

The Corporation of the City of Vaughan

2014 - 2019 Consolidated Water System Financial Plan

Vaughan Water System Kleinburg Water System



WATER SYSTEM

STATEMENT OF FINANCIAL POSITION

	FORECAST						
As at December 31	2014	2015	2016	2017	2018	2019	
Financial Assets							
Cash and Cash Equivalents	48,084,000	45,426,000	45,834,000	47,796,000	51,836,000	57,659,000	
Water Billings Receivable	9,406,000	10,256,000	11,063,000	11,926,000	12,865,000	13,796,000	
Total Financial Assets	57,490,000	55,682,000	56,897,000	59,722,000	64,701,000	71,455,000	
Liabilities							
Accounts Payable	577,000	593,000	618,000	644,000	679,000	719,000	
Accrued Liabilities	11,505,000	12,524,000	13,561,000	14,479,000	15,399,000	16,328,000	
Debenture & Other Debt	4,485,000	4,607,000	4,852,000	5,180,000	5,764,000	6,564,000	
Deferred Revenue - Obligatory Reserve Funds	9,835,000	9,235,000	9,635,000	10,235,000	10,335,000	10,435,000	
Total Liabilities	26,402,000	26,959,000	28,666,000	30,538,000	32,177,000	34,046,000	
Net Financial Assets/(Debt)	31,088,000	28,723,000	28,231,000	29,184,000	32,524,000	37,409,000	
Non-Financial Assets							
Tangible Capital Assets	280,255,000	294,649,000	308,351,000	320,870,000	332,981,000	344,052,000	
Inventory of Supplies	81,000	81,000	81,000	81,000	81,000	81,000	
Total Non-Financial Assets	280,336,000	294,730,000	308,432,000	320,951,000	333,062,000	344,133,000	
Accumulated Surplus/(Deficit)	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000	



WATER SYSTEM

STATEMENT OF OPERATIONS

		FORECAST						
As at December 31	2014	2015	2016	2017	2018	2019		
Revenues								
Rate Based	52,171,000	56,882,000	61,357,000	66,147,000	71,354,000	76,517,000		
Other	690,000	700,000	710,000	720,000	720,000	730,000		
Contributions from Developers	8,752,000	8,752,000	8,852,000	8,652,000	8,552,000	8,452,000		
Contributed / Assumed Assets	2,661,000	1,951,000	2,674,000	1,978,000	2,702,000	1,993,000		
Interest Income	528,000	538,000	532,000	651,000	735,000	871,000		
Total Revenues	64,802,000	68,823,000	74,125,000	78,148,000	84,063,000	88,563,000		
Expenses								
Water Purchases	37,270,000	40,570,000	43,932,000	46,905,000	49,886,000	52,895,000		
Operating and Maintenance	8,543,000	8,857,000	9,311,000	9,828,000	10,372,000	10,994,000		
Allocated Overhead	1,664,000	1,632,000	1,624,000	1,557,000	1,635,000	1,717,000		
Loss of Disposal of TCA	0	0	0	0	0	0		
Future Employee Benefits	418,000	481,000	553,000	636,000	731,000	841,000		
Interest Expense	65,000	64,000	58,000	58,000	58,000	0		
Amortization	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000		
Total Expenses	53,004,000	56,794,000	60,919,000	64,675,000	68,613,000	72,608,000		
Annual Surplus	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000		
Accumulated Surplus, beginning of year	299,627,000	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000		
Accumulated Surplus, end of year	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000		



WATER SYSTEM

STATEMENT OF CASH FLOW

As at December 31	FORECAST						
	2014	2015	2016	2017	2018	2019	
Cash Provided by (used in):							
Operations:							
Excess Revenues over Expenses	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000	
Items not involving Cash:							
Amortization	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000	
Loss on disposal of Tangible Capital Assets							
Deferred Charges							
Contributed/Assumed Assets	(11,413,000)	(10,703,000)	(11,526,000)	(10,630,000)	(11,254,000)	(10,445,000)	
	5,429,000	6,516,000	7,121,000	8,534,000	10,127,000	11,671,000	
Uses:							
Increase in Water Billings Receivable	(625,000)	(849,000)	(807,000)	(864,000)	(939,000)	(931,000)	
Decrease in Accounts Payable							
Decrease in Accrued Liabilities							
Decrease in Deferred Revenue	(500,000)	(600,000)		-	-	-	
	(1,125,000)	(1,449,000)	(807,000)	(864,000)	(939,000)	(931,000)	
Sources:							
Decrease in Inventory							
Increase in Accounts Payable	10,000	16,000	25,000	25,000	35,000	40,000	
Increase in Accrued liabilities	910,000	1,019,000	1,038,000	918,000	920,000	929,000	
Increase in Employee Future Benefits	418,000	481,000	553,000	636,000	731,000	841,000	
Increase in Deferred Revenue	· -	-	400,000	600,000	100,000	100,000	
	1,338,000	1,516,000	2,016,000	2,179,000	1,786,000	1,910,000	
Net change in Cash from Operations	5,642,000	6,583,000	8,330,000	9,849,000	10,974,000	12,650,000	
Capital:							
Cash used to acquire Tangible Capital Assets	(7,205,000)	(8,882,000)	(7,617,000)	(7,579,000)	(6,788,000)	(6,788,000)	
Net change in Cash from Capital	(7,205,000)	(8,882,000)	(7,617,000)	(7,579,000)	(6,788,000)	(6,788,000)	
Financing:							
Debenture and Other Debt repaid	(336,000)	(359,000)	(307,000)	(307,000)	(148,000)	(40,000)	
Net change in Cash from Financing	(336,000)	(359,000)	(307,000)	(307,000)	(148,000)	(40,000)	
Investments:							
Increase in Investments	0	0	0	0	0	0	
Net change in Cash from Investments	0	0	0	0	0	0	
Net change in Cash and Cash Equivalents	(1,899,000)	(2,658,000)	406,000	1,963,000	4,038,000	5,822,000	
Cash and Cash Equivalents, beginning of year	49,984,000	48,084,000	45,427,000	45,835,000	47,798,000	51,837,000	
Cash and Cash Equivalents, end of year	48,084,000	45,426,000	45,834,000	47,796,000	51,836,000	57,659,000	



WATER SYSTEM

STATEMENT OF CHANGES IN NET FINANCIAL ASSETS

	FORECAST						
As at December 31	2014	2015	2016	2017	2018	2019	
Annual Surplus / (Deficit)	11,798,000	12,029,000	13,206,000	13,473,000	15,450,000	15,955,000	
Less: Acquisition of Tangible Capital Assets	(18,617,000)	(19,585,000)	(19,143,000)	(18,210,000)	(18,042,000)	(17,233,000)	
Add: Amortization of Tangible Capital Assets	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,162,000	
	(1,775,000)	(2,366,000)	(496,000)	954,000	3,339,000	4,884,000	
Less: Acquisition of Supplies Inventory	0	0	0	0	0	0	
Add: Consumption of Supplies Inventory	0	0	0	0	0	0	
	0	0	0	0	0	0	
Increase / (Decrease) in Net Financial Assets/Net Debt	(1,775,000)	(2,366,000)	(496,000)	954,000	3,339,000	4,884,000	
Net Financial Assets / (Net Debt), beginning of year	32,864,000	31,090,000	28,724,000	28,228,000	29,182,000	32,521,000	
Net Financial Assets / (Net Debt), end of year	31,088,000	28,723,000	28,231,000	29,184,000	32,524,000	37,409,000	



WATER SYSTEM

NOTES TO THE CONSOLIDATED FINANCIAL PLAN 2014 - 2019

The City of Vaughan with a population of 311,000 is located in the Regional Municipality of York, Province of Ontario, Canada. The City manages, maintains and distributes drinking water to 80,000 property owners through two water systems, the Vaughan water system and the Kleinburg water system.

1. SAFE DRINKING WATER ACT

Under the Safe Drinking Water Act (SDWA) the City has received a full scope – Accreditation Certificate on July 7th, 2009 for its Drinking Water Quality Management Standards (DWQMS). As a result of receiving the accreditation the City must now under the SDWA regulation 453/07 provide to the Ministry of Municipal Affairs and Housing a six year financial plan for Water.

The City was issued a Drinking Water Works Permit (Permit number 011-201) along with a Municipal Drinking Water Licence (Licence number 011-101) in order to operate. The Municipal Drinking Water Licence expiry date is July 26, 2014. As such, the City is obligated to apply for renewal no later than January 24, 2014.

The six year financial plan must include: Statement of Operations

Statement of Financial Position Statement of Net Financial Assets

Statement of Cash Flow

The consolidated six year financial plan must be adopted by the Council of the municipality and the resolution must also indicate that the drinking water system financial plan is sustainable and financially viable.

2. THE SIX YEAR FINANCIAL PLAN - ASSUMPTIONS

The basis for the development of the pro forma consolidated six year water financial statements incorporates key assumptions contained in the 2009 water/wastewater rate study and the 2013 Development Charges Background Study. 2012 actual is the base year for the forecast and 2013 reflects the approved 2013 Water Budget incorporating other assumptions.

These assumptions include growth, inflationary factors, lifecycle capital forecasts and development charge revenues. The cost used for the purchase of potable water over the forecasted period was available from Region of York.

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.

3. FINANCIAL ASSETS

Financial assets consist of cash, cash equivalents, accounts receivables and billing accruals. Controlled by the City, these economic resources are a result of past transactions or events where future economic benefits are expected to be obtained.

4. LIABILITIES

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

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.

Long Term Debt

The City 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.

Deferred Revenue

Deferred revenue represents special area development charge reserve fund balances which are considered a liability until funds are expended for projects related to growth activity. Forecasts are based on existing projects as outlined in the 2013 Development Charges Background Study. Due to the nature and timing of collections and spending, projections are based on anticipated activity on remaining net project estimates at 2013.

5. NON-FINANCIAL ASSETS

Non-financial assets consist of tangible capital assets (TCA), inventory supplies, and prepaid expenses and are held for use in the provision of services.

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 (2013), special area projects, contributed/assumed assets and work in progress (WIP). Specific details are outlined as follows:

Additions

Capital spending is forecasted for 2013 per the approved capital budget and subsequent years reflect outstanding commitments for the year ended 2012 totaling \$6.5M. Additional capital projects are forecasted for 2014 – 2019 totalling \$43.2M. These expenditures are reflected as tangible capital assets in this forecast period and depreciated accordingly (half year rule applied).

Contributed/Assumed Assets

Contributed assets are those tangible capital assets that are assumed by the City from developers through development agreements or constructed on behalf of the City through capital projects and acquisitions.

Due to the nature and timing of recognizing these assets a conservative approach has been applied. Water meters have been forecasted on the basis of a future growth of 1.5%. Contributed or assumed assets are reflected as revenues on the forecasted statement of operations.

Work in Progress

Work in progress (WIP) primarily consists of special area development charges for this forecast period representing projects that are not completed. Such assets are not depreciated in this forecast period. WIP may also consist of assets contributed, assumed or funded from other sources.

Disposals

Not projected for this forecast period.

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:

Assets	Useful life – Years
Water and Wastewater Infrastructure	80 – 95
Water Booster Stations – Concrete	85
Water Booster Stations – Machinery & Equipment	20 – 35
Water Filling Stations	25
Water Meters	20
Vehicles	7

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.

CITY OF VAUGHAN

WATER SYSTEM

TANGIBLE CAPITAL ASSET SUMMARY

	FORECAST					
As at December 31	2014	2015	2016	2017	2018	2019
Opening TCA Balance (Historical Cost)	348,965,000	367,582,000	387,167,000	406,310,000	424,520,000	442,561,000
Additions	18,617,000	19,585,000	19,143,000	18,210,000	18,042,000	17,232,000
Disposals	0	0	0	0	0	0
Closing TCA Balance (Historical Cost)	367,582,000	387,167,000	406,310,000	424,520,000	442,562,000	459,793,000
Opening Accumulated Amortization	82,283,000	87,328,000	92,517,000	97,958,000	103,649,000	109,580,000
Amortization Expense	5,044,000	5,190,000	5,441,000	5,691,000	5,931,000	6,161,000
Amortization on Disposals	0	0	0	0	0	0
Closing Accumulated Amortization	87,327,000	92,518,000	97,958,000	103,649,000	109,580,000	115,741,000
Net Book Value	280,255,000	294,649,000	308,352,000	320,871,000	332,982,000	344,052,000

6. NET FINANCIAL ASSETS

Net financial assets defined are the difference between financial assets and liabilities and is a key indicator in determining the water system financial ability to replace its infrastructure. As reflected in the statement of changes in net financial assets the City is in a net financial asset position which is an indication that the City has sufficient resources to finance current and future activities. Forecasted net financial assets for the years 2014-2019 are \$31.0M - \$37.4M.

7. ACCUMULATED SURPLUS

Accumulated surplus consists of reserve and reserve fund balances, contributions of tangible capital assets and debt related transactions.

CITY OF VAUGHAN

WATER SYSTEM

ACCUMULATED SURPLUS

	FORECAST						
As at December 31	2014	2015	2016	2017	2018	2019	
Surplus:							
Investment in Tangible Capital Assets	280,255,000	294,649,000	308,352,000	320,871,000	332,982,000	344,052,000	
Amounts to be recovered in future years:							
Future Benefits	(3,204,000)	(3,685,000)	(4,237,000)	(4,873,000)	(5,604,000)	(6,444,000)	
Debentures	(1,281,000)	(922,000)	(615,000)	(307,000)	(160,000)	(120,000)	
	275,770,000	290,042,000	303,500,000	315,691,000	327,218,000	337,488,000	
Reserves set aside for specific purposes by Council							
Water	35,655,000	33,411,000	33,163,000	34,445,000	38,369,000	44,054,000	
Accumulated Surplus	311,425,000	323,454,000	336,660,000	350,133,000	365,583,000	381,538,000	