

Memo

From: Steve Burns
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To: Dave Blake, C.E.T.
Environmental Coordinator

Re: Town of St. Marys Water Works – 2014 Financial Plan
Technical Memo No. 2 – The Financial Plan

File #: 13277

Date: May 12, 2014

1.0 Background and Purpose of Memo:

The Town of St. Marys operates a municipal drinking water system with License No. 056-101. As a condition of the License, the Safe Drinking Water Act (2002) requires that Council adopt a Financial Plan as described in O.Reg. 453/07. The current License expires on November 22, 2014 and an application for renewal must be submitted on or before May 23, 2014. As part of the application for renewal of the License the Town must prepare and adopt a new Financial Plan covering the period from 2014 to at least 2019.

The Town has retained BMROSS to assist with the preparation of the necessary Financial Plan. The Plan is to cover the period 2014 to 2024 in detail and also review financial requirements in 10 year increments for a full life cycle of the existing water system assets.

In Technical Memo No. 1 information was provided concerning system assets, long-term replacement needs and costs, and reserve fund requirements.

The purpose of this Memo is to provide a Financial Plan for the St. Marys Water Works of the period 2014 to 2024. The Memo includes background information in support of the Plan.

2.0 The Financial Plan

2.1 Structure

The Financial Plan is attached to this Memo. The structure of the Plan is as set out in Ontario Regulation 453/07. The Plan has three sections. From top to bottom they are:

- Financial Position
- Financial Operations
- Cash Flow

The Plan is developed by completing the Financial Operations (Revenue and Expenditures) section first in order to determine the annual surplus or deficit from water works operations. Capital works are only represented in terms of changes to the net book value of the assets (i.e. amortization), losses or gains through asset disposal and interest paid for financing capital.

The next section to be completed is the Cash Flow section which introduces the capital program as well as the impacts of investing and borrowing.

The final section to be completed is the top section in the Plan, which takes the outcome of the Operations and Cash sections and presents the end of year financial position of the system, incorporating the overall asset value.

The following sections of this memo provide details of the various decisions and assumptions that are incorporated into the 2014 Town of St. Marys Financial Plan for Water Works.

2.2 Financial Operations Section

2.2.1 Assumptions

The following assumptions have been used to provide the values for the Financial Operations Section:

- The starting point for the Financial Operations Section was the 2014 water works budget.
- Re: Revenue Increases:
 - Fees from water billing revenue will increase by 3% annually from 2014 to 2017 and 2% per year after that.
 - Fees from service charges, penalties and sale of assets will remain at current values.
 - Actual water consumption will remain constant throughout the life of the plan.
- Re: Expense Increase:
 - Labour, contract and professional fees, training and business expenses will increase 2.5% annually.
 - Utility costs, which are principally for hydro, will increase 5% per year through the life of the Plan.
 - Material and supplies and internal charges will increase at 2% annually.
 - Bank charges will remain constant.

2.2.2 Outcomes

Given that revenue increases in the Plan are limited to 2% annually beyond 2018 and expenses are typically increasing at 2% to 5%, the net revenue, although positive, continues to decline. The rate of decline is offset somewhat by declining debenture interest expenses.

Consistent with O. Reg. 453/07 requirements, amortization is expensed on an annual basis. The amortization expense changes annually in consideration of capital asset activities. Because of the relatively long life of most new assets, the annual amortization value does not change significantly through the 10 years of the Plan.

2.3 Cash Flow Section

2.3.1 Assumptions

The following assumptions have been made regarding the Cash Flow Section:

The cash position at the beginning of 2014 (\$918,863) is equal to the accumulated reserves dedicated to water works activities.

The capital projects that will result in the values presented in the Capital Transactions sub-section are as follows:

**Table 2.1
Planned Capital Projects
(2014 – 2024)**

Project Description	Year of Construction	Capital Allowance
Watermains:		
Carral Street Reconstruction (Queen to Elgin)	2014	\$71,000
Warner St. (Queen to Elgin) and Jones St. W (Salina to Warner) Reconstruction	2015	\$17,000
	2016	\$147,000
Queen Street Core Area Reconstruction	2016	\$341,000
Elizabeth St. (Brock to Waterloo) & Waterloo St. (Elgin to Waterloo South End)	2016	\$15,000
	2017	\$179,000
Peel Street N Reconstruction (Egan to Station)	2017	\$20,000
	2018	\$269,000
Egan Avenue Improvements	2018	\$49,000
Emily Street Improvement (Thamesview Crescent to Overpass)	2018	\$204,000
St. George Street North Reconstruction	2020	\$5,000
	2021	\$43,000
Wellington Street North Reconstruction (Parkview to Egan)	2022	\$33,000
Wellington St. S/St. Maria St./Washington St.	2024	\$135,000
Sub-Total Watermains		\$1,528,000
Other: Water Projects		
Additional Water Storage Facility	2014	\$130,400
Generator for Well 3	2014	\$45,000
	2015	\$2,760,000
Water Meter Replacement	2020	\$30,000
	2021	\$30,000
	2022	\$30,000
	2023	\$30,000
Generator, SCADA and related	2015	\$17,000
	2016	\$15,000
	2017	\$20,000
	2020	\$5,000
Sub-Total Other		\$3,112,400
Overall Total		\$4,640,400

In addition to the information in the table, starting in 2015, \$4,000 annually is proposed for lead service replacement. Section 3.(4) (iv) of O.Reg. 453/07 specifically requires identification of the costs of lead service replacement.

Along with lead service costs, capital expenditures are further divided into categories consistent with their primary purpose. These are:

- Growth related
- Service enhancement
- Replacement of existing plant

The majority of projects are watermain replacements. The largest single project is the planned construction of additional water storage in 2015, which is considered both a service enhancement (to address an existing storage deficiency) and growth related to accommodate expected development. The allocation of costs is based on information provided to BMROSS.

The Financial Plan assumes that a debenture will be issued in 2015 to finance construction of the proposed water storage expansion. The debenture value and interest rate used are \$2,760,000 and 3.7 % respectively for a period of 15 years.

For purposes of the Financial Plan, it assumed that payments will begin in 2016 and continue to beyond the life of the plan.

2.3.2 Outcomes

On a cash basis, current revenues will exceed operating costs (exclusive of amortization) by \$672,024 in 2014, will decline to a surplus of approximately \$570,000 in 2016 and then increase steadily to \$730,000 by 2024.

As a result of the significant debenture issue in 2015 for the purpose of increasing water storage, principal payments increase in 2016. Payments will decrease by approximately \$35,000 annually in 2020 as a result of full payment of previous debt.

As currently drafted, the Plan is showing cash deficit positions in 2014 and 2016 as a result of the water storage project proceeding simultaneously with aggressive watermain reconstruction.

Table 2.2 identifies the annual transfer to reserve or deficit for each year of the Plan.

**Table 2.2
Year End Cash Surplus (Deficit)**

Year End	Cash Difference from Prior Year	Investment in System Upgrades	Total
2014	(\$254,693)	\$116,000	\$370,693
2015	\$445,445 ¹	\$17,000	\$462,445
2016	(\$274,512)	\$518,000	\$243,488
2017	\$49,357	\$219,000	\$268,357
2018	(\$115,195)	\$522,000	\$406,805
2019	\$415,442	\$0	\$415,442
2020	\$428,613	\$40,000	\$468,613
2021	\$404,151	\$73,000	\$477,151
2022	\$422,622	\$63,000	\$485,622
2023	\$464,015	\$30,000	\$494,015
2024	\$337,323	\$165,000	\$502,323
Total	\$2,831,954	\$1,763,000	\$4,594,954

Note: 1. As a result of borrowing

In Technical Memo No. 1, it was identified that contributions to reserves, combined with expenditures or rehabilitation/replacement, needed to be in the order of \$520,000 annually to achieve system sustainability. The current Plan is currently underfunding this value by an average of roughly \$100,000 (20%) annually. However, the early years (2014 to 2016) show significant growth related capital expenditures and by 2023-2024 the Plan is within 4% of sustainable values.

2.4 Financial Position Section

This section summarizes the annual position of the St. Marys Water Works with respect to its financial and non-financial (i.e physical assets).

There are no assumptions directly applicable to the Financial Position Section. This section of the Financial Plan is directly dependent on the Operations and Cash activities discussed previously.

2.4.2 Discussion

Based on the 2014 operating capital budget for the St. Marys Water Works, at the end of 2014 there will be:

- \$1,173,556 in Reserves
- \$8,836,564 in Asset Net Book Value
- \$995,970 in Long-Term Debt
- \$9,014,150 in Total Equity

In 2024, based on the forecasted changes in revenue and expenses, and the planned capital program, the above value will change to:

- \$3,750,817 in Reserves
- \$10,646,255 in Asset Net Book Value
- \$1,413,819 in Long-Term Debt
- \$12,843,853 in Total Equity

As discussed in Technical Memo No. 1 and in Section 2.3.2, the need for reserves is substantial. Although the 2024 value (\$3.75 M) appears significant, it is actually less than the funds required for financial stability. However, by the end of the Plan period the overall Financial Position will be improving annually to the point where it is approaching where it needs to be.

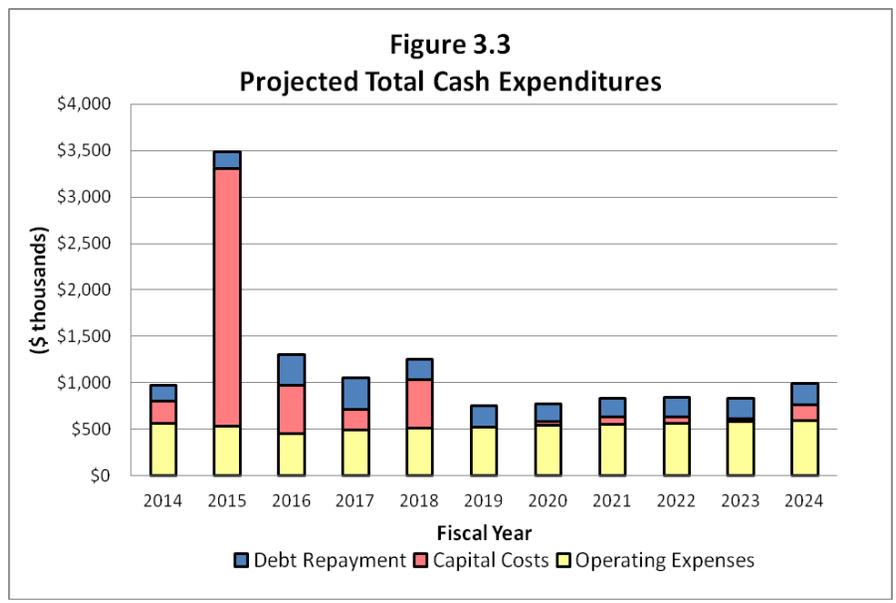
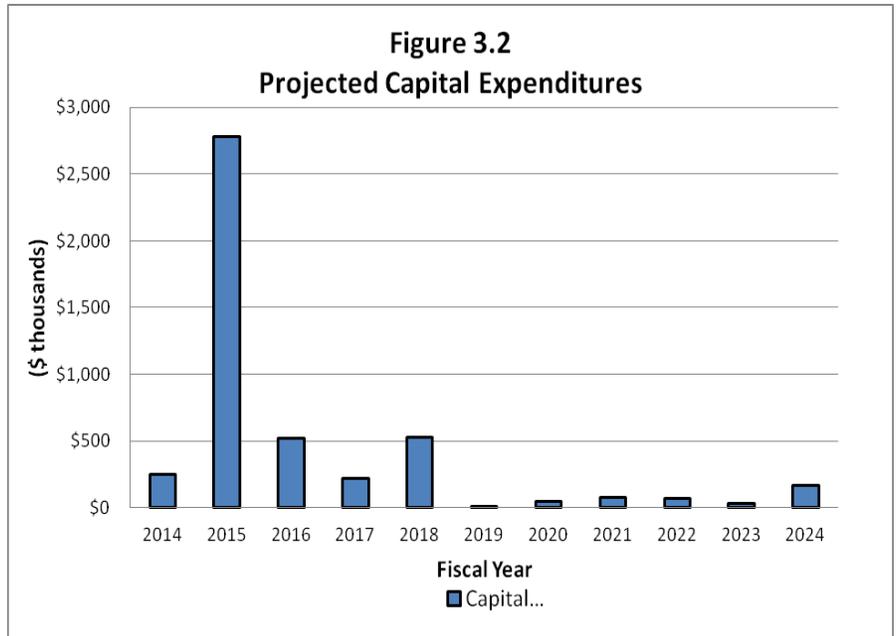
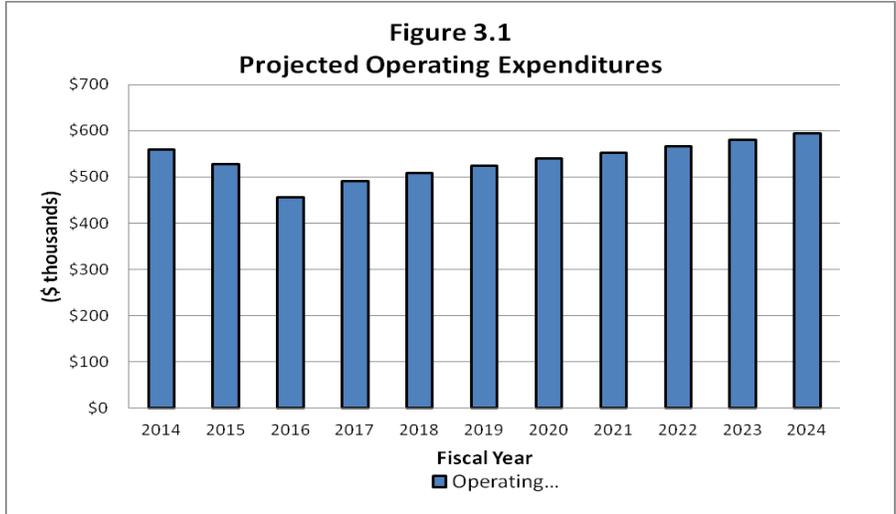
3.0 Summary

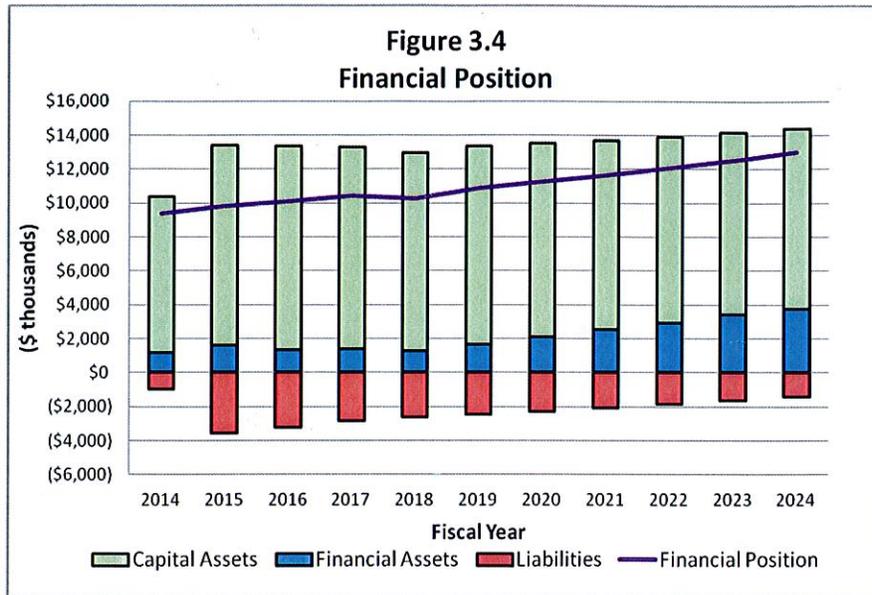
It is a requirement of the renewal of a Municipal Drinking Water License that a Financial Plan as described in O.Reg. 453/07 be approved by Council. The Regulation requires that the first year of the Plan be the year in which the current license expires (i.e. 2014) and that the Plan be for a minimum of six years.

In addition, Sections 4(5) and 4(6) of the Regulation requires:

- “ 5. The owner of the drinking-water system must,
- make the financial plans available, on request, to members of the public who are served by the drinking-water system without charge.*
 - 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, and*
 - 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.*
6. The owner of the drinking-water system must, give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. “

The following figures summarize the content of the 2014 Financial Plan.





The 2014 Financial Plan provides a picture of the expected financial position of the Water Works for the period 2014 to 2024. The picture is one of steady improvement in overall financial position and movement towards full sustainability. It is important that the Plan be revisited annually to confirm the validity of the various assumptions that form the basis for all forecasts.

Stephen D. Burns, P. Eng.

SDB:hv

TOWN of ST. MARYS 2014 FINANCIAL PLAN FOR WATER WORKS --FINAL

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
FINANCIAL POSITION												
Financial assets												
Cash and cash equivalents		1,173,556	1,619,001	1,344,489	1,393,846	1,278,651	1,694,094	2,122,706	2,526,858	2,949,479	3,413,495	3,750,817
Total FINANCIAL ASSETS		1,173,556	1,619,001	1,344,489	1,393,846	1,278,651	1,694,094	2,122,706	2,526,858	2,949,479	3,413,495	3,750,817
Financial Liabilities												
Long-term debt -- Internal		348,764	264,440	176,127	42,712	0	0	0	0	0	0	0
Long-term debt -- External -Existing at 2014		647,206	553,912	457,636	358,270	329,991	300,254	268,984	236,103	210,527	165,168	126,935
Long-term debt -- External -for Water Storage		0	2,760,000	2,619,062	2,472,909	2,321,348	2,164,179	2,001,196	1,832,181	1,656,914	1,475,161	1,286,684
Total LIABILITIES		995,970	3,578,352	3,252,825	2,873,891	2,651,339	2,464,433	2,270,180	2,068,284	1,867,441	1,640,329	1,413,619
NET DEBT (Liabilities - Assets)		(177,586)	1,959,351	1,908,336	1,480,045	1,372,688	770,339	147,474	(458,574)	(1,082,038)	(1,773,166)	(2,337,198)
Non-financial assets (Tangible capital assets)												
Existing watermain and facilities - book value		8,837,100	9,180,164	11,707,138	11,946,462	11,880,496	11,638,040	11,614,969	11,363,533	11,143,534	10,956,054	10,733,659
New watermain and facilities - at cost		246,400	2,781,000	522,000	223,000	526,000	4,000	44,000	77,000	34,000	169,000	169,000
Less: Write down of existing assets		(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
Less: Amortization		(221,936)	(229,026)	(257,676)	(263,966)	(266,456)	(267,071)	(270,436)	(271,999)	(229,480)	(231,395)	(231,404)
Total NON-FINANCIAL ASSETS		8,836,564	11,707,138	11,946,462	11,880,496	12,115,040	11,349,969	11,363,533	11,143,534	10,923,054	10,868,659	10,646,255
Financial position (Non-Financial assets - Net Debt)		9,014,150	9,747,787	10,038,126	10,400,451	10,742,352	10,579,630	11,216,059	11,602,108	12,005,092	12,641,825	12,983,453
Analysis of financial position												
Equity in tangible capital assets	-	7,840,594	8,128,786	8,693,637	9,006,605	9,463,701	8,885,536	9,093,353	9,075,250	9,055,613	9,228,330	9,232,636
Reserves and reserve funds		1,173,556	1,619,001	1,344,489	1,393,846	1,278,651	1,694,094	2,122,706	2,526,858	2,949,479	3,413,495	3,750,817
General surplus (deficit)	-	-	-	-	-	-	-	-	-	-	-	-
Financial position (from analysis)	-	9,014,150	9,747,787	10,038,126	10,400,451	10,742,352	10,579,630	11,216,059	11,602,108	12,005,092	12,641,825	12,983,453
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
FINANCIAL OPERATIONS												
REVENUE												
St. Marys Waterworks												
2 User Fees - Water Billing Revenue		1,554,400	1,601,032	1,649,063	1,698,535	1,732,506	1,767,156	1,802,499	1,838,549	1,875,320	1,912,826	1,951,083
User Fees - Fees and Service Charges		6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
3 Contract and Professional Fees		0	0	0	0	0	0	0	0	0	0	0
3 Government transfers		58,000	0	0	0	0	0	0	0	0	0	0
4 Licenses, Permits and Donations		0	0	0	0	0	0	0	0	0	0	0
5 Penalties, Interest and Sale of Assets		9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Total REVENUE	-	1,627,900	1,616,532	1,664,563	1,714,035	1,748,006	1,782,656	1,817,999	1,854,049	1,890,820	1,928,326	1,966,583
EXPENSES												
St. Marys Waterworks												
1 Labour		118,574	121,538	124,577	127,691	130,884	134,156	137,509	140,947	144,471	148,083	151,785
2 Material and Supplies		125,000	127,500	130,050	132,651	135,304	138,010	140,770	143,586	146,457	149,387	152,374
3 Contract and Professional Fees		463,025	474,601	486,466	498,627	511,093	523,870	536,967	550,391	564,151	578,255	592,711
4 Development Training and Business Expenses		9,000	9,225	9,456	9,692	9,934	10,183	10,437	10,698	10,966	11,240	11,521
5 Utilities		75,000	78,750	82,688	86,822	91,163	95,721	100,507	105,533	110,809	116,350	122,167
6 Bank Charges		2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Debtenture Interest		49,582	42,896	138,044	125,560	113,034	104,180	94,965	87,322	79,374	71,107	62,508
8 Internal Charges		113,195	115,459	117,768	120,123	122,526	124,976	127,476	130,025	132,626	135,279	137,984
Amortization Expense		221,936	229,026	257,676	263,966	266,456	267,071	270,436	271,999	229,480	231,395	231,404
Loss (Gain) on disposal of Capital assets		25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Total EXPENSES	-	1,202,812	1,226,495	1,374,224	1,392,633	1,407,894	1,425,667	1,446,568	1,468,001	1,445,834	1,468,594	1,489,954
Net Revenue (Deficit) for the year	-	425,088	390,037	290,339	321,402	340,112	356,988	371,431	386,047	444,986	459,732	476,629

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CASH FLOW												
Operating Transactions												
Net revenue (deficit) for the year		918,960	898,089	855,691	899,334	923,024	941,130	962,303	980,045	953,946	972,522	989,437
Add back (deduct) non-cash expense:		(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
Add back Amortization of Capital Assets		(221,936)	(229,026)	(257,676)	(263,966)	(266,456)	(267,071)	(270,436)	(271,999)	(229,480)	(231,395)	(231,404)
Add back Internal Charges		(113,195)	(115,459)	(117,768)	(120,123)	(122,526)	(124,976)	(127,476)	(130,025)	(132,626)	(135,279)	(137,984)
Total OPERATING TRANSACTIONS		558,829	528,604	455,247	490,245	509,042	524,083	539,391	553,021	566,840	580,849	595,048
Capital Transactions												
Growth related	-	(20,700)	(938,000)	0	0	0	0	0	0	0	0	0
Service enhancement (system upgrades)	-	(109,700)	(1,822,000)	0	0	0	0	0	0	0	0	0
Lead service reduction	-		(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
Replacement of existing plant	-	(116,000)	(17,000)	(518,000)	(219,000)	(522,000)	0	(40,000)	(73,000)	(63,000)	(30,000)	(165,000)
Total CAPITAL TRANSACTIONS	-	(246,400)	(2,781,000)	(522,000)	(223,000)	(526,000)	(4,000)	(44,000)	(77,000)	(67,000)	(34,000)	(169,000)
Investing transactions												
Proceeds from portfolio investments	-	0	0	0	0	0	0	0	0	0	0	0
Purchase of portfolio investments	-	0	0	0	0	0	0	0	0	0	0	0
Total INVESTING TRANSACTIONS	-	0	0	0	0	0	0	0	0	0	0	0
Financing transactions												
Federal/Provincial grants	-		0	0	0	0	0	0	0	0	0	0
Proceeds from debenture issue			2,760,000									
Debt Repayment - principal on existing at 2014		(170,931)	(177,618)	(184,589)	(191,858)	(69,202)	(72,449)	(31,270)	(32,881)	(34,576)	(36,359)	(38,233)
Debt Repayment - principal on water storage debenture		-	0	(140,938)	(146,153)	(151,561)	(157,168)	(162,984)	(169,014)	(175,268)	(181,753)	(188,477)
Total FINANCING TRANSACTIONS	-	(170,931)	2,582,382	(325,527)	(338,011)	(220,763)	(229,617)	(194,254)	(201,895)	(209,844)	(218,112)	(226,710)
Net Cash Receipts (Payments) for the year		141,498	445,445	(274,512)	49,357	(115,195)	415,442	428,613	404,151	422,622	464,015	337,323
Cash at beginning of year	-	918,863	1,173,556	1,619,001	1,344,489	1,393,846	1,278,651	1,694,094	2,122,706	2,526,858	2,949,479	3,413,495
Cash at end of year	918,863	1,173,556	1,619,001	1,344,489	1,393,846	1,278,651	1,694,094	2,122,706	2,526,858	2,949,479	3,413,495	3,750,817
Additional information:												
Temporary borrowing (transfers to reserve)	-	(254,693)	(445,445)	274,512	(49,357)	115,195	(415,442)	(428,613)	(404,151)	(422,622)	(464,015)	(337,323)

Notes: