

Ray Ritcey, Chair Halifax Water Halifax, NS

The regular meeting of the Halifax Water Board will be held on Thursday, March 29, 2018 at 9:00 a.m. in the Boardroom at 450 Cowie Hill Road, Halifax.

AGENDA

In Camera Reports

- 1C Approval of Minutes of the In-Camera Meeting held on Thursday, January 25, 2018
- 2C Business Arising from Minutes
 - a) Governance Matter (Verbal Update)
- 3C Governance Matter (Verbal Update)
- 4C Personnel Matter
- 5C Personnel Matter
- 6C Legal Matter
- 7C Security Matter (Presentation)

In Camera Information Reports

1C-I Governance Matter

Regular Reports

- 1. a) Ratification of In-Camera Motions
 - b) Approval of the Order of Business and Approval of Additions and Deletions
- 2. Approval of Minutes of the Regular Meeting held on Thursday, January 25, 2018
- 3. Business Arising from Minutes
 - a)
- 4. Operating Results for the Eleven Months ended February 28, 2018
- 5. 2018 Spring MFC Debenture
- 6. Benefits Enhancements
- 7. Pension Plan Amendments
- 8. Corporate Balanced Scorecard 2018/19 Program Targets

Information Reports

- 1-I Operations and Financial Monthly Update
- 2-I Capital Budget Approvals to Date
- 3-I Bank Balance
- 4-I 2017 Annual Report Pension and Benefits Advisory Committee
- 5-I HRWC Employees' Pension Plan Q4 Financial Report
- 6-I HRM Pension Plan Investment Performance
- 7-I Cogswell Redevelopment Project
- 8-I Merchant Discount Fees for RDC Credit Card Payments

Original Signed By:

James G. Spurr Secretary

HALIFAX REGIONAL WATER COMMISSION MINUTES

January 25, 2018

PRESENT:

Commissioner Ray Ritcey, Chair

Commissioner Russell Walker, Vice Chair

Commissioner Darlene Fenton Commissioner Craig MacMullin Commissioner Lisa Blackburn Commissioner Steve Streatch Commissioner Jacques Dubé Commissioner Lorelei Nicoll

REGRETS:

STAFF:

Carl Yates, General Manager, HRWC

Cathie O'Toole, Director, Corporate Services, HRWC

James Spurr, Legal Counsel, HRWC

Lorna Skinner, Administrative Assistant, HRWC

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CALL TO ORDER

The Chair called the regular meeting to order at 9:00 a.m. in the Board Room of the HRWC, 450 Cowie Hill Road. The Board moved In Camera at 9:00 a.m. and the regular meeting reconvened at 9:45 a.m.

1a. RATIFICATION OF IN-CAMERA MOTIONS

MOVED BY Commissioner Streatch, seconded by Commissioner Nicoll that the Halifax Regional Water Commission Board ratify the In-Camera motions.

MOTION PUT AND PASSED.

1b. APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF DELETIONS

MOVED BY Commissioner Nicoll, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve the order of business and approve additions and deletions with the above noted amendment.

MOTION PUT AND PASSED.

2. APPROVAL OF MINUTES - November 30, 2017

MOVED BY Commissioner Blackburn, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve the minutes of November 30, 2017.

MOTION PUT AND PASSED.

3. BUSINESS ARISING FROM MINUTES

a) Five Year Business Plan (2018/19 to 2022/23)

A report dated January 17, 2018, was submitted.

MOVED BY Commissioner Fenton, seconded by Commissioner Blackburn that the Halifax Regional Water Commission Board approve the Five-Year Business Plan (2018–/19 to 2022/23).

MOTION PUT AND PASSED.

4. OPERATING RESULTS FOR THE NINE MONTHS ENDED DECEMBER 31, 2017

A report dated January 15, 2018, was submitted.

Cathie O'Toole gave a brief overview of the operating results.

5. PROPOSED 2018/19 CAPITAL BUDGET

A report dated January 17, 2018, was submitted.

MOVED BY Commissioner Walker, seconded by Commissioner Streatch that the Halifax Regional Water Commission Board approve, with the advice and recommendation of the General Manager, the,

- 1. 2018/19 Capital budget at a total value of \$73,448,000, as detailed in the attached Schedule 1.
- 2. List of routine capital expenditure items required for on-going departmental operation, at a total value of \$6,456,000 as indicated in Schedule 1.

MOTION PUT AND PASSED.

6. 2018/19 WATER, WASTEWATER AND STORMWATER OPERATING BUDGET

A report dated January 13, 2018, was submitted.

MOVED BY Commissioner Walker, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve the 2018/19 Water, Wastewater and Stormwater Operating Budget including the proposed 2018/19 budget for unregulated activities.

MOTION PUT AND PASSED.

7. PROPOSED 2018/19 BUSINESS PLAN

A report dated January 17, 2018, was submitted.

It was suggested that a short integrated briefing note be circulated to HRM Councilors prior to the presentation to HRM Council.

MOVED BY Commissioner Blackburn, seconded by Commissioner MacMullin that the Halifax Regional Water Commission Board approve in the substantive form attached and direct the General Manager to submit the 2018/19 Business Plan to Halifax Council for approval.

MOTION PUT AND PASSED.

8. HALIFAX REGIONAL WATER COMMISSION EMPLOYEES' PENSION PLAN 2018 BUDGET

A report dated January 10, 2018, was submitted.

Cathie O'Toole gave a brief overview of the Pension Plan's performance and budget. The next actuarial valuation is effective January 1, 2019.

January 25, 2018

MOVED BY Commissioner Nicoll, seconded by Commissioner MacMullin that the Halifax Regional Water Commission Board approve the attached 2018 Pension Plan Budget covering the period January 1, 2018, to December 31, 2018.

MOTION PUT AND PASSED.

9. <u>INTEGRATED STORMWATER MANAGEMENT POLICY</u>

A report dated January 17, 2018, was submitted.

Commissioner Fenton stated there are four pillars of the policy framework: capital investment, ownership and maintenance, land development practice, and drainage on private property.

MOVED BY Commissioner Fenton, seconded by Commissioner Blackburn that the Halifax Regional Water Commission Board, with the recommendation of the Environment, Health and Safety Committee, approve the Policy Framework for the Halifax/Halifax Water Integrated Stormwater Management Policy.

MOTION PUT AND PASSED.

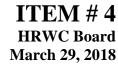
The next regular Board Meeting will be held on March 29, 2018.

The meeting was adjourned at 10:35 a.m.

Original Signed By:	Original Signed By:
James G. Spurr	Commissioner Ray Ritcey
Secretary	Chair

The following Information Items were submitted:

- 1-I Operations and Financial Monthly Update
- 2-I Capital Budget Approvals to Date
- 3-I Bank Balance
- 4-I Annual Customer Survey
- 5-I 2017/18 Cost Containment Quarter 3





TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Cathie O'Toole, MBA, CPA/CGA, Director, Corporate Services

APPROVED: *Original Signed By:*

Carl Yates, M.A.Sc., P.Eng., General Manager

DATE: March 20, 2018

SUBJECT: Operating Results for the Eleven Months Ended February 28, 2018

INFORMATION REPORT

ORIGIN

Financial Statements

BACKGROUND

The Board is required to review periodic financial information throughout the year.

DISCUSSION

Attached are the operating results for the first eleven (11) months of the 2017/18 fiscal year, period ending February 28, 2018. The statements reflect direct operating costs by department and allocations among water, wastewater and stormwater for common costs shared across all the services provided by Halifax Regional Water Commission (HRWC).

HRWC is a fully regulated government business enterprise, falling under the jurisdiction of the Nova Scotia Utility and Review Board (NSUARB). The NSUARB requires that HRWC file Financial Statements and rate applications with the Board based on the NSUARB Handbook for Accounting and Reporting for Water Utilities. The Accounting Standards Board (AcSB) requires rate regulated entities to conform to International Financial Reporting Standards (IFRS). The Commission has converted the SAP financial records to IFRS for the purposes of the annual audit and consolidation of the financial statements with those of Halifax Regional Municipality (HRM). The budget for the 2017/18 fiscal year was prepared using the NSUARB format and financial results will continue to be provided in NSUARB format.

Summary information is provided for the Balance Sheet on Page 1 and the Income Statement on Page 2. A detailed presentation of the Balance Sheet and Income Statement is provided on Pages 3 and 4. Pages 5 through 8 provide Income Statements by Service and for Regulated and Un-Regulated Services. Pages 9 and 10 provide the Balance Sheet and Income Statement in IFRS format.

Consolidated Income Statement - Page 2

Consolidated operating revenue of \$126.5 million is on par with revenue reported for the same time last year. Consolidated operating expenses of \$87.9 million are \$6.7 million higher than last year.

Summarized Consolidated Operating Results						
	Actual YTD 2017/18 '000	Actual YTD 2016/17 '000	\$ Change	% Change		
	000	000	\$ Change	70 Change		
Operating Revenue	\$126,478	\$126,478	\$0	0.0%		
Operating Expenses	\$87,896	\$81,160	\$6,736	8.3%		
Operating Profit (Loss)	\$38,582	\$45,318	(\$6,735)	-14.9%		
Non Operating Revenue	\$4,177	\$3,033	\$1,144	37.7%		
Non Operating Expenditure	\$31,367	\$31,714	(\$347)	-1.1%		
Net Surplus before OCI	\$11,392	\$16,636	(\$5,244)	-31.5%		
Pension Plan Expense	(\$4,585)	(\$2,829)	(\$1,756)	62.1%		
OCI	\$2,021	\$0	\$2,021	0.0%		
Net Surplus (Deficit) \$8,828 \$13,807 (\$4,980) -36.1%						

Figures used in the various tables throughout the report may contain differences due to Excel rounding.

The Net Surplus for the year is \$8.8 million, a decline of \$5.0 million from the prior year. The Net Surplus includes Pension Plan Expense of \$4.6 million and Other Comprehensive Income (OCI) of \$2.0 million. The Other Comprehensive Income is primarily the unrealized gains on employee benefit programs, such as investment returns on Pension Plan investments. Excluding OCI and Pension Plan Expense, the Net Surplus for the year is \$11.4 million, a decline of \$5.2 million as compared to the prior year.

Budget managers provided updated expense projections as of the end of the third and various updates to the Forecast have been made in the subsequent months. The approved budget was for a loss of \$6.7 million. The Forecast is now for a profit of \$9.0 million, an improvement of \$15.7 million.

Balance Sheet - Page 3

The Cash balance of \$47.0 million is down from \$58.7 million in the prior year. The decline is attributable to substantial expenditures associated with the current capital projects.

The total Accounts Receivable balance of \$40.1 million is up \$6.2 million. The addition of the HRM Stormwater Right of Way charge on customer bills has increased the normal Customer Receivables balance. As requested by HRM Council, Stormwater customers are billed for this service and the proceeds are remitted to HRM. The liquidity on the balance sheet (ratio of current assets divided by current liabilities) is 1.94, down from the ratio of 2.17 at the same time last year.

Accounts Receivable				
2017/18 2016/17				
Customer Receivables	\$16,804	\$13,308		
Unbilled Services	\$17,206	\$17,010		
Halifax Regional Mun.	\$6,122	\$3,582		
Total	\$40,132	\$33,900		

Balance Sheet Liquidity (Current Ratio)						
2017/18 2016/17						
Current Assets ('000) \$89,095 \$94,139						
Current Liabilities ('000)	\$45,995	\$43,421				
Current Ratio	1.94	2.17				

Plant in Service assets, net of Accumulated Depreciation, is \$1.13 billion and is \$0.7 million higher than at this time last year. Capital Assets Under Construction is up \$23.9 million to \$83.6 million, net of external funding received under the Build Canada and Clean Water and Wastewater Fund programs. Completed projects that will be capitalized for year-end are expected to exceed \$100 million in value. The following table highlights the major projects underway:

Capital Assets Under Construction		
	Cumulative	
	'000	
Northwest Arm Sewer Rehab	\$20,671	
Aerotech Wastewater Treatment Facility	\$18,246	
Sullivan's Pond Storm Sewer Replacement	\$8,761	
AMI - Automated Metering Infrastructure	\$7,572	
All other projects	\$56,791	
Total Capital Expenditures	\$112,040	
External Funding Received	(\$28,452)	
Net Assets Under Construction	\$83,588	

Current liabilities of \$46.0 million are up \$2.6 million from the prior year. Trade Payables decreased \$0.6 million and balances payable to HRM are down \$0.9 million.

The Accrued Post Retirement Benefits, Accrued Long Service Award, Deferred Pension Liability and Supplementary Employee Retirement Plan (SERP) are on par with expected amounts. The balance of the reserve for Regional Development Charges has increased from \$12.2 million to \$22.4 million, which is attributable to development activity in the Halifax area.

Long Term Debt is down \$9.1 million from last year, which is a net of new debt of \$10.8 million, repayments of \$20.1 million, and a decrease in the Current Portion of Long Term Debt of \$0.8 million. The debt service ratio of 21.3% is well below the maximum 35% ratio allowed under the blanket guarantee agreement with HRM.

Long	Term Debt by Service	
	2017/18	2016/17
	'000	'000
Water	\$55,411	\$59,599
Wastewater	\$127,043	\$133,409
Stormwater	\$11,043	\$11,324
Combined	\$193,497	\$204,333

Debt Servicing Ratio by Service				
YTD Debt Servicing Cost Ratio				
2017/18 2016/17				
Water	18.8%	19.4%		
Wastewater	23.7%	25.0%		
Stormwater	17.7%	11.6%		
Combined	21.3%	21.7%		

The cumulative Operating Surplus of \$16.7 million at the beginning of the fiscal year has grown to \$23.5 million with the year-to-date net profit before other comprehensive income of \$6.8 million.

Income Statement - All Services - Page 4

The following tables compare the results with the eleven month pro-rated budget and forecasts for the year. Year to date results are \$13.6 million better than the pro-rated budget and \$1.1 million ahead of the pro-rated current forecast with Revenue higher than budget and forecast and Expenses lower than budget and forecast.

Summarized Consolidated Operating Results							
Eleven Month							
	Actual YTD Budget						
	2017/18	2017/18					
_	'000 '000 \$ Variance						
Operating Revenue	\$126,478	\$124,288	\$2,190				
Operating Expenses	\$87,896	\$93,393	(\$5,497)				
Operating Profit (Loss)	\$38,582	\$30,895	\$7,687				
Non Operating Revenue	\$4,177	\$2,555	\$1,623				
Non Operating Expenditure	\$31,367	\$35,642	(\$4,275)				
Net Surplus (Deficit) \$11,392 (\$2,192) \$13,584							

Summarized Consolidated Operating Results						
	Eleven Month					
	Actual YTD	Forecast				
	2017/18	2017/18				
	'000 '000 \$ Variance					
Operating Revenue	\$126,478	\$125,827	\$651			
Operating Expenses	\$87,896	\$88,130	(\$234)			
Operating Profit (Loss)	\$38,582	\$37,697	\$885			
Non Operating Revenue	\$4,177	\$4,152	\$26			
Non Operating Expenditure	\$31,367	\$31,590	(\$223)			
Net Surplus (Deficit)	\$11,392	\$10,259	\$1,134			

Customer Rates

Rates for Water and Wastewater service did not change this fiscal year, having last been adjusted on April 1, 2016. A new rate structure for Stormwater Service took effect July 1, 2017. This reset the rates, but did not increase revenues. The rate for many customers decreased, as shown in the Summary of Rate Change – Stormwater table below:

	Summary of Rates						
	Effective April 1/16	Effective May 1/15	\$ Change	% Change			
Volumetric Charges (per m3)							
Water	0.976	0.845	0.131	15.5%			
Wastewater	1.753	1.638	0.115	7.0%			
Combined	2.729	2.483	0.246	9.9%			
Base Charges (per year)							
Water	Varies by me	eter size	No Change	0.0%			
Wastewater	Varies by me	eter size	Varies	1.1%-7.7%			

Summary of Rate Change - Stormwater						
, r	Effective July 1/17	Effective April 1/14	\$ Change	% Change		
Residential - Impervious Are	<u>a</u>					
Less than 50 m2	-	33.39	- 33.390	-100.0%		
50 to 200 m2	14.00	33.39	- 19.390	-58.1%		
210 to 400 m2	27.00	33.39	- 6.390	-19.1%		
410 to 800 m2	54.00	33.39	20.610	61.7%		
Greater than 810 m2	81.00	33.39	47.610	142.6%		
Culvert only service	14.00	Varied	Varies	Varies		
ICI Rate per m2	0.135	0.149	- 0.014	-9.4%		

Operating Revenue

Operating Revenue matches the previous year and is \$2.2 million ahead of the pro-rated budget with Metered Sales accounting for the difference.

Metered Sales revenue is down \$0.1 million (0.2%) for Water Service and up \$0.3 million (0.5%) for Wastewater Service as compared to the prior year. Metered Sales consist of base and volumetric charges. Base charges are slightly below budget expectations. Volumetric revenue budgets for 2017/18 were based on a 3% decrease in metered consumption. Billed water consumption has been unusually high in January and February. This has offset the normal annual decline in consumption which is now 0.1% ahead of the prior year consumption.

Wastewater Metered Sales also consists of a volumetric discharge component and a base charge component. For most customers, the discharge component is based on the metered water consumption, and the volumes reflect the decline in water consumption. The actual billed discharge volume increased by 0.4%. Wastewater Rebates are available to large customers whose metered water does not enter the Wastewater system. Rebates are \$0.9 million less than budget, which benefits Wastewater Revenue. The Forecast for Wastewater Metered Sales was previously increased by \$1.5 million to reflect the expected results.

Stormwater Site Generated revenue is slightly below budget and the prior year. A large portion of this revenue is billed annually to Stormwater-only customers in March. Other revenue categories are comparable with budget and forecasted amounts.

Operating Expenses

Operating Expenses of \$87.9 million are \$6.7 million higher than the prior year, \$5.5 million below the pro-rated budget for the year and on par with the forecast. Compared to the prior year, expense categories with the largest increases in costs to date are Wastewater Collection, Wastewater Treatment, Stormwater Collection and Depreciation.

Financial Revenue

Investment income was budgeted to decrease this year as a result of Accounting changes. Previously, investment income was earned in part through charges on Capital Assets Under Construction. This practice was eliminated for the current fiscal year but higher than anticipated cash balances and rising interest rates have mitigated the impact on revenue. Miscellaneous revenue is up \$1.1 million including the receipt in December of a payment of \$0.9 million in relation to total completion of the Harbour Solutions project. Miscellaneous Revenue also includes various un-regulated activities such as tower leases, energy generation, consulting activities and some contracted services.

Financial Expenses

Long Term Debt costs have decreased \$0.6 million from the prior year. Debt servicing savings are a result of new debt issues having lower interest rates than older, maturing issues. New debt was issued in the Municipal Finance Corporation's (MFC's) Fall Debenture in the amount of \$10.0 million. There is a separate report on the debt requirements for the MFC's Spring Debenture. The Dividend/Grant In Lieu of Taxes is paid annually to HRM. The amount is based on the net asset value of water assets and will increase this year to \$4.8 million.

The following table shows operating results for each service.

Year to Date Operating Results by Service						
	2017/18 2016/17					
	'000	'000				
Water	\$2,111	\$5,315				
Wastewater	\$4,534	\$5,984				
Stormwater	\$163	\$2,508				
Net Surplus (Deficit)	\$6,807	\$13,807				

Water Operations - Page 5

Water Operations show a profit of \$2.1 million, compared to a profit of \$5.3 million for the previous year at this time. Water revenue is down \$0.1 million. Operating Expenses are up \$3.2 million with Administration & Pension showing the largest increase at \$1.3 million.

Wastewater Operations - Page 6

Wastewater Operations show a profit of \$4.5 million, down from a profit of \$6.0 million in the prior year. Wastewater revenue has increased \$0.4 million from the prior year, with Metered Sales and Overstrength Agreements accounting for the increase. Operating expenses have increased by \$3.8 million from the previous year. Expenses in Wastewater Collection are \$1.7 million higher. Higher costs are also seen in Wastewater Treatment, Administration & Pension, and Depreciation.

Stormwater Operations - Page 7

Stormwater Operations show a profit of \$0.2 million, a decline from the profit of \$2.5 million for the same period last year.

Revenue is down \$0.3 million, with slight declines in each Revenue category. Expenses are higher for Stormwater Collection by \$0.9 million and for Regulatory Services by \$0.5 million. Financial Expenses are up \$0.6 million, reflecting the growing capital expenditures and associated debt servicing costs for Stormwater.

Regulated and Unregulated Operations - Page 8

Activities regulated by the NSUARB show a profit of \$5.1 million, a decline from the \$12.7 million profit for the same period last year.

Unregulated activities show a profit of \$1.7 million, ahead of the profit of \$1.1 million for the prior year. The profit increase is a result of the contract to treat wastewater from the aircraft carrier that visited Halifax in the summer and lower costs associated with de-watering and bio-solids treatment.

Results by Activity							
2017/18 2016/17							
	'000	'000					
Regulated Activities	\$5,132	\$12,713					
Unregulated Activities	\$1,675	\$1,095					
Net Surplus (Deficit)	\$6,807	\$13,807					

Results under International Financial Reporting Standards - Pages 9 & 10

As noted previously, the AcSB requires HRWC, as a rate regulated utility, to report financial results using International Financial Reporting Standards (IFRS).

On the IFRS Balance Sheet, Accumulated Depreciation is higher producing a lower value for assets, Contributed Capital is treated as a long term liability and amortized rather than being treated as a contribution to equity, and the Operating Surplus is much higher due to changes in the Income Statement.

On the IFRS Income Statement, Operating Revenue is the same. Depreciation Expense is higher as contributed assets are depreciated and some assets are depreciated more quickly. Financial Revenue is higher as the amortization of contributed capital is treated as revenue. The most significant change is Financial Expenses are lower as there is no expense for the Long Term Debt Principal appropriation – a difference of \$21.4 million for the full year.

The IFRS Net Profit for the year to date is \$22.8 million.

ATTACHMENTS

Unaudited Operating Results for the eleven (11) months ended February 28, 2018

Report prepared by: *Original Signed By:*

Warren Brake, B.Comm, CPA, CGA, Manager, Accounting, 902-490-4814

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HALIFAX WATER UNAUDITED BALANCE SHEET - CONSOLIDATED AS OF FEBRUARY 28, 2018

	2018 	2017 '000
ASSETS		
Cash	\$47,026	\$58,719
Accounts Receivable	\$40,132	\$33,900
Materials & Supplies	\$1,624	\$1,604
Prepaid Expenses	\$314	(\$84)
	\$89,095	\$94,139
Regulatory Asset	\$3,213	\$3,404
Plant in Service	\$1,131,726	\$1,130,766
Assets Under Construction	\$83,588	\$59,679
	\$1,218,526	\$1,193,850
Unamortized Debt Discount & Issue Expense	\$929	\$1,049
	\$1,308,551	\$1,289,038
LIABILITIES & CAPITAL		
Trade Payables & Accrued Liabilities	\$20,471	\$22,136
Deposits & Unearned Revenue	\$4,608	(\$384)
Current Portion of Long Term Debt	\$20,916	\$21,669
	\$45,995	\$43,421
Pension & Accrued Retirement Benefits	\$65,445	\$61,295
RDC & Special Purpose Reserves	\$23,659	\$13,987
Long Term Debt	\$193,497	\$204,333
Total Liabilities	\$328,596	\$323,035
Capital Surplus, Committed Reserves, & Accumulated OCI	\$956,470	\$944,377
Operating Surplus	\$16,677	\$7,819
Excess (Deficiency) of Revenue over Expenditure - Consolidated	\$6,807	\$13,807
Total Capital & Surplus	\$979,954	\$966,003
	\$1,308,551	\$1,289,038

HALIFAX WATER UNAUDITED INCOME STATEMENT - CONSOLIDATED APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACTU (CURRENT THIS YEAR	MONTH) LAST YEAR		ACTUAL (YEAR TO DATE) THIS YEAR LAST YEAR		APR 1/17 MAR 31/18 BUDGET*	APR 1/17 MAR 31/18 FORECAST	% of
'000	'000	DESCRIPTION	'000	'000	'000	'000	FORECAST
\$10,073	\$10,290	OPERATING REVENUE	\$126,478	\$126,478	\$135,587	\$137,266	92.14%
\$7,727	\$7,150	OPERATING EXPENSES	\$87,896	\$81,160	\$101,883	\$96,142	91.42%
\$2,346	\$3,140	OPERATING PROFIT	\$38,582	\$45,318	\$33,704	\$41,124	93.82%
		FINANCIAL REVENUE					
\$67	\$61	INVESTMENT INCOME	\$615	\$734	\$346	\$679	90.65%
\$167	\$167	PNS FUNDING HHSP DEBT	\$1,833	\$1,833	\$2,000	\$2,000	91.67%
\$51	\$33	MISCELLANEOUS	\$1,729	\$465	\$441	\$1,850	93.42%
\$285	\$261	WIGGELF/WEGGG	\$4,177	\$3,033	\$2,787	\$4,529	92.23%
ΨΣΟΟ	Ψ201		Ψ+,111	ΨΟ,ΟΟΟ	Ψ2,101	Ψ+,020	OLILO 70
		FINANCIAL EXPENSES					
\$590	\$632	LONG TERM DEBT INTEREST	\$7,255	\$7,792	\$9,530	\$7,904	91.80%
\$1,621	\$1,645	LONG TERM DEBT PRINCIPAL	\$19,452	\$19,477	\$24,289	\$21,426	90.79%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$185	\$183	\$217	\$200	92.53%
\$398	\$382	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,376	\$4,218	\$4,827	\$4,774	91.67%
(\$6)	\$1	MISCELLANEOUS	\$98	\$44	\$19	\$158	62.16%
\$2,620	\$2,676		\$31,367	\$31,714	\$38,882	\$34,462	91.02%
•							
		NET PROFIT (LOSS) BEFORE					
\$11	\$725	OTHER COMPREHENSIVE INCOME	\$11,392	\$16,636	(\$2,392)	\$11,191	101.80%
		NON NSUARB ITEMS					
(\$417)	(\$257)	PENSION PLAN EXPENSE	(\$4,585)	(\$2,829)	(\$4,358)	(\$4,358)	105.21%
\$184	\$0	OTHER COMPREHENSIVE INCOME	\$2,021	\$0	\$0	\$2,204	91.67%
(\$233)	(\$257)		(\$2,565)	(\$2,829)	(\$4,358)	(\$2,154)	119.07%
		NET PROFIT (LOON) AVAILABLE FOR					
(#000)	6400	NET PROFIT (LOSS) AVAILABLE FOR	#0.000	¢40.00 7	(#C 750)	¢0.007	07.000/
(\$223)	\$468	CAPITAL EXPENDITURES	\$8,828	\$13,807	(\$6,750)	\$9,037	97.68%

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HALIFAX WATER UNAUDITED BALANCE SHEET AS OF FEBRUARY 28, 2018

	2018 '000	2017 '000
ASSETS		
Cash	\$47,026	\$58,719
Accounts Receivable		
Customers & Contractual	\$16,804	\$13,308
Customers & Contractual - Unbilled Services	\$17,206	\$17,010
Halifax Regional Municipality	\$6,122	\$3,582
Materials & Supplies	\$1,624	\$1,604
Prepaid Expenses	\$314	(\$84)
	\$89,095	\$94,139
Regulatory Asset	\$3,213	\$3,404
Plant in Service - Water	\$599,993	\$584,992
Plant in Service - Wastewater	\$714,226	\$696,202
Plant in Service - Stormwater	\$245,193	\$234,352
Less: Accumulated Depreciation - Water	(\$180,009)	(\$170,116)
Accumulated Depreciation - Wastewater	(\$202,782)	(\$179,978)
Accumulated Depreciation - Stormwater	(\$44,896)	(\$34,686)
	\$1,134,938	\$1,134,171
Assets Under Construction	\$83,588	\$59,679
	\$1,218,526	\$1,193,850
Unamortized Debt Discount & Issue Expense	\$929	\$1,049
	\$1,308,551	\$1,289,038
LIABILITIES & CAPITAL		
Trade	\$12,494	\$13,058
Interest on Long Term Debt	\$2,509	\$2,680
Halifax Regional Municipality	\$5,468	\$6,397
Contractor & Customer Deposits	\$183	\$199
Unearned Revenue	\$4,425	(\$583)
Current Portion of Long Term Debt	\$20,916	\$21,669
	\$45,995	\$43,421
Accrued Post-Retirement Benefits	\$341	\$466
Accrued Pre-Retirement Benefit	\$4,060	\$3,735
Deferred Pension Liability	\$61,044	\$57,094
Special Purpose Reserves not allocated to projects	\$1,222	\$1,822
Regional Development Charge	\$22,437	\$12,164
Long Term Debt-Water	\$55,411	\$59,599
Long Term Debt-Wastewater	\$127,043	\$133,409
Long Term Debt-Stormwater	\$11,043	\$11,324
Total Liabilities	\$328,596	\$323,035
One ital Orientes	********	00=0 = 10
Capital Surplus	\$982,872 \$3,304	\$973,542
Committed Reserves	\$2,391 (\$44,472)	\$2,391 (\$43,036)
Accumulated Other Comprehensive Income	(\$41,172) \$12,380	(\$43,936) \$12,380
Operating Surplus	\$12,380 \$16,677	\$12,380 \$7,810
Operating Surplus		\$7,819 \$13,807
Excess (Deficiency) of Revenue over Expenditure - Consolidated Total Capital & Surplus	\$6,807 \$979,954	\$13,807 \$966,003
	\$1,308,551	\$1,289,038
	ψ1,500,551	ψ1,203,030

HALIFAX WATER UNAUDITED INCOME STATEMENT - ALL SERVICES APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACT			ACTU		APR 1/17 MAR 31/18	APR 1/17 MAR 31/18		
THIS YEAR '000	LAST YEAR '000	DESCRIPTION	THIS YEAR '000	LAST YEAR '000	BUDGET* '000	FORECAST '000	% of BUDGET*	% of FORECAST
		DEGGRIF HON	000	000	- 000	000	BODGET	TOREGAGI
		REVENUE				•		
\$3,509	\$3,533	METERED SALES - WATER	\$43,209	\$43,293	\$46,610	\$46,610	92.70%	92.70%
\$5,074	\$5,168	METERED SALES - WASTEWATER	\$63,980	\$63,668	\$67,756	\$69,256	94.43%	92.38%
\$360	\$466	STORMWATER SITE GENERATED SERVICE	\$5,831	\$6,060	\$6,700	\$6,700	87.03%	87.03%
\$590	\$590	FIRE PROTECTION	\$6,485	\$6,485	\$7,074	\$7,074	91.67%	91.67%
\$321	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,526	\$3,558	\$3,881	\$3,847	90.84%	91.67%
\$151 \$39	\$143 \$45	OTHER SERVICES AND FEES CUSTOMER LATE PAY./COLLECTION FEES	\$2,699 \$352	\$2,608 \$465	\$2,716 \$491	\$2,971 \$401	99.39% 71.70%	90.85% 87.80%
\$30	\$22	MISCELLANEOUS	\$396	\$341	\$358	\$407	110.67%	97.34%
\$10,073	\$10,290	MIGGLELANEOUS	\$126,478	\$126,478	\$135,587	\$137,266	93.28%	92.14%
Ψ10,073	Ψ10,230	EXPENSES	Ψ120,470	ψ120,470	ψ100,007	Ψ107,200	33.2070	J2.1470
\$721	\$472	WATER SUPPLY & TREATMENT	\$6,913	\$6,236	\$8,565	\$7,338	80.71%	94.21%
\$691	\$633	TRANSMISSION & DISTRIBUTION	\$8,017	\$7,662	\$8,969	\$8,108	89.39%	98.87%
\$814	\$884	WASTEWATER COLLECTION	\$10,078	\$8,400	\$9,653	\$9,703	104.41%	103.87%
\$1,398	\$1,286	WASTEWATER TREATMENT PLANTS	\$16,396	\$15,675	\$19,251	\$18,161	85.17%	90.28%
\$272	\$238	STORMWATER COLLECTION	\$4,437	\$3,582	\$4,589	\$4,437	96.70%	100.00%
\$223	\$266	SMALL SYSTEMS AND OTHER SERVICES	\$2,428	\$2,768	\$3,170	\$2,834	76.58%	85.66%
\$182	\$172	SCADA, CONTROL & PUMPING	\$1,995	\$1,929	\$2,210	\$2,080	90.30%	95.94%
\$558	\$500	ENGINEERING & INFORMATION SERVICES	\$6,316	\$6,059	\$7,504	\$7,064	84.16%	89.40%
\$260	\$233	REGULATORY SERVICES	\$3,042	\$2,814	\$3,710	\$3,327	81.99%	91.43%
\$384	\$340	CUSTOMER SERVICE	\$4,374	\$3,941	\$4,626	\$4,626	94.54%	94.54%
\$573	\$583	ADMINISTRATION & PENSION	\$5,661	\$5,563	\$7,096	\$6,896	79.77%	82.09%
\$1,651	\$1,544	DEPRECIATION	\$18,240	\$16,530	\$22,538	\$21,568	80.93%	84.57%
\$7,727	\$7,150		\$87,896	\$81,160	\$101,883	\$96,142	86.27%	91.42%
\$2,346	\$3,140	OPERATING PROFIT	\$38,582	\$45,318	\$33,704	\$41,124	114.47%	93.82%
		FINANCIAL REVENUE						
\$67	\$61	INVESTMENT INCOME	\$615	\$734	\$346	\$679	177.99%	90.65%
\$167	\$167	PNS FUNDING HHSP DEBT	\$1,833	\$1,833	\$2,000	\$2,000	91.67%	91.67%
\$51	\$33	MISCELLANEOUS	\$1,729	\$465	\$441	\$1,850	391.80%	93.42%
\$285	\$261		\$4,177	\$3,033	\$2,787	\$4,529	149.89%	92.23%
	·			• •	•			
		FINANCIAL EXPENSES						
\$590	\$632	LONG TERM DEBT INTEREST	\$7,255	\$7,792	\$9,530	\$7,904	76.13%	91.80%
\$1,621	\$1,645	LONG TERM DEBT PRINCIPAL	\$19,452	\$19,477	\$24,289	\$21,426	80.09%	90.79%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$185	\$183	\$217	\$200	85.29%	92.53%
\$398	\$382	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,376	\$4,218	\$4,827	\$4,774	90.66%	91.67%
(\$6)	\$1 \$0.676	MISCELLANEOUS	\$98	\$44	\$19	\$158	511.53%	62.16%
\$2,620	\$2,676		\$31,367	\$31,714	\$38,882	\$34,462	80.67%	91.02%
		NET PROFIT (LOSS) BEFORE						
\$11	\$725	OTHER COMPREHENSIVE INCOME	\$11,392	\$16,636	(\$2,392)	\$11,191	576.36%	101.80%
_								
(¢ 44.7\	(¢ 0.53\	NON NSUARB ITEMS	(04.505)	(#Q 000\	(#4.250 <u>)</u>	(\$4.2EQ)	105 240/	10F 010/
(\$417) \$184	(\$257) \$0	PENSION PLAN EXPENSE	(\$4,585)	(\$2,829)	(\$4,358)	(\$4,358)	105.21%	105.21%
\$184 (\$233)	(\$257)	OTHER COMPREHENSIVE INCOME	\$2,021 (\$2,565)	\$0 (\$2,829)	\$0 (\$4,358)	\$2,204 (\$2,154)	0.00% 58.84%	91.67% 119.07%
(φ233)	(\$237)		(ψ∠,505)	(\$2,029)	(44,556)	(φ ∠ , 134)	JO.04 /0	113.01 /0
(\$223)	\$468	NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES	\$8,828	\$13,807	(\$6,750)	\$9,037	230.78%	97.68%
(ψ223)	ψ+00	ON THE EXICIDITY ONLY	ψ0,020	ψ13,007	(ψυ, ε 30)	ψ3,031	230.1070	31.00/0

HALIFAX WATER UNAUDITED INCOME STATEMENT - WATER OPERATIONS APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACTUAL (CURRENT MONTH)			ACTU		APR 1/17	APR 1/17	
THIS YEAR	LAST YEAR		(YEAR TO THIS YEAR	LAST YEAR	MAR 31/18 BUDGET*	MAR 31/18 FORECAST	% of
'000	'000	DESCRIPTION	'000	'000	'000	'000	FORECAST
		DEGGIAI HON				000	TORLOAGT
		REVENUE					
\$3,509	\$3,533	METERED SALES	\$43,209	\$43,293	\$46,610	\$46,610	92.70%
\$590	\$590	FIRE PROTECTION	\$6,485	\$6,485	\$7,074	\$7,074	91.67%
\$66	\$64	PRIVATE FIRE PROTECTION SERVICES	\$780	\$758	\$857	\$857	91.04%
\$10	\$8	BULK WATER STATIONS	\$292	\$314	\$314	\$305	95.66%
\$20	\$27	CUSTOMER LATE PAY./COLLECTION FEES	\$199	\$254	\$212	\$212	93.82%
\$11	\$9	MISCELLANEOUS	\$160	\$141	\$139	\$164	97.55%
\$4,206	\$4,230		\$51,125	\$51,246	\$55,207	\$55,223	92.58%
		EXPENSES					
\$721	\$472	WATER SUPPLY & TREATMENT	\$6,913	\$6,236	\$8,565	\$7,338	94.21%
\$691	\$633	TRANSMISSION & DISTRIBUTION	\$8,017	\$7,662	\$8,969	\$8,108	98.87%
\$85	\$82	SMALL SYSTEMS (inc. Contract Systems)	\$1,008	\$955	\$1,073	\$997	101.08%
\$73	\$66	SCADA, CONTROL & PUMPING	\$733	\$718	\$873	\$838	87.47%
\$281	\$212	ENGINEERING & INFORMATION SERVICES	\$2,868	\$2,662	\$3,515	\$3,350	85.63%
\$340	\$96	REGULATORY SERVICES	\$1,006	\$1,202	\$1,374	\$1,005	100.08%
(\$39)	\$173	CUSTOMER SERVICE	\$2,082	\$2,008	\$2,357	\$2,357	88.33%
\$506	\$431	ADMINISTRATION & PENSION	\$5,565	\$4,292	\$5,836	\$5,734	97.05%
\$672	\$634	DEPRECIATION	\$7,438	\$6,677	\$9,218	\$8,728	85.21%
\$3,330	\$2,799		\$35,629	\$32,412	\$41,781	\$38,455	92.65%
\$876	\$1,431	OPERATING PROFIT	\$15,496	\$18,834	\$13,426	\$16,768	92.41%
		FINANCIAL REVENUE					
\$30	\$28	INVESTMENT INCOME	\$277	\$331	\$156	\$306	90.61%
\$41	\$26	MISCELLANEOUS	\$434	\$337	\$428	\$547	79.36%
\$71	\$54	Wilder Wilder	\$711	\$669	\$583	\$852	83.39%
.	* . — :	FINANCIAL EXPENSES		*	A	A-	00.6=21
\$152	\$171	LONG TERM DEBT INTEREST	\$1,976	\$2,201	\$2,683	\$2,128	92.85%
\$611	\$654	LONG TERM DEBT PRINCIPAL	\$7,570	\$7,669	\$9,012	\$8,292	91.29%
\$8	\$8	AMORTIZATION DEBT DISCOUNT	\$86	\$87	\$98	\$93	92.62%
\$398	\$382	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,376	\$4,218	\$4,827	\$4,774	91.67%
(\$7)	\$0	MISCELLANEOUS	\$88	\$12	\$19	\$158	55.56%
\$1,162	\$1,215		\$14,096	\$14,187	\$16,639	\$15,445	91.26%
		NET PROFIT (LOSS) AVAILABLE FOR					
(\$215)	\$269		\$2,111	\$5,315	(\$2,630)	\$2,175	97.05%

HALIFAX WATER UNAUDITED INCOME STATEMENT - WASTEWATER OPERATIONS APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACT (CURREN			ACTU (YEAR TO		APR 1/17 MAR 31/18	APR 1/17 MAR 31/18	
	LAST YEAR		THIS YEAR	LAST YEAR	BUDGET*	FORECAST	% of
1000	'000	DESCRIPTION	1000	'000	'000	'000	FORECAST
	000	DESCRIPTION	000	000	000	000	FUNECASI
		REVENUE					
\$5,074	\$5,168	METERED SALES	\$63,980	\$63,668	\$67,756	\$69,256	92.38%
\$2,074	\$0	WASTEWATER OVERSTRENGTH AGREEMENTS	\$201	\$23	\$0	\$205	98.21%
\$29	\$30	LEACHATE CONTRACT	\$293	\$314	\$389	\$389	75.31%
\$10	\$8	CONTRACT REVENUE	Ψ233 \$81	\$74	\$86	\$86	94.48%
\$17	\$17	DEWATERING FACILITY/SLUDGE LAGOON	\$192	\$192	\$210	\$210	91.65%
\$0	\$0	AIRLINE EFFLUENT	\$89	\$66	\$86	\$120	74.35%
\$16	\$16	SEPTAGE TIPPING FEES	\$771	\$867	\$775	\$800	96.36%
\$10 \$17	\$10 \$17	CUSTOMER LATE PAY./COLLECTION FEES	\$155	\$176	\$240	\$180	86.14%
\$17 \$9	\$17 \$7	MISCELLANEOUS	\$132	\$176 \$119	\$129	\$135	97.21%
\$5,174	\$5,263	WIGGELLANEOUS	\$65,894	\$65,499	\$69,670	\$71,380	92.31%
\$3,174	\$5,265	EXPENSES	\$00,094	ФО 3,499	\$09,070	₹1,30U	92.31%
¢011	\$884	WASTEWATER COLLECTION	\$10,078	\$8,400	\$0.653	\$9,703	103.87%
\$814	\$1,286	WASTEWATER COLLECTION WASTEWATER TREATMENT PLANTS			\$9,653		
\$1,398	\$1,266 \$106	SMALL SYSTEMS	\$16,396	\$15,675	\$19,251	\$18,161	90.28% 84.87%
\$94 \$18	\$106 \$54	DEWATERING FACILITY/ SLUDGE MGM'T	\$1,048 \$117	\$1,062 \$410	\$1,276 \$380	\$1,235 \$160	72.74%
	\$54 \$0	BIOSOLIDS TREATMENT	\$117 \$1			·	
\$0 *25	* -		*	\$71	\$101	\$101	1.27%
\$25	\$25	LEACHATE CONTRACT	\$254	\$271	\$341	\$341	74.51%
\$105	\$102	SCADA, CONTROL & PUMPING	\$1,222	\$1,172	\$1,306	\$1,215	100.59%
\$238	\$247	ENGINEERING & INFORMATION SERVICES	\$2,965	\$2,921	\$3,431	\$3,195	92.81%
\$123	\$73	REGULATORY SERVICES	\$867	\$922	\$1,094	\$1,251	69.34%
\$443	\$144	CUSTOMER SERVICE	\$2,050	\$1,662	\$2,064	\$2,064	99.34%
\$416	\$352	ADMINISTRATION & PENSION	\$4,026	\$3,526	\$4,833	\$4,748	84.80%
\$919	\$860	DEPRECIATION	\$10,146	\$9,313	\$12,465	\$12,045	84.23%
\$4,595	\$4,132		\$49,170	\$45,405	\$56,194	\$54,218	90.69%
\$579	\$1,131	OPERATING PROFIT	\$16,724	\$20,094	\$13,476	\$17,162	97.44%
		FINANCIAL REVENUE					
\$30	\$28	INVESTMENT INCOME	\$277	\$331	\$156	\$306	90.61%
\$167	\$167	PNS FUNDING HHSP DEBT	\$1,833	\$1,833	\$2,000	\$2,000	91.67%
\$10	\$7	MISCELLANEOUS	\$1,295	\$128	\$14	\$1,304	99.31%
\$207	\$201		\$3,405	\$2,293	\$2,169	\$3,609	94.34%
		FINANCIAL EVERNORS					
		FINANCIAL EXPENSES		•			
\$395	\$415	LONG TERM DEBT INTEREST	\$4,759	\$5,053	\$6,022	\$5,206	91.41%
\$912	\$940	LONG TERM DEBT PRINCIPAL	\$10,736	\$11,230	\$13,699	\$11,881	90.37%
\$8	\$8	AMORTIZATION DEBT DISCOUNT	\$90	\$87	\$107	\$97	92.46%
\$1	\$0	MISCELLANEOUS	\$10	\$32	\$0	\$0	0.00%
\$1,317	\$1,364	-	\$15,595	\$16,402	\$19,828	\$17,183	90.76%
/#F04.3	(604)	NET PROFIT (LOSS) AVAILABLE FOR	A4 F64	65.001	(64.400)	# 0 5 00	400 0 407
(\$531)	(\$31)	CAPITAL EXPENDITURES	\$4,534	\$5,984	(\$4,183)	\$3,589	126.34%

HALIFAX WATER UNAUDITED INCOME STATEMENT - STORMWATER OPERATIONS APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACT (CURREN THIS YEAR	Γ MONTH) LAST YEAR		(YEAR TO THIS YEAR			APR 1/17 MAR 31/18 FORECAST	% of
'000	'000	DESCRIPTION	'000	'000	'000	'000	FORECAST
		REVENUE					
\$360	\$466	STORMWATER SITE GENERATED SERVICE	\$5,831	\$6,060	\$6,700	\$6,700	87.03%
\$321	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,526	\$3,558	\$3,881	\$3,847	91.67%
\$2	\$1	CUSTOMER LATE PAY./COLLECTION FEES	(\$2)	\$34	\$39	\$9	-17.83%
\$10	\$ 5	MISCELLANEOUS	\$104	\$81	\$89	\$107	97.17%
\$693	\$796		\$9,459	\$9,733	\$10,710	\$10,663	88.71%
		EXPENSES		• •			
\$272	\$238	STORMWATER COLLECTION	\$4,437	\$3,582	\$4,589	\$4,437	100.00%
\$4	\$3	SCADA, CONTROL & PUMPING	\$41	\$39	\$31	\$27	149.00%
\$39	\$40	ENGINEERING & INFORMATION SERVICES	\$482	\$476	\$558	\$520	92.81%
(\$203)	\$64	REGULATORY SERVICES	\$1,169	\$691	\$1,242	\$1,071	109.13%
(\$20)	\$23	CUSTOMER SERVICE	\$242	\$270	\$205	\$205	117.63%
\$68	\$57	ADMINISTRATION & PENSION	\$655	\$573	\$786	\$772	84.80%
\$59	\$49	DEPRECIATION	\$656	\$540	\$855	\$795	82.59%
\$219	\$476		\$7,682	\$6,172	\$8,266	\$7,828	98.14%
¢ 47.4	#220	ODED ATIMO DEOCIT	¢4 777	#2 FC4	CO 444	#0.00 E	CO CON/
\$474	\$320	OPERATING PROFIT	\$1,777	\$3,561	\$2,444	\$2,835	62.68%
		FINANCIAL REVENUE					
\$7	\$6	INVESTMENT INCOME	\$62	\$72	\$35	\$68	91.05%
\$0	\$0	MISCELLANEOUS	\$0	\$0	\$0	\$0	0.00%
\$7	\$6		\$62	\$72	\$35	\$68	91.05%
		FINANCIAL EXPENSES					
\$43	\$45	LONG TERM DEBT INTEREST	\$521	\$538	\$825	\$570	91.37%
\$97	\$51	LONG TERM DEBT PRINCIPAL	\$1,146	\$578	\$1,577	\$1,253	91.44%
\$1	\$1	AMORTIZATION DEBT DISCOUNT	\$9	\$9	\$12	\$10	92.34%
\$141	\$97		\$1,676	\$1,125	\$2,414	\$1,833	91.42%
		NET DROET (LOOS) AVAILABLE FOR					
\$339	\$230	NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES	\$163	\$2,508	\$64	\$1,070	15.20%
	7_55		7.00	+=,300	ŢŪ.	¥ · , • · •	

HALIFAX WATER UNAUDITED INCOME STATEMENT - REGULATED AND UNREGULATED OPERATIONS APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

DESCRIPTION			APR 1/17 MAR 31/18 BUDGET*	APR 1/17 MAR 31/18 FORECAST	% of FORECAST	
REGULATED ACTIVITIES						
EVENUE						
METERED SALES	\$113,020	\$113,021	\$121,067	\$122,567	92.21%	
FIRE PROTECTION	\$6,485	\$6,485	\$7,074	\$7,074	91.67%	
PRIVATE FIRE PROTECTION	\$780	\$758	\$857	\$857	91.04%	
STORMWATER SERVICE	\$3,526	\$3,558	\$3,881	\$3,847	91.67%	
OTHER OPERATING REVENUE	\$1,207	\$1,109	\$1,141	\$1,296	93.11%	
	\$125,018	\$124,931	\$134,020	\$135,641	92.17%	
XPENSES						
WATER SUPPLY & TREATMENT	\$6,913	\$6,236	\$8,565	\$7,338	94.21%	
TRANSMISSION & DISTRIBUTION	\$8,017	\$7,662	\$8,969	\$8,108	98.87%	
WASTEWATER & STORMWATER COLLECTION	\$14,511	\$11,966	\$14,241	\$14,140	102.63%	
WASTEWATER TREATMENT PLANTS	\$16,396	\$15,675	\$19,251	\$18,161	90.28%	
SMALL SYSTEMS	\$2,040	\$2,002	\$2,324	\$2,208	92.40%	
SCADA, CONTROL & PUMPING	\$1,995	\$1,929	\$2,210	\$2,080	95.94%	
ENGINEERING & INFORMATION SERVICES	\$6,316	\$6,059	\$7,504	\$7,064	89.40%	
REGULATORY SERVICES	\$3,042	\$2,814	\$3,710	\$3,327	91.43%	
CUSTOMER SERVICE	\$4,341	\$3,909	\$4,591	\$4,591	94.56%	
ADMINISTRATION & PENSION	\$10,200	\$8,365	\$11,424	\$11,233	90.80%	
DEPRECIATION	\$18,221	\$16,525	\$22,538	\$21,568	84.48%	
	\$91,992	\$83,143	\$105,330	\$99,818	92.16%	
INANCIAL REVENUE						
INVESTMENT INCOME	\$615	\$734	\$346	\$679	90.65%	
MISCELLANEOUS	\$2,760	\$1,861	\$2,083	\$3,372	81.85%	
	\$3,375	\$2,595	\$2,429	\$4,051	83.33%	
INANCIAL EXPENSES						
LONG TERM DEBT INTEREST	\$7,255	\$7,792	\$9,530	\$7,904	91.80%	
LONG TERM DEBT PRINCIPAL	\$19,452	\$19,477	\$24,289	\$21,426	90.79%	
AMORTIZATION DEBT DISCOUNT	\$185	\$183	\$217	\$200	92.53%	
DIVIDEND/GRANT IN LIEU OF TAXES	\$4,376	\$4,218	\$4,827	\$4,774	91.67%	
	\$31,269	\$31,670	\$38,863	\$34,304	91.15%	
ET PROFIT (LOSS) AVAILABLE FOR						
	0= 100	212 -12	(04)	0= ==0	22.450/	
	\$5,132	\$12,713	(\$7,744)	\$5,570	92.15%	
UNREGULATED ACTIVITIES	\$5,132	\$12,713	(\$7,744)	\$5,570	92.15%	
CAPITAL EXPENDITURES UNREGULATED ACTIVITIES EVENUE		-				
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES	\$771	\$867	\$775	\$800	96.36%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT	\$771 \$293	\$867 \$314	\$775 \$389	\$800 \$389	96.36% 75.31%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE	\$771 \$293 \$81	\$867 \$314 \$74	\$775 \$389 \$86	\$800 \$389 \$86	96.36% 75.31% 94.48%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING	\$771 \$293 \$81 \$192	\$867 \$314 \$74 \$192	\$775 \$389 \$86 \$210	\$800 \$389 \$86 \$210	96.36% 75.31% 94.48% 91.65%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT	\$771 \$293 \$81 \$192 \$89	\$867 \$314 \$74 \$192 \$66	\$775 \$389 \$86 \$210 \$86	\$800 \$389 \$86 \$210 \$120	96.36% 75.31% 94.48% 91.65% 74.35%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS	\$771 \$293 \$81 \$192 \$89 \$145	\$867 \$314 \$74 \$192 \$66 \$149	\$775 \$389 \$86 \$210 \$86 \$184	\$800 \$389 \$86 \$210 \$120 \$184	96.36% 75.31% 94.48% 91.65% 74.35% 79.11%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT	\$771 \$293 \$81 \$192 \$89 \$145 \$34	\$867 \$314 \$74 \$192 \$66 \$149 \$34	\$775 \$389 \$86 \$210 \$86 \$184 \$22	\$800 \$389 \$86 \$210 \$120 \$184 \$22	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS	\$771 \$293 \$81 \$192 \$89 \$145	\$867 \$314 \$74 \$192 \$66 \$149	\$775 \$389 \$86 \$210 \$86 \$184	\$800 \$389 \$86 \$210 \$120 \$184	96.36% 75.31% 94.48% 91.65% 74.35% 79.11%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES	\$771 \$293 \$81 \$192 \$89 \$145 \$34	\$867 \$314 \$74 \$192 \$66 \$149 \$34	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS KPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846	\$775 \$389 \$86 \$210 \$86 \$1184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE MISCELLANEOUS	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS KPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE MISCELLANEOUS NANCIAL EXPENSES	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489 \$657	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846 \$289	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682 \$295	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69% 222.88%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489 \$657	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846 \$289	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912 \$174 \$174	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682 \$295 \$295	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69% 222.88% 222.88%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS XPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE MISCELLANEOUS NANCIAL EXPENSES MISCELLANEOUS	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489 \$657	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846 \$289	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682 \$295	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69% 222.88%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS KPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE MISCELLANEOUS NANCIAL EXPENSES MISCELLANEOUS ET PROFIT (LOSS) AVAILABLE FOR	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489 \$657	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846 \$289	\$775 \$389 \$86 \$210 \$86 \$184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912 \$174 \$174	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682 \$295 \$295	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69% 222.88% 62.16%	
UNREGULATED ACTIVITIES EVENUE SEPTAGE TIPPING FEES LEACHATE CONTRACT CONTRACT REVENUE DEWATERING AIRLINE EFFLUENT ENERGY PROJECTS MISCELLANEOUS KPENSES WATER SUPPLY & TREATMENT WASTEWATER TREATMENT SPONSORSHIPS & DONATIONS DEPRECIATION NANCIAL REVENUE MISCELLANEOUS NANCIAL EXPENSES	\$771 \$293 \$81 \$192 \$89 \$145 \$34 \$1,606 \$16 \$376 \$78 \$19 \$489 \$657 \$657	\$867 \$314 \$74 \$192 \$66 \$149 \$34 \$1,696 \$15 \$767 \$59 \$5 \$846 \$289 \$289 \$44	\$775 \$389 \$86 \$210 \$86 \$1184 \$22 \$1,750 \$25 \$821 \$66 \$0 \$912 \$174 \$174	\$800 \$389 \$86 \$210 \$120 \$184 \$22 \$1,809 \$25 \$602 \$56 \$0 \$682 \$295 \$295 \$158	96.36% 75.31% 94.48% 91.65% 74.35% 79.11% 158.32% 88.73% 65.95% 62.40% 140.35% 0.00% 71.69% 222.88% 222.88% 62.16%	

HALIFAX WATER UNAUDITED BALANCE SHEET - IFRS FORMAT AS OF FEBRUARY 28, 2018

	2018 '000	2017 '000
ASSETS		
Cash	\$47,026	\$58,719
Accounts Receivable		
Customers & Contractual	\$16,804	\$13,308
Customers & Contractual - Unbilled Services	\$17,206	\$17,010
Halifax Regional Municipality	\$6,122	\$3,582
Materials & Supplies	\$1,624	\$1,604
Prepaid Expenses	\$314	(\$84)
Tropana Exponess	\$89,095	\$94,139
Regulatory Asset	\$3,213	\$3,404
Plant in Service - Water	\$599,993	\$584,992
Plant in Service - Wastewater	\$714,226	\$696,202
Plant in Service - Stormwater	\$245,193	\$234,352
Less: Accumulated Depreciation - Water	(\$186,042)	(\$175,490)
Accumulated Depreciation - Wastewater	(\$209,623)	(\$185,257)
Accumulated Depreciation - Stormwater	(\$44,894)	(\$34,686)
Accumulated Depreciation - Stormwater	\$1,122,065	\$1,123,518
Assets Under Construction	\$83,588	\$59,679
Assets Officer Construction	\$1,205,654	\$1,183,197
Unamortized Debt Discount & Issue Expense	\$929	\$1,049
·	\$1,295,678	\$1,278,385
	φ1,293,070	ψ1,270,303
LIABILITIES		
Trade	\$12,494	\$13,058
Interest on Long Term Debt	\$2,509	\$2,680
Halifax Regional Municipality	\$5,468	\$6,397
Contractor & Customer Deposits	\$183	\$199
Unearned Revenue	\$4,425	(\$583)
Current Portion of Deferred Contributed Capital	\$12,889	\$12,526
Current Portion of Long Term Debt	\$20,916	\$21,669
3	\$58,884	\$55,947
Accrued Post-Retirement Benefits	\$341	\$466
Accrued Pre-Retirement Benefit	\$4,060	\$3,735
Deferred Pension Liability	\$61,044	\$57,094
Deferred Contributed Capital	\$807,388	\$803,826
Long Term Debt-Water	\$55,411	\$59,599
Long Term Debt-Wastewater	\$127,043	\$133,409
Long Term Debt-Stormwater	\$11,043	\$11,324
Total Liabilities	\$1,125,214	\$1,125,400
EQUITY		
Accumulated Other Comprehensive Income	(\$41,172)	(\$43,936)
Accumulated Surplus	\$190,822	\$167,606
Excess (Deficiency) of Revenue over Expenditure	\$20,814	\$29,315
Total Equity	\$170,464	\$152,985
	\$1,295,678	\$1,278,385
	φ1,293,078	φ1,210,303

HALIFAX WATER UNAUDITED INCOME STATEMENT - IFRS FORMAT - ALL SERVICES APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) 91.67%

ACTU. (CURRENT THIS YEAR I			ACTU (YEAR TO THIS YEAR		APR 1/17 MAR 31/18 BUDGET*	APR 1/17 MAR 31/18 FORECAST	% of	% of
'000	'000	DESCRIPTION	'000	'000	'000	'000	BUDGET*	FORECAST
		REVENUE						
\$3,509	\$3,533	METERED SALES - WATER	\$43,209	\$43,293	\$46,610	\$46,610	92.70%	92.70%
\$5,074	\$5,168	METERED SALES - WASTEWATER	\$63,980	\$63,668	\$67,756	\$69,256	94.43%	92.38%
\$360	\$466	STORMWATER SITE GENERATED SERVICE	\$5,831	\$6,060	\$6,700	\$6,700	87.03%	87.03%
\$590	\$590	FIRE PROTECTION	\$6,485	\$6,485	\$7,074	\$7,074	91.67%	91.67%
\$321	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,526	\$3,558	\$3,881	\$3,847	90.84%	91.67%
\$151	\$143	OTHER SERVICES AND FEES	\$2,699	\$2,608	\$2,716	\$2,971	99.39%	90.85%
\$39	\$45	CUSTOMER LATE PAY./COLLECTION FEES	\$352	\$2,008 \$465	\$491	\$401	71.70%	87.80%
\$30	\$22	MISCELLANEOUS	\$396	\$341	\$358	\$407	110.67%	97.34%
\$10,073	\$10,290	MIOCELEAINEOUS	\$126,478	\$126,478	\$135,587	\$137,266	93.28%	92.14%
\$10,073	\$10,230	EXPENSES	\$120,470	\$120,476	φ133,361	\$137,200	93.2076	92.14/0
\$721	\$472	WATER SUPPLY & TREATMENT	\$6,913	\$6,236	\$8,565	\$7,338	80.71%	94.21%
\$691	\$633	TRANSMISSION & DISTRIBUTION	\$8,017	\$7,662	\$8,969	\$8,108	89.39%	98.87%
\$814	\$884	WASTEWATER COLLECTION	\$10,078	\$8,400	\$9,653	\$9,703	104.41%	103.87%
\$1,398	\$1,286	WASTEWATER TREATMENT PLANTS	\$16,396	\$15,675	\$19,251	\$18,161	85.17%	90.28%
\$272	\$238	STORMWATER COLLECTION	\$4,437	\$3,582	\$4,589	\$4,437	96.70%	100.00%
\$223	\$266	SMALL SYSTEMS AND OTHER SERVICES	\$2,428	\$2,768	\$3,170	\$2,834	76.58%	85.66%
\$182	\$172	SCADA, CONTROL & PUMPING	\$1,995	\$1,929	\$2,210	\$2,080	90.30%	95.94%
\$558	\$500	ENGINEERING & INFORMATION SERVICES	\$6,316	\$6,059	\$7,504	\$7,064	84.16%	89.40%
\$260	\$233	REGULATORY SERVICES	\$3,042	\$2,814	\$3,710	\$3,327	81.99%	91.43%
\$384	\$340	CUSTOMER SERVICE	\$4,374	\$3,941	\$4,626	\$4,626	94.54%	94.54%
\$990	\$840	ADMINISTRATION & PENSION	\$10,246	\$8,392	\$11,455	\$11,254	89.45%	91.04%
\$3,637	\$5,088	DEPRECIATION	\$40,491	\$32,686	\$22,538	\$35,063	179.65%	115.48%
\$10,130	\$10,951		\$114,732	\$100,145	\$106,241	\$113,995	107.99%	100.65%
(\$57)	(\$662)	OPERATING PROFIT	\$11,746	\$26,333	\$29,346	\$23,271	40.03%	50.48%
		FINANCIAL REVENUE						
\$67	\$61	INVESTMENT INCOME	\$615	\$734	\$346	\$679	177.99%	90.65%
\$167	\$167	PNS FUNDING HHSP DEBT	\$1,833	\$1,833	\$2,000	\$2,000	91.67%	91.67%
\$1,568	\$1,632	MISCELLANEOUS	\$18,415	\$12,525	\$441	\$13,086	4173.42%	140.71%
\$1,802	\$1,860		\$20,863	\$15,092	\$2,787	\$15,765	748.63%	132.34%
		FINANCIAL EXPENSES						
\$590	\$632	LONG TERM DEBT INTEREST	\$7,255	\$7,792	\$9,530	\$7,904	76.13%	91.80%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$185	\$183	\$217	\$200	85.29%	92.53%
\$398	\$382	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,376	\$4,218	\$4,827	\$4,774	90.66%	91.67%
(\$6)	(\$127)	MISCELLANEOUS	(\$22)	(\$83)	\$19	\$158	-112.99%	-13.73%
\$999	\$903		\$11,795	\$12,110	\$14,594	\$13,036	80.82%	90.48%
· · · · · ·	•			•	·			
\$746	\$295	NET PROFIT (LOSS) BEFORE OTHER COMPREHENSIVE INCOME	\$20,814	\$29,315	\$17,539	\$26,000	118.68%	80.06%
\$140	\$ 233	OTTIEN COMPTACHEMONE INCOME	Ψ 2 U,014	φ∠9,315	का है । है	φ20,000	110.00 /0	00.00%
\$184	\$0	OTHER COMPREHENSIVE INCOME	\$2,021	\$0	\$0	\$2,204	0.00%	91.67%
\$929	\$295	NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES	\$22,835	\$29,315	\$17,539	\$28,204	130.20%	80.96%
4323	\$293	OAL HAL LAFLIDHUNES	ΨΖΖ,03 5	φ 2 3,313	φ17,339	φ20,204	130.2076	00.30%



ITEM # 5 HRWC Board March 29, 2018

TO: Mr. Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: Original Signed By:

Cathie O'Toole, MBA, CPA, CGA Director of Finance &

Customer Service

APPROVED: *Original Signed By:*

Carl Yates M.A.Sc., P.Eng., General Manager

DATE: March 21, 2018

SUBJECT: 2018 Spring MFC Debenture

ORIGIN

Halifax Water (HW) participation in the Spring 2018 Municipal Finance Corporation (MFC) Debenture issue to secure debt financing for balloon payments due on two existing debt issues.

RECOMMENDATION

It is recommended that the Halifax Water Board:

- 1. Approve the financing of \$500,000 for a five year term with a five year amortization schedule and an all-inclusive rate not to exceed 5.5%.
- 2. Approve the financing of \$1,000,000 for a ten year term with a ten year amortization schedule and an all-inclusive rate not to exceed 5.5%.

BACKGROUND

The HRWC is legally required to borrow through the MFC. The borrowing proposed in this report is consistent with the Five Year Business Plan, and the Approved Operating and Capital Budgets for 2017/18 and 2018/19, and the approved rates.

DISCUSSION

Long term debt issued for water and wastewater projects is traditionally amortized for a period of twenty years based on the life of the asset being financed. Traditionally the market

for twenty year financing in Canada has been significantly more expensive than ten year financing so twenty year amortized debt is usually financed for ten years and the balloon payment refinanced for the remaining ten years.

In 2003/04, new debt of \$2,000,000 was acquired to fund the Water Capital expenditures (as HW was a Water-only utility at the time). Interest rates at the time were such that a better rate was available for fifteen years rather than the usual ten years. A balloon payment of \$500,000 is due May 18, which will be refinanced for the remaining five years.

In 2008/09, new debt of \$2,000,000 was acquired to fund the Water Capital expenditures (shortly after the Wastewater merger). Debt was acquired for a ten year term with a twenty year amortization. A balloon payment of \$1,000,000 is due July 7, which will be refinanced for the remaining ten years.

The two amounts to be renewed are small relative to the annual debt requirements in recent years. The current high cash balance would indicate that these items do not need to be renewed immediately. However, a choice to not renew these items carries the implication that the Debt is being paid off from the Operating Surplus as Debt principal repayments are expensed on the Income Statement. The Operating Surplus as of February 2018 is \$16.7 million but is expected to decline significantly in 2018/19 due to the budgeted loss of \$12.1 million. The 2018/19 Operating Budget assumes the renewal of the balloon payments rather than their full repayment.

The new issues can be expected to have a lower interest rate than the original issues. The 2003 Debenture had an interest rate of 5.59% while the 2008 Debenture had a rate of 4.88%. Our current Weighted Average Cost of Debt is 3.50% and the Fall 2017 Debenture had an interest rate of 3.05%. The final timing of the debt issuance and interest rates will not be known with certainty until the formal debenture process concludes.

HRWC's debt is covered by a blanket guaranteed approved by HRM Council in September 2014. The blanket guarantee will apply to all HRWC debt with a condition that HRWC must maintain a debt service ratio of 35% or less. HRWC's debt service ratio is 21.7% as of February 28, 2018.

HRWC's outstanding debt at March 31, 2017 was \$226.0 million, and debt is projected to be \$214.4 million by March 31, 2018. The 2017/18 Budget anticipated \$48.8 million in new debt, of which only \$10.0 million was acquired in the 2017 Fall Debenture. The 2018/19 Budget anticipates \$37.2 million in new debt.

BUDGET IMPLICATIONS

HRWC has budgeted for \$31.2 million in debt servicing in 2018/19. Halifax Water's capital financing strategy is designed to maintain a debt service ratio of 35% or less; and to use a mixture of infrastructure funding, development related charges (reserves), depreciation, and debt.

ALTERNATIVES

Halifax Water could choose to forgo renewing the balloon payments in the 2018 Spring Debenture and re-consider it with the issuance of debt in the 2018 Fall Debenture.

ATTACHMENTS

- 1. Borrowing Resolution for \$1,000,000
- 2. Borrowing Resolution for \$500,000
- 3. Cash Flow Model for 2018/19 based on approved Operating and Capital Budgets

	Report Prepared by:	Original Signed By:					
		Warren Brake, B.Comm, CPA, CGA, Manager, Accounting, 490-4814					

ITEM # 5 HRWC Board March 29, 2018 ATTACHMENT 1

HALIFAX REGIONAL WATER COMMISSION BORROWING RESOLUTION

WHEREAS the Halifax Regional Water Commission, (the Commission) is incorporated under the provisions of the *Halifax Regional Water Commission Act*, Ch. 55 of the Acts of 2007 (The Act);

AND WHEREAS the Act provides that the Commission has power to borrow such sums as may be authorized and approved by the Board of the Commission for the purposes of the Commission, subject to the approval of the Nova Scotia Utility and Review Board:

AND WHEREAS the Commission wishes to borrow for the purpose of financing regular Additions to Utility Plant in Service for a 20 year amortization period;

AND WHEREAS a blanket guarantee for Halifax Regional Water Commission Debt was approved by the Halifax Regional Municipality on September 23, 2014;

BE IT THEREFORE RESOLVED

THAT under the authority of Section 16 of the Act the Commission borrow from the Municipal Finance Corporation, for the purpose set forth above, a sum or sums not exceeding \$1,000,000 for a 10 year term amortized over a 10 year amortization period at an all-inclusive rate not to exceed 5.5% percent;

THAT the sum be borrowed by the issue of debentures of the Commission to such an amount at the Commission deems necessary and that the debentures be arranged with the Nova Scotia Municipal Finance Corporation, with interest to be paid semi-annually and principal payments made annually;

THAT this resolution remains in force for a period of not more than 12 months from the passing of this resolution.

I certify the above to be a true copy of a Resolution approved at a meeting of the Halifax Regional Water Commission held on March 29, 2018.

James G. Spurr Corporate Secretary and Legal Counsel

ITEM # 5 HRWC Board March 29, 2018 ATTACHMENT 2

HALIFAX REGIONAL WATER COMMISSION BORROWING RESOLUTION

WHEREAS the Halifax Regional Water Commission, (the Commission) is incorporated under the provisions of the *Halifax Regional Water Commission Act*, Ch. 55 of the Acts of 2007 (The Act);

AND WHEREAS the Act provides that the Commission has power to borrow such sums as may be authorized and approved by the Board of the Commission for the purposes of the Commission, subject to the approval of the Nova Scotia Utility and Review Board:

AND WHEREAS the Commission wishes to borrow for the purpose of financing regular Additions to Utility Plant in Service for a 20 year amortization period;

AND WHEREAS a blanket guarantee for Halifax Regional Water Commission Debt was approved by the Halifax Regional Municipality on September 23, 2014;

BE IT THEREFORE RESOLVED

THAT under the authority of Section 16 of the Act the Commission borrow from the Municipal Finance Corporation, for the purpose set forth above, a sum or sums not exceeding \$500,000 for a 5 year term amortized over a 5 year amortization period at an all-inclusive rate not to exceed 5.5% percent;

THAT the sum be borrowed by the issue of debentures of the Commission to such an amount at the Commission deems necessary and that the debentures be arranged with the Nova Scotia Municipal Finance Corporation, with interest to be paid semi-annually and principal payments made annually;

THAT this resolution remains in force for a period of not more than 12 months from the passing of this resolution.

I certify the above to be a true copy of a Resolution approved at a meeting of the Halifax Regional Water Commission held on March 29, 2018.

James G. Spurr Corporate Secretary and Legal Counsel Halifax Water Cash Flow Model for 2018-19 As at March 20/18

	Original <u>Budget</u>	<u>Forecast</u>	Adjustments for Cash Flow	<u>Cash Flow</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Total</u>
Operating Revenue	135,217,315	135,217,315	-	135,217,315	10,058,994	10,058,994	10,358,994	10,358,994	10,858,994	19,850,873	10,858,994	10,358,994	10,358,994	10,058,994	10,058,994	11,976,500	135,217,315
Operating Expenses	(86,528,243)	(86,528,243)	2,940,000	(83,588,243)	(6,749,020)	(8,049,020)	(6,749,020)	(6,749,020)	(6,749,020)	(6,749,020)	(6,749,020)	(8,049,020)	(6,749,020)	(6,749,020)	(6,749,020)	(6,749,020)	(83,588,243)
Non Op Revenue	970,293	970,293	-	970,293	80,858	80,858	80,858	80,858	80,858	80,858	80,858	80,858	80,858	80,858	80,858	80,858	970,293
Non Op Expenses	(61,745,469)	(61,745,469)	26,555,396	(35,190,073)	(177,674)	(4,539,084)	(570,836)	(3,204,558)	(0)	(6,620,350)	(1,052,674)	(8,672,731)	(116,151)	(4,129,152)	-	(6,106,863)	(35,190,073)
Operations Total	(12,086,104)	(12,086,104)	29,495,396	17,409,292	3,213,157	(2,448,252)	3,119,996	486,273	4,190,832	6,562,361	3,138,157	(6,281,899)	3,574,681	(738,321)	3,390,832	(798,525)	17,409,292
Capital Expenditures (incl CCC projects)	(73,448,000)	(87,103,220)	-	(87,103,220)	(1,363,093)	(4,970,018)	(6,246,704)	(7,216,716)	(8,272,431)	(9,063,030)	(9,356,124)	(8,909,224)	(8,194,502)	(7,971,973)	(7,425,997)	(8,113,408)	(87,103,220)
New Long Term Debt	80,297,091	41,060,892	(307,957)	40,752,935	-	1,488,750	-	-	-	-	-	39,264,185	-	-	-	-	40,752,935
Other Incoming Cash (Build Can, RDC, etc)	8,171,552	14,709,959	-	14,709,959	629,667	337,359	2,292,320	629,667	629,667	2,264,268	629,667	705,167	2,264,268	777,667	777,667	2,772,576	14,709,959
Changes in working capital	-	(4,906,100)	-	(4,906,100)	(1,952,213)	(890,345)	(622,789)	(808,026)	106,138	130,084	140,084	40,084	(359,916)	154,369	(205,631)	(637,938)	(4,906,100)
Net Cash Flow	2,934,539	(48,324,574)	29,187,439	(19,137,134)	527,518	(6,482,506)	(1,457,177)	(6,908,802)	(3,345,794)	(106,318)	(5,448,216)	24,818,313	(2,715,469)	(7,778,258)	(3,463,129)	(6,777,296)	(19,137,134)
Opening Cash Balance				50,000,000	50,000,000	50,527,518	44,045,012	42,587,835	35,679,033	32,333,238	32,226,921	26,778,705	51,597,017	48,881,548	41,103,290	37,640,161	50,000,000
Ending Cash Balance			_	30,862,866	50,527,518	44,045,012	42,587,835	35,679,033	32,333,238	32,226,921	26,778,705	51,597,017	48,881,548	41,103,290	37,640,161	30,862,866	30,862,866
Actual reconciled month end cash balance					-	-	-	-	-	-	-	-	-	-	-	-	-
Variance					-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

- Debt principle and interest payments are included in the Non Operating Expenses category
- Capital Expenditures includes the 2018-19 Capital Budget projects, projects carried over from 2017-18, and additional CCC project payments
- The 2018-19 Capital Budget anticipated new Long Term Debt of \$39.6m. There was \$39.2m in unissued debt from the 2017-18 Capital Budget
- The new Long Term Debt anticipated in this forecast is for just \$41.0m including a \$1.5m balloon renewal
- Other Incoming Cash includes the remaining \$6.5 m in Build Canada and CWWF funding





ITEM #6 HRWC Board March 29, 2018

TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: Original Signed By:

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

Original Signed By:

Carl Yates, M.A.Sc., P. Eng., General Manager

DATE: March 29, 2018

SUBJECT: Group Benefit Plan Enhancements

ORIGIN

Halifax Water's Group Extended Health Plan

RECOMMENDATION

This is to recommend that Halifax Water enhance the current medical benefit plan to include Naturopathic and Osteopathic services to a maximum of \$400/ member annually.

BACKGROUND/DISCUSSION

Plan members have formally requested that the Pension and Benefit Committee review and consider adding Naturopathic and Osteopathic services to the group medical plan. It was confirmed by Medavie Blue Cross that these benefits are eligible to be added to the benefit plan for an additional cost of 1.3% annually.

Therefore, the Pension and Benefit Committee agreed to the recommended plan enhancements.

BUDGET IMPLICATIONS

There is no impact on the 2017/18 operating budget as a result of these changes. The impact on future budgets will be an increase of approximately \$7,500.

ALTERNATIVES

Maintain the status quo for services.

Report Prepared by: Original Signed By:

Rochelle Bellemare, Manager of Human Resources, 902-490-4807



ITEM # 7 HRWC Board March 29, 2018

TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services/CFO

APPROVED: *Original Signed By:*

Carl Yates, M.A.Sc., P.Eng., General Manager

DATE: March 29, 2018

SUBJECT: Pension Plan Amendment #11

ORIGIN

A new Pension Benefits Act (passed in 2011) and new Pension Benefits Regulations came into effect in Nova Scotia on June 1, 2015. Plans have until June 1, 2018 to file amendments to comply with the Legislation.

RECOMMENDATION

It is recommended that the HRWC Board:

1. Approve Pension Plan Amendment #11, as attached, and the submission of a certified copy of the Amendment to the Superintendent of Pensions.

BACKGROUND

Pension Plan Amendment #11 was prepared by Halifax Water staff and the Plan's actuary Ecklers, to ensure the Plan is compliant with the NS Pension Benefits Act.

DISCUSSION

The Plan changes are shown in the attached Amendment #11. None of the changes indicated in Amendment #11 will reduce the value of pension benefits for Plan Members. Some of the changes may potentially enhance or further protect the value of pension benefits for Plan Members and their beneficiaries.

BUDGET IMPLICATIONS

Amendment #11 is not expected to have any material impact on the current service cost of the Plan, or the Plan's liabilities, going-concern and solvency status.

ATTACHMENT

Pension Plan Amendment #11

Report Prepared by: Original Signed By:

Cathie O'Toole, MBA, CPA, CGA Director, Corporate Services/CFO

HALIFAX REGIONAL WATER COMMISSION EMPLOYEES' PENSION PLAN

(As Amended and Restated Effective June, 1998)

AMENDMENT NO. 11

WHEREAS the Halifax Water Commission established the original Employees' Pension Plan for its employees with effect from January, 1972 and, as the Halifax Regional Water Commission, consolidated and restated the Pension Plan effective January 1, 2011 to reflect the Plan text effective June, 1998 together with the 8 amendments that were made subsequent to that date;

AND WHEREAS two additional amendments were made during 2015;

AND WHEREAS Section 14.1 of the Pension Plan provides for its amendment from time to time;

AND WHEREAS the Halifax Regional Water Commission wishes to amend the Pension Plan for the purpose of reflecting the changes to the Nova Scotia Pension Benefits Act which came into effect on June 1, 2015;

NOW THEREFORE the Halifax Regional Water Commission Employees' Pension Plan is hereby further amended effective June 1, 2015 as follows:

1. Section 1.6.1 is deleted and replaced with the following:

"This section has been intentionally deleted.",

and any reference in all sections of the document to the phrase "the marriage or the cohabitation of Common-law partners" shall be replaced with "the marriage or the cohabitation of Spouses".

2. Section 1.27.1 is deleted and replaced with the following:

"Spouse" means either of two persons who:

- (1) are married to each other,
- (2) are married to each other by a marriage that is voidable and that has not been annulled by a declaration of nullity,
- (3) have gone through a form of marriage with each other, in good faith, that is void and are cohabiting or, where they have ceased to cohabit, have cohabited within the twelve-month period immediately preceding the date of entitlement,
- (4) are domestic partners within the meaning of Section 52 of the Vital Statistics Act RSNS 1989, c 494, or

- (5) not being married to each other, are cohabiting in a conjugal relationship with each other, and have done so continuously for at least
 - a. three years, if either of them is married, or
 - b. one year, if neither of them is married.

Notwithstanding this definition, for all applications of the Income Tax Act (Canada), the relevant definition(s) therein shall apply. Any right, privilege or benefit available to a Spouse under or incidental to this Pension Plan is subject to the limits of applicable legislation in force at the relevant time.

3. Section 5.9 is deleted and replaced with the following:

If the amount of the pension payable at the Normal Retirement Date is less than 4% of the YMPE in the year of termination or if the Commuted Value of the pension payable is less than 20% of the YMPE in the year of termination, the Administrator reserves the right to pay the pension less frequently than monthly but not less frequently than annually and the right to pay the Commuted Value of the pension payments in a lump sum.

- 4. Section 8.1 is deleted and replaced with the following:
 - (1) Married Members
 - (a) In the event that a married Member should die before attaining his Normal Retirement Date, then the following benefits will be provided:
 - i. In respect of Credited Service prior to June 1, 1998,
 - a. A monthly pension shall be paid to the Member's surviving Spouse commencing on the first day of the month following the Member's death, and payable for the lifetime of the surviving spouse. The amount of annual pension payable to a Spouse shall be 60% of the normal retirement benefit accrued by the Member as at the date of his death.
 - b. Notwithstanding the above, in respect of Credited Service after December 31, 1987 but prior to June 1, 1998, the Commuted Value of the annual pension payable to the spouse in accordance with 8.1(1)(a)i.a. shall be no less than the Commuted Value of the normal retirement benefit accrued by the Member as at the date of his death.
 - ii. In respect of Credited Service on or after June 1, 1998, the Member's Spouse shall be entitled to receive the Commuted Value of the normal retirement benefit accrued by the Member as at the date of his death.

(b) A Spouse may require the administrator to pay the benefits herein to a registered retirement savings arrangement, or to receive an immediate or deferred pension, which is the Actuarial Equivalent of the benefits herein.

(2) Single Members

- (a) In the event that a Member without a Spouse should die before attaining his Normal Retirement Date, then the following benefits will be provided:
 - In respect of Credited Service prior to January 1, 1988 the Member's Beneficiary shall be entitled to receive the total amount of the Member's Required Contributions, plus Interest computed annually to the end of the month in which the death occurs.
 - ii. In respect of Credited Service after December 31, 1987, the Member's Beneficiary shall be entitled to receive the Commuted Value of the normal retirement benefit accrued by the Member as at the date of his death.
- (3) Notwithstanding the above, the Member shall be considered a single Member and the Spouse shall not entitled to the pre-retirement death benefit payable under section 8.1(1) if the Member and Spouse are living separate and apart on the Member's date of death with no reasonable prospect of the resumption of cohabitation, and the Spouse:
 - (a) has delivered a written waiver to the administrator in the manner prescribed by the Pension Benefits Act;
 - (b) is not entitled to receive an amount in respect of the deferred pension or pension in accordance with the terms of a written agreement that provides for the division of a pension benefit; or
 - (c) is not entitled to receive an amount in respect of the deferred pension or pension by court order.

5. Section 8.4 is deleted and replaced with the following:

In the event that a Member should die prior to actual Retirement Date but after having reached Normal Retirement Date, then the Member is deemed to have retired on the day immediately preceding the day of death and death benefits shall be payable in accordance with the applicable normal form of pension and subject to minimums and payment options in accordance with applicable legislation.

6. Section 9.2 is deleted and replaced with the following:

The table below indicates the options available with respect to benefits other than those provided by Additional Voluntary Contributions.

Service Period	Options Available
Benefits in respect of Service before December 31, 1987:	Options I or II
Benefits in respect of Service on and after January 1, 1988:	Option I

7. Section 9.5 is deleted and replaced with the following:

This section has been intentionally deleted.

8. Section 9.6 is deleted and replaced with the following:

Notwithstanding the above, if the amount of the pension payable at the Normal Retirement Date is less than 4% of the YMPE in the year of termination or if the Commuted Value of the deferred pension is less than 20% of the YMPE in the year of termination, the Administrator reserves the right to pay the Commuted Value of the deferred pension in a lump sum.

9. Section 12.5 is added as follows:

The Commission will make prescribed documents relating to benefits under the Plan available for inspection either at cost, or at the specified cap cost. The Commission will maintain prescribed documents in accordance with applicable legislation.

10. Section 14.1 is deleted and replaced with the following:

The Commission intends to maintain the Plan in force indefinitely but necessarily reserves the right to amend or terminate the Plan, either in whole or in part, after prior consultation with the Members or a committee of the Members, and subject to the provision of notice and summary to all Members and former Members entitled to benefits from the Plan, subject to the requirements of applicable legislation.

THIS IS TO CERTIFY THAT the Board of Commissioners of the Halifax Regional Water Commission, at its meeting of March 29, 2018, amended the Plan in the form above.

AND THAT the Halifax Regional Water Commission will apply to the Superintendent of Pensions for registration of such amendment pursuant to the Pension Benefits Act and the regulations made thereunder.

DATED AT HALIFAX, Province of Nova Scotia, this 29th day of March, 2018.

Cathie O'Toole, MBA, CPA, CGA Chief Financial Officer and administrator 450 Cowie Hill Road Halifax, Nova Scotia B3P 2V3 902 490 3685



ITEM # 8 HRWC Board March 29, 2018

TO: Ray Ritcey, Chair, and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Carl Yates M.A.Sc., P.Eng., General Manager

DATE: March 20, 2018

SUBJECT: Corporate Balanced Scorecard - 2018/19 Program

ORIGIN:

Annual Corporate Performance Measurement.

RECOMMENDATION:

The Board approve:

- 1. Corporate Balanced Scorecard targets for the 2018/19 fiscal year as detailed in the attached presentation.
- 2. The Organizational Award Program tied to the outcomes of 12 Organizational Indicators as detailed in the attached presentation.

BACKGROUND:

Halifax Water has been utilizing a Corporate Balanced Scorecard (CBS) to measure performance since 2001. At that time, the CBS was viewed to be an excellent way to connect the mission of the utility with the everyday activities of staff. The CBS development was very inclusive in 2001 and followed a process to identify Critical Success Factors (CSFs) in support of the mission, establish Organizational Indicators (OIs) to measure performance and set targets for continuous improvement. In March 2002, the Board approved an organizational award program tied to eight OIs which were the most objective and outward looking. This program was well received by staff and ensured that rewards were linked to strategic outcomes.

DISCUSSION:

With the transfer of wastewater/stormwater assets from HRM to Halifax Water on August 1, 2007, it was evident that a new mission, vision and CBS would need to be developed to ensure we were inclusive of all services provided by the utility. Building on the success of the process utilized in 2001 to develop the CBS, a similar process was established in the fall of 2007 with the selection of a steering committee to oversee the CBS development. The steering committee consisted of the executive staff, two non-union employees from middle management, two employees from CUPE Local 227, and two employees from CUPE Local 1431. As part of the process, the steering committee engaged a broader audience of staff and conducted two major workshops to ensure direct input from all levels of the organization. As a result of this process, a consensus was developed on the mission, vision, critical success factors, and OIs. The mission of Halifax Water is "to provide world class services to our customers and our environment". The statement is simple, recognizes the connection between customers and the environment with our expanded mandate, and places the challenge on employees to make Halifax Water a world class utility.

The vision statement for Halifax Water is:

- We will provide our customers with high quality water, wastewater, and stormwater services.
- Through adoption of best practices, we will place the highest value on public health, customer service, fiscal responsibility, workplace safety and security, asset management, regulatory compliance, and stewardship of the environment.
- We will fully engage employees through teamwork, innovation, and professional development

The vision statement expanded on the values and principles of a world class utility in fulfilling its mission and captures the medium to long term aspirations of Halifax Water. With the vision statement developed, staff then selected the critical success factors that support the mission, and through an interactive process, settled on the following:

- 1. High Quality Drinking Water
- 2. Service Excellence
- 3. Responsible Financial Management
- 4. Effective Asset Management
- 5. Safety and Security
- 6. Regulatory Compliance
- 7. Environmental Stewardship
- 8. Motivated and Satisfied Employees

With the CSFs established, staff set about the task of developing OIs under each CSF to enable performance measurement and establishment of targets. Each year, the OIs are reviewed and refined based on operational objectives and approved budgets. Of note, this year's CBS includes a continued focus on safety with four OIs included in the CBS. A revised OI for Asset Management has been developed in recognition that we have closed the information gaps within the corporate geographic information system (GIS). The GIS updating project is essentially finished with the target of 99% complete by March 31, 2018. The proposed new OI for Asset Management tracks the hours of unplanned outages of the GIS and CityWorks applications. With CityWorks operating in a 24/7 environment and the GIS system now hosted "In-House", it is critical to maximize availability of these corporate systems. For the third year running, staff recommend the inclusion of an OI to track the capital budget spend rate to ensure we close the gap on capital investments.

One of the OIs related to Safety reflects a corporate commitment to reduce lost-time accidents by setting a target threshold at no more than 4.5 lost time accidents/100 employees. Failure to meet this target will result in no organizational award.

Similar to last year, two indicators related to our annual customer survey position us for high performance this year, namely, customer perception of water quality and service. The OIs for these indicators have a reduced range of outcome with the water quality OI target pegged at 80 to 85% of customers rating water quality as good or excellent and the service OI set at 85 to 90% of customers being satisfied or very satisfied with our service.

The attached presentation provides detail on the process including identification of CSFs and OIs for 2018/19.

Similar to the past process, the most objective OIs have been considered for the organizational award program. Of the 28 OIs detailed in the attachment, 12 are recommended for inclusion in the award program. These 12 OIs are reflective of seven CSFs which are critical to our mission and the most objective and outward looking. Again, similar to the previous process, the recognition of an organizational award hinges on a minimum score of 7.0 to give a passing grade out of a maximum score of 12.0. Funds for the award program are connected to the operating expense to revenue ratio being below the target for the fiscal year. In this regard, if the operating expense to revenue ratio is met, funds are already embedded in the operational budget. The Operating Expense to Revenue ratio OI has been modified this year to reflect a target that incorporates the equivalent of \$1 million in expense reduction.

It should also be recognized that the targets for these OIs are meant to be stretch goals, such that the utility is pushing for both efficiency and effectiveness in its service delivery. In many cases, the improvements in efficiency will realize enough savings to pay for the award program itself. The water loss control initiative is a prime example of how the utility has realized gains in efficiency with financial savings in the order of \$650,000 per year. In keeping with the cost containment theme, water and wastewater service cost measures under Responsible Financial Management have targets to realize 3% savings compared to

the approved operations budget. In addition, under the Environmental Stewardship theme, the utility is expected to reduce energy consumption as a result of capital improvements. In that regard, staff are confident that the continued implementation of the organization award tied to the outcomes of the CBS will realize future savings for the utility.

BUDGET IMPLICATIONS

Funds for the Award Program are available with the realization of the operating expense to revenue ratio below the target amount. In this regard, funds would be embedded within the 2018/19 Operations Budget. In many cases, meeting the OI targets will realize direct savings to the utility, improved operational effectiveness, and/or improved customer service.

ALTERNATIVES

None recommended.

ATTACHMENT

Presentation - Measuring Performance through a Corporate Balanced Scorecard, dated March 30, 2018

Report Prepared by: *Original Signed By:*

Carl Yates, M.A.Sc., P.Eng.General Manager, (902)490-4840

Financial Reviewed by: *Original Signed By:*

Cathie O'Toole, MBA, CPA, CGA, Director, Finance and Customer

Service, 902-490-3572



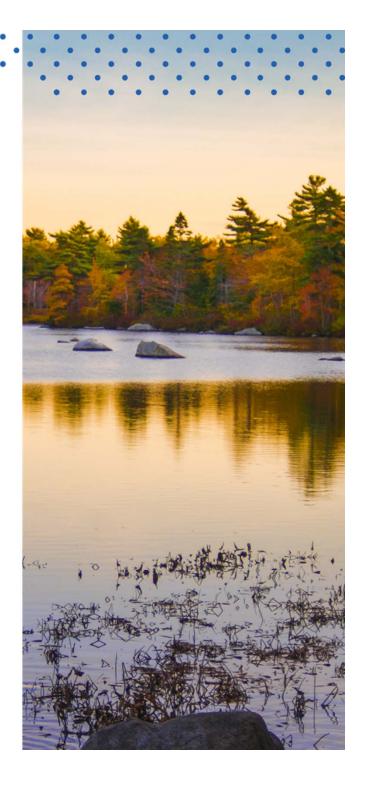
Item 8 - Attachment

Halifax Water **Corporate Balanced**

Scorecard 2018/19 Program

Presented to Halifax Water Board March 29, 2018

> **STRAIGHT from** the **SOURCE**





Background of Corporate Balanced Scorecard

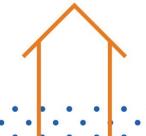
- HRWC embarked on a Continuous Improvement Program in 1999
- In 2000, HRWC looking for methodology to measure organizational performance that was meaningful
- Introduced to concept of Corporate Balanced Scorecard [CBS] through association with Bridgeport Hydraulics, Connecticut
- HRWC Board approved CBS in 2001 and Organizational Award Program on March 28, 2002
- CBS ensured all employees focused on strategic outcomes
- After the wastewater merger on August 1/07, recognition that CBS should be expanded to include wastewater/stormwater performance measures and opportunity to recalibrate water measures

www.halifaxwater.ca



The Process

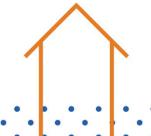
- In late fall 2007, struck a steering committee and selected a group of forty employees to review the utility mission, vision and develop expanded scorecard
- Good cross section of employees representing all departments, all levels, union and management [front line to General Manager]
- Three steering committee meetings and two staff workshops held with facilitation by an outside consultant, Jack Duffy





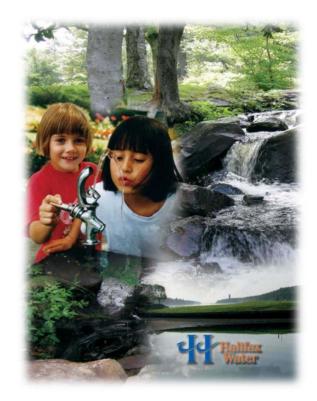
The Process

- Developed a new mission statement which had to change as a result of the merger in 2007
- Identified critical success factors [CSFs] in support of the new mission
- Developed organizational indicators [OIs] to measure performance
- Received approval of the revised CBS from the Halifax Water Board and a revised organizational award program on March 6, 2008





The Mission of Halifax Water



"To provide world class services for our customers and our environment"

www.halifaxwater.ca





The Vision of Halifax Water

- We will provide our customers with high quality water, wastewater, and stormwater services.
- Through adoption of best practices, we will place the highest value on public health, customer service, fiscal responsibility, workplace safety and security, asset management, regulatory compliance, and stewardship of the environment.
- We will fully engage employees through teamwork, innovation, and professional development.





Critical Success Factors

- High Quality Drinking Water
- Service Excellence
- Responsible Financial Management
- Effective Asset Management
- Workplace Safety and Security
- Regulatory Compliance
- Environmental Stewardship
- Motivated and Satisfied Employees





Organizational Indicators

- Organizational Indicators (OI's) are the measures of our performance within each CSF and provide the definition and detail to best understand them.
 The OI's are organizational, not individual measures.
- The OI's provide both a detailed clarification of the CSF and allow a target or goal for performance to be established and tracked.





Organizational Performance Award Program

- Based on a subset [12] of our strategic OI's which are the most objective.
- Program pays for itself by meeting operating expense to revenue ratio target; ratio is reduced from approved budget to accommodate the award program potential.
- It is not a given; a threshold of 7.0 in scoring must be reached in a given year.
- To be eligible for the award, employees must work a minimum of nine months during the fiscal year [April 1st to March 31st]





The CBS Targets for 2018/19 Fiscal Year

Organizational Indicators with a star * are tied to the Award Program



CSF: High Quality Drinking Water



Organizational Indicator:



 Adherence with 5 objectives from the Water Quality Master Plan for all water systems; we must own system for one year to include results.

Objective	Total Sites	Result to March 31/19 (% of Sites Achieving Target)	Target	Distrib. Pts.
Disinfection – Chlorine Residual	65		80 – 100%	/20
Disinfection By-products (THMs)	24		< 80 ug/l	/20
Disinfection By-products (HAAs)	25		< 60 ug/l	/20
Particle Removal	5		<0.2 &< 1.0 NTU	/20
Corrosion Control	n/a		Lead; <10 ug/l	/20
Summary Total				/100

Disinfection – Achieve 0.2 mg/L at all sites (100% of sites achieving residual of 0.2 on 95% of tests)

THMs – Annual Avg. of < 80 ug/L at all THM sampling sites

 \mbox{HAAs} - Annual Avg. of < 60 ug/L at all HAA sampling sites

Particle removal – Surface water plant achieves turbidity of <0.2 NTU 95% of the time and <1.0 100% of the time

Corrosion Control – Achieve 90th percentile standing lead sample of <10 ug/L for all sample sites

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CSF: High Quality Drinking Water



Organizational Indicator:

 Bacteriological tests [monthly target of 99.3% free of Total Coliform]

	% Samples Free of Coliform	Target
2018/19		99.3%



CSF: High Quality Drinking Water



Organizational Indicator:

Customer satisfaction about water quality [Target of 85% rating water quality as good to excellent]

	Survey Results (actual)	Target
From Fall 2018 Survey		80% - 85%





Organizational Indicator:

 Customer satisfaction with service [Target of 90% satisfied or very satisfied]

	Survey Result (actual)	Target
From Fall 2018 Survey	%	85% - 90%



Organizational Indicator:

Service outages of water [# connection hours / 1000 customers]

	Hours (actual)	Target
2018/19		200



Organizational Indicator:

 Service outages of wastewater [# connection hours / 1000 customers]. (N.B. the clock starts after we know it is our problem)

	Hours (actual)	Target
2018/19		8



Organizational Indicator:

Average call wait time over the year

	Seconds	Target
2018/19		70



CSF: Responsible Financial Management

Organizational Indicator:



Operating Expense/Revenue Ratio [based on annual operating budget]

	Exp/Rev ratio (actual)	Target
2018/19		0.797





CSF: Responsible Financial Management

Organizational Indicator:

Annual Cost per Customer Connection [Water]

	Cost/connection	Target
2018/19		\$482

*





CSF: Responsible Financial Management

Organizational Indicator:

Annual Cost per Customer Connection [Wastewater]

	Cost/connection	Target
2018/19		\$687



*

Organizational Indicator:

 Water Loss Control; target leakage allowance of 180 Litres/Service Connection/Day

	Leakage Actual	Target
2018/19		180 - 190



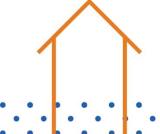


Organizational Indicator:



 Inflow and Infiltration [I&I] Reduction; # of inspections on private property in relation to discharge of stormwater into the wastewater system.

	I&I Inspections	Target
2018/19		900





*

Organizational Indicator:

Hours of unplanned outages of GIS and CityWorks

	Outage Hours	Target
2018/19	*85% of 17/18 actual	*90% to 85% of 17/18 actual

*Actual number pending post fiscal year-end report from HRM

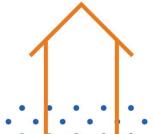




Organizational Indicator

 Capital Budget Expenditures – Maximize annual funds spent by end of fiscal year

	Maximize Annual Capital Budget Expenditures	Target
2018/19		80% to 90% approved





Organizational Indicator:

 # of Incidents with written Compliance Orders received from NS Labour and Advanced Education

	Labour Infractions	Target
2018/19		0 - 2 (max.)





*

Organizational Indicator:

 Lost Time Accidents [# of accidents resulting in lost time per 100 employees (FTE pro-rated)]

	Lost time accidents	Target
2018/19		2.5 – 3.5 per 100 employees (with a maximum of 4.5)

Note: This is a gateway indicator with an award program contingent on results of <4.5 lost time accidents per 100 employees





*

Organizational Indicator:

• # of Traffic Accidents per 1,000,000 km

	Traffic Accidents / 1,000,000 Kms	Target
2018/19		4.0 per 1,000,000 km (maximum of 5)





Organizational Indicator:

Employees are retrained or recertified before due date

	% of Employees Retrained or Recertified Before Due Date	Target
2018/19		80% - 90%



Organizational Indicator:

Supervisors complete weekly or bi-weekly safety talks

	% of Completed Safety Talks	Target
2018/19		80% - 90%



CSF: Regulatory Compliance

Organizational Indicator:

 # of public health and environmental regulatory infractions resulting in an Environmental Warning Report, Summary Offence Ticket, Ministerial Order or prosecution.

	Public Health & Env. Infract.	Target
2018/19		0 - 2 (max.)





CSF: Regulatory Compliance

Organizational Indicator:



% of WWTFs complying with NSE approval permits.

	% of WWTF samples meeting NSE discharge limits	Target
2018/19		93% - 98%



CSF: Environmental Stewardship

Organizational Indicator:

of ICI properties in HRM inspected by Pollution Prevention [P2]
 Section each year

	Actual Inspected	Target
2018/19		500



CSF: Environmental Stewardship

*

Organizational Indicator:

 Energy Management [kwh/m3]; % energy reduction associated with capital projects

	% Energy Reduction	Target
2016/17		3%





CSF: Environmental Stewardship

Organizational Indicator:



- Bio-solid Residuals Handling; % of sludge meeting solids concentration target - 97% of samples meet a minimum solids concentration of:
 - 25% from HHSP plants
 - 18% from Aerotech Dewatering Facility

	% Meet Solids Concentration Target	Target
2018/19		92-97 %



Organizational Indicator:

of arbitrations divided by total # of grievances.

	Arbitrations/Grievances	Target
2018/19		0 Arbitrations



Organizational Indicator:

 % of jobs filled from within Halifax Water [excluding entry level jobs].

	% Jobs filled within	Target
2018/19		80%



Organizational Indicator:

Employee satisfaction survey. [2009 was the benchmark year with a B result].

	Survey Result (actual)	Target
Survey in 2018		Α-



Organizational Indicator:

Average number of days of absenteeism

	Avg. No. of days absenteeism	Target
2018/19		< 7 days

Based on a subset of 12 Ols which are the most objective:

Organizational Indicator	Max. Score
Water Quality Master Plan Objectives	1.0
Customer Water Quality Survey Results	1.0
Customer Service Survey Results	1.0
Operating Expense/Revenue Ratio [Gateway Indicator]	1.0
Water Loss Control Reduction	1.0
Inflow & Infiltration Reduction	1.0
Percentage of Unplanned Outages of GIS and CityWorks	1.0
# of Lost Time Accidents per 100 Employees [Gateway Indicator]	1.0
# of Traffic Accidents per 1,000,000 km	1.0
Percentage of WWTFs Compliant with NS Environment Permits	1.0
Energy Management – Water & Wastewater	1.0
Biosolids Residual Handling	1.0
TOTAL MAXIMUM SCORE	12.0

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Employees Organizational Award

The highest possible score is 12.0 [1.0 for each OI]. If HRWC performs well, then everyone should be rewarded as follows:

Total OI Score	OP Award Amount
<u>≥</u> 11.0	\$1,000
10.0	\$900
9.0	\$800
8.0	\$700
7.0	\$600
< 7.0	\$ 0

These values will be pro-rated if a score falls between them.

Example: For the total OP Award score of 8.5, each employee will get an organizational award of \$750.

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Summary

- The track record of the CBS at Halifax Water has been very positive; it has made us a better utility.
- The CBS process continues to be an inclusive and consensus building exercise for employees.
- Staff obtains Board approval of the Organizational Award Program on an annual basis
- Organizational Award Program funding is available by meeting the Operating Expense to Revenue Ratio Target.
- The Organizational Award Program is not a given; the organization must score at least 7.0 to have an award.
- Financial targets are consistent with approved annual operating budgets

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Questions or Comments?







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TO: Ray Ritcey, Chair and Members of the Halifax Regional Water Commission

Board

SUBMITTED BY:

Original Signed By:

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

Original Signed By:

Reid Campbell, P.Eng., Director, Water Services

Original Signed By:

Susheel Arora, M.A.Sc., P.Eng., Director, Wastewater & Stormwater Services

Original Signed By:

Kenda MacKenzie, P.Eng., Director, Regulatory Services

APPROVED: *Original Signed By:*

Carl D. Yates, M.A.Sc., P.Eng., General Manager

SUBJECT: Financial and Operations Information Report

INFORMATION REPORT

ORIGIN:

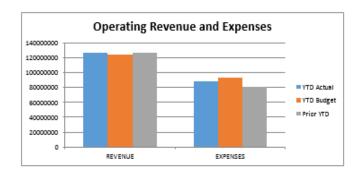
Regular update.

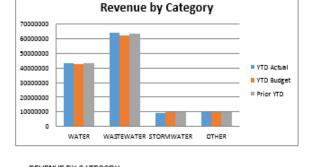
This report provides a high level overview of financial and operational performance for the utility. Financial results are presented first, followed by indicators and statistics for water and wastewater.

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FINANCIAL

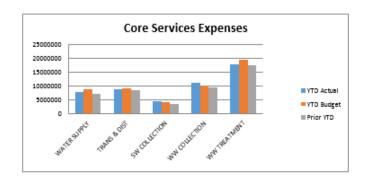
HALIFAX WATER UNAUDITED FINANCIAL INFORMATION APRIL 1/17 - FEBRUARY 28/18 (11 MONTHS) '000

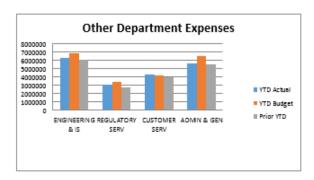




OPERATING REVEN	IUE AND EXPENSES			
	YTD Actual	YTD Budget	Prior YTD	% of Budget
REVENUE	\$126,478	\$124,288	\$126,478	93.28%
EXPENSES	\$87,896	\$93,393	\$81,160	86.27%
	\$38,582	\$30,895	\$45,318	114.472

	\$126,478	\$124,288	\$126,478
OTHER	\$9,932	\$9,752	\$9,899
STORMWATER	\$9,357	\$9,700	\$9,617
WASTEWATER	\$63,980	\$62,110	\$63,668
WATER	\$43,209	\$42,726	\$43,293
	YTD Actual	YTD Budget	Prior YTD
REVENUE BY CATEGOR	Y		



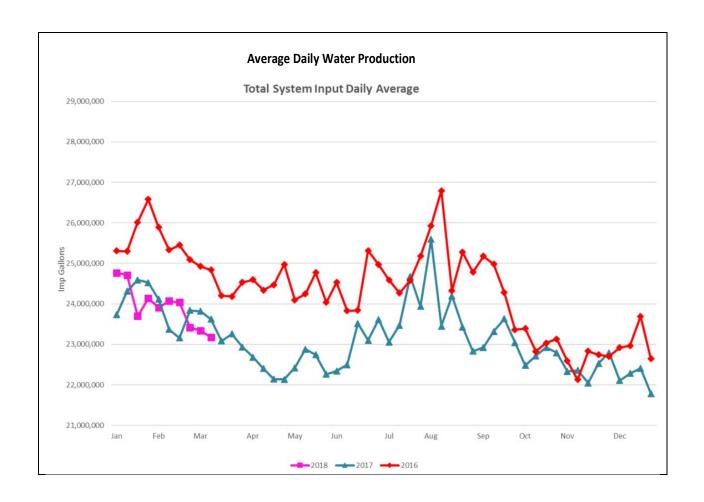


\$11,300 \$17,816	\$10,045 \$19,570	\$9,571 \$17,489	103,12% 83,45%
*** 000	440.045	40 574	400 405
\$4,478	\$4,235	\$3,621	96,92%
\$8,750	\$9,022	\$8,380	88.90%
\$7,921	\$8,835	\$7,191	82.18%
YTD Actual	YTD Budget	Prior YTD	% of Budget
	\$7,921	YTD Actual YTD Budget \$7,921 \$8,835 \$8,750 \$9,022	YTD Actual YTD Budget Prior YTD \$7,921 \$8,835 \$7,191 \$8,750 \$9,022 \$8,380

	\$19,392	\$21,026	\$18,377
ADMIN & GEN	\$5,661	\$6,505	\$5,563
CUSTOMER SERV	\$4,374	\$4,241	\$3,941
REGULATORY SERV	\$3,042	\$3,401	\$2,814
ENGINEERING & IS	\$6,316	\$6,879	\$6,059
	YTD Actual	YTD Budget	Prior YTD
OTHER DEFARITMENT E	AFEINOLO		

OTHER DEPARTMENT EXPENSES

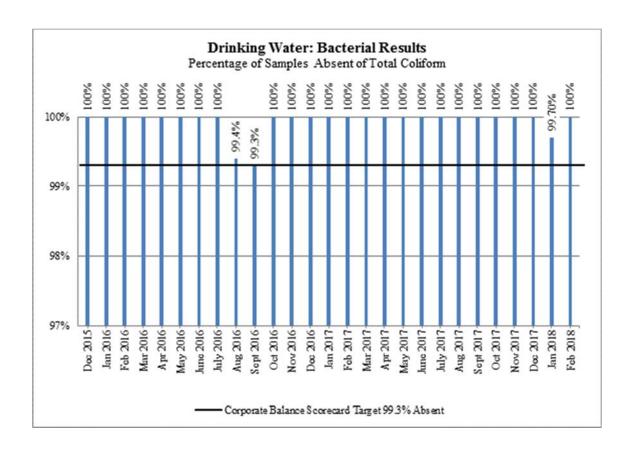
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Regional Water Main Break/Leak Data							
Year	Total Breaks/Leaks	Current 12 Month Rolling Total (up to February 28, 2018)					
2015/16	226						
2014/15	210						
2013/14	213	202					
2012/13	262	_~_					
2011/12	205						
Total	1116						
Yr. Avg.	217.6						

Water Accountability
Losses per Service Connection/Day (International Water Association Standard)
Period Ending December 31, 2017
Real Losses: 196 litres
CBS Target: 180

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Water Quality Master Plan Objectives							
2017-2018 Q3							
Objective Total % of Sites 90th Award Percentile < 15 µg/L All Sites: 90th Percentile < 15 µg/L							
Disinfection	64	91%		11			
Total Trihalomethanes	25	100%		20			
Haloacetic Acids	21	95%		16			
Particle Removal	5	93%		13			
Corrosion Control	69		5.59	20			
TOTAL				80			

In this report each facility is assessed using monthly or quarterly averages, depending on the averaging period specified in its Approval to Operate.

												•	ce Summary							
Wastewater Treatment	CB0 (mg		T. (mg	SS g/L)	(counts/ pH) Yungen		E. coli (counts/ pH						Ammonia Phospl		H Ammonia Phosphorous TRC Oxygen Oxygen		Phosphorous TRC		Toxicity	Trend
Facility	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Avg.	NSE Limit	Avg.					
Halifax	50	26	40	25	5000	310	6-9	6.9	-			-	-		-	Not acutely lethal	Continued			
Dartmouth	50	28	40	34	5000	33	6-9	7.0	-			-	-		-	Not acutely lethal	Continued			
Herring Cove	50	19	40	18	5000	24	6-9	6.9				-	-			Not acutely lethal	Continued			
Eastern Passage	25	6	25	9	200	30	6-9	7.1	-			-	-		-	Not acutely lethal	Continued			
Mill Cove	25	15	25	25	200	22	6-9	6.8	-			-	-		-	Not acutely lethal	Continued			
Springfield	20	5	20	6	200	10	6-9	7.0	-			-	-		-	-	Continued			
Frame	20	5	20	1	200	10	6-9	6.7	-			-	-		-	-	Continued			
Middle Musq.	20	5	20	5	200	104	6-9	7.9	-			-	-		-	-	Continued			
Uplands	20	5	20	4	200	10	6-9	6.8	-			-	-		-	-	Continued			
Aerotech	5	5	5	15	200	108	6-9	7.5	5.7 W 1.2 S	11.1	0.5	0.5	-	6.5	9.0	Not acutely lethal	Declined			
North Preston	10	5	10	9	200	10	6-9	6.9	3	1.1	1.5	0.2	-		-	-	Continued			
Lockview	20	5	20	11	200	28	6.5-9	6.8	8.0 S	10.4	1.2 S	0.3	-		-	-	Continued			
Steeves (Wellington)	20	6	20	10	200	10	6.5-9	6.7	14.4 S	0.1	1.0 S	0.1	-		-	-	Continued			
BLT	15	7	20	18	200	13	6-9	7.2	5 W 3 S	6	3 W 1 S	2	0.02 * 0.08	5	8.2	Not acutely lethal	Declined			
Avg. of all Facilities	1	0	1	.3	5	52	7	.0	5.	7	0	.6	0.18	8	3.6					

NOTES & ACRONYMS:	LEGEND	
CBOD ₅ - Carbonaceous 5-Day Biochemical Oxygen Demand		NSE Compliant
TSS - Total Suspended Solids		NSE Non-Complian

NSE requires monthly averages be less than the NSE Compliance Limit for each parameter (Dartmouth, Eastern Passage, Halifax, Herring Cove, Mill Cove)
NSE requires quarterly averages be less than the NSE Compliance Limit for each parameter (Aerotech, Lockview, Mid. Musq., Frame, BLT, Uplands, North
Preston, Steeves, Springfield)

Continued - All parameters remain essentially unchanged since the last report

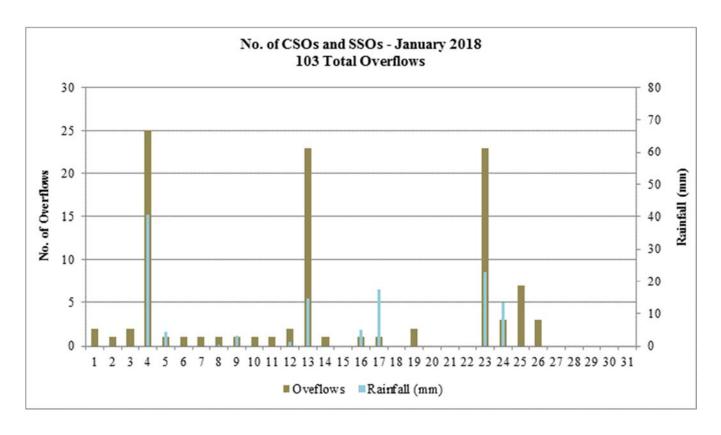
Improved - One or more parameter(s) became compliant since the last report

Declined - One or more parameters(s) became non-compliant since the last report

 $^{*\} TRC\ -\ Total\ Residual\ Chlorine\ -\ Maxxam\ can\ only\ measure\ 0.10\ mg/L\ residual;\ results\ of\ 0.1\ mg/L\ are\ compliant$

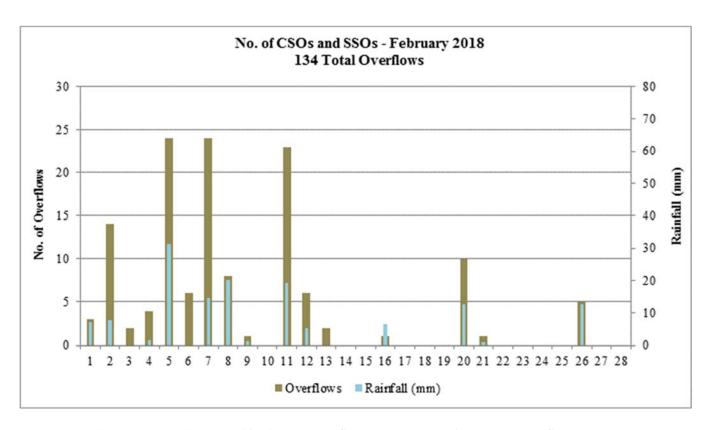
 $W \ / \ S$ - $Winter \ / \ Summer \ compliance \ limits$

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NOTES & ACRONYMS: CSO - Combined Sewer Overflow SSO - Sanitary Sewer Overflow

- Rainfall data is from Halifax Water's rain gauge at the Halifax WWTF.
- There were twenty-three overflows on days when there was no recorded rainfall, as follows:
 - January 1: The reason for the CSO at the Cuisack St CSO was a blockage caused by debris.
 - 2. January 3: The CSO at the Melva St PS & CSO was the result of a power and SCADA issue at the station.
 - 3. January 6: The CSO at the Park Ave PS & CSO occurred due to blockages caused by debris.
 - 4. January 14: The CSO at the Wallace St CSO occurred due to blockages caused by debris.
 - 5. January 25: The SSOs at Beaver Crescent PS and Stewart Harris Drive PS were due to rain on the previous day. The CSO at the Lyle St CSO occurred due to a power outage.
 - 6. January 26: The CSOs at the Lyle St CSO, King St PS & CSO and the Melva St PS & CSO occurred due to computer and SCADA outages that caused a pump inhibit at the Dartmouth WWTF.
 - 7. Throughout January, the Lyle St CSO experienced apparent overflows due to the settings for the 24 hour maintenance pump flush cycle at the Park Ave PS. The settings have since been adjusted.

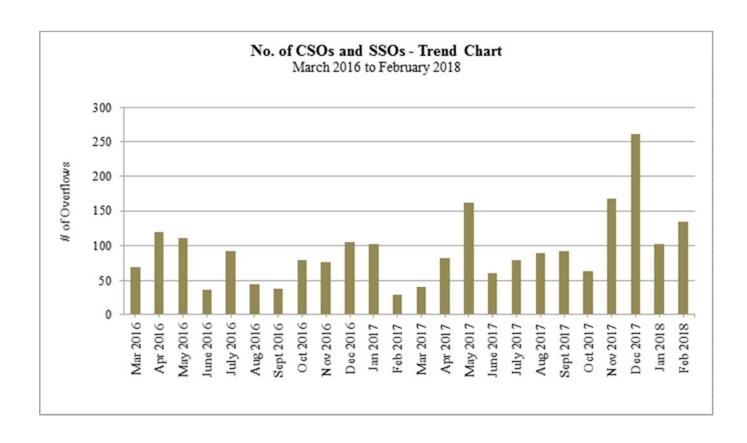


NOTES & ACRONYMS: CSO - Combined Sewer Overflow SSO - Sanitary Sewer Overflow

- Rainfall data is from Halifax Water's rain gauge at the Halifax WWTF.
- There were ten overflows on days when there was no recorded rainfall, as follows:
 - 1. February 3: The CSO at the Maitland St PS & CSO and the SSO at the Stewart Harris Drive PS occurred due to rain on the previous day and snow melt.
 - 2. February 6: The CSOs at the Maitland St PS & CSO, Pier A PS & CSO, Lyle St CSO and the Park Ave PS & CSO and the SSO at the Amos Walter PS were all due to rain on the previous day and snow melt.
 - 3. February 13: The CSO at the Maitland St PS & CSO occurred due to electrical maintenance being performed at the station. The SSO at the Amos Walter PS occurred due to rain on the previous day.

ITEM# 1-I

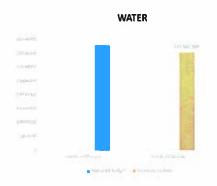
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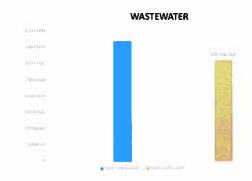


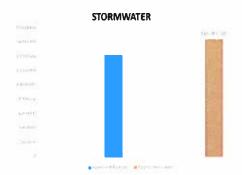


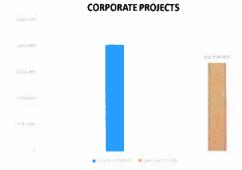
ITEM 2-1 HRWC Board March 29, 2018

CAPITAL BUDGET APPROVALS TO DATE - 2017/18









Approved Budget	\$38,091,520	93%
Approvals to date	\$35,502,168	
WASTEWATER		
Approved Budget	\$36,965,981	84%
Approvals to date	\$31,196,168	
STORMWATER		
Approved Budget	\$14,213,000	1159
Approvals to date	\$16,384,730	
COOPODATE PROIE	CTS	

WATER

Total Budget:	\$109,333,000
Total To Date:	\$99,901,066

Approved Budget \$14,213,000 115%
Approvals to date \$16,384,730

CORPORATE PROJECTS
Approved Budget \$20,237,000 83%
Approvals to date \$16,818,000

Total % to date 91%

Report Approved: D

Mar 21/18

2017 - 2018 Capital Budget HRWC Board Report 2I - Capital Budget Approvals to Date - March 29, 2018

Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval
Water		•	
Bennery Lake WSP - Rapid Mixer Replacement project	\$130,000	\$130,000	9/25/2017
Bennery Lake WSP Water Supply Study	\$20,000	\$0	11/14/2017
Treatment Plants			
Lake Major WSP Waste Residual Management Study	\$78,000	\$0	3/30/2017
Treatment Facilities			
Purchase of PID No. 40149668 Bennery Lake	\$75,000	\$0	8/14/201
Transmission		·	
Bedford Connector 750mm Replacement Phase 3	\$4,569,717	\$4,569,717	3/31/201
Peninsula Low South Transmission Main Rehabilitation	\$8,500,000	\$8,500,000	4/10/201
St. Margaret's Bay and Layton Drive water main renewal project funding increase	\$295,000	\$0	6/26/201
Watermain Rehabilitation Project - Bedford Waterfront Drive Interconnection	\$200,000	\$0	2/6/2013
Structures			
Leiblin Drive Booster Station Fire Pump Replacement Design	\$50,000	\$0	3/30/201
Blue Mountain Meter Replacement	\$20,000	\$20,000	3/30/2011
Crestview Booster Station PRV Conversion	\$57,000	\$57.000	3/30/201
Geizer 158 Reservoir Drainage Improvements	\$53,000	\$53,000	3/30/2017
Geizer 158 Reservoir Floor Replacement	\$2,750,000	\$2,750,000	7/6/2016
Lake Major Dam Replacement	\$7,789,391	\$7,789,391	4/10/2013
Pratt & Whitney PRV Communications Upgrade	\$10,000	\$10,000	3/30/201
Silverside Booster Station - Control Panel Replacement	\$50,000	\$50,000	3/30/201
Prince Arthur Avenue Watermain Renewal	\$74,000	\$0	3/14/2018
Security			
Security Upgrade Program	\$150,000	\$150,000	8/17/201
Facilties		-	
Geizer 158 Reservoir Drainage Improvements - funding increase	\$30,000	\$0	2/14/2018
Facilities			
450 Cowie Hill - New DR7000 for Lab	\$14,000	\$14,000	3/30/201
Bennery Lake WSP: Culvert Replacement	\$20,000	\$20,000	3/30/201
Bennery Lake WSP: New Chlorine Analyzer	\$14,000	\$14,000	3/30/201
Bennery Lake WSP: New Low Lift VFD Pump Replacement Program	\$110,000	\$110,000	3/30/2011
Bennery Lake WSP: New Magnetic Flow Meters	\$29,000	\$29,000	3/30/201
Bennery Lake WSP: Plant MCC Replacement	\$75,000	\$75,000	
Bennery Lake WSP: Post Filter Chemical Addition Optimization	\$62,000	\$62,000	3/30/201
Bennery Lake WSP: Replace Sludge Pumps and Valve Replacements	\$53,000	\$53,000	3/30/201
Chlorine Analyzer Relocation - Geizer 158 Reservoir	\$33,000	\$33,000	3/30/201
Chlorine Analyzer Replacement Program	\$23,000	\$23,000	1/28/2018
Inline Zeta Potential Meters for Water Plants	\$100,000	\$100,000	3/30/2013
JD Kline WSP; Effluent Valve Actuator Replacement Program	\$50,000	\$50,000	3/30/2013

Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval
JD Kline WSP: Filter Media and Underdrain Replacement Program	\$5,747,060	\$5,747,060	4/13/2017
JD Kline WSP: Lime Feed and Delivery System Replacement	\$300,000	\$300,000	1/19/2018
JD Kline: Ampgard III to Vacuum Contactor Conversion	\$40,000	\$40,000	3/30/2017
JD Kline: Bench-top Turbidimeters	\$6,000	\$6,000	3/30/2017
JD Kline: Chorine Storage Room - System Modifications	\$70,000	\$70,000	3/30/2017
JD Kline: pH Meter Replacements	\$10,000	\$10,000	3/30/2017
JD Kline: Raw Water Pumping Station Ladder Extension and Fall Protection Equipment	\$9,000	\$9,000	3/30/2017
JD Kline: Roof Replacement	\$220,000	\$220,000	3/30/2017
JD Kline: Slide Gate Actuators to Lagoons	\$44,000	\$44,000	3/30/2017
JD Kline: Turbidity Meters	\$50,000	\$50,000	3/30/2017
JD Kline: Westinghouse Electrical Panels Replacement	\$5,000	\$5,000	3/30/2017
JD Kline:VTS Alarm System Upgrade	\$7,000	\$7,000	3/30/2017
Lake Major WSP: Bench Top Turbidimeters	\$6,000	\$6,000	3/30/2017
Lake Major WSP: Blower Vent	\$35,000	\$35,000	3/30/2017
Lake Major WSP: Butterfly valve replacement program	\$100,000	\$100,000	3/30/2017
Lake Major WSP: Carbon Dioxide Feed System	\$215,000	\$215,000	4/13/2017
Lake Major WSP: Clarifier Upgrades	\$75,000	\$75,000	1/31/2018
Lake Major WSP: Dry Polymer Feed System Replacement	\$75,000	\$75,000	6/28/2017
Lake Major WSP: Filter Media Replacement	\$200,000	\$200,000	3/30/2017
Lake Major WSP: Lime Feed and Delivery System Replacement	\$120,000	\$120,000	1/3/2018
Lake Major WSP: MCC Contactors Replacement	\$34,000	\$34,000	3/30/2017
Lake Major WSP: PLC Upgrade	\$360,000	\$360,000	12/6/2017
Lake Major WSP: Treatment Train Isolation	\$222,000	\$222,000	3/30/2017
Lake Major WSP Office Space Architectural Design Work			
Equipment			
Miscellaneous Equipment Replacement			
Mobile Event Trailer "The Shed"	\$60,000	\$0	6/6/2017
Purchase portable acoustic listening equipment	\$15,000	\$0	5/17/2017
Distribution			
Automated Flushing Program	\$20,000	\$20,000	3/30/2017
Bulk Fill Stations - Site Work Improvements	\$110,000	\$110,000	3/30/2017
Distribution System Chlorine Residual Analyzer Upgrade Program	\$100,000	\$100,000	4/4/2017
	4		
Hydrant Renewals	\$75,000	\$75,000	4/13/2017
Lead Service Line Replacement Program	\$400,000	\$400,000	4/13/2017
Re-Chlorination Stations - Sampson and Stokil Reservoirs	\$30,000	\$30,000	4/3/2017

Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval
Service Line Renewals	\$100,000	\$100,000	
Valve Renewals	\$125,000	\$125,000	4/13/2017
Water Distribution - Main Renewal Program	\$1,900,000	\$1,900,000	3/21/2017
Water Sampling Station Relocation Program	\$30,000	\$30,000	3/30/2017
Assets			
Watermain renewal stand alone projects Maitland Street/Warren Street	\$280,000	\$0	1/9/2018
Water Total	\$36,679,168	\$35,502,168	11/22/9765
Wastewater	——————————————————————————————————————		
Wastewater Lateral Lining 2018 - Engineering Services	\$25,000	\$25,000	12/1/2017
Fairview Clayton Park Bridgeview I/I Reduction - Engineering Services	\$25,000	\$25,000	12/1/2017
Pembrooke Street Sewer Replacement Design Phase	\$10,000	\$0	11/14/2017
Trunk Sewers			
Northwest Arm Sewer Rehabilitation	\$19,493,168	\$19,493,168	3/8/2017
Northwest Arm Sewer Rehabilitation funding increase	\$3,517,389	\$250,000	5/12/2017
Treatment Facilities			
Dartmouth WWTF: Ductwork Replacement	\$150,000	\$150,000	11/2/2017
Eastern Passage WWTF: Control Building HVAC Upgrade	\$8,000	\$8,000	5/23/2017
Halifax WWTF: Ductwork Replacement	\$41,000	\$61,000	1/0/1900
Herring Cove WWTF: Window Installation for Natural Light	\$20,000	\$20,000	7/25/2017
HSP Plants - Carbon Replacement	\$285,000	\$285,000	8/9/2017
Mill Cove WWTF	\$750,000	\$750,000	3/27/2017
Roach's Pond Pumping Station Trash Rack	\$50,000	\$0	8/1/2017
Dartmouth WWTF: Odour Control Study	\$40,000	\$40,000	8/21/2017
Halifax WWTF: Screenings Compactor Replacement	\$200,000	\$200,000	9/13/2017
Herring Cove WWTF: Overhead Door	\$20,000	\$20,000	9/13/2017
Eastern Passage Wastewater Treatment Facilities Process Optimization	\$70,000	\$0	7/25/2017
Aerotech WWTF Septage Compactor Replacement	\$60,000	\$0	2/8/2018
Roach's Pond Pumping Station - Catwalk/Stair Replacement	\$60,000	\$0	2/9/2018
Structures			
Emergency Pumping Station Pump replacements	\$250,000	\$250,000	4/25/2017
Hines Road Sewer - Odour Management:	\$150,000	\$150,000	3/28/2017
Prince Albert Road WW IP	\$21,000	\$0	7/22/2017
Shipyard Road Pumping Station Upgrade	\$175,000	\$175,000	6/28/2017
Weybridge Lanc Pumping Station CCC	\$100,000	\$100,000	10/25/2017
CSO Upgrades 2017	\$95,000	\$0	12/6/2017

Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval
Bedford West CCC (Water/Wastewater) Various phases 2017/18	\$71,000	\$0	1/9/2018
Security			
Security Upgrade Program	\$200,000	\$200,000	8/17/2017
Pumping Station			
Market Street Combined Sewer Replacement project	\$24,000	\$0	9/25/2017
Combined sewer upgrade - Quinpool Road from Preston Street to Oxford Street- Preliminary Investigation	\$15,000	\$0	10/26/2017
Forcemains			
Kearney Lake Road Forcemain Extension	\$260,000	\$260,000	7/3/2017
Fleet			
Office Furniture and Building Improvements 2 Park Avenue	\$87,000	\$0	11/27/2018
Facilities			
Aerotech BPF - New Warehouse Ventilation System & HVAC Garage Door	\$16,000	\$0	10/5/2017
HHST Surge Suppression Investigation	\$10,000	\$0	1/15/2018
Driveway Culvert Replacement - Central Region	\$225,000	\$0	1/19/2018
Equipment			
I&I Reduction (SIR) Program Flow Meters and Related Equipment	\$25,000	\$25,000	4/13/2017
Miscellaneous Equipment Replacement	\$70,000	\$70,000	4/13/2017
Energy	1		
Dartmouth WWTF; MCC Ventilation Upgrades	\$100,000	\$100,000	11/17/2017
Dartmouth WWTF: Ventilation Air Heat Recovery	\$250,000	\$250,000	6/21/2017
Halifax WWTF: Cogswell Area District Energy System	\$105,000	\$105,000	12/12/2017
Halifax WWTF: MCC Ventilation Upgrades	\$130,000	\$130,000	11/21/2017
Collections			
Percy Street Storm Sewer Replacement	\$20,000	\$0	5/10/2017
Post Construction Consulting - Wastewater System Trenchless Rehabilitation Program	\$6,500	\$0	5/15/2017
Glendale Drive to Sackville Trunk Sewer Wastewater System Upgrade	\$25,000	\$0	
Collection System			
Balsam/Monroe Subdivision Sewer Upgrade	\$165,000	\$165,000	5/9/2017
Corporate Flow Monitoring Program	\$1,000,000	\$1,000,000	5/9/2017
East and Central Region Infrastructure Plan	\$600,000	\$600,000	11/23/2017
Hines Road Rider Sewer Extension	\$50,000	\$50,000	3/8/2017
Integrated Wastewater Projects - Program	\$1,000,000	\$1,000,000	3/21/2017
Lateral Replacements (non-tree roots)	\$1,300,000	\$1,300,000	
Lateral Replacements (tree roots)			
Leiblin Pumping Station Gravity Sewer	\$3,495,000	\$3,495,000	3/30/2017
Manholc Renewals	\$29,000	\$29,000	
Sewer Condition Assessments	\$300,000	\$300,000	5/9/2017
Wastewater Conveyance System Upgrade - Dingle	\$15,000	\$15,000	10/25/2017
Wet Weather Management Program	\$100,000	\$100,000	4/25/2017
Assets			
Deep Wastewater System in West Bedford Block 3-4 to decommission the BluewaterRoad Pumping Station	\$138,000	\$0	1/9/2018
Wastewater Total	\$35,447,057	\$31,196,168	

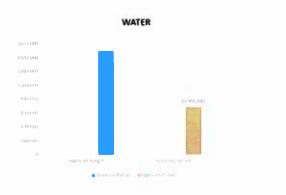
Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval
Stormwater			
Ditches and Culverts	·		
First Lake Drive Culvert Replacement Project	\$155,000	\$0	4/3/2017
Stormwater			
Structures			
Ellenvale Run Retaining Wall System Replacement	\$1,535,000	\$1,535,000	5/17/2017
Riverwood Drive SW IP	\$213,000	\$0	1/10/2018
Pipes	<u> </u>		
Catchbasin Renewals	\$36,000	\$36,000	
Integrated Stormwater Projects Program	\$1,060,000	\$1,060,000	3/21/2017
Lateral Replacements	\$15,000	\$15,000	
Manhole Renewals	\$24,000	\$24,000	
Storm Sewer Condition Assessment	\$150,000	\$150,000	5/9/2017
Sullivan's Pond Storm Sewer System Replacement Phase 1	\$9,581,199	\$9,581,199	5/17/2017
Sullivan's Pond Storm Sewer System Replacement Funding Increase	\$0	\$1,524,531	5/17/2017
Ditches and Culverts			
Blue Hill Road (near #77)	\$130,000	\$130,000	3/1/2017
Cobequid Road (#510)	\$160,000	\$160,000	3/1/2017
Cole Harbour Road (near #1560)	\$210,000	\$210,000	3/1/2017
Driveway Culvert Replacement	\$700,000	\$700,000	1/19/2018
John Cross Drive (near #40)	\$200,000	\$200,000	3/1/2017
Kipawa Crescent (near #14) (project did not proceed)	\$213,000	\$213,000	7/21/2017
Lucasville Road (near #1419)	\$170,000	\$170,000	3/1/2017
Montague Road (near #1044)	\$155,000	\$155,000	3/1/2017
Softwind Lane (near #31)	\$105,000	\$105,000	3/1/2017
Terradore Lane (near #7)	\$96,000	\$96,000	3/1/2017
Waverley Road (near #4132)	\$115,000	\$115,000	3/1/2017
Yankeetown Road (near #16)	\$205,000	\$205,000	3/1/2017
Collections		· -	
Baker Drive 2016 Stormwater Integrated Project (SWIP)	\$9,700	\$0	4/25/2017
Stormwater Total	\$15,082,899	\$16,384,730	5/14/41/29
Corporate Projects			
GIS Hosting Implementation	\$245,000	\$0	9/26/2017
Information Technology			
Desktop Computer Replacement Program	\$290,000	\$290,000	4/13/2017
AMI Meter System Upgrades (50/50 w/ww)	\$11,685,000	\$11,685,000	4/15/2016
Computerized Maintenance Management System Phase 2	\$2,000,000	\$2,000,000	10/15/2015
IT Strategic Plan Additional funding	\$110,000	\$0	
Network Infrastructure Upgrades	\$220,000	\$220,000	4/13/2017

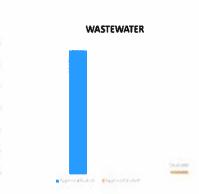
Category	Total Approval	Net Impact on 17/18 Capital Budget	Final Approval	
Fleet				
Fleet Upgrade Program Stormwater	\$280,000	\$280,000	4/13/2017	
Fleet Upgrade Program Wastewater	\$1,120,000	\$1,120,000	4/13/2017	
Fleet Upgrade Program Water	\$505,000	\$505,000	4/13/2017	
Facility				
450 Cowie Hill Renovation	\$68.000	\$68,000	1/0/1900	
Heating/Ventilation Upgrades in new phase of 450 Cowie Hill Road	\$100,000	\$100,000	6/6/2017	
Assets				
Assess AM Software and Tools	\$20,000	\$50,000	9/25/2017	
Asset Management Program Development	\$150,000	\$150,000	4/13/2017	
Climate Change Assessment and Policy	\$150,000	\$150,000	11/23/2017	
Expand Prioritization Methodology	\$125,000	\$125,000	2/1/2018	
Long Term Planning Coordination Strategy (50/50 w/ww)	\$75,000	\$75,000	11/23/2017	
Host Static Website - Phase 1 (Detailed Requirements Development)	\$200,000	\$0	12/1/2017	
Asset Management				
West Region Infrastructure Plan Funding Increase	\$208,250	\$0	3/14/2018	
Corporate Projects Total	\$17,551,250	\$16,818,000	12/30/3895	
Grand Total	\$104,915,374	\$99,901,066	#########	

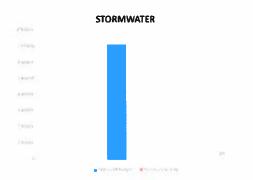


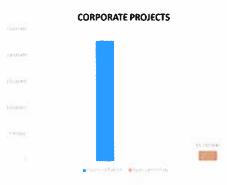
ITEM 2-I HRWC Board March 29, 2018

CAPITAL BUDGET APPROVALS TO DATE - 2018 - 2019









WAIEK	
Approved Budget	\$15,011,000
Approvals to date	\$6,901,000
WASTEWATER	

Total Budget: \$73,448,000 Total To Date: \$9,323,000

Approved Budget \$28,471,000
Approvals to date \$630,000

STORMWATER
Approved Budget \$7,111,000
Approvals to date \$0

Total % to date 10%

CORPORATE PROJECTS

Approved Budget \$22,855,000 Approvals to date \$1,792,000

Heport Approved: Jamie Hannam Date

HRWC Board Report 2I - 2018/2019 Capital Budget Approvals to Date

		Net Impact on 2018/2019	
Category	Sum of Total	Budget	Final Approval
Water			
Distribution			
Valve Renewals			
Hydrant Renewals			
Service Line Renewals			<u> </u>
Lead Service Line Replacement Program			
Automated Flushing Program	\$20,000	\$20,000	2/20/2018
Water Sampling Station Relocation Program	\$30,000	\$30.000	2/23/2018
Energy			
JD Kline WSP - 2nd Boiler Replacement	\$100,000	\$100.000	2/6/2018
Lake Major WSP - Process Area HVAC Upgrades			
Equipment			
Miscellaneous Equipment Replacement			
Facilities			
JD Kline WSP Underdrains and Filter Media Replacement Program	\$4,100,000	\$4,100,000	1/19/2018
JD Kline WSP Raw Water Intake Travelling Screen Replacement Program			
JD Kline WSP Replace Filter Isolation Gates	\$50,000	\$50,000	2/23/2018
JD Kline WSP Storage Building Improvements	\$76,000	\$76,000	2/23/2018
JD Kline WSP Purchase New Boat for Lake sampling	\$32,000	\$32,000	
JD Kline WSP Replace Existing 4160 Transformer in Low lift Station	\$26,000	\$26,000	
JD Kline WSP New Grounding Bar for Crane	\$17.000	\$17,000	
JD Kline WSP Caustic Tank liner Replacements	\$13,000	\$13,000	
JD Kline WSP Effluent Valve Actuator Replacement Program	\$100,000	\$100.000	
JD Kline WSP Replace CO2 Feeders	\$70.000	\$70,000	
JD Kline WSP Upgrades to the Process Wastewater Lagorins	\$20,000	\$20,000	
JD Kline WSP Replace Turbidity Meters	\$50,000	\$50,000	
JD Kline WSP Ampgard III to Vacuum Contactor Conversion	\$40,000	\$40,000	
JD Kline WSP Filter Gallery Electrical Wiring Upgrades	\$55,000	\$55.000	
JD Kline WSP Pilot Plant PLC Upgrade	\$19,000	\$19,000	2/20/2013
Lake Major WSP - Replace Raw Water Pumping Station Design	\$17,000	\$17,000	272072011
Lake Major WSP - Replace Contactors in the MCC	\$34,000	\$34,000	2/23/2018
Lake Major WSP - Butterfly valve replacement program	\$100,000	\$100,000	2/28/2018
Lake Major WSP - Clarifier Repair	\$100,000	\$100,000	2/20/2019
Lake Major WSP - New Alum and Fluoride Tanks	\$145.000	\$145.000	3/5/2018
Lake Major WSP - Improved access to pipe gallery	\$50,000	\$50,000	
	\$9,000	\$9,000	
Lake Major WSP - Purchase H-frame for fall arrest system	\$120,000	\$120,000	
Lake Major WSP - Pre-Oxidation Strategy Study	\$160,000	\$160,000	
Lake Major WSP - Yard Drainage and Parking Area Improvements			2/23/2013
Lake Major WSP - East Lake Dam Repairs Lake Major WSP - Dechlorination System Design	\$65,000	\$65,000	3/5/2013
	\$75,000	\$75.000 \$60.000	
Lake Major WSP - Motor Protection Relays	\$60,000		
Bennery Lake WSP - Access Road Improvements Study Phase Only	\$130.000	\$130,000	
Bennery Lake WSP - Sludge Valve Replacement Program	\$7,000	\$7.000	
Bennery Lake WSP - New Low Lift VFD pump Replacement Program	\$110,000	\$110,000	
Bennery Lake WSP - Manganese Removal Strategy Study	\$60.000	\$60,000	2/20/201
NON-URBAN Core WSP			
Miller Lake Small System - Supply Treatment Improvements			
Miller Lake Small System - Water Storage Tank			
Collins Park WSP - Air Exchange System	\$26,000	\$26,000	
Lake Lamont - Replace Suction Piping and Chlorine Injection	\$72.000	\$72,000	
Chlorine Analyzer Replacement Program	\$23,000	\$23,000	
JD Kline WSP Replace Westinghouse Electrical Panel	\$5,000	\$5,000	2/23/201
Bennery Lake WSP - Actuator for Backwash Control Valve	\$13.000	\$13,000	2/20/201

		Net Impact on 2018/2019 Budget	
Category	Sum of Total	Duuget	Final Approval
Land			
Watershed Land Acquisition Security			
Security Upgrades	 		
Structures			
Beaver Bank Reservoir Meter Upgrade	\$35,000	\$35,000	2/20/2018
Bedford South (Hemlock) Reservoir CCC	333,000	0501000	2/20/2010
Bluewater PRV Chamber CSE Retrofit	\$76.000	\$76,000	2/20/2018
Brunello Booster Station - Pump Control Modifications	\$27,000	\$27,000	2/20/2018
Cowie Hill Reservoir Rehabilitation			
Eaglewood Pumping Station - Upgrades	\$9,000	\$9.000	2/20/2018
Golf View Drive PRV Chamber Rehabilitation	\$18,000	\$18,000	2/20/2018
Leiblin Drive Booster Station - Replacement of Diesel Fire Pump		•	
Lyle Street Pumping Station Upgrades	\$235,000	\$235.000	3/5/2018
Main Control Chamber Annubar Meter Replacement	\$55.000	\$55,000	3/5/2018
Parkdale Booster Station Decommissioning	\$22.000	\$22.000	2/23/2018
Ritcey Crescent PRV - New Meter	\$11,000	\$11,000	2/23/2018
Robie 2 Emergency Pump - Pump Control Review and Optimization	\$105,000	\$105,000	2/23/2018
Sampson and Stokil Reservoirs Rechlorination System			
Steel Reservoir Inspection and Assessment Study	\$175,000	\$175,000	2/20/2018
Bulk Fill Service Connection for the Cowie Hill Operations Depot	\$51,000	\$51,000	2/20/2018
Transmission			
Water Total	\$6,901,000	\$6,901,000	HASHEL
Wastewater			
Collection System			
Regional Development Charge Studies			
Wastewater Lateral Lining			
Inglis Street Sewer/Pier A PS Ventilation/Odour Control Modifications			
Wanda Lane Sanitary Sewer Replacement			
Auburn Avenue Sanitary Sewer			
Glendale Drive to Sackville Trunk Sewer - System Upgrade			
Manhole Renewals WW			
Lateral Replacements WW (non tree roots)			
Lateral Replacements WW (tree roots)			
Wet weather management program			
Bedford West Collection System CCC			
Young Street Sewer Separation			
Kempi Road Phase 1 - Sewer Separation			
Bayer's Road Phase 1 Sewer Separation			
Joseph Howe Drive Sewer Separation			
Romans Federal Avenues Sewer Separation			
Gottingen/North Flow Split - Alteration to Combined Sewer			
Energy			
Pump Station HVAC Retro-Commissioning Program	\$50,000	\$50,000	2/12/2018
Wastewater Pump Stations - NSPI Meter Relocations HHSP - BAS-HVAC Recommissioning	\$50,000	\$30,000	2/12/2018
Dartmouth WWTF - UV Channel/Densadeg Gate Actuators			
Halifax WWTF - UV Channel/Densadeg Gate Actuators	000.002	200,000	1/21/2019
	\$80,000	\$80,000	1/31/2013
Equipment Miscellaneous Equipment Replacement			
1&I Reduction (SIR)Program Flow Meters and Related Equipment			
Forcemains			1
Kearney Lake Road Forcemain Extension			-
Security			
Security Upgrade Program			
Structures	1		
Emergency Pumping Station Pump Replacements			
Wastewater Pumping Station Component Replacement Program - East Region			
Wastewater Pumping Station Component Replacement Program - East Region Wastewater Pumping Station Component Replacement Program - Central Region			-
Weybridge Lane Pump Station CCC			
Bissett PS Component Upgrade			
Roach's Pond PS Component Upgrade			
Shipyard Road PS			
Windmill Road PS Replacement	-		
PS Control Panel/Electrical Replacement			
CSO Upgrade Program	<u> </u>		
I OOO OPERAN I INGRAIN			

		Net Impact on 2018/2019 Budget	
Category	Sum of Total	buuget	Final Approval
Treatment Facilities			
Plant Optimization Audit Program			
Emergency Wastewater Treatment Facility equipment replacements			
HWWTF - Duct Work Replacements			
HWWTF - New Raw Water Pumps			
DWWTF - Duct Work Replacement			
HCWWTF - Duct Work Replacement Program			
HCWWTF - Densadeg Flow Meters			
Mill Cove WWTF - Civil Asset Condition Assessment			
Mill Cove WWTF - Compactor/Conveyor Replacement	\$300,000	\$300,000	
Mill Cove WWTF - RAS Piping Replacement	\$245,000	\$200,000	3/5/2018
Mill Cove WWTF - Process Upgrade Conceptual Design			
Eastern Passage WWTF - Process Upgrade Program			
Eastern Passage WWTF - Secondary Launder Covers			
Aerotech WWTF - Process Upgrade Program			
Timberlea WWTF - Asset Renewal Program			
Uplands WWTF - New Screening Facility			
Fall River/Lockview WWTF Waterline Replacement			
Fall River/Lockview WWTF Driveway Replacement			·
Biosolids Processing Facility - Asset Renewal Program			
Biosolids Processing Facility - Dryer Bypass Conveyor			
Trunk Sewer			
Kearney Lake Road Wastewater Sewer Upgrades			
Bedford to Halifax Trunk Sewer Upgrade			
Wastewater Total	\$675,000	\$630,000	
Stormwater	\$075,000	4000,000	
Culverts/Ditches			
Driveway Culvert Replacements	+		
Street Specific Culvert Replacements:			
St. Margarets Bay Road 2797			
Lake Major Road 190			
Clarence St near civic 4			
Windgate Dr near civic 4			
			
Nottingham Drive near civic 53			
Penny Lane at Windsor Drive			
Knight Bridge Drive at Buckingham Drive			
Allenby Drive near civic 34			
Allenby Dr near civic 2			
Minna Drive near civic 6			
St. Margarets Bay Road near civic 2916			
Stella Crt near civic 1			
Ramar Dr near civic 6			
St. Margarets Bay Road near Second Chain Lake			
Ross Road near civic 241			
Clarence Avenue at Howard Ave			
Clarence Avenue near Morris Avenue			
Braeside Ave near civic 2			
Cow Bay Road near civic 1174			
Shore Rd near civic 1796			
Hines Road near civic 195			
Ritcey Cres near civic 1			
Orchard Dr near civic 32			
Pipes			
Doyle Street Storm Sewer	+		
Manhole Renewals SW			
Catchbasin Renewals SW			
Lateral Replacements SW			
Drainage Remediation Program - Survey/Studies			
Structures			
Ellenvale Run Retaining Wall System - Replacement			

Category	Sum of Total	Net Impact on 2018/2019 Budget	Final Approval
Corporate	Sum of Total		Tinai Appiovai
Asset Management			
Integrated Resource Plan Update	- 	-	
Sewer Condition Assessment			
Storm Sewer Condition Assessment			
Driveway Culvert Data Collection Program			
Corporate Flow Monitoring Program	\$1,700,000	\$1,700,000	
Hydraulic Water Model Build	31,700.000	\$1.700.000	
Facility			
East/Central Regional Operational Facility			
Building Capital Improvements	- 	-	
Fleet		*	
Fleet Upgrade Program	- 		
GIS		····	
GIS Application Support Program			
Dashboard Replacement			
Data Governance			
GIS Upgrade/Cityworks Upgrade			
Desktop Progression Plan			
GIS Data Build - Services			
CAD Drawing Database			
Information Technology		 	
Desktop Computer Replacement Program			
Network Infrastructure Upgrades			
Document Management Program		_	
Computerized Maintenance Management System Enhancements			
SharePoint Implementation			
AMI/ARM Meter System Upgrades			
SAP Rate Structure Support			
Asset Registry Build			
Halifax Water Website			
Portfolio and Project Lifecycle	\$50,000	\$50,000	2/6/20
IT Foundations			
Wi-Fi Design and Build			
Cayenta Optimization			
Telephony			
Intranet			
Permit Approvals			
Stormwater Billing Support			
Analytics and Dashboards			
SCADA & Other Equipment	1		
GPS Units - Replacement	\$42,000	\$42,000	2/28/201
CNSS Receiver for Asset Management Data Collection			
Large and New Customer Meters			
Corporate Total	\$1,792,000	\$1,792,000	8/21

Item 3-I

\$53,360,345.19

FINANCIAL REPORT

Consolidated balance of the four operating accounts maintained by the Commission as of:

27-Mar-18 \$53,360,345

0.136%

Investment Rate of Return

Rate of interest on the above balance -



ITEM #4-I HRWC Board March 29, 2018

TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Gary McPherson, Chair and Members of the Pension and Benefits

Advisory Committee

APPROVED: *Original Signed By:*

Carl Yates, M.A.Sc., P.Eng., General Manager

DATE: March 5, 2018

SUBJECT: 2017 Annual Report - Pension and Benefits Advisory

Committee

INFORMATION REPORT

ORIGIN

Activities of the Pension and Benefit Committee are reported to the Commission ("Administrator") annually, in accordance with the Term of Reference of the Committee.

BACKGROUND

As defined in the Terms of Reference of the Pension and Benefits Advisory Committee, the objectives and responsibilities of the Pension and Benefits Advisory Committee include:

- Monitor the administration of the Pension and Benefits Plans to ensure that the Plans, as administered by the Administrator, are conducted in a manner consistent with the provisions of the official Pension Plan document, group insurance and other benefit plan documents, and governing legislation;
- Make recommendations to the Administrator respecting the administration of the Pension and Benefits Plans;
- Promote awareness and understanding of the Pension and Benefits Plans on the part
 of members of the Plans and persons receiving pension or other benefits under the
 Plans;

- Assist with the monitoring of Pension and Benefits Plans activities and provide input in this regard, through review of audited financial statements, actuarial valuations, key contracts and agreements, reports on investment performance and other performance metrics; and
- Review annual communication plan to all plan stakeholders, which minimally will include a plan for:
 - o Annual pension statements,
 - o Newsletters (Spring and Fall),
 - o Annual general meeting for pension plan members, and
 - o Educational sessions for pre-retirement.

The purpose of the report is to provide a brief summary of the Committee's activities during 2017.

DISCUSSION

The Pension and Benefits Committee met as follows during 2017:

January 18, 2017 2:00 pm
March 1, 2017 1:30 pm
May 16, 2017 2:00 pm
September 6, 2017 2:00 pm
November 29, 2017 2:00 pm

All meetings were held at 450 Cowie Hill Road, Halifax, NS.

Table 1 that follows provides a summary of attendance at Committee meetings held during 2017. Additional comments regarding the attendance report are as follows:

- Don Mason's last meeting as the Board Representative was May 16, 2017, and the Board has yet to select a new Representative;
- Pensioners' Representative Bob White resigned his position during the year. An election was held and the Pensioners' group elected Cheryl Little as their new Representative, with Norma Dube as an Alternate. This is the first time Pensioners have filled an Alternate position on the Committee;
- Changes for Local 1431 during the year included Dan Kennie stepping down as a voting Member, with this position being assumed by Chris MacNeil (Alternate). Anna McCarron is the newly appointed Alternate for Local 1431.

Table 1

	[January	March	May	September	
		18	1	16	6	29
Representatives:						
Gary McPherson, Chair	Local 227	✓	✓	✓	-	✓
Allan Campbell, Vice Chair	P	✓	✓	✓	√	✓
Don Mason	HW Board	✓	✓	✓	n/a	n/a
Todd Masters	Local 227	✓	✓	✓	✓	✓
Dan Kennie	Local 1431	-	✓	✓	✓	n/a
Paul Taylor	Local 1431	✓	1	✓	✓	✓
Chris MacNeil	Local 1431	n/a	n/a	✓	✓	✓
Cathie O"Toole	Management	✓	✓	✓	✓	-
Carl Yates	Management	✓	✓	-	✓	✓
John Eisnor	Non-Union	✓	✓	✓	✓	✓
Bob White	Pensioners	✓	-	-	n/a	n/a
Cheryl Little	Pensioners	n/a	n/a	n/a	-	✓
Alternates						
Martin Austin	Local 227	-	✓	-	✓	✓
Mike Cowper	Local 1431	✓	n/a	n/a	n/a	n/a
Anna McCarron	Local 1431	n/a	n/a	n/a	n/a	-
Heather Britten	Non-Union	✓	✓	-	✓	✓
Norma Dube	Pensioners	n/a	n/a	n/a	✓	✓
HR Coordinator	•			•	•	
Rochelle Bellemare	Observer	✓	✓	✓	✓	✓
Administration Support	•			•	•	•
Amanda Joudrey	[✓	✓	✓	✓	✓
	Legend:	√ - n/a	- Present - Absent	er of the Comn		

Key issues the Committee addressed during the year included:

- Communication to Plan Members via Pension (and Benefits) Information Sessions;
- Revising the Terms of Reference relating to Deferred Member representation on the Committee;
- Proposed enhancements to the Canada Pension Plan (CPP);
- Proposed changes to the HRM Pension Plan governance structure;
- Benefit renewals for Life and Long Term Disability, and Medavie Blue Cross Health and Dental;
- Potential enhancements to Plan benefits, including Orthodontics, Naturopath and Osteopath; and
- Continuing education for Committee Members, including budgets and options.

The main accomplishments of the Committee for the year were:

- Through Mercer, Halifax Water was able to successfully negotiate benefit renewals for Life and Long Term Disability at an overall increase of 1.8%, which was lower than the 7.4% increase proposed by the provider. The renewal was effective April 1, 2017.
- Through Mercer, Halifax Water was able to successfully negotiate benefit renewals for Health and Dental with overall increases of 11% for Health and 3% for Dental. With increasing complexities in the health sector, and given the fact the first rate increase since 2012 occurred in 2016, an increase in premium rates was anticipated. The renewal was effective June 1, 2017.
- The approval of Pension (and Benefits) Plan information sessions prepared by Halifax Water staff. The purpose of the sessions was:
 - 1) Provide Plan Members with updated information regarding the financial health of the Pension Plan; and
 - 2) Provide an overview of the Pension Plan;
 - 3) Provide an overview of health, dental and other benefits accessible to Plan Members. The sessions concluded in February, 2017 and were attended by approximately 160 staff.

NEAR TERM PLANS

Amendments are necessary to bring the Pension Plan text into compliance with the Pension Benefit Act of Nova Scotia, which must be completed and filed with the Regulator by June 30, 2018. Once drafted, these amendments will be reviewed by the Committee before being sent to the Board for final approval.

Report Prepared by: Original Signed By:

Allan Campbell, B.Comm, CPA, CMA, Manager, Finance, 902-490-4288



ITEM # 5-I HRWC Board March 29, 2018

TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services Allan Campbell, BComm, CPA, CMA, Manager, Finance

APPROVED: *Original Signed By:*

Carl Yates, M.A.Sc., P. Eng., General Manager

DATE: March 5, 2018

SUBJECT: Halifax Regional Water Commission Employees' Pension Plan

Financial Report – 4th Quarter, 2017

INFORMATION REPORT

ORIGIN

Financial reporting for the Halifax Regional Water Commission Employees' Pension Plan (hereinafter called the "Plan").

BACKGROUND

On September 29, 2016, Plan administration submitted an Information Report to the Board containing a budget for the period January 1, 2016 to December 31, 2016. This marked the first time a budget with respect to the Plan had been introduced to the Board. Although the 2016 budget was in the form of an information report, it was the intent at that time to submit annual budgets to the Board for review and approval on a go-forward basis. In addition, the Board would be provided with unaudited financial results for the Plan on a quarterly basis.

The 2017 operating budget was the first operating budget submitted to the HRWC Board for approval, with formal approval obtained March 30, 2017 (Board Item #9). The budget detailed the changes in assets available for benefits, outlined the various revenues, contributions and expenses for the Plan, and projected net assets available as at December 31, 2017.

Pursuant to the above, the Board is required to review the periodic financial results of the Plan throughout the year.

DISCUSSION

The attached Statement of changes in net assets available for benefits outlines the 2017 budget for the Plan and actual unaudited financial results to the end of the 4th quarter, for the year ended December 31, 2017. Favourable or unfavourable variances reported compare actual results to budgeted amounts for 2017, with results for 2016 and 2015 shown for comparative purposes.

As shown on the Statement of changes in net assets available for benefits attached, the budget for 2017 forecasted an increase in net assets of \$6.5 million. Actual results report an increase in net assets of \$12.4 million for the year, resulting in a favourable variance of \$5.9 million, or 92% of budget.

Revenue for the year totals \$10.9 million, which when compared to the forecast of \$5.3 million, results in a favorable variance of \$5.7 million. Revenue is most affected by the performance of the HRM Master Trust, and change tends to be more volatile compared to contributions and expenses of the Plan. The large variance is attributed directly to the increase in the fair value of the investment assets. The increase in the fair value of investment assets during the year amounts to \$8.4 million. Investment income for the year performed slightly higher than expected, showing a favorable increase of \$0.2 million or 7% of budgeted investment income.

Contributions tracked as expected, reporting a small overall change.

Expenses of \$4.4 million for the year are lower than the forecast of \$4.7 million resulting in a favorable variance of \$0.3 million or 6% of budget. The main contributor to this favorable variance is termination benefits of \$0.3 million, which are lower than the budgeted amount of \$0.8 million, resulting in a \$0.5 million variance. This favourable variance is offset by death benefit payments made during the year in the amount of \$0.2 million. Administrative expenses are favourable overall, however it is noted these expenses are reported on the cash basis for the purposes of quarterly reports. Expenses paid by Halifax Water on behalf of the Pension Plan are typically reimbursed by the Trustee biannually.

The audit of the 2017 books and records of the Plan is scheduled to commence in April, 2018, and audited financial statements will be submitted to the Board in June, 2018 for final approval.

ATTACHMENT

Statement of changes in net assets available for benefits, for the year (twelve month period) ended December 31, 2017.

Report Prepared by: Original Signed By:

Allan Campbell, B.Comm, CPA, CMA, Manager, Finance, 902-490-4288

Halifax Regional Water Commission Employees' Pension Plan Statement of changes in net assets available for benefits For the year (twelve month period) ended

Benchmark 100%

Denominark	nchmark 100% December 31, 2017						
			Actual	Varian Actual versu Favourable (Ur	s Budget	Actual	Actual
		Budget	(unaudited)	\$	%	2016	2015
Revenue ¹							
Net investm	ent income:						
	Total investment income	\$2,440,000	\$2,622,024	182,024	7%	\$2,389,377	\$2,350,179
	Investment manager fees	(\$140,000)	(\$146,420)	(6,420)	5%	(\$138,922)	(\$188,555)
Increase (de	ecrease) in the fair value of investment assets	\$2,960,000	\$8,444,970	5,484,970	185%	\$4,056,258	\$7,313,583
		\$5,260,000	\$10,920,574	5,660,574	108%	\$6,306,713	\$9,475,207
Contributions	2						
Participants							
i articipants	Current service (inc AVC's)	\$2,594,000	\$2,663,505	69.505	3%	\$2,484,448	\$3,253,526
Sponsors:	ounent service (inc AVOS)	Ψ2,394,000	Ψ2,000,303	09,303	378	Ψ2,404,440	ψ3,233,320
оронзога.	Current service (inc LTD)	\$2,487,000	\$2,421,072	(65,928)	-3%	\$2,265,591	\$2,741,953
	Unfunded liability	\$825,000	\$825,200	200	0%	\$825,200	\$2,952,200
	-	\$5,906,000	\$5,909,777	3,777	0%	\$5,575,239	\$8,947,679
Expenses ³							
Benefit payr							
	Benefit payments	\$3,699,000	\$3,738,659	(39,659)	-1%	\$3,536,894	\$3,246,032
	Termination payments	\$800,000	\$314,591	485,410	61%	\$992,572	\$1,021,997
	Death benefit payments	\$0	\$242,767	(242,767)	n/a	\$509,236	\$0
Administrativ							
	Actuarial & consulting fees	\$130,000	\$69,309	60,691	47%	\$128,676	\$134,296
	Audit & accounting fees	\$8,000	\$8,034	(34)	0%	\$15,999	\$660
	Bank custodian fees	\$22,000	\$20,132	1,868	8%	\$26,511	\$21,567
	Insurance	\$8,000		8,000	100%	\$7,950	\$7,950
	Miscellaneous	\$13,000	\$15,966	(2,966)	-23%	\$14,433	\$11,641
	Professional fees	\$20,000	\$14,964	5,036	25%	\$12,845	\$18,313
	Registration fees	\$2,000	\$2,221	(221)	-11%	\$2,158	\$2,074
	Training (Trustees/ Administration/ Pension Committee)	\$5,000	\$2,027	2,973	59%	\$1,127	\$0
		\$4,707,000	\$4,428,669	278,331	6%	\$5,248,400	\$4,464,530
Increase (decr	rease) in net assets available for benefits	\$6,459,000	\$12,401,682	5,942,682	92%	\$6,633,551	\$13,958,356
Net assets ava	ailable for benefits, beginning of period	\$106,198,705	\$107,067,995			\$100,434,444	\$86,476,088
Increase (decrea	ase) in net assets available for benefits	\$6,459,000	\$12,401,682			\$6,633,551	\$13,958,356
Net assets available for benefits, end of period		\$112,657,705	\$119,469,677			\$107,067,995	\$100,434,444

Note:

- 1 Budgeted amounts for revenue are derived by calculating the average change in investment income and increase / decrease in the fair value of net assets and assuming this average change to continue.
- 2 Budgeted amounts for contributions are derived by using the actual amounts remitted for the two (2) month period ended Feb 28, 2017, then adding forecasted amounts for the remainder of the year, as reported in the annual contribution planner filed with the trustee.
- 3 Budgeted amounts for benefit payments are derived by using the actual amounts paid to pensioners for the three (3) months of the year, then adding an estimated amount for the remainder of the year based on actual benefit payments paid March 1, 2017. All other expenses are based on best estimates.

For the purposes of this statement, expenses are reported on a cash basis. Comparative years are reported on an accrual basis as that is how they are reported on the fine



ITEM #6-I HRWC Board March 29, 2018

TO: Ray Ritcey, Chair, and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services Allan Campbell, BComm, CPA, CMA, Manager, Finance

APPROVED: *Original Signed By:*

Carl Yates M.A.Sc., P.Eng., General Manager

DATE: March 19, 2018

SUBJECT: HRM Pension Plan Investment Performance – 4th Quarter, 2017

INFORMATION REPORT

ORIGIN

The Pension Plan investment performance is reported to the Commission periodically throughout the year.

BACKGROUND

None

DISCUSSION

The tables below and the attached Investment Report provide a performance update for the fourth quarter of 2017 (October to December) for the Halifax Regional Municipality (HRM) Pension Plan Master Trust, of which Halifax Regional Water Commission (HRWC) is a part. The fair value of the investment in the Master Trust is determined and updated at year-end, and HRWC's share of the total HRM Master Trust at December 31, 2017 was 6.1077%, and totaled \$119.4 million.

The total fund returned 4.32% in the 4th Quarter, which outperformed the policy benchmark of 3.01% by 1.31%. The return for the one-year period ended December 31, 2017 is 10.85%, outperforming the policy benchmark of 8.91% by 1.94%. Other historical returns are provided in Table 1 below:

Table 1 - Returns

	Quarter		3 - Year	4 - Year	Inception
	(Oct to Dec)	1-Year	Annualized	Annualized	(Oct 1999)
Fund Return	4.32%	10.85%	8.82%	8.93%	7.18%
Policy Benchmark	3.01%	8.91%	6.57%	6.73%	5.72%
Excess Return	1.31%	1.94%	2.25%	2.20%	1.46%

The total fund return is subject to investment management fees and plan expenses. The HRM Pension Plan performs an analysis with respect to the Master Trust to show the potential downside return risk under different scenarios. The most recent scenarios analyzed showing the greatest potential risk, are identified in Table 2 following:

Table 2 – Stress Testing (as at February 28, 2018)

	Projected Return
Scenario:	of Master Trust
Inflation increases by 1%	5.38%
Equities down by 5%	-2.31%
CAD weakens by 10% compared to the USD	1.26%
Cdn interest rates increase 100BP	-0.46%
Oil prices increase by 10%	-0.52%
Oil prices decrease by 10%	0.52%
USD Fed Rate increases by 100BP	1.47%

As at December 31, 2017 the Master Trust was in compliance with the Statement of Investment Policies and Procedures (SIP&P), and a summary of the asset mix is provided in Table 3 below:

Table 3 – Asset Mix, as at December 31, 2017

Asset:	Actual	Policy
Cash & Equivalents	0.88%	0.00%
Canadian Equity	6.23%	6.00%
Global Equity	31.91%	29.30%
Bonds	25.12%	30.80%
Minimum Target Return	35.86%	33.90%

ATTACHMENT

Halifax Regional Municipality Pension Plan Investment Report 4th Quarter, 2017

Report Prepared by: Original Signed By:

Michelle Bennett, BComm, Accountant 902-490-5242



Investment Report

Q4 2017



Executive Summary

Compliance

As at December 31, 2017, the Master Trust (MT) was in compliance with the SIP&P.

Funded Status

- As at December 31, 2016, the going concern funded ratio and transfer ratio were 90% and 60% respectively.*
- The December 31, 2017 funded status to be discussed with Eckler.

Master Trust Performance (net of fees)

- In Q4, the MT earned 4.32%, outperforming the policy benchmark return by 1.31%.
- For the one-year period ending December 31, 2017, the MT earned 10.85%, outperforming the policy benchmark by 1.94%.
- The MT earned an annualized return of 8.93% over the 4-year period ending December 31, 2017 outperforming the policy benchmark by 2.20% annualized.
- Since inception (October 1999), the MT earned 7.18% annualized outperforming the Plan's longterm rate objective of 6.40%. The table on the next slide summarizes the calendar year returns for the MT.

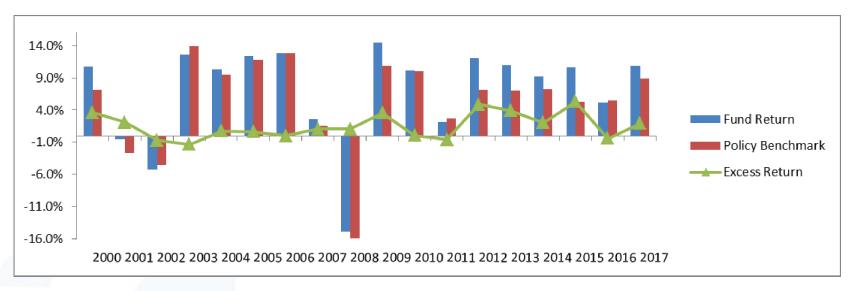


^{*}Per Eckler Valuation Report as at December 31, 2016. Assumes a discount rate 6.40% for Going Concern.



Executive Summary – Cont.

Calendar Returns (net of fees)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fund Return	10.71%	-0.56%	-5.21%	12.60%	10.27%	12.38%	12.88%	2.60%	-14.83%	14.47%	10.12%	2.11%	12.01%	10.94%	9.27%	10.59%	5.13%	10.85%
Policy Benchmark	7.12%	-2.64%	-4.50%	13.91%	9.50%	11.76%	12.85%	1.53%	-15.88%	10.92%	10.08%	2.71%	7.12%	7.01%	7.24%	5.27%	5.55%	8.91%
Excess Return	3.59%	2.08%	-0.71%	-1.31%	0.77%	0.62%	0.03%	1.07%	1.05%	3.55%	0.04%	-0.60%	4.89%	3.93%	2.03%	5.32%	-0.42%	1.94%



Executive Summary – Cont.

Added Value

In Q4 of 2017, the MT outperformed its policy benchmark by +1.31%. Attribution: Minimum Target Return +1.29%, Global Credit +0.11%, US Equity +0.02%, EAFE Equity +0.01%, Emerging Market Equity +0.01%, World Equity -0.04%, Universe Bonds -0.04%, and Canadian Equity -0.05%.

Q4 Updates

- Invested additional CAD \$10 million to existing Canadian bond fund.
- Invested additional CAD \$10 million to existing Global Credit fund.
- Committed CAD \$10 million to a Canadian real estate fund focused on multi-residential properties targeting 10% net internal rate of return.



HRM PENSION Total Fund Net Returns – Dec 31, 2017

	Q4 2017	1-Year	3-Year Annualized	4-Year Annualized	Inception (Oct 1999)
Fund Return	4.32%	10.85%	8.82%	8.93%	7.18%
Policy Benchmark*	3.01%	8.91%	6.57%	6.73%	5.72%
Excess Return	1.31%	1.94%	2.25%	2.20%	1.46%

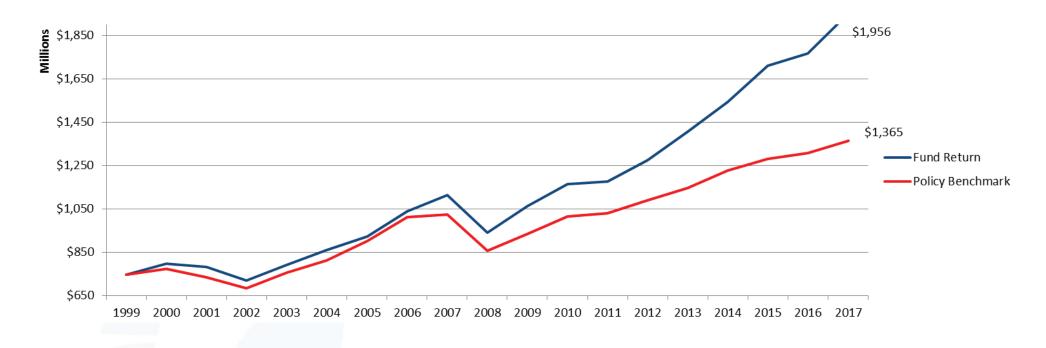
Fund returns are shown net of fees and expenses



^{*}Effective Dec 31, 2017, the Policy Benchmark is 3.5% S&P/TSX Index + 2.5% S&P/TSX 60 + 4.8% S&P 500 Index (\$USD) + 9.3% MSCI EAFE Index (\$CAN) + 3.6% MSCI Emerging Markets (\$CAN) + 11.6% MSCI World (\$CAN) +15.6% FTSE TMX Canada Universe Bond + 15.2% 3 Month Bankers Acceptance + 33.9% Minimum Target Return.



Since Inception Performance



In dollar terms, the fund has grown \$591 million in excess of the policy benchmark since inception.

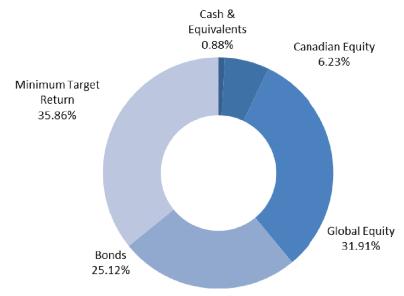
Fund returns are shown net of fees and expenses



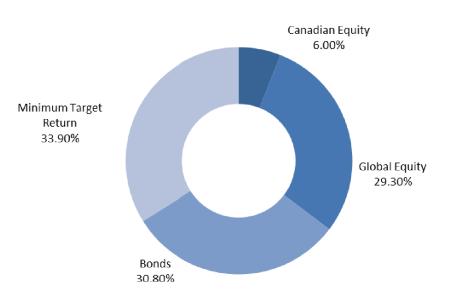


Asset Mix – Dec 31, 2017

Actual Asset Mix As of Dec 31, 2017



Asset Mix Policy As of Dec 31, 2017



^{*}Effective Dec 31, 2017, the Policy Benchmark is 3.5% S&P/TSX Index + 2.5% S&P/TSX 60 + 4.8% S&P 500 Index (\$USD) + 9.3% MSCI EAFE Index (\$CAN) + 3.6% MSCI Emerging Markets (\$CAN) + 11.6% MSCI World (\$CAN) +15.6% FTSE TMX Canada Universe Bond + 15.2% 3 Month Bankers Acceptance + 33.9% Minimum Target Return.





Equity Market Index Returns

Indexes	Q4 2017	1-Year Ending Dec 31, 2017	4-Year Ending Dec 31, 2017
Canadian Equity (S&P/TSX Composite Index)	4.45%	9.10%	7.57%
US Equity (S&P 500 C\$)	6.84%	13.83%	16.69%
US Equity (S&P 500 U\$)	6.64%	21.83%	11.98%
EAFE Equity (MSCI EAFE C\$)	4.42%	16.82%	8.87%
Emerging Markets (MSCI EM C\$)	7.63%	28.26%	10.63%
World Equity (MSCI World C\$)	5.70%	14.36%	12.72%

^{*}Source: Mercer Insight and Northern Trust

- All stock markets earned positive returns in Q4, and for the 1 and 4 year periods.
- In Q4, global equities capped off with gains and the S&P 500 made a strong advance.
- Emerging market equities recorded a strong gain in Q4 and outperformed developed markets.





Bond Market Index Returns

Bond Indexes	Q4 2017	1-Year Ending Dec 31, 2017	4-Year Ending Dec 31, 2017
Canadian Government Bonds (FTSE TMX Canada Universe Government)	2.08%	2.18%	4.00%
Canadian Universe Bonds (FTSE TMX Canada Universe Bond)	2.02%	2.52%	4.09%
Canadian Corporate Bonds (FTSE TMX Canada Universe Corporate)	1.87%	3.38%	4.33%

- Corporate bonds have outperformed Government Bonds and the broader Universe over the 1-year and 4-year periods.
- Government bonds outperformed Corporate and Universe Bonds over Q4.
- The Canadian bond market ended the quarter in positive territory, with longer-term bonds outperforming their short-term counterparts.





Fixed Income – Q4 Summary

• The MT's diversified Fixed Income portfolio earned 1.12%, which underperformed its benchmark return of 1.20% by -0.08%.

			Relative
MT Fixed Income	Q4 2017	Benchmark	Performance
Universe Bond	1.59%	2.02%	-0.43%
Canadian Corporate Bond	1.06%	1.87%	-0.81%
Government Bond	1.87%	2.08%	-0.21%
Global Credit Absolute Return	0.99%	0.36%	0.63%
MT Fixed Income Total	1.12%	1.20%	-0.08%

^{*}Source: Northern Trust

• Strong performance by our global credit portfolios boosted returns relative to the overall fixed income benchmark due to strong security selection in material, energy, and banking sectors.





Fixed Income – 1 Year Summary

• The MT's Fixed Income portfolio returned 2.94%, which outperformed it's benchmark return of 1.86% by +1.08%.

			Relative
MT Fixed Income	One Year	Benchmark	Performance
Universe Bond	2.40%	2.52%	-0.12%
Canada Corporate Bond	4.15%	3.38%	0.77%
Government Bond	1.40%	2.18%	-0.78%
Global Credit Absolute Return	4.78%	1.18%	3.60%
MT Fixed Income Total	2.94%	1.86%	1.08%

^{*}Source: Northern Trust

Outperformance was driven primarily by Canadian corporate bond investments and global credit.



MTR –Summary

• The Minimum Target Return portfolio (private investment portfolio) returned 5.89% in Q4, versus a benchmark of 1.57%, outperforming by +4.32%.

	Q4 2017	1-Year Ending Dec 31, 2017	4-Year Ending Dec 31, 2017	7-Year Ending Dec 31, 2017
MTR Return	5.89%	12.28%	12.19%	13.13%
Policy Benchmark	1.57%	6.42%	6.49%	6.53%
Excess Return	4.32%	5.86%	5.70%	6.60%

The policy benchmark for the private investment portfolio is the Going Concern Discount rate. The 2017 rate is 6.4%, 2016 is 6.5%, 2015 is 6.55%, 2014 is 6.5%, 2013 is 6.25%, 2007-2012 is 6.75% and prior to 2007 is 7.4% respectively.





MTR –1 Year Summary

- For one year, the Minimum Target Return portfolio returned 12.28%, which outperformed it's benchmark return of 6.42% by +5.86%.
 - Contributions from individual private asset classes in CAD terms are as follows:

	1 year Return
Infrastructure (C\$)	12.20%
Private Debt (C\$)	7.60%
Real Estate (C\$)	12.70%
Private Equity (C\$)	13.00%



Equity – Q4 Summary

• The MT's Equity portfolio returned 5.15% during the quarter, underperforming the equity policy benchmark return of 5.51% by -0.36%, primarily due to the allocation to Canadian Equities and Emerging Markets.

			Relative
MT Equity	Q4 2017	Benchmark	Performance
Canadian Equity (S&P/TSX Composite Index)**	3.76%	4.65%	-0.89%
US Equity (S&P 500 U\$)	7.01%	6.64%	0.37%
EAFE Equity (MSCI EAFE C\$)	4.40%	4.42%	-0.02%
Emerging Markets (MSCI EM C\$)	6.65%	7.63%	-0.98%
World Equity (MSCI World C\$)	5.16%	5.70%	-0.54%
MT Equity Total	5.15%	5.51%	-0.36%

^{*}Source: Northern Trust



^{**}Canadian Equity is a blended index of S&P TSX 60 and S&P/TSX Composite



Equity – 1 Year Summary

• The HRM MT Equity portfolio returned 16.26% underperforming its benchmark return of 16.60% by -0.34% primarily due to the underperformance of World and Canadian Equities

MT Equity	One Year	Benchmark	Relative Performance
Canadian Equity (S&P/TSX Composite Index)**	4.86%	9.38%	-4.52%
US Equity (S&P 500 C\$)	20.94%	21.83%	-0.89%
EAFE Equity (MSCI EAFE C\$)	17.10%	16.82%	0.28%
Emerging Markets (MSCI EM C\$)	33.16%	28.26%	4.90%
World Equity (MSCI World C\$)	13.23%	14.36%	-1.13%
MT Equity Total	16.26%	16.60%	-0.34%

^{*}Source: Northern Trust



^{**}Canadian Equity is a blended index of S&P TSX 60 and S&P/TSX Composite



ITEM # 7-I HRWC Board March 29, 2018

TO: Ray Ritcey, Chair and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: *Original Signed By:*

Jamie Hannam, P. Eng., Director, Engineering & IS

APPROVED BY: *Original Signed By:*

Carl Yates, M.A.Sc., P. Eng., General Manager

DATE: March 19, 2018

SUBJECT: Cogswell Redevelopment Project

INFORMATION REPORT

ORIGIN

Halifax Regional Municipality Cogswell Redevelopment project initiation.

BACKGROUND

The Halifax Regional Municipality is currently planning the redevelopment of the existing Cogswell Interchange area located in downtown Halifax. The Municipality is well underway with the Cogswell Redevelopment project, having completed their 30% detailed design for the proposed development, and on-track to complete a 60% design submission to Regional Council in mid-2018, and the 90% design submission in the fall of 2018.

Halifax Water is engaged in this project in two distinct areas. Firstly, Halifax Water is proposing the installation and operation of a District Energy System within the new Cogswell area; and secondly, Halifax Water has a significant volume of existing and proposed water, wastewater and stormwater infrastructure to be relocated or constructed within the project limits.

DISCUSSION

District Energy System:

A Feasibility Study was completed in June 2016 to determine the feasibility of an Ambient Temperature District Energy System (ATDES) for the Cogswell area. This feasibility study looked at the technical feasibility of an ambient temperature system versus more traditional high temperature systems, utility ownership options, regulatory considerations, and the preliminary business case for such a system. The study concluded that an ATDES would be the most economical and energy efficient system, with sufficient capacity to provide heating and cooling to the proposed new developments within the Cogswell redevelopment area of downtown Halifax.

As a natural progression from this earlier feasibility study, and to keep pace with the Cogswell Redevelopment 60% and 90% design work, Halifax Water is undertaking the preliminary and detailed designs for the linear infrastructure (ATDES piping and building interconnection stations), completing a Municipal By-Law Review, and developing an ATDES information document to be used to promote the project.

The scope of work for the DES component of the Cogswell project, being undertaken by the Halifax Water consultant team Pinchin/WSP, includes:

- (a) <u>Preliminary Design</u> Based on the existing Cogswell Redevelopment plans, develop preliminary (60%) design for the underground linear infrastructure (ATDES piping and building interconnection stations) for the ATDES to service the identified future building loads. Collaborate with the municipality prime design consultants assigned to complete work on the underground municipal infrastructure (i.e. water, wastewater, natural gas, telecommunications, electrical, etc.) for the Cogswell redevelopment project, leading to the successful integration of the ATDES underground infrastructure into the overall Cogswell redevelopment plan and project;
- (b) Municipal By-Law Review Complete a review of other Canadian municipal DES projects to determine how other municipalities and/or utilities have developed, integrated and completed DES projects into their local communities. The focus includes how regulatory mechanisms such as by-laws, development agreements, restrictive covenants, etc. have been used to ensure project success, mitigate risks for DES utilities, developers, customers and residents, and how mandatory connection requirements have been used versus other risk mitigation strategies;
- (c) <u>ATDES Information Package Development</u> Develop an information package, which will be utilized to educate stakeholders on DESs in general, and specifically ATDESs, and communicate the many benefits of an ATDES (e.g. socio-economic, environmental, energy security, community, etc.) for the Cogswell project. Stakeholders include Provincial and Municipal governments, potential commercial and residential developers, potential tenants and residents, local businesses and related service providers, other utilities (e.g. electrical, natural gas), and the public at large.

The business case for Halifax Water proceeding with the DES project includes the ability to establish mandatory connection to the DES within the Cogswell project limits. This assumption is fundamental to the business case and is a best practice within the industry in Canada. To facilitate this requirement, the municipality has requested changes to the HRM Charter. The Province introduced legislation to this effect within the current session of the Legislature. Second reading and final approval are pending.

Pending regional Council approval of the project at the 60% and 90% stages, approval of legislative changes for mandatory connection, and a final business case assessment, future phases of ATDES related work would include:

- Detailed (90%) Design of the Linear Infrastructure
- Building Connection Specification Development
- Preliminary + Detailed Design for the Building Mechanical Rooms
- Preliminary + Detailed Design for the ATDES Energy Transfer Center

The estimated total cost for the full detailed design of the District Energy System is \$1,600,000.

Infrastructure Relocations:

The municipality, via their consultant WSP, has completed preliminary designs for all water, wastewater and stormwater infrastructure relocations and/or new installations required to facilitate the Cogswell project as part of the 60% design process. Halifax Water staff are currently formally reviewing the engineering drawings and meeting with the municipal team to reach agreement on the scope of work. The outcome of the review will clarify the required infrastructure and identify financial responsibility for the various components.

Consistent with standard municipal subdivision processes, the municipality will be responsible for net new water, wastewater or stormwater infrastructure required to service new streets and building lots. The municipality has advised Halifax Water that all existing water, wastewater and stormwater infrastructure required to be relocated due to street realignment (vertical or horizontal) will be Halifax Water's financial responsibility in accordance with the provisions of the Municipal Street By-Law.

Halifax Water is currently finalizing these requirements; however, preliminary estimates are that these relocations will cost several million dollars.

Within the Upper Water Street area of the Cogswell project, storm based street flooding is experienced during significant rain events. These rain events surcharge the existing combined sewer and water ponds on the street and occasionally overflow towards the adjacent DND lands. This flooding problem has been identified as a priority issue with the recently completed National Disaster Mitigation Program (NDMP) study. Halifax Water and municipal staff are coordinating a review to ensure that an appropriate resolution to the issue is developed and coordinated with the construction of the Cogswell project when it proceeds.

BUDGET IMPLICATIONS

The overall feasibility for the DES project is contingent on the mandatory connection requirement and regulatory oversight by the NS Utility and Review Board. If the project does not proceed, any soft costs for work completed will not qualify as regulated capital as there will be no resulting addition to plant in service. If this occurs, the soft costs would be charged to the applicable unregulated operating budget within Halifax Water.

The required Halifax Water cost for infrastructure relocations will be finalized as the project proceeds and would affect the 2019/20 and 2020/21 capital budgets.

<u>ALTERNATIVES</u>

N/A

ATTACHMENTS

N/A

Report Prepared by: *Original Signed By:*

Jamie Hannam, P. Eng. Director of Engineering & IS,

902-490-4804

Financial Reviewed by: Original Signed By:

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

902-490-3685



ITEM #8-I HRWC Board March 29, 2018

TO: Ray Ritcey, Chair, and Members of the Halifax Regional Water

Commission Board

SUBMITTED BY: Original Signed By:

Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

APPROVED: *Original Signed By:*

Carl Yates M.A.Sc., P.Eng., General Manager

DATE: March 20, 2018

SUBJECT: Merchant Discount Fees for RDC Credit Card Payments

INFORMATION REPORT

ORIGIN

October 2014 Nova Scotia Utility And Review Board Decision – Permission to Accept Merchant Discount Fees for Credit Card Payments for Development Related Charges Paid Through HRM Customer Service Centres.

BACKGROUND

In July 2014, the Nova Scotia Utility and Review Board (NSUARB) approved the implementation of Regional Development Charges (RDCs) for Water and Wastewater. RDCs are paid by developers and property owners for new construction. RDCs are primarily collected by Halifax Regional Municipality (HRM) with other permit fees and are remitted to Halifax Water monthly.

In October 2014, HRM began implementation of a credit card payment system for permit payments and the NSUARB granted interim approval of the payment of RDCs via the same system. The objective of the implementation was to enhance convenience and service to permit payers. The NSUARB requested a report be filed annually on usage and costs associated with the system. The NSUARB interim approval requires Halifax Water to make application for permission to continue acceptance of credit card payments for RDCs at the end of the interim approval period. Now that there are three fiscal years of information upon which to base a decision, Halifax Water is going to submit this report

along with a request for approval to continue acceptance of credit card payments for payments of RDCs.

DISCUSSION

HRM implemented the credit card payment system in the 2014/15 fiscal year. HRM fully absorbed the implementation cost and began invoicing Halifax Water for the merchant discount fees associated with the payments in April 2015.

At the time the interim approval was granted, the merchant discount rate was not yet known, though a rate between 2% and 3.5% was anticipated. Total RDCs of up to \$9 million per year were anticipated, with between 10% and 50% expected to be paid by credit card. Thus an annual cost between \$18,000 and \$157,500 in merchant discount fees was anticipated.

The actual RDCs collected, actual paid by credit card, and the merchant discount fees incurred in the 2015-16 and 2016-17 fiscal years, as well as the first 11 months of 2017-18 are as follows:

			Percentage		
		RDCs paid by	paid by	Average	Merchant
Year	RDC Total	credit card	credit card	Discount Rate	Discount Fees
2015-16	5,012,522.98	1,178,683.68	23.5%	2.00%	23,619.97
2016-17	9,144,724.75	2,205,725.21	24.1%	2.07%	45,665.97
2017-18 (Apr-Feb)	9,109,388.84	2,515,878.99	27.6%	1.95%	49,163.44

By comparison, Halifax Water estimated it would cost \$172,878 to implement its own process to administer collection of development permits and it would incur a \$70,000 annual cost.

The 2017-18 fiscal year is the end of the interim time period approved by the NSUARB. A request for a continuing or permanent approval of the acceptance of credit card payments and the incurrence of the associated merchant discount fees will be submitted to the NSUARB.

Report Prepared by: Original Signed By:

Warren Brake, B.Comm, CPA, CGA, Manager, Accounting, 490-4814