0)	-	-	-	-
Closing	851.0	842.0	839.7	850.9	880.8	907.9	932.3	951.4

IT Infrastructure:

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
Opening	22.5	30.2	28.0	26.2	24.6	23.2	22.0	21.0
Additions	19.2	13.1	11.2	9.6	8.2	7.0	6.0	5.2
Disposals	(11.5)	(15.2)	(13.1)	(11.2)	(9.6)	(8.2)	(7.0)	(6.0)
Closing	30.2	28.0	26.2	24.6	23.2	22.0	21.0	20.2

Linear Assets:

	Actuals 2014	Adopted 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	Proposed 2021
Opening	8,738.7	9,507.5	10,224.9	9,825.2	11,328.0	13,131.8	14,935.6	16,739.5
Additions	818.5	717.5	800.2	1,502.8	1,803.8	1,803.8	1,803.8	1,803.8
Disposals	(49.8)	-	(1,200.0)	-	-	-	-	-
Closing	9,507.5	10,224.9	9,825.2	11,328.0	13,131.8	14,935.6	16,739.5	18,543.3

TOWN OF BRADFORD WEST GWILLIMBURY

Drinking WATER SYSTEM

NOTES TO THE SIX YEAR FINANCIAL PLAN

1. SIX YEAR FINANCIAL PLAN - ASSUMPTIONS

The development of the pro forma consolidated six year water financial statements incorporated the assumptions contained in the 2016 draft water/wastewater budget and the 2013 development charges study. The above study included assumptions for growth, inflationary factors, lifecycle capital forecasts and development charge revenues.

In certain situations best estimates were used in the development of the forecasted figures when financial information or data was not known. Generally the development of the consolidated six year financial forecast used a conservative approach in terms of consumption, inflation, expenditures and estimates.

2. FINANCIAL ASSETS

Financial assets consist of cash, cash equivalents, accounts receivables and billing accruals. Controlled by the Town, these economic resources are a result of past transactions or events where future economic benefits are expected to be obtained. Water reserve ending fund balances were adjusted for accrued transactions as reflected in accounts receivable/payable and conversion of other account balances to determine opening cash values. Forecasted accounts receivable and billing accruals are projected estimates based on historical trends.

3. LIABILITIES

Liabilities consist of accounts payable, accrued liabilities and long term debt.

a. Accounts Payable & Accrued Liabilities

Accounts payable and accrued liabilities represent the costs of goods and services acquired in the period and recognized whether or not payments have been made or invoices received. Forecasted accounts payable and accruals are projected estimates based on historical trends.

b. Long Term Debt

The Town has incurred long term debt which consists of debentures for watermain replacements. Forecasted principal and interest payments are based on existing debentures only and no additional debentures are projected in this forecast period.

4. NON-FINANCIAL ASSETS

Non-financial assets consist of tangible capital assets (TCA), inventory supplies, and prepaid expenses. These are not available to discharge existing liabilities and are held for use in the provision of services.

a. Tangible Capital Assets

TCA are physical assets with useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations. Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. Forecasted capital additions reflect budgeted capital expenditures (2016) and contributed/assumed assets. Specific details are outlined as follows:

i. Additions

Capital spending is forecasted for 2016-2021 per the draft capital budget and subsequent years are based on the 2016 draft capital budget. These expenditures are reflected as tangible capital assets in this forecast period and depreciated accordingly (half year rule applied).

ii. Contributed/Assumed Assets

These asset additions exceed those funded from water and are funded from other sources or are assets contributed by developers. Due to the nature and timing of recognizing these assets, these have not been included in this forecast.

i. Disposals

Not projected for this forecast period with the exception of well decommissioning.

ii. Amortization

Tangible capital assets are physical assets with a useful life extending beyond one year that are acquired, constructed or developed. The cost, less residual value, of the tangible capital assets, excluding land, are amortized on a straight line basis over their estimated useful lives as follows:

iii. Asset Useful life – Years

Water and Wastewater Infrastructure – 50 years

Water Buildings – 50 years

Machinery & Equipment - 15 – 20 years

Water Meters - 15 years

Vehicles - 8-10 years

Information Technology – 3-7 years

Annual amortization is charged in the year the asset is available for productive use and in the year of disposal. Assets under construction are not amortized until the asset is available for productive use.