

4. FINANCIAL PLAN # 290-301
Amendment May 28,2015 to cover Period of 2011 to 2021

4. FINANCIAL PLAN

4.1 Introduction

The following tables provide the complete financial plan for the Municipality's water system. A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of the Municipality's water system. It is not an audited document¹ and contains various estimates as detailed in the "Notes to the Financial Plan" section below.

4.2 Water Financial Plan

4.2.1 *Statement of Financial Position (Table 4-1)*

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of the Municipality's water system. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement". A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2011 due to the existing water debt principal balance and low reserve balance, the Municipality's water system was in a net debt position of \$1,085,323. However, this net debt position improves to \$1,062,361 in 2012 then continues to improve throughout the forecast period, resulting in a net debt position of \$702,632 by 2021. The net debt position is projected to improve by over \$350,000 over the forecast period. This is due to the 2012 Water Forecast projecting a reducing debt balance and increasing reserve balance over the forecast period.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. As noted earlier, providing this information is a new requirement of municipalities as part of PS3150 compliance (since 2009) and is significant from a financial planning perspective for the following reasons:

- Tangible capital assets such as water mains are imperative to water service delivery;
- These assets represent significant economic resources in terms of their historical and replacement costs. Therefore, ongoing capital asset management is essential to managing significant replacements and repairs; and

¹ O.Reg. 453/07 does not require an audited financial plan.

- The annual maintenance required by these assets has an enduring impact on water operational budgets.

In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the municipality or donation/contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows that there are no current plans to purchase or construct water tangible capital assets during the forecast period. As a result, the tangible capital asset net book value is anticipated to decrease by over \$3 million during this time, due to annual amortization amounts. This indicates that the Municipality has no plans to invest in water tangible capital asset over the forecast period.

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues at 202% in 2011 and 2012, 220% in 2013 then gradually improving to 161% by 2021. As a result, annual deficit amounts are shown at \$322534 in 2011, \$321431 in 2012, \$367546 in 2013 then gradually improving to \$230239 by 2021. Deficit are shown due to the fact that the Municipality is not currently contributing to water reserves at amounts equalling or exceeding amortization expense each year. Amortization, which is a non-cash expense from a full accrual reporting standpoint, is included in operating expenses as shown in Table 4-2. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, reserve/reserve fund transfers and debt principal payments in the future.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing or rate increases are required to finance annual deficits. From Table 4-2, the financial plan illustrates a reduction in accumulated surplus of approximately \$2.8 million over the forecast period. This is due to the projection of annual deficits as well as the decreasing tangible capital asset net book value over the forecast period. The existing accumulated surplus, as indicated in Table 4-2, is predominately made up of reserve balances as well as historical investments in tangible capital assets.

4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. Table 4-3 indicates that forecasted tangible capital asset amortization exceeds the forecasted annual deficit for each year of the forecast period, resulting in an increase in net financial assets each year. This trend of improving the net financial asset position will eventually allow for a long term plan of funding capital through accumulated surplus (i.e. reserve balances).

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how the water system is expected to generate and use cash resources during the planning period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash and accrual based reporting. Table 4-4 indicates that cash from operations will be used to start building internal reserves and make required debt payments over the forecast period. The financial plan projects the cash position of the Municipality's water system to decline from a balance of approximately \$39604 at the beginning of 2011 to \$2449 in 2014 and then improve to an estimated balance of \$114,783 by 2021. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

Table 4-1
Municipality of Machin
Statement of Financial Position (Water)
UNAUDITED: For Financial Planning Purposes Only
2011-2021
Revised May 2015

Description	Notes	Budget					Forecast					
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Financial Assets												
Cash	1	\$40,829.00	\$40,571.00	\$34,505.00	\$34,243.00	\$37,887.00	\$45,695.00	\$58,000.00	\$75,004.00	\$95,007.00	\$118,017.00	\$122,737.00
Accounts Receivable	1	\$11,708.00	\$11,587.00	\$12,501.00	\$12,734.00	\$13,133.00	\$13,581.00	\$14,047.00	\$14,528.00	\$14,927.00	\$15,336.00	\$15,949.00
Total Financial Assets		\$52,537.00	\$52,158.00	\$47,006.00	\$46,977.00	\$51,020.00	\$59,276.00	\$72,047.00	\$89,532.00	\$109,934.00	\$133,353.00	\$138,686.00
Liabilities												
Accounts Payable & Accrued Liabilities		\$37,182.00	\$36,803.00	\$36,306.00	\$37,032.00	\$37,775.00	\$38,531.00	\$39,302.00	\$40,087.00	\$40,889.00	\$41,708.00	\$42,500.00
Debt (Principal only)	1	\$1,100,678.00	\$1,077,716.00	\$1,053,600.00	\$1,028,270.00	\$1,001,666.00	\$973,722.00	\$944,373.00	\$913,547.00	\$881,170.00	\$847,164.00	\$813,277.00
Deffered Revenue	2											
Total Liabilities	3	\$1,137,860.00	\$1,114,519.00	\$1,089,906.00	\$1,065,302.00	\$1,039,441.00	\$1,012,253.00	\$983,675.00	\$953,634.00	\$922,059.00	\$888,872.00	\$855,777.00
Net Financial Asset/(- Debt)		-\$1,085,323.00	-\$1,062,361.00	-\$1,042,900.00	-\$1,018,325.00	-\$988,421.00	-\$952,977.00	-\$911,628.00	-\$864,102.00	-\$812,125.00	-\$755,519.00	-\$702,632.00
Non-Financial Assets												
Tangible Capital Assets	4	\$5,844,658.00	\$5,504,380.00	\$5,164,102.00	\$4,823,824.00	\$4,512,001.00	\$4,228,633.00	\$3,945,265.00	\$3,661,897.00	\$3,378,529.00	\$3,095,161.00	\$2,811,893.00
Total Non-Financial Assets		\$5,844,658.00	\$5,504,380.00	\$5,164,102.00	\$4,823,824.00	\$4,512,001.00	\$4,228,633.00	\$3,945,265.00	\$3,661,897.00	\$3,378,529.00	\$3,095,161.00	\$2,811,893.00
Accumulated Surplus/(Deficit)	5	\$4,759,335.00	\$4,442,019.00	\$4,121,202.00	\$3,805,499.00	\$3,523,580.00	\$3,275,656.00	\$3,033,637.00	\$2,797,795.00	\$2,566,404.00	\$2,339,642.00	\$2,112,696.00
Financial Indicators												
	Total Change	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1) Increase/(Decrease) in Net Financial Assets	\$351,665.00	\$21,861.00	\$22,962.00	\$19,461.00	\$24,575.00	\$29,904.00	\$35,444.00	\$41,349.00	\$47,526.00	\$51,977.00	\$56,606.00	\$61,248.00
2) Increase/(Decrease) in Tangible Capital Assets	-\$3,089,776.00	-\$340,279.00	-\$340,278.00	-\$340,278.00	-\$340,278.00	-\$311,823.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00
3) Increase/(Decrease) in Accumulated Surplus	-\$2,738,111.00	-\$318,418.00	-\$317,316.00	-\$320,817.00	-\$315,703.00	-\$281,919.00	-\$247,924.00	-\$242,019.00	-\$235,842.00	-\$231,391.00	-\$226,762.00	-\$222,120.00

Table 4-2
Municipality of Machin
Statement of Financial Position (Water)
UNAUDITED: For Financial Planning Purposes Only
2011-2021
Revised May 2015

Description	Notes	Budget		Forecast								
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Water Revenue												
Billing Revenue		161,383.00	164,383.00	177,038.00	184,208.00	191,633.00	199,253.00	207,243.00	215,503.00	222,033.00	228,753.00	233,328.00
Earned Development charges & Gas Tax revenue	3	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00	54,150.00
Other Revenue	6	101,053.00	95,553.00	74,970.00	76,480.00	78,956.00	81,856.00	81,160.00	82,780.00	84,430.00	86,110.00	87,832.00
Total Revenues		316,586.00	314,086.00	306,158.00	314,838.00	324,739.00	335,259.00	342,553.00	352,433.00	360,613.00	369,013.00	375,310.00
Water Expenses												
Operating Expenses	Sch 4-1	243,320.25	240,817.71	280,159.00	285,404.00	249,015.00	253,995.30	259,075.21	264,256.71	269,541.84	274,932.68	280,431.33
Interest on Debt	2	55,522.00	54,422.00	53,267.00	52,053.00	50,779.00	49,440.00	48,034.00	46,557.00	45,006.00	43,377.00	41,750.00
Amortization	4	340,278.00	340,278.00	340,278.00	340,278.00	311,823.00	283,368.00	283,368.00	283,368.00	283,368.00	283,368.00	283,368.00
Total expenses		639,120.25	635,517.71	673,704.00	677,735.00	611,617.00	586,803.30	590,477.21	594,181.71	597,915.84	601,677.68	605,549.33
Annual Surplus/(-Deficit)		-322,534.25	-321,431.71	-367,546.00	-362,897.00	-286,878.00	-251,544.30	-247,924.21	-241,748.71	-237,302.84	-232,664.68	-230,239.33
Accumulated Surplus/(-Deficit) beginning of year	5	5,077,753.00	4,758,335.00	4,442,019.00	4,121,202.00	3,805,499.00	3,523,580.00	3,275,656.00	3,033,637.00	2,797,795.00	2,566,404.00	2,335,428.00
Accumulated Surplus/(-Deficit) end of Year		4,755,218.75	4,436,903.29	4,074,473.00	3,758,305.00	3,518,621.00	3,272,035.70	3,027,731.79	2,791,888.29	2,560,492.16	2,333,739.32	2,105,188.67
Note: 5												
Accumulated Surplus/(-Deficit) is made up of:												
Reserve Balances												
Reserves: Gas Tax												
Reserves: Capital/Other		15,355.00	15,355.00	10,700.00	9,945.00	13,245.00	20,745.00	32,745.00	49,446.00	69,045.00	91,646.00	111,646.00
Total Reserve Balance		15,355.00	15,355.00	10,700.00	9,945.00	13,245.00	20,745.00	32,745.00	49,446.00	69,045.00	91,646.00	111,646.00
Less: Debt obligations and deferred Revenue		-1,100,678.00	-1,077,716.00	-1,053,600.00	-1,028,270.00	-1,001,666.00	-973,722.00	-944,373.00	-913,547.00	-881,170.00	-847,164.00	-813,277.00
Add: Tangible Capital Assets		5,844,658.00	5,504,380.00	5,164,102.00	4,823,824.00	4,512,001.00	4,228,633.00	3,945,265.00	3,661,897.00	3,378,529.00	3,095,161.00	2,811,893.00
Total Ending Balance		4,728,625.00	4,411,309.00	4,099,802.00	3,785,609.00	3,497,090.00	3,234,166.00	2,968,147.00	2,698,904.00	2,428,314.00	2,156,351.00	1,886,970.00
Financial Indicators	Total Change	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1) Expense to revenue ratio		202%	202%	220%	215%	188%	175%	172%	169%	166%	163%	161%
2) Increase/(-Decrease) in accumulated surplus		-322,534.25	-321,431.71	-367,546.00	-362,897.00	-286,878.00	-251,544.30	-247,924.21	-241,748.71	-237,302.84	-232,664.68	-230,239.33

Schedule 4-1
Municipality of Machin
Schedule of Operating Expenses
UNAUDITED: For Financial Planning Purposes Only
2011-2021
Revised May 2015

Description	Notes	Budget		Forecast								
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Expenditures												
Operating Costs												
Green Shield			\$500.00	\$510.00	520.00	\$530.00	\$540.60	\$551.41	\$562.44	\$573.69	\$585.16	\$596.87
Union Gas		\$4,000.00	\$4,600.00	\$4,690.00	4,780.00	\$6,000.00	\$6,120.00	\$6,242.40	\$6,367.25	\$6,494.59	\$6,624.48	\$6,756.97
Hydro		\$22,629.00	\$20,000.00	\$20,400.00	20,810.00	\$24,000.00	\$24,480.00	\$24,969.60	\$25,468.99	\$25,978.37	\$26,497.94	\$27,027.90
Insurance		\$12,950.00	\$13,500.00	\$13,770.00	14,050.00	\$15,719.00	\$16,033.38	\$16,354.05	\$16,681.13	\$17,014.75	\$17,355.05	\$17,702.15
Memberships/subscriptions		\$275.00	\$290.00	\$300.00	310.00	\$200.00	\$204.00	\$208.08	\$212.24	\$216.49	\$220.82	\$225.23
DWQMS Audit			\$10,000.00	\$10,200.00	10,400.00	\$4,600.00	\$4,692.00	\$4,785.84	\$4,881.56	\$4,979.19	\$5,078.77	\$5,180.35
O/D Contract		\$200,000.00	\$180,000.00	\$183,600.00	187,270.00	\$148,123.00	\$151,085.46	\$154,107.17	\$157,189.31	\$160,333.10	\$163,539.76	\$166,810.56
Property Taxes		\$466.25	\$464.71	\$43,119.00	\$43,624.00	\$45,343.00	\$46,249.86	\$47,174.86	\$48,118.35	\$49,080.72	\$50,062.34	\$51,063.58
Building Maintenance		\$1,000.00	\$1,000.00	\$1,020.00	1,040.00	\$1,500.00	\$1,530.00	\$1,560.60	\$1,591.81	\$1,623.65	\$1,656.12	\$1,689.24
Distribution Parts & Maintenance		\$2,000.00	\$2,500.00	\$2,550.00	2,600.00	\$3,000.00	\$3,060.00	\$3,121.20	\$3,183.62	\$3,247.30	\$3,312.24	\$3,378.49
OPW Grant			\$7,963.00									
Non TCA- Expenses from Capital Budget												
Total Operating Expenses		\$243,320.25	\$240,817.71	\$280,159.00	\$285,404.00	\$249,015.00	\$253,995.30	\$259,075.21	\$264,256.71	\$269,541.84	\$274,932.68	\$280,431.33

Table 4-3
Municipality of Machin
Statement of Change in Net Financial Asset/(-Debt) (Water)
UNAUDITED: For Financial Planning Purposes Only
2011-2021
Revised May 2015

Description	Notes	Budget				Forecast						
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Annual Surplus/(-Deficit)		-5322,534.25	-5321,431.71	-5367,546.00	-5362,897.00	-5286,878.00	-5251,544.30	-5247,924.21	-5241,748.71	-5237,302.84	-5232,664.68	-5230,239.33
Less Acquisition of Tangible Capital Assets	4											
Add Amortization of Tangible Capital Assets	4	5340,278.00	5340,278.00	5340,278.00	5340,278.00	5311,823.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00
(Gain)/Loss on Disposal of Tangible Capital Assets												
Add: Proceeds on sale of Tangible Capital Assets												
Add: Write Downs of tangible Capital Assets												
Increase/(-Decrease) in Net Financial Assets/(-Net Debt)		17,743.75	18,846.29	-27,268.00	-22,619.00	24,945.00	31,823.70	35,443.79	41,619.29	46,065.16	50,703.32	55,128.67
Net Financial Assets/(-Debt), Beginning of Year		-1,100,678.00	-1,077,716.00	-1,053,600.00	-1,028,270.00	-1,001,666.00	-973,722.00	-944,373.00	-913,547.00	-881,170.00	-847,164.00	-813,277.00
Net Financial Assets/(-Debt), End of Year		-1,085,323.00	-1,062,361.00	-1,042,900.00	-1,018,325.00	-998,421.00	-975,977.00	-949,128.00	-918,102.00	-885,105.00	-850,461.00	-815,148.00

Financial Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
1) Acquisitions of Tangible Capital Assets (Cumulative)												
2) Annual Surplus/(-Deficit) before Amortization (Cumulative)		\$21,861.00	\$44,823.00	\$64,284.00	\$88,859.00	\$118,763.00	\$154,207.00	\$195,556.00	\$243,082.00	\$295,059.00	\$351,665.00	\$412,913.00
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's Cumulative												

Financial Indicators	Total Change	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1) Increase/(-Decrease) in Net Financial Assets	\$351,665.00	\$21,861.00	\$22,962.00	\$19,461.00	\$24,575.00	\$29,904.00	\$35,444.00	\$41,349.00	\$47,526.00	\$51,977.00	\$56,606.00	\$61,248.00
2) Increase/(-Decrease) in Tangible Capital Assets	-\$3,089,776.00	-\$340,278.00	-\$340,278.00	-\$340,278.00	-\$340,278.00	-\$311,823.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00	-\$283,368.00
3) Increase/(-Decrease) in Accumulated Surplus	-\$2,738,111.00	-\$318,418.00	-\$317,316.00	-\$320,817.00	-\$315,703.00	-\$281,919.00	-\$247,924.00	-\$242,019.00	-\$235,842.00	-\$231,391.00	-\$226,762.00	-\$222,120.00

-283

Table 4-4
Municipality of Machin
Statement of Cash Flow- Indirect Method (Water)
UNAUDITED: For Financial Planning Purposes Only
2011-2021
Revised May 2015

Description	Notes	Budget				Forecast						
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Operating Transactions												
Annual Surplus/(-Deficit)		-5322,534.25	-5321,431.71	-5367,546.00	-5362,897.00	-5286,878.00	-5251,544.30	-5247,924.21	-5241,748.71	-5237,302.84	-5232,664.68	-5230,239.33
Add: Amortization of TCA's	4	5340,278.00	5340,278.00	5340,278.00	5340,278.00	5311,823.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00	5283,368.00
(Gain)/Loss on Disposal of Tangible Capital Assets												
Less: Earned Deferred Revenue	3	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00	-554,150.00
Less: Developer Contributions												
Add: Development Charge and Gas Tax Proceeds		554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00	554,150.00
Change in A/R (increase)/(-Decrease)			\$121.00	-\$914.00	-\$233.00	-\$399.00	-\$448.00	-\$466.00	-\$481.00	-\$399.00	-\$409.00	-\$419.00
Change in A/P (increase)/(-Decrease)			-379	-497	726	743	756	771	785	802	819	826.00
Less Interest Proceeds												
Cash Produced by Operating transactions		\$21,861.00	\$22,962.00	\$19,461.00	\$24,575.00	\$29,904.00	\$35,444.00	\$41,349.00	\$47,526.00	\$51,977.00	\$56,606.00	\$61,248.00
Capital Transactions												
Proceeds on sale of Tangible Capital Assets												
Less: Cash Used to acquire Tangible Capital Assets	4											
Cash applied to Capital Transactions												
Investing Transactions												
Proceeds on sale of tangible Assets												
Less: Cash Used to Acquire investments												
Cash Provided by (applied to) investing transactions												
Financing Transactions												
Proceeds for Debt Issue	2											
Less: Debt Repayment (Principal only)		-521,861.00	-522,961.00	-524,116.00	-525,330.00	-526,604.00	-527,943.00	-529,349.00	-530,825.00	-532,377.00	-534,006.00	-535,638.00
Cash Applied to Financing Transactions		-521,861.00	-522,961.00	-524,116.00	-525,330.00	-526,604.00	-527,943.00	-529,349.00	-530,825.00	-532,377.00	-534,006.00	-535,638.00
Increase in Cash and Cash Equivalents, Beginning of Year			-258	-6066	-261	3644	7808	12305	17004	20003	23010	26010
		\$39,604.75	\$41,550.29	-\$9,218.00	\$1,449.00	\$55,193.00	\$67,575.70	\$77,097.79	\$89,449.29	\$98,445.16	\$107,719.32	\$114,783.67
		\$39,604.75	\$41,292.29	-\$15,284.00	\$2,187.00	\$58,837.00	\$75,383.70	\$89,402.79	\$106,453.29	\$118,448.16	\$130,729.32	\$140,793.67

WATER NOTES TO FINANCIAL PLAN

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, Section 3(2) of O.Reg. 453/07 states the following:

“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).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue); and
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges;
- C. Investing transactions that are acquisitions and disposal of investments;
- E. Change in cash and cash equivalents during the year; and
- F. Cash and cash equivalents at the beginning and end of the year.

In order to show a balanced financial plan in a full accrual format for the Municipality of Machin, some of the items listed above have been estimated given that the Municipality does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses). The assumptions used have been documented below:

1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to: Ending Reserve/Reserve Fund Balance *Plus*: Ending Accounts Payable Balance Less: Ending Accounts Receivable Balance *Equals*: *Approximate Ending Cash Balance*

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a. Receivables: Based on historical levels of receivables as a percentage of annual revenue earned (source: prior years audited financial statements); and
- b. Payables: Based on historical levels of payables as a percentage of annual expenses incurred (source: prior years audited financial statements).

2. Debt

Outstanding water related debt at the end of 2010 was \$1,143,353 with no additional debt proceeds anticipated throughout the forecast period. Principal repayments for existing over the forecast period are scheduled as follows:

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve balances and/or gas tax reserve fund balances, which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected.

Year	Principal Payments
2011	\$ 21,861
2012	\$ 22,961
2013	\$ 24,116
2014	\$ 25,330
2015	\$ 26,604
2016	\$ 27,943
2017	\$ 29,349
2018	\$ 30,826
2019	\$ 32,377
2020	\$ 34,006
2021	\$ 35,638
Total	\$ 311,011

The Municipality of Machin does not collect water development charges and does not maintain an ongoing gas tax balances specifically for water services, therefore deferred revenue is assumed to be zero over the forecast period.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Water Treatment Assets;
 - ii. Water Distribution Assets;
 - iii. Other Water Assets;
- Amortization is calculated based on using the straight-line approach;
- Write-offs are assumed to equal \$0 for each year in the forecast period;
- Tangible capital assets are shown on a net book value basis.
- Gains/losses on disposal are assumed to be \$0;
- Contributed Assets are assumed to be \$0; and
- The Municipality is unaware of any specific lead service piping in the municipal water system.

The balance of tangible capital assets is summarized as follows:

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Opening TCA Balance (Historical Cost)	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Disposals	-	-	-	-	-	-	-	-	-	-	-
Closing TCA Balance (Historical Cost)	8,487,579										
Opening Accumulated Amortization	2,302,643	2,642,921	2,983,199	3,323,477	3,663,755	3,975,578	4,258,946	4,542,314	4,825,682	5,109,050	5,392,418
Amortization Expense	340,278	340,278	340,278	340,278	311,823	283,368	283,368	283,368	283,368	283,368	283,368
Amortization on Disposal	-	-	-	-	-	-	-	-	-	-	-
Ending Accumulated Amortization	2,642,921	2,983,199	3,323,477	3,663,755	3,975,578	4,258,946	4,542,314	4,825,682	5,109,050	5,392,418	5,109,050
Net Book Value	5,844,658	5,504,380	5,164,102	4,823,824	4,512,001	4,228,633	3,945,265	3,661,897	3,378,529	3,095,161	2,811,793

5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Water	2011 Opening Accumulated Surplus
Reserve Balances	
Reserves: Gas Tax	-
Reserves: Capital/Other	15,355
Total Reserves Balance	15,355
Less: Debt Obligations and Deferred Revenue	-1,122,539
Add: Tangible Capital Assets	6,184,937
Total Opening Balance	5,077,753

The accumulated surplus reconciliation for all years within the forecast period is contained in Table 4-2.

6. Other Revenue Other revenue includes frontage connections, miscellaneous sale of water, hydrant changes and other operating general revenues.

7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets, if applicable, would have to be reclassified and shown as an operating expense in the year in which they occur. This is not applicable for Machin.