

2021

Water Financial Plan



The Corporation of the
Municipality of McDougall

Introduction & Summary	3
Service Context.....	4
Drinking Water – Levels of Service	5
Water System Inventory.....	7
Water By-Laws.....	7
Water System Needs & Revenue Requirements	8
Asset Management.....	8
Growth.....	8
Operations & Maintenance	8
Preventative Maintenance.....	9
Unplanned Maintenance.....	9
Financial Model & Budget Process	9
Financial Model	9
Operating Budget Process.....	9
Capital Budget Process	10
Revenue & Rates	10
Financial Statements	10
Statement of Operations.....	11
Projected annual inflation rates for operating costs.....	11
Statement of Financial Position.....	12
Statement of Cash Flows	12
Schedule of Projected Liabilities.....	13

Introduction & Summary

This Financial Plan has been prepared to comply with the requirements of Ontario Regulation 453/07 and addresses The Corporation of the Municipality of McDougall's Drinking Water System and associated distribution 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 we are 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

This financial plan utilizes the guidelines of the Public Sector Accounting Board standards PSAB 3150 for Tangible Capital Assets (TCA) as required by Ontario Regulation 453/07. PSAB 3150 ensures municipalities and ratepayers are more aware of the investment in physical infrastructure and the cost of using an asset to provide services over its useful life. Furthermore, it also encourages long-term planning for capital renewal and replacement.

Following approval of the Financial Plan by Council, any requested changes will be made and the plan will be published on the Municipality of McDougall website and submitted to the Ministry of Municipal Affairs and Housing, as required by the legislation. Hard copies will be available to the public upon request.

Service Context

The supply of fresh, clean water is a very important service to the Municipality. Residents expect to be able to turn on their tap at any time and be able to trust that the water being supplied is safe to drink. The Municipality owes a duty of care to residents and businesses to ensure that water is available, clean and safe and it is this responsibility that guides Staff in its day to day operations, long term planning and recommendations to Council.

Drinking Water – Levels of Service

Performance Measure	Level of Service Objective	Performance Measure Process	2019 Performance Measured	Desired Level of Service
Purpose	Managing the water distribution system in accordance with all applicable legislation.	Number of customer service requests relating to quality/water taste.	1 Customer requests.	5 Customer requests.
Reliability	Provide users with a consistent supply of drinking water.	Number of unexpected interruptions of service.	0 Unexpected interruptions.	0 Unexpected interruptions.
Safety	Provide users with a safe supply of drinking water.	Number of AWQI (Adverse Drinking Water Quality Indicator)	0 AWQI cases.	0 AWQI cases.
		Number of pipe line breaks per 100km.	0 Pipe line break per 100km.	0 Pipe line breaks per 100km.
		Repair time after pipe breaks.	0 hours.	12 hour repair time after pipe breaks.
		Customer service request response time.	N/A, Completed within 0 hours in 2019.	12 hour response time.
Quality	Maintaining and continually improving the D.W.Q.M.S.	Number of improvements to the D.W.Q.M.S.	8 D.W.Q.M.S. improvements in 2019.	5 D.W.Q.M.S. improvements annually.
Capacity	Providing enough drinking water to residents with water connections and sufficient volume for fire protection.	Number of customer service requests relating to water pressure.	0 Customer service requests relating to water pressure.	5 Customer service requests relating to water pressure.

Performance Measure	Level of Service Objective	Performance Measure Process	2019 Performance Measured	Desired Level of Service
Operations	Water quality meets legislative requirements.	Inspections schedule. Water main flushing schedule.	Inspections completed daily. Annual flushing complete in 2019.	Daily inspections (Provincial regulation). Annual water main and hydrant flushing (Provincial regulation).
Maintenance	Respond to customer service maintenance requests and provide scheduled maintenance.	Work related to customer maintenance requests and scheduled maintenance completion times.	1 Customer service requests. Maintenance & repairs completed within 3 hours after beginning/notice.	3 Customer service requests. Maintenance & repairs completed within 12 hours after beginning/notice.
Renewal	Useful lives of infrastructure should be increasing with the replacement of components.	Infrastructure useful lives.	Average useful life is increasing with renewals. * 2012 Average Life: 71%	Infrastructure components are replaced before the end of the asset's lifecycle.
Upgrade/New	Residents and businesses who have access to Municipal water receive a sufficient amount of quality drinking water while maintaining a supply for fire protection.	Provision of water infrastructure to users who are eligible.	All users with Municipal water access have enough quality water. There is an ample amount of water for fire protection.	All users with Municipal water access have enough quality water. There is an ample amount of water for fire protection.

*As per 2013 Drinking Water System Asset Management Plan approved by council

resolution

Water System Inventory

The Municipality’s drinking water system consists of a network of pipes, maintenance holes, valves, hydrants, connections, a pumping station, and a chlorination room. The summary below provides a list of asset components*:

Asset Type	Asset Component	Inventory
Linear	Local Pipes	
	400mm	308m
	350mm	4,433m
	300mm	40m
	250mm	1,055m
	200mm	3,759m
	150mm	5,366m
	Valves & Chambers	92
	Hydrants	95
	Equipment	13
	Service Connections	343
Facilities	Chlorination Room in Parry Sound Water Tower	1
	Water Dept. Storage & Sampling Structure	1
	Pumping Station Structure Decommissioned in Jan 2008, Storage building only	1

*As per 2020 asset listing

Water By-Laws

The By-law for the Regulation of Water Supply By-law No. 2011-53 is a comprehensive By-law addressing all water related matters such as application for water service, operation of the water system, water services, water restrictions, prohibitions and enforcement. This By-law also addresses the Regulation of Cross Connection and Backflow Prevention on plumbing systems which is required to protect the Municipal

drinking water supply and distribution system from contamination.

Water System Needs & Revenue Requirements

Asset Management

In April of 2014, Finance staff in consultation with Management staff completed and presented the Asset Management Plan (AMP) for the Municipality. Included in this plan are the assets used by the Water Division to treat and supply water. The AMP outlined that currently 27% of water assets have a useful life of 75-100 years and that 48% of water assets have a useful life of 50-75 years. 57% of the water assets are deemed to be in excellent condition compared to 43% being in good condition.

There are no major capital replacements scheduled over the six year legislated period. Over the last three years the Municipality has not replaced or renewed any major drinking water assets; minor rehabilitation and repairs have been performed on the SCADA system as well as chlorination equipment. The Municipality has focused on reserve building and will continue to do so. Looking towards the next 20 years, a series of major asset lives come up for renewal namely hydrants and service connections. Further resources will be required and reserve building is important to ensure financial sustainability in the future.

Growth

The costs of major water expansion projects related to growth are to be funded by the developer. Individual connections and lot “infilling” are funded by the property owner by way of a connection fee and/or new service fee as per the Water By-Law. Water System growth is limited by distribution restrictions imposed by the Town of Parry Sound as per By-Law 2006-36 a maximum of 1,908 cubic meters of water supplied per day (m³/day). As per the 2019 Summary report to council, the systems average daily demand is at 248m³/day of a design demand of 763 m³/day, or at 33% of original design daily demand. It can also be stated that the system’s average daily demand (248m³/day) was only 13% of the maximum daily demand (1,908m³/day). Looking at these numbers you can see there is room for growth without considering infrastructure development.

Operations & Maintenance

Operating expenses typically detail the on-going, day-to-day expenses associated with the production and treatment of water. Items such as wages, benefits, chemicals and utility costs are included in the systems operating expenses. A major component of the operating budget is the water purchased from the Town of Parry Sound. The Municipality started receiving water from the Town of Parry Sound December 2006. The Municipality of McDougall receives cost increases for water purchased from the Town of Parry Sound that are adjusted annually. The annual increases subsequently increase the bi-monthly rate for McDougall users.

Preventative Maintenance

Preventative maintenance represents a proactive approach to maintaining the water distribution system. Acts of preventative maintenance often address issues before they cause a major problem or breakdown and can result in significant cost savings. Below are some of the key programs that fall under this heading.

- Regular inspection of hydrants and manual hydrant flushing (Spring & Fall)
- Hydrant maintenance is conducted and is comprised of two components:
 - i. Annual Maintenance, and
 - ii. Winter Inspection
- Valves are exercised to ensure functionality and identify deficiencies.
- The Supervisory Control and Data Acquisition (SCADA) system equipment and station pumps undergo life cycle maintenance based on manufacturers' specifications or as required by the regulations.

Unplanned Maintenance

Unplanned maintenance typically consists of repairing leaks or other deficiencies (e.g. damaged hydrants) that are reported by the public or Municipal staff. For facilities, required maintenance work may be identified by Operators during regular visits to the facilities. Often unplanned maintenance can be costly and disruptive for the customers, which is why significant effort and focus is put on preventative maintenance.

Financial Model & Budget Process

Financial Model

In April 2014 Council approved the Asset Management Plan. This plan gave an overview of where the Municipality is with regards to its linear infrastructure, including roads, water mains and other assets. This model will continue to be updated and improved and will become the backbone to the capital budget as well as the operating maintenance budget

Operating Budget Process

Operating Costs are generally 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 water system assets. 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.

The Water Operating Budget can be divided into the following categories:

- Salaries, Wages, Benefits
- Administration & Personnel Costs
- Water Supply Costs

- Treatment & Distribution Costs
- Equipment & Vehicle Costs
- Insurance

In addition to these categories the Income Statement for the Water Division will include amortization of Tangible Capital Assets (TCA) consistent with PSAB Section 3150.

The budgets for Salaries, Wages and Benefits, Administration & Personnel Costs, Treatment and Distribution Costs, Equipment and Vehicle Costs and Insurance are typically driven by inflation and in some cases changes in operations. The water supply contract with the Town of Parry Sound is scheduled to be renegotiated in 2026.

The annual budget is developed through consultation with management prior to approval by council.

Capital Budget Process

Capital Costs are those expenditures which increase the value of the system, improve the system, replace existing assets and/or extend the lifespan of those assets.

On an annual basis, projects are reviewed and adjusted to reflect changes in the background information, inflationary impacts, changing priorities within the Municipality and coordination with development plans. The resulting annual Capital Budgets are approved by Council.

Revenue & Rates

Currently the rates are structured by a fixed component. The fixed charge is a flat rate billed to all customers based on the type of connection (residential, commercial, institutional). Annual rates are based on the funding needs for both the Operating and Capital budgets and cover the annual increases to purchase water from the Town of Parry Sound as well as to help fund reserves.

Financial Statements

In June 2006, the Public Sector Accounting Board (PSAB) approved PSAB 3150, requiring municipalities to report Tangible Capital Assets in their Statement of Financial Position effective January 1, 2009. Starting with the 2009 audited financial statements all municipalities moved to a full accrual financial statement format. This change required the inclusion of tangible capital assets, related accumulated amortization, removal of capital and reserve and reserve fund statements, introduction of accumulated surplus including all reserve and reserve funds balances. The attached forecasted financial statements have been prepared under these requirements as well following Ontario Regulation 453/07.

Statement of Operations

	2021	2022	2023	2024	2025	2026	2027
Revenue							
Projected Rate Increase		2.48%	2.64%	2.57%	2.51%	2.44%	2.58%
User Rate Billings	\$ 288,086	\$ 295,223	\$ 303,009	\$ 310,795	\$ 318,582	\$ 326,368	\$ 334,803
Miscellaneous User Charges	6,500	5,610	5,610	5,610	5,610	5,610	5,610
Recovery of Expenses	113,779	116,598	119,673	122,748	125,823	128,898	132,230
One time contribution to capital	398,036						
Total Revenue	806,401	417,431	428,292	439,154	450,015	460,876	472,642
Operating Expenses							
Salaries, Wages, Benefits	\$ 239,765	\$ 245,759	\$ 251,903	\$ 258,201	\$ 264,656	\$ 271,272	\$ 278,054
Administration & Personnel Costs	15,700	16,093	16,495	16,907	17,330	17,763	18,207
Water Supply Costs	95,000	97,354	99,921	102,489	105,056	107,624	110,405
Treatment & Distribution Costs	27,400	28,085	28,787	29,507	30,244	31,001	31,776
Equipment & Vehicle Costs	6,500	6,663	12,829	7,150	7,329	7,512	7,700
Insurance	17,000	17,425	17,861	18,307	18,765	19,234	19,715
One time donation							
Total Operating Expenses	401,365	411,378	427,796	432,560	443,380	454,405	465,856
Debt Charges - Interest Payments	2,478	506					
Amortization Expense	226,761	226,761	226,761	237,761	237,761	237,761	237,761
Total Expenses	\$ 630,604	\$ 638,644	\$ 654,556	\$ 670,321	\$ 681,140	\$ 692,166	\$ 703,617
Annual Surplus (Deficit)	\$ 175,797	-\$ 221,213	-\$ 226,264	-\$ 231,167	-\$ 231,125	-\$ 231,290	-\$ 230,975
Accumulated Surplus - beginning of year	7,372,120	7,547,918	7,326,705	7,100,441	6,869,274	6,638,148	6,406,859
Accumulated Surplus - end of year	\$ 7,547,918	\$ 7,326,705	\$ 7,100,441	\$ 6,869,274	\$ 6,638,148	\$ 6,406,859	\$ 6,175,884

Projected annual inflation rates for operating costs

	2021	2022	2023	2024	2025	2026
Salaries, Wages, Benefits	2.48%	2.64%	2.57%	2.51%	2.44%	2.58%
Administration & Personnel Costs	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Water Supply Costs	2.48%	2.64%	2.57%	2.51%	2.44%	2.58%
Treatment & Distribution Costs	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Equipment & Vehicle Costs	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Insurance	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Financial & Interest Expenses	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

Statement of Financial Position

	2021	2022	2023	2024	2025	2026	2027
Financial Assets							
Cash, Investments	\$ 693,315	\$ 690,624	\$ 691,121	\$ 642,714	\$ 649,349	\$ 655,820	\$ 662,606
Water Debenture Receivable	31,154	-	-	-	-	-	-
Total Financial Assets	724,469	690,624	691,121	642,714	649,349	655,820	662,606
Financial Liabilities							
Accounts Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Long Term Liabilities	39,392	-	-	-	-	-	-
Total Financial Liabilities	39,392	-	-	-	-	-	-
Net Financial Assets (Net Debt)	\$ 685,076	\$ 690,624	\$ 691,121	\$ 642,714	\$ 649,349	\$ 655,820	\$ 662,606
Non Financial Assets							
Tangible Capital Assets	\$ 11,401,934	\$ 11,401,934	\$ 11,401,934	\$ 11,456,934	\$ 11,456,934	\$ 11,456,934	\$ 11,456,934
Accumulated Amortization	4,539,093	4,765,853	4,992,614	5,230,374	5,468,135	5,705,896	5,943,656
Total Non Financial Assets	6,862,841	6,636,081	6,409,320	6,226,560	5,988,799	5,751,038	5,513,278
Accumulated Surplus - end of year	\$ 7,547,918	\$ 7,326,705	\$ 7,100,441	\$ 6,869,274	\$ 6,638,148	\$ 6,406,858	\$ 6,175,884

Statement of Cash Flows

	2021	2022	2023	2024	2025	2026	2027
Operating Transactions							
Projected Annual Surplus (Deficit)	\$ 175,797	-\$ 221,213	-\$ 226,264	-\$ 231,167	-\$ 231,125	-\$ 231,290	-\$ 230,975
Decrease in Water Debenture Receivable	37,461	31,154	-	-	-	-	-
Items not involving cash:							
Amortization	226,761	226,761	226,761	237,761	237,761	237,761	237,761
Cash used for Operating Transactions	440,018	36,702	497	6,593	6,635	6,471	6,786
Financing Transactions							
Proceeds from Long Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repayments	- 40,897	- 40,897	-	-	-	-	-
Cash used for Financing Transactions	- 40,897	- 40,897	-	-	-	-	-
Capital Transactions							
System Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Watermain Replacement/Rehabilitation	-	-	-	-	-	-	-
Fleet & Equipment	-	-	-	-	-	-	-
Facilities	-	-	-	-	-	-	-
Cash used for Capital Transactions	-	-	-	-	-	-	-
Net Change in Cash/Cash Equivalents	\$ 399,122	-\$ 4,195	\$ 497	\$ 6,593	\$ 6,635	\$ 6,471	\$ 6,786
Beginning Balance	49,532	448,654	444,459	444,956	451,549	458,184	464,655
Ending Balance	\$ 448,654	\$ 444,459	\$ 444,956	\$ 451,549	\$ 458,184	\$ 464,655	\$ 471,441

Schedule of Projected Liabilities

	2021	2022	2023	2024	2025	2026	2027
Long Term Debt Financed by Municipality							
Opening Balance	\$ 76,861	\$ 39,392	\$ -	\$ -	\$ -	\$ -	\$ -
Repayments	- 76,861	- 39,392	-	-	-	-	-
New Long Term Debt	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-



RESOLUTION NO.: 2020-97

DATE: October 7, 2020

CARRIED: ✓

DEFEATED: _____

MOVED BY:

Councillor Ryman

DIVISION LIST

Councillor Constable

Councillor Gregory

FOR

AGAINST

SECONDED BY:

Councillor Gregory

Councillor Malott

Councillor Ryman

Mayor Robinson

THAT the McDougall Council as per the Requirements of O. Reg. 453/07 of the Safe Drinking Water Act 2002, approve the 2021 Water Financial Plan as presented to Council on the 7th day of October, 2020.

MAYOR