

June 23, 2017



Ray Ritcey, Chair  
Halifax Water  
Halifax, NS

***Revised***

The regular meeting of the Halifax Water Board will be held on Wednesday, June 28, 2017 at 12:30 p.m. in the Boardroom at 450 Cowie Hill Road, Halifax.

## **AGENDA**

### **In Camera Reports**

- 1C a) Approval of Minutes of the In-Camera Meeting held on Thursday, March 30, 2017
- 1C b) Approval of Minutes of Special In-Camera Meeting held on Monday, April 24, 2017
- 2C Business Arising from Minutes
  - a) Personnel Matter
  - b) Governance Matter (Verbal)
- 3C Governance Matter (Verbal)
- 4C Contractual Matter

### **Regular Reports**

- 1. a) Ratification of In-Camera Motions
- 1. b) Approval of the Order of Business and Approval of Additions and Deletions (*5 minutes*)
- 2. a) Approval of Minutes of the Regular Meeting held on Thursday, March 30, 2017
- 2. b) Approval of Minutes of the Special Meeting held on Friday, May 5, 2017
- 3. Business Arising from Minutes
  - a)
- 4. 2016/17 Audited Financial Statements and Year End Results
- 5. Capital Projects - N/A
- 6. HRWC Employees' Pension Plan Financial Statements for the Year Ended Dec. 31, 2016
- 7. Capital Project Spending Summary – 2016/17

### **Information Reports**

- 1-I Operations and Financial Monthly Update
- 2-I Capital Budget Approvals to Date
- 3-I Bank Balance
- 4-I Federal/Provincial Infrastructure Funding-Clean Water and Wastewater Fund (CWWF) - Update
- 5-I HRM Pension Plan Investment Performance 1<sup>st</sup> Quarter, 2017
- 6-I Communications Strategy
- 7-I Seasonal Disinfection Program - Update
- 8-I 2016/17 Cost Containment
- 9-I Halifax Regional Water Commission Employees' Pension Plan Financial Report – 1st Quarter 2017
- 10-I Capital Cost Contribution – Financial Status Report for the Fiscal Year ended March 31, 2017

*Original Signed by Carl Yates for:*

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James G. Spurr  
Secretary

**HALIFAX REGIONAL WATER COMMISSION  
MINUTES**

**March 30, 2017**

PRESENT: Commissioner Ray Ritcey, Chair  
Commissioner Russell Walker, Vice Chair  
Commissioner Mike Savage  
Commissioner Jacques Dube  
Commissioner Darlene Fenton  
Commissioner Lisa Blackburn  
Commissioner Don Mason

REGRETS: Commissioner Steve Streach

STAFF: Carl Yates, General Manager, HRWC  
Cathie O'Toole, Director, Corporate Services & Human  
Resources, HRWC  
James Spurr, Legal Counsel, HRWC  
Lorna Skinner, Administrative Assistant, HRWC

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b) Lead Service Line Replacements

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**9. HALIFAX REGIONAL WATER COMMISSION EMPLOYEES' PENSION  
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**10. DATE OF NEXT MEETING ..... 5**

**CALL TO ORDER**

The Chair called the regular meeting to order at 9:05 a.m. in the Board Room of the HRWC, 450 Cowie Hill Road. The Board moved In Camera at 9:05 and the regular meeting reconvened at 10:00 a.m.

**1a. RATIFICATION OF IN-CAMERA MOTIONS**

**MOVED BY Commissioner Mason, seconded by Commissioner Blackburn 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 Walker, seconded by Commissioner Mason that the Halifax Regional Water Commission Board approve the order of business and approve additions and deletions.**

**MOTION PUT AND PASSED.**

**2. APPROVAL OF MINUTES – February 2, 2017**

**MOVED BY Commissioner Mason, seconded by Commissioner Walker that the Halifax Regional Water Commission Board approve the minutes of November 24, 2016.**

**MOTION PUT AND PASSED.**

**3. BUSINESS ARISING FROM MINUTES**

**a) Northwest Arm Sewer Rehabilitation**

A report dated March 30, 2017, was submitted.

**MOVED BY Commissioner Mason, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve additional funding in the amount of \$3,517,389 for the construction phase of the Northwest Arm Sewer Rehabilitation Project for a revised gross total project cost of \$23,310,557.**

**MOTION PUT AND PASSED.**

**b) Lead Service Line Replacements**

Carl Yates stated that there is a submission to the NSUARB currently being developed to confirm HW's view that the NSUARB has jurisdiction to rule on the application.

**4. OPERATING RESULTS FOR THE ELEVEN MONTHS ENDED FEBRUARY 28, 2016**

A report dated March 23, 2017, was submitted.

**5. PROPOSED 2017/18 CAPITAL BUDGET**

None

**6. SIGNING AUTHORITY PROTOCOL**

A report dated March 24, 2017, was submitted.

**MOVED BY Commissioner Savage, seconded by Commissioner Blackburn that the Halifax Regional Water Commission Board approve:**

1. The Signing Authority Guidelines as shown in Attachment A.
2. The Signing Authority for Halifax Regional Water Commission (Banking) approved at a regular Commission meeting on January 16, 2012, be rescinded and replaced with the Signing Authority Resolution in Attachment B.
3. The Financial Approval list as shown in Attachment C be approved.

**MOTION PUT AND PASSED.**

**7. UNREGULATED BUSINESS PROCESS AND AUTHORITY**

A report dated March 24, 2017, was submitted.

**MOVED BY Commissioner Mason, seconded by Commissioner Blackburn that the Halifax Regional Water Commission Board approve the Unregulated Business Process and Authority Guideline as attached, and seek ratification from Halifax municipality.**

**MOTION PUT AND PASSED.**

**8. CORPORATE BALANCED SCORECARD – 2017/18 PROGRAM**

A report dated March 23, 2017, was submitted.

**MOVED BY Commissioner Mason, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve:**

1. Corporate Balanced Scorecard targets for the 2017/18 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.

**MOTION PUT AND PASSED.**

**9. HALIFAX REGIONAL WATER COMMISSION EMPLOYEES' PENSION PLAN (the "Pension Plan") 2017 BUDGET**

A report dated March 22, 2017, was submitted.

**MOVED BY Commissioner Mason, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve the attached 2017 Pension Plan Budget covering the period January 1, 2017, to December 31, 2017.**

**MOTION PUT AND PASSED.**

The next meeting is scheduled for June 29, 2017.

The meeting was adjourned at 1:00 p.m.

*Original Signed By:*

\_\_\_\_\_  
*James G. Spurr*  
*Secretary*

*Original Signed By:*

\_\_\_\_\_  
*Commissioner Ray Ritcey*  
*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 Customer Care Centre and Customer Dispute Resolution Process
- 5-I Communications Strategy Update
- 6-I Group Life and LTD Annual Renewal
- 7-I Halifax Water Committee on Environment, Health and Safety – 2016 Summary
- 8-I Pension Plan Investment Performance 4<sup>th</sup> Quarter 2016

**HALIFAX REGIONAL WATER COMMISSION  
SPECIAL MEETING  
MINUTES**

**MAY 5, 2017**

**PRESENT:** Commissioner Ray Ritcey, Chair  
Commissioner Russell Walker, Vice Chair  
Commissioner Darlene Fenton  
Commissioner Lisa Blackburn (via teleconference)  
Commissioner Don Mason  
Commissioner Lorelei Nicoll

**REGRETS:** Commissioner Steve Streach  
Commissioner Mike Savage  
Commissioner Jacques Dube

**STAFF:** Carl Yates, General Manager, HRWC  
Cathie O'Toole, Director, Corporate Services & Human Resources, HRWC  
James Spurr, Legal Counsel, HRWC  
Jamie Hannam, Director, Engineering & IT Services  
Lorna Skinner, Administrative Assistant, HRWC

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**CALL TO ORDER..... 3**

**1. SULLIVAN'S POND STORM SEWER SYSTEM REPLACEMENT ..... 3**

**CALL TO ORDER**

The Chair called the regular meeting to order at 3:00 p.m. in the Board Room of the HRWC, 450 Cowie Hill Road.

**1. SULLIVAN'S POND STORM SEWER SYSTEM REPLACEMENT**

A report dated May 5, 2017, was submitted.

The Chair reminded the Board that the initial capital expenditure for Sullivan's Pond Storm Sewer Replacement was approved at the meeting of February 2, 2017. A special meeting was called to obtain Board approval for increased funding as this project is part of the Clean Water & Wastewater Fund (CWWF) federal funding and as such, has time restraints attached to it. The budgeted cost of the project has increased by \$2.1M. This is as a result of the project being complex and unique as well as a reflection of the current construction capacity limitations in the marketplace.

Jamie Hannam gave an updated overview of the project. He stated that staff conducted a review of the project costs with the successful proponent (Dexter Construction) in an attempt to reduce costs; however, the review did not provide any opportunities for cost reduction. As well, the project consultant (CBCL Limited) concluded that the costs submitted by Dexter were fair and reasonable given the scope of the project.

**MOVED BY Commissioner Mason, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve additional funding in the amount of \$2,100,531 for the construction phase of the Sullivan's Pond Storm Sewer Replacement Project for a revised gross total project cost of \$11,682,524.**

**MOTION PUT AND PASSED.**

The meeting was adjourned at 3:45 p.m.

*Original Signed By:*

\_\_\_\_\_  
*James G. Spurr*  
*Secretary*

*Original Signed By:*

\_\_\_\_\_  
*Commissioner Ray Ritcey*  
*Chair*

**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:** June 15, 2017

**SUBJECT:** **2016/17 Audited Financial Statements and Year End Results**

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### **INFORMATION REPORT**

#### **ORIGIN**

Operational and Regulatory Requirement.

#### **RECOMMENDATION**

It is recommended that the Board approve the March 31, 2017, Halifax Regional Water Commission's Audited Financial Statements prepared using International Financial Reporting Standards.

#### **BACKGROUND**

Halifax Regional Water Commission (HRWC) is required to submit Board-approved audited financial statements to the Halifax Regional Municipality (HRM) and the Nova Scotia Utility and Review Board (NSUARB).

#### **DISCUSSION**

Attached are the financial statements for the year ended March 31, 2017, presented in two formats.

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 regulated entities conform to International Financial Reporting Standards (IFRS).

The differing requirements of the standards results in two unique sets of financial statements. The internal financial statements, as regularly presented at Board meetings, aligns with the NSUARB Handbook. The external financial statements align with IFRS and were prepared in conjunction with the annual audit by Grant Thornton. Included in the schedules of the audited statements is information on the financial results under the NSUARB standards. The external format also includes the report of the auditor, Grant Thornton. The internal NSUARB statements are reviewed as part of the audit but are considered supplementary information and not subject to the auditor's opinion due to the differing standards.

The underlying activities and operating results are similar under the two standards. The key differences are:

- 1) IFRS includes depreciation on contributed assets in the income statement, resulting in higher depreciation expense,
- 2) IFRS includes the amortization of contributed capital in the income statement, resulting in higher non-operating revenue,
- 3) IFRS requires componentization of assets records and shorter useful lives, resulting in higher depreciation expense,
- 4) IFRS does not permit the appropriation of long term debt principle payments in the income statement, resulting in lower non-operating expenses,
- 5) IFRS requires contributed capital be treated as a long-term liability, resulting in much higher long-term liabilities and much lower equity.

The on-site field work portion of the annual audit by Grant Thornton began May 1<sup>st</sup>. The audit timing was coordinated with HRM's presentation of its statements.

The following discussion of the operating results is based on the internal NSUARB form statements except where noted. The results reflect direct operating costs by department and allocations among water, wastewater and stormwater for common costs shared across all the services provided by HRWC.

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 \$138.0 million is \$6.3 million greater than revenue reported for last year. Consolidated operating expenses of \$97.8 million are \$1.6 million higher than the same period last year.

Summarized Consolidated Operating Results				
	Actual YTD 2016/17 '000	Actual YTD 2015/16 '000	\$ Change	% Change
Operating Revenue	<b>\$137,997</b>	\$131,716	\$6,280	4.8%
Operating Expenses	<b>\$97,839</b>	\$96,238	\$1,601	1.7%
Operating Profit (Loss)	<b>\$40,158</b>	\$35,479	\$4,679	13.2%
Non Operating Revenue	<b>\$3,322</b>	\$3,370	(\$48)	-1.4%
Non Operating Expenditures	<b>\$34,622</b>	\$33,972	\$650	1.9%
Net Surplus (Loss) before OCI	<b>\$8,858</b>	\$4,877	\$3,981	81.6%
Other Comprehensive Income	<b>\$743</b>	\$10,389	(\$9,646)	-92.8%
Net Surplus (Deficit)	<b>\$9,601</b>	\$15,266	(\$5,665)	-37.1%

The Net Surplus for the year is \$9.6 million, a decline of \$5.7 million from the prior year. The Net Surplus includes Other Comprehensive Income (OCI) of \$0.7 million. Excluding OCI, the Net Surplus for the year is \$8.9 million, an improvement of \$4.0 million as compared to the prior year. The budget for the year, approved at the January 28, 2016 Board meeting, was for a profit of \$154 thousand. The Forecast included with the February results was for a Net Surplus of \$9.2 million.

Relative to the Budget, the Net Surplus is a result of higher Operating Revenue, lower Operating Expenses, lower debt servicing costs, and the unrealized gains on employee benefit programs shown in Other Comprehensive Income.

**Balance Sheet - Page 3**

The cash balance of \$55.9 million is up \$9.4 million from the prior year. The high cash balance is a result of an operating surplus greater than budgeted and capital expenditures that are lower than anticipated due to the timing of project expenditures.

The total Accounts Receivable balance of \$32.4 million is down \$9.0 million. A decrease in Customer Receivables of \$2.3 million is largely attributable to the change in billing of the HRM Stormwater charge, as HRM collected this charge on tax bills for 2016-17. The amounts receivable from HRM of \$1.9 million are down \$7.7 million from the prior year as most capital and operation items were settled prior to year-end. The liquidity on the balance sheet (ratio of current assets divided by current liabilities) is 2.17, up from the ratio of 1.91 at the same time last year.

**ITEM # 4**  
**HRWC Board**  
**June 28, 2017**

Accounts Receivable		
	2016/17	2015/16
Customer Receivables	<b>\$13,321</b>	\$15,641
Unbilled Services	<b>\$17,158</b>	\$16,171
Halifax Regional Mun.	<b>\$1,880</b>	\$9,558
<b>Total</b>	<b>\$32,359</b>	\$41,370

Balance Sheet Liquidity (Current Ratio)		
	2016/17	2015/16
Current Assets ('000)	<b>\$90,705</b>	\$90,394
Current Liabilities ('000)	<b>\$41,831</b>	\$47,275
<b>Current Ratio</b>	<b>2.17</b>	1.91

Plant in Service assets, net of Accumulated Depreciation, is \$1.17 billion and is \$9.7 million higher than at this time last year. A total of 318 Capital Work Orders were closed during the year, primarily in the final two months, representing \$49.7 million in Plant In Service Additions. This was offset by Retirements of Plant In Service of \$2.2 million and Depreciation of \$37.8 million. The Geizer 158 Reservoir Rehabilitation was the largest capital project completed in the fiscal year, with a value of \$5.1 million. The Governor's Brook subdivision represented the largest contributed asset addition at \$3.7 million. Capital Assets Under Construction is up \$9.9 million to \$28.4 million. The following tables highlight the major projects completed and still in progress:

Capital Asset Additions	
	Cumulative '000
Geizer 158 Reservoir Rehab	<b>\$5,135</b>
Governor's Brook Subdivision	<b>\$3,743</b>
Belmont Pump Station & Forcemain	<b>\$2,735</b>
Rockingham South	<b>\$2,435</b>
All other projects	<b>\$35,616</b>
<b>Total</b>	<b>\$49,664</b>

Capital Assets Under Construction	
	Cumulative '000
MacDonald Bridge Transmission Main	<b>\$6,282</b>
Aerotech Wastewater Treatment Facility	<b>\$5,359</b>
CMMS	<b>\$3,135</b>
Corporate Flow Monitoring Program	<b>\$1,167</b>
All other projects	<b>\$12,462</b>
<b>Total</b>	<b>\$28,406</b>

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

Current liabilities of \$41.8 million are down \$5.4 million from the prior year. Amounts payable to HRM are down \$4.3 million as most capital and operating items were settled prior to year-end. The current portion of Long Term Debt balance of \$21.7 million is down \$1.5 million from the prior year despite obtaining new debt in the fall debenture because there are no amounts to be refinanced in the next year.

The Accrued Post Retirement Benefits, Accrued Long Service Award, Deferred Pension Liability and Supplementary Employee Retirement Plan (SERP) have been updated based on the year end actuarial reports. The Deferred Pension Liability is \$58.5 million, an increase of \$4.2 million. For rate setting purposes, the NSUARB considers Pension costs on a cash basis, not on the basis of the full Pension liability and expense accrual.

Long Term Debt is down \$12.6 million from last year, which is a net of new debt of \$7.1 million, repayments of \$21.2 million, and a decrease in the Current Portion of Long Term Debt of \$1.5 million. The debt service ratio of 21.7% is well below the maximum 35% ratio allowed under the blanket guarantee agreement with HRM.

**ITEM # 4**  
**HRWC Board**  
**June 28, 2017**

Long Term Debt by Service		
	2016/17	2015/16
	'000	'000
Water	<b>\$59,599</b>	\$62,042
Wastewater	<b>\$133,409</b>	\$143,823
Stormwater	<b>\$11,324</b>	\$11,083
Combined	<b>\$204,333</b>	\$216,949

Debt Servicing Ratio by Service		
	YTD Debt Servicing Cost Ratio	
	2016/17	2015/16
Water	<b>19.5%</b>	19.8%
Wastewater	<b>24.2%</b>	25.3%
Stormwater	<b>17.0%</b>	15.6%
Combined	<b>21.7%</b>	22.3%

The cumulative Operating Surplus of \$7.8 million at the beginning of the fiscal year has grown to \$16.7 million with the year-to-date profit of \$8.9 million. The accumulated Operating Surplus will be drawn down by a budget loss of \$6.9 million in 2017/18 and allows another year with no rate increases for Water, Wastewater, and Stormwater service.

**Income Statement – All Services - Page 4**

The following table compares the results with the budget approved at the January 28, 2016 Board meeting. The final results are \$8.7 million better than budget with Revenue finishing higher than budget and Expenses finishing lower than budget.

Summarized Consolidated Operating Results				
	Actual	Budget		
	2016/17	2016/17		
	'000	'000	\$ Variance	% Variance
Operating Revenue	<b>\$137,997</b>	\$135,675	\$2,322	1.7%
Operating Expenses	<b>\$97,839</b>	\$102,424	(\$4,585)	-4.5%
Operating Profit (Loss)	<b>\$40,158</b>	\$33,251	\$6,907	20.8%
Non Operating Revenue	<b>\$3,322</b>	\$3,314	\$8	0.2%
Non Operating Expenditures	<b>\$34,622</b>	\$36,410	(\$1,788)	-4.9%
Net Surplus (Deficit)	<b>\$8,858</b>	\$156	\$8,702	5589.9%

**Customer Rates**

The following table summarizes the most significant customer rate changes during the fiscal year.

Summary of Rate Changes				
	Effective	Effective		
	April 1/16	May 1/15	\$ Change	% Change
<u>Volumetric Charges (per m3)</u>				
Water	<b>0.976</b>	0.845	0.131	15.5%
Wastewater	<b>1.753</b>	1.638	0.115	7.0%
Combined	<b>2.729</b>	2.483	0.246	9.9%
<u>Base Charges (per year)</u>				
Water	<b>Varies by meter size</b>		No Change	0.0%
Wastewater	<b>Varies by meter size</b>		Varies	1.1%-7.7%
Stormwater - Residential	<b>33.39</b>	33.39	No Change	0.0%

Rates for Stormwater Service will be changing on July 1, 2017.

**Operating Revenue**

Operating Revenue is \$2.3 million ahead of the budget with Metered Sales accounting for the difference. Revenue is also \$1.3 million ahead of the previous forecast for the year as consumption did not decrease as much as anticipated in the winter months.

Metered Sales revenue is up \$4.0 million (9.2%) for Water Service and \$2.9 million (4.3%) for Wastewater Service as compared to the prior year. Metered Sales consist of base and volumetric charges. Base charges are on par with budget expectations. Volumetric revenue budgets for 2016/17 were based on a 3% decrease in metered consumption, however billed water consumption is down only 2.4%. This decline mitigation combined with a higher volumetric rate accounts for the increase in revenue.

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 budgeted decline in volume is offset by a 7.0% increase in the Wastewater volumetric rate. The actual billed discharge volume declined 2.7%. Wastewater Rebates are available to large customers whose metered water does not enter the Wastewater system. Rebates were \$0.7 million less than budget, which benefits Wastewater Revenue.

Stormwater Site Generated revenue is slightly below budget and the prior year. Other Services and Fees are \$0.2 million ahead of budget and \$0.4 million ahead of the prior year, with notable increases in Private Fire Protection and Septage Tipping fees.

**Operating Expenses**

Operating Expenses of \$97.8 million are \$1.6 million below the prior year and \$4.6 million below the budget for the year. Most departmental expenses are below budget and forecast. Only Corporate Services is over budget for the year, as it was subject to a \$1.9 million adjustment to the Pension Expense following the year end actuarial report. Significant savings were seen in Materials & Supplies, Power, Chemicals and Depreciation. The following tables summarize Operating Expenses by department and nature.

Summary of Operating Expenses by Department				
	Actual YTD 2016/17 '000	Budget 2016/17 '000	\$ Variance	% Variance
Water Services	\$17,047	\$18,422	(\$1,375)	-7.5%
WW Services	\$31,433	\$32,335	(\$902)	-2.8%
SW Services	\$4,097	\$4,789	(\$693)	-14.5%
Engineering & IS	\$7,576	\$8,067	(\$491)	-6.1%
Regulatory Services	\$2,356	\$2,605	(\$248)	-9.5%
Corporate Services	\$16,230	\$15,049	\$1,181	7.8%
Depreciation	\$19,101	\$21,157	(\$2,056)	-9.7%
<b>Total Operating Expenses</b>	<b>\$97,839</b>	<b>\$102,424</b>	<b>(\$4,585)</b>	<b>-4.5%</b>

Summary of Operating Expenses by Nature				
	Actual YTD 2016/17 '000	Budget YTD 2016/17 '000	\$ Variance	% Variance
Salaries & Benefits	\$41,666	\$40,786	\$880	2.2%
Contract Services	\$12,329	\$13,097	(\$767)	-5.9%
Materials & Supplies	\$8,653	\$9,942	(\$1,289)	-13.0%
Power	\$6,294	\$7,459	(\$1,165)	-15.6%
Chemicals	\$4,415	\$5,300	(\$885)	-16.7%
Other Expenses	\$5,381	\$4,683	\$698	14.9%
Depreciation	\$19,101	\$21,157	(\$2,056)	-9.7%
<b>Total Operating Expenses</b>	<b>\$97,839</b>	<b>\$102,424</b>	<b>(\$4,585)</b>	<b>-4.5%</b>

**Financial Revenue**

Investment income is slightly above budget but slightly below the prior year. A decline in investment income is somewhat offset by an increase in miscellaneous revenue, which includes various un-regulated activities such as tower leases, energy generation and rental properties.

**Financial Expenses**

Long Term Debt costs are up from the prior year, but less than budgeted. New debt acquired in the Fall Debenture was less than anticipated so debt related costs are below budget.

The following table shows operating results for each service.

Year to Date Operating Results by Service		
	2016/17	2015/16
	'000	'000
Water	\$3,731	\$1,136
Wastewater	\$3,369	\$1,621
Stormwater	\$1,759	\$2,120
Net Surplus (Deficit)	\$8,858	\$4,877

**Water Operations - Page 5**

Water Operations show a profit of \$3.7 million, compared to a profit of \$1.1 million for the previous year at this time. Water revenue is up \$3.3 million. A reduction in Public Fire Protection revenue is offset by higher Metered Sales and Private Fire Protection revenue. Operating Expenses are up less than \$0.1 million, with higher Administration & Pension offset by lower Water Supply & Treatment and Transmission & Distribution.

**Wastewater Operations - Page 6**

Wastewater Operations show a profit of \$3.4 million, up from a profit of \$1.6 million in the prior year. Wastewater revenue has increased \$3.0 million from the prior year, with Metered Sales and Septage Tipping Fees accounting for the increase. Operating expenses have increased by \$1.3 million from the previous year. Higher costs in Wastewater Collection and Wastewater Treatment Plants are associated with the legal costs for the recent arbitration hearing. Higher costs in Administration and Pension are for the recording of the final Pension expense.

**Stormwater Operations - Page 7**

Stormwater Operations show a profit of \$1.8 million, a decline from the profit of \$2.1 million for the same period last year.

Revenue is down less than \$0.1 million and Expenses are up \$0.2 million as compared to the prior year figures. A portion of Investment Income was allocated to Stormwater for the first time in 2016/17, a total of \$0.1 million. Financial Expenses are up \$0.2 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 \$7.9 million, larger than the \$4.0 million profit for the same period last year.

Unregulated activities show a profit of \$1.0 million, slightly ahead of the profit of \$0.9 million for the prior year. Notable increases in Unregulated Revenue are seen in Septage Tipping Fees and Airline Effluent processing. The Septage Tipping Fee was increased in April 2016 by 10.2% while the Septage Tipping volume increased by 25.7%. The Airline Effluent rate increased in April 2016 by 10.0%. The rates will be reviewed again for 2018/19.

Results by Activity		
	2016/17	2015/16
	'000	'000
Regulated Activities	\$7,887	\$4,022
Unregulated Activities	\$971	\$855
Net Surplus (Deficit)	\$8,858	\$4,877

**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 \$21.3 million for the full year.

The IFRS Net Profit for the year is \$24.0 million.

**ATTACHMENTS**

Audited Financial Statements for the twelve (12) months ended March 31, 2017 (IFRS format)

Unaudited Financial Statements for the twelve (12) months ended March 31, 2017 (Internal NSUARB & IFRS format)

Financial Information Graph of Revenue and Expenses for 2016/2017

Report prepared by: *Original Signed by Allan Campbell for:*  


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

Financial Statements

Halifax Regional Water Commission

March 31, 2017

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# Halifax Regional Water Commission

## Statements of earnings

Year ended March 31, 2017 (in thousands)

	2017	2016
		Restated (Note 15)
Operating revenues		
Water	\$ 47,183	\$ 43,193
Wastewater	69,475	66,601
Stormwater	10,542	10,595
Fire protection	7,074	8,032
Private fire protection	831	679
Other operating revenue	<u>2,892</u>	<u>2,617</u>
	<u>137,997</u>	<u>131,717</u>
Operating expenditures (note 14)		
Water supply and treatment	8,050	8,623
Water transmission and distribution	8,997	9,094
Wastewater collection	11,639	10,577
Stormwater collection	4,097	4,237
Wastewater treatment	19,794	19,285
Engineering and information services	7,576	7,018
Regulatory services	2,356	2,370
Customer service	4,432	4,450
Administration and pension	11,799	9,681
Depreciation and amortization	<u>43,433</u>	<u>40,254</u>
	<u>122,173</u>	<u>115,589</u>
Earnings from operations before financial and other revenues and expenditures	<u>15,824</u>	<u>16,128</u>
Financial and other revenues		
Interest	780	883
Contributed capital	17,980	17,446
Other	<u>2,543</u>	<u>2,487</u>
	<u>21,303</u>	<u>20,816</u>
Financial and other expenditures		
Interest on long term debt	8,475	8,889
Amortization of debt discount	199	186
Grant in lieu of taxes	4,578	4,528
Other	<u>467</u>	<u>198</u>
	<u>13,719</u>	<u>13,801</u>
Earnings for the year before regulatory deferral account balance amortization	23,408	23,143
Regulatory deferral account balance amortization (note 5)	<u>(192)</u>	<u>(192)</u>
Earnings for the year	<u>\$ 23,216</u>	<u>\$ 22,951</u>

See accompanying notes to the financial statements.

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## Halifax Regional Water Commission Statements of comprehensive earnings

Year ended March 31 (in thousands)

	2017		2016
Earnings for the year	\$ 23,216	\$	22,951
Other comprehensive income (loss)			
Items that will not be reclassified subsequently to earnings:			
Re-measurement on defined benefit plans	<u>743</u>	<u>\$</u>	10,389
Total comprehensive earnings for the year	<u>\$ 23,959</u>	<u>\$</u>	<u>33,340</u>

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See accompanying notes to the financial statements.

# Halifax Regional Water Commission

## Statements of financial position

March 31 (in thousands)

	2017	2016	2015
		Restated (Note 15)	Restated (Note 15)
<b>Assets</b>			
<b>Current</b>			
Cash and cash equivalents	\$ 55,879	\$ 46,478	\$ 39,271
Receivables			
Customer charges and contractual	13,321	15,641	14,181
Unbilled service revenues	17,158	16,171	15,479
Halifax Regional Municipality	1,880	9,558	3,743
Inventory	1,601	1,684	1,528
Prepays	867	862	915
	<u>90,706</u>	<u>90,394</u>	<u>75,117</u>
Intangible assets (note 11)	10,275	10,201	10,672
Capital work in progress	28,406	18,529	41,423
Utility plant in service (note 12)	1,144,152	1,139,658	1,096,257
Total assets	<u>1,273,539</u>	<u>1,258,782</u>	<u>1,223,469</u>
Regulatory deferral account balance (note 5)	<u>3,388</u>	<u>3,580</u>	<u>3,772</u>
<b>Total assets and regulatory deferral account debit balances</b>	<b><u>\$ 1,276,927</u></b>	<b><u>\$ 1,262,362</u></b>	<b><u>\$ 1,227,241</u></b>
<b>Liabilities</b>			
<b>Current</b>			
Payables and accruals			
Trade	\$ 16,790	\$ 16,686	\$ 15,612
Interest on long term debt	2,101	2,229	2,137
Halifax Regional Municipality	295	4,584	6,973
Contractor and customer deposits	191	193	198
Current portion of deferred contributed capital	12,889	12,526	21,603
Current portion of long term debt (note 13)	21,669	23,195	22,374
Unearned revenue	787	389	511
	<u>54,722</u>	<u>59,802</u>	<u>69,408</u>
Deferred contributed capital	808,632	804,641	790,315
Long term debt (note 13)	203,299	215,794	208,231
Employee benefit obligation – pension plan (note 4)	58,480	54,265	65,005
Employee benefit obligation – post-retirement benefits (note 4)	341	466	458
Employee benefit obligation – pre-retirement benefits (note 4)	3,824	3,724	3,494
	<u>1,129,298</u>	<u>1,138,692</u>	<u>1,136,911</u>
<b>Equity</b>			
Accumulated other comprehensive (loss) (page 5)	(43,193)	(43,936)	(54,325)
Accumulated surplus (page 5)	190,822	167,606	144,655
	<u>147,629</u>	<u>123,670</u>	<u>90,330</u>
	<b><u>\$ 1,276,927</u></b>	<b><u>\$ 1,262,362</u></b>	<b><u>\$ 1,227,241</u></b>

Contingent liabilities (note 3)  
Commitments (note 6)

Approved by the Board

\_\_\_\_\_  
Commissioner

\_\_\_\_\_  
Commissioner

See accompanying notes to the financial statements.

# Halifax Regional Water Commission

## Statements of changes in equity

Year ended March 31 (in thousands)

	Accumulated other comprehensive <u>(loss)</u>	Accumulated <u>surplus</u>	<u>Total</u>
Balance at April 1, 2015	\$ (54,325)	\$ 144,655	\$ 90,330
Earnings for the year	-	22,951	22,951
Other comprehensive income	<u>10,389</u>	<u>-</u>	<u>10,389</u>
Comprehensive earnings for the year	<u>10,389</u>	<u>22,951</u>	<u>33,340</u>
Balance at March 31, 2016	<u>\$ (43,936)</u>	<u>\$ 167,606</u>	<u>\$ 123,670</u>
Balance at March 31, 2016	<u>\$ (43,936)</u>	<u>\$ 167,606</u>	<u>\$ 123,670</u>
Earnings for the year	-	23,216	23,216
Other comprehensive income	<u>743</u>	<u>-</u>	<u>743</u>
Comprehensive earnings for the year	<u>743</u>	<u>23,216</u>	<u>23,959</u>
Balance at March 31, 2017	<u>\$ (43,193)</u>	<u>\$ 190,822</u>	<u>\$ 147,629</u>

See accompanying notes to the financial statements.

# Halifax Regional Water Commission

## Statement of cash flows

Year ended March 31 (in thousands)

	2017	2016
		Restated (Note 15)
Increase (decrease) in cash and cash equivalents		
<b>Operating</b>		
Comprehensive earnings for the year	\$ 23,959	\$ 33,340
Depreciation and amortization	26,692	23,934
Employee benefit obligations	4,191	(10,504)
Gains on disposal of plant in service	59	158
	<u>54,901</u>	<u>46,928</u>
Change in non-cash operating working capital items (note 7)	5,172	(9,420)
	<u>60,073</u>	<u>37,508</u>
<b>Financing</b>		
Proceeds from issuance of long term debt	9,053	28,307
Contributed capital	9,231	5,013
Debt issue costs, net	122	(49)
Principal repayment on Harbour Solutions long term debt	(6,500)	(6,500)
Principal repayments of long term debt	(16,695)	(13,373)
	<u>(4,789)</u>	<u>13,398</u>
<b>Investing</b>		
Deferred capital contributions	629	4,148
Proceeds from sale of plant in service	197	90
Purchase of capital work in progress	(19,393)	(10,321)
Purchase of utility plant in service	(27,316)	(37,616)
	<u>(45,883)</u>	<u>(43,699)</u>
Net change in cash and cash equivalents	9,401	7,207
Cash and cash equivalents, beginning of year	<u>46,478</u>	<u>39,271</u>
Cash and cash equivalents, end of year	<u>\$ 55,879</u>	<u>\$ 46,478</u>

See accompanying notes to the financial statements.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 1. Nature of operations

The Halifax Regional Water Commission (the Commission) is a public utility owned and controlled by the Halifax Regional Municipality (HRM). The Commission is responsible for the supply of municipal water, wastewater and stormwater services to the residents of the HRM. The Commission's principal place of business is P.O. Box 8388 Station A, 450 Cowie Hill Road, Halifax, Nova Scotia. The Commission is exempt from income tax.

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### 2. Summary of significant accounting policies

#### (a) Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

The financial statements were authorized for issue by the Board on June 28, 2017.

#### (b) Basis of measurement

The Commission's financial statements are prepared on the historical cost basis, except for certain financial instruments measured at fair value. The financial statements are presented in Canadian dollars and all values are rounded to the nearest thousand. The financial statements are presented in accordance with International Accounting Standards (IAS) 1 "Presentation of Financial Statements".

#### (c) Regulation

In matters of administrative policy relating to customers, rates, capital expenditures, depreciation rates and accounting matters, the Commission is subject to the jurisdiction of the Nova Scotia Utility and Review Board (NSUARB). Rates charged to and collected from customers are designed to recover costs of providing the regulated services. Halifax Water is required to prepare submissions in accordance with the Handbook issued by the NSUARB. There are differences in the accounting treatment of certain transactions from IFRS including the accounting of principal debt payments, employee future benefits, depreciation and amortization, and gains and losses on the disposal of plant in service and accumulated surplus.

Regulatory assets represent costs incurred that have been deferred as approved by the NSUARB and will be recovered through future rates collected from customers. Halifax Water's regulatory asset is disclosed in note 5.

#### (d) Utility plant in service

Utility plant in service (note 12) is recorded at cost, being the purchase price and directly attributable cost of acquisition or construction, including interest capitalized during construction. Contributions for capital expenditures are treated as deferred contributed capital on the statement of financial position and amortized over the estimated useful lives of the assets. Structures and land taken out of service are removed from utility plant in service and placed in plant not in service at cost less accumulated depreciation. Losses or gains related to assets retired, demolished or sold are charged or credited to the statement of earnings.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 2. Summary of significant accounting policies (continued)

#### (e) Cash and cash equivalents

Cash and cash equivalents consists of cash on hand and balances with banks.

#### (f) Depreciation

Depreciation is provided using the straight-line method over the estimated useful lives of the assets.

The estimated useful lives for the major classifications of utility plant in service are as follows:

Culverts	25 to 50 years
Hydrants	50 to 80 years
Meters	20 to 25 years
Office equipment and furniture and transportation equipment	3 to 10 years
Pumping equipment	5 to 30 years
Purification and treatment equipment	20 to 50 years
SCADA equipment	5 to 25 years
Services and laterals	50 to 60 years
Structures and improvements	50 to 100 years
Tools and work equipment	5 to 30 years
Water, wastewater and stormwater mains	60 to 100 years

Depreciation commences in the year an asset is put in service and ready for its intended use. In the year of acquisition, depreciation is calculated at 50% of the above rates unless a project is significant, in which case depreciation is prorated for the number of months the asset was in use. The Commission does not maintain a depreciation fund. The Commission has received NSUARB approval for exemption from setting up a depreciation fund as long as net depreciable additions to plant exceed the depreciation charged.

#### (g) Inventory

Cost of inventory is comprised of direct materials and supplies. Inventories are valued at the lower of cost and net realizable value with cost being determined on a weighted average moving cost method.

#### (h) Revenues and expenditures

All revenues and expenditures are recorded on an accrual basis. Revenues relating to supplying water, wastewater and stormwater services are recorded based on cyclical billings and include an accrual for estimated amounts not yet billed. Fire protection revenue is recorded based on approved rates. Other revenues are recorded at the time services are performed, the amount can be measured reliably and collection is reasonably assured.

#### (i) Long term debt

Debt issue costs are deferred and amortized over the term of the debt to which it relates.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 2. Summary of significant accounting policies (continued)

#### (j) Use of estimates and critical accounting judgments

In preparing the Commission's financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenditures during the period. Significant estimates and assumptions are not limited to, but include the following:

- At year end, revenue from water, stormwater and wastewater services has been earned, but not yet billed due to the timing of the billing cycles. Management estimates the unbilled revenue accrual based on historic billing trends.
- Management assumptions are used in the actuarial determination of employee benefit obligations, such as standard rates of inflation, mortality, discount rates, and anticipation of future salary increases.
- Useful lives of utility plant in service are reviewed at each reporting date based on expected patterns of usage and historical information.
- Recognition and measurement of provisions and contingencies.

Actual results could differ from these estimates.

#### (k) Financial instruments

The Commission initially recognizes and measures its financial assets and liabilities at fair value.

All financial instruments are classified into one of five categories: fair value through profit and loss, held to maturity, loans and receivables, available for sale financial assets, or other financial liabilities. All financial instruments are initially measured in the statement of financial position at fair value. Financial instruments subsequently measured at amortized cost include transaction costs.

Subsequent measurement and changes in fair value will depend on their initial classification, as follows:

- Fair value through profit and loss financial instruments are measured at fair value and changes in fair value are recognized in net earnings;
- Available for sale financial assets are measured at fair value with changes in fair value recorded in other comprehensive income until the financial asset is derecognized or impaired at which time the amounts would be recorded in profit or loss; and
- Loans and receivables, held to maturity investments, and other financial liabilities are measured at amortized cost using the effective interest method.

The Commission's financial assets and liabilities are classified and measured as follows:

<u>Asset/Liability</u>	<u>Classification</u>	<u>Measurement</u>
Cash and cash equivalents	Loans and receivables	Amortized cost
Receivables	Loans and receivables	Amortized cost
Receivable from HRM	Loans and receivables	Amortized cost
Payables and accruals	Other financial liabilities	Amortized cost
Long term debt	Other financial liabilities	Amortized cost
Deposits	Other financial liabilities	Amortized cost

#### (l) Provisions

A provision is recognized in the statement of financial position when the Commission has a legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a rate that reflects current market assessment of the time value of money and, where appropriate, the risks specific to the obligation.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 2. Summary of significant accounting policies (continued)

#### (m) Impairments

At the end of each reporting period, the Commission reviews the carrying amounts of its tangible and intangible assets to determine whether there is an indication of an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of impairment loss (if any). The recoverable amount of any asset is the higher of its fair value less costs to sell and its value in use. Where it is not possible to estimate the recoverable amount of an individual asset, the impairment test is carried out on the asset's cash-generating unit (CGU), which is the lowest group of assets to which the asset belongs for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets. The Commission has three CGU's (water, wastewater and stormwater) for which impairment testing is performed.

If the recoverable amount of the asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized immediately in earnings. When an impairment loss is subsequently reversed, the carrying amount of the assets is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years.

#### (n) Intangibles

Intangible assets include land access easements, water removal rights, studies, and capital master plans and are recorded at cost less accumulated amortization. Land rights include payment for easements and right of use over land and have an indefinite useful life. Intangibles with finite useful lives are amortized annually over the estimated useful lives. The expected useful lives are as follows:

Intangible assets	10 to 30 years
-------------------	----------------

#### (o) Employee benefits obligations

The Commission accrues in its accounts, annually, the estimated liabilities for pensions and other employee benefits.

##### *Pension benefits*

The Commission provides employment, post-retirement and pre-retirement benefits through defined benefit plans and defined contribution plans.

The cost of pension benefits for defined contribution pension plans are expensed at the time active employees are compensated.

The defined benefit plans sponsored by the Commission determine the amount of pension benefits employees will receive on retirement by reference to length of service and salary levels. Obligations associated with defined benefit plans reside with the Commission, even if plan assets for funding the plan are set aside.

The liability recognized in the statement of financial position for defined benefit plans is the present value of the defined benefit obligation at the end of the reporting date less the fair value of plan assets.

Management estimates the defined benefit obligation annually with assistance from an independent actuary using the projected unit credit method. The defined benefit obligation uses estimates for inflation, medical cost trends, mortality, and anticipated salary levels. The discount factor used to present value estimated future cash flows is determined with reference to high quality corporate bonds that have terms to maturity approximating the terms of the related pension liability.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 2. Summary of significant accounting policies (continued)

Gains and losses resulting from re-measurements of the net defined benefit liability are charged to other comprehensive income in the period in which they arise. Service costs are recognized immediately into earnings.

Net interest cost related to pension obligations and returns on plan assets are included in salary and benefits on the statement of earnings.

#### *Short-term employee benefits*

Short-term employee benefit obligations that are due to be settled wholly within twelve months after the end of the annual reporting period in which the employees render the related service are measured on an undiscounted basis and are expensed as the related service is provided.

#### **(p) Regulatory deferral account balance**

The Commission early adopted IFRS 14 Regulatory Deferral Accounts and has continued to apply the accounting policies it applied in accordance with the Handbook for the recognition, measurement and impairment of assets and liabilities arising from rate regulation. These are referred to as regulatory deferral account balances.

#### *Explanation of recognized amounts*

Regulatory deferral account balances are recognized and measured at cost less amortization. They are assessed for impairment on the same basis as other non-financial assets as described below.

Management continually assesses the likelihood of recovery of regulatory assets. If recovery through future rates is no longer considered probable, the amounts would be charged to the results of operations in the period that the assessment is made.

#### **(q) Future accounting standards**

At the date of authorization of these financial statements, certain new IFRS standards, amendments and interpretations to existing standards have been published by the IASB, but are not yet effective and have not been adopted early by the Commission.

Management anticipates that all of the relevant pronouncements will be adopted in the Commission's accounting policies for the first period beginning after the effective date of the pronouncement. Information on new standards, amendments and interpretations that are expected to be relevant to the Commission's financial statements is provided below.

#### **IFRS 15 Revenue from Contracts with Customers**

The IASB released a new standard IFRS 15 Revenue from Contracts with Customers which replaces IAS 18 Revenue, IAS 11 Construction Contracts and certain revenue-related interpretations. The new standard provides a single, principle based five-step model to be applied to all contracts with customers requiring an entity to recognize revenue 1) in a manner that depicts the transfer of goods or services to customers and 2) at an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services.

IFRS 15 is effective for annual periods beginning on or after January 1, 2018.

#### **IFRS 9 Financial Instruments**

The IASB has replaced IAS 39 Financial Instruments: Recognition and Measurement in its entirety with a new standard IFRS 9 Financial Instruments. The final version of the standard introduces a new approach to financial asset classification, replaces the "incurred loss" impairment model with a more forward-looking expected loss model and substantially revises hedge accounting.

The new standard IFRS 9 is effective for annual periods beginning on or after January 1, 2018.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### (q) Future accounting standards (continued)

#### **IFRS 16 Leases**

The IASB issued IFRS 16, Leases, which replaces IAS 17, Leases. IFRS 16 provides a single lessee accounting model, requiring the recognition of assets and liabilities for all leases, unless the lease term is twelve months or less or the underlying asset has a low value. Lessor accounting remains largely unchanged from IAS 17.

The new standard IFRS 16 is effective for annual periods beginning on or after January 1, 2019.

Management believes these new and revised standards will have minimal impact on the financial statements.

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### **3. Contingent liabilities**

As a condition of a prior year sale of a property, the Commission indemnified the purchaser from claims or actions resulting from migration of halocarbons. The environmental risk is assessed to be low and the likelihood of any related liability is not determinable.

The Commission has been named along with the contractor for a flooding incident that occurred as a result of an overflow of wastewater at a pumping station associated with the Halifax Harbour Solutions Project (HHSP). The claim is being defended by the Commission's insurer and management believes exposure in this regard is minimal.

There are active claims against the Commission; however, the likelihood of actual liability is not determinable at this time. If the Commission's defense of active claims is unsuccessful, the potential exposure would be \$2,000 - \$3,000.

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### **4. Employee benefit obligations**

#### **Retirement benefit plan – employees transferred from HRM**

The Commission is responsible for funding the employer share of the contributions to the HRM pension plan for certain employees that transferred from HRM as of August 1, 2007. HRM administers this defined benefit pension plan and the Commission reimburses HRM for the pension costs related to the Commission's proportionate share of the employees covered under the plan. Due to the nature of the plan, the Commission does not have sufficient information to account for the plan as a defined benefit; therefore, the multiemployer defined benefit plan is accounted for in the same manner as a defined contribution plan. An expense is recorded in the period when the Commission is obligated to make contributions for services rendered by the employee. During 2017, the Commission funded \$674 (2016 - \$627) in contributions to the plan.

#### **Defined benefit plans and other long term employment benefits**

For all other employees, the Commission maintains a defined benefit pension plan and offers post-retirement health and insurance benefits to all of its employees. The pension plan provides pensions based upon length of service and best seven years' earnings. This defined benefit pension plan is funded by employer and employee contributions, each contributing 12.95% of regular employee earnings effective January 1, 2014. As of January 1, 2016, the pension plan was amended with employees currently contributing 10.65%. The employer contributes 13.29% of payroll which includes 9.85% toward current service cost and 3.44% toward going concern special payments.

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

### 4. Employee benefit obligations (continued)

Employees who retired prior to July 1, 1998 have extended health benefits coverage for life and drug coverage until age 65. Employees who retired after July 1, 1998 and before December 31, 2008 have coverage for drug, extended health, dental and life insurance until age 65 on a 50/50 cost shared basis (100% basis for employees who retired after December 31, 2008). Extended health coverage for these retirees and their spouses after the age of 65 is available on an optional basis at 100% retiree cost and drug coverage is available through the provincially managed drug program.

The Commission also has a non-funded pre-retirement benefit that is accrued annually, but is payable on retirement, termination or death if the employee has at least 10 years of continuous service. The benefit is equal to three days' pay for each completed year of service, up to a maximum of six month's salary and can be taken as a lump sum payment at the date of retirement in lieu of pre-retirement leave.

Information about the Commission's plans, based on an actuarial extrapolation as at March 31, 2017, is as follows:

	Pension Plan		Post-retirement benefits		Pre-retirement benefits	
	2017	2016	2017	2016	2017	2016
<b>Change in accrued benefit obligation</b>						
Balance, beginning of year	\$ 152,633	\$ 157,296	\$ 466	\$ 458	\$ 3,724	\$ 3,494
Current service cost	5,020	5,777	-	-	308	274
Interest cost	6,160	5,938	11	11	129	130
Past service cost	-	(2,787)	-	-	-	-
Contributions by plan participants	2,417	3,274	-	-	-	-
Benefit payments	(4,715)	(4,496)	(61)	(65)	(377)	(254)
Remeasurements – actuarial (gains)/ losses from changes in demographic assumptions	-	(1,101)	31	(21)	-	-
Remeasurements – actuarial (gains)/ losses from changes in financial/experience assumptions	6,848	(11,268)	(106)	83	40	80
Balance, end of year	<u>168,363</u>	<u>152,633</u>	<u>341</u>	<u>466</u>	<u>3,824</u>	<u>3,724</u>
<b>Change in fair value of plan assets</b>						
Balance, beginning of year	98,368	92,291	-	-	-	-
Interest income	3,934	3,644	-	-	-	-
Administrative expenses	(144)	(163)	-	-	-	-
Actual return on plan assets	7,639	(1,896)	-	-	-	-
Benefit payments	(4,715)	(4,496)	(61)	(65)	(377)	(254)
Contributions: Employee	2,417	3,273	-	-	-	-
Employer	2,384	5,715	61	65	377	254
Balance, end of year	<u>109,883</u>	<u>98,368</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Accrued benefit liability at March 31	<u>\$ 58,480</u>	<u>\$ 54,265</u>	<u>\$ 341</u>	<u>\$ 466</u>	<u>\$ 3,824</u>	<u>\$ 3,724</u>

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

### 4. Employee benefit obligations (continued)

Administration and pension expense includes pension expense of \$7,390 (2016 - \$5,448).

The significant actuarial assumptions adopted in measuring the Commission's accrued benefit obligations are as follows:

	<b>2017</b>	2016	<b>2017</b>	2016	<b>2017</b>	2016
	<b>Pension Plan</b>	Pension Plan	<b>Post- Retirement Benefits</b>	Post- Retirement Benefits	<b>Pre- Retirement Benefit</b>	Pre- Retirement Benefit
Discount rate	<b>3.80%</b>	4.00%	<b>2.70%</b>	2.90%	<b>3.40%</b>	3.50%
Expected return on plan assets	<b>3.80%</b>	4.00%	<b>N/A</b>	N/A	<b>N/A</b>	N/A
Rate of compensation increase	<b>3.75%</b>	3.75%	<b>N/A</b>	N/A	<b>3.75%</b>	3.75%
Expenses for life benefits as a % of claims	<b>N/A</b>	N/A	<b>10.00%</b>	10.00%	<b>N/A</b>	N/A
Health benefit inflation per year	<b>N/A</b>	N/A	<b>7.16%</b>	7.43%	<b>N/A</b>	N/A
Dental benefit inflation per year	<b>N/A</b>	N/A	<b>4.50%</b>	4.50%	<b>N/A</b>	N/A

The measurement date used to determine the Plan assets and the accrued benefit obligation was March 31, 2017. The most recent valuation was completed January 1, 2016. The next review is scheduled for January 1, 2019.

The estimated employer contributions expected to be paid into the defined benefit plan and supplemental plan for the next fiscal year are \$2,368.

### 5. Regulatory deferral account balance

In June 2011, the NSUARB granted the Commission approval to defer depreciation charges on certain assets transferred in 2010 from HRM relating to the Halifax Harbour Solutions Project (HHSP). Depreciation of \$2,078 was deferred in each of fiscal 2011 and 2012. As a result, the Commission recognized a \$4,156 regulatory deferral account. In absence of rate regulation, this regulatory deferral account balance would have been expensed as depreciation in fiscal 2011 and 2012. In May 2012, the NSUARB granted approval of the amortization of this deferral account over the remaining useful lives of the underlying assets, beginning in 2014. The expense recognized in 2017 is \$192 (2016 - \$192). IFRS 14 permits a first-time adopter of IFRS to continue to account, with some limited changes, for 'regulatory deferral account balances' in accordance with its previous GAAP, both on initial adoption of IFRS and in subsequent financial statements.

	<u>2017</u>	<u>2016</u>
Beginning balance	\$ 3,580	\$ 3,772
Amortization	<u>(192)</u>	<u>(192)</u>
Ending balance	<u>\$ 3,388</u>	<u>\$ 3,580</u>

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

### 6. Commitments

There is an agreement with HRM for renewal of the dividend/grant in lieu of taxes for fiscal years 2015/16 to 2019/20 for water services. Dividend payments are approved as part of revenue requirements by the NSUARB. There is no dividend/grant in lieu of taxes approved for wastewater/stormwater. The Commission is committed to a payment of \$4,774 for the 2018 fiscal year.

At March 31, 2017, the Commission had \$124,395 in expenditures from current and past approved capital budgets not yet expended.

### 7. Supplemental cash flow information

	<u>2017</u>	<u>2016</u>
Changes in non-cash operating working capital items		
Receivables, customer charges and contractual	\$ 1,333	\$ (2,152)
Payable to/receivable from HRM, net	3,389	(8,204)
Inventory	83	(156)
Prepays	(5)	53
Payables and accruals, trade	104	1,074
Accrued interest on long term debt	(128)	92
Contractor and customer deposits	(2)	(5)
Unearned revenue	<u>398</u>	<u>(122)</u>
	<u>\$ 5,172</u>	<u>\$ (9,420)</u>

Interest paid during the year was \$8,475 (2016 - \$8,889).

### 8. Capital management

The Commission's objective when managing capital is to ensure sufficient liquidity to support its financial obligations and execute its operating and capital plans. The Commission monitors and makes adjustments to its capital structure through additional borrowings of long term debt which are used to finance capital projects.

The Commission considers its total capitalization to include all long term debt and total equity. The calculation is set out as follows:

	<u>2017</u>	<u>2016</u>
Long term debt (current portion)	\$ 21,669	\$ 23,195
Long term debt	<u>203,299</u>	<u>215,794</u>
Funded debt	224,968	238,989
Equity	<u>147,630</u>	<u>123,670</u>
Capital under management	<u>\$ 372,598</u>	<u>\$ 362,659</u>

The Commission is a regulated utility and is subject to the regulations of the NSUARB. As part of this regulation, the Commission must obtain approval by the NSUARB for all borrowings. The Commission has obtained regulatory approval for all borrowings during the fiscal year. The Commission is not subject to financial borrowing covenants other than as outlined in Note 10.

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

### 9. Financial instruments and risk management

The Commission applies a three-tier hierarchy framework for disclosing fair value of financial instruments, based on whether the inputs into the various valuation techniques are observable or unobservable. Observable techniques reflect market data obtained from independent sources, while unobservable inputs reflect management assumptions. Changes in valuation techniques of financial instruments may result in transfers of assigned levels. The hierarchy of input is as follows:

Level I	Quoted prices in active markets for identical assets or liabilities;
Level II	Inputs other than quoted prices included in Level I that are observable, either directly or indirectly; and
Level III	Inputs that are not based on observable market data.

The carrying values of current assets and current liabilities approximate their fair value due to the relatively short period to maturity of these financial instruments. Loans and receivables are carried at amortized cost. The fair value of variable rate long term debt is assumed to approximate its carrying value. Fair value has been estimated by discounting future cash flows at a rate offered for borrowings of similar maturities and credit quality at year end.

There were no transfers between classes of the fair value hierarchy during the year.

The Commission is exposed to risks as a result of holding financial instruments. Management considers and evaluates those risks on an on-going basis to ensure that the risks are appropriately managed. These potential risks include credit risk, interest risk, market risk and liquidity risk.

#### *Credit risk*

Credit risk arises from the possibility that the Commission's customers may experience financial difficulty and be unable to fulfill their obligations. The Commission's maximum exposure to credit risk corresponds to the cash and customer charges and contractual accounts receivable. However, the Commission's customers are numerous and diverse, which reduces the concentration of credit risk.

An analysis of the Commission's receivables and continuity of the Commission's provision for impairment losses on receivables is as follows:

	<u>2017</u>	<u>2016</u>
Receivables		
Customer charges, contractual and unbilled	\$ 32,702	\$ 33,754
Less: allowance for doubtful accounts	<u>(2,223)</u>	<u>(1,941)</u>
	<u>\$ 30,479</u>	<u>\$ 31,813</u>

The credit quality of financial assets that are neither past due nor impaired are assessed with reference to historical information and includes the following considerations; new customers, existing customers and payment patterns / history.

#### *Interest risk*

Interest risk arises from the possibility that changes in interest rates will cause the Commission a potential loss. All of the Commission's long term debt is at varying fixed rates and has staggered maturity dates which reduce the interest rate risk.

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# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

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### 9. Financial instruments and risk management (continued)

#### *Market risk*

Market risk arises from the possibility that the value of an investment will fluctuate as a result of changes in market prices. These changes could affect the market value of the investments in the Commission's employees' pension plan and consequently the plan's deficit. The risk is mitigated by the pension plan diversifying the types of investments in its portfolio.

#### *Liquidity risk*

Liquidity risk arises from the possibility of the Commission not being able to meet its cash requirements in a timely and cost effective manner. The Commission manages this risk by closely monitoring the cash on hand in comparison to upcoming cash commitments.

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### 10. Related party transactions

The immediate parent and ultimate controlling party of the Commission is the HRM.

The Commission is obligated to make payments on debt, held in the name of HRM, associated with wastewater and stormwater assets which were transferred to the Commission in 2007 and subsequent years.

Amounts receivable from and payable to HRM have normal credit terms.

The Commission had the following related party transactions with HRM:

- The Commission recorded revenue for provision of water, wastewater and stormwater services to HRM in the amount of \$5,025 (2016 - \$4,705).
- The Commission recorded fire protection revenue from HRM of \$7,074 (2016 - \$8,032).
- The Commission paid a grant in lieu of tax of \$4,578 (2016 - \$4,528).
- The debt issued by the Commission was covered by a blanket guarantee from HRM subject to the Commission maintaining a debt service ratio of less than 35%.

### Compensation of key management personnel

Members of the Board of Commissioners and Executive Management team are deemed to be key management personnel. It is the Board of Commissioners and Executive Management team who have the responsibility for planning, directing and controlling the activities of the Commission.

The following is compensation expense for key management personnel:

	<u>2017</u>	<u>2016</u>
Short term benefits	\$ 1,345	\$ 1,481
Post-employment benefits	<u>243</u>	<u>233</u>
Total compensation	<u>\$ 1,588</u>	<u>\$ 1,714</u>

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

11. Intangible assets	<u>2017</u>	<u>2016</u>
Cost		
Beginning balance, April 1	\$ 12,232	\$ 11,669
Additions	<u>981</u>	<u>563</u>
Total cost, March 31	<u>13,213</u>	<u>12,232</u>
Accumulated depreciation		
Beginning balance, April 1	2,031	997
Depreciation	<u>907</u>	<u>1,034</u>
Total accumulated depreciation, March 31	<u>2,938</u>	<u>2,031</u>
Net book value	<u>\$ 10,275</u>	<u>\$ 10,201</u>

### 12. Utility plant in service

	<u>Land</u>	<u>Structures and improvements</u>	<u>Treatment and network equipment</u>	<u>Distribution and collection network</u>	<u>Tolls and work equipment</u>	<u>Total</u>
Cost						
Beginning balance, April 1, 2016	\$ 20,518	\$ 206,944	\$ 214,182	\$ 760,027	\$ 12,291	\$ 1,213,962
Additions	262	8,726	4,814	28,005	6,874	48,681
Disposals	-	(795)	(223)	(386)	(843)	(2,247)
Total cost, March 31, 2017	<u>20,780</u>	<u>214,875</u>	<u>218,773</u>	<u>787,646</u>	<u>18,322</u>	<u>1,260,396</u>
Accumulated depreciation						
Beginning balance, April 1, 2016	\$ -	\$ 21,561	\$ 22,714	\$ 28,354	\$ 1,676	\$ 74,305
Depreciation	-	12,246	11,957	15,390	2,346	41,939
Total accumulated depreciation March 31, 2017	-	<u>33,807</u>	<u>34,671</u>	<u>43,744</u>	<u>4,022</u>	<u>116,244</u>
Net book value, March 31, 2017	<u>\$ 20,780</u>	<u>\$ 181,068</u>	<u>\$ 184,102</u>	<u>\$ 743,902</u>	<u>\$ 14,300</u>	<u>\$ 1,144,152</u>

	<u>Land</u>	<u>Structures and improvements</u>	<u>Treatment and network equipment</u>	<u>Distribution and collection network</u>	<u>Tolls and work equipment</u>	<u>Total Restated (Note 15)</u>
Cost						
Beginning balance, April 1, 2015	\$ 18,983	\$ 199,526	\$ 204,676	\$ 700,532	\$ 7,838	\$ 1,131,555
Additions	1,605	7,418	10,041	59,495	5,275	83,834
Disposals	(70)	-	(535)	-	(822)	(1,427)
Total cost, March 31, 2016	<u>20,518</u>	<u>206,944</u>	<u>214,182</u>	<u>760,027</u>	<u>12,291</u>	<u>1,213,962</u>
Accumulated depreciation						
Beginning balance, April 1, 2015	-	10,690	11,254	13,790	(436)	35,298
Depreciation	-	10,871	11,460	14,564	2,112	39,007
Total accumulated depreciation March 31, 2016	-	<u>21,561</u>	<u>22,714</u>	<u>28,354</u>	<u>1,676</u>	<u>74,305</u>
Net book value, March 31, 2016	<u>\$ 20,518</u>	<u>\$ 185,383</u>	<u>\$ 191,468</u>	<u>\$ 731,673</u>	<u>\$ 10,615</u>	<u>\$ 1,139,657</u>

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

13. Long-term debt	<u>Interest rates</u>	<u>2017</u>	<u>2016</u>
Payable to Municipal Finance Corporation (MFC)			
Water	1.040% to 6.750%	\$ 68,380	\$ 72,356
Halifax Harbour Solutions	0.900% to 4.329%	8,450	9,100
Wastewater/stormwater	1.040% to 4.500%	85,120	88,228
Stormwater	1.040% to 4.114%	<u>11,985</u>	<u>11,699</u>
		<u>173,935</u>	<u>181,383</u>
Payable to Halifax Regional Municipality			
MFC Wastewater/stormwater	1.200% to 4.940%	<u>52,066</u>	<u>58,762</u>
		<u>226,001</u>	<u>240,145</u>
Less: debt issue costs		<u>(1,033)</u>	<u>(1,156)</u>
		<u>224,968</u>	<u>238,989</u>
Less: amount payable within one year		<u>(21,669)</u>	<u>(23,195)</u>
		<u>\$ 203,299</u>	<u>\$ 215,794</u>

The debentures are repayable in fixed annual or semi-annual principal instalments plus interest payable semi-annually. Principal instalments for the next five years are as follows:

2018	\$ 21,669
2019	\$ 22,130
2020	\$ 23,259
2021	\$ 17,581
2022	\$ 15,538

14. Operating expenditures by nature	<u>2017</u>	Restated <u>2016</u>
Salaries and benefits	\$ 39,839	\$ 33,538
Training	656	409
Contract services	12,118	16,326
Electricity	6,295	6,964
Operating supplies	9,423	8,349
Professional services	4,768	3,878
Chemicals	4,404	4,742
Depreciation and amortization	<u>44,670</u>	<u>41,381</u>
	<u>\$ 122,173</u>	<u>\$ 115,587</u>

# Halifax Regional Water Commission

## Notes to the financial statements

March 31, 2017 (in thousands)

### 15. Restatement

During the fiscal year ended March 31, 2017, the Commission completed Asset Management Plans for various assets. In the course of completing this initiative, management compiled an inventory of stormwater assets that were not previously recorded, specifically culverts for driveways and under roadways (cross culverts). Most of these assets are contributed assets installed prior to the transfer of wastewater and stormwater assets from HRM in 2007. At the time of the 2007 transfer no records were available on asset quantities, location, cost and condition. The Commission has added the assets to utility plant in service due to the relative significance of the assets to stormwater service. The assets were valued using an estimated depreciated replacement cost and prior year figures restated. The impact of restatement is as follows:

	<u>Previously Reported April 1, 2015</u>	<u>Adjustment</u>	<u>Restated April 1, 2015</u>
Distribution and collection network			
Cost	\$ 597,781	\$ 102,751	\$ 700,532
Accumulated depreciation	\$ 9,877	\$ 3,913	\$ 13,790
Deferred contributed capital	\$ 691,477	\$ 98,838	\$ 790,315
	<u>2016</u>	<u>Adjustment</u>	<u>2016</u>
Depreciation expense	\$ 10,650	\$ 3,914	\$ 14,564
Contributed capital revenue	\$ 13,533	\$ 3,914	\$ 17,447

### 16. Comparative figures

Certain of the comparative figures have been reclassified to conform with the financial statement presentation adopted for the current year.

# Halifax Regional Water Commission

## Schedule of utility plant in service

# Schedule A

Year ended March 31, 2017 (in thousands)

### Water

	Land improvements	Structures and improvements	Pumping equipment	Purification equipment	SCADA equipment	Transmission and distribution mains	Services	Meters	Hydrants	Aerotech and small systems	Tools and work equipment	Total
<b>Cost</b>												
Beginning balance, April 1, 2016												
Cost	\$ 15,297	\$ 87,643	\$ 9,711	\$ 22,901	\$ 4,792	\$ 343,510	\$ 34,082	\$ 14,442	\$ 18,887	\$ 9,467	\$ 23,876	\$ 584,608
Additions	120	5,486	9	870	254	6,977	1,551	701	445	97	3,336	19,846
Disposals	-	(795)	-	-	-	(386)	-	(223)	-	-	(341)	(1,745)
<b>Total cost, March 31, 2017</b>	<u>15,417</u>	<u>92,334</u>	<u>9,720</u>	<u>23,771</u>	<u>5,046</u>	<u>350,101</u>	<u>35,633</u>	<u>14,920</u>	<u>19,332</u>	<u>9,564</u>	<u>26,871</u>	<u>602,709</u>
<b>Accumulated depreciation</b>												
Beginning balance, April 1, 2016	-	25,551	6,778	14,522	3,545	76,018	5,795	5,480	3,605	2,648	17,117	161,059
Depreciation	-	2,483	250	956	144	4,226	582	470	297	274	1,192	10,874
Total accumulated depreciation, March 31, 2017	-	28,034	7,028	15,478	3,689	80,244	6,377	5,950	3,902	2,922	18,309	171,933
<b>Net book value, March 31, 2017</b>	<u>\$ 15,417</u>	<u>\$ 64,300</u>	<u>\$ 2,692</u>	<u>\$ 8,293</u>	<u>\$ 1,357</u>	<u>\$ 269,857</u>	<u>\$ 29,256</u>	<u>\$ 8,970</u>	<u>\$ 15,430</u>	<u>\$ 6,642</u>	<u>\$ 8,562</u>	<u>\$ 430,776</u>
<b>Cost</b>												
Beginning balance, April 1, 2015												
Cost	\$ 15,440	\$ 86,583	\$ 9,711	\$ 22,613	\$ 4,326	\$ 327,226	\$ 32,931	\$ 13,801	\$ 18,400	\$ 9,248	\$ 22,913	\$ 563,192
Additions	54	1,060	-	288	466	16,662	1,151	1,021	487	219	963	22,371
Disposals	(197)	-	-	-	-	(378)	-	(380)	-	-	-	(955)
<b>Total cost, March 31, 2016</b>	<u>15,297</u>	<u>87,643</u>	<u>9,711</u>	<u>22,901</u>	<u>4,792</u>	<u>343,510</u>	<u>34,082</u>	<u>14,442</u>	<u>18,887</u>	<u>9,467</u>	<u>23,876</u>	<u>584,608</u>
<b>Accumulated depreciation</b>												
Beginning balance, April 1, 2015	-	24,250	6,523	13,624	3,459	72,021	5,269	5,132	3,326	2,388	15,601	151,592
Depreciation	-	1,301	255	898	86	3,997	526	348	279	260	1,516	9,466
Total accumulated depreciation, March 31, 2016	-	25,551	6,778	14,522	3,545	76,018	5,795	5,480	3,605	2,648	17,117	161,059
<b>Net book value, March 31, 2016</b>	<u>\$ 15,297</u>	<u>\$ 62,092</u>	<u>\$ 2,933</u>	<u>\$ 8,379</u>	<u>\$ 1,247</u>	<u>\$ 267,492</u>	<u>\$ 28,287</u>	<u>\$ 8,962</u>	<u>\$ 15,282</u>	<u>\$ 6,819</u>	<u>\$ 6,759</u>	<u>\$ 423,549</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

Utility plant in service under IFRS differs from the Handbook due to exclusion of intangible assets, componentization of certain assets and useful lives for depreciation.

# Halifax Regional Water Commission

## Schedule of utility plant in service

# Schedule A

Year ended March 31, 2017 (in thousands)

### Wastewater

	Land	Structures and improvements	Pumping equipment	Treatment equipment	SCADA equipment	Collection system	Laterals	Tools and work equipment	Aerotech and small systems	Total
<b>Cost</b>										
Beginning balance, April 1, 2016										
Cost	\$ 5,187	\$ 172,048	\$ 16,870	\$ 159,921	\$ 7,777	\$ 283,562	\$ 16,170	\$ 22,401	\$ 11,994	\$ 695,930
Additions	142	3,160	709	1,201	433	6,607	2,938	3,508	95	18,793
Disposals	-	-	-	-	-	-	-	(502)	-	(502)
<b>Total cost, March 31, 2017</b>	<u>5,329</u>	<u>175,208</u>	<u>17,579</u>	<u>161,122</u>	<u>8,210</u>	<u>290,169</u>	<u>19,108</u>	<u>25,407</u>	<u>12,089</u>	<u>714,221</u>
<b>Accumulated depreciation</b>										
Beginning balance, April 1, 2016	-	48,798	5,962	39,289	910	53,469	1,149	9,877	3,021	162,475
Depreciation	-	4,899	615	7,966	456	3,949	353	1,696	429	20,363
Total accumulated depreciation, March 31, 2017	-	53,697	6,577	47,255	1,366	57,418	1,502	11,573	3,450	182,838
<b>Net book value, March 31, 2017</b>	<u>\$ 5,329</u>	<u>\$ 121,511</u>	<u>\$ 11,002</u>	<u>\$ 113,867</u>	<u>\$ 6,844</u>	<u>\$ 232,751</u>	<u>\$ 17,606</u>	<u>\$ 13,834</u>	<u>\$ 8,639</u>	<u>\$ 531,383</u>
<b>Cost</b>										
Beginning balance, April 1, 2015										
Cost	\$ 5,187	\$ 171,473	\$ 9,568	\$ 159,922	\$ 7,061	\$ 279,268	\$ 13,465	\$ 21,161	\$ 11,730	\$ 678,835
Additions	-	575	7,302	54	716	4,294	2,705	1,240	264	17,150
Disposals	-	-	-	(55)	-	-	-	-	-	(55)
<b>Total cost, March 31, 2016</b>	<u>5,187</u>	<u>172,048</u>	<u>16,870</u>	<u>159,921</u>	<u>7,777</u>	<u>283,562</u>	<u>16,170</u>	<u>22,401</u>	<u>11,994</u>	<u>695,930</u>
<b>Accumulated depreciation</b>										
Beginning balance, April 1, 2015	-	44,715	5,684	31,406	552	50,104	903	7,834	2,610	143,808
Depreciation	-	4,083	278	7,883	358	3,365	246	2,043	411	18,667
Total accumulated depreciation, March 31, 2016	-	48,798	5,962	39,289	910	53,469	1,149	9,877	3,021	162,475
<b>Net book value, March 31, 2016</b>	<u>\$ 5,187</u>	<u>\$ 123,250</u>	<u>\$ 10,908</u>	<u>\$ 120,632</u>	<u>\$ 6,867</u>	<u>\$ 230,093</u>	<u>\$ 15,021</u>	<u>\$ 12,524</u>	<u>\$ 8,973</u>	<u>\$ 533,455</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

Utility plant in service under IFRS differs from the Handbook due to exclusion of intangible assets, componentization of certain assets and useful lives for depreciation.

# Halifax Regional Water Commission

## Schedule of utility plant in service

# Schedule A

Year ended March 31, 2017 (in thousands)

### Stormwater

	Structures and improvements	Collection system	Laterals	Tools and work equipment	Total Restated (Note 15)
<b>Cost</b>					
Beginning balance, April 1, 2016					
Cost	\$ 9,705	\$ 218,501	\$ 3,929	\$ 2,034	\$ 234,169
Additions	80	9,250	682	1,011	11,023
Disposals	-	-	-	-	-
<b>Total cost, March 31, 2017</b>	<u>9,785</u>	<u>227,751</u>	<u>4,611</u>	<u>3,045</u>	<u>245,192</u>
<b>Accumulated depreciation</b>					
Beginning balance, April 1, 2016	1,226	30,690	216	504	32,636
Depreciation	176	5,690	85	366	6,317
Total accumulated depreciation, March 31, 2017	<u>1,402</u>	<u>36,380</u>	<u>301</u>	<u>870</u>	<u>38,953</u>
<b>Net book value, March 31, 2017</b>	<u>\$ 8,383</u>	<u>\$ 191,371</u>	<u>\$ 4,310</u>	<u>\$ 2,175</u>	<u>\$ 206,239</u>
<b>Cost</b>					
Beginning balance, April 1, 2015					
Cost	\$ 8,945	\$ 211,223	\$ 3,636	\$ 1,624	\$ 225,428
Additions	760	7,278	293	410	8,741
Disposals	-	-	-	-	-
<b>Total cost, March 31, 2016</b>	<u>9,705</u>	<u>218,501</u>	<u>3,929</u>	<u>2,034</u>	<u>234,169</u>
<b>Accumulated depreciation</b>					
Beginning balance, April 1, 2015	1,062	25,317	168	332	26,879
Depreciation	164	5,373	48	172	5,757
Total accumulated depreciation, March 31, 2016	<u>1,226</u>	<u>30,690</u>	<u>216</u>	<u>504</u>	<u>32,636</u>
<b>Net book value, March 31, 2016</b>	<u>\$ 8,479</u>	<u>\$ 187,811</u>	<u>\$ 3,713</u>	<u>\$ 1,530</u>	<u>\$ 201,533</u>

During the year, \$267 of interest was capitalized to Utility Plant in Service (2016 - \$491).

Cumulative utility plant in service	Water	Wastewater	Stormwater	Total
Net book value, March 31, 2017	\$ 416,232	\$ 521,890	\$ 106,611	\$ 1,044,733
Net book value, March 31, 2016	\$ 416,232	\$ 521,890	\$ 106,611	\$ 1,044,733

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

Utility plant in service under IFRS differs from the Handbook due to exclusion of intangible assets, componentization of certain assets and useful lives for depreciation.

# Halifax Regional Water Commission

## Schedule of long term debt

# Schedule B

Year ended March 31, 2017 (in thousands)

	<u>Interest rate</u>	<u>Final Maturity</u>	<u>Balance Remaining</u>	
			<u>2017</u>	<u>2016</u>
Payable to Municipal Finance Corporation				
Water				
Debenture 23 A 1	4.250% to 6.125%	2018	\$ 700	\$ 800
Debenture 26 A 1	5.500% to 8.000%	2016	-	2,200
Debenture 96 A 1	4.350% to 4.880%	2016	-	80
Debenture 27 A 1	4.650% to 5.010%	2017	1,108	2,165
Debenture 28 A 1	6.500% to 6.750%	2018	1,200	1,300
Debenture 98 A 1	3.750% to 5.088%	2019	7,128	10,383
Debenture 29 A 1	0.900% to 4.329%	2019	675	900
Debenture 30 A 1	1.550% to 3.870%	2020	700	875
Debenture 31 A 1	1.630% to 4.221%	2021	750	900
Debenture 32 A 1	1.636% to 3.480%	2022	1,200	1,400
Debenture 32 C 1	1.510% to 3.160%	2022	8,587	9,124
Debenture 33 A 1	1.330% to 3.489%	2023	8,595	9,101
Debenture 33 B 1	1.285% to 4.114%	2023	6,300	6,671
Debenture 34 B 1	1.200% to 3.190%	2024	12,305	12,989
Debenture 35 B 1	1.040% to 2.894%	2025	12,794	13,467
Debenture 36 A 1	1.150% to 2.925%	2026	2,000	-
Debenture 36 B 1	1.150% to 2.506%	2026	4,338	-
Halifax Harbour Solutions				
Debenture 29 A 1	0.900% to 4.329%	2019	8,450	9,100
Wastewater/stormwater				
Debenture 30 A 1	1.510% to 4.500%	2020	2,380	2,550
Debenture 32 A 1	1.636% to 3.480%	2022	1,917	2,037
Debenture 32 B 1	1.380% to 3.156%	2022	25,600	27,200
Debenture 32 C 1	1.510% to 3.160%	2022	3,676	3,906
Debenture 33 A 1	1.330% to 3.489%	2023	14,331	15,174
Debenture 33 B 1	1.285% to 4.114%	2023	9,259	9,804
Debenture 34 A 1	1.245% to 3.347%	2024	5,012	5,291
Debenture 34 B 1	1.200% to 3.190%	2024	7,727	8,157
Debenture 35 B 1	1.040% to 2.894%	2025	13,405	14,110
Debenture 36 B 1	1.150% to 2.506%	2026	1,813	-
Stormwater				
Debenture 33 A 1	1.330% to 3.489%	2023	459	486
Debenture 33 B 1	1.285% to 4.114%	2023	2,243	2,375
Debenture 34 B 1	1.200% to 3.190%	2024	5,313	5,608
Debenture 35 B 1	1.040% to 2.894%	2025	3,069	3,230
Debenture 36 B 1	1.150% to 2.506%	2026	901	-
			<u>173,935</u>	<u>181,383</u>
Payable to Halifax Regional Municipality				
Municipal Finance Corporation – Wastewater/stormwater				
Debenture 24 B 1	2.840% to 5.940%	2024	44,000	49,500
Debenture 26 A 1	4.350% to 4.880%	2016	-	126
Debenture 26 B 1	4.265% to 4.410%	2016	-	5
Debenture 27 A 1	4.650% to 5.010%	2017	66	131
Debenture 34 B 1	1.200% to 3.190%	2024	8,000	9,000
			<u>52,066</u>	<u>58,762</u>
			<u>226,001</u>	<u>240,145</u>
Less: debt issue costs			(1,033)	(1,156)
			<u>224,968</u>	<u>238,989</u>
Less: amount payable within one year			(21,669)	23,195
			<u>\$ 203,299</u>	<u>\$ 215,794</u>

The debentures are repayable in fixed annual or semi-annual principal instalments plus interest payable semi-annually. Principal instalments for the next five years are as follows:

2018	\$ 21,669
2019	\$ 22,130
2020	\$ 23,259
2021	\$ 17,585
2022	\$ 15,538

# Halifax Regional Water Commission

## Schedule of operations for water service

## Schedule C

Year ended March 31, 2017 (in thousands)

	<u>2017</u>	<u>2016</u> Restated (Note 15)
Operating revenues		
Water service	\$ 47,183	\$ 43,193
Fire protection	7,074	8,032
Private fire protection services	831	679
Other operating revenue		
Bulk water stations	330	265
Customer late payment fees	282	198
Miscellaneous	153	181
	<u>55,853</u>	<u>52,548</u>
Operating expenditures		
Water supply and treatment	8,050	8,232
Water transmission and distribution	8,997	9,485
Engineering and information services	3,828	3,528
Regulatory services	493	505
Customer service	2,290	2,268
Administration and pension	5,966	4,919
Depreciation	7,756	8,411
	<u>37,380</u>	<u>37,348</u>
Earnings from operations before financial and other revenues and expenditures	<u>18,473</u>	<u>15,200</u>
Financial and other revenues		
Interest	351	442
Other	375	434
	<u>726</u>	<u>876</u>
Financial and other expenditures		
Interest on long term debt	2,378	2,531
Repayment of long term debt	8,400	7,766
Amortization of debt discount	95	90
Grant in lieu of taxes	4,578	4,528
Other	17	29
	<u>15,468</u>	<u>14,944</u>
Earnings for the year	<u>\$ 3,731</u>	<u>\$ 1,132</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

**Halifax Regional Water Commission**  
**Schedule of operations for wastewater service**

**Schedule D**

Year ended March 31, 2017 (in thousands)

	<u>2017</u>	2016 Restated (Note 15)
Operating revenues		
Wastewater service	\$ 69,475	\$ 66,601
Other operating revenue		
Leachate and other contract revenue	440	424
Septage tipping fees	909	648
Overstrength surcharge	23	135
Customer late payment fees	189	238
Miscellaneous	428	382
	<u>71,464</u>	<u>68,428</u>
 Operating expenditures		
Wastewater collection	11,639	10,578
Wastewater treatment	19,793	19,286
Engineering and information services	3,223	3,010
Regulatory services	1,095	1,134
Customer service	1,842	1,877
Administration and pension	5,017	4,095
Depreciation	10,669	11,975
	<u>53,278</u>	<u>51,955</u>
 Earnings from operations before financial and other revenues and expenditures	<u>18,186</u>	<u>16,473</u>
 Financial and other revenues		
Interest	351	441
Other	2,168	2,054
	<u>2,519</u>	<u>2,495</u>
 Financial and other expenditures		
Interest on long term debt	5,509	5,786
Repayment of long term debt	11,699	11,462
Amortization of debt discount	95	89
Other	32	11
	<u>17,335</u>	<u>17,348</u>
 Earnings for the year	<u>\$ 3,370</u>	<u>\$ 1,620</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

# Halifax Regional Water Commission

## Schedule of operations for stormwater service

## Schedule E

Year ended March 31, 2017 (in thousands)

	<u>2017</u>	<u>2016</u> Restated (Note 15)
Operating revenues		
Stormwater site generated service	\$ 6,661	\$ 6,713
Stormwater right-of-way service	3,881	3,881
Other operating revenue		
Customer late payment fees	51	63
Miscellaneous	88	82
	<u>10,681</u>	<u>10,739</u>
Operating expenditures		
Stormwater collection	4,096	4,236
Engineering and information services	525	480
Regulatory services	768	729
Customer service	300	305
Administration and pension	816	666
Depreciation	677	523
	<u>7,182</u>	<u>6,939</u>
Earnings from operations before financial and other revenue and expenditures	<u>3,499</u>	<u>3,800</u>
Financial and other revenues		
Investment income	<u>78</u>	<u>-</u>
Financial and other expenditures		
Interest on long term debt	588	571
Repayment of long term debt	1,221	1,100
Amortization of debt discount	9	8
	<u>1,818</u>	<u>1,679</u>
Earnings for the year	<u>\$ 1,759</u>	<u>\$ 2,121</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

# Halifax Regional Water Commission

## Schedule of regulated activities

## Schedule F

Year ended March 31, 2017 (in thousands)

	<u>2017</u>	<u>2016</u> Restated (Note 15)
Operating revenues		
Water service	\$ 47,183	\$ 43,193
Wastewater service	69,475	66,601
Stormwater service	10,542	10,594
Public fire protection	7,074	8,032
Private fire protection services	831	679
Other operating revenue	<u>1,207</u>	<u>1,262</u>
	<u>136,312</u>	<u>130,361</u>
Operating expenditures		
Water supply and treatment	9,137	9,308
Water transmission and distribution	10,411	10,534
Wastewater collection	10,347	9,537
Stormwater collection	4,039	4,186
Wastewater treatment	17,797	17,421
Engineering and information services	7,576	7,018
Regulatory services	2,356	2,369
Customer service	4,396	4,415
Administration and pension	11,768	9,660
Depreciation	<u>19,095</u>	<u>20,903</u>
	<u>96,922</u>	<u>95,351</u>
Earnings from operations before financial and other revenues and expenditures	<u>39,390</u>	<u>35,010</u>
Financial and other revenues		
Interest	780	883
Other	<u>2,289</u>	<u>2,055</u>
	<u>3,069</u>	<u>2,938</u>
Financial and other expenditures		
Interest on long term debt	8,475	8,889
Repayment of long term debt	21,320	20,328
Amortization of debt discount	199	186
Grant in lieu of taxes	4,578	4,528
Other	<u>-</u>	<u>158</u>
	<u>34,572</u>	<u>34,089</u>
Earnings for the year	<u>\$ 7,887</u>	<u>\$ 3,859</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

# Halifax Regional Water Commission

## Schedule of unregulated activities

## Schedule F

Year ended March 31, 2017 (in thousands)

	<u>2017</u>	<u>2016</u> Restated (Note 15)
Operating revenues		
Dewatering	\$ 210	\$ 210
Septage tipping fees	909	648
Leachate treatment and contract revenue	440	424
Airplane effluent	89	51
Other operating revenue	<u>196</u>	<u>219</u>
	<u>1,844</u>	<u>1,552</u>
Operating expenditures		
Water supply and treatment	16	10
Wastewater treatment	830	822
Other	111	68
Depreciation	<u>6</u>	<u>6</u>
	<u>963</u>	<u>906</u>
Earnings from operations before financial and other revenues and expenditures	<u>881</u>	<u>646</u>
Financial and other revenues		
Other	<u>139</u>	<u>376</u>
Financial and other expenditures		
Other	<u>49</u>	<u>-</u>
Earnings for the year	<u>\$ 971</u>	<u>\$ 1,022</u>

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

# Halifax Regional Water Commission Nova Scotia Utility and Review Board information

## Schedule G

Year ended March 31, 2017 (in thousands)

<b>Return on rate base</b>	<b>2017</b>	<b>2016</b>
Rate of return on rate base for water service	4.54%	3.64%
Rate of return on rate base for wastewater service	6.71%	6.18%
Rate of return on rate base for stormwater service	11.78%	15.45%

### Special purpose reserves

	Wastewater & Stormwater Reserves	RDC Water Reserve	RDC Wastewater Reserve	Other Capital Reserves	<b>2017 Total</b>	2016 Total
Reserve, beginning of year	\$ 3,638	\$ 774	\$ 3,653	\$ 5	\$ 8,070	\$ 24,875
Contributions and interest	-	471	8,759	-	9,230	5,012
Expenditures	182	-	(570)	-	(388)	(21,817)
Reserve, end of year	\$ 3,820	\$ 1,245	\$ 11,842	\$ 5	\$ 16,912	\$ 8,070

### Summarized consolidated operating results

	<b>Actual 2017</b>	Actual 2016 Restated (Note 15)
Operating revenues	\$ 137,997	\$ 131,716
Operating expenditures	97,839	96,238
Earnings from operations before financial and other revenues and expenditures	40,158	35,478
Non-operating revenues	3,322	3,370
Non-operating expenditures	34,622	33,961
Earnings for the year	\$ 8,858	\$ 4,877

Schedules are presented in accordance with the NSUARB Accounting and Reporting Handbook for Water Utilities (Handbook).

HALIFAX WATER  
UNAUDITED BALANCE SHEET - CONSOLIDATED  
AS OF MARCH 31, 2017

	2017 '000	2016 '000
<b>ASSETS</b>		
Cash	\$55,879	\$46,478
Amounts Receivable	\$32,359	\$41,370
Materials & Supplies	\$1,601	\$1,684
Prepaid Expenses	\$867	\$862
	<u>\$90,705</u>	<u>\$90,394</u>
Regulatory Asset	\$3,388	\$3,580
Plant in Service	\$1,168,398	\$1,158,538
Assets Under Construction	\$28,406	\$18,529
	<u>\$1,200,192</u>	<u>\$1,180,647</u>
Unamortized Debt Discount & Issue Expense	\$1,033	\$1,155
	<u><b>\$1,291,930</b></u>	<u><b>\$1,272,196</b></u>
<b>LIABILITIES &amp; CAPITAL</b>		
Trade Payables & Accrued Liabilities	\$19,185	\$23,498
Deposits & Unearned Revenue	\$977	\$582
Current Portion of Long Term Debt	\$21,669	\$23,195
	<u>\$41,831</u>	<u>\$47,275</u>
Pension & Accrued Retirement Benefits	\$62,645	\$58,454
RDC & Special Purpose Reserves	\$14,522	\$5,679
Long Term Debt	\$204,333	\$216,949
Total Liabilities	<u>\$323,331</u>	<u>\$328,358</u>
Capital Surplus, Committed Reserves, & Accumulated OCI	\$951,922	\$936,025
Operating Surplus	\$7,819	\$2,936
Excess (Deficiency) of Revenue over Expenditure - Consolidated	\$8,858	\$4,877
Total Capital & Surplus	<u>\$968,599</u>	<u>\$943,838</u>
	<u><b>\$1,291,930</b></u>	<u><b>\$1,272,196</b></u>

**ITEM # 4**

HRWC BOARD

June 28, 2017

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**HALIFAX WATER  
UNAUDITED INCOME STATEMENT - CONSOLIDATED  
APRIL 1/16 - MARCH 31/17 (12 MONTHS)  
100.00%**

ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17	MAR 31/17	
'000	'000		'000	'000	BUDGET*	FORECAST	
\$11,519	\$11,543	OPERATING REVENUE	\$137,997	\$131,716	\$135,675	\$136,728	100.93%
\$13,594	\$9,187	OPERATING EXPENSES	\$97,839	\$96,238	\$102,424	\$96,317	101.58%
<b>(\$2,075)</b>	<b>\$2,356</b>	<b>OPERATING PROFIT</b>	<b>\$40,158</b>	<b>\$35,479</b>	<b>\$33,251</b>	<b>\$40,411</b>	<b>99.37%</b>
		<b>FINANCIAL REVENUE</b>					
\$46	\$40	INVESTMENT INCOME	\$780	\$883	\$810	\$810	96.30%
\$167	\$167	PNS FUNDING HHSP DEBT	\$2,000	\$2,000	\$2,000	\$2,000	100.00%
\$77	\$203	MISCELLANEOUS	\$542	\$487	\$504	\$504	107.50%
<b>\$289</b>	<b>\$410</b>		<b>\$3,322</b>	<b>\$3,370</b>	<b>\$3,314</b>	<b>\$3,314</b>	<b>100.24%</b>
		<b>FINANCIAL EXPENSES</b>					
\$683	\$838	LONG TERM DEBT INTEREST	\$8,475	\$8,889	\$8,872	\$8,492	99.80%
\$1,843	\$1,800	LONG TERM DEBT PRINCIPAL	\$21,320	\$20,328	\$22,652	\$21,237	100.39%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$199	\$186	\$199	\$199	99.98%
\$360	\$377	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,578	\$4,528	\$4,663	\$4,578	100.00%
\$5	\$36	MISCELLANEOUS	\$49	\$40	\$24	\$64	77.34%
<b>\$2,908</b>	<b>\$3,069</b>		<b>\$34,622</b>	<b>\$33,972</b>	<b>\$36,410</b>	<b>\$34,570</b>	<b>100.15%</b>
<b>(\$4,694)</b>	<b>(\$303)</b>	<b>NET PROFIT (LOSS) BEFORE OTHER COMPREHENSIVE INCOME</b>	<b>\$8,858</b>	<b>\$4,877</b>	<b>\$156</b>	<b>\$9,154</b>	<b>96.76%</b>
\$743	\$10,389	OTHER COMPREHENSIVE INCOME	\$743	\$10,389	\$0	\$0	
<b>(\$3,951)</b>	<b>\$10,086</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$9,601</b>	<b>\$15,266</b>	<b>\$156</b>	<b>\$9,154</b>	<b>104.88%</b>

**HALIFAX WATER  
UNAUDITED BALANCE SHEET  
AS OF MARCH 31, 2017**

	2017 '000	2016 '000
<b>ASSETS</b>		
Cash	\$55,879	\$46,478
Amounts Receivable		
Customers & Contractual	\$13,321	\$15,641
Customers & Contractual - Unbilled Services	\$17,158	\$16,171
Halifax Regional Municipality	\$1,880	\$9,558
Materials & Supplies	\$1,601	\$1,684
Prepaid Expenses	\$867	\$862
	<u>\$90,705</u>	<u>\$90,394</u>
Regulatory Asset	\$3,388	\$3,580
Plant in Service - Water	\$602,711	\$584,609
Plant in Service - Wastewater	\$714,221	\$695,930
Plant in Service - Stormwater	\$245,193	\$234,169
Less: Accumulated Depreciation - Water	(\$171,935)	(\$161,059)
Accumulated Depreciation - Wastewater	(\$182,839)	(\$162,475)
Accumulated Depreciation - Stormwater	(\$38,953)	(\$32,636)
	<u>\$1,171,787</u>	<u>\$1,162,118</u>
Assets Under Construction	\$28,406	\$18,529
	<u>\$1,200,192</u>	<u>\$1,180,647</u>
Unamortized Debt Discount & Issue Expense	\$1,033	\$1,155
	<u><u>\$1,291,930</u></u>	<u><u>\$1,272,196</u></u>
<b>LIABILITIES &amp; CAPITAL</b>		
Trade	\$16,790	\$16,686
Interest on Long Term Debt	\$2,101	\$2,229
Halifax Regional Municipality	\$295	\$4,584
Contractor & Customer Deposits	\$191	\$193
Unearned Revenue	\$786	\$389
Current Portion of Long Term Debt	\$21,669	\$23,195
	<u>\$41,831</u>	<u>\$47,275</u>
Accrued Post-Retirement Benefits	\$341	\$466
Accrued Pre-Retirement Benefit	\$3,824	\$3,723
Deferred Pension Liability	\$58,480	\$54,265
Special Purpose Reserves not allocated to projects	\$1,434	\$1,252
Regional Development Charge	\$13,088	\$4,427
Long Term Debt-Water	\$59,599	\$62,042
Long Term Debt-Wastewater	\$133,409	\$143,823
Long Term Debt-Stormwater	\$11,324	\$11,083
Total Liabilities	<u>\$323,331</u>	<u>\$328,358</u>
Capital Surplus	\$980,344	\$965,191
Committed Reserves	\$2,391	\$2,391
Accumulated Other Comprehensive Income	(\$43,193)	(\$43,936)
Operating Surplus used to Fund Capital	\$12,380	\$12,380
Operating Surplus	\$7,819	\$2,936
Excess (Deficiency) of Revenue over Expenditure - Consolidated	\$8,858	\$4,877
Total Capital & Surplus	<u>\$968,599</u>	<u>\$943,838</u>
	<u><u>\$1,291,930</u></u>	<u><u>\$1,272,196</u></u>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - ALL SERVICES**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of BUDGET*	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17	MAR 31/17		
'000	'000		'000	'000	'000	'000		
<b>REVENUE</b>								
\$3,890	\$3,600	METERED SALES - WATER	\$47,183	\$43,193	\$46,475	\$46,675	101.52%	101.09%
\$5,806	\$5,479	METERED SALES - WASTEWATER	\$69,475	\$66,601	\$68,052	\$68,652	102.09%	101.20%
\$601	\$1,226	STORMWATER SITE GENERATED SERVICE	\$6,661	\$6,713	\$6,708	\$6,708	99.29%	99.29%
\$590	\$669	FIRE PROTECTION	\$7,074	\$8,032	\$7,074	\$7,074	100.00%	100.00%
\$323	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,881	\$3,881	\$3,881	\$3,881	100.00%	100.00%
\$223	\$190	OTHER SERVICES AND FEES	\$2,831	\$2,413	\$2,586	\$2,859	109.48%	99.04%
\$58	\$31	CUSTOMER LATE PAY./COLLECTION FEES	\$522	\$499	\$530	\$510	98.59%	102.46%
\$28	\$24	MISCELLANEOUS	\$369	\$384	\$369	\$369	100.10%	100.10%
<b>\$11,519</b>	<b>\$11,543</b>		<b>\$137,997</b>	<b>\$131,716</b>	<b>\$135,675</b>	<b>\$136,728</b>	<b>101.71%</b>	<b>100.93%</b>
<b>EXPENSES</b>								
\$792	\$867	WATER SUPPLY & TREATMENT	\$7,028	\$7,543	\$7,983	\$7,658	88.04%	91.78%
\$538	\$640	TRANSMISSION & DISTRIBUTION	\$8,223	\$8,405	\$8,710	\$8,211	94.41%	100.15%
\$1,948	\$763	WASTEWATER COLLECTION	\$10,347	\$9,537	\$9,446	\$9,314	109.54%	111.10%
\$2,122	\$1,952	WASTEWATER TREATMENT PLANTS	\$17,797	\$17,421	\$19,425	\$17,979	91.62%	98.99%
\$471	\$494	STORMWATER COLLECTION	\$4,053	\$4,202	\$4,761	\$4,650	85.14%	87.17%
\$249	\$309	SMALL SYSTEMS AND OTHER SERVICES	\$3,018	\$2,945	\$3,132	\$3,026	96.36%	99.73%
\$203	\$137	SCADA, CONTROL & PUMPING	\$2,109	\$1,765	\$2,089	\$2,088	100.94%	101.00%
\$738	\$800	ENGINEERING & INFORMATION SERVICES	\$7,576	\$7,018	\$8,067	\$7,798	93.91%	97.16%
\$321	\$205	REGULATORY SERVICES	\$2,356	\$2,369	\$2,605	\$2,605	90.47%	90.44%
\$490	\$461	CUSTOMER SERVICE	\$4,431	\$4,450	\$4,419	\$4,413	100.28%	100.39%
\$3,407	(\$1,584)	ADMINISTRATION & PENSION	\$11,799	\$9,680	\$10,631	\$9,523	110.99%	123.90%
\$2,315	\$4,143	DEPRECIATION	\$19,101	\$20,904	\$21,157	\$19,053	90.28%	100.25%
<b>\$13,594</b>	<b>\$9,187</b>		<b>\$97,839</b>	<b>\$96,238</b>	<b>\$102,424</b>	<b>\$96,317</b>	<b>95.52%</b>	<b>101.58%</b>
<b>(\$2,075)</b>	<b>\$2,356</b>	<b>OPERATING PROFIT</b>	<b>\$40,158</b>	<b>\$35,479</b>	<b>\$33,251</b>	<b>\$40,411</b>	<b>120.77%</b>	<b>99.37%</b>
<b>FINANCIAL REVENUE</b>								
\$46	\$40	INVESTMENT INCOME	\$780	\$883	\$810	\$810	96.30%	96.30%
\$167	\$167	PNS FUNDING HHSP DEBT	\$2,000	\$2,000	\$2,000	\$2,000	100.00%	100.00%
\$77	\$203	MISCELLANEOUS	\$542	\$487	\$504	\$504	107.50%	107.50%
<b>\$289</b>	<b>\$410</b>		<b>\$3,322</b>	<b>\$3,370</b>	<b>\$3,314</b>	<b>\$3,314</b>	<b>100.24%</b>	<b>100.24%</b>
<b>FINANCIAL EXPENSES</b>								
\$683	\$838	LONG TERM DEBT INTEREST	\$8,475	\$8,889	\$8,872	\$8,492	95.53%	99.80%
\$1,843	\$1,800	LONG TERM DEBT PRINCIPAL	\$21,320	\$20,328	\$22,652	\$21,237	94.12%	100.39%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$199	\$186	\$199	\$199	99.98%	99.98%
\$360	\$377	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,578	\$4,528	\$4,663	\$4,578	98.19%	100.00%
\$5	\$36	MISCELLANEOUS	\$49	\$40	\$24	\$64	208.16%	77.34%
<b>\$2,908</b>	<b>\$3,069</b>		<b>\$34,622</b>	<b>\$33,972</b>	<b>\$36,410</b>	<b>\$34,570</b>	<b>95.09%</b>	<b>100.15%</b>
<b>(\$4,694)</b>	<b>(\$303)</b>	<b>NET PROFIT (LOSS) BEFORE OTHER COMPREHENSIVE INCOME</b>	<b>\$8,858</b>	<b>\$4,877</b>	<b>\$156</b>	<b>\$9,154</b>	<b>5689.91%</b>	<b>96.76%</b>
\$743	\$10,389	<b>OTHER COMPREHENSIVE INCOME</b>	\$743	\$10,389	\$0	\$0		
<b>(\$3,951)</b>	<b>\$10,086</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$9,601</b>	<b>\$15,266</b>	<b>\$156</b>	<b>\$9,154</b>	<b>6167.38%</b>	<b>104.88%</b>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - WATER OPERATIONS**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17	MAR 31/17	
'000	'000		'000	'000	BUDGET*	FORECAST	
<b>REVENUE</b>							
\$3,890	\$3,600	METERED SALES	\$47,183	\$43,193	\$46,475	\$46,675	101.09%
\$590	\$669	FIRE PROTECTION	\$7,074	\$8,032	\$7,074	\$7,074	100.00%
\$73	\$62	PRIVATE FIRE PROTECTION SERVICES	\$831	\$679	\$840	\$840	98.93%
\$15	\$10	BULK WATER STATIONS	\$330	\$265	\$326	\$326	101.18%
\$28	\$12	CUSTOMER LATE PAY./COLLECTION FEES	\$282	\$198	\$203	\$273	103.19%
\$12	\$8	MISCELLANEOUS	\$153	\$181	\$142	\$142	107.20%
<b>\$4,607</b>	<b>\$4,362</b>		<b>\$55,853</b>	<b>\$52,548</b>	<b>\$55,061</b>	<b>\$55,331</b>	<b>100.94%</b>
<b>EXPENSES</b>							
\$792	\$867	WATER SUPPLY & TREATMENT	\$7,028	\$7,543	\$7,983	\$7,658	91.78%
\$538	\$640	TRANSMISSION & DISTRIBUTION	\$8,223	\$8,405	\$8,710	\$8,211	100.15%
\$67	\$117	SMALL SYSTEMS (inc. Contract Systems)	\$1,022	\$1,080	\$883	\$964	105.97%
\$79	\$50	SCADA, CONTROL & PUMPING	\$774	\$689	\$846	\$846	91.53%
\$387	\$406	ENGINEERING & INFORMATION SERVICES	\$3,828	\$3,528	\$3,848	\$3,799	100.78%
\$71	\$47	REGULATORY SERVICES	\$493	\$505	\$515	\$515	95.58%
\$281	\$235	CUSTOMER SERVICE	\$2,290	\$2,268	\$2,251	\$2,249	101.83%
\$1,674	(\$814)	ADMINISTRATION & PENSION	\$5,966	\$4,919	\$5,416	\$4,852	122.97%
\$958	\$1,507	DEPRECIATION	\$7,756	\$8,406	\$8,561	\$7,831	99.03%
<b>\$4,847</b>	<b>\$3,054</b>		<b>\$37,379</b>	<b>\$37,343</b>	<b>\$39,013</b>	<b>\$36,925</b>	<b>101.23%</b>
<b>(\$240)</b>	<b>\$1,307</b>	<b>OPERATING PROFIT</b>	<b>\$18,474</b>	<b>\$15,205</b>	<b>\$16,048</b>	<b>\$18,407</b>	<b>100.37%</b>
<b>FINANCIAL REVENUE</b>							
\$19	\$22	INVESTMENT INCOME	\$351	\$442	\$365	\$365	96.20%
\$37	\$198	MISCELLANEOUS	\$375	\$434	\$432	\$432	86.72%
<b>\$57</b>	<b>\$220</b>		<b>\$725</b>	<b>\$876</b>	<b>\$796</b>	<b>\$796</b>	<b>91.06%</b>
<b>FINANCIAL EXPENSES</b>							
\$176	\$210	LONG TERM DEBT INTEREST	\$2,378	\$2,531	\$2,486	\$2,406	98.82%
\$732	\$705	LONG TERM DEBT PRINCIPAL	\$8,400	\$7,766	\$8,576	\$8,446	99.46%
\$8	\$8	AMORTIZATION DEBT DISCOUNT	\$95	\$90	\$100	\$100	95.03%
\$360	\$377	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,578	\$4,528	\$4,663	\$4,578	100.00%
\$6	\$25	MISCELLANEOUS	\$17	\$29	\$24	\$24	73.23%
<b>\$1,282</b>	<b>\$1,325</b>		<b>\$15,468</b>	<b>\$14,945</b>	<b>\$15,848</b>	<b>\$15,554</b>	<b>99.45%</b>
<b>(\$1,465)</b>	<b>\$202</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$3,731</b>	<b>\$1,136</b>	<b>\$996</b>	<b>\$3,649</b>	<b>102.24%</b>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - WASTEWATER OPERATIONS**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17	MAR 31/17	
'000	'000		'000	'000	BUDGET*	FORECAST	
<b>REVENUE</b>							
\$5,806	\$5,479	METERED SALES	\$69,475	\$66,601	\$68,052	\$68,652	101.20%
\$0	\$8	WASTEWATER OVERSTRENGTH AGREEMENTS	\$23	\$135	\$0	\$23	100.00%
\$43	\$39	LEACHATE	\$357	\$331	\$389	\$389	91.82%
\$9	\$8	CONTRACT REVENUE	\$83	\$93	\$86	\$86	96.99%
\$17	\$17	DEWATERING FACILITY/SLUDGE LAGOON	\$210	\$210	\$210	\$210	99.99%
\$23	\$10	AIRLINE EFFLUENT	\$89	\$51	\$86	\$86	103.62%
\$42	\$35	SEPTAGE TIPPING FEES	\$909	\$648	\$650	\$900	101.00%
\$13	\$14	CUSTOMER LATE PAY./COLLECTION FEES	\$189	\$238	\$257	\$192	98.64%
\$10	\$9	MISCELLANEOUS	\$129	\$121	\$133	\$133	96.93%
<b>\$5,964</b>	<b>\$5,621</b>		<b>\$71,463</b>	<b>\$68,428</b>	<b>\$69,862</b>	<b>\$70,669</b>	<b>101.12%</b>
<b>EXPENSES</b>							
\$1,948	\$763	WASTEWATER COLLECTION	\$10,347	\$9,537	\$9,446	\$9,314	111.10%
\$2,122	\$1,952	WASTEWATER TREATMENT PLANTS	\$17,797	\$17,421	\$19,425	\$17,979	98.99%
\$120	\$118	SMALL SYSTEMS	\$1,182	\$1,059	\$1,251	\$1,225	96.53%
\$24	\$26	DEWATERING FACILITY/ SLUDGE MGM'T	\$434	\$414	\$556	\$396	109.76%
\$0	\$12	BIOSOLIDS TREATMENT	\$71	\$102	\$101	\$101	70.02%
\$38	\$36	LEACHATE CONTRACT	\$309	\$290	\$341	\$341	90.74%
\$120	\$85	SCADA, CONTROL & PUMPING	\$1,292	\$1,041	\$1,215	\$1,215	106.34%
\$301	\$347	ENGINEERING & INFORMATION SERVICES	\$3,223	\$3,010	\$3,629	\$3,439	93.70%
\$74	\$97	REGULATORY SERVICES	\$1,095	\$1,134	\$1,254	\$1,225	89.39%
\$179	\$194	CUSTOMER SERVICE	\$1,842	\$1,877	\$1,864	\$1,862	98.91%
\$1,491	(\$662)	ADMINISTRATION & PENSION	\$5,017	\$4,095	\$4,485	\$4,017	124.88%
\$1,220	\$2,537	DEPRECIATION	\$10,669	\$11,975	\$11,982	\$10,607	100.58%
<b>\$7,638</b>	<b>\$5,504</b>		<b>\$53,278</b>	<b>\$51,954</b>	<b>\$55,549</b>	<b>\$51,720</b>	<b>103.01%</b>
<b>(\$1,675 )</b>	<b>\$117</b>	<b>OPERATING PROFIT</b>	<b>\$18,185</b>	<b>\$16,474</b>	<b>\$14,312</b>	<b>\$18,949</b>	<b>95.97%</b>
<b>FINANCIAL REVENUE</b>							
\$20	\$18	INVESTMENT INCOME	\$351	\$441	\$365	\$365	96.33%
\$167	\$167	PNS FUNDING HHSP DEBT	\$2,000	\$2,000	\$2,000	\$2,000	100.00%
\$40	\$5	MISCELLANEOUS	\$168	\$54	\$72	\$72	231.60%
<b>\$226</b>	<b>\$190</b>		<b>\$2,519</b>	<b>\$2,494</b>	<b>\$2,437</b>	<b>\$2,437</b>	<b>103.36%</b>
<b>FINANCIAL EXPENSES</b>							
\$457	\$577	LONG TERM DEBT INTEREST	\$5,509	\$5,786	\$5,817	\$5,517	99.87%
\$469	\$993	LONG TERM DEBT PRINCIPAL	\$11,699	\$11,462	\$12,978	\$11,693	100.05%
\$8	\$8	AMORTIZATION DEBT DISCOUNT	\$95	\$89	\$89	\$89	107.03%
(\$0)	\$11	MISCELLANEOUS	\$32	\$11	\$0	\$40	79.76%
<b>\$933</b>	<b>\$1,589</b>		<b>\$17,335</b>	<b>\$17,348</b>	<b>\$18,884</b>	<b>\$17,339</b>	<b>99.98%</b>
<b>(\$2,382 )</b>	<b>(\$1,283 )</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$3,369</b>	<b>\$1,621</b>	<b>(\$2,135 )</b>	<b>\$4,047</b>	<b>83.24%</b>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - STORMWATER OPERATIONS**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17 BUDGET*	MAR 31/17 FORECAST	
'000	'000		'000	'000	'000	'000	
<b>REVENUE</b>							
\$601	\$1,226	STORMWATER SITE GENERATED SERVICE	\$6,661	\$6,713	\$6,708	\$6,708	99.29%
\$323	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,881	\$3,881	\$3,881	\$3,881	100.00%
\$17	\$4	CUSTOMER LATE PAY./COLLECTION FEES	\$51	\$63	\$70	\$45	114.46%
\$6	\$7	MISCELLANEOUS	\$88	\$82	\$93	\$93	93.79%
<b>\$948</b>	<b>\$1,560</b>		<b>\$10,681</b>	<b>\$10,740</b>	<b>\$10,753</b>	<b>\$10,728</b>	<b>99.56%</b>
<b>EXPENSES</b>							
\$471	\$494	STORMWATER COLLECTION	\$4,053	\$4,202	\$4,761	\$4,650	87.17%
\$4	\$3	SCADA, CONTROL & PUMPING	\$43	\$34	\$28	\$28	155.52%
\$49	\$47	ENGINEERING & INFORMATION SERVICES	\$525	\$480	\$590	\$560	93.82%
\$177	\$62	REGULATORY SERVICES	\$768	\$729	\$835	\$865	88.87%
\$29	\$32	CUSTOMER SERVICE	\$300	\$305	\$303	\$303	98.91%
\$243	(\$108)	ADMINISTRATION & PENSION	\$816	\$666	\$729	\$653	124.88%
\$136	\$99	DEPRECIATION	\$677	\$523	\$614	\$614	110.18%
<b>\$1,109</b>	<b>\$628</b>		<b>\$7,182</b>	<b>\$6,941</b>	<b>\$7,862</b>	<b>\$7,672</b>	<b>93.61%</b>
<b>(\$161)</b>	<b>\$932</b>	<b>OPERATING PROFIT</b>	<b>\$3,499</b>	<b>\$3,799</b>	<b>\$2,891</b>	<b>\$3,055</b>	<b>114.52%</b>
<b>FINANCIAL REVENUE</b>							
\$7	\$0	INVESTMENT INCOME	\$78	\$0	\$81	\$81	96.62%
\$0	\$0	MISCELLANEOUS	\$0	\$0	\$0	\$0	0.00%
<b>\$7</b>	<b>\$0</b>		<b>\$78</b>	<b>\$0</b>	<b>\$81</b>	<b>\$81</b>	<b>96.62%</b>
<b>FINANCIAL EXPENSES</b>							
\$50	\$52	LONG TERM DEBT INTEREST	\$588	\$571	\$569	\$569	103.29%
\$643	\$102	LONG TERM DEBT PRINCIPAL	\$1,221	\$1,100	\$1,098	\$1,098	111.24%
\$1	\$1	AMORTIZATION DEBT DISCOUNT	\$9	\$8	\$11	\$11	87.56%
<b>\$693</b>	<b>\$154</b>		<b>\$1,818</b>	<b>\$1,679</b>	<b>\$1,678</b>	<b>\$1,678</b>	<b>108.39%</b>
<b>(\$848)</b>	<b>\$778</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$1,759</b>	<b>\$2,120</b>	<b>\$1,294</b>	<b>\$1,459</b>	<b>120.57%</b>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - REGULATED AND UNREGULATED OPERATIONS**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16 MAR 31/17 BUDGET*	APR 1/16 MAR 31/17 FORECAST	% of FORECAST
	THIS YEAR	LAST YEAR			
<b>REGULATED ACTIVITIES</b>					
<b>REVENUE</b>					
METERED SALES	\$123,319	\$116,507	\$121,235	\$122,035	101.05%
FIRE PROTECTION	\$7,074	\$8,032	\$7,074	\$7,074	100.00%
PRIVATE FIRE PROTECTION	\$831	\$679	\$840	\$840	98.93%
STORMWATER SERVICE	\$3,881	\$3,881	\$3,881	\$3,881	100.00%
OTHER OPERATING REVENUE	\$1,207	\$1,262	\$1,203	\$1,205	100.12%
	<b>\$136,312</b>	<b>\$130,361</b>	<b>\$134,234</b>	<b>\$135,036</b>	<b>100.94%</b>
<b>EXPENSES</b>					
WATER SUPPLY & TREATMENT	\$7,028	\$7,543	\$7,983	\$7,658	91.78%
TRANSMISSION & DISTRIBUTION	\$8,223	\$8,405	\$8,710	\$8,211	100.15%
WASTEWATER & STORMWATER COLLECTION	\$14,385	\$13,723	\$14,207	\$13,964	103.01%
WASTEWATER TREATMENT PLANTS	\$17,797	\$17,421	\$19,425	\$17,979	98.99%
SMALL SYSTEMS	\$2,188	\$2,129	\$2,116	\$2,170	100.81%
SCADA, CONTROL & PUMPING	\$2,109	\$1,765	\$2,089	\$2,088	101.00%
ENGINEERING & INFORMATION SERVICES	\$7,576	\$7,018	\$8,067	\$7,798	97.16%
REGULATORY SERVICES	\$2,356	\$2,369	\$2,605	\$2,605	90.44%
CUSTOMER SERVICE	\$4,396	\$4,415	\$4,384	\$4,378	100.40%
ADMINISTRATION & PENSION	\$11,768	\$9,660	\$10,610	\$9,502	123.85%
DEPRECIATION	\$19,095	\$20,898	\$21,157	\$19,053	100.22%
	<b>\$96,922</b>	<b>\$95,345</b>	<b>\$101,352</b>	<b>\$95,406</b>	<b>101.59%</b>
<b>FINANCIAL REVENUE</b>					
INVESTMENT INCOME	\$780	\$883	\$810	\$810	96.30%
MISCELLANEOUS	\$2,289	\$2,055	\$2,125	\$2,125	107.70%
	<b>\$3,069</b>	<b>\$2,938</b>	<b>\$2,935</b>	<b>\$2,935</b>	<b>104.56%</b>
<b>FINANCIAL EXPENSES</b>					
LONG TERM DEBT INTEREST	\$8,475	\$8,889	\$8,872	\$8,492	99.80%
LONG TERM DEBT PRINCIPAL	\$21,320	\$20,328	\$22,652	\$21,237	100.39%
AMORTIZATION DEBT DISCOUNT	\$199	\$186	\$199	\$199	99.98%
DIVIDEND/GRANT IN LIEU OF TAXES	\$4,578	\$4,528	\$4,663	\$4,578	100.00%
MISCELLANEOUS	\$0	\$0	\$0	\$0	0.00%
	<b>\$34,573</b>	<b>\$33,932</b>	<b>\$36,386</b>	<b>\$34,507</b>	<b>100.19%</b>
<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$7,887</b>	<b>\$4,022</b>	<b>(\$570 )</b>	<b>\$8,058</b>	<b>97.87%</b>
<b>UNREGULATED ACTIVITIES</b>					
<b>REVENUE</b>					
SEPTAGE TIPPING FEES	\$909	\$648	\$650	\$900	101.00%
LEACHATE	\$357	\$331	\$389	\$389	91.82%
CONTRACT REVENUE	\$83	\$93	\$86	\$86	96.99%
DEWATERING	\$210	\$210	\$210	\$210	99.99%
AIRLINE EFFLUENT	\$89	\$51	\$86	\$86	103.62%
ENERGY PROJECTS	\$159	\$198	\$184	\$184	86.43%
MISCELLANEOUS	\$37	\$21	\$22	\$22	171.00%
	<b>\$1,843</b>	<b>\$1,553</b>	<b>\$1,625</b>	<b>\$1,875</b>	<b>98.30%</b>
<b>EXPENSES</b>					
WATER SUPPLY & TREATMENT	\$16	\$10	\$18	\$18	86.46%
WASTEWATER TREATMENT	\$830	\$822	\$998	\$837	99.10%
MISCELLANEOUS	\$45	\$13	\$37	\$37	120.85%
SPONSORSHIPS & DONATIONS	\$66	\$55	\$56	\$56	118.73%
DEPRECIATION	\$6	\$6	\$0	\$0	0.00%
	<b>\$962</b>	<b>\$906</b>	<b>\$1,109</b>	<b>\$948</b>	<b>101.47%</b>
<b>FINANCIAL REVENUE</b>					
MISCELLANEOUS	\$139	\$248	\$232	\$232	59.91%
	<b>\$139</b>	<b>\$248</b>	<b>\$232</b>	<b>\$232</b>	<b>59.91%</b>
<b>FINANCIAL EXPENSES</b>					
MISCELLANEOUS	\$49	\$40	\$24	\$64	77.34%
	<b>\$49</b>	<b>\$40</b>	<b>\$24</b>	<b>\$64</b>	<b>77.34%</b>
<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$971</b>	<b>\$855</b>	<b>\$726</b>	<b>\$1,096</b>	<b>88.64%</b>
<b>NET PROFIT (LOSS) AVAILABLE FOR TOTAL CAPITAL EXPENDITURES (REG &amp; UNREG)</b>	<b>\$8,858</b>	<b>\$4,877</b>	<b>\$156</b>	<b>\$9,154</b>	<b>96.76%</b>

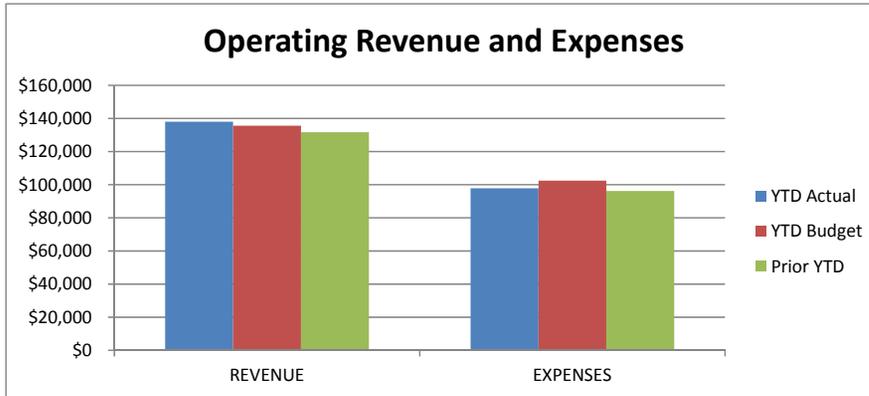
**HALIFAX WATER**  
**UNAUDITED BALANCE SHEET - IFRS FORMAT**  
**AS OF MARCH 31, 2017**

	2017 '000	2016 '000
<b>ASSETS</b>		
Cash	\$55,879	\$46,478
Amounts Receivable		
Customers & Contractual	\$13,321	\$15,641
Customers & Contractual - Unbilled Services	\$17,158	\$16,171
Halifax Regional Municipality	\$1,880	\$9,558
Materials & Supplies	\$1,601	\$1,684
Prepaid Expenses	\$867	\$862
	<u>\$90,705</u>	<u>\$90,394</u>
Regulatory Asset	\$3,388	\$3,580
Plant in Service - Water	\$602,711	\$584,609
Plant in Service - Wastewater	\$714,221	\$695,930
Plant in Service - Stormwater	\$245,193	\$234,169
Less: Accumulated Depreciation - Water	(\$178,449)	(\$165,856)
Accumulated Depreciation - Wastewater	(\$190,294)	(\$166,359)
Accumulated Depreciation - Stormwater	(\$38,953)	(\$32,636)
	<u>\$1,157,817</u>	<u>\$1,153,438</u>
Assets Under Construction	\$28,406	\$18,529
	<u>\$1,186,223</u>	<u>\$1,171,966</u>
Unamortized Debt Discount & Issue Expense	\$1,033	\$1,155
	<u><b>\$1,277,961</b></u>	<u><b>\$1,263,515</b></u>
<b>LIABILITIES</b>		
Trade	\$16,790	\$16,686
Interest on Long Term Debt	\$2,101	\$2,229
Halifax Regional Municipality	\$295	\$4,584
Contractor & Customer Deposits	\$191	\$193
Unearned Revenue	\$786	\$389
Current Portion of Deferred Contributed Capital	\$12,889	\$12,526
Current Portion of Long Term Debt	\$21,669	\$23,195
	<u>\$54,720</u>	<u>\$59,801</u>
Accrued Post-Retirement Benefits	\$341	\$466
Accrued Pre-Retirement Benefit	\$3,824	\$3,723
Deferred Pension Liability	\$58,480	\$54,265
Deferred Contributed Capital	\$808,633	\$804,641
Long Term Debt-Water	\$59,599	\$62,042
Long Term Debt-Wastewater	\$133,409	\$143,823
Long Term Debt-Stormwater	\$11,324	\$11,083
Total Liabilities	<u>\$1,130,331</u>	<u>\$1,139,846</u>
<b>EQUITY</b>		
Accumulated Other Comprehensive Income	(\$43,193)	(\$43,936)
Accumulated Surplus	\$167,607	\$144,654
Excess (Deficiency) of Revenue over Expenditure	\$23,216	\$22,952
Total Equity	<u>\$147,630</u>	<u>\$123,670</u>
	<u><b>\$1,277,961</b></u>	<u><b>\$1,263,515</b></u>

**HALIFAX WATER**  
**UNAUDITED INCOME STATEMENT - IFRS FORMAT - ALL SERVICES**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**100.00%**

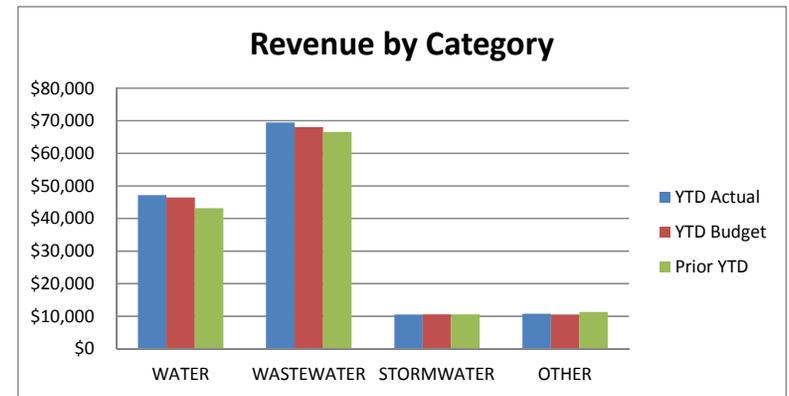
ACTUAL (CURRENT MONTH)		DESCRIPTION	ACTUAL (YEAR TO DATE)		APR 1/16	APR 1/16	% of BUDGET*	% of FORECAST
THIS YEAR	LAST YEAR		THIS YEAR	LAST YEAR	MAR 31/17	MAR 31/17		
'000	'000		'000	'000	BUDGET*	'000		
<b>REVENUE</b>								
\$3,890	\$3,600	METERED SALES - WATER	\$47,183	\$43,193	\$46,475	\$46,675	101.52%	101.09%
\$5,806	\$5,479	METERED SALES - WASTEWATER	\$69,475	\$66,601	\$68,052	\$68,652	102.09%	101.20%
\$601	\$1,226	STORMWATER SITE GENERATED SERVICE	\$6,661	\$6,713	\$6,708	\$6,708	99.29%	99.29%
\$590	\$669	FIRE PROTECTION	\$7,074	\$8,032	\$7,074	\$7,074	100.00%	100.00%
\$323	\$323	STORMWATER RIGHT OF WAY SERVICE	\$3,881	\$3,881	\$3,881	\$3,881	100.00%	100.00%
\$223	\$190	OTHER SERVICES AND FEES	\$2,831	\$2,413	\$2,586	\$2,859	109.48%	99.04%
\$58	\$31	CUSTOMER LATE PAY./COLLECTION FEES	\$522	\$499	\$530	\$510	98.59%	102.46%
\$28	\$24	MISCELLANEOUS	\$369	\$384	\$369	\$369	100.10%	100.10%
<b>\$11,519</b>	<b>\$11,543</b>		<b>\$137,997</b>	<b>\$131,716</b>	<b>\$135,675</b>	<b>\$136,728</b>	<b>101.71%</b>	<b>100.93%</b>
<b>EXPENSES</b>								
\$792	\$867	WATER SUPPLY & TREATMENT	\$7,028	\$7,543	\$7,983	\$7,658	88.04%	91.78%
\$538	\$640	TRANSMISSION & DISTRIBUTION	\$8,223	\$8,405	\$8,710	\$8,211	94.41%	100.15%
\$1,948	\$763	WASTEWATER COLLECTION	\$10,347	\$9,537	\$9,446	\$9,314	109.54%	111.10%
\$2,122	\$1,952	WASTEWATER TREATMENT PLANTS	\$17,797	\$17,421	\$19,425	\$17,979	91.62%	98.99%
\$471	\$494	STORMWATER COLLECTION	\$4,053	\$4,202	\$4,761	\$4,650	85.14%	87.17%
\$249	\$309	SMALL SYSTEMS AND OTHER SERVICES	\$3,018	\$2,945	\$3,132	\$3,026	96.36%	99.73%
\$203	\$137	SCADA, CONTROL & PUMPING	\$2,109	\$1,765	\$2,089	\$2,088	100.94%	101.00%
\$738	\$800	ENGINEERING & INFORMATION SERVICES	\$7,576	\$7,018	\$8,067	\$7,798	93.91%	97.16%
\$321	\$205	REGULATORY SERVICES	\$2,356	\$2,369	\$2,605	\$2,605	90.47%	90.44%
\$490	\$461	CUSTOMER SERVICE	\$4,431	\$4,450	\$4,419	\$4,413	100.28%	100.39%
\$3,407	(\$1,584)	ADMINISTRATION & PENSION	\$11,799	\$9,680	\$10,631	\$9,523	110.99%	123.90%
\$8,374	\$10,440	DEPRECIATION	\$43,625	\$40,446	\$21,157	\$33,682	206.19%	129.52%
<b>\$19,653</b>	<b>\$15,484</b>		<b>\$122,363</b>	<b>\$115,780</b>	<b>\$102,424</b>	<b>\$110,947</b>	<b>119.47%</b>	<b>110.29%</b>
<b>(\$8,134)</b>	<b>(\$3,941)</b>	<b>OPERATING PROFIT</b>	<b>\$15,634</b>	<b>\$15,936</b>	<b>\$33,251</b>	<b>\$25,781</b>	<b>47.02%</b>	<b>60.64%</b>
<b>FINANCIAL REVENUE</b>								
\$46	\$40	INVESTMENT INCOME	\$780	\$883	\$810	\$810	96.30%	96.30%
\$167	\$167	PNS FUNDING HHSP DEBT	\$2,000	\$2,000	\$2,000	\$2,000	100.00%	100.00%
\$5,274	\$6,225	MISCELLANEOUS	\$18,521	\$17,934	\$504	\$13,029	3672.95%	142.15%
<b>\$5,487</b>	<b>\$6,432</b>		<b>\$21,302</b>	<b>\$20,817</b>	<b>\$3,314</b>	<b>\$15,839</b>	<b>642.72%</b>	<b>134.49%</b>
<b>FINANCIAL EXPENSES</b>								
\$683	\$838	LONG TERM DEBT INTEREST	\$8,475	\$8,889	\$8,872	\$8,492	95.53%	99.80%
\$17	\$17	AMORTIZATION DEBT DISCOUNT	\$199	\$186	\$199	\$199	99.98%	99.98%
\$360	\$377	DIVIDEND/GRANT IN LIEU OF TAXES	\$4,578	\$4,528	\$4,663	\$4,578	98.19%	100.00%
\$550	\$194	MISCELLANEOUS	\$466	\$198	\$24	\$64	1971.94%	732.62%
<b>\$1,609</b>	<b>\$1,426</b>		<b>\$13,719</b>	<b>\$13,801</b>	<b>\$13,758</b>	<b>\$13,334</b>	<b>99.72%</b>	<b>102.89%</b>
<b>(\$4,257)</b>	<b>\$1,065</b>	<b>NET PROFIT (LOSS) BEFORE OTHER COMPREHENSIVE INCOME</b>	<b>\$23,216</b>	<b>\$22,952</b>	<b>\$22,807</b>	<b>\$28,287</b>	<b>101.79%</b>	<b>82.07%</b>
\$743	\$10,389	<b>OTHER COMPREHENSIVE INCOME</b>	\$743	\$10,389	\$0	\$0	0.00%	0.00%
<b>(\$3,514)</b>	<b>\$11,454</b>	<b>NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES</b>	<b>\$23,960</b>	<b>\$33,341</b>	<b>\$22,807</b>	<b>\$28,287</b>	<b>105.05%</b>	<b>84.70%</b>

**HALIFAX WATER**  
**UNAUDITED FINANCIAL INFORMATION**  
**APRIL 1/16 - MARCH 31/17 (12 MONTHS)**  
**'000**



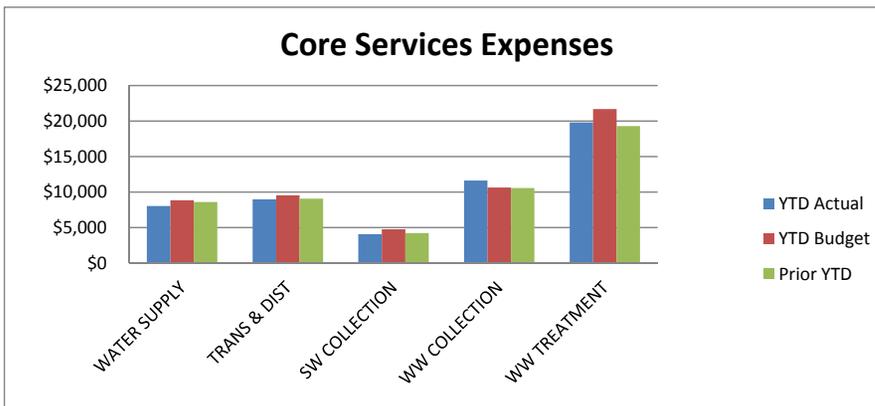
**OPERATING REVENUE AND EXPENSES**

	YTD Actual	YTD Budget	Prior YTD	% of Budget
REVENUE	\$137,997	\$135,675	\$131,716	101.71%
EXPENSES	\$97,839	\$102,424	\$96,238	95.52%
	<b>\$40,158</b>	<b>\$33,251</b>	<b>\$35,479</b>	<b>120.77%</b>



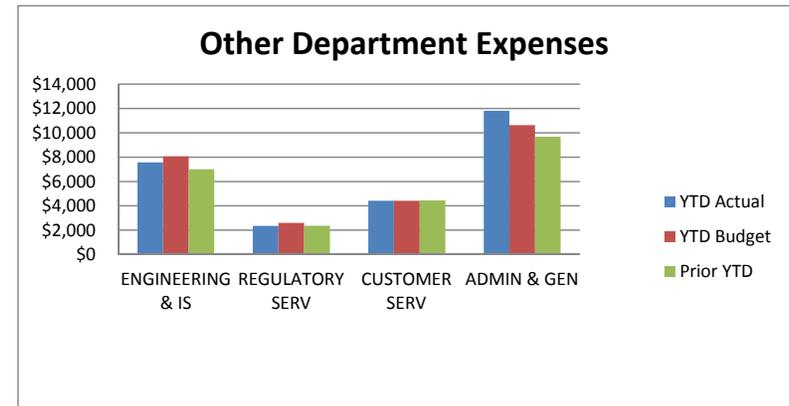
**REVENUE BY CATEGORY**

	YTD Actual	YTD Budget	Prior YTD
WATER	\$47,183	\$46,475	\$43,193
WASTEWATER	\$69,475	\$68,052	\$66,601
STORMWATER	\$10,542	\$10,590	\$10,595
OTHER	\$10,797	\$10,559	\$11,328
	<b>\$137,997</b>	<b>\$135,675</b>	<b>\$131,716</b>



**CORE SERVICES EXPENSES**

	YTD Actual	YTD Budget	Prior YTD	% of Budget
WATER SUPPLY	\$8,050	\$8,866	\$8,623	90.79%
TRANS & DIST	\$8,997	\$9,556	\$9,094	94.15%
SW COLLECTION	\$4,097	\$4,789	\$4,237	85.54%
WW COLLECTION	\$11,639	\$10,661	\$10,578	109.17%
WW TREATMENT	\$19,794	\$21,674	\$19,285	91.33%
	<b>\$52,576</b>	<b>\$55,546</b>	<b>\$51,817</b>	<b>94.65%</b>



**OTHER DEPARTMENT EXPENSES**

	YTD Actual	YTD Budget	Prior YTD
ENGINEERING & IS	\$7,576	\$8,067	\$7,018
REGULATORY SERV	\$2,356	\$2,605	\$2,369
CUSTOMER SERV	\$4,431	\$4,419	\$4,450
ADMIN & GEN	\$11,799	\$10,631	\$9,680
	<b>\$26,162</b>	<b>\$25,721</b>	<b>\$23,517</b>

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

**SUBMITTED BY:** *Original Signed By:*  
\_\_\_\_\_  
Allan Campbell, B.Comm, CPA, CMA, Manager, Finance  
Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

**APPROVED:** *Original Signed By:*  
\_\_\_\_\_  
Carl Yates, M.A.Sc., P.Eng., General Manager

**DATE:** June 16, 2017

**SUBJECT:** **Halifax Regional Water Commission Employees' Pension Plan  
Financial Statements for the Year Ended December 31, 2016**

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### **ORIGIN**

The Halifax Regional Water Commission Employees' Pension Plan financial statements are audited annually.

### **RECOMMENDATION**

It is recommended that the Commission Board approve the audited financial statements for the Halifax Regional Water Commission Employees' Pension Plan (the "Plan") for the year ended December 31, 2016.

### **BACKGROUND**

Annually, the Plan's financial statements are prepared by staff and audited by the Commission's auditors, currently Grant Thornton, LLP.

### **DISCUSSION**

Attached are the audited financial statements of the Plan for the year ended December 31, 2016 with comparative figures for 2015. Page numbers or note references in this report refer to the audited financial statements.

The auditor’s report on Page 1 indicates that the financial statements present fairly, in all material respects, the financial position of the Plan as at December 31, 2016, the changes in net assets available for benefits, and changes in pension obligations in accordance with Canadian accounting standards for pension plans.

The Statement of Financial Position for the Plan is reported on page 2 of the financial statements, and the highlights are summarized in Table 1 below. The deficiency as at December 31, 2016 compares favourably to the prior year, decreasing from \$7.6 million to \$7.0 million, a change of \$0.6 million or 8.4%. This favourable result is due to higher reported values at year-end for net assets available for benefits compared to pension obligations. Net assets available for benefits as at December 31, 2016 amounted to \$107.1 million compared \$100.4 million the prior year, an increase of \$6.6 million or 6.6%. Pension obligations increased \$6.0 million or 5.5% to \$114.0 million as at December 31, 2016, up from \$108.1 million in 2015.

**Table 1:**

Statement of financial position December 31				
	2016	2015	Change	
			\$	%
Net assets available for benefits (note 4)	\$107,067,996	\$100,434,444	\$6,633,552	6.6%
Pension obligations (note 5)	\$114,046,900	\$108,055,300	\$5,991,600	5.5%
Deficiency	(\$6,978,904)	(\$7,620,856)	\$641,952	-8.4%

The Statement of Changes in Net Assets Available for Benefits are reported on page 3 of the financial statements, with highlights summarized in Table 2 below. Net assets available for benefits show a reduction of \$7.3 million or 52.4% compared to 2015, decreasing from \$14.0 million to \$6.6 million as at December 31, 2016. There was a decline in reported net revenue for 2016 of \$4.0 million or 78.9% compared to the prior year, attributed to a combination of lower revenue and higher expenses. The lower revenue had the biggest impact, seeing reported revenue drop to \$6.3 million in 2016 from \$9.5 million the prior year, a change of \$3.2 million or 33.4%. Assets of the Plan are invested as part of the Halifax Regional Municipality Master Trust, and represent 6.0% (2015, 5.9%) of the Master Trust’s assets. The gross fund rate for 2016 was 5.5% (2015, 10.6%), and the net fund rate after expenses was 5.1% (2015, 9.9%). Lower returns experienced in 2016 by the Master Trust would explain the drop in revenue compared to 2015, especially with respect to changes in the fair value of the investment assets. In the first quarter of 2017 the Master Trust’s return was 3.1%, which outperformed the policy benchmark by 0.1%.

It was noted above expenses contributed to lowering the net assets available for benefits in 2016. Expenses are mainly driven by benefit payments, and during 2016 expenses rose to \$5.2 million compared to \$4.5 million the previous year, an increase of \$0.8 million or 17.6%.

**Table 2:**

Statement of changes in net assets available for benefits				
December 31				
	2016	2015	Change	
			\$	%
Revenue	\$6,306,713	\$9,475,207	(\$3,168,494)	-33.4%
Expenses	\$5,248,400	\$4,464,530	\$783,870	17.6%
Increase in Net Revenue	\$1,058,313	\$5,010,677	(\$3,952,364)	-78.9%
Contributions (note 7)	\$5,575,239	\$8,947,679	(\$3,372,440)	-37.7%
Increase in net assets available for benefits	\$6,633,553	\$13,958,356	(\$7,324,803)	-52.5%

Contributions during 2016 were lower compared to 2015 by \$3.4 million or 37.7%, which further contributed to the decrease in net assets available for benefits. This reduction was expected since the actuarial valuation of January 1, 2016 established lower current service contributions required by the employer and employee, and also a reduction in special payments by the employer relating to the unfunded liability. Further details regarding net assets available for benefits can be found on page 3 and Note 4 (page 12) of the financial statements.

The statement of changes in pension obligations is reported on page 4 of the financial statements, and summarized in Table 3 below. Pension obligations increased to \$114.0 million in 2016 compared to \$108.1 million the prior year, an increase of \$6.0 million or 5.5%. The year-over-year variance is primarily due to the actuarial valuation performed as at January 1, 2016. This valuation included a number of changes which effectively lowered the pension obligation significantly, including changes in the Plan design and actuarial assumptions. The next actuarial valuation must be performed on or before January 1, 2019.

In looking at the current year, the increase in the pension obligations amounted to \$11.0 million, and were driven by increased costs for interest accrued on benefits and benefits accrued in the amount of \$6.3 million and \$4.8 million respectively. Interest rates continue to be low, which increases liabilities. This cost is reflected in the \$0.2 million increase in interest accrued on benefits over the prior year. Further details with respect to pension obligations can be found on page 4 and Note 5 (page 12) of the financial statements.

Reductions associated with the pension obligation totaled \$5.0 million, and are directly related to benefits payments made during 2016. Details related to benefit payments can be found in Note 8 (page 13) of the financial statements.

**Table 3:**

Statement of changes in pension obligations December 31				
	2016	2015	Change	
			\$	%
Pension obligations, beginning of year	\$108,055,300	\$109,009,100	(\$953,800)	-0.9%
Changes in actuarial assumptions	\$0	(\$6,488,300)	\$6,488,300	n/a
Impact of Pension Plan changes	\$0	(\$2,029,000)	\$2,029,000	n/a
Miscellaneous sources of decrease	\$0	(\$231,500)	\$231,500	n/a
Interest accrued on benefits	\$6,259,500	\$6,043,000	\$216,500	3.6%
Benefits accrued	\$4,770,802	\$6,020,000	(\$1,249,198)	-20.8%
Benefits paid (note 8)	(\$5,038,702)	(\$4,268,000)	(\$770,702)	18.1%
	<u>\$5,991,600</u>	<u>(\$953,800)</u>	<u>\$6,945,400</u>	<u>-728.2%</u>
Pension obligations, end of year	<u>\$114,046,900</u>	<u>\$108,055,300</u>	<u>\$5,991,600</u>	<u>5.5%</u>

Additional notes in the financial statements include line-by-line comparisons of various categories. Table 4 below is a summary of each category, and details are provided for Notes 6 through 9 inclusive of the financial statements.

**Table 4:**

Summary of various categories December 31				
	2016	2015	Change	
			\$	%
Net investment income (note 6)	\$2,250,455	\$2,161,624	\$88,831	4.1%
Contributions (note 7)*	\$5,575,239	\$8,947,679	(\$3,372,440)	-37.7%
Benefit payments (note 8)	\$5,038,702	\$4,268,029	\$770,673	18.1%
Administrative expenses (note 9)	\$209,699	\$196,501	\$13,198	6.7%
* Employees' Contributions	\$2,484,448	\$2,655,143	(\$170,695)	-6.4%
Reciprocal Transfer Agreements	\$0	\$598,383	(\$598,383)	-100.0%
Employer's Contributions	\$3,090,791	\$5,694,153	(\$2,603,362)	-45.7%
	\$5,575,239	\$8,947,679	(\$3,372,440)	-37.7%

Note 6 (page 13) of the financial statements reports income from investment funds, as well as investment manager fees. The fees have decreased by \$49.6 thousand or 26.3% over the prior year and income has increased by \$39.2 thousand or 1.7%, for a net investment income increase of \$88.8 thousand.

Note 7 (page 13) shows contribution details from employees and the employer. As mentioned above, total contributions for 2016 decreased by \$3.4 million or 37.7% compared to 2015, and this reduction was attributed to:

- Special payments made by the employer relating to the unfunded liability which was reduced to \$0.8 million per annum in 2016 compared to \$3.0 million per annum in 2015 (as per the actuarial valuation);
- The percentage contributed by employees and the employer for current service contributions was reduced effective January 1, 2016. Employer contributions were lowered to 9.85% from 12.95%, and employees experienced a similar reduction from 12.95% to 10.65% (as per the actuarial valuation); and
- There were no reciprocal transfers into the Plan in 2016.

Note 8 (page 13) details the benefit payments, with total expenditures increasing by \$0.8 million or 18.1% in 2016 compared to the prior year. Of this increase, \$0.3 million was associated to retirement benefit payments, and death benefit payments in the amount of \$0.5 million.

Note 9 (page 14) outlines all expense categories, which reports a net increase in total expenditures of \$13.2 thousand or 6.7% compared to 2015. Most categories are comparable to 2015 with the exception of actuarial and consulting, audit and accounting, and professional fees. Actuarial and consulting fees were lower by \$5.6 thousand, which was expected considering in 2015 other specialized work was performed by the actuaries related to the labour disruption. Audit and accounting fees were understated in 2015 as a result of an expense adjustment of a prior year. Professional fees are allocated trust expenditures which experienced a decrease of \$5.5 thousand in 2016.

No solvency funding is required as the Plan obtained a solvency funding exemption effective June 1, 2015. Currently the ratio of solvency assets to solvency liabilities is greater than the “solvency concerns” threshold of 85%, under Nova Scotia pension legislation. Should the solvency ratio fall below the 85% threshold, the Plan would be required to file a valuation within one (1) year rather than the usual three (3) year period.

### **BUDGET IMPLICATIONS**

There are no budget implications associated with the audited financial statements of the pension plan. Budget implications arise from the Actuarial Valuations.

### **ALTERNATIVES**

None

### **ATTACHMENT**

Halifax Regional Water Commission Employees’ Pension Plan Financial Statements as at December 31, 2016

Financial Statements

Halifax Regional Water Commission

Employees' Pension Plan

December 31, 2016

DRAFT

## Contents

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**Halifax Regional Water Commission  
Employees' Pension Plan  
Statement of financial position**

December 31	2016	2015
<b>Assets</b>		
Investment assets (note 3)	\$ 107,043,865	\$ 100,407,501
Contributions receivable	<u>40,166</u>	<u>59,371</u>
	<b>107,084,031</b>	<b>100,466,872</b>
<b>Liabilities</b>		
Payables and accruals		
Trade	<u>16,035</u>	<u>32,428</u>
Net assets available for benefits (note 4)	<b>107,067,996</b>	100,434,444
Pension obligations (page 4)	<u>114,046,900</u>	<u>108,055,300</u>
Deficiency	<b>\$ (6,978,904)</b>	<b>\$ (7,620,856)</b>

On behalf of the Board

\_\_\_\_\_  
Trustee

\_\_\_\_\_  
Trustee

See accompanying notes to the financial statements.

**Halifax Regional Water Commission**  
**Employees' Pension Plan**  
**Statement of changes in net assets available for benefits**

Year Ended December 31 2016 2015

Revenue		
Net investment income (note 6)	\$ 2,250,455	\$ 2,161,624
Changes in the fair value of investment assets	<u>4,056,258</u>	<u>7,313,583</u>
	<u>6,306,713</u>	<u>9,475,207</u>
Contributions (note 7)		
Participants	2,484,448	3,253,526
Sponsor	<u>3,090,791</u>	<u>5,694,153</u>
	<u>5,575,239</u>	<u>8,947,679</u>
Expenses		
Benefit payments (note 8)	5,038,702	4,268,029
Administrative (note 9)	<u>209,698</u>	<u>196,501</u>
	<u>5,248,400</u>	<u>4,464,530</u>
Increase in net assets available for benefits	<u>\$ 6,633,552</u>	<u>\$ 13,958,356</u>
<hr/>		
Net assets available for benefits, beginning of year	\$ 100,434,444	\$ 86,476,088
Increase in net assets available for benefits	<u>6,633,552</u>	<u>13,958,356</u>
Net assets available for benefits, end of year	<u>\$ 107,067,996</u>	<u>\$ 100,434,444</u>

See accompanying notes to the financial statements.

**Halifax Regional Water Commission  
Employees' Pension Plan  
Statement of changes in pension obligations**

Year Ended December 31	2016	2015
Pension obligations, beginning of year	<u>\$ 108,055,300</u>	<u>\$ 109,009,100</u>
Change in pension obligations		
Changes in actuarial assumptions (note 5)	-	(6,488,300)
Impact of Pension Plan changes	-	(2,029,000)
Miscellaneous sources of decrease	-	(231,500)
Interest accrued on benefits	<b>6,259,500</b>	6,043,000
Benefits accrued	<b>4,770,802</b>	6,020,000
Benefits paid (note 8)	<u><b>(5,038,702)</b></u>	<u>(4,268,000)</u>
	<u><b>5,991,600</b></u>	<u>(953,800)</u>
Pension obligations, end of year	<u><b>\$ 114,046,900</b></u>	<u><b>\$ 108,055,300</b></u>

DRAFT

See accompanying notes to the financial statements.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 1. Description of the Plan

The Halifax Regional Water Commission Employees' Pension Plan (the "Plan") is registered under the Pension Benefits Act of Nova Scotia (Registration Number 0344614). The following description of the Plan is a summary only. For more complete information, reference should be made to the Plan agreement restated as at January 1, 2011 as amended and consolidated, in addition to Amendment #9 and Amendment #10, effective January 1, 2016.

##### (a) General

The Halifax Regional Water Commission maintains a contributory defined benefit pension plan for all employees, and participation in the Plan is compulsory for full-time and part-time employees. The pension plan provides pensions based upon length of service and best seven consecutive years' earnings.

The employees who transferred to the Halifax Regional Water Commission on August 1, 2007 with the transfer of the wastewater/stormwater operations have remained members of the Halifax Regional Municipality Pension Plan. The Halifax Regional Water Commission is responsible for funding the employer share of the contributions for these employees. All new employees hired after August 1, 2007 join the Halifax Regional Water Commission Employees' Pension Plan.

Amendment # 9 and Amendment #10 were effective January 1, 2016. Amendment #9 permitted members an option to buy-back lost time as a result of the labour disruption of 2015, and defined rules with respect to the break in service for members. Amendment #10 dealt with negotiated changes in the Plan with the intent to improve the Plan's financial position. Highlights of the changes are as follows:

- Best average annual earnings adjusted from 5 years to 7 years
- Guaranteed indexing of pensions reduced from 2% to 1%
- Maximum earnings cap frozen temporarily for 8 years, then indexed at a rate of 1% per annum
- Conditional current service contribution rates for the employer and employees realigned
- Current service cost for employees on long term disability is shared 50/50 between the employer and employees

Effective June 1, 2015 the amendments to the Nova Scotia Pension Benefits Act and Regulations came into effect which had some immediate impact on the Plan regarding administration of transfer deficiency holdbacks and immediate vesting.

##### (b) Funding policy

Employees' required contributions in 2016 were 10.65% (2015 – 12.95%) of pensionable earnings. Pensionable earnings are capped temporarily to a maximum of \$140,945 through 2023, and will be indexed at a rate of 1% per annum thereafter. The Halifax Regional Water Commission matches employee contributions up to 9.85%. Prior to January 1, 2016, the Halifax Regional Water Commission matched employee contributions up to 12.95%. Basic contributions from employers and members due to the Plan at the end of the year are recorded on an accrual basis.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 1. Description of the Plan (continued)

##### (b) Funding policy (continued)

In addition, the Plan and the Pension Benefits Act of Nova Scotia require that the Halifax Regional Water Commission, from time to time, make contributions to the Plan of such amounts which are required as special payments in accordance with the provisions of the Plan as determined by the actuary (see note 5).

##### (c) Retirement benefits

Employees are entitled to annual pension benefits of an amount equal to 2.0% of their best earnings averaged over the highest seven consecutive years of earnings for each year of credited service up to the maximum permitted by the Canada Revenue Agency. For credited service prior to January 1, 2016, the best average earnings cannot be less than the best average five consecutive years of earnings paid to an employee prior to 2016.

Benefits are adjusted each year. Adjustments are based on the increase in the Consumer Price Index over the previous calendar year to a maximum of 2% for benefits earned prior to January 1, 2016, and to a maximum of 1% for benefits earned after December 31, 2015.

##### (d) Disability pensions

Disabled employees continue to accrue credited service without having to continue their contributions. The employer and employees fund the actuarial cost of the pensions for disabled employees annually. Disabled employees are eligible for a pension if they meet the following criteria:

- a) they have completed 10 years of continuous participation in the Plan;
- b) they are not in receipt of a salary continuance benefit under an insured plan to which the Halifax Regional Water Commission contributes; and
- c) they are totally and permanently disabled as certified by a medical practitioner.

##### (e) Death benefits

A survivor pension is payable to the member's surviving spouse at the rate of 60% of the member's pension credits accrued prior to June 1, 1998. The beneficiary of a single employee who dies before retirement will be entitled to the member's contributions and interest up to the month preceding death. In respect of pension credits accrued after June 1, 1998, the commuted value of the normal retirement benefits shall be paid to the member's beneficiary or estate.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 1. Description of the Plan (continued)

##### (f) Termination of employment

Subject to any statutory limitations, a member with two or more years of continuous service or Plan membership may elect to receive one of the following options:

- a) a paid-up deferred pension commencing on the member's normal retirement date in an amount equal to the pension accrued to date of termination; or
- b) transfer the value of benefit to the member's new employer's pension plan, a Retirement Savings Plan, or purchase a deferred annuity.

A member with less than two years of Plan membership or continuous service is entitled to a cash payment equal to the member's required contributions with interest calculated to the end of the month in which termination occurs. Upon termination, any member may transfer the value of benefits to his or her new employer's pension plan or Retirement Savings Plan.

On June 1, 2015 revisions to the Pension Benefits Act and Regulations came into effect. One change that impacted the Plan on that date was the provision for immediate vesting, which supersedes the two (2) year vesting period in the Plan as described above.

##### (g) Voluntary contributions

Members of the Plan may make additional voluntary contributions up to the deductible limit provided under the Income Tax Act. The non locked-in additional voluntary contributions may be withdrawn from the Plan by a member prior to termination or retirement, either in the form of a lump sum cash payment or transferred directly to the member's Retirement Savings Plan.

Members of the Plan may transfer non locked-in or locked-in benefits from a previous employer. Non locked-in benefits are administered as outlined in the previous paragraph. Locked-in benefits can be withdrawn within ten years of the normal retirement date. Upon retirement, the locked-in and non locked-in contributions may be used to purchase an annuity.

##### (h) Income taxes

The Plan is not subject to income taxes since it is a Registered Pension Trust as defined by the Income Tax Act.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies

The financial statements are presented in accordance with Canadian accounting standards for pension plans in Part IV of the Chartered Professional Accountants of Canada (CPA) Handbook, Section 4600 – Pension Plans. Section 4600 provides specific accounting guidance on pension obligations and investments, with investments complying with international financial reporting standards (“IFRS”) in Part I of the CPA Canada Handbook. For accounting policies that do not relate to either investments or pension obligations, the plan must consistently comply with either IFRS or accounting standards for private enterprises (“ASPE”) in Part II of the CPA Canada Handbook. The plan has elected to comply on a consistent basis with ASPE. To the extent that ASPE is inconsistent with Section 4600, Section 4600 takes precedence.

##### (a) Financial instruments

Financial assets and financial liabilities are recognized when the Plan becomes a party to the contractual provisions of the financial instrument.

Financial assets are derecognized when the contractual rights to the cash flows from the financial assets expire, or when the financial asset and all substantial risks and rewards are transferred.

A financial liability is derecognized when it is extinguished, discharged, cancelled or expires.

All financial assets and financial liabilities are initially measured at fair value. Fair value is an estimate of the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Financial assets and liabilities are subsequently measured as described below:

##### *Investment assets*

All investment assets are measured at fair value at the date of the statement of financial position in accordance with IFRS 13: Fair Value Measurement Part I of the CPA Canada Handbook. Fair values of investment assets are determined as follows:

- Pooled funds are valued at the unit value supplied by the Master Trust administrator and which represent the Plan's proportionate share of underlying net assets at fair value determined using closing bid prices.

Transaction costs are not included in the fair value of investment assets either on initial recognition or on subsequent re-measurement. Transaction costs are included in the statement of changes in net assets available for benefits as part of expenses incurred in the period.

Investment income, excluding changes in the fair value of investment assets, is presented in the statement of changes in net assets available for benefits.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

##### (a) Financial instruments (continued)

###### *Financial liabilities*

Financial liabilities are measured subsequently at amortized cost using the effective interest method.

##### (b) Pension obligations

The Plan is a defined benefit plan established for members. The pension obligations recognized in the statements of financial position are the actuarial present value of accrued pension benefits determined by applying best estimate assumptions and the projected benefit method prorated on services.

##### (c) Net investment income

Income from investments is recognized on an accrual basis and includes dividend income (recognized on ex-dividend date), interest income, and is net of investment manager fees.

##### (d) Changes in the fair value of investment assets and liabilities

This includes both realized gains or losses on sale of investments and unrealized gains or losses on investments.

Realized gains or losses on sale of investments are the difference between the proceeds received and the average cost of investments sold.

Unrealized gains or losses on investments represent the difference between the carrying value at the year end and the carrying value at the previous year end or purchase value during the year, less the reversal of previously recognized unrealized gains and losses in respect of disposals during the year.

##### (e) Contributions

Required employee and employer contributions are recorded the month following when the payroll deductions are made. Employee and employer contributions, as well as special payments due to the Plan at the end of the year are recorded on an accrual basis. Cash received from pension plan transfers or members for service purchases are recorded when received.

##### (f) Benefits

Benefit payments to retired members, commuted value payments and refunds to former members are recorded in the period paid. Accrued benefits are recorded as part of the accrued pension benefit obligation.

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

##### (g) Estimation uncertainty

When preparing the financial statements, management undertakes a number of judgments, estimates and assumptions about recognition and measurement of assets, liabilities, revenue and expenses. The actual results are likely to differ from the judgments, estimates and assumptions made by management and will seldom equal the estimated results. Information about the significant judgments, estimates and assumptions that have the most significant effect on the recognition and measurement of assets, liabilities, revenue and expenses are discussed below:

##### *Fair value of financial instruments*

Management uses valuation techniques in measuring the fair value of financial instruments, where active market quotes are not available. Details of the assumptions used are given in the notes regarding financial assets and liabilities. In applying the valuation techniques, management makes maximum use of market inputs, and uses estimates and assumptions that are, as far as possible, consistent with observable data that market participants would use in pricing the instrument. Where applicable data is not observable, management uses its best estimate about the assumptions that market participants would make. These estimates may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date.

##### *Pension obligations*

Management estimates the pension obligations annually with the assistance of an independent actuary; however, the actual outcome may vary due to estimation uncertainties. The estimate of the pension obligation of \$114,046,900 (2015 - \$108,055,300) is based on assumed rates of retirement, mortality, breaks in service and contributory hours. Discount factors are determined at or near year-end to reflect the long term expectation of investment returns that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension obligation.

##### (h) New accounting standards not yet adopted

The International Accounting Standards Board (IASB) has issued a number of new and amended standards that are not yet effective and have not been early adopted by the Plan.

- IFRS 9, *Financial Instruments*. The new standards will replace IAS 39, *Financial Instruments: Recognition and Measurement* and includes guidance on recognition and derecognition of financial assets and financial liabilities. The new standard is tentatively effective for annual periods beginning on or after January 1, 2018 and early application is permitted.

Management does not expect any significant impact on either the Plan's financial position or performance when adopting this new standard.

# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

#### 3. Investment assets

The investment in the Halifax Regional Municipality Master Trust (the "HRM Master Trust") is recorded at its fair value. The Plan's interest in the HRM Master Trust represents 6.01% (December 31, 2015 – 5.87%) of the HRM Master Trust units. The remaining units are held by the Halifax Regional Municipality ("HRM"). The co-mingling of investments does not affect the actuarial liabilities or the net assets available for benefits of the Plan.

The fair value of the investment in the HRM Master Trust is determined as at the date of the statements of financial position as described in note 2(a). The fair value of the investment in the HRM Master Trust is categorized as a Level 2 investment under fair value hierarchy measurement.

Section 67 (3) of the *Pension Benefits Act Regulations* requires disclosure of each investment asset that has a fair value greater than two percent (2%) of the fair value of all the investment assets of the Plan. The following schedule reports all investments having a fair value greater than 2% of the fair value of all investment assets of the Plan.

<u>Investment</u>	<u>Investment type</u>	<u>Market value</u>
Blackrock Active Canadian Equity Fund	Canadian Equities	\$ 4,793,306
Wellington Management Global Total Return Fund	Foreign Bonds	4,467,917
Putnam Canadian Fixed Income Global Alpha Fund	Canadian Bonds	3,665,790
GCM Grosvenor Opportunistic Investments, LP	Limited Partnership	2,868,264
ACM Bernstein SICAV Emerging Consumer Portfolio	Foreign Equity	2,336,164
UBS (UK) Real Estate Funds Selection Global Ex Canada, L.P.	Limited Partnership	2,288,131
Minto Multi-Residential Income Partners 1, LP	Limited Partnership	2,179,239
Macquarie European Infrastructure Fund 4, LP	Limited Partnership	<u>2,147,879</u>
		<u>\$ 24,746,690</u>

# Halifax Regional Water Commission Employees' Pension Plan Notes to the financial statements

December 31, 2016

## 4. Net assets available for benefits 2016 2015

### Allocation of net assets available for benefits

To pension plan	<b>\$106,638,861</b>	\$ 100,007,378
To extra voluntary contribution benefits	<b>204,657</b>	213,409
To individual locked in amounts	<b><u>224,478</u></b>	<u>213,657</u>
	<b><u>\$ 107,067,996</u></b>	<b><u>\$ 100,434,444</u></b>

## 5. Pension obligations

The actuarial value of accrued benefits, determined periodically by the Plan's actuary, is the amount that results from applying actuarial assumptions to adjust the Plan benefits to reflect the time value of money between the valuation date and the expected date of payment. The significant actuarial assumptions used include:

- a) 40% of members will retire at the age of 65, and 60% will retire at the earliest date of eligibility for an unreduced pension;
- b) interest rate assumption of 5.80% per annum (2015 – 5.80%);
- c) salary scale assumption of 3.90% per annum (2015 – 3.90%); and
- d) life expectancy of participants based upon the CPM-2014 Combined mortality table, with Scale CPM-B improvements.

An actuarial valuation of the Halifax Regional Water Commission Employees' Pension Plan was performed as at January 1, 2016 by Eckler Ltd. The January 1, 2016 actuarial valuation resulted in an unfunded liability of \$7,620,900, and the Halifax Regional Water Commission was required to make special payments which were being amortized over 15 years. This resulted in an unfunded liability payment of \$825,200 (2015 - \$2,952,200) as shown in note 7. The unfunded liability payment of \$825,200 will continue until a new actuarial valuation is completed, with the next normal actuarial valuation of the Halifax Regional Water Commission Employees' Pension Plan required to be performed no later than January 1, 2019.

# Halifax Regional Water Commission Employees' Pension Plan Notes to the financial statements

December 31, 2016

<b>6. Net investment income</b>	<u><b>2016</b></u>	<u><b>2015</b></u>
Income from investment funds	\$ 2,389,377	\$ 2,350,179
Investment manager fees	<u>(138,922)</u>	<u>(188,555)</u>
	<u><b>\$ 2,250,455</b></u>	<u><b>\$ 2,161,624</b></u>

<b>7. Contributions</b>	<u><b>2016</b></u>	<u><b>2015</b></u>
Participants' contributions		
Required	\$ 2,453,597	\$ 2,628,465
Reciprocal transfer agreements	-	598,383
Voluntary	<u>30,851</u>	<u>26,678</u>
	<u><b>\$ 2,484,448</b></u>	<u><b>\$ 3,253,526</b></u>
Sponsor's contributions		
Required	\$ 2,265,591	\$ 2,597,053
Unfunded liability	825,200	2,952,200
Special	<u>-</u>	<u>144,900</u>
	<u><b>\$ 3,090,791</b></u>	<u><b>\$ 5,694,153</b></u>

<b>8. Benefit payments</b>	<u><b>2016</b></u>	<u><b>2015</b></u>
Retirement benefit payments	\$ 3,536,894	\$ 3,246,032
Termination benefit payments	992,572	1,021,997
Death benefit payments	<u>509,236</u>	<u>-</u>
	<u><b>\$ 5,038,702</b></u>	<u><b>\$ 4,268,029</b></u>

During 2016, there were 16 termination benefit payments (2015 – 15) and 1 death benefit payment (2015 – None). Termination benefits are paid out as described in note 1(f) and death benefit payments are paid out as described in note 1(e).

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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<b>9. Administrative expenses</b>	<b><u>2016</u></b>	<b><u>2015</u></b>
Actuarial and consulting fees	\$ 128,676	\$ 134,296
Audit and accounting fees	15,999	660
Bank custodian fees	26,510	21,567
Insurance	7,950	7,950
Miscellaneous	15,560	11,641
Professional fees	12,845	18,313
Registration fees	2,158	2,074
	<u>\$ 209,698</u>	<u>\$ 196,501</u>

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#### **10. Related party transactions**

The Halifax Regional Water Commission, the Plan's sponsor, collects the Plan's contributions and pays certain expenses on behalf of the Plan. These items are then credited or charged back to the Plan.

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#### **11. Financial instruments**

##### **Financial instruments risk exposure and management**

The Plan is exposed to various risks in relation to its investment in the HRM Master Trust, consisting of investment assets. The Plan's financial assets are categorized in Level 2. The main types of risks are market risk, credit risk and liquidity risk.

The Plan's risk management policy is derived from the HRM Master Trust in which the Plan holds units. The HRM Master Trust has formal policies and procedures placed upon it that establish an asset mix among equity and fixed income investments, required diversification of investments within categories, a set limit on the size of exposure to individual investments, and a requirement to use A-rated counterparties.

The Plan does not actively engage in the trading of financial assets for speculative purposes nor does it write options. The most significant financial risks to which the Plan is exposed are described below:

(a) **Market risks**

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. For purposes of this disclosure, the Plan segregates market risk into three categories: interest rate risk, currency risk and other price risk.

*i. Interest rate risk*

Interest rate risk refers to the fact that the value of the Plan's assets is affected by changes in nominal interest rates and equity markets.

*ii. Currency risk*

The Plan's functional currency is Canadian dollars and all of the Plan's transactions are carried out in Canadian dollars.

# Halifax Regional Water Commission Employees' Pension Plan Notes to the financial statements

December 31, 2016

## 11. Financial instruments (continued)

### (a) Market risks (continued)

#### iii. Other price risk

Other price risk is the risk that the fair value or future cash flows of financial instruments will fluctuate because of changes in market prices, other than those arising from interest rate risk or currency risk, whether those changes are caused by factors specific to the individual investment or factors affecting all securities traded in the market.

All investments have a risk of loss of capital. The maximum risk resulting from the investments is determined by the fair value of these instruments, which total \$107,043,865 at December 31, 2016 (2015 - \$100,407,501). A one percent (1%) change in market risk (holding all variables constant) will impact the fair value of these investments by approximately \$1,070,439 (2015 - \$1,004,075).

### (b) Credit risk

Credit risk on financial instruments is the risk of financial loss occurring as a result of default or insolvency of a counterparty on its obligations to the Plan. The Plan's credit risk is primarily attributable to the underlying assets of the HRM Master Trust. Credit risk is mitigated through the management of the HRM Master Trust assets with generally accepted parameters of safety and prudence, using a diversified investment program. Investments in the HRM Master Trust must adhere to specific limitations as outlined in the Halifax Regional Municipality's Statement of Investment Policies and Procedures for the Defined Benefit Pension Plan ("the Statement of Investment Policies and Procedures").

### (c) Liquidity risk

Liquidity risk is the risk of not being able to meet the Plan's cash requirements in a timely and cost effective manner. Liquidity requirements are managed through income generated from investments and monthly contributions made by members and participating employers. The sources of funds are used to pay pension benefits, make additional investments and fund operating expenses. The Plan's primary future liabilities include the accrued benefit obligation of the Plan. The Plan's main asset, the investment in the HRM Master Trust, is liquid as cash is available to make required payments.

The following are the contractual maturities of financial liabilities:

Payments due year ending December 31, 2016

	<u>Total</u>	<u>Less than 1 year</u>	<u>1 - 3 years</u>	<u>4 - 5 years</u>	<u>After 5 years</u>
Payables and accruals	\$ 16,035	\$ 16,035	\$ -	\$ -	\$ -

# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

#### 11. Financial instruments (continued)

(c) Liquidity risk (continued)

Payments due year ending December 31, 2015

	<u>Total</u>	Less than <u>1 year</u>	<u>1 - 3 years</u>	<u>4 - 5 years</u>	After <u>5 years</u>
Payables and accruals	\$ <u>32,428</u>	\$ <u>32,428</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>

#### Fair value disclosure

The financial instruments recognized at fair value on the statement of financial position must be classified as one of three fair value hierarchy levels. This hierarchy groups financial assets and liabilities into three levels based on the significance of inputs used in measuring the fair value of the financial assets and liabilities. The fair value hierarchy has the following levels:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The level within which the financial asset or liability is classified is determined based on the lowest level of significant input to the fair value measurement. The financial assets and liabilities measured at fair value in the statement of financial position are grouped into the fair value hierarchy as follows:

Financial assets at fair value as at December 31, 2016

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
Pooled fund	\$ <u>-</u>	\$ <u>107,043,865</u>	\$ <u>-</u>	\$ <u>107,043,865</u>

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# Halifax Regional Water Commission

## Employees' Pension Plan

### Notes to the financial statements

December 31, 2016

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#### 11. Financial instruments (continued)

##### Fair value disclosure (continued)

Financial assets at fair value as at December 31, 2015

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
Pooled fund	\$ -	\$ 100,407,501	\$ -	\$ 100,407,501

The methods and valuation techniques used for the purpose of measuring fair value are unchanged compared to the previous reporting period.

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#### 12. Capital management

The Plan defines its capital as the deficiency of the Plan, as determined annually based on the fair value of net assets and actuarial liabilities, provided by the actuarial valuation prepared by the Plan's independent actuary (note 5).

The overall objectives in investing the assets of the Plan are to ensure sufficient liquidity to support its financial obligations, to continue to provide benefits in the best interest of its members, to remain financially self-sufficient and to preserve and enhance the value of capital through adequate diversification in high quality investments and achieve the highest investment return that can be obtained with the assumption of an acceptable degree of risk. The Plan holds units with the HRM Master Trust which has formal policies and procedures that establish asset mix, require diversification within different categories, set a limit on the exposure to individual investments and provides a requirement to use A-rated counterparties.

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

**SUBMITTED BY:** Original Signed By:  
Jamie Hannam, P.Eng.  
Director, Engineering & Information Services

**APPROVED:** Original Signed By:  
Carl Yates, M.A.Sc., P.Eng., General Manager

**DATE:** June 16, 2017

**SUBJECT:** **Capital Project Spending Summary – 2016/17**

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### **ORIGIN**

NSUARB requirement for reconciliation of Capital Budget expenditures.

### **RECOMMENDATION**

It is recommended that the Halifax Water Board approve the individual project over expenditures as identified within Attachment 2, “*Capital Project Spending Summary, April 1, 2016 – March 31, 2017*” and direct staff to forward the subset of projects “over \$250,000” to the NSUARB for information and approval.

### **BACKGROUND**

The HRWC Board and the NSUARB approve annual Capital Budget plans for required capital projects and equipment. The specific funding for individual projects are further approved by the General Manager, HRWC Board, and the NSUARB as required based on total project cost, as per the Capital Funding Approval Policy.

**DISCUSSION**

During the 2016/17 fiscal year, a series of capital projects were completed, placed in service, and “closed out” from a fiscal work order perspective. These projects were funded from the 2016/17 Capital Budget and previous years’ capital budgets for projects with multi-year delivery time lines.

The first attached report entitled, “Capital Project Spending Summary, April 1, 2016 to March 31, 2017”, identifies all capital projects funded from the Halifax Water Capital Budget that were completed prior to March 31, 2017. For water projects, the total expenditure for these completed projects totals \$15.6 million, with an aggregate net deficit of \$59.4 thousand relative to the total funding approvals. For wastewater projects, the total expenditure for these completed projects totals \$16.0 million, with an aggregate net surplus of \$4.7 million or 22.6% relative to budget. For stormwater projects, the total expenditures for these completed projects totals \$4.8 million, with an aggregate net surplus of \$1.0 million or 17.0% relative to the total funding approvals.

The second attached report entitled, “Capital Project Spending Summary – Projects Over \$250,000, April 1, 2016 to March 31, 2017”, identifies all capital projects funded from the Halifax Water Capital Budget that were completed prior to March 31, 2017 that required specific NSUARB approval based on the \$250,000 threshold. For water projects, the total expenditure for these completed projects totals \$10.9 million, with an aggregate net surplus of \$0.2 million or 1.5% relative to the total funding approvals. For wastewater projects, the total expenditure for these completed projects totals \$11.2 million, with an aggregate net surplus of \$3.1 million or 21.7% relative to the total funding approvals. For stormwater projects, the total expenditure for these completed projects totals \$1.5 million, with an aggregate net surplus of \$0.5 million or 27.3% relative to the total funding approvals. The “Projects Over \$250,000” will be forwarded to the NSUARB as part of our annual financial submission requirements.

Halifax Water’s Capital Funding Policy requires all material funding increases for capital projects to be approved at the time of the funding need. This process promotes fiscal accountability and improves management of available funds.

The Board will note that a variety of the projects from the 2016/17 Summary Report were completed with final expenditures greater than the original budget. Staff is seeking HRWC Board approval for these expenditures with funding available from the identified surpluses as per the BUDGET IMPLICATIONS section of this report.

**BUDGET IMPLICATIONS**

Water capital projects closed during the fiscal year 2016/17 represent an approved total budget of \$15.5 million, and when compared to the actual total project costs of \$15.6 million, results in a net deficit of \$56.4 thousand. This appears to be a timing difference

within the close-out process, and the difference in the current year will be offset against the 2017/18 capital budget.

Wastewater capital projects closed during the fiscal year 2016/17 represent an approved total budget of \$20.7 million, and when compared to the actual total project costs of \$16.0 million, results in a net difference of \$4.7 million. This aggregate net difference represents a surplus which can be utilized for capital funding sources in future years, and for funding 2016/17 and previous years' projects not yet completed.

Stormwater capital projects closed during the fiscal year 2016/17 represent an approved total budget of \$5.8 million, and when compared to the actual total project costs of \$4.8 million, results in a net difference of \$1.0 million. This aggregate net difference represents a surplus which can be utilized for capital funding sources in future years, and for funding 2016/17 and previous years' capital projects not yet completed.

**ATTACHMENTS**

Attachment 1 - Capital Project Spending Summary, April 1, 2016 – March 31, 2016

Attachment 2 - Capital Project Spending Summary  
Projects over \$250,000, April 1, 2016 - March 31, 2017

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**Capital Project Spending Summary**

**ITEM #7**

**HRWC BOARD**

**June 28, 2017**

**ATTACHMENT 1**

**April 1, 2016 - March 31, 2017**

<b>Project Number</b>	<b>Project Name</b>	<b>HRWC Board Approval Date</b>	<b>NSUARB Approval Date</b>	<b>Amount Spent: Cumulative to March 31/17</b>	<b>Project Budget</b>	<b>Over Budget</b>	<b>(Under Budget)</b>
300001041	SCADA PANELS - CONSTRUCTION (2008)	1-Apr-08	31-Jul-08	\$0.00	\$0.00	\$0.00	\$0.00
300001420	REPLACE RAW PUMP MOTOR - JD KLINE	29-Apr-10	N/A	\$9,433.65	\$7,567.00	\$1,866.65	\$0.00
300001421	FLOCCULATION UPGRADES DESIGN - JD KLINE	29-Apr-10	N/A	\$32,941.04	\$106,000.00	\$0.00	(\$73,058.96)
300001422	REPLACE BACKWASH PUMP MOTOR - JD KLINE	29-Apr-10	24-Jan-14	\$301,870.96	\$360,000.00	\$0.00	(\$58,129.04)
300001521	JD KLINE - ELECTRIC MOTOR 11/12	12-May-11	12-May-11	\$0.00	\$12,000.00	\$0.00	(\$12,000.00)
300001530	LARGE SCADA/METER INSTALL - DALHOUSIE U	12-May-11	12-May-11	\$0.00	\$17,000.00	\$0.00	(\$17,000.00)
300001585	JD KLINE INDUSTRIAL WATER PUMP STUDY	7-Oct-11	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300001588	BEDFORD/BURNSIDE TRANS MAIN CONNECTION	22-Nov-11	N/A	\$28,494.86	\$26,000.00	\$2,494.86	\$0.00
300001701	ENERGY RECOVERY ORCHARD CONTROL CHAMBER	23-May-12	9-Jul-12	\$440,912.40	\$732,964.00	\$0.00	(\$292,051.60)
300001725	MILLER LAKE LAND PURCHASE 13/14	31-Jan-13	28-Mar-13	\$808,891.50	\$848,542.00	\$0.00	(\$39,650.50)
300001748	LAND ACQ - LAKE MAJOR WATERSHED 13/14	15-Feb-13	N/A	\$44,045.49	\$47,000.00	\$0.00	(\$2,954.51)
300001901	SACKVILLE DRIVE PRV UPGRADE	10-Mar-14	N/A	\$13,179.23	\$15,000.00	\$0.00	(\$1,820.77)
300001922	GOVERNORS BROOK PH 7-12 14/15	3-Apr-13	N/A	\$189,147.38	\$197,000.00	\$0.00	(\$7,852.62)
300001930	JDK WSP IMP VENTILATION AT PS	7-Apr-14	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300001931	LAKE MAJOR WSP BUTTERFLY VALVE REPLACE	7-Apr-14	N/A	\$75,144.94	\$70,000.00	\$5,144.94	\$0.00
300001935	LAKE MAJOR WSP FIRE ALARM SYSTEM	7-Apr-14	N/A	\$13,644.40	\$41,000.00	\$0.00	(\$27,355.60)
300001937	JD KLINE WSP FILTER VALVE ACTUATORS PROG	7-Apr-14	N/A	\$50,665.34	\$45,000.00	\$5,665.34	\$0.00
300001954	BENNERLY LAKE FILTER VALVE REPLACEMENTS	5-Jun-14	N/A	\$18,398.37	\$15,000.00	\$3,398.37	\$0.00
300001955	BENNERLY LAKE CHEMICAL FEED PUMP & METER	5-Jun-14	N/A	\$8,235.70	\$9,000.00	\$0.00	(\$764.30)
300001956	BEAVER BANK BS DRIVEWAY RECONFIGURATION	10-Mar-14	N/A	\$17,120.27	\$38,000.00	\$0.00	(\$20,879.73)
300001957	LAKE MAJOR WSP PROCESS OPTIM STUDY	15-Apr-14	N/A	\$167,040.21	\$160,000.00	\$7,040.21	\$0.00
300001963	DOCUMENT MGMT SYSTEM (W)	13-Jun-14	19-Jun-14	\$216,385.17	\$100,000.00	\$116,385.17	\$0.00
300001968	SCADA CONTROL SYSTEM ENHANCE (W) 14/15	13-Jun-14	19-Jun-14	\$104,912.65	\$100,000.00	\$4,912.65	\$0.00
300002006	LAKE MAJOR WSP EMERGENCY GENERATOR	15-Sep-14	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300002030	LM DWY CULVERT REPLACE (W) IP 15/16	28-Nov-14	***	\$50,899.36	\$76,000.00	\$0.00	(\$25,100.64)
300002036	RECORD DRAWING FOR COMPLETED WORK ORDERS	14-Jan-15	N/A	\$79,466.16	\$25,000.00	\$54,466.16	\$0.00
300002038	POCKWOCK WM CORRIDOR HRM TAX SALE ACQ.	6-Feb-15	N/A	\$0.00	\$1,300.00	\$0.00	(\$1,300.00)
300002070	CRITICAL VALVE REPLACEMENT - GOTTINGEN	24-Mar-15	N/A	\$274,240.50	\$250,000.00	\$24,240.50	\$0.00
300002072	CHAIN CONTROL TRANS MAIN REALIGN	10-Jun-15	16-Feb-16	\$1,075,776.51	\$1,000,000.00	\$75,776.51	\$0.00
300002086	NETWORK INFRASTRUCTURE UPGRADES (W)	30-Jan-15	9-Jun-15	\$90,914.59	\$100,000.00	\$0.00	(\$9,085.41)
300002088	CMMS PHASE 2A (W) 15/16	28-May-15	N/A	\$90,424.43	\$107,500.00	\$0.00	(\$17,075.57)
300002091	ASSET ACCOUNTING IN SAP (W)	30-Aug-16	N/A	\$50,611.69	\$50,000.00	\$611.69	\$0.00
300002092	CRM SELECTION & IMPLEMENTATION (W)	8-Apr-15	14-Oct-15	\$301,880.13	\$300,000.00	\$1,880.13	\$0.00
300002098	GIS DATA PLAN CENTRAL (OPUS) (W)	23-Apr-15	30-Jul-15	\$334,499.84	\$150,000.00	\$184,499.84	\$0.00
300002099	M2 HYDRANT REPLACEMENT PROGRAM	18-Aug-15	N/A	\$0.00	\$50,000.00	\$0.00	(\$50,000.00)
300002123	RENFREW ST PRV DECOMMISSIONING	30-Apr-15	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300002127	JD KLINE - ENTRANCE ROAD PAVING RENEWAL	29-Sep-15	N/A	\$8,055.07	\$10,000.00	\$0.00	(\$1,944.93)
300002130	JD KLINE AMPGARD III-VACUUM CONVERSION	24-Mar-15	N/A	\$39,426.35	\$40,000.00	\$0.00	(\$573.65)
300002135	CATWALK IN THE FILTER GALLERY LAKE MAJOR	12-Aug-15	N/A	\$8,638.65	\$15,000.00	\$0.00	(\$6,361.35)
300002140	LM WSP STORAGE CONTAINERS	30-Apr-15	N/A	\$14,455.14	\$16,000.00	\$0.00	(\$1,544.86)
300002143	RECIRCULATING PUMPS FOR HEATING SYSTEM	4-May-15	N/A	\$7,274.33	\$8,000.00	\$0.00	(\$725.67)
300002144	COLLINS PARK WW TANK RETROFIT	30-Apr-15	N/A	\$22,338.91	\$11,000.00	\$11,338.91	\$0.00
300002150	SECURITY UPGRADE PROGRAM (W) 15/16	5-Jan-16	N/A	\$50,067.34	\$50,000.00	\$67.34	\$0.00
300002154	DIESEL PLATE COMPACTOR	30-Jan-15	9-Jun-15	\$18,068.01	\$16,000.00	\$2,068.01	\$0.00
300002180	HYDRANT & CATCHBASIN GIS PUBLIC INFORMAT	5-May-15	N/A	\$48,651.43	\$120,000.00	\$0.00	(\$71,348.57)
300002181	ORDINANCE GROUNDS SUBDIVISION	30-Jun-15	N/A	\$0.00	\$0.00	\$0.00	\$0.00

**Capital Project Spending Summary**

**ITEM #7**

**HRWC BOARD**

**June 28, 2017**

**ATTACHMENT 1**

**April 1, 2016 - March 31, 2017**

<b>Project Number</b>	<b>Project Name</b>	<b>HRWC Board Approval Date</b>	<b>NSUARB Approval Date</b>	<b>Amount Spent: Cumulative to March 31/17</b>	<b>Project Budget</b>	<b>Over Budget</b>	<b>(Under Budget)</b>
300002182	SHAREPOINT IMPLEMENTATION (W)	13-Jun-14	7-Jun-15	\$248,300.29	\$200,000.00	\$48,300.29	\$0.00
300002189	GIS DATA PLAN CENTRAL (AECOM) (W)	23-Apr-15	30-Jul-15	\$223,602.06	\$150,000.00	\$73,602.06	\$0.00
300002190	GIS DATA PLAN EAST (W)	23-Apr-15	30-Jul-15	\$142,017.65	\$325,000.00	\$0.00	(\$182,982.35)
300002300	MURRAY HILL DRIVE W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$406,202.93	\$430,000.00	\$0.00	(\$23,797.07)
300002301	FARQUHARSON STREET W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$337,361.75	\$350,000.00	\$0.00	(\$12,638.25)
300002302	BROMPTON ROAD W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$193,762.19	\$170,000.00	\$23,762.19	\$0.00
300002303	EVERETTE STREET W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$336,429.73	\$365,000.00	\$0.00	(\$28,570.27)
300002306	INVERNESS W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$182,339.60	\$260,000.00	\$0.00	(\$77,660.40)
300002307	TILLOCK DRIVE W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$280,406.77	\$290,000.00	\$0.00	(\$9,593.23)
300002308	GAS MONITORING PROGRAM	6-Jan-16	N/A	\$42,331.47	\$40,000.00	\$2,331.47	\$0.00
300002321	Valve Renewals 16/17	28-Jan-16	13-Apr-16	\$39,323.13	\$125,000.00	\$0.00	(\$85,676.87)
300002322	HYDRANTS RENEWALS 16/17	28-Jan-16	13-Apr-16	\$40,200.76	\$75,000.00	\$0.00	(\$34,799.24)
300002323	SERVICE LINES RENEWALS 16/17	28-Jan-16	13-Apr-16	\$510,794.18	\$190,000.00	\$320,794.18	\$0.00
300002326	Temporary Water Line Pipe Materials EAST	28-Jan-16	13-Apr-16	\$17,517.37	\$18,000.00	\$0.00	(\$482.63)
300002327	Water Dist Pressure Monitoring Equipment	28-Jan-16	13-Apr-16	\$8,743.63	\$10,000.00	\$0.00	(\$1,256.37)
300002332	Bedford Reservoir Inflow Meter Replace	26-May-16	N/A	\$6,446.90	\$8,000.00	\$0.00	(\$1,553.10)
300002333	Zinck PRV Flow Meter Replacement	24-May-16	N/A	\$8,029.14	\$8,000.00	\$29.14	\$0.00
300002334	BELMONT PRV VALVE REPLACEMENT	24-May-16	N/A	\$0.00	\$10,000.00	\$0.00	(\$10,000.00)
300002337	Geizer 158 Reservoir Rehabilitation	20-Jan-16	19-Feb-16	\$5,135,153.57	\$4,920,000.00	\$215,153.57	\$0.00
300002342	JD Kline Ampgard III to Vacuum Contactor	8-Mar-16	N/A	\$39,315.82	\$40,000.00	\$0.00	(\$684.18)
300002343	JDK Replace Power Pole at Low Lift Stn	22-Feb-16	N/A	\$0.00	\$8,000.00	\$0.00	(\$8,000.00)
300002346	LM Replace Contactors in the MCC	8-Mar-16	N/A	\$40,883.13	\$34,000.00	\$6,883.13	\$0.00
300002351	LM WSP Purchase Dewatering Equipment	24-Mar-16	N/A	\$104,684.14	\$100,000.00	\$4,684.14	\$0.00
300002359	BL WSP Power Monitoring	30-Mar-16	N/A	\$22,568.42	\$20,000.00	\$2,568.42	\$0.00
300002360	BL WSP Surge Protection	7-Mar-16	N/A	\$16,348.52	\$17,000.00	\$0.00	(\$651.48)
300002362	Chlorine Analyzer Replacement Program	24-May-16	N/A	\$20,635.92	\$23,000.00	\$0.00	(\$2,364.08)
300002370	JD Kline - Pump Station MCC Ventilation	11-Jul-16	N/A	\$0.00	\$72,000.00	\$0.00	(\$72,000.00)
300002372	Large Tapping Machine 16/17	28-Jan-16	13-Apr-16	\$0.00	\$0.00	\$0.00	\$0.00
300002373	Small Hydro Vac for valve box maintenanc	28-Jan-16	13-Apr-16	\$0.00	\$6,000.00	\$0.00	(\$6,000.00)
300002374	Plastic Shell Cutters for Tapping Machin	28-Jan-16	13-Apr-16	\$12,613.13	\$12,000.00	\$613.13	\$0.00
300002375	Portable Valve Exerciser	28-Jan-16	13-Apr-16	\$5,898.42	\$10,000.00	\$0.00	(\$4,101.58)
300002376	CSE SYSTEM FOR BENNERLY LAKE WSP	28-Jan-16	13-Apr-16	\$12,713.87	\$14,000.00	\$0.00	(\$1,286.13)
300002403	DESKTOP COMPUTER REPLACEMENT PROG 16/17	28-Jan-16	13-Apr-16	\$78,405.28	\$90,000.00	\$0.00	(\$11,594.72)
300002404	NETWORK INFRASTRUCTURE UPGRADES 16/17	28-Jan-16	13-Apr-16	\$94,628.81	\$100,000.00	\$0.00	(\$5,371.19)
300002408	OFFICE FURNITURE & MINOR BLDG IMPROV	23-Sep-16		\$43,247.26	\$45,000.00	\$0.00	(\$1,752.74)
300002411	CRM INTERFACES	31-May-16	N/A	\$95,536.26	\$100,000.00	\$0.00	(\$4,463.74)
300002416	450 COWIE HILL EXTERNAL LIGHTING UPGRADE	28-Jul-16	N/A	\$0.00	\$23,000.00	\$0.00	(\$23,000.00)
300002425	FLEET UPGRADE PROGRAM (W) 16/17	28-Jan-16	13-Apr-16	\$447,205.36	\$505,000.00	\$0.00	(\$57,794.64)
300002426	FOXGLOVE LANE W/M RENEWAL 16/17	20-Jan-16	24-Mar-16	\$108,381.63	\$150,000.00	\$0.00	(\$41,618.37)
300002428	METERS 16/17	28-Jan-16	13-Apr-16	\$700,796.38	\$375,000.00	\$325,796.38	\$0.00
300002431	JDK REPLACE TURBIDIMETERS & PH METERS	30-Mar-16	N/A	\$11,536.11	\$11,000.00	\$536.11	\$0.00
300002438	GANDER AVE W/M RENEWAL IP 16/17	24-Jun-16	N/A	\$246,045.40	\$240,000.00	\$6,045.40	\$0.00
300002439	COURTNEY RD METER CHAMBER ABANDONMENT	27-Jun-16	N/A	\$14,685.36	\$17,000.00	\$0.00	(\$2,314.64)
300002440	HORNES RD BRIDGE W/M REPLACEMENT 16/17	28-Jul-16	N/A	\$93,013.50	\$90,000.00	\$3,013.50	\$0.00
300002441	HARE LANE WM EMERGENCY RENEWAL PROJECT	30-Aug-16	N/A	\$14,012.15	\$25,000.00	\$0.00	(\$10,987.85)
300002443	CSE RETROFITS-SILVERSIDE BOOSTER STN	31-Aug-16	N/A	\$37,804.86	\$50,000.00	\$0.00	(\$12,195.14)

**Capital Project Spending Summary**

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**April 1, 2016 - March 31, 2017**

<b>Project Number</b>	<b>Project Name</b>	<b>HRWC Board Approval Date</b>	<b>NSUARB Approval Date</b>	<b>Amount Spent: Cumulative to March 31/17</b>	<b>Project Budget</b>	<b>Over Budget</b>	<b>(Under Budget)</b>
300002460	NAV CANADA TOWER SERVICE EXT	4-Oct-16	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300002464	LAKE MAJOR WSP-FIRE ALARM SYSTEM UPGRADE	11-Oct-16	N/A	\$0.00	\$0.00	\$0.00	\$0.00
300002502	PURCHASE NOISE CORRELATORS	6-Dec-16	N/A	\$27,880.38	\$32,000.00	\$0.00	(\$4,119.62)
300002529	BEDFORD CONNECTOR PH 3 - EASEMENT	30-Jan-17	N/A	\$14,100.00	\$15,000.00	\$0.00	(\$900.00)
300002552	ACTIVETRACK TOTAL STN CONTROLLERS	6-Mar-17	N/A	\$32,261.44	\$30,000.00	\$2,261.44	\$0.00
<b>Water Capital Difference</b>				<b>\$15,600,316.67</b>	<b>\$15,540,873.00</b>	<b>\$1,538,231.83</b>	<b>(\$1,478,788.16)</b>
						<b>\$59,443.67</b>	
600000102	FRAME SUBDIVISION WWTF	21-Jul-08	16-Sep-08	\$1,140,031.39	\$1,197,000.00	\$0.00	(\$56,968.61)
600000503	JAMIESON ST TRUNK OUTFALL PHASE 2 11/12	12-May-11	12-May-11	\$251,417.45	\$1,190,000.00	\$0.00	(\$938,582.55)
600000506	ADDITIONAL HHSP COSTS 2011/2012	6-Jun-11	N/A	\$0.00	\$0.00	\$0.00	\$0.00
600000706	OVERFLOW MONITORING PROGRAM 13/14	20-Nov-13	N/A	\$72,835.76	\$200,000.00	\$0.00	(\$127,164.24)
600000709	WW PUMPING STATIONS CONDITION ASSESSMENT	25-Feb-13	8-May-13	\$493,702.19	\$525,000.00	\$0.00	(\$31,297.81)
600000710	WWTF CONDITION ASSESSMENT	25-Feb-13	8-May-13	\$358,619.32	\$400,000.00	\$0.00	(\$41,380.68)
600000812	WW PS UPGRADE PROGRAM 13/14 CENTRAL	1-Nov-13	N/A	\$39,639.78	\$50,000.00	\$0.00	(\$10,360.22)
600000813	AEROTECH PS - PANEL REPLACEMENT 13/14	7-Nov-13	N/A	\$30,225.16	\$23,000.00	\$7,225.16	\$0.00
600000913	SHORE DRIVE FORCEMAIN REPLACE & TWINNING	14-Mar-14	1-May-14	\$311,678.63	\$698,000.00	\$0.00	(\$386,321.37)
600000940	BEDFORD FISH HATCH PS FORCEMAIN COND ASS	15-Apr-14	6-Jun-14	\$257,955.39	\$500,000.00	\$0.00	(\$242,044.61)
600000943	DOCUMENT MGMT SYSTEM (WW)	13-Jun-14	19-Jun-14	\$173,714.03	\$80,000.00	\$93,714.03	\$0.00
600001014	HCWWTF - UV TRANS MONITORING & CONTROL	15-Oct-14	N/A	\$0.00	\$50,000.00	\$0.00	(\$50,000.00)
600001027	HC WTTF MCC 190 VENT	9-Feb-15	N/A	\$11,033.04	\$56,000.00	\$0.00	(\$44,966.96)
600001040	BALSAM RD FORCEMAIN REPLACEMENT	3-Mar-15	8-Apr-16	\$613,034.33	\$770,000.00	\$0.00	(\$156,965.67)
600001041	HSWWTFs and MCWWTF Screen Evaluation	3-Mar-15	N/A	\$0.00	\$140,000.00	\$0.00	(\$140,000.00)
600001071	EMERGENCY PUMP STATION PUMP REPLACE	24-Mar-16	N/A	\$174,676.25	\$250,000.00	\$0.00	(\$75,323.75)
600001072	WW PUMP STATION UPGRADE PROG-WEST	21-Mar-16	14-Apr-16	\$188,772.75	\$420,000.00	\$0.00	(\$231,227.25)
600001073	WW PUMP STATION UPGRADE PROG-EAST	9-Mar-16	N/A	\$139,362.69	\$110,000.00	\$29,362.69	\$0.00
600001075	NEW PUMP STN & FORCEMAIN + BELMONT	21-Jan-15	15-Apr-15	\$2,735,259.79	\$3,080,000.00	\$0.00	(\$344,740.21)
600001081	BPF - UPGRADE PROGRAM	7-Jan-16	N/A	\$80,685.89	\$120,000.00	\$0.00	(\$39,314.11)
600001093	HALIFAX WWTF - VENT AIR HEAT RECOVERY	15-Apr-16	N/A	\$197,058.02	\$250,000.00	\$0.00	(\$52,941.98)
600001096	SIR PROGRAM FLOW METERS & EQUIPMENT	30-Jan-15	9-Jun-15	\$37,098.05	\$55,000.00	\$0.00	(\$17,901.95)
600001101	NETWORK INFRASTRUCTURE UPGRADES (WW)	30-Jan-15	9-Jun-15	\$72,731.67	\$80,000.00	\$0.00	(\$7,268.33)
600001103	CMMS PHASE 2A 15/16 (WW)	28-May-15	N/A	\$72,339.53	\$86,000.00	\$0.00	(\$13,660.47)
600001105	ASSET ACCOUNTING IN SAP (WW)	30-Aug-16	N/A	\$40,489.35	\$40,000.00	\$489.35	\$0.00
600001106	CRM SELECTION & IMPLEMENTATION (WW)	8-Apr-15	14-Oct-15	\$241,504.09	\$240,000.00	\$1,504.09	\$0.00
600001110	GIS DATA PLAN CENTRAL (OPUS) (WW)	23-Apr-15	30-Jul-15	\$267,599.87	\$120,000.00	\$147,599.87	\$0.00
600001148	DWWTF LOCAL UV SYSTEM DISCONNECTS	15-Apr-15	N/A	\$20,198.63	\$22,500.00	\$0.00	(\$2,301.37)
600001161	SHAREPOINT IMPLEMENTATION (WW)	4-May-15	N/A	\$198,640.24	\$160,000.00	\$38,640.24	\$0.00
600001166	DWWTF REPLACE & UPGRADE UV SYSTEM PANELS	7-May-15	N/A	\$0.00	\$135,000.00	\$0.00	(\$135,000.00)
600001167	DWWTF EMERGENCY BASEMENT PUMP SYSTEM	27-Jul-15	N/A	\$22,630.62	\$30,000.00	\$0.00	(\$7,369.38)
600001168	CCTV FOR PROPOSED 16/17 IP	10-Aug-15	N/A	\$0.00	\$0.00	\$0.00	\$0.00
600001170	GIS DATA PLAN CENTRAL (AECOM) (WW)	23-Apr-15	30-Jul-15	\$178,881.64	\$120,000.00	\$58,881.64	\$0.00
600001171	GIS DATA PLAN EAST (WW)	23-Apr-15	30-Jul-15	\$114,832.48	\$260,000.00	\$0.00	(\$145,167.52)
600001173	SCADA MASTER PLAN IMPEM 14/15 (WW)	23-Feb-15	6-Jul-15	\$330,102.58	\$350,000.00	\$0.00	(\$19,897.42)
600001222	CENTRIFUGE WINTERIZATION UPGRADE MC WWTF	3-Nov-15	N/A	\$93,289.16	\$75,000.00	\$18,289.16	\$0.00
600001300	WWTF SECURITY UPGRADE PROGRAM 15/16	3-Nov-15	N/A	\$49,189.61	\$50,000.00	\$0.00	(\$810.39)
600001301	COMPRESSOR DUCTWORK - BPF	3-Nov-15	N/A	\$11,662.28	\$14,750.00	\$0.00	(\$3,087.72)

**Capital Project Spending Summary**

**ITEM #7**

**HRWC BOARD**

**June 28, 2017**

**ATTACHMENT 1**

**April 1, 2016 - March 31, 2017**

<b>Project Number</b>	<b>Project Name</b>	<b>HRWC Board Approval Date</b>	<b>NSUARB Approval Date</b>	<b>Amount Spent: Cumulative to March 31/17</b>	<b>Project Budget</b>	<b>Over Budget</b>	<b>(Under Budget)</b>
600001302	RALSTON BUILDING - WASTEWATER SERVICES	3-Nov-15	N/A	\$0.00	\$0.00	\$0.00	\$0.00
600001304	MANHOLE LINING CRES AVE & STUART HARRIS	3-Nov-15	N/A	\$185,967.75	\$195,000.00	\$0.00	(\$9,032.25)
600001311	Wet Weather Management Program	9-Nov-16	N/A	\$63,894.49	\$100,000.00	\$0.00	(\$36,105.51)
600001313	Manhole Renewals EAST (WW) 16/17	28-Jan-16	13-Apr-16	\$0.00	\$11,000.00	\$0.00	(\$11,000.00)
600001314	Manhole Renewals WEST (WW) 16/17	28-Jan-16	13-Apr-16	\$0.00	\$11,000.00	\$0.00	(\$11,000.00)
600001315	Manhole Renewals CENTRAL (WW) 16/17	28-Jan-16	13-Apr-16	\$0.00	\$10,000.00	\$0.00	(\$10,000.00)
600001316	Lateral Replacements EAST (WW) 16/17	28-Jan-16	13-Apr-16	\$671,644.67	\$430,000.00	\$241,644.67	\$0.00
600001317	Lateral Replacements WEST (WW) 16/17	28-Jan-16	13-Apr-16	\$687,449.07	\$530,000.00	\$157,449.07	\$0.00
600001318	Lateral Replacements CENTRAL (WW) 16/17	28-Jan-16	13-Apr-16	\$239,156.93	\$680,000.00	\$0.00	(\$440,843.07)
600001319	WW System Trenchless Rehabilitation Prog	20-Jan-16	10-Mar-16	\$1,799,178.32	\$1,800,000.00	\$0.00	(\$821.68)
600001324	Waterfront Drive WW System Replacement	11-Feb-16	6-Apr-16	\$0.00	\$338,000.00	\$0.00	(\$338,000.00)
600001330	Emergency PS Pump replacements	11-Aug-16	N/A	\$100,173.39	\$250,000.00	\$0.00	(\$149,826.61)
600001333	WW PS UPGRADE PROGRAM - CENTRAL	11-Aug-16	N/A	\$50,999.02	\$65,000.00	\$0.00	(\$14,000.98)
600001344	HWWTF - Installation of TSS Analyzer	5-Jul-16	N/A	\$55,443.47	\$82,000.00	\$0.00	(\$26,556.53)
600001345	HWWTF - Pump replacements sludge mixing	30-Aug-16	N/A	\$91,725.53	\$82,000.00	\$9,725.53	\$0.00
600001349	MCWWTF - Compressor Replacement	27-Apr-16	N/A	\$4,865.15	\$20,000.00	\$0.00	(\$15,134.85)
600001350	MC WWTF - Entrance Gate Replacement	27-Apr-16	N/A	\$30,547.55	\$20,000.00	\$10,547.55	\$0.00
600001357	EPWWTF Process Water System Filter Upg	17-May-16	N/A	\$10,784.96	\$23,500.00	\$0.00	(\$12,715.04)
600001358	EPWWTF Fall Protection Grates - Sludge	17-May-16	N/A	\$7,771.24	\$8,500.00	\$0.00	(\$728.76)
600001363	BPF - Front End Loader Replacement	1-Sep-16	19-Sep-16	\$255,987.39	\$253,000.00	\$2,987.39	\$0.00
600001366	BLT WWTF - Lighting Upgrade	19-Aug-16	N/A	\$17,867.05	\$25,000.00	\$0.00	(\$7,132.95)
600001369	Security Upgrade Program WW 16/17	28-Jul-16	N/A	\$194,069.88	\$200,000.00	\$0.00	(\$5,930.12)
600001370	SIR Program Flow Meters and Related Eq	28-Jan-16	13-Apr-16	\$28,299.05	\$40,000.00	\$0.00	(\$11,700.95)
600001384	FLEET UPGRADE PROGRAM (WW) 16/17	28-Jan-16	13-Apr-16	\$874,387.89	\$920,000.00	\$0.00	(\$45,612.11)
600001385	MURRAY HILL DR WW IP 16/17	20-Jan-16	24-Mar-16	\$26,607.75	\$38,000.00	\$0.00	(\$11,392.25)
600001386	FARQUHARSON ST WW IP 16/17	20-Jan-16	24-Mar-16	\$58,067.48	\$109,000.00	\$0.00	(\$50,932.52)
600001387	BROMPTON RD WW IP 16/17	20-Jan-16	24-Mar-16	\$25,791.85	\$278,000.00	\$0.00	(\$252,208.15)
600001388	EVERETTE ST WW IP 16/17	20-Jan-16	24-Mar-16	\$59,978.95	\$97,000.00	\$0.00	(\$37,021.05)
600001389	ALFRED ST WW IP 16/17	20-Jan-16	24-Mar-16	\$80,769.00	\$199,000.00	\$0.00	(\$118,231.00)
600001390	BECKFOOT DR WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
600001394	FOXGLOVE LANE WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$13,000.00	\$0.00	(\$13,000.00)
600001397	LAYTON RD WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$13,000.00	\$0.00	(\$13,000.00)
600001398	INVERNESS AVE WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$22,000.00	\$0.00	(\$22,000.00)
600001399	TILLOCK DR WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$13,000.00	\$0.00	(\$13,000.00)
600001400	TILLOCK COURT WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
600001402	McQUARRIE BRIDGE WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$150,000.00	\$0.00	(\$150,000.00)
600001403	LYDGATE DR WW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
600001407	MILL COVE WWTF CLARIFIER ACCESS	31-May-16	N/A	\$43,185.32	\$55,000.00	\$0.00	(\$11,814.68)
600001411	BLT WWTF - CLARIFIER ACCESS	5-Jul-16	N/A	\$12,486.24	\$16,000.00	\$0.00	(\$3,513.76)
600001412	SMALLWOOD AVENUE WW IP 16/17	18-Jul-16	N/A	\$63,327.04	\$72,000.00	\$0.00	(\$8,672.96)
600001413	CENTRIFUGE DEWATERING EQUIPMENT - MCWWTF	25-Jul-16	N/A	\$169,401.08	\$167,000.00	\$2,401.08	\$0.00
600001414	SL WWTF - UV INSTALLATION	25-Jul-16	N/A	\$247,294.69	\$245,000.00	\$2,294.69	\$0.00
600001415	HORNES RD BRIDGE WW REPLACEMENT 16/17	28-Jul-16	N/A	\$94,839.08	\$90,000.00	\$4,839.08	\$0.00
600001423	TREE ROOTS EAST	18-Oct-16	N/A	\$207,049.01	\$300,000.00	\$0.00	(\$92,950.99)
600001424	TREE ROOTS WEST	18-Oct-16	N/A	\$110,607.38	\$200,000.00	\$0.00	(\$89,392.62)
600001425	TREE ROOTS CENTRAL	18-Oct-16	N/A	\$16,695.41	\$50,000.00	\$0.00	(\$33,304.59)

**Capital Project Spending Summary**

**ITEM #7**

**HRWC BOARD**

**June 28, 2017**

**ATTACHMENT 1**

**April 1, 2016 - March 31, 2017**

<b>Project Number</b>	<b>Project Name</b>	<b>HRWC Board Approval Date</b>	<b>NSUARB Approval Date</b>	<b>Amount Spent: Cumulative to March 31/17</b>	<b>Project Budget</b>	<b>Over Budget</b>	<b>(Under Budget)</b>
600001427	MCWWTF SECONDARY FLOW INSTR REPLAC PROJ	17-Oct-16	N/A	\$44,735.10	\$45,000.00	\$0.00	(\$264.90)
600001430	HBR SOL WWTF FINE SCREEN UPGRADES	24-Oct-16	N/A	\$147,738.50	\$249,000.00	\$0.00	(\$101,261.50)
600001460	MARITIME MUSEUM SEWER OUTFALL ADDL COSTS	24-Jan-17	N/A	\$31,838.34	\$0.00	\$31,838.34	\$0.00
600001549	CRM INTERFACES (WW)	6-Mar-17	N/A	\$76,429.03	\$80,000.00	\$0.00	(\$3,570.97)
600001566	DESKTOP COMPUTER REPL PROGRAM (WW) 16/17	28-Jan-17	13-Apr-16	\$62,724.23	\$72,000.00	\$0.00	(\$9,275.77)
600001567	NETWORK INFRASTRUCT UPGRADES (WW) 16/17	31-Mar-01	N/A	\$75,703.05	\$80,000.00	\$0.00	(\$4,296.95)
<b>Wastewater Capital Difference</b>				<b>\$16,046,372.99</b>	<b>\$20,721,250.00</b>	<b>\$859,433.63</b>	<b>(\$5,534,310.64)</b>
							<b>(\$4,674,877.01)</b>
700000303	561 HERRING COVE RD CULVERT REPLACEMENT	26-Apr-12	N/A	\$81,841.39	\$80,000.00	\$1,841.39	\$0.00
700000343	DRAINAGE REMEDIATION PROGRAM 12/13	10-Aug-12	N/A	\$0.00	\$0.00	\$0.00	\$0.00
700000395	SW CULVERT/DITCH CONDITION ASSESSMENT	25-Feb-13	8-May-13	\$342,109.41	\$325,000.00	\$17,109.41	\$0.00
700000422	WILSON DR CULVERT REPLACEMENT 13/14	25-Apr-13	N/A	\$138,978.38	\$215,000.00	\$0.00	(\$76,021.62)
700000424	INVERNESS AVE CULVERT REPLACEMENT 13/14	25-Apr-13	N/A	\$93,174.06	\$200,000.00	\$0.00	(\$106,825.94)
700000540	SACKVILLE CROSS RD SW SYSTEM RENEWAL	27-Feb-14	6-Apr-16	\$744,517.84	\$925,000.00	\$0.00	(\$180,482.16)
700000556	183 LAKEVIEW AVE TWIN CULVERT REPLACE	27-Mar-13	N/A	\$151,690.71	\$188,400.00	\$0.00	(\$36,709.29)
700000583	DOCUMENT MGMT SYSTEM (SW)	13-Jun-14	19-Jun-14	\$43,444.44	\$20,000.00	\$23,444.44	\$0.00
700000600	15/16 CULVERT PROG - ENGINEERING SERVICE	17-Jul-14	N/A	\$0.00	\$0.00	\$0.00	\$0.00
700000643	HOLLY COURT CULVERT REPLACEMENT	19-Feb-15	N/A	\$192,651.27	\$234,400.00	\$0.00	(\$41,748.73)
700000660	ROLLING HILLS DRIVE SW REHAB	18-Feb-15	N/A	\$152,036.93	\$157,000.00	\$0.00	(\$4,963.07)
700000676	BEDFORD HWY @ SHAUNSLIEVE DR CULVERT	23-Feb-15	27-Apr-15	\$204,722.66	\$441,400.00	\$0.00	(\$236,677.34)
700000677	NORTH PRESTON RD-CROSS CULVERT REPLACE	23-Feb-15	27-Apr-15	\$172,940.43	\$321,400.00	\$0.00	(\$148,459.57)
700000681	NETWORK INFRASTRUCTURE UPGRADES (SW)	30-Jan-15	9-Jun-15	\$18,182.92	\$20,000.00	\$0.00	(\$1,817.08)
700000683	CMMS PHASE 2A 15/16 (SW)	28-May-15	N/A	\$18,084.90	\$21,500.00	\$0.00	(\$3,415.10)
700000685	ASSET ACCOUNTING IN SAP (SW)	30-Aug-16	N/A	\$10,122.34	\$10,000.00	\$122.34	\$0.00
700000686	CRM SELECTION & IMPLEMENTATION (SW)	8-Apr-15	14-Oct-15	\$60,376.03	\$60,000.00	\$376.03	\$0.00
700000689	GIS DATA PLAN CENTRAL (OPUS) (SW)	23-Apr-15	30-Jul-15	\$72,430.38	\$30,000.00	\$42,430.38	\$0.00
700000710	YANKEETOWN RD NEAR COX LAKE CULVERT	20-Mar-15	N/A	\$134,879.89	\$175,400.00	\$0.00	(\$40,520.11)
700000714	MERRIMAC DR (SW) IP 15/16	21-Jan-15	15-Apr-15	\$10,346.62	\$21,000.00	\$0.00	(\$10,653.38)
700000723	JUBILEE LANE (SW) IP 15/16	21-Jan-15	15-Apr-15	\$7,072.21	\$13,000.00	\$0.00	(\$5,927.79)
700000742	SHAREPOINT IMPLEMENTATION (SW)	13-Jun-14	6-Jul-15	\$49,660.06	\$40,000.00	\$9,660.06	\$0.00
700000747	KEATING ROAD SW INLET STRUCTURE	13-Jul-15	N/A	\$66,496.53	\$75,000.00	\$0.00	(\$8,503.47)
700000749	GIS DATA PLAN CENTRAL (AECOM) (SW)	23-Apr-15	30-Jul-15	\$44,720.41	\$30,000.00	\$14,720.41	\$0.00
700000750	GIS DATA PLAN EAST (SW)	23-Apr-15	30-Jul-15	\$28,708.12	\$65,000.00	\$0.00	(\$36,291.88)
700000903	MANHOLE RENEWALS SW EAST 16/17	28-Jan-16	13-Apr-16	\$0.00	\$10,000.00	\$0.00	(\$10,000.00)
700000904	MANHOLE RENEWALS SW WEST 16/17	28-Jan-16	13-Apr-16	\$0.00	\$10,000.00	\$0.00	(\$10,000.00)
700000905	MANHOLE RENEWALS SW CENTRAL 16/17	28-Jan-16	13-Apr-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
700000906	CATCHBASIN RENEWALS SW EAST 16/17	28-Jan-16	13-Apr-16	\$19,651.45	\$10,000.00	\$9,651.45	\$0.00
700000907	CATCHBASIN RENEWALS SW WEST 16/17	28-Jan-16	13-Apr-16	\$16,948.57	\$10,000.00	\$6,948.57	\$0.00
700000908	CATCHBASIN RENEWALS SW CENTRAL 16/17	28-Jan-16	13-Apr-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
700000909	LATERAL REPLACEMENTS SW EAST 16/17	28-Jan-16	13-Apr-16	\$0.00	\$29,000.00	\$0.00	(\$29,000.00)
700000910	LATERAL REPLACEMENTS SW WEST 16/17	28-Jan-16	13-Apr-16	\$4,589.62	\$29,000.00	\$0.00	(\$24,410.38)
700000911	LATERAL REPLACEMENTS SW CENTRAL 16/17	28-Jan-16	13-Apr-16	\$6,739.20	\$29,000.00	\$0.00	(\$22,260.80)
700000912	BOM SW LATERAL 5151 GEORGE STREET	6-Jun-16	N/A	\$0.00	\$90,000.00	\$0.00	(\$90,000.00)
700000915	DRIVEWAY CULVERT REPLACE EAST 16/17	6-Apr-16	25-Apr-15	\$137,776.45	\$150,000.00	\$0.00	(\$12,223.55)
700000916	DRIVEWAY CULVERT REPLACE WEST 16/17	6-Apr-16	25-Apr-15	\$62,888.23	\$150,000.00	\$0.00	(\$87,111.77)

**Capital Project Spending Summary**

**ITEM #7**

**HRWC BOARD**

**June 28, 2017**

**ATTACHMENT 1**

**April 1, 2016 - March 31, 2017**

Project Number	Project Name	HRWC Board Approval Date	NSUARB Approval Date	Amount Spent: Cumulative to March 31/17	Project Budget	Over Budget	(Under Budget)
700000917	DRIVEWAY CULVERT REPLACE CENTRAL 16/17	6-Apr-16	25-Apr-15	\$726,413.76	\$150,000.00	\$576,413.76	\$0.00
700000922	CLEMENT ST BERM - SW CONTROL STRUCTURE	22-Mar-17	n/a	\$0.00	\$0.00	\$0.00	\$0.00
700000923	FLEET UPGRADE PROGRAM (SW) 16/17	28-Jan-16	N/A	\$208,561.57	\$230,000.00	\$0.00	(\$21,438.43)
700000924	MURRAY HILL DR SW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$28,000.00	\$0.00	(\$28,000.00)
700000925	FARQUHARSON ST SW IP 16/17	20-Jan-16	24-Mar-16	\$14,509.44	\$19,000.00	\$0.00	(\$4,490.56)
700000926	BROMPTON RD WW IP 16/17	20-Jan-16	24-Mar-16	\$15,475.22	\$151,000.00	\$0.00	(\$135,524.78)
700000927	EVERETTE ST SW IP 16/17	20-Jan-16	24-Mar-16	\$3,761.37	\$28,000.00	\$0.00	(\$24,238.63)
700000928	ALFRED ST SW IP 16/17	20-Jan-16	24-Mar-16	\$33,728.60	\$11,000.00	\$22,728.60	\$0.00
700000929	BECKFOOT DR SW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$9,000.00	\$0.00	(\$9,000.00)
700000932	TILLOCK DR SW IP 16/17	20-Jan-16	24-Mar-16	\$18,790.17	\$19,000.00	\$0.00	(\$209.83)
700000934	BAKER DRIVE SW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$52,000.00	\$0.00	(\$52,000.00)
700000935	SECOND AVE SW IP 16/17	20-Jan-16	24-Mar-16	\$0.00	\$70,000.00	\$0.00	(\$70,000.00)
700000939	YANKEETOWN RD (NEAR CIVIC 258) CULVERT	26-May-16	N/A	\$115,774.99	\$200,000.00	\$0.00	(\$84,225.01)
700000940	MANSION AVENUE (NEAR CIVIC 43) CULVERT	30-May-16	N/A	\$58,846.01	\$60,000.00	\$0.00	(\$1,153.99)
700000941	BEDFORD HWY SW SYSTEM EMERGENCY REPAIR	21-Jul-16	N/A	\$64,600.87	\$75,000.00	\$0.00	(\$10,399.13)
700000942	STORMWATER APPEALS TRACKING	N/A	N/A	\$11,612.72	\$12,000.00	\$0.00	(\$387.28)
700000943	HAMMONDS PLAINS RD SW IP 16/17	30-Aug-16	N/A	\$230,961.73	\$230,000.00	\$961.73	\$0.00
700000946	SYCAMORE LANE STORM SEWER REPLACEMENT	23-Sep-16	N/A	\$129,442.87	\$150,000.00	\$0.00	(\$20,557.13)
700001049	COW BAY RD DEEP STORM SEWER-ADDT'L COSTS	3-Mar-17	N/A	\$8,799.75	\$8,700.00	\$99.75	\$0.00
700001055	CRM INTERFACES (SW)	6-Mar-17	N/A	\$19,107.26	\$20,000.00	\$0.00	(\$892.74)
700001076	BAKER DR 2016 SW IP	6-Apr-17	N/A	\$9,761.17	\$9,762.00	\$0.00	(\$0.83)
700001077	DESKTOP COMPUTER REPL PROGRAM 16/17 (SW)	28-Jan-16	13-Apr-16	\$15,681.06	\$18,000.00	\$0.00	(\$2,318.94)
700001078	NETWORK INFRASTRUCT UPGRADES 16/17 (SW)	31-Mar-17	N/A	\$18,925.76	\$20,000.00	\$0.00	(\$1,074.24)
<b>Stormwater Capital Difference</b>				<b>\$4,792,535.77</b>	<b>\$5,773,962.00</b>	<b>\$726,508.32</b>	<b>(\$1,707,934.55)</b>
						<b>(\$981,426.23)</b>	
<b>Net Difference</b>				<b>\$36,439,225.43</b>	<b>\$42,036,085.00</b>	<b>\$3,124,173.78</b>	<b>(\$8,721,033.35)</b>
						<b>(\$5,596,859.57)</b>	



**Capital Project Spending Summary over \$250,000**  
**April 1, 2016 - March 31, 2017**

ITEM # 7  
 HRWC BOARD  
 June 28, 2017  
 ATTACHMENT 2

Project Number	Project Name	HRWC Board Approval Date	NSUARB Approval Date	Amount Spent: Cumulative to March 31/17	Staged Approvals		Total Project Budget	Project Adjustments	Revised Total Project Budget	Over Budget	(Under Budget)	Comments
					Design	Tender / Construction						
70000395	SW CULVERT/DITCH CONDITION ASSESSMENT	25-Feb-13	8-May-13	\$342,109.41	\$0	\$0	\$325,000.00	\$0	\$325,000	\$17,109	\$0	
70000540	SACKVILLE CROSS RD SW SYSTEM RENEWAL	27-Feb-14	6-Apr-16	\$744,517.84	\$0	\$0	\$110,000.00	\$815,000	\$925,000	\$0	(\$180,482)	Added 1.09M from 7-914 April 6 2016 / moved \$150 K to 7-946 Sept 30/16 / Minus 125K to 7-981 Nov 10, 2016
70000676	BEDFORD HWY @ SHAUNSLIEVE DR CULVERT	23-Feb-15	27-Apr-15	\$204,722.66	\$0	\$0	\$407,000.00	\$34,400	\$441,400	\$0	(\$236,677)	Added 34.4K from 7-600 em May 12 2016
70000677	NORTH PRESTON RD-CROSS CULVERT REPLACE	23-Feb-15	27-Apr-15	\$172,940.43	\$0	\$0	\$347,000.00	(\$25,600)	\$321,400	\$0	(\$148,460)	Added 34.4K from 7-600 em May 12 2016 / Minus 60K to 7-940 May 30 2016
<b>Stormwater Capital Difference</b>				\$1,464,290	\$0	\$0	\$1,189,000	\$823,800	\$2,012,800	\$17,109	(\$565,619)	
<b>Net Difference</b>				\$23,595,706	\$0	\$0	\$19,278,964	\$8,154,342	\$27,433,306	\$1,037,797	(\$4,875,398)	
											(\$3,837,600)	

**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**

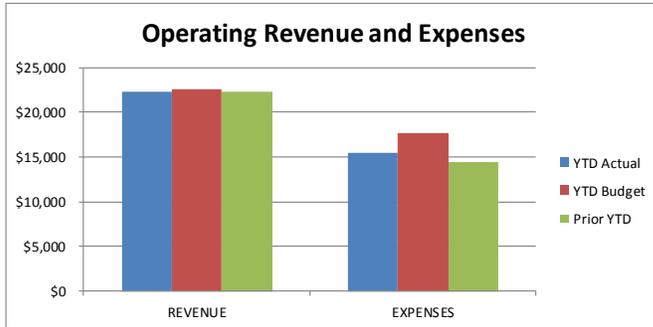
**ORIGIN:**

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.

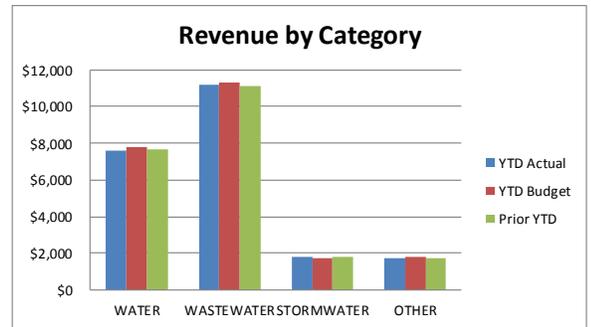
**FINANCIAL**

**HALIFAX WATER  
 UNAUDITED FINANCIAL INFORMATION  
 APRIL 1/17 - MAY 31/17 (2 MONTH)  
 '000**



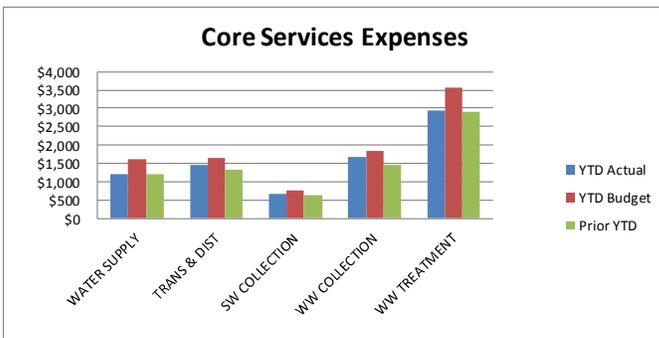
**OPERATING REVENUE AND EXPENSES**

	YTD Actual	YTD Budget	Prior YTD	% of Budget
REVENUE	\$22,343	\$22,598	\$22,291	16.48%
EXPENSES	\$15,497	\$17,707	\$14,424	14.59%
	<b>\$6,846</b>	<b>\$4,891</b>	<b>\$7,867</b>	<b>23.33%</b>



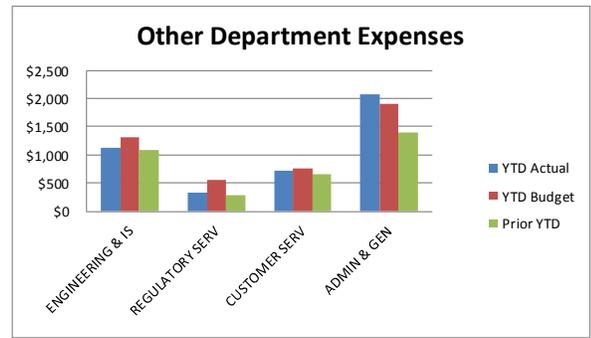
**REVENUE BY CATEGORY**

	YTD Actual	YTD Budget	Prior YTD
WATER	\$7,623	\$7,768	\$7,646
WASTEWATER	\$11,205	\$11,293	\$11,133
STORMWATER	\$1,774	\$1,764	\$1,771
OTHER	\$1,741	\$1,773	\$1,741
	<b>\$22,343</b>	<b>\$22,598</b>	<b>\$22,291</b>



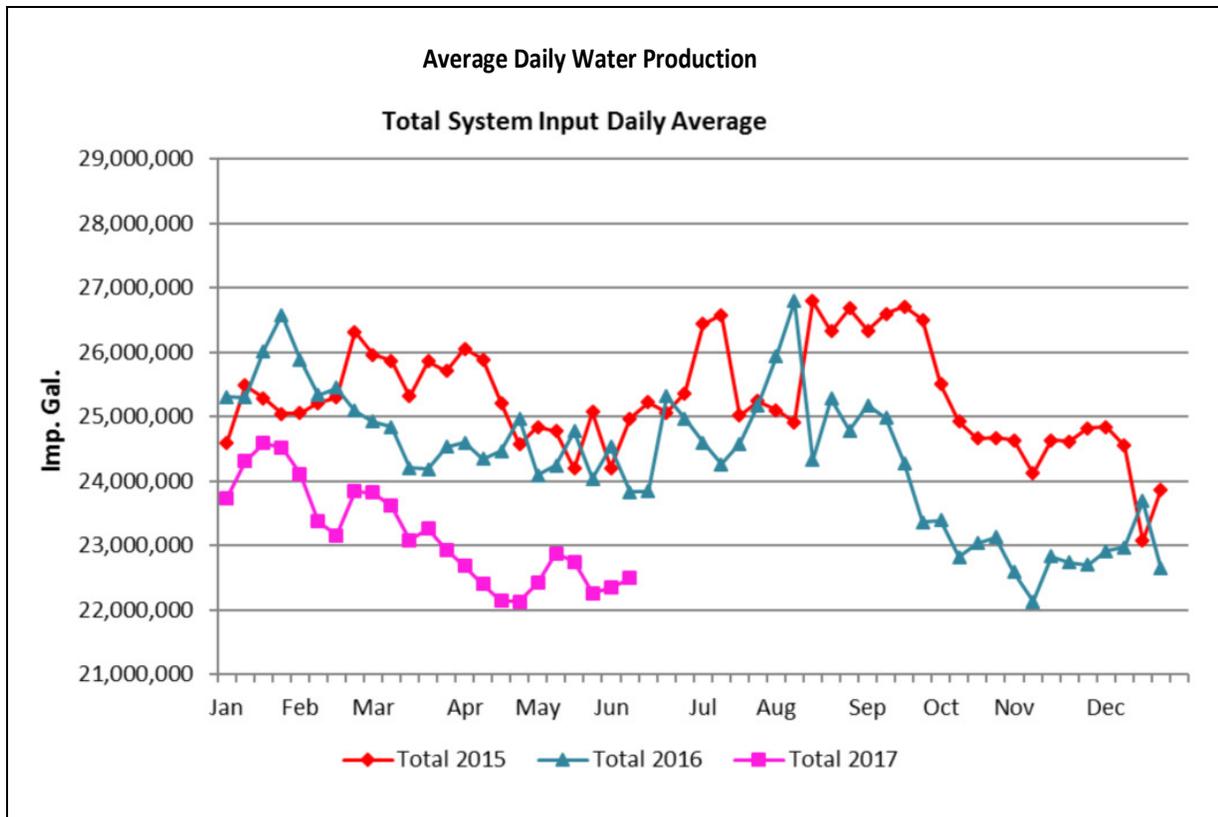
**CORE SERVICES EXPENSES**

	YTD Actual	YTD Budget	Prior YTD	% of Budget
WATER SUPPLY	\$1,192	\$1,608	\$1,210	12.36%
TRANS & DIST	\$1,463	\$1,640	\$1,336	14.87%
SW COLLECTION	\$689	\$770	\$634	14.91%
WW COLLECTION	\$1,672	\$1,826	\$1,462	15.25%
WW TREATMENT	\$2,933	\$3,558	\$2,905	13.74%
	<b>\$7,950</b>	<b>\$9,403</b>	<b>\$7,546</b>	<b>14.09%</b>



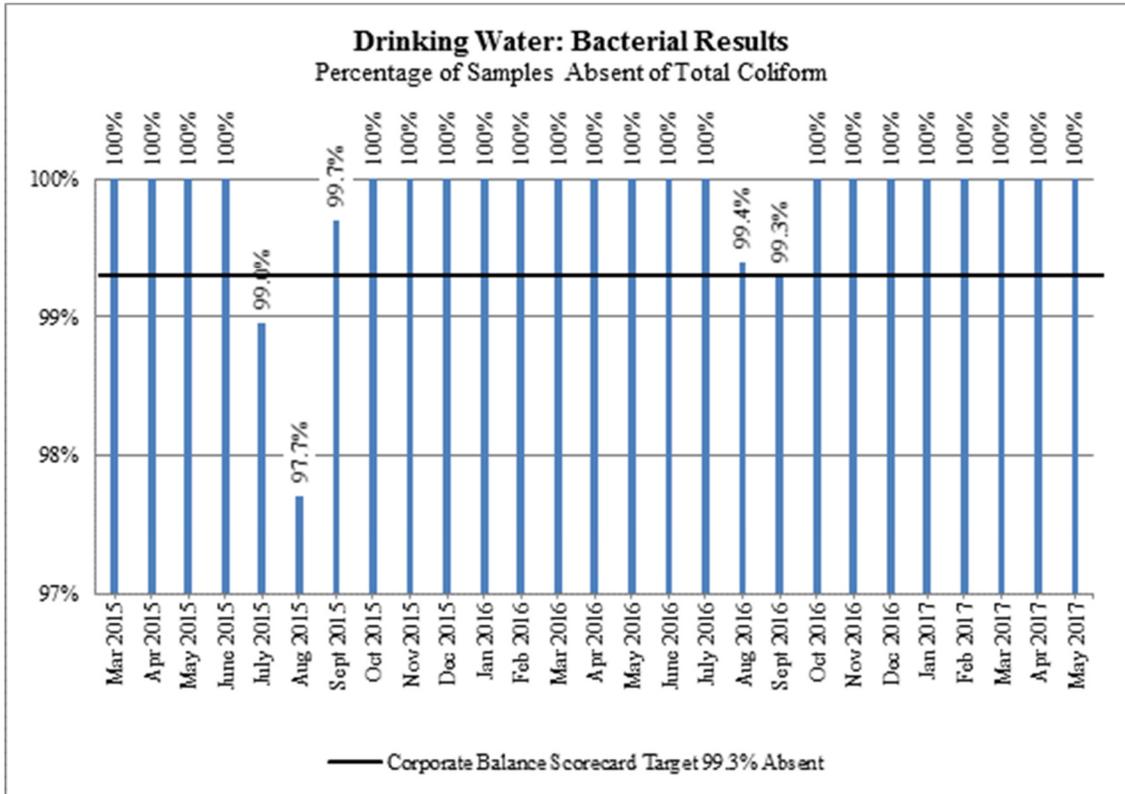
**OTHER DEPARTMENT EXPENSES**

	YTD Actual	YTD Budget	Prior YTD
ENGINEERING & IS	\$1,128	\$1,307	\$1,099
REGULATORY SERV	\$330	\$562	\$294
CUSTOMER SERV	\$720	\$771	\$652
ADMIN & GEN	\$2,067	\$1,908	\$1,389
	<b>\$4,245</b>	<b>\$4,548</b>	<b>\$3,434</b>



Regional Water Main Break/Leak Data		
Year	Total Breaks/Leaks	Current 12 Month Rolling Total (up to May 31/17)
2015/16	226	200
2014/15	210	
2013/14	213	
2012/13	262	
2011/12	205	
<b>Total</b>	<b>1116</b>	
<b>Yr. Avg.</b>	<b>217.6</b>	

Water Accountability
<b>Losses per Service Connection/Day (International Water Association Standard)</b>
<i>Period Ending March 31, 2017</i>
Real Losses: 227 litres
CBS Target: 180



<b>Water Quality Master Plan Objectives</b>				
<b>2016-2017 Q4</b>				
Objective	Total Sites	% of Sites Achieving Target	All Sites: 90th Percentile < 15 µg/L	CBSC Awarded Points
Disinfection	66	98%	---	18
Total Trihalomethanes	25	100%	---	20
Haloacetic Acids	21	95%	---	16
Particle Removal	5	100%	---	20
Corrosion Control*	69	---	6.1	20
<b>TOTAL</b>				<b>94</b>

Score: 94/100

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

Wastewater Treatment Facility	Wastewater Treatment Facility Compliance Summary																Toxicity	Trend	
	Rolling Averages - March, April and May 2017																		
	CBODs (mg/L)		TSS (mg/L)		E. coli (counts/100mL)		pH		Ammonia (mg/L)		Phosphorous (mg/L)		TRC (mg/L)		Dissolved Oxygen (mg/L)				
NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.		
Halifax	50	34	40	28	5000	756	6-9	6.8	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Dartmouth	50	32	40	28	5000	1031	6-9	6.7	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Herring Cove	50	23	40	21	5000	125	6-9	6.9	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Eastern Passage	50	7	40	5	5000	50	6-9	7.0	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Mill Cove	25	11	25	14	200	50	6.5-9	6.9	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Springfield	20	5	20	5	200	16	6-9	7.2	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Frame	20	5	20	1	200	13	6-9	7.1	-	-	-	-	-	-	-	-	-	-	Continued
Middle Musq.	20	25	20	20	200	5161	6-9	7.2	-	-	-	-	-	-	-	-	-	-	Continued
Uplands	20	10	20	10	200	938	6-9	7.3	-	-	-	-	-	-	-	-	-	-	Continued
Aerotech	5	5	5	6	200	13	6-9	7.1	5.7 W 1.2 S	0.5	0.5	0.3	-	6.5	8.2	-	-	Not acutely lethal	Continued
North Preston	10	5	10	10	200	10	6-9	6.7	3	1.4	1.5	0.3	-	-	-	-	-	-	Improved
Lockview	20	5	20	5	200	13	6.5-9	7.4	8.0 S	4.2	1.2 S	0.3	-	-	-	-	-	-	Continued
Steeves (Wellington)	20	5	20	8	200	100	6.5-9	6.8	14.4 S	0.1	1.0 S	0.2	-	-	-	-	-	-	Continued
BLT	15	6	20	22	200	18	6-9	7.0	5 W 3 S	4.1	3 W 1 S	1.5	0.02	0.10	5	7.7	-	Not acutely lethal	Continued
Avg. of all Facilities	13		13		592		7.0		2.1		0.5		0.18		8.0				

**NOTES & ACRONYMS:**

CBODs - Carbonaceous 5-Day Biochemical Oxygen Demand

TSS - Total Suspended Solids

TRC - Total Residual Chlorine

W / S - Winter / Summer compliance limits

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

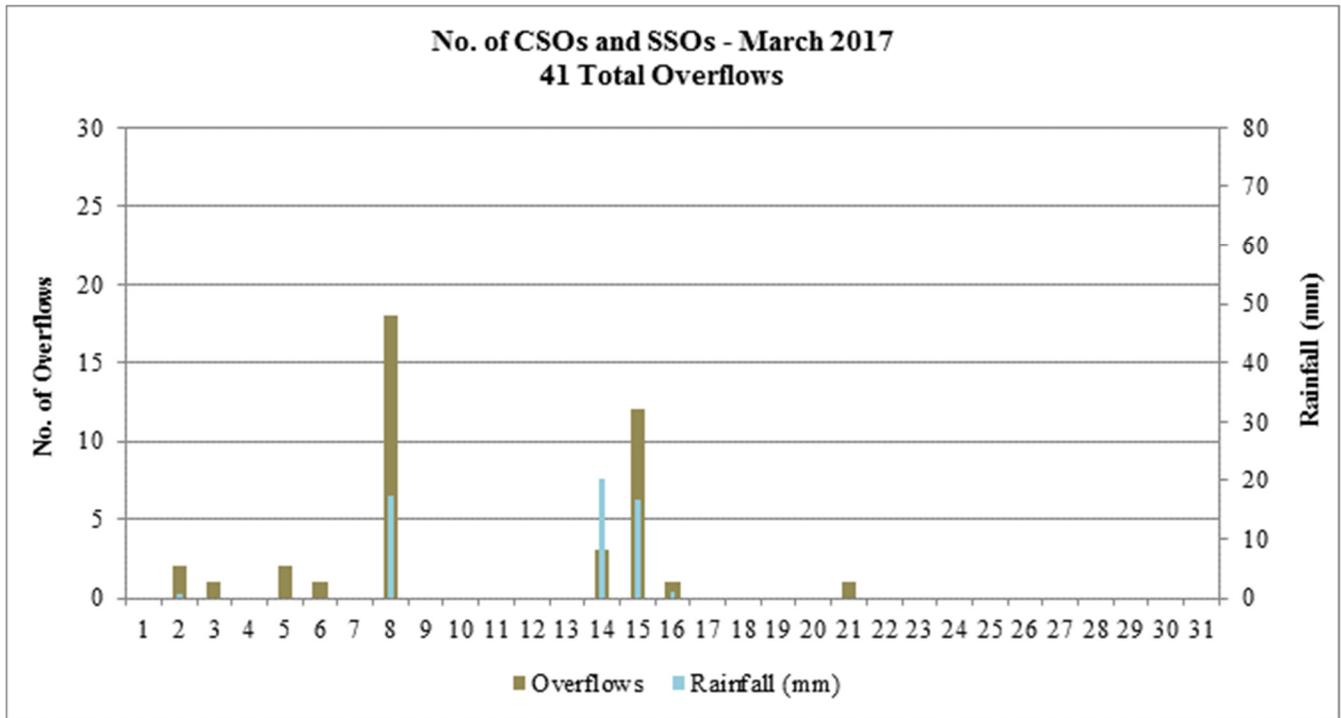
Improved - One or more parameter(s) became compliant since the last report

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

**LEGEND**

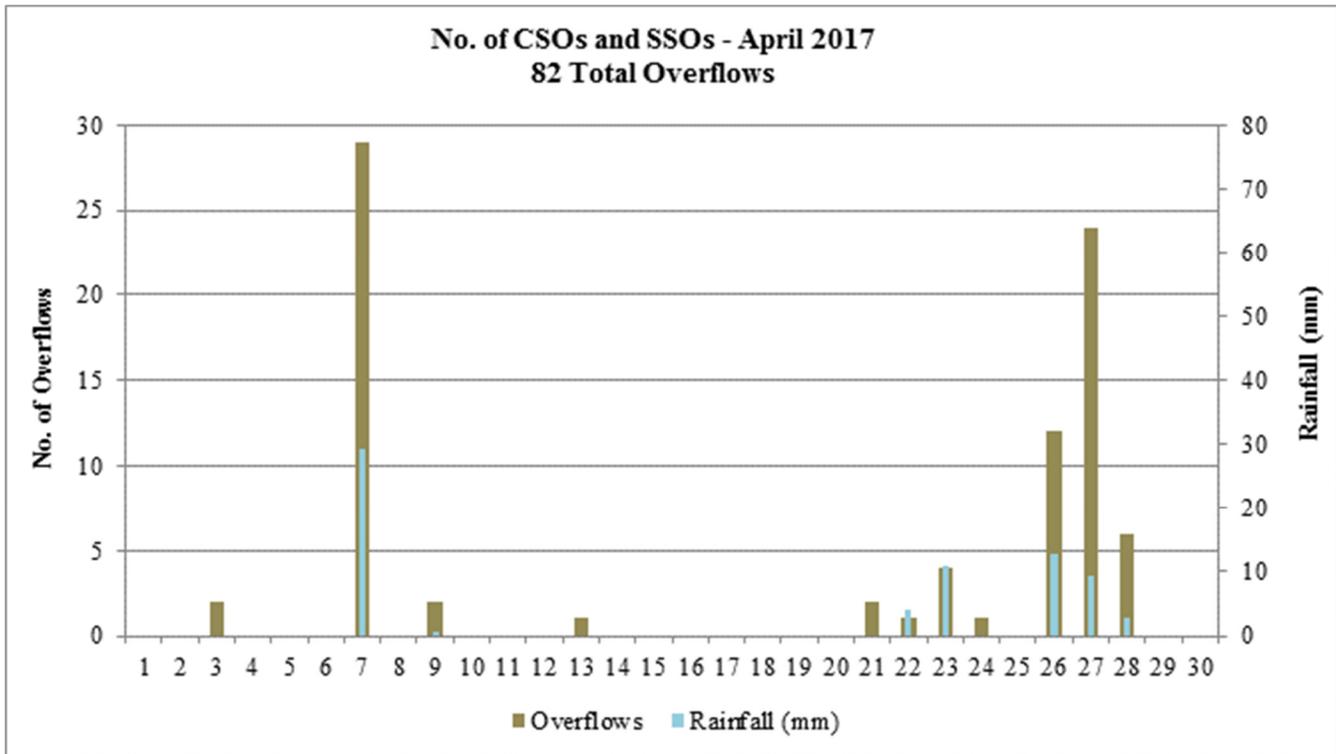
	NSE Compliant
	NSE Non-Compliant

The Middle Musquodobit Facility had a mechanical failure of the Rotating Biological Contactor (RBC) unit that impacted the CBOD results and there was rehabilitation work completed on the polishing pond that influenced the results for the E.coli. Both the RBC and polishing pond are fully operational again.



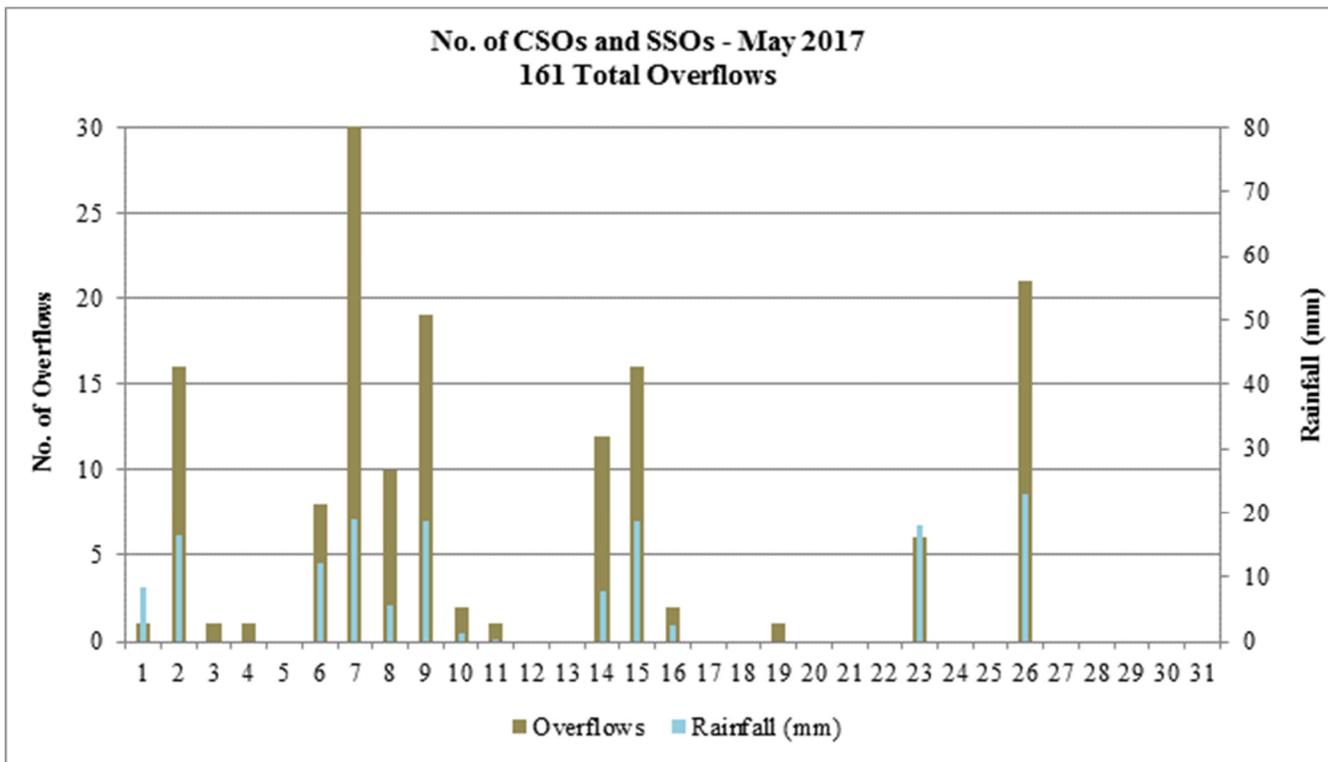
NOTES & ACRONYMS: CSO - Combined Sewer Overflow SSO - Sanitary Sewer Overflow

- Rainfall data is from Halifax Water’s rain gauge at the Halifax WWTF.
- There were five overflows on days when there was no recorded rainfall, as follows:
  1. March 3: The CSO at the Chain Rock PS & CSO was due to snow melt.
  2. March 5: The CSOs at the Duffus St PS and the Upper Water St CSO were due to snow melt.
  3. March 6: The CSO at the Chain Rock PS & CSO was due to snow melt.
  4. March 21: The SSO at the Armdale PS resulted from a mechanical failure of the gate.



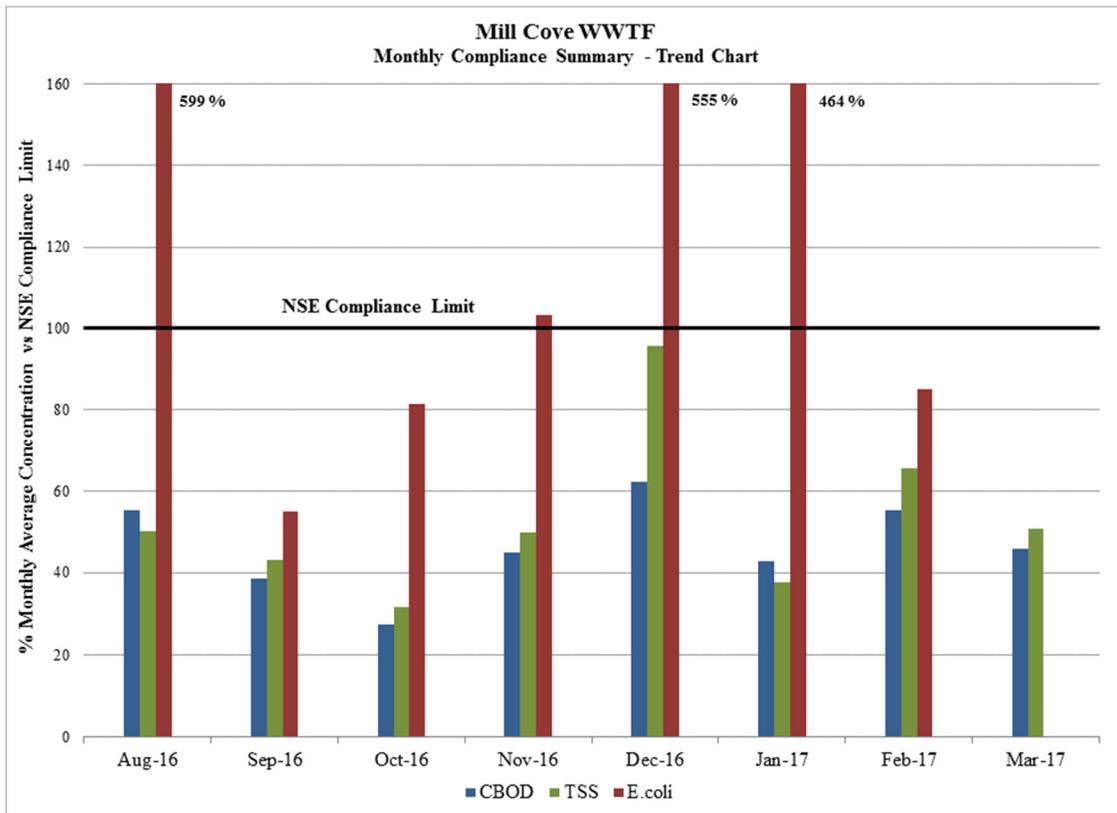
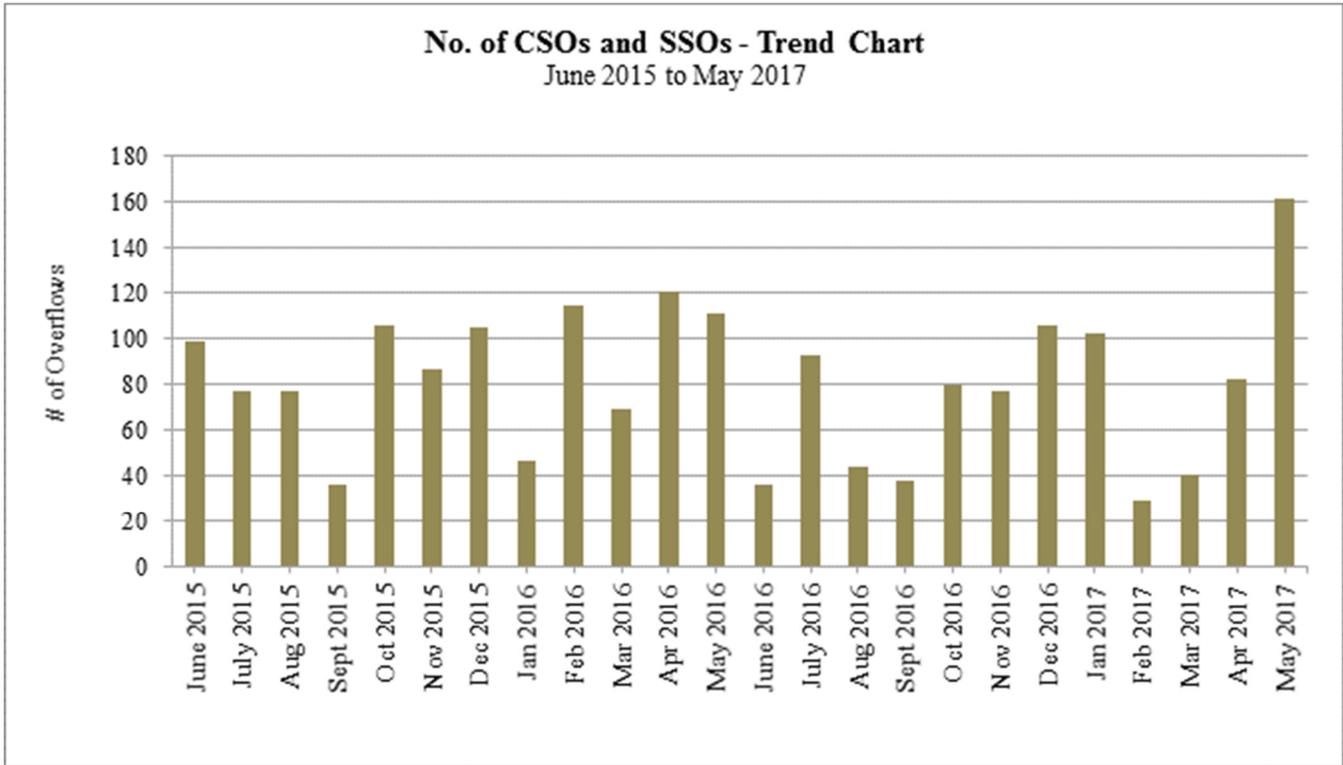
NOTES & ACRONYMS: CSO - Combined Sewer Overflow SSO - Sanitary Sewer Overflow

- Rainfall data is from Halifax Water’s rain gauge at the Halifax WWTF.
- There were four overflows on days when there was no recorded rainfall, as follows:
  1. April 3: The CSO at the Melva St. PS & CSO was caused by an automated SCADA pump inhibit and gate closure. It was likely due to an electrical supply fluctuation. The CSO at the Ferguson Rd CSO was caused by an automated SCADA pump inhibit and gate closure for an unknown reason.
  2. April 13: The SSO at the Fish Hatchery Park PS was due to thermographic survey testing being performed on the station.
  3. April 24: The CSO at the Ferguson Rd CSO was the result of a valve blockage by debris.

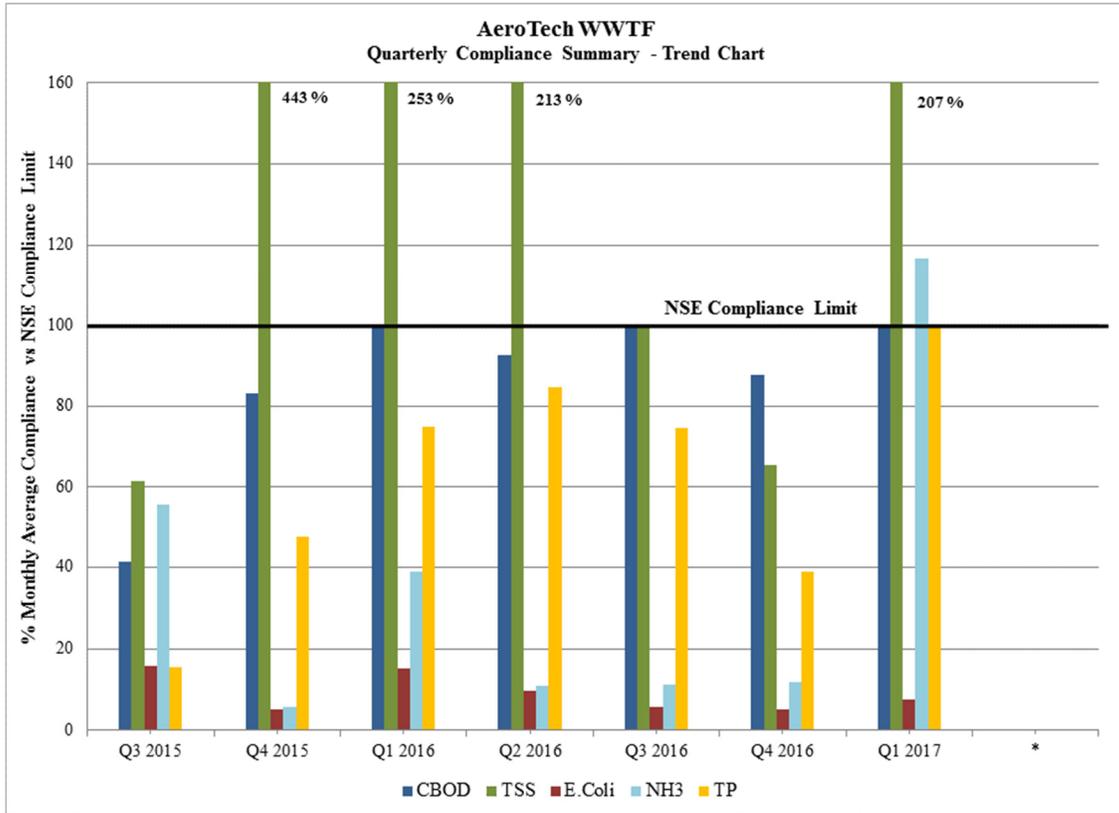


NOTES & ACRONYMS: CSO - Combined Sewer Overflow SSO - Sanitary Sewer Overflow

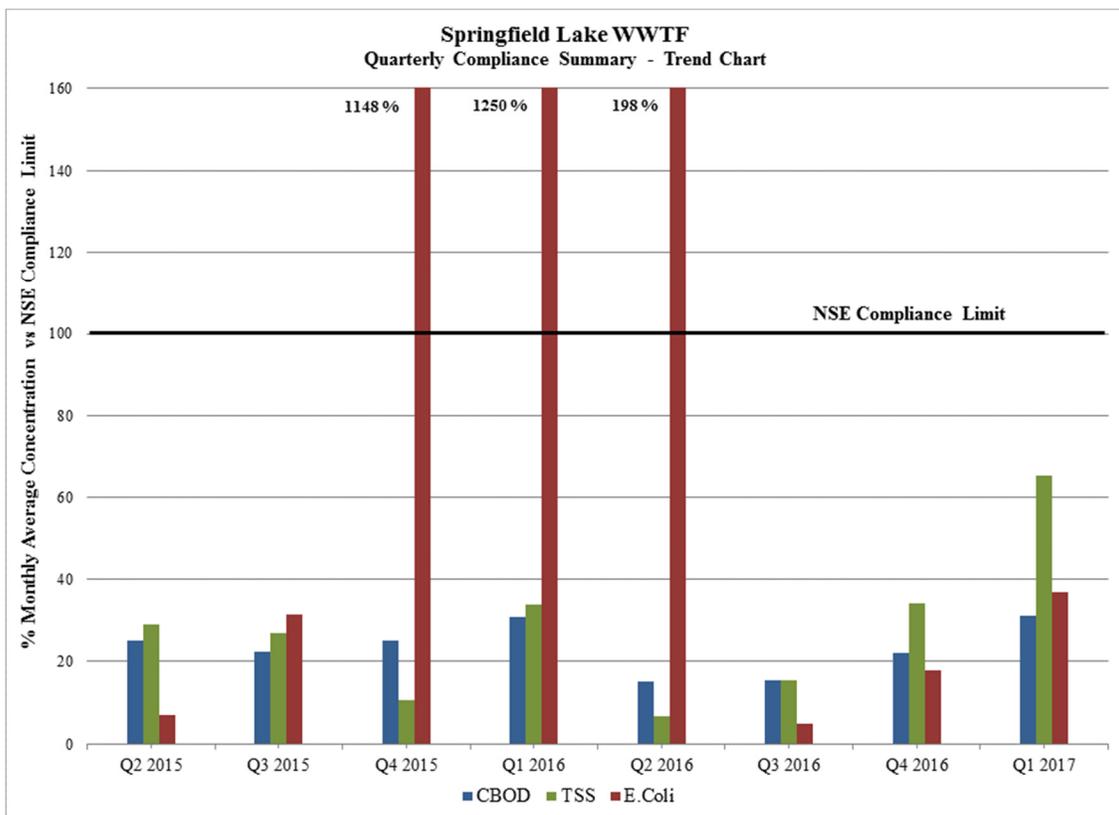
- Rainfall data is from Halifax Water’s rain gauge at the Halifax WWTF.
- There were four overflows on days when there was no recorded rainfall, as follows:
  1. May 3: The CSO the Maritime Museum CSO was due to rainfall on the previous day.
  2. May 4: The CSO at the Grove St CSO was due to a valve blockage by debris.
  3. May 11: The CSO at the Jamieson St PS & CSO was due to maintenance in the wet well, necessitating the closure of the valve.
  4. May 19: The CSO at the Duffus St PS was due to electrical issues caused by a power interruption at the Halifax WWTF.



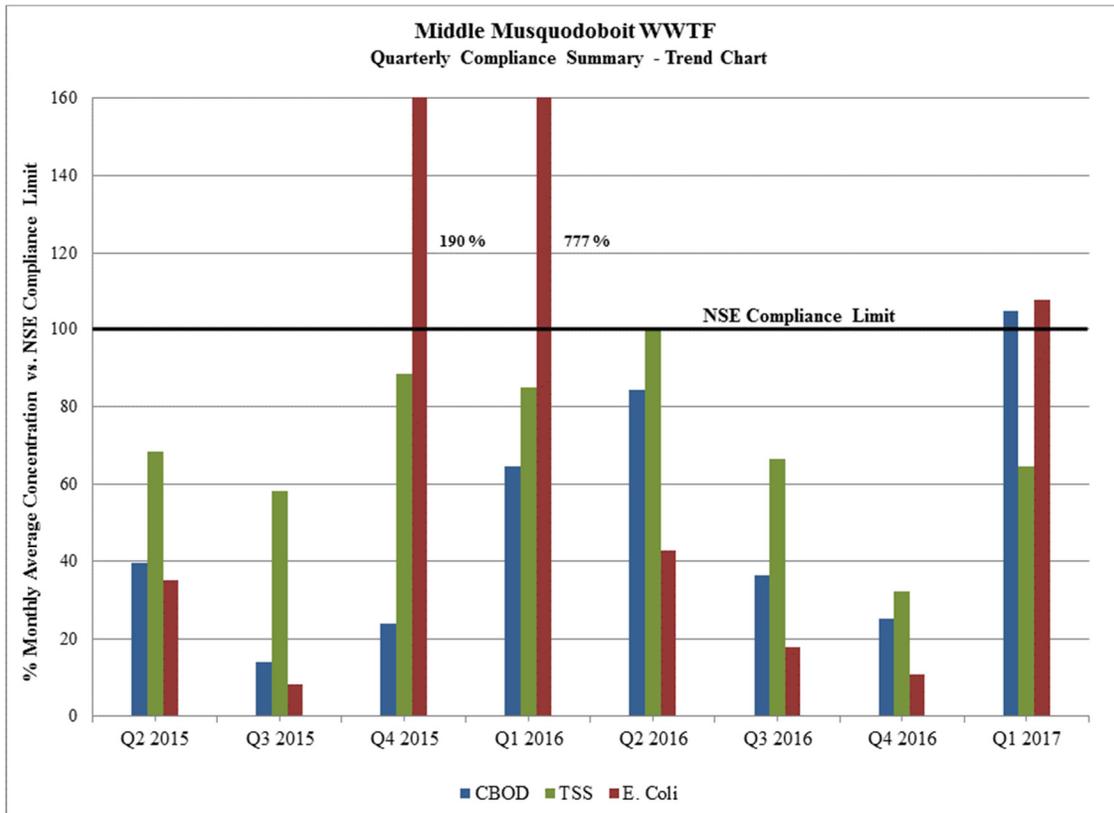
Lower numbers represent better performance.



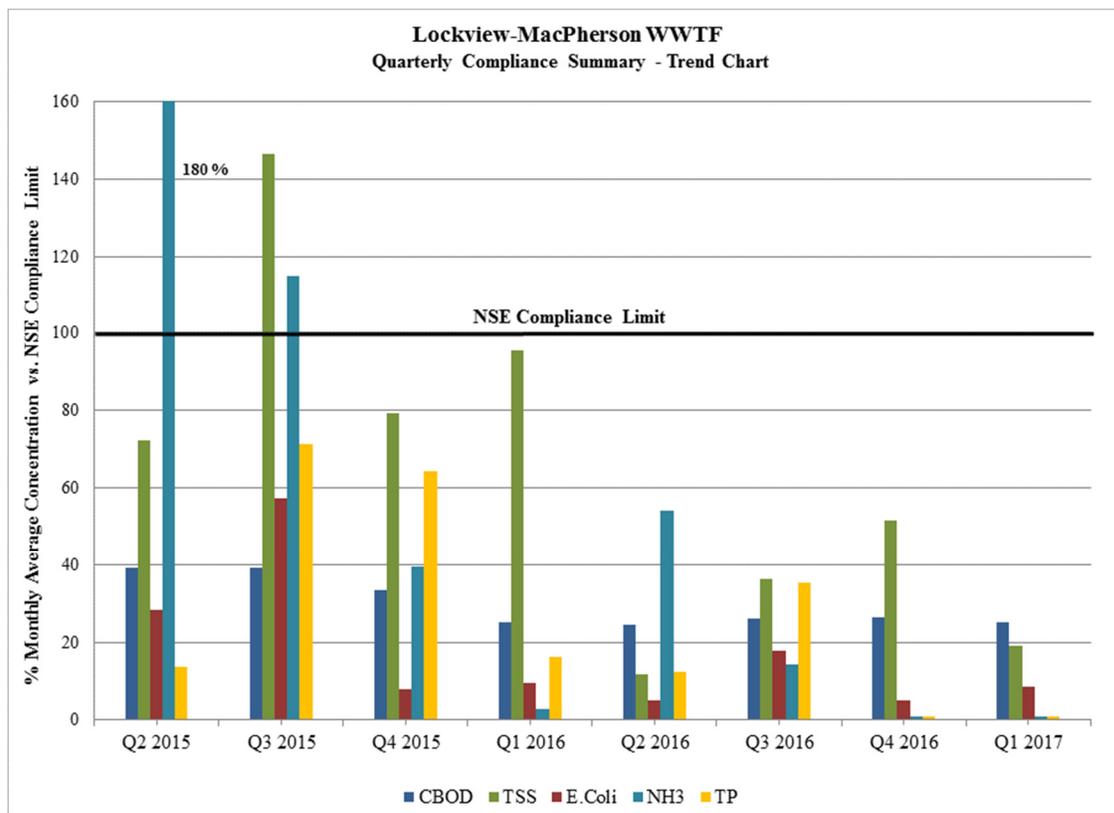
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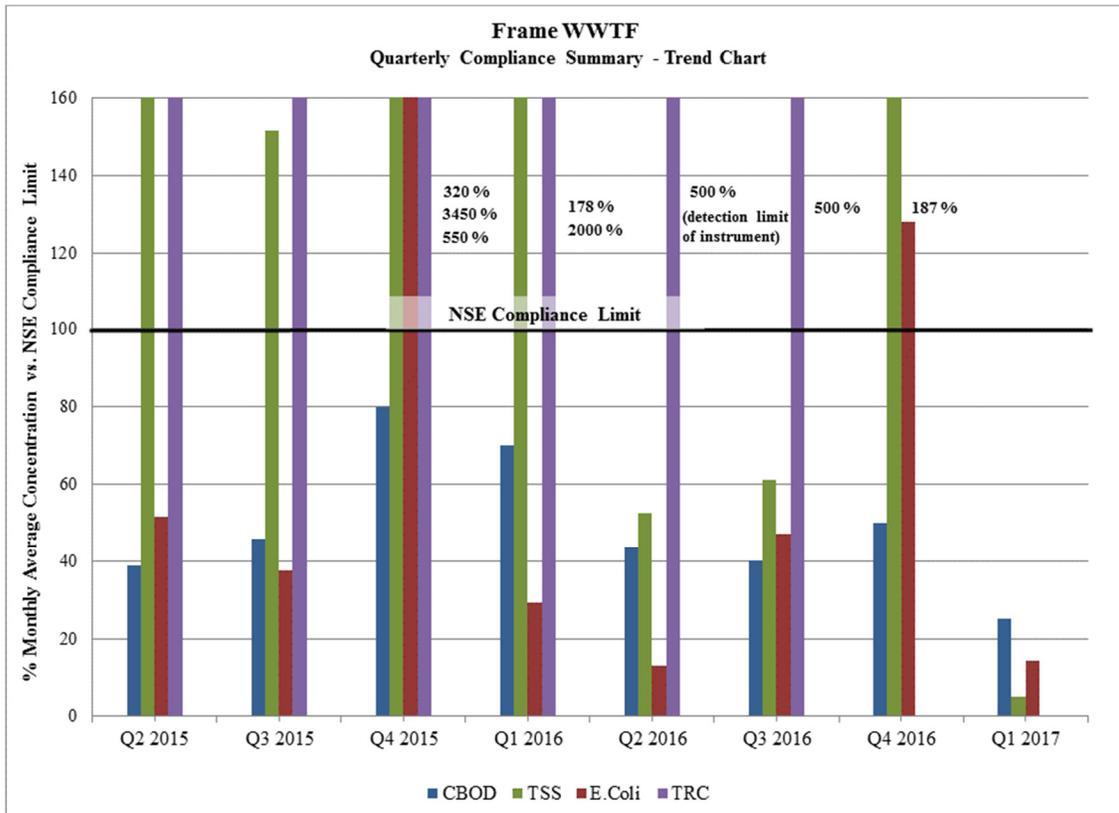
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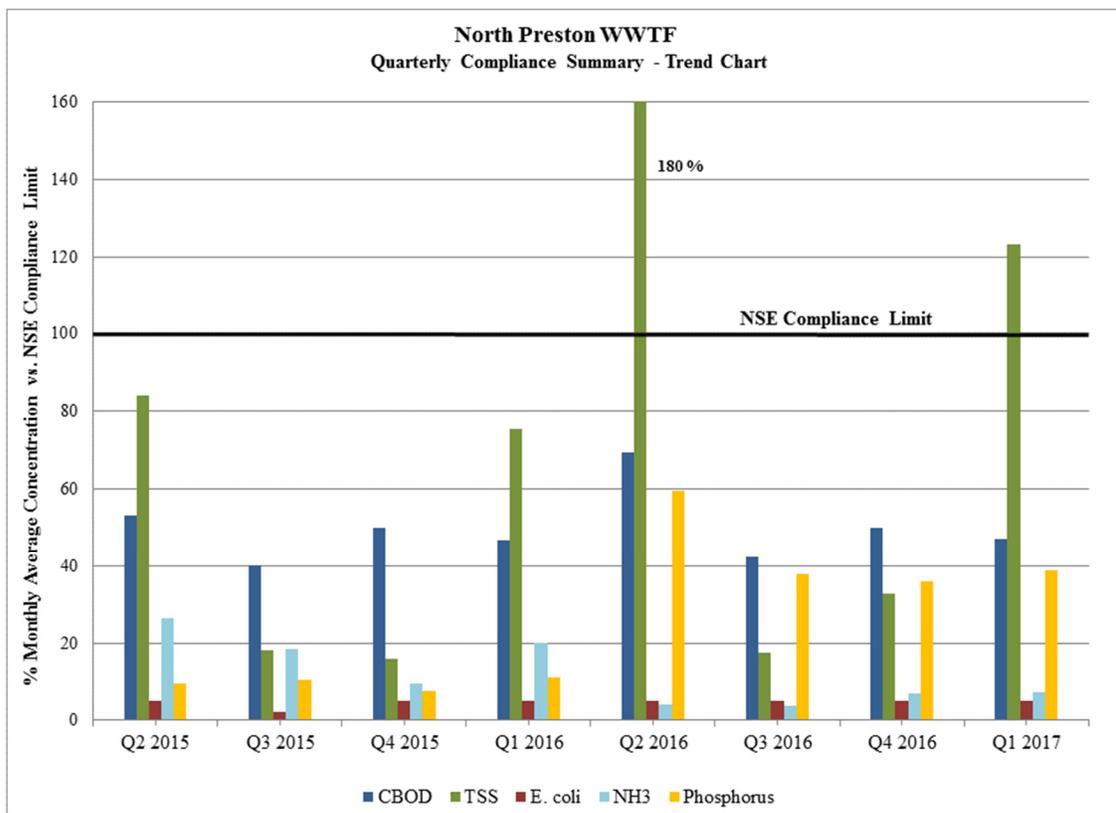
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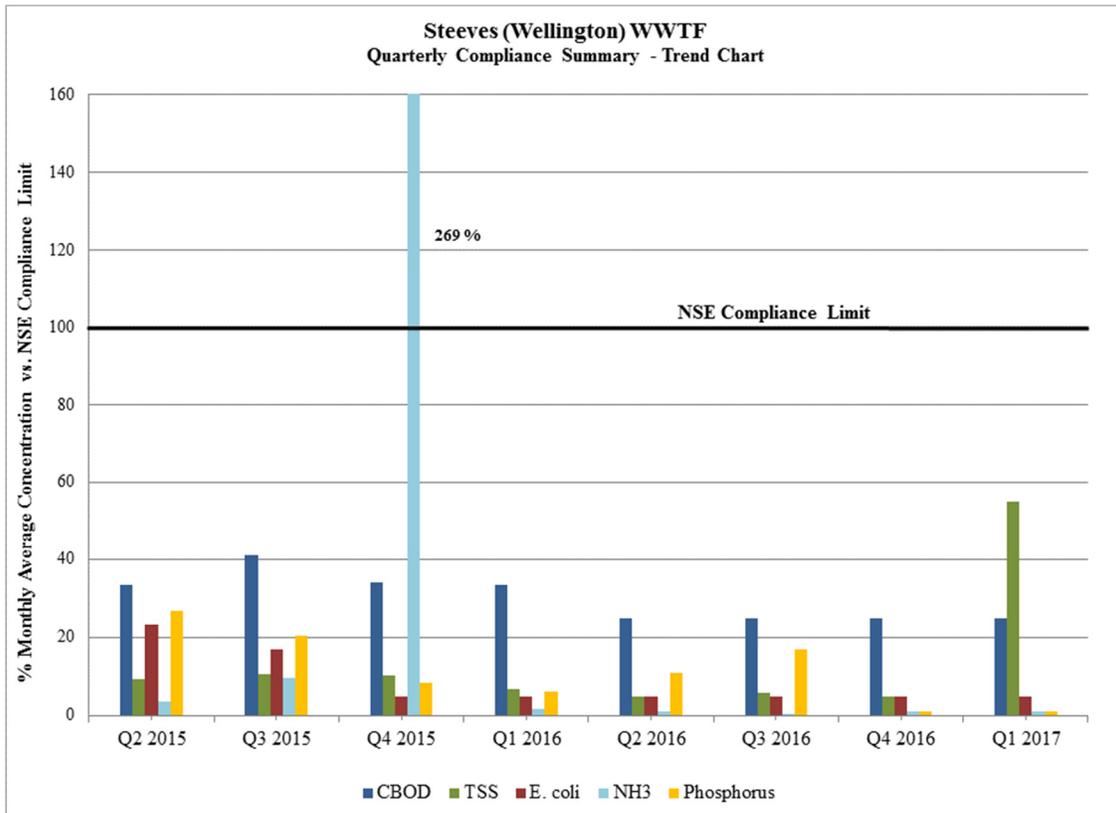
Lower numbers represent better performance



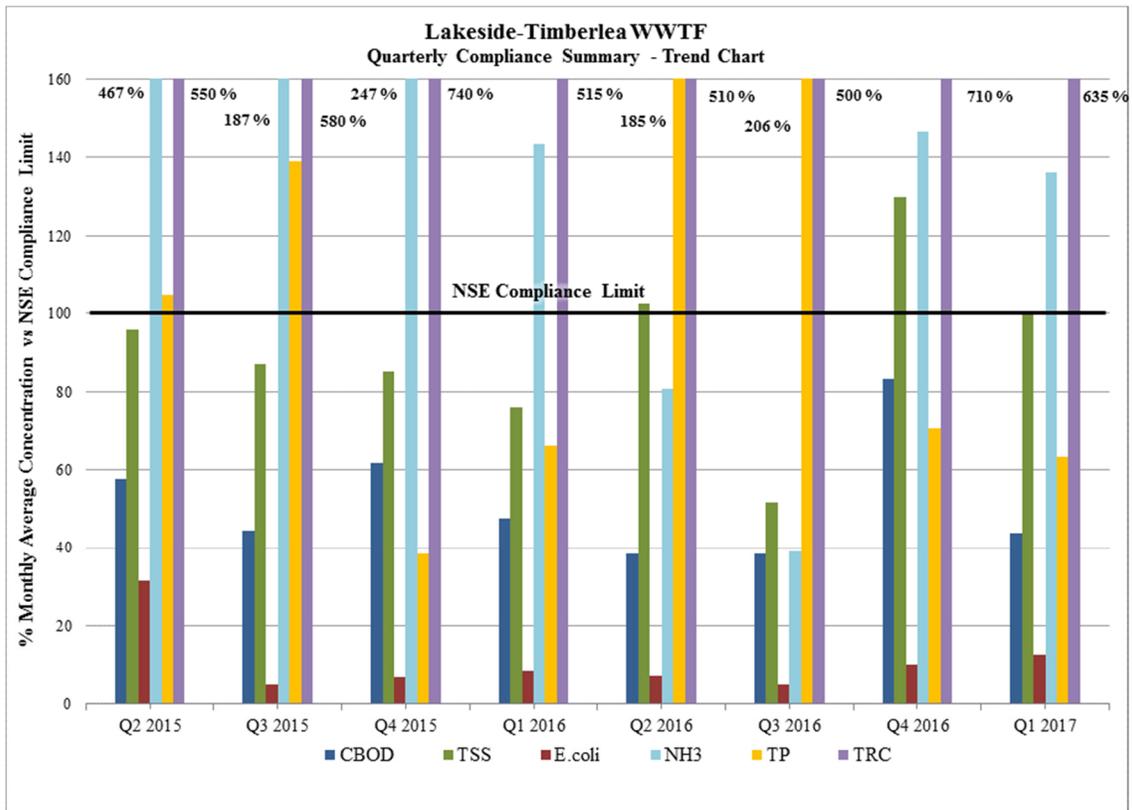
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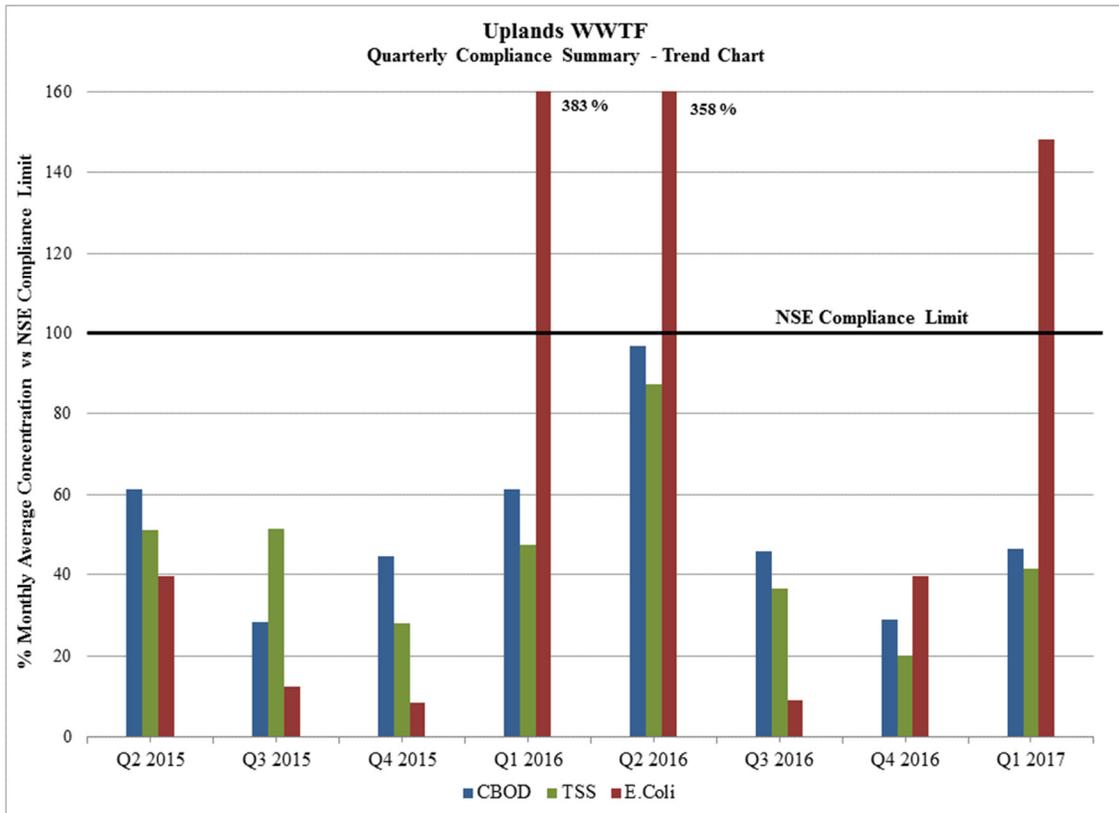
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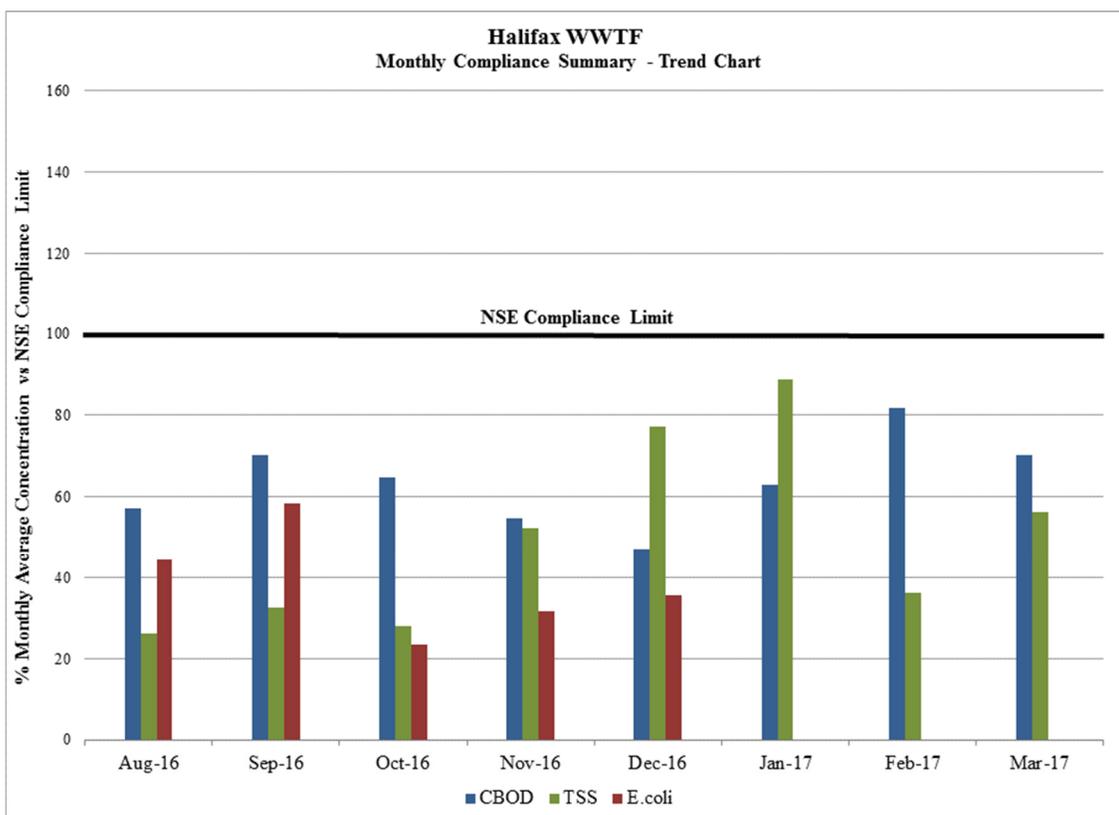
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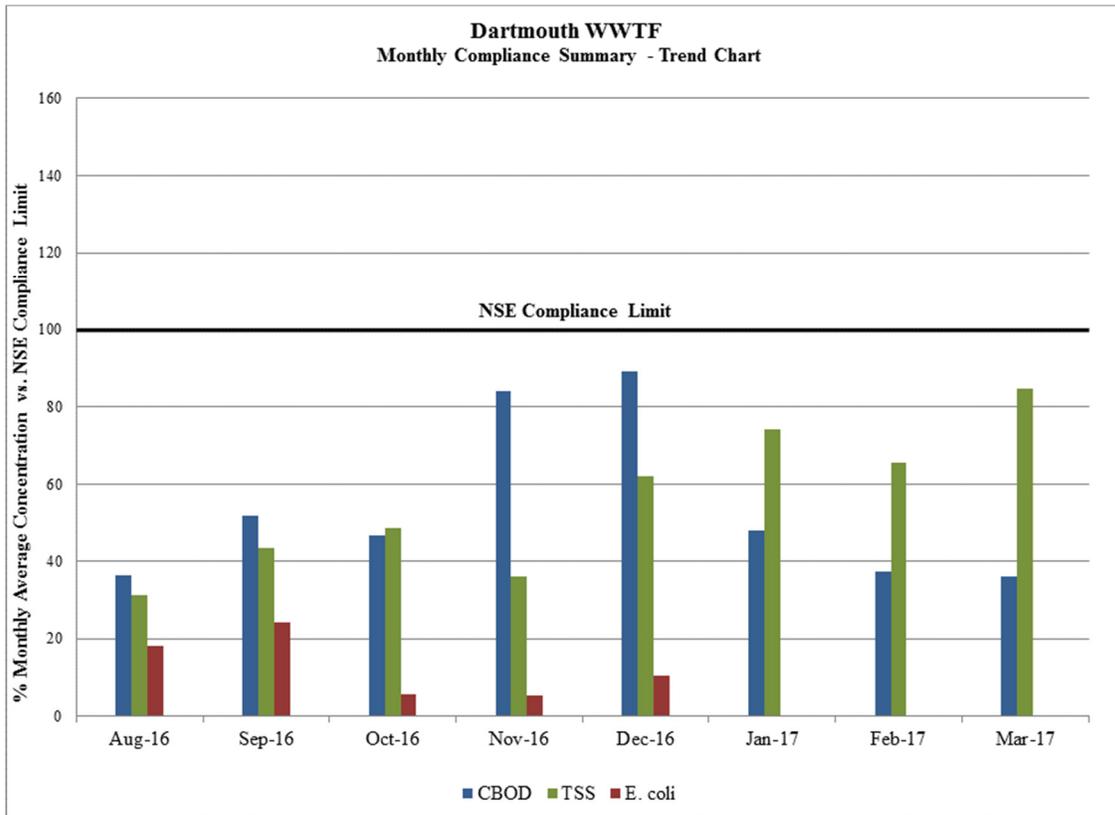
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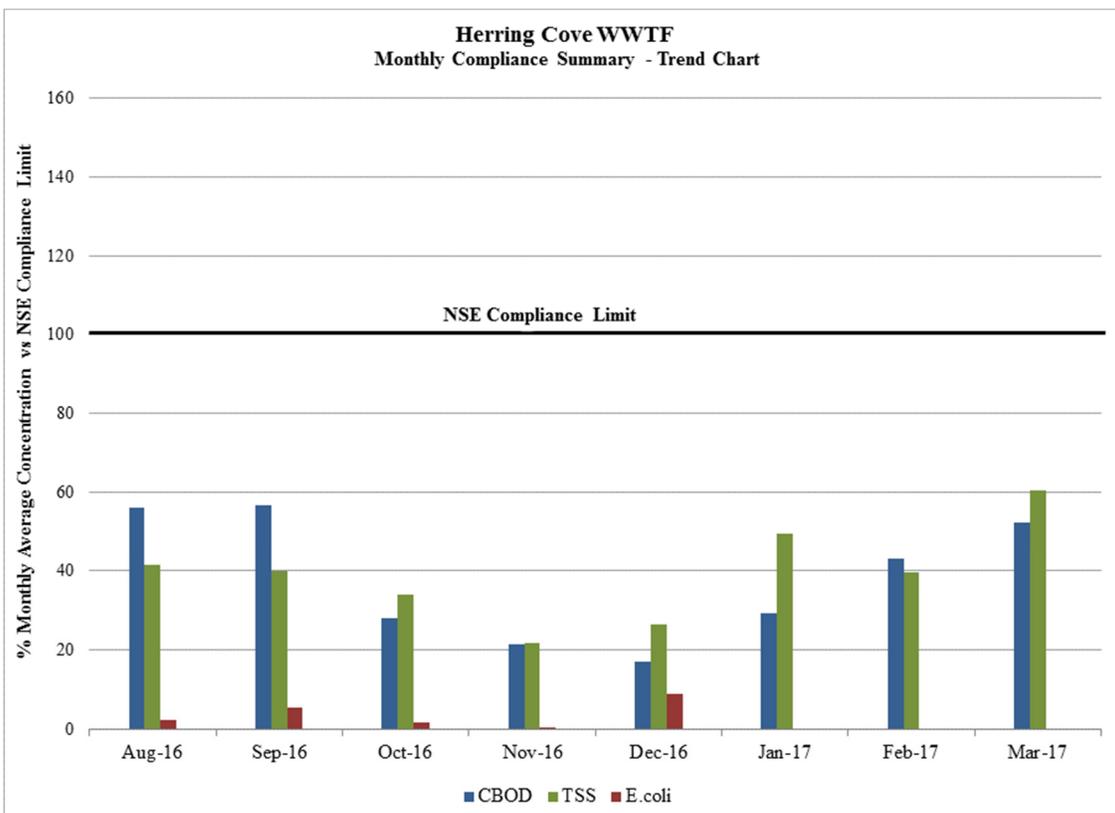
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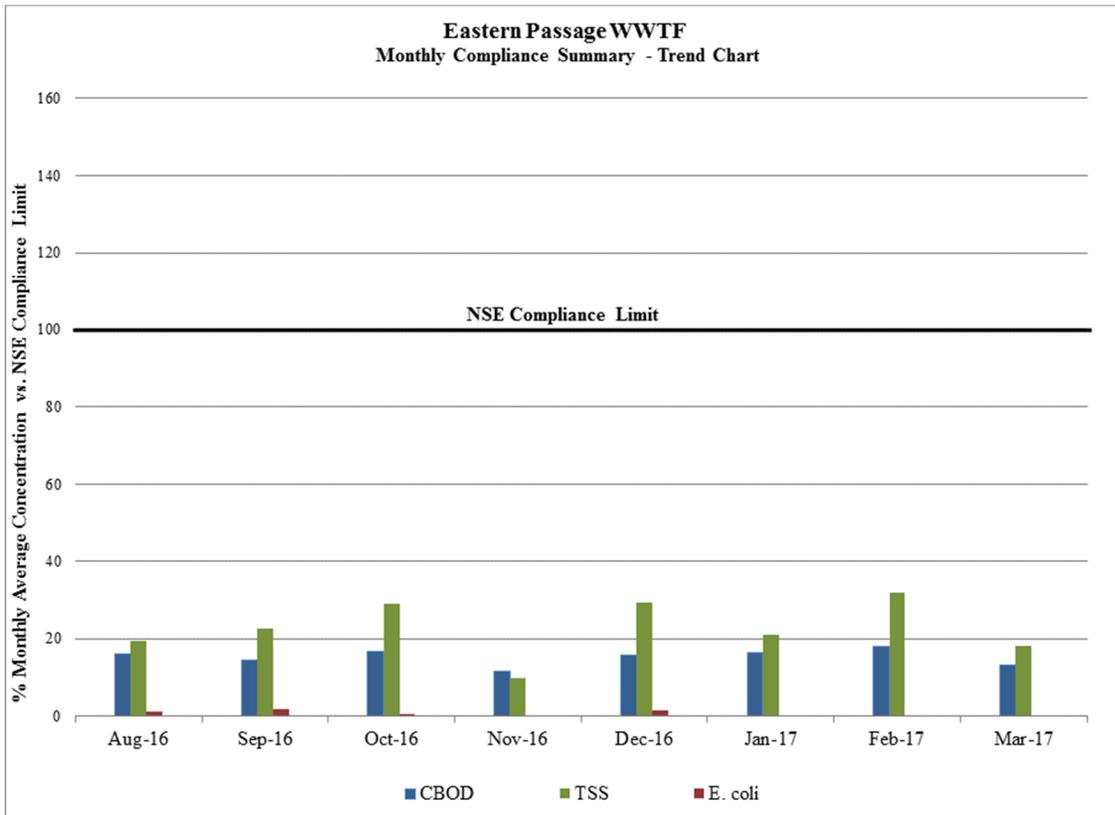
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Lower numbers represent better performance.



Lower numbers represent better performance.



**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 Department

**APPROVED:** *Original Signed By:*  
\_\_\_\_\_  
Carl Yates, M.A.Sc., P.Eng., General Manager

**DATE:** June 27, 2017

**SUBJECT:** **Engineering & IS**  
**2017/18 Capital Budget Approvals to Date**

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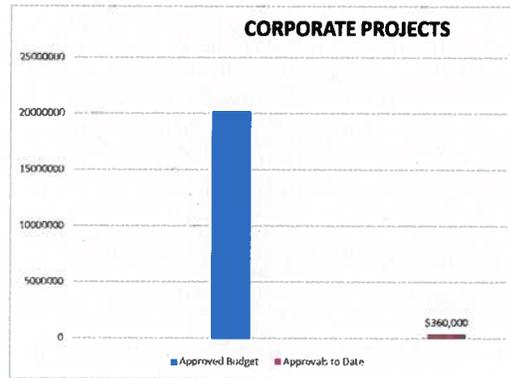
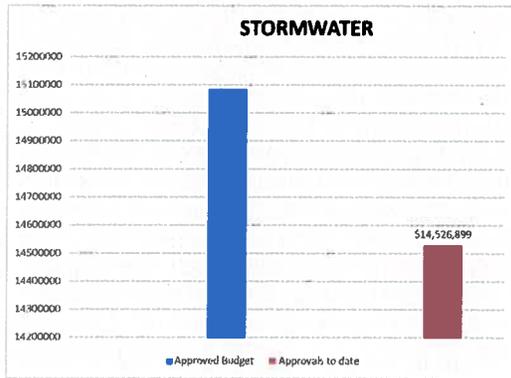
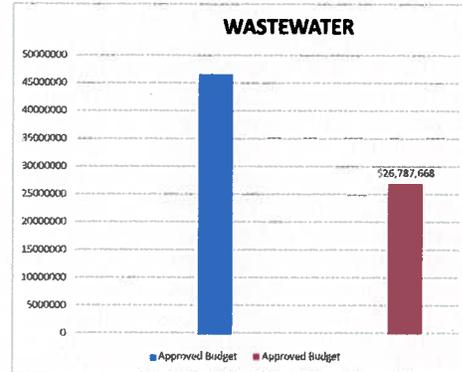
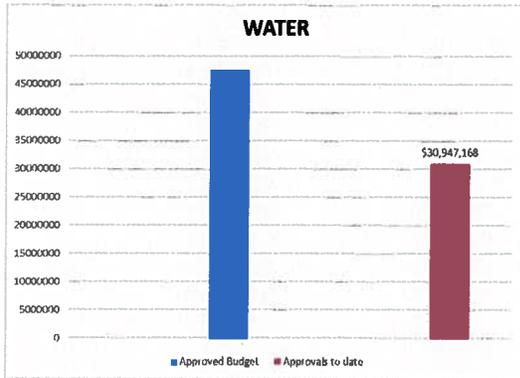
**INFORMATION REPORT**

**ORIGIN**

This report provides a summary of Capital Projects “Approvals to Date” as per the 2017/18 Capital Budget.

Report Prepared by: *Original Signed By:*  
\_\_\_\_\_  
Jamie Hannam, P. Eng. Director, Engineering & IS

**CAPITAL BUDGET APPROVALS TO DATE - 2017/18**



**WATER**

Approved Budget \$47,612,000 65%  
Approvals to date \$30,947,168

**STORMWATER**

Approved Budget \$15,084,200 96%  
Approvals to date \$14,526,899

**WASTEWATER**

Approved Budget \$46,636,800 57%  
Approvals to date \$26,787,668

**CORPORATE PROJECTS**

Approved Budget \$20,237,000 2%  
Approvals to date \$360,000

Total Budget: \$109,333,000.00  
Total To Date: \$72,621,735.00

Total % to date 66%

Report Approved: \_\_\_\_\_ Date \_\_\_\_\_  
Jamie Hannam

## Approvals to Date June 28, 2017 Board Item #2.1

Category	Approved Amount	Net Additions	Final Approval
<b>Water</b>			
<b>Distribution</b>			
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
Automated Flushing Program	\$20,000	\$20,000	3/30/2017
Bulk Fill Stations - Site Work Improvements	\$110,000	\$110,000	3/30/2017
Re-Chlorination Stations - Sampson and Stokil Reservoirs	\$30,000	\$30,000	4/3/2017
Distribution System Chlorine Residual Analyzer Upgrade Program	\$100,000	\$100,000	4/4/2017
<b>Equipment</b>			
Purchase portable acoustic listening equipment	\$15,000	\$0	5/17/2017
Mobile Event Trailer "The Shed"	\$60,000	\$0	6/6/2017
<b>Facilities</b>			
JD Kline: pH Meter Replacements	\$10,000	\$10,000	3/30/2017
JD Kline: Chlorine Storage Room - System Modifications	\$70,000	\$70,000	3/30/2017
Lake Major WSP: MCC Contactors Replacement	\$34,000	\$34,000	3/30/2017
JD Kline: Bench-top Turbidimeters	\$6,000	\$6,000	3/30/2017
Lake Major WSP: Filter Media Replacement	\$200,000	\$200,000	3/30/2017
Lake Major WSP: Butterfly valve replacement program	\$100,000	\$100,000	3/30/2017
Lake Major WSP: Blower Vent	\$35,000	\$35,000	3/30/2017
JD Kline: Ampgard III to Vacuum Contactor Conversion	\$40,000	\$40,000	3/30/2017
JD Kline: VTS Alarm System Upgrade	\$7,000	\$7,000	3/30/2017
JD Kline WSP: Effluent Valve Actuator Replacement Program	\$50,000	\$50,000	3/30/2017
JD Kline: Turbidity Meters	\$50,000	\$50,000	3/30/2017
Inline Zeta Potential Meters for Water Plants	\$100,000	\$100,000	3/30/2017
JD Kline: Roof Replacement	\$220,000	\$220,000	3/30/2017
Chlorine Analyzer Relocation - Geizer 158 Reservoir	\$33,000	\$33,000	3/30/2017
Lake Major WSP: Treatment Train Isolation	\$222,000	\$222,000	3/30/2017
Bennery Lake WSP: Replace Sludge Pumps and Valve Replacements	\$53,000	\$53,000	3/30/2017
Lake Major WSP: Bench Top Turbidimeters	\$6,000	\$6,000	3/30/2017

Bennery Lake WSP: Post Filter Chemical Addition Optimization	\$62,000	\$62,000	3/30/2017
JD Kline: Slide Gate Actuators to Lagoons	\$44,000	\$44,000	3/30/2017
Bennery Lake WSP: New Magnetic Flow Meters	\$29,000	\$29,000	3/30/2017
450 Cowie Hill - New DR7000 for Lab	\$14,000	\$14,000	3/30/2017
Bennery Lake WSP: New Low Lift VFD Pump Replacement Program	\$110,000	\$110,000	3/30/2017
JD Kline: Raw Water Pumping Station Ladder Extension and Fall Protection Equipment	\$9,000	\$9,000	3/30/2017
Bennery Lake WSP: New Chlorine Analyzer	\$14,000	\$14,000	3/30/2017
JD Kline: Westinghouse Electrical Panels Replacement	\$5,000	\$5,000	3/30/2017
Bennery Lake WSP: Culvert Replacement	\$20,000	\$20,000	3/30/2017
Lake Major WSP: Carbon Dioxide Feed System	\$215,000	\$215,000	4/13/2017
JD Kline WSP: Filter Media and Underdrain Replacement Program	\$5,747,060	\$5,747,060	4/13/2017
<b>Structures</b>			
Geizer 158 Reservoir Drainage Improvements	\$53,000	\$53,000	3/30/2017
Silverside Booster Station - Control Panel Replacement	\$50,000	\$50,000	3/30/2017
Crestview Booster Station PRV Conversion	\$57,000	\$57,000	3/30/2017
Pratt & Whitney PRV Communications Upgrade	\$10,000	\$10,000	3/30/2017
Leiblin Drive Booster Station Fire Pump Replacement Design			
Blue Mountain Meter Replacement	\$50,000	\$0	3/30/2017
	\$20,000	\$20,000	3/30/2017
Lake Major Dam Replacement	\$7,789,391	\$7,789,391	4/10/2017
<b>Transmission</b>			
Bedford Connector 750mm Replacement Phase 3	\$4,569,717	\$4,569,717	3/31/2017
Peninsula Low South Transmission Main Rehabilitation	\$8,500,000	\$8,500,000	4/10/2017
<b>Treatment Plants</b>			
Lake Major WSP Waste Residual Management Study	\$78,000	\$0	3/30/2017
<b>Water Total</b>	<b>\$30,947,168</b>	<b>\$30,744,168</b>	
<b>Wastewater</b>			
<b>Collection System</b>			
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

Leiblin Pumping Station Gravity Sewer	\$3,495,000	\$3,495,000	3/30/2017
Wet Weather Management Program	\$100,000	\$100,000	4/25/2017
Sewer Condition Assessments	\$300,000	\$300,000	5/9/2017
Corporate Flow Monitoring Program	\$1,000,000	\$1,000,000	5/9/2017
Balsam/Monroe Subdivision Sewer Upgrade	\$165,000	\$165,000	5/9/2017
<b>Structures</b>			
Hines Road Sewer - Odour Management:	\$150,000	\$150,000	3/28/2017
Emergency Pumping Station Pump replacements	\$250,000	\$250,000	4/25/2017
<b>Treatment Facilities</b>			
Mill Cove WWTF	\$750,000	\$750,000	3/27/2017
Eastern Passage WWTF: Control Building HVAC Upgrade	\$8,000	\$8,000	5/23/2017
<b>Trunk Sewers</b>			
Northwest Arm Sewer Rehabilitation	\$19,493,168	\$19,493,168	3/8/2017
<b>Collections</b>			
Percy Street Storm Sewer Replacement	\$20,000	\$0	5/10/2017
	\$6,500	\$0	5/15/2017
<b>Wastewater Total</b>	<b>\$26,787,668</b>	<b>\$26,761,168</b>	
<b>Stormwater</b>			
<b>Ditches and Culverts</b>			
First Lake Drive Culvert Replacement Project	\$155,000	\$0	4/3/2017
<b>Stormwater Total</b>	<b>\$155,000</b>	<b>\$0</b>	
<b>Ditches and Culverts</b>			
Lucasville Road (near #1419)	\$170,000	\$170,000	3/1/2017
Kipawa Crescent (near #14)	\$220,000	\$220,000	3/1/2017
Waverley Road (near #4132)	\$115,000	\$115,000	3/1/2017
John Cross Drive (near #40)	\$200,000	\$200,000	3/1/2017
Softwind Lane (near #31)	\$105,000	\$105,000	3/1/2017
Montague Road (near #1044)	\$155,000	\$155,000	3/1/2017

Yankeetown Road (near #16)	\$205,000	\$205,000	3/1/2017
Terradore Lane (near #7)	\$96,000	\$96,000	3/1/2017
Cole Harbour Road (near #1560)	\$210,000	\$210,000	3/1/2017
Blue Hill Road (near #77)	\$130,000	\$130,000	3/1/2017
Cobequid Road (#510)	\$160,000	\$160,000	3/1/2017
Fletcher Drive (near #52)	\$270,000	\$270,000	3/27/2017
<b>Pipes</b>			
Integrated Stormwater Projects Program	\$1,060,000	\$1,060,000	3/21/2017
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
<b>Structures</b>			
Ellenvale Run Retaining Wall System Replacement	\$1,535,000	\$1,535,000	5/17/2017
<b>Collections</b>			
Baker Drive 2016 Stormwater Integrated Project (SWIP)	\$9,700	\$0	4/25/2017
<b>Stormwater Total</b>	<b>\$14,371,899</b>	<b>\$14,362,199</b>	
<b>Corporate Projects</b>			
<b>Assets</b>			
Asset Management Program Development	\$150,000	\$150,000	4/13/2017
<b>Facility</b>			
Heating/Ventilation Upgrades in new phase of 450 Cowie Hill Road	\$100,000	\$100,000	6/6/2017
<b>Information Technology</b>			

# Item 3-I

10-Aug-17

## FINANCIAL REPORT

Consolidated balance of the four operating accounts maintained by the Commission as of:	10-Aug-17	\$58,540,042
Rate of interest on the above balance - Investment Rate of Return	0.078%	\$58,540,042.37

**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:** June 22, 2017

**SUBJECT:** **Federal/Provincial Infrastructure Funding - Clean Water & Wastewater Fund (CWWF) - Update**

---

## **INFORMATION REPORT**

### **ORIGIN**

August 5, 2014 HRM Council report “Building Canada Fund Infrastructure Projects”. HRWC Board Report; Federal/Provincial Infrastructure Funding – Additional Candidate Project approved May 26, 2016

### **BACKGROUND**

#### **CWWF Project Approvals**

On August 16, 2016, Prime Minister Justin Trudeau, and the Honorable Stephen McNeil, Premier of Nova Scotia, announced that they had reached a bilateral agreement that will result in more than \$238 million being invested in wastewater and public transit projects across the province with the following attributes.

- This funding is part of the first phase of *Investing in Canada*, the Government of Canada’s historic \$120-billion plan to support public infrastructure across the country over the next 10 years.
- Under this agreement, the Government of Canada has made its funding retroactive to April 1, 2016, so projects can proceed without delay to ensure a productive construction season.
- Details on Phase 2 of *Investing in Canada* will be announced over the next year.

**ITEM # 4-I****HRWC Board****June 28, 2017**

All seven of the CWWF projects submitted by HRM were approved for cost sharing. The following details the project specific approvals:

<b>Halifax Water's Project Title</b>	<b>Category</b>	<b>Total Ask</b>	<b>Total Approved</b>	<b>Federal/ Provincial</b>
Northwest Arm Sewer	Wastewater	\$17,153,000	\$16,343,708	\$12,257,781
Sullivan's Pond	Wastewater	\$9,890,000	\$8,429,190	\$6,321,925
Peninsula Transmission Mains	Drinking Water	\$7,200,000	\$7,508,594	\$5,631,446
Lake Major Dam	Drinking Water	\$5,900,000	\$4,517,716	\$3,388,287
JD Kline Filter Media	Drinking Water	\$5,600,000	\$4,200,160	\$3,150,120
<b>TOTAL AMOUNTS:</b>		<b>\$45,743,000</b>	<b>\$40,999,368</b>	<b>\$30,749,559</b>

<b>HRM's Project Title</b>	<b>Category</b>	<b>Total Ask</b>	<b>Total Approved</b>	<b>Federal/ Provincial</b>
Fall River Water	Drinking Water	\$7,600,000	\$7,925,739	\$5,944,305
Herring Cove Servicing	Wastewater	\$12,750,000	*\$4,561,952	\$3,421,464
<b>TOTAL AMOUNTS:</b>		<b>\$20,350,000</b>	<b>\$12,487,691</b>	<b>\$9,365,769</b>

\*The Total Approved for this project is calculated with an assumed 25% contribution from HRM relative to the reduced Federal/Provincial amount.

The JD Kline Filter Media project approved total eligible cost was only 75% of the original estimate as 25% of the project cost was funded within the 2016/17 Halifax Water Capital Budget and thus ineligible. The balance of the Halifax Water projects were slightly under the original submission cost estimate due to some inclusion of ineligible costs and current year approval of design phase funding.

The Federal/Provincial cost sharing on the HRM Herring Cove project was limited to \$3,421,464, well below the submitted request.

**DISCUSSION**

Subsequent to the formal funding approval in August of 2016, all seven projects have progressed through design phase and are in either the tender phase or the construction phase, with one project on hold pending direction from the Municipality. The following provides an update on each of the CWWF funded projects.

**1. Northwest Arm Sewer Rehabilitation**

Federal/Provincial funding: \$12,257,781

The 4.5km Northwest Arm trunk sewer is over a century old. It is 1200 mm in diameter and a large part of the line is constructed of clay blocks mortared together. This line needs to be structurally renewed to extend its service life, prevent leakage and overflows into Northwest Arm and bring it into line with modern environmental standards.

As referenced in the February 2, 2017 Halifax Water Board Report, the total estimated project cost was \$19,793,168 and, in part, this included a construction cost estimate of \$18.1M (including 20% contingency and net HST).

An initial construction tender for the Armdale Pumping Station Upgrade component of this overall project was awarded to Dexter Construction on March 7, 2017 for a total cost of \$1,042,228 plus net HST.

Halifax Water issued a formal public Request for Proposal (RFP) tender for the project on February 9, 2017. The tender closed on March 17, 2017. Halifax Water received one response to the RFP. The contractor (Liqui-Force Services Inc.) tendered a cost of \$18,768,980 plus net HST.

Subsequent to the tender close, Halifax Water staff negotiated with Liqui-Force to realize any opportunities to reduce the project cost without impacting the final product. The negotiation has resulted in a revised quotation of \$18,492,454 plus net HST.

Based on the revised tender price, the revised gross total project cost is estimated at \$23,310,557. The balance of the Halifax Water funding, in the amount of \$3,517,389, was subsequently approved by the Halifax Water Board and the NSUARB.

The construction contract has been signed with Liqui-Force and all required permits and approvals from NSDOE, HRM and CN are in place. Construction began on June 21, 2017. The expected completion date is December 2017.

Considerable communication has taken place with the local residents in the neighborhoods that the project will impact. These efforts have included public meetings, homeowner mail outs, direct contractor property visits and a project specific website.

## **2. Peninsula Transmission Main Rehabilitation**

Federal/Provincial funding: \$5,631,446

This project involves the rehabilitation of critical water transmission mains in Halifax to extend the serviceable life. There has been significant development activity in peninsular Halifax in recent years, with more planned. Increased water supply is required for future development and increased densities. This project will rehabilitate the original pipes that have served the city for over 150 years, and minimize the impact on businesses and residents along the streets.

Initially the project was focused on the installation of a structural liner to extend the serviceable life of a critical water transmission main on Quinpool Road. Through the detailed design process the project scope was enhanced with a prioritized focus on the renewal of the three transmission mains along Crown Drive as the first phase of the Peninsula Transmission Main rehabilitation. The proposed work includes the open cut replacement of approximately 2500m of 375 mm, 600mm and 675 mm diameter pipe.

The project detailed design was completed by WSP. The project was tendered in March 2017 and was awarded to Dexter Construction. The estimated total project cost based on the tendered price is \$7,213,144 which is within the existing project funding. Construction began in early June 2017 and is proposed for completion in December 2017.

## **3. Lake Major Dam**

Federal/Provincial funding: \$3,388,287

A dam is required to impound water within Lake Major to provide water supply to the greater Dartmouth area. A new dam is required to replace the existing gravity timber and earthen structure which has reached the end of its service life.

The detailed design was completed by MECO. The project was tendered in March 2017 and the low bidder was Lindsay Construction. The estimated project cost based on the low bid tender is within the existing project funding. The project is currently on hold pending completion of the process to receive a Permit to Construct from NS Department of Environment (NSDOE). Halifax Water staff and their external consultants are working diligently with NSDOE staff to resolve all required issues to facilitate moving towards the construction phase.

Based on the current status, it is unlikely that the project will be able to be completed prior to March 31, 2017. As a result, Halifax Water has formally applied to the provincial and federal program administrators for a schedule extension to October 2018.

**4. Sullivan's Pond Storm Sewer Renewal – Phase 1**

Federal/Provincial funding: \$6,321,925

The existing storm sewer between Sullivan's Pond and Halifax Harbour has reached the end of its service life. A new 580 metre line is being designed, with the construction completed in two phases of approximately 290 m each. Phase one from Sullivan's Pond to Irishtown Road is the limits of the current approved phase.

The detailed design was completed by CBCL. The project was tendered in March 2017 and awarded to Dexter Construction.

As referenced in the February 2, 2017 Halifax Water Board Report, the pre-tender total estimated project cost was \$9,581,993 inclusive of a construction cost estimate of \$7.81M (including 20% contingency and net HST). Based on the tender bid (\$8,721,640), the revised gross total project cost is estimated at \$11,682,524. The Halifax Water Board and the NSUARB subsequently approved \$2,100,531 in additional required funding.

The on-site construction is set to begin in July 2017 with a planned completion date for December 2017.

Considerable communication has taken place with the local residents in the area with a focus on the residents of the Lock4@Starr condominium who are directly adjacent to the work area. An open community information meeting is scheduled for early July.

**5. JD Kline Filter Media and Underdrain Replacement**

Federal/Provincial funding: \$3,150,120

The J.D. Kline Water Supply Plant supplies treated water to the communities of Halifax, Bedford and Sackville, and provides the only specific barrier to prevent pathogens from entering the drinking water supply. This project involves the replacement of the existing filter media and underdrains in all eight filters, the majority of which are beyond their recommended life span.

The detailed design for the project was completed by AECOM . The project is scheduled for public tender in July. Based on the operational requirement to complete one filter upgrade at a time, it is anticipated that the construction schedule will extend until September of 2018. Accordingly, Halifax Water has formally applied to the provincial and federal program administrators for a schedule extension to October 2018.

**HRM Projects:**

**6. Fall River Water Servicing**

Federal/Provincial funding: \$5,944,305

This is a new construction project to install approximately 3.5 km of central water services from Windsor Junction Road to Fall River Centre via Fall River Road. As this falls outside the current service boundary, HRM must facilitate a planning process to determine project scope and would be responsible for the construction costs of the water system.

Halifax Water is managing the design and construction of this project as an agent of the municipality. The detailed design for the project was completed by DesignPoint Consultants. The project was tendered and the low bidder was Dexter Construction. Based on the Dexter bid price the revised estimated total cost is \$10,632,000, approximately \$2.7M above the available funding. HRM staff are currently reviewing funding alternatives and a report is scheduled for Regional Council in July to get approval on the direction for this project. In anticipation of the delay from the funding shortfall, the municipality has requested a project schedule extension from the provincial and federal program administrators.

**7. Herring Cove Servicing – Phase 2B**

Federal/Provincial funding: \$3,421,464

This is the final phase of a new construction project that is providing central water and sewer service to the community of Herring Cove. In 1999, HRM Council agreed to extend water service to the area due to the co-location of a Harbour Solutions sewage treatment plant. By 2008, the first three phases were completed; However, Phase 2B has never been initiated due to the fact that escalating construction prices exceeded the original budget and insufficient funds were available to complete it. This project is located inside the service boundary with HRM being responsible for the construction costs of the water system.

Halifax Water is managing the design and construction of this project as an agent of the municipality. The detailed design for the project was completed by WSP Consultants and is ready for public tendering. Due to the initial underfunding from the CWWF program, the municipality is currently reviewing their preferred alternative to moving forward with this project.

**BUDGET IMPLICATIONS**

All of the approved Halifax Water CWWF projects were identified within the 2016 version of the Five Year Capital Plan, spread across various years. To accommodate the CWWF schedule, the Halifax Water share of the total project costs has been included within the 2017/18 Capital Budget.

The availability of the required funding for these projects is consistent with the current multi-year financial plan, with some minor project deferral or re-scheduling of originally proposed 2017/18 projects.

The net impact of the CWWF funding assistance will have a positive impact on the overall capital funding plan for HRWC in future years and may reduce debt requirements and rate impacts or create capacity to fund other capital projects.

**ALTERNATIVES**

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

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

**SUBMITTED BY:** Original Approved By:  
Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

**APPROVED:** Original Approved By:  
Carl Yates M.A.Sc., P.Eng., General Manager

**DATE:** June 16, 2017

**SUBJECT:** **HRM Pension Plan Investment Performance 1<sup>st</sup> Quarter, 2017**

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### **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 first quarter of 2017 (January to March) 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, 2016 was 6.01%, and totaled \$106.2 million.

**Table 1 - Returns**

	<b>Current Quarter (Jan to Mar)</b>	<b>1-Year</b>	<b>3 - Year Annualized</b>	<b>4 - Year Annualized</b>	<b>Since Inception (Oct 1999)</b>
Fund Return	3.11%	11.63%	8.39%	9.10%	7.06%
Policy Benchmark	2.99%	9.29%	6.14%	6.45%	5.64%
Excess Return	0.12%	2.34%	2.25%	2.65%	1.42%

**Table 2 – Asset Mix, as at December 31, 2016**

Asset:	<b>Actual</b>	<b>Policy</b>
Cash & Equivalents	0.55%	0.00%
Canadian Equity	8.23%	7.60%
Global Equity	31.54%	29.90%
Bonds	22.47%	26.20%
Minimum Target Return	37.21%	36.30%

The total fund returned 3.11% in the 1<sup>st</sup> Quarter, which outperformed the policy benchmark of 2.99% by 0.12%. The return for the one-year period ended March 31, 2017 is 11.63%, outperforming the policy benchmark of 9.29% by 2.34%. Other historical returns are provided in the Table 1 above.

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 four scenarios analyzed as at May 15, 2017 that show the greatest potential risk, are identified in Table 3 below:

**Table 3 – Stress Testing**

Scenario:	<b>Projected Return of Master Trust</b>
Equities down by 5%	-2.14%
CAD increasing by 10% compared to the USD	-1.16%
US interest rates decreasing by 0.25%	-1.15%
Oil prices dropping 10%	-0.24%

As at March 31, 2017 the Master Trust was in compliance with the Statement of Investment Policies and Procedures (SIP&P).

**ATTACHMENT**

Halifax Regional Municipality Pension Plan Investment Report 1<sup>st</sup> Quarter, 2017

Report Prepared by:	<i>Original Approved By:</i> _____ Allan Campbell, B.Comm, CPA, CMA Manager, Finance, 902-490-4288
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# Investment Report

## Q1 2017



# Executive Summary

## Compliance

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

## Funded Status\*

As at December 31, 2016, the accounting funded position was 104%. The estimated going concern funded ratio and estimated solvency funded ratio are estimated to be 92%\*\* and 61% respectively.

## Master Trust Performance (net of fees)

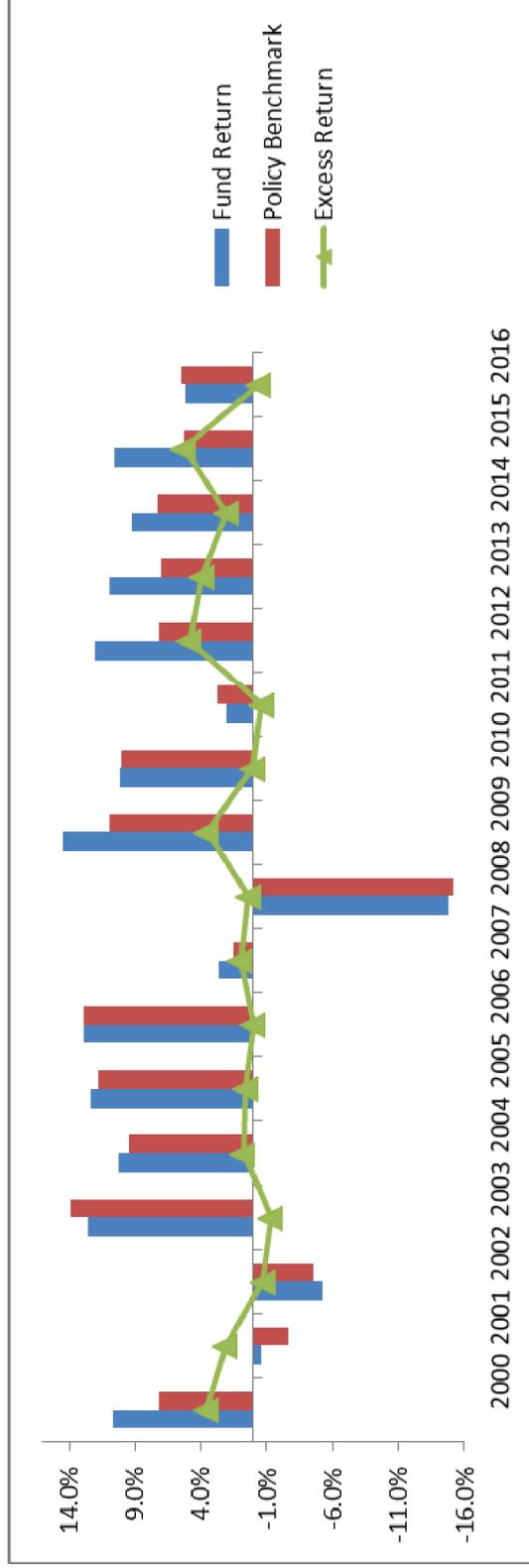
- In Q1, the MT earned 3.1%, outperforming the policy benchmark return by 0.1%.
- For the one-year period ending March 31, 2017, the MT earned 11.6%, outperforming the policy benchmark by 2.3%.
- The MT earned an annualized return of 9.1% over the 4-year period ending March 31, 2017 outperforming the policy benchmark by 2.7% annualized.
- Since inception (October 1999), the MT earned 7.1% annualized outperforming the Plan's long-term rate objective of 6.5%. The table on the next slide summarizes the calendar year returns for the MT.

\* Assumes discount rates of 7.25% for Accounting and 6.5% for Going Concern. *Estimated funded status has been estimated using updated market values only and a roll forward of 2015 liabilities. 2016 liabilities will be updated as part of the actuarial valuation process later in 2017.*

\*\* Uses a 6.5% going concern discount rate. *If 6.25% is used, the going concern funded status is estimated to be 90%.*

# 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
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%
Policy Benchmark	7.12%	-2.64%	-4.50%	13.91%	9.50%	11.76%	12.85%	1.58%	-15.20%	10.92%	10.08%	2.71%	7.12%	7.01%	7.24%	5.27%	5.55%
Excess Return	3.59%	2.08%	-0.71%	-1.31%	0.77%	0.62%	0.03%	1.02%	0.37%	3.55%	0.04%	-0.60%	4.89%	3.93%	2.03%	5.32%	-0.42%

# Executive Summary – Cont.

## Added Value

In Q1 of 2017, the MT outperformed its policy benchmark by 0.12%. Attribution: Global Credit +0.11%, Emerging Market Equity +0.10%, US Equity -0.04%, and Minimum Target Return -0.05%.

## Q1 Updates

- Funded additional CAD \$3.7 million to Emerging Market Local Equity portfolio from excess cash
- Selected manager for a CAD \$30 million investment in a global multi-asset diversified portfolio (currently performing due diligence)
- Invested EUR 7.5mn in a private debt fund. We have invested in the prior two funds and one co-investment with the same investment manager.

# Executive Summary – Cont.

## Q1 Updates

- Alongside our best performing private equity manager, we co-invested USD 2mn in a US consumer goods company.
- Invested USD 13mn in a US real estate debt fund.
- Invested CAD 10mn in value added real estate fund that primarily focuses on the Greater Toronto area. We invested in the previous fund alongside a select few Canadian pension plans.
- We also invested in a CAD \$3.4 mm Canadian real estate co-investment with this manager alongside two other Canadian pension plans.

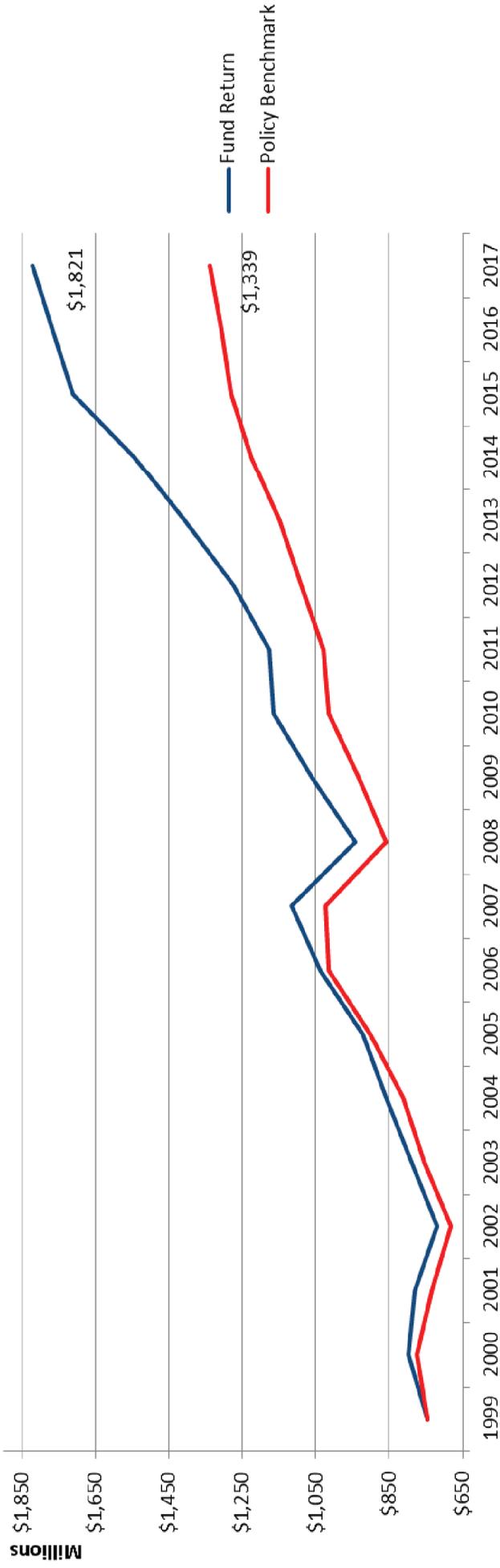
# Total Fund Net Returns – March 31, 2017

	Q1 2017	1-Year	3-Year Annualized	4-Year Annualized	Since Inception (Oct 1999)
Fund Return	3.11%	11.63%	8.39%	9.10%	7.06%
Policy Benchmark*	2.99%	9.29%	6.14%	6.45%	5.64%
Excess Return	0.12%	2.34%	2.25%	2.65%	1.42%

\*Effective March 31, 2017, the Policy Benchmark is 5.1% S&P/TSX Index + 2.5% S&P/TSX 60 + 4.8% S&P 500 Index(\$USD) + 9.3% MSCI EAFE Index (\$CAN) + 4.2% MSCI Emerging Markets (CAN\$) + 11.6% MSCI World (CAN\$) +14.9% FTSE TMX Canada Universe + 11.3% 3 Month Bankers Acceptance + 36.3% Minimum Target Return.

*Fund returns are shown net of fees and expenses*

# Since Inception Performance

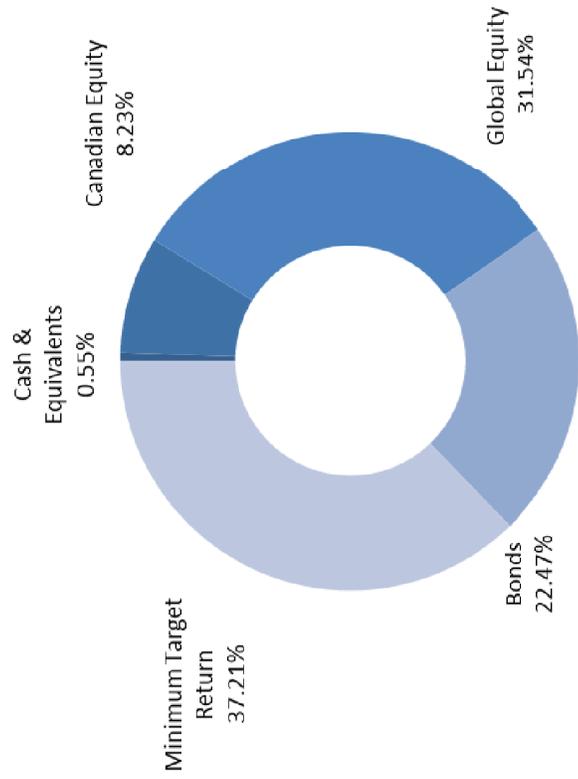


In dollar terms, the fund has grown \$482.0 million in excess of the policy benchmark since inception.

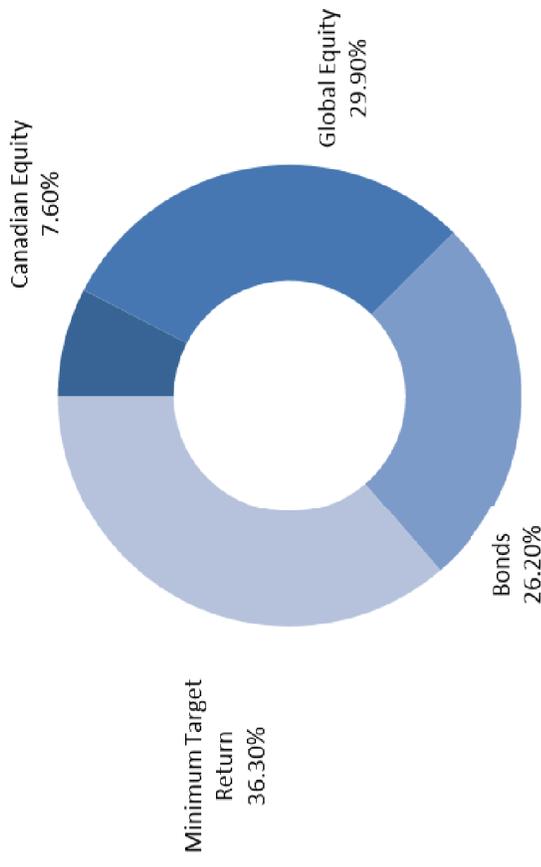
*Fund returns are shown net of fees and expenses*

# Asset Mix – March 31, 2017

**Actual Asset Mix**  
As of March 31, 2017



**Asset Mix Policy**  
As of March 31, 2017



\* Effective March 31, 2017, the Policy Benchmark is 5.1% S&P/TSX Index + 2.5% S&P/TSX 60 + 4.8% S&P 500 Index(\$USD) + 9.3% MSCI EAFE Index (\$CAN) + 4.2% MSCI Emerging Markets (CAN\$) + 11.6% MSCI World (CAN\$) + 14.9% FTSE TMX Canada Universe + 11.3% 3 Month Bankers Acceptance + 36.3% Minimum Target Return.

# Equity Market Index Returns

Indexes	Q1 2017	1-Year Ending March 31, 2017	4-Year Ending March 31, 2017
Canadian Equity (S&P/TSX Composite Index)	2.41%	18.62%	8.27%
US Equity (S&P 500 C\$)	5.48%	20.81%	21.10%
US Equity (S&P 500 U\$)	6.07%	17.17%	13.14%
EAFE Equity (MSCI EAFE C\$)	6.65%	15.15%	11.87%
Emerging Markets (MSCI EM C\$)	10.83%	20.86%	7.59%
World Equity (MSCI World C\$)	5.79%	18.33%	16.41%

\*Source: Mercer Insight and Northern Trust

\*Source: Mercer Insight and Northern Trust

- All stock markets earned positive returns for Q1, and for 1-year and 4 -year time periods.
- Global equities delivered robust gains in the first quarter.
- Emerging market equities were particularly strong.
- US equities advanced to all-time highs.

# Bond Market Index Returns

Bond Indexes	Q1 2017	1-Year Ending March 31, 2017	4-Year Ending March 31, 2017
Canadian Government Bonds (FTSE TMX Canada Universe Government)	1.02%	0.56%	3.09%
Canadian Universe Bonds (FTSE TMX Canada Universe)	1.25%	1.51%	3.26%
Canadian Corporate Bonds (FTSE TMX Canada Universe Corporate)	1.83%	4.05%	3.77%

\*Source: Mercer Insight and Northern Trust

- Corporate bonds have outperformed Government Bonds and the broader Universe over each of Q1, 1-year and 4-year periods.

# Fixed Income – Q1 Summary

- The MT's diversified Fixed Income portfolio earned 1.11%, which outperformed its benchmark return of 0.81% by +0.30%.

MT Fixed Income	Q1 2017	Benchmark	Relative Performance
Universe Bond	0.90%	1.25%	-0.35%
Credit Bond	0.88%	1.83%	-0.95%
Government Bond	0.91%	1.02%	-0.11%
Global Credit Absolute Return	1.66%	0.24%	1.42%
MT Fixed Income Total	1.11%	0.81%	0.30%

\*Source: Mercer Insight and Northern Trust

- Individual Canadian fixed income portfolios underperformed their benchmarks in the quarter
- Strong performance by our global credit portfolios boosted returns relative to the overall fixed income benchmark.

# MTR – Q1 Summary

- The Minimum Target Return portfolio earned 1.55%, in line with its benchmark of 1.59%.

# Equity – Q1 Summary

- The MT's Equity portfolio returned 6.05% during the quarter, outperforming the equity policy benchmark return of 5.92% by +0.13%, primarily due to allocation to Emerging Markets.

MT Equity	Q1 2017	Benchmark	Relative Performance
Canadian Equity (S&P/TSX Composite Index)**	2.34%	2.42%	-0.08%
US Equity (S&P 500 C\$)	5.47%	6.07%	-0.60%
EAFE Equity (MSCI EAFE C\$)	6.77%	6.65%	0.12%
Emerging Markets (MSCI EM C\$)	12.71%	10.83%	1.88%
World Equity (MSCI World C\$)	5.60%	5.79%	-0.19%
MT Equity Total	6.05%	5.92%	0.13%

\*Source: Northern Trust

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

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

**SUBMITTED BY:** *Original Signed By*  
James Campbell, Communications & Public Relations Coordinator

**APPROVED:** *Original Signed By*  
Carl Yates, M.A.Sc., P.Eng., General Manager

**DATE:** June 15, 2017

**SUBJECT:** **Communications Strategy**

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### **INFORMATION REPORT**

#### **ORIGIN**

Staff

#### **BACKGROUND**

Halifax Regional Water Commission (branded as Halifax Water in 2007) is in the process of implementing an overall communications strategy.

The utility currently has a low public profile. While our customers rely on our critical water, wastewater and stormwater services every day, there is a perceived lack of understanding and/or interest in what the utility does and the essential role it plays in the social, economic, and environmental well-being of our communities.

Notwithstanding the importance of the services Halifax Water provides, they are generally not top of mind with customers or other stakeholders.

Halifax Water has a number of initiatives underway that will fundamentally change the way we do business and provide the opportunity for enhanced two way interaction with our customers. These projects include the implementation of Advanced Metering Infrastructure (the Customer Connect project), Customer Relationship Management and Operational Maintenance Management. These initiatives, along with a focus on a redesigned Halifax Water website and overall enhanced customer service are the impetus

for this Strategy. Halifax Water is interested in transforming the utility from a silent service provider to a utility that is valued and regarded as essential to the sustainability of the communities it serves.

In order to implement a Communications Strategy, Halifax Water sought proposals for the design, development and delivery framework to assist Halifax Water in better serving customers, external clients and internal staff. The successful proponent would provide recommendations and a clear program outline that will enable Halifax Water staff to implement the strategy.

### **DISCUSSION**

On June 30, 2016, Halifax Water issued an RFP entitled Halifax Water Communications Strategy.

On September 8, 2016, Revolve Branding and Marketing was awarded the contract at a price of \$132,025.00, including HST.

To date Revolve has:

- Held a meeting with a large and diverse group of Halifax Water staff to gain insights into the internal culture, philosophy and view that staff have of the utility and how they feel we are viewed by the public;
- Condensed this information into a Brand DNA document that provides an overview of key themes, purpose, commitment, and vision that the utility would like to project internally and externally;
- Met with key Halifax Water staff to better understand the main Operational issues that our utilities face currently and into the future;
- Developed an overall Brand Strategy that includes such things as the “Our Organizational DNA” booklet; the overall look and feel of public information materials we produce; educational videos; social media strategy; Transit Busboard designs; and “The Shed” mobile event trailer. The Communications Strategy is now complete.

Over the next few months Revolve will:

- Roll out the Brand Strategy that includes such things as the overall look and feel of public information materials we produce; educational videos; social media strategy; Transit Busboard designs; “The Shed” mobile event trailer; and Communications Guidelines.
- Revolve, through subcontractor WSP, will be hosting a series of Pop Up engagement sessions at various high profile locations (Tall Ships, Buskerfest, Farmer’s Markets, Sportsplexes, Home Show etc...) throughout our service area

to gauge customer thoughts about how Halifax Water is viewed, and why. “The Shed” will be an integral part of this outreach effort. It is anticipated this enhanced presence will draw considerable interest to Halifax Water at these events.

**BUDGET IMPLICATIONS:**

Funding in the amount of \$60,000 for “The Shed”- is available in the 2017/18 Capital Budget.

Funding in the amount of \$31,471.00 for the Media Strategy is included in the 2016/17 and 2017/2018 Operating Budgets.

**ATTACHMENTS:**

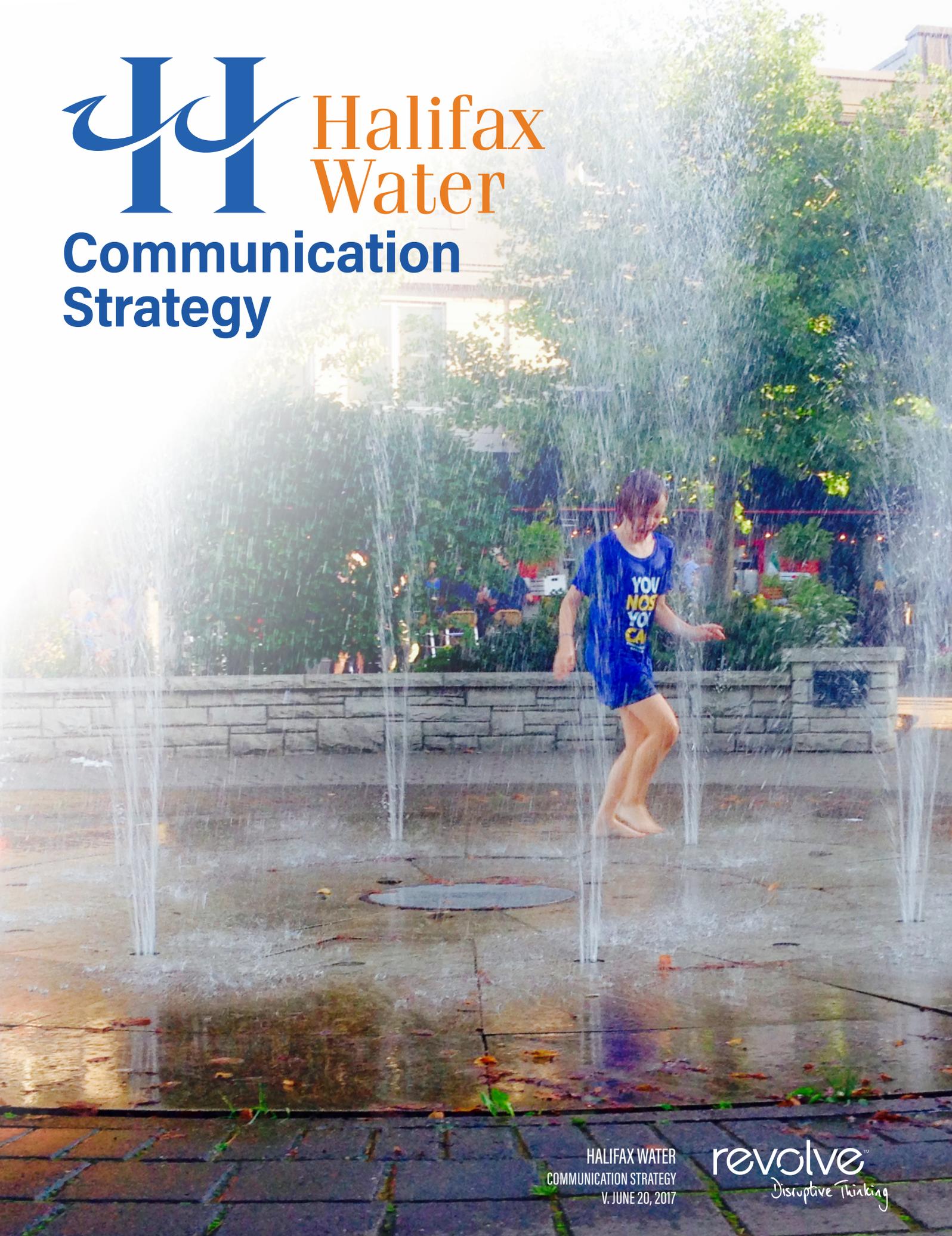
Communications Strategy  
Our Organizational DNA Booklet

Report Prepared by:	<i>Original Signed By:</i> _____ James Campbell, Communications & Public Relations Coordinator 902-490-4604
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Halifax  
Water

# Communication Strategy



# Halifax Water Communication Strategy

## OVERVIEW

At Halifax Water, we are proud stewards of the water cycle. We make clean water accessible across the municipality and safely transfer it back to the source with financial and environmental responsibility top-of-mind. We are effective managers of the resource and are internationally recognized as stewards of the water cycle, and for using innovation to solve large and small problems. Unfortunately, we don't always receive supportive or constructive feedback from our customers or in the media, and have come under scrutiny for rate increases, communications with the public, and for enormous infrastructure projects.

Fundamentally, residents of Halifax municipality don't understand the full scope and scale of what we do, and how essential these services are to the community. We have developed a long-term communication strategy designed to better tell our story, help people understand what we do and how we do it to a world-class standard.

## OBJECTIVES

- Give residents of Halifax municipality a way to learn more about what we do
- Create positive equity in advance of major infrastructure projects and rate increases
- Generate awareness to strengthen our reputation, increase our social license to operate and gain higher levels of public approval

## APPROACH

- Define the Halifax Water Brand
- Build a communication platform that can be activated in the summer of 2017
- Invest in long term development of our corporate reputation

## OUR BRAND DNA

Revolve worked with a large group of our employees to discover and define our Brand DNA. The language in the DNA gives us focus, a clear articulation of who we are, what we do, and who we do it for. It is our combination of reputation and expectation.

## WHAT WE DO

We are stewards of the water cycle, from the source, to the tap, and back to the source again; we take care of our harbour and lakes so all can enjoy; whether it's sailing, fishing, swimming, or a walk along the shore. We build and maintain infrastructure that supports the treatment, delivery and movement of water across the region.

## CONSUMER TARGET

360 000 users (90 000 of which pay bills) across the municipality. Everyone – if you receive municipal water, wastewater or stormwater service in the Halifax region, Halifax Water cares deeply about your safety and well-being!

- 80% residential
- 20% commercial, industrial, institutional
- Home and property owners, Tenants, Families, Working professionals (singles and couples), Students, Seniors, Visitors, Business Owners, Developers, Contractors, Consultants

# Halifax Water Communication Strategy

## BRAND BENEFITS

### THE HIGHEST STANDARDS

Our processes and services are world-class. Halifax's water is award-winning for its quality and we were the first utility in North America to adopt the International Water Association methodology to reduce leakage in the distribution system. Halifax Water has established an environmental management system for its water supply plants with certification to the ISO 14001 standard. The first wastewater Plant at Herring Cove was certified last year with plans to certify all plants over the next three years.

### SERVICE

We exist to serve our customers and our environment. We take this responsibility seriously and feel an immense sense of pride in reaching beyond industry service standards.

### RESEARCH

We invest in research and development to discover how to better serve our customers and the environment. We're proud to have our Natural Science and Engineering Research Council of Canada (NSERC) Research Chair with Dalhousie University and a utility subscriber with the Water Research Foundation for almost 30 years.

### SAFETY IS OUR HIGHEST PRIORITY

- Safe drinking water
- Safe wastewater
- Safe drainage
- Safe infrastructure
- Safe recreation environments

## PERSONALITY

- Trailblazers
- Genuine
- Reliable
- Vibrant
- Dedicated

## VALUES

### RELATIONSHIPS

We nurture relationships with our customers, our regulators, our shareholder Halifax municipality, our team members and the environment.

### INNOVATION

We are among the top utilities across the continent and we are known on the global stage. We always ask, "How can we improve efficiency, sustainability, creativity and the customer experience?"

### ACCOUNTABILITY

We refuse to cut corners. We are driven to make our policies, decisions and projects as clear as our drinking water.

### PROTECTION

Halifax Water protects the health and well-being of our population. We exist to guard natural resources, finding ways to sustain our communities and environment.

## VISION

Admired worldwide as the leading water utility through efficiency, environmental stewardship, innovation and customer care.

# Halifax Water Communication Strategy

## COMMITMENT

We do what's right for the region, the environment and the future. We are trusted for making the most efficient use of our customers' resources as we source, treat, supply, move and protect water.

## PURPOSE

We make clean water accessible across the municipality and safely transfer it back to the source with financial and environmental responsibility top-of-mind. We are proud stewards of the water cycle.

## PROMISE

Refreshing.

## OUR COMMUNICATION PLATFORM

**We have developed a platform to communicate to the public – we call it Straight from the Source.**

Straight from the Source signals a new way for us to act and communicate – with genuineness, reliability and vibrancy. It educates and informs – shedding light on what it truly means to be stewards of the water cycle.

Straight from the Source cuts through the jargon. It tells real stories and important news via the ultimate source of credibility – people whose livelihoods depend on clean water.

Straight from the Source captures attention because it's unexpected.

It's not how most utilities speak or act.

It's long-lasting, sincere, clear and refreshing.

## WHY OUR CORPORATE REPUTATION MATTERS

Our corporate reputation is our brand. It's the value we have in the minds of our customers and stakeholders. It's a combination of reputation and expectation, and it's one of our most valuable assets.

A positive corporate reputation allows us to achieve our objectives more easily. It creates trust between us and our customers ahead of major infrastructure projects, and understanding when those projects disrupt their lives. And it can protect us during difficult times and even crisis.

While we cannot create a positive corporate reputation, we can influence it by following our communication platform day in and day out.

## TACTICS

The following tactics outline how and where our customers will learn about us and Straight from the Source during Summer 2017.

### Online

- [HalifaxWater.ca](http://HalifaxWater.ca)
- [Facebook.com/HalifaxWater](https://www.facebook.com/HalifaxWater)
- [Twitter.com/HalifaxWater](https://twitter.com/HalifaxWater)
- [YouTube.com/HalifaxWater](https://www.youtube.com/HalifaxWater)

# Halifax Water Communication Strategy

Our options to update the Halifax municipality managed website are limited – but available. A Straight from the Source section will be created with pertinent information – particularly for those who want to be able to dig deeper into what we do.

The communications hub will be our social channels. It's where we can speak directly to customers. Full graphic takeovers of Facebook, Twitter, YouTube. Organizing information, videos and posts. Pinning the information that is most interesting. And engaging customers in direct conversation to address any of their questions.

## Content

Just like the water cycle, our story is best if it comes from multiple sources.

- Video – via great content produced by Revolve & PLANifax
- Case studies of past projects
- Supporter stories – businesses in Halifax that benefit from our work (Murphy's on the Water, A for Adventure, Discover Halifax, Waterfront Development, and more)
- Upcoming / Major Projects – proactively outline what we're doing and why
  - Customer Connect
  - Lead service lines
  - Trenchless technology
  - Infrastructure replacement

## Paid Media

Getting mass awareness of our message is critical to support the campaign and the engagement efforts during the summer. Revolve has planned an attention-getting mass media campaign to maximize impact. The following plan outlines our approach for a heavy-impact, attention-grabbing campaign to drive mass awareness of our message and to gain critical support for engagement efforts during the summer.

The campaign will deliver 29.5 Million impressions from late June through the end of August.

## Media Objectives

Our campaign objectives are to generate higher levels of awareness and positive sentiment, and to give residents of Halifax municipality the opportunity to learn more about what we do by driving them to our relevant online channels – [HalifaxWater.ca](http://HalifaxWater.ca), [Facebook.com/HalifaxWater](https://www.facebook.com/HalifaxWater), [Twitter.com/HalifaxWater](https://twitter.com/HalifaxWater) and [YouTube.com/HalifaxWater](https://www.youtube.com/HalifaxWater).

From a media perspective, our objectives are to reach our target audience with enough frequency to have impact, to stand out and to ensure our message resonates.

## Media Strategy

Our target audiences are broad-reaching. Homeowners in HRM could be young newlyweds moving into their first home, retirees ready to enter the empty-nest phase of their lives or many segments in between. Although our target audiences have varied media consumption habits, we need to ensure marketing efforts are focused. A concentrated approach will ensure significant reach, frequency and impact by focusing activity within a select number of relevant, targeted media channels. A strategic, concentrated approach ensures the media buy is robust, noteworthy and noticeable, and not diluted amongst too many media channels. We're going to do a few things very well instead of many things poorly.

## Target Audience & Media Consumption

We have focused our efforts on reaching homeowners in Halifax municipality– those more likely to be receiving and paying a water bill. To garner a deep understanding of our target audiences, we've reviewed the media consumption

# Halifax Water Communication Strategy

habits of Halifax homeowners (A25+). Vividata (2016, Q3) provides great insight into our target audiences. Vividata indicates there are 300,000 Halifax residents aged 25+, and of those 218,000 are homeowners. Of those homeowners:

- 41,000 (19%) are aged 25-34
- 65,000 (30%) are aged 35-49
- 70,000 (32%) are aged 50-64
- 42,000 (19%) are aged 65+

Vividata research also provides insight into how our target audiences consume media, which in turn provides guidance on which media channels can be used to deliver messaging.

## Out of Home

Haligonians are heavy travelers – driving an average of 151 - 168 kilometres per week. They are going to the office, driving to meetings, shopping, taking the kids to activities, banking and dining. The use of out of home advertising is relevant for this mobile audience as it allows the development of high frequency.

The fast-growing mobile trend is positively impacting consumers' lives by allowing them to shop, share, inform, and be entertained. Out of home media is strongly positioned to engage with on-the-go consumers through multiple placements on transit, billboards, place-based networks, malls, resto-bars, and street-level products (to name a few).

Out of home is an excellent option to reach the active, mobile audience as it provides both high reach and frequency. Outdoor activity works well in conjunction with other media – further increasing exposure and impact. With Internet/digital specifically, reach peaks in the afternoon and more than doubles the reach of either media alone. Out of home also motivates actions such as calls or visits to websites.

## Digital

Halifax homeowners spend 31 hours weekly online – 20 on desktop and another 11 on mobile devices. They spend more time with digital than they do with TV, radio, magazine and newspaper combined.

Our target audiences are heavy consumers of digital content, and the channel itself provides exceptional targeting, optimization and measurement capabilities. There are numerous highly-targeted opportunities in the digital world, and our partner will be EyeReturn.

Over the last number of years, the way digital advertising is planned and bought has evolved. It is now bought based on audience instead of specific websites. People leave digital footprints based on sites they visit, searches they perform, articles they read and ads they click on. Based on these behaviours, we're able to finitely target people by action and intention. Our campaign requires less targeting – mostly geographic and age; however, despite the lighter targeting segmentations, the campaign will still be monitored and optimized to ensure the channels used are relevant and driving traffic.

We have partnered with EyeReturn Marketing, parent to the EyeDemand Network, because they are a leader in ad serving, advanced analytics, verification, shopping cart retargeting, big data analysis, and dynamic creative optimization. Using EyeDemand will allow us to run on multiple websites throughout the network with exceptional service through one point of contact. Instead of just running on one or two local sites, our ads will be served on thousands of sites to local users – Globe and Mail, Kijiji, About.com, MSN, Yahoo, Facebook, etc.

## Public Engagement

We've partnered with WSP to engage directly with customers at popular public events and locations. These will be areas with high volumes of foot traffic and all demographics - maximizing the impact of the engagements. WSP will socialize our message and get valuable feedback.

# Halifax Water Communication Strategy

## Tactical Event Locations

- Buskers Festival
- Tall Ships Event
- Farmer's Market
- Halifax or Alderney Ferry Terminal
- Sportsplexes
  - Canada Games Centre
  - Dartmouth Sportsplex
  - Cole Harbour Place
  - Spryfield Wave Pool
  - BMO Centre
  - St. Margaret's Centre
- Discovery Centre
- Central Library
- Public Gardens
- Grocery Stores
- Halifax Boardwalk
- Dingle Park

## TIMELINE

- Brand DNA Development: January 2017
- Straight from the Source Creation and Development: March - May 2017
- Media & Public Engagement: Late June to End of August 2017

## LONG TERM PUBLIC ENGAGEMENT PLAN

Maintaining a positive public image over the long term is key to influencing our corporate reputation. We achieve this by proactively going to our customers, initiating discussions and spreading our message. This involves annual investments in engagement material like branded gear and staffing for our mobile engagement unit, The Shed, during major events throughout the tourist season. Long term public engagement will allow us a positive corporate reputation that we can leverage to achieve our objectives more easily.



OUR ORGANIZATIONAL DNA





# the future is refreshing

For decades we have been focused on improving our operations so we can continue to manage our region's water cycle in a financially and environmentally responsible manner. As a result of everyone's hard work, we have grown into a world-class utility with an incredible story.

We now have an opportunity to improve the way we tell our story. By communicating proactively, celebrating our achievements and educating our customers and stakeholders, over time we will build a brand as refreshing as our water.

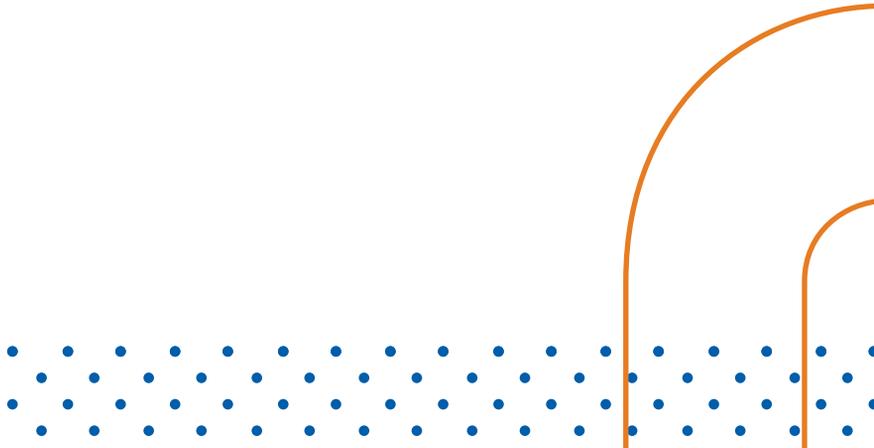


Carl D. Yates, M.A.Sc., P.Eng.  
General Manager

# what we do

Build and maintain infrastructure that supports the treatment, delivery and flow of water across the region.

We take care of our harbour, lakes and rivers so all can enjoy; whether it's sailing, fishing, swimming, or a walk along the shore.

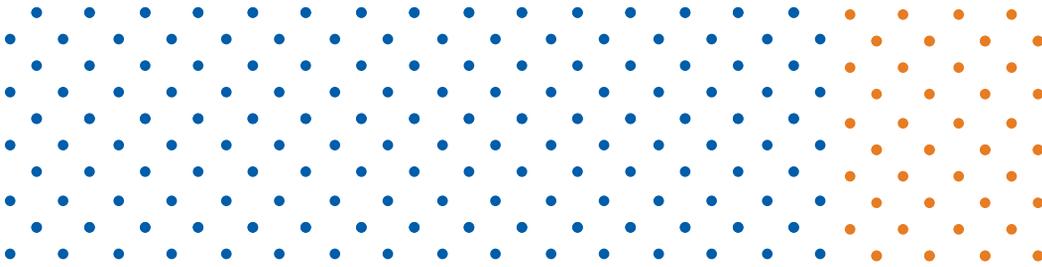




# our customers

Who our brand must excite and involve.

360 000 users (90 000 of which pay bills) across the municipality. Everyone – if you consume water in the Halifax region, Halifax Water cares deeply about your safety and well-being!



80%

residential

20%

commercial,  
industrial,  
institutional



## AUDIENCE

Home and property owners | Tenants | Families  
Working professionals (singles and couples)  
Students | Seniors | Visitors | Developers  
Contractors | Consultants



# our benefits

The key features and attributes of our brand.

## The Highest Standards

Our processes and services are world-class. Halifax's water is award-winning for its quality and we were the first utility in North America to adopt the International Water Association methodology to reduce leakage in the distribution system.

## Service

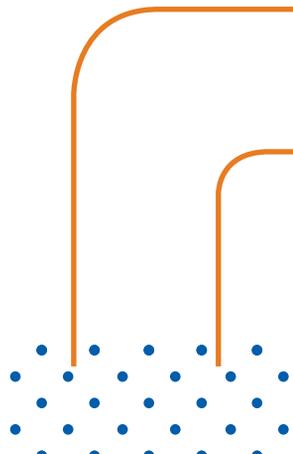
We exist to serve the public and the environment. We take this responsibility seriously and feel an immense sense of pride in reaching beyond industry service standards.

## Research

We invest in research and development to discover how to better serve our customers and the environment. Halifax Water has a Natural Science and Engineering Research Council of Canada Research Chair with Dalhousie University.

## Safety Is Our Highest Priority

- Safe drinking water
- Safe wastewater
- Safe drainage
- Safe infrastructure
- Safe recreation environments



# our personality

The human characteristics of our brand, giving it tone, feel and style.

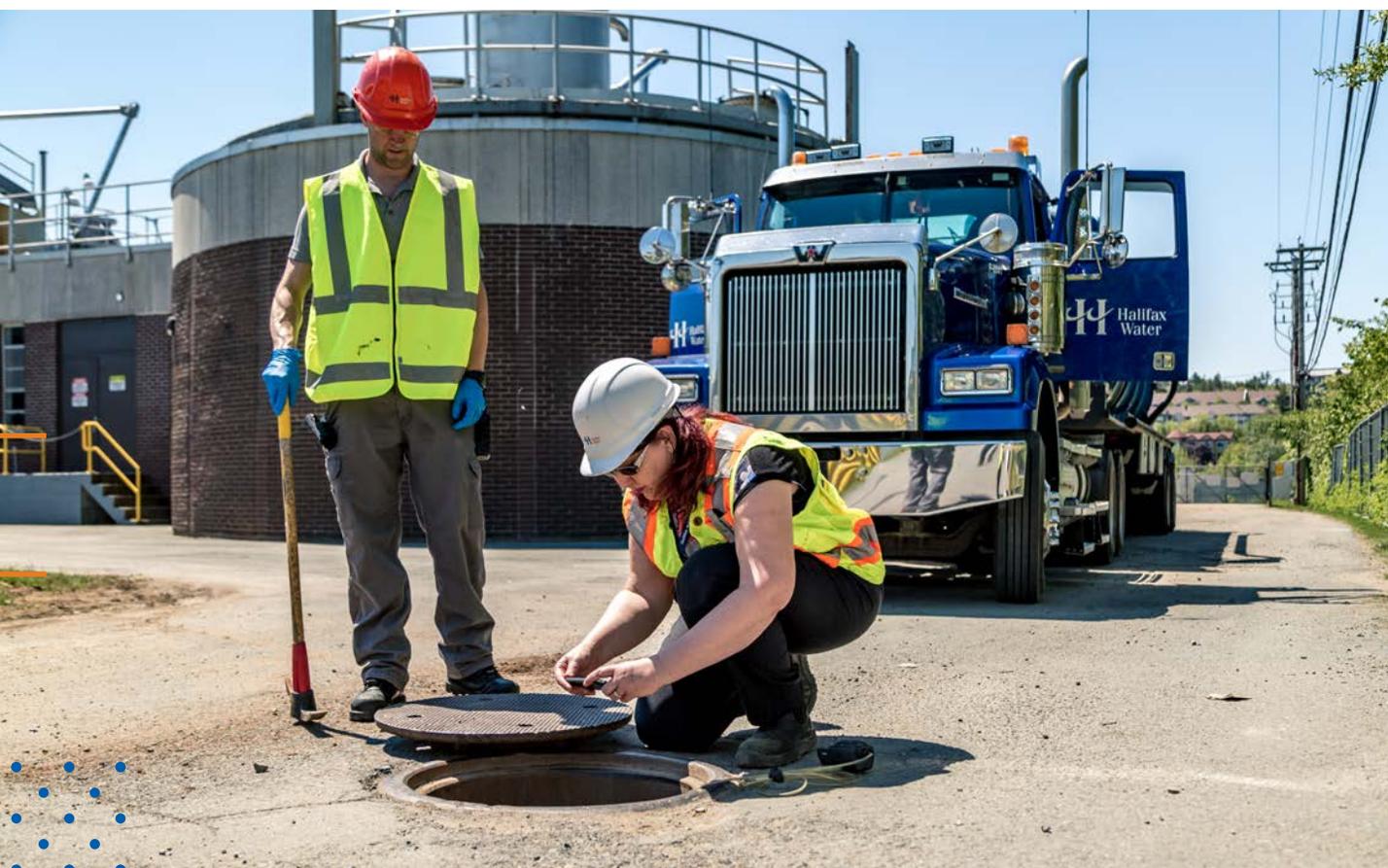
**Trailblazers**

**Genuine**

**Reliable**

**Vibrant**

**Dedicated**





OUR ORGANIZATIONAL DNA

# we value

The fundamental, guiding principles and beliefs of our brand.



## Relationships

We nurture relationships with our customers, our team members and the environment.



## Innovation

We are among the top utilities across the continent and we are known on the global stage. We always ask, “How can we improve efficiency, sustainability, creativity and the customer experience?”

## OUR ORGANIZATIONAL DNA

# we value

The fundamental, guiding principles and beliefs of our brand.



## Accountability

We refuse to cut corners. We are driven to make our policies, decisions and projects as clear as our drinking water.



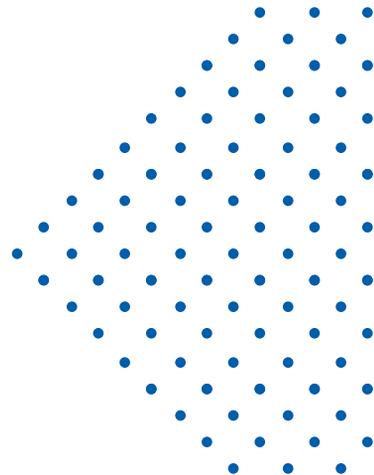
# Protection

Halifax Water protects the health and well-being of our population. We exist to guard natural resources, finding ways to sustain our communities and environment.

# our vision

Our vision inspires and captures what our brand wants to be, what it stands for and why it deserves to be looked up to. Vision is not a strategy or a business plan, it is the place where our strategy needs to take us. It is our destination, our north star, conveying spirit, drive and enthusiasm for the destination.

**Admired worldwide as the leading water utility through efficiency, environmental stewardship, innovation and customer care.**







# our commitment

Clarifies the goals of our organization or place. What do we do, for whom do we do it and what is the impact? While our vision statement is a declaration of what we're focused on being, our commitment talks about what we are doing.

**We do what's right for the region,  
the environment and the future.  
We are trusted for making the most  
efficient use of our customers'  
resources as we source, treat, supply,  
move and protect water.**



## our brand purpose

A clear and vivid brand purpose describes what a brand knows must change in the world and the role the brand sees for itself in helping to achieve that change. It is the door of opportunity to make a difference to the people we serve. It explains why people come to work. It gives each person a reason to be proud. It calibrates and guides thinking.

**We make clean water accessible across the municipality and safely transfer it back to the source with financial and environmental responsibility top-of-mind. We are proud stewards of the water cycle.**



# our brand promise

Our brand promise is the experience our brand promises to make to the world. The combination of reputation and expectation, rooted in the fundamental customer need that we fulfill.

## Refreshing.



# STRAIGHT from the SOURCE

Straight from the Source is our new way to act and communicate – with authenticity, reliability and vibrancy.

It educates and informs – shedding light on what it truly means to be stewards of the water cycle.

Straight from the Source cuts through the jargon. It tells real stories and important news via the ultimate source of credibility – people whose lives are affected by clean water.

Straight from the Source captures attention because it's unexpected. It's not how most utilities speak or act.

It's long-lasting.

It's sincere.

It's clear.

And it's refreshing.







# why our corporate reputation matters

Our corporate reputation is our brand. It's the value we have in the minds of our customers and stakeholders. It's a combination of reputation and expectation, and it's one of our most valuable assets.

A positive corporate reputation allows us to achieve our objectives more easily. It creates trust between us and our customers ahead of major infrastructure projects, and understanding when those projects disrupt their lives. And it can protect us during difficult times and even crisis.

While we cannot manufacture a positive corporate reputation, we can influence it by following our approach day in and day out.





revolve™

**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

**APPROVED:** *Original Signed By:*  
\_\_\_\_\_  
Darlene Fenton, Chair, Environment and Safety Committee

**DATE:** June 16, 2017

**SUBJECT:** **Seasonal Disinfection Program - Update**

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### **INFORMATION REPORT**

#### **ORIGIN**

Halifax Regional Water Commission (HRWC) applied to the Nova Scotia Environment (NSE) for the ability to undertake a second pilot for Seasonal Disinfection for the Halifax, Dartmouth, Herring Cove and Eastern Passage Wastewater Treatment Facilities (WWTF).

#### **BACKGROUND**

A Seasonal Disinfection Program involves turning off the ultraviolet (UV) disinfection system in a wastewater treatment facility during the winter months, when recreational activity is significantly reduced or non-existent. Seasonal Disinfection Programs are implemented in a number of utilities across Canada and the United States, for both marine and freshwater receiving waters.

NSE granted approval for a two-month trial period commencing March 1, 2016, prior to granting this recent pilot.

#### **DISCUSSION**

HRWC turned the UV systems off at four of the Harbour Wastewater Treatment Facilities (WWTF) on November 1, 2016 and turned them back on April 30, 2016, with

the exception of December 19, 2016 to January 2, 2107, when the UV systems were turned back on for the Polar bear swim.

Staff continued monthly sampling at the eight locations, noted below, to monitor bacteria levels during the pilot period (See Attachment A for detailed results).

1. Dingle Beach – Sir Sanford Fleming Park, Northwest Arm: Public access.
2. Black Rock Beach – Point Pleasant Park, Middle Harbour: Public access.
3. Halifax Ferry Terminal – Halifax Waterfront: Public access and adjacent commercial or institutional uses.
4. Seaview Park – Harbour Narrows: Public access, adjacent commercial uses, and proximity to Bedford Basin.
5. Dartmouth Ferry Terminal – Dartmouth Waterfront: Public access and adjacent commercial or institutional uses.
6. Woodside Ferry Terminal – Dartmouth Waterfront: Public access and adjacent commercial or institutional uses.
7. Fisherman’s Cove – Eastern Passage: Public access and adjacent commercial or institutional uses.
8. Herring Cove – Public wharf

The parameters monitored are as follows:

- Fecal coliform (safe swimming limit 400/100ml)
- E. coli (safe swimming limit 400/100ml)
- Enterococcus (safe swimming limit 70/100ml)

The results indicate that the highest bacteria levels were found at the Halifax Ferry Terminal, Dartmouth Ferry Terminal, and at Herring Cove. These locations are the three closest to the treatment plant outfalls. The increased levels resulted from system overflows related to wet weather events that would have occurred regardless of seasonal disinfection or not.

Staff are preparing an application to NSE for a Seasonal Disinfection Program to be embedded permanently within the Operating Permits for Halifax, Dartmouth, Eastern Passage and Herring Cove Wastewater Treatment Facilities

### **BUDGET IMPLICATIONS**

The implementation of the Seasonal Disinfection Program over the 2016/17 pilot (23 weeks) has saved HRWC approximately \$143,000 in energy costs and \$24,000 in demand charges for a total of \$167,000 plus HST.

**ATTACHMENT**

Attachment A – Seasonal Disinfection Data 2016-2017

Report Prepared by: *Original Signed By:*  
Kenda MacKenzie, P. Eng., Director Regulatory Services,  
(902) 237-7116

**Seasonal Disinfection Data**  
1 November 2016 to April 30 2017

Date		SD - 1: Dingle Beach South				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	3	< 10	10	10		
	18	20	17	21		
	28	26	30	20	8	1
Dec	9	10	20	10	6	4
	19	60	10	50	1	-2
Jan	5	<b>140</b>	150	160	3	0
	20	10	< 10	< 10	2	-1
Feb	9	17	< 10	10	0	-3
	22	20	10	10	0	-1
Mar	7	< 10	< 10	< 10	1	-1
	23	60	< 10	10	-1	-6
Apr	4	< 10	< 10	< 10	5	9
	25	< 10	< 10	< 10	6	5

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 2: Black Rock Beach				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	9	20	< 10	< 10		
	28	44	30	60	9	1
Dec	9	10	< 10	< 10	4	3
	19	240	130	160	1	-3
Jan	5	60	40	90	4	2
	19	110	120	180	3	3
Feb	9	72	70	40	3	1
	22	150	40	50	4	2
Mar	9	60	10	20	4	8
	23	< 10	70	40	-2	-7
Apr	4	< 10	< 10	< 10	6	10
	25	20	< 10	< 10	6	6

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 3: Halifax Ferry Terminal				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	9	160	100	70	11	8
	28	150	270	290	8	1
Dec	9	110	160	90	6	1
	19	140	200	370	4	-3
Jan	5	230	390	430	4	3
	19	70	70	50	4	4
Feb	9	200	390	490	2	0
	22	160	360	310	3	3
Mar	9	170	110	80	2	6
	24	30	50	50	0	-4
Apr	4	60	70	90	3	8
	25	90	60	110	5	10

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 4: Africville Park				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	3	< 10	20	10		
	22	30	10	< 10	8	5
Dec	2	<b>200</b>	» 250	» 250	8	5
	12	< 10	< 10	10	5	-5
	22	*	30	< 10	4	4
Jan	5	<b>350</b>	<b>850</b>	<b>660</b>	4	2
	20	< 10	< 10	30	2	0
Feb	10	10	10	< 10	0	-4
	22	< 10	< 10	< 10	4	3
Mar	9	40	40	50	3	6
	24	< 10	10	10	1	-7
Apr	4	< 10	< 10	10	4	8
	25	< 10	< 10	< 10	7	10

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 5: Dartmouth Ferry Terminal				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	7	< 10	< 10	10		
	15	23	45	43		
Dec	1	<b>80</b>	240	140		
	12	60	120	110	3	-5
	22	*	< 10	40	4	-2
Jan	5	<b>280</b>	<b>840</b>	<b>880</b>	4	2
	19	<b>120</b>	120	70	3	2
Feb	10	30	30	60	0	-8
	22	20	< 10	< 10	2	1
Mar	9	<b>180</b>	90	70	5	7
	24	20	10	< 10	-1	-3
Apr	4	10	< 10	< 10	4	5
	25	20	< 10	< 10	6	8

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 6: Woodside Ferry Terminal				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	3	10	10	10		
	15	41	95	89		
Dec	1	60	60	30		
	12	30	50	40	3	-5
	22	*	20	40	4	-2
Jan	5	<b>290</b>	<b>600</b>	<b>590</b>	4	2
	19	50	130	80	3	4
Feb	10	50	180	150	-1	-7
	22	30	40	30	3	2
Mar	9	50	70	40	4	6
	24	< 10	< 10	20	0	-3
Apr	4	< 10	10	90	2	6
	25	50	10	30	5	11

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

Seasonal Disinfection Data

1 November 2016 to April 30 2017

Date		SD - 7: Fisherman's Cove				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	7	30	< 10	< 10		
	15	2	4	9		
	18	84	29	29		
Dec	1	20	30	50		
	12	< 10	10	< 10	3	-5
	22	*	60	30	4	-1
Jan	5	50	10	30	3	1
	20	110	70	140	3	2
Feb	10	10	50	20	-1	-3
	22	< 10	< 10	< 10	2	2
Mar	9	30	10	10	4	5
	24	< 10	10	10	0	-4
Apr	4	< 10	10	< 10	3	4
	25	< 10	< 10	< 10	6	8

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

## Seasonal Disinfection Data

Halifax Water

1 November 2016 to April 30 2017

Date		SD - 8: Herring Cove				
		Enterococcus (CFU/100mL)	E. coli (CFU/100mL)	Fecal Coliforms (CFU/100mL)	Water Temp. (°C)	Air Temp. (°C)
Nov	3	30	10	20		
	14	38	18	15		
	28	34	30	60		
Dec	9	70	110	100	4	10
	19	650	2100	2500	1	-2
	29	270	210	160	0	-2
Jan	5	750	2000	840	3	1
	19	10	20	10	0	-2
Feb	9	19	40	80	0	-2
	22	60	20	40	0	-3
Mar	7	20	30	< 10	2	0
	22	40	20	10	2	3
Apr	4	10	10	20	6	8
	25	< 10	< 10	10	5	7

Analyte	Threshold
Enterococci : ocean/harbour	70
E.Coli and Fecal : freshwater	400

- Water and air field temperature readings missed until November 22 (SD4), November 28 (SD1,2,3), December 9 (SD8) and December 12 (SD5,6,7) while awaiting a thermometer on order.
- \* These samples were received by the lab on Dec 22nd and the enterococcus could not be completed due to holiday hours.
- Due to sampling constraints, samples taken between January 19 and February 10 and between April 4 and April 25 were taken 3 weeks apart (rather than the stipulated 2 weeks in the Approval).
- SD2, SD3 and SD5 samples were not taken 2 weeks apart between November 7 and November 28 due to sampling error.

**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:** June 16, 2017

**SUBJECT:** **2016/17 Cost Containment**

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### **INFORMATION REPORT**

#### **ORIGIN**

The Cost Containment Process (Item #6) as approved by the Halifax Regional Water Commission (HRWC) Board, October 3, 2013.

April 14, 2015 NSUARB Decision- HRWC General Rate Application (M06540)

#### **BACKGROUND**

The process for cost containment as approved by the HRWC Board on October 3, 2013 called for the implementation of a number of recommended actions that would assist HRWC in addressing the Nova Scotia Utility and Review Board's (NSUARB) request for a more rigorous approach to cost containment as an organization. One key recommendation was the establishment of a reporting structure whereby, *“on a quarterly basis, the monthly financial report of the HRWC Board will also include an update on Cost Containment Initiatives”*.

In the Decision on the 2015 Rate Hearing, the NSUARB directed HRWC to file annual reports on its efforts to contain operating costs of the utility, with this report to be filed no later than June 30 of each year. Within the Decision, the NSUARB expressed its appreciation in receiving HRWC's first cost containment report, and HRWC's initiatives to contain its operating costs. HRWC filed this initial report with the NSUARB in September 2014, identifying \$2.8 million of savings for 2013/14. Initiatives in subsequent

years resulted in projected savings of \$1.7 million and \$3.0 million for 2014/15 and 2015/16 respectively.

## **DISCUSSION**

A Summary Report-of Cost Containment Initiatives for 2016/17 is attached, with updated information as at May 31, 2017. This report shows the cost containment initiatives effecting operations for 2016/17 as a result of new initiatives implemented thus far during the year, along with amounts of an ongoing nature from 2013/14 to 2015/16 inclusive. The inclusion of initiatives and amounts from prior years reflects an intentional focus on sustainable results over the long term. The projected cost savings for 2016/17 is \$5.1 million as outlined by category in Figure #1 below:

**Figure #1**

<b>General Budget Strategies</b>	<b>\$0</b>	<b>0%</b>
<b>Procurement Strategies</b>	<b>\$647,954</b>	<b>13%</b>
<b>Human Resource Strategies</b>	<b>\$2,254,344</b>	<b>44%</b>
<b>Information Technology (IT) Strategies</b>	<b>\$108,700</b>	<b>2%</b>
<b>Facilities/ Process Strategies</b>	<b>\$1,987,214</b>	<b>39%</b>
<b>Reduce Paper and Printing Costs</b>	<b>\$20,679</b>	<b>0%</b>
<b>Technology and Business Process Changes</b>	<b>\$112,138</b>	<b>2%</b>
	<b><u>\$5,131,028</u></b>	

As shown above, cost containment are impacted the most in the areas of Human Resource and Facilities/ Process Strategies. Under Human Resource Strategies the effects of pension plan re-design initiated in 2015/16 is one of the main forces with respect to cost containment savings in the current year. Annual savings related to pension plan re-design approximates \$1.7 million, which represents 75% of the savings within Human Resource Strategies and 33% of the total projected cost savings for 2016/17. Employer contributions on pensionable earnings decreased in 2016 from 12.95% to 9.85%, with employees experiencing a similar decrease from 12.95% to 10.65%. In addition, special payments made by the HRWC to fund the unfunded liability of the pension plan were reduced from \$3.0 million to \$0.8 million on an annual basis. Savings of \$20.2 million for the employer was projected over a 14 year period, with a 50% likelihood the plan would be fully funded within 10 years.

## ITEM # 8-I

HRWC Board

June 28, 2017

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Facilities/ Process Strategies contain initiatives of varying nature, however one of the main contributors in this category is Halifax Water's Energy Efficiency Program. Projects under this program account for approximately \$0.7 million of projected savings for the current year, representing 37% of savings within the category and 14% of the total projected savings for 2016/17.

Chemical costs are key to the operations of Halifax Water, in both water and wastewater services. Through its Procurement Strategies, staff continues to negotiate the best product and pricing to enable the facilities to operate in an efficient manner. This is evident in 2016/17 where savings related to chemical purchasing amounted to an estimated \$0.4 million.

New cost containment initiatives implemented during the 2016/17 fiscal year resulted in cost savings amounting to \$0.6 million. These initiatives are highlighted for ease of reference on the Summary Report-Cost Containment Initiatives attached. Cost savings resulting from these new initiatives fall within the following categories, ranked in order of cost savings: Facilities/ Process Strategies (\$0.4 million); Human Resource Strategies (\$0.1 million), Procurement Strategies (\$63 thousand), and Paper and Printing Reduction (\$2 thousand).

### **BUDGET IMPLICATIONS**

Available information on cost containment initiatives were taken into consideration when the 2016/17 budgets were developed. Initiatives that impact future fiscal periods (not annual or one-time occurrences only) will be incorporated into budget cycles and processes of these future periods.

### **ATTACHMENTS**

Summary Report – Cost Containment Initiatives

Report Prepared by:	<i>Original Signed By:</i> Allan Campbell, <u>B.Comm, CPA, CMA</u> Manager, Finance
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13-Jun-17

#	Initiative	Annual Cost Savings	Comments	Year Initiated	2016/17 Cost Savings
<b>1 General Budget Strategies</b>					
					Sub-total
					<u>\$0</u>
<b>2 Procurement Strategies</b>					
	Insurance adjustment services - sole source relationship over a 10 year period	\$5,460	HW participated in a joint tender with HRM. Costs will be approximately 20% lower.	2013/14	\$5,460
	Standardized uniforms and clothing	\$20,000	Issuance of a bulk tender; centralization of purchasing and distribution function; possible policy change to "as required" rather than a quota system	2013/14	\$20,000
	Standardized boots	\$5,000	Issuance of a bulk tender; centralization of purchasing and distribution function; possible policy change to "as required" rather than a quota system	2013/14	\$5,000
	Mobile devices - switched supplier and carrier	\$51,624	HW participated in a joint tender with HRM	2013/14	\$51,624
	Customer account collections	\$10,000	Coordination of collection services related to closed customer accounts in conjunction with the Provincial Public Procurement Act, rather than outsourcing to private organizations	2014/15	\$10,000
	Lab Testing	\$60,000	Savings as a result of contract tendering	2013/14	\$60,000
	NSPI rate reclassification	\$16,000	Eastern Passage WWTF	2014/15	\$16,000
	NSPI rate reclassification	\$15,000	Duffus Street Pumping Station	2015/16	\$15,000
	Chemical purchasing	\$400,000	Able to purchase a corrosion inhibitor with a higher concentration of active ingredient, thus foregoing additional costs that would have resulted under current dosage requirements	2015/16	\$400,000
	Replacement of wireless headsets for CCC staff	\$1,500	Wireless headsets were not performing as expected, therefore a switch was made to wired headsets which resulted in savings on a per unit cost basis, and also savings regarding the frequency and cost of replacement associated with the wired headsets.	2015/16	\$1,500
	Mobile devices - switched supplier and carrier	\$48,000	HW leveraged the mobility contract of the Province of Nova Scotia	2016/17	\$12,000
	Garbage collection - JD Kline Plant	\$1,370	An RFP was put out to consolidate the garbage collection, which resulted in a cost savings with respect to internal man-hours and use of HW vehicles.	2016/17	\$1,370
	Utilizing HW staff to setup excavations sites	\$50,000	Using trained HW staff as TWS for job sites, unless outside traffic control personal are required	2016/17	\$50,000
					Sub-total
					<u>\$647,954</u>
<b>3 Human Resource Strategies</b>					
	Corporate ID Badges	\$3,200	updating the corporate ID badges to be deferred from the 2013/14 fiscal year to 2014/15 for existing employees	2013/14	\$3,200
	Heavy Truck and Equipment Service	\$100,000	the addition of a new Heavy Equipment Technician provides in-house maintenance service capabilities for the HW fleet.	2013/14	\$100,000
	Beeper Pay	\$75,000	Elimination of an inconsistency between Water and Wastewater Services, as Water Services staff do not receive beeper pay. This involves 10 non-union staff in total.	2013/14	\$75,000
	Annual service awards banquet	\$15,000	Changed the venue and the cost of the meal	2014/15	\$15,000
	Accessing on-line training opportunities	\$2,241	More use of on-line training versus the traditional methods, including WHMIS and TDG renewals	2014/15	\$2,241
	Background Checks	\$654	Out-sourced background checks to a new contractor.	2015/16	\$654
	Workload, labour force assessment	\$140,000	A reduction in number of staff in Development Approvals. The volume of work did not warrant 6 planning technologists, and as a result this number has been reduced to 4.	2015/16	\$140,000
	Pension plan re-design	\$1,700,000	Through the collective bargaining process, HW was able to negotiate pension plan re-design to make the plan more sustainable. It is estimated the employer's share contributions will decrease from the current 12.95% to 9.85% effective January 1, 2015.	2015/16	\$1,700,000
	Re-structuring within the organization to create a new "Corporate Services" sector	\$35,000	January 1, 2016 saw the elimination of two (2) full time positions and a re-design of several other jobs.	2015/16	\$35,000
	Workload, labour force assessment	\$57,000	January 1, 2016 saw the elimination the administrative assistant within Regulatory Services.	2015/16	\$57,000
	Reduction in the number of summer students	\$42,296	Net reduction in the number of summer students, including Federal funding in the amount of \$2,996	2016/17	\$42,296
	Workload, labour force assessment	\$81,966	November, 2016 saw the elimination of a Compliance Sampling position as a result of a reduction in sampling requirements.	2016/17	\$34,153
	Hiring at Lake Major plant	\$9,800	Summer student not hired	2016/17	\$9,800
	Overtime reductions	\$40,000	Overtime has been reduced at the Harbour Solutions Plants with respect to sick leaves, vacation, etc. when weather conditions allow and operational needs are met. Also, Halifax WWTP staff are responding to after hours calls at the Dartmouth and Herring Cove facilities in an effort to minimize the need for overtime call-outs.	2016/17	\$40,000

Sub-total \$2,254,344

**4 Information Technology (IT) Strategies**

Xerox managed print solutions	\$20,000	Rationalization and replacement of photocopiers and printers	2013/14	\$20,000
Network	\$80,000	Change in cost model by Eastlink, giving HW the new pricing	2013/14	\$80,000
Telephone land lines	\$8,700	Rationalization of services and eliminate duplication of resources as required	2013/14	\$8,700

Sub-total \$108,700

**5 Facilities/ Process Strategies**

Chlorine Utilization - Pockwock	\$40,000	Discontinuation of the pre-chlorination process	2013/14	\$40,000
Lab Testing	\$105,000	Price benefits from purchasing product from a different source mainly affecting the Harbour Solution Plants	2013/14	\$105,000
Pumper Truck Utilization	\$130,000	pilot project to be scheduled initially for stormwater customers only as a test	2013/14	\$130,000
Waste oil boiler system - Herring Cove WWTF	\$13,250	new system to allow the use of waste oil from Metro Transit as an alternative heating source	2014/15	\$13,250
System sampling for HPC's	\$8,025	sampling was reduced from weekly to monthly	2014/15	\$8,025
NSE system assessments	\$25,000	Assessment reports are being completed in-house rather than being outsourced	2014/15	\$25,000
Decommissioning of the Bedford South pumping station	\$15,000	The developer driven system expansion will permit the use of gravity and pressure reduction rather than the pumping station	2014/15	\$15,000
Lighting upgrades - Bennery Lake WSP	\$4,793		2014/15	\$4,793
Insulation upgrades - Bennery Lake WSP	\$36,000		2014/15	\$36,000
Lighting upgrades - Eastern Passage WWTF	\$7,880		2014/15	\$7,880
Lighting upgrades - Dartmouth WWTF	\$22,542		2014/15	\$22,542
Lighting upgrades - Herring Cove WWTF	\$13,744		2014/15	\$13,744
Lighting upgrades - Halifax WWTF	\$29,845		2014/15	\$29,845
Lighting upgrades - Aerotech BPF	\$19,109		2014/15	\$19,109
HVAC upgrades - Eastern Passage WWTF	\$20,711		2014/15	\$20,711
HVAC upgrades - Roach's Pond pumping station	\$13,500		2014/15	\$13,500
MCC 190 cooling and heat recovery - Halifax WWTF	\$13,164		2014/15	\$13,164
Aeration system upgrades - Eastern Passage WWTF	\$76,382		2014/15	\$76,382
Orchard Park in-line turbine project	\$31,494		2014/15	\$31,494
Wind farm - Pockwock WSP	\$130,399		2014/15	\$130,399
Biogas CHP system - Mill Cove	\$86,000		2014/15	\$86,000
Disposal of water treatment plant solid residual material	\$36,000	A new location for the disposal of the residual material was found	2014/15	\$36,000
Advanced investigative tool for leaks and structural condition of pipes	\$150,000	The current program has been halted as a cost containment initiative and as a result of the information received.	2014/15	\$150,000
Seasonal disinfection of wastewater effluents	\$250,000	In coordination with NSE, UV disinfection of effluents will not be required during certain periods of the year	2014/15	\$250,000
E-delivery	\$20,000	Transitioning from traditional billing methods to e-delivery	2014/15	\$20,000
Change in Recycling Pickups	\$2,700	By changing the schedule for recycling pickups from bi-weekly to every three (3) weeks, the anticipated annual savings will range from \$2,500 to \$2,700.	2015/16	\$2,700
Highway #7 Booster Station Upgrade	\$14,300	Expected energy savings	2015/16	\$14,300
Dartmouth WWTF - UV Channel Isolation	\$59,460	Expected energy savings	2015/16	\$59,460
Halifax WWTF - Fixed Compressed Air Leaks	\$2,293	Expected energy savings	2015/16	\$2,293
Halifax WWTF - UV Channel Isolation	\$62,115	Expected energy savings	2015/16	\$62,115
Herring Cove WWTF - MCC 190 Cooling/Heat Recovery	\$8,496	Expected energy savings	2015/16	\$8,496
Herring Cove WWTF - Ventilation Air Heat Recovery	\$28,300	Expected energy savings	2015/16	\$28,300
Sampling	\$4,160	Using internal staff at the Mill Cove facility to perform the required daily sampling at the facility, rather than the compliance staff, limiting their site visits to once a week.	2015/16	\$4,160
Staff utilization	\$50,000	Using trained HW staff for traffic control on HW job sites unless contractors are required.	2015/16	\$50,000
Process alternative	\$40,000	A centrifuge was rented for the Mill Cove WWTF (with the option to purchase) on a trial basis to dewater liquid sludge that typically would be transported to the Aerotech WWTF. The transport of the liquid sludge resulted overtime costs, as well as reducing the time available for HW truck to service other facilities. This process assisted the Aerotech in reaching its compliance goals and reduced overtime costs by an estimated 50%. This equipment will enable HW proceed with a digester clean out project, which would otherwise be sub-contracted at a cost of \$200,000.	2015/16	\$40,000
Process change	\$4,854	It was decided that flanges for meter sizes greater than 2" would be the responsibility of the customer, since when meters are replaced, the flanges are not replaced.	2015/16	\$4,854

Process change relating to NSPI billing meter relocations	\$160,000	Cost savings created as a result of more accurate billing: ability to receive timely readings, and monitor and report energy usage; reduction in the materials and time used to escort meter readers to secure, un-staffed locations.	2016/17	\$160,000
UV disinfection shutdown - HHSP and Eastern Passage WWTFs	\$150,270	Annual shutdown of UV disinfection system resulted in cost savings associated with electrical energy savings, peak demand reduction,	2016/17	\$150,270

**5 Facilities/ Process Strategies (continued)**

Halifax WWTF - Ventilation Air Heat Recovery System	\$32,300	Implemented October, 2016	2016/17	\$13,458
Halifax WWTF - Carbon Scrubber By-Pass	\$40,800	Implemented April, 2016	2016/17	\$40,800
Tools developed internally	\$20,000	Tools developed internally to install new operating nuts on buried valves. Previously nuts were lost on buried valves resulting in a need to excavate the valve and install new nuts. Cost savings are achieved regarding excavation and reinstatement.	2016/17	\$20,000
Boiler Replacement - JD Kline Plant	\$3,000	Anticipated savings related to oil usage and pricing resulting from the replacement of the old boiler.	2016/17	\$3,000
Process change	\$3,170	It was decided to dig away from the main which was located 7' under the sidewalk to repair a low pressure issue. The main stop was cleared using a cable and fish tap. Savings included the cost of concrete reinstatement, sods and the overall inconvenience to the public.	2016/17	\$3,170
Spruce Hill transmission main	\$3,000	Two long term leaks were discovered in the transmission main resulting in cost savings from the perspective of water loss control.	2016/17	\$3,000
Installation of a new rotating assembly	\$6,000	Using in house experience and knowledge to install a new rotating assembly for the centrifuge at the Lake Major plant	2016/17	\$6,000
Utilization of industrial water	\$26,000	A new filter system was installed at the Eastern Passage WWTP that provides the capability to use the current industrial water system rather than potable water to deliver water to the polymer feed systems.	2016/17	\$13,000

Sub-total \$1,987,214

**6 Reduce Paper and Printing Costs**

Electronic HRWC Board Packages	\$7,500	Send Board packages out electronically rather than issuing hard copies	2013/14	\$7,500
Paperless Office within the HR Department	\$4,804	Creating electronic workflow	2013/14	\$4,804
Stewardship Report	\$3,000	The Stewardship Report will be published electronically only, with no hard copies	2013/14	\$3,000
Changes to document archiving	\$3,175	Transitioning file storage from outside contractor to public resources	2013/14	\$3,175
Changes to document archiving	\$9,000	Transitioning file storage from outside contractor to public resources	2016/17	\$2,200

Sub-total \$20,679

**7 Technology and Business Process Changes**

Workload, labour force assessment	\$47,605	Through the utilization of technology, such as a Customer Relationship Management (CRM) system, a budgeted addition (customer service representative) has been removed.	2015/16	\$47,605
Workload, labour force assessment	\$64,533	Re-structuring by management within the AMI project as a result of technological efficiencies anticipated.	2015/16	\$64,533

Sub-total \$112,138

\$5,131,028

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

**SUBMITTED BY:** *Original Approved By:*  
Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

**APPROVED:** *Original Approved By:*  
Carl Yates, M.A.Sc., P. Eng., General Manager

**DATE:** June 20, 2017

**SUBJECT:** **Halifax Regional Water Commission Employees' Pension Plan Financial Report - 1st Quarter, 2017**

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### **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 annual budget for the Plan and actual financial performance for the 1st quarter (January 1 to March 31, 2017). Favourable or unfavourable variances reported compare actual results to prorated budget amounts (25% = 3 months/ 12 months), which serves as a benchmark for the three (3) month period in 2017. Results for 2016 and 2015 are shown for comparative purposes.

As shown on the statement of changes in net assets available for benefits attached, net assets available for benefits have increased by \$3.7 million over the three (3) month period ending March 31, 2017. The budget for 2017 forecasted an increase in net assets available of \$6.5 million. Actual results for the period compared to the benchmark show a favourable variance in the amount of \$2.1 million.

Revenue for the period totaled \$3.4 million, which when compared to the benchmark, results in a favourable variance of \$2.0 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. Gains in the fair value for the period amounted to \$2.9 million. Investment income for the period is performing slightly below expectations, showing an unfavorable variance of \$0.2 million or 25%.

Contributions are tracking as expected but are reported under budget due the timing of budgeted pay increases.

Expenses of \$1.0 million for the period are lower than the benchmark of \$1.2 million resulting in a favourable variance of \$0.2 million or 15%. The main contributor to this favourable variance is termination benefit payments of \$48.1 thousand, which came in considerably lower than the benchmark of \$0.2 million, resulting in a 76% variance. The remainder of the variance is due to the timing of administrative expenses with Q1 totaling \$23.4 thousand compared to the benchmark of \$50.0 thousand.

**ATTACHMENT**

Statement of changes in net assets available for benefits, for the three (3) month period ended March 31, 2017.

Report Prepared by: *Original Approved 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 three (3) month period ended**  
*Benchmark 25%*

	March 31, 2017						Actual 2016	Actual 2015	
	Budget	Actual	Prorated Budget 25%	Variance		Actual 2016			Actual 2015
				Actual versus Prorated Budget Favourable (Unfavourable)					
			\$	%					
<b>Revenue<sup>1</sup></b>									
Net investment income:									
Total investment income	\$2,440,000	\$454,727	610,000	(155,273)	-25%	\$2,389,377	\$2,350,179		
Investment manager fees	(\$140,000)	(\$36,111)	(35,000)	(1,111)	3%	(\$138,922)	(\$188,555)		
Increase (decrease) in the fair value of investment assets	\$2,960,000	\$2,936,702	740,000	2,196,702	297%	\$4,056,258	\$7,313,583		
	<b>\$5,260,000</b>	<b>\$3,355,318</b>	<b>1,315,000</b>	<b>2,040,318</b>	<b>155%</b>	<b>\$6,306,713</b>	<b>\$9,475,207</b>		
<b>Contributions<sup>2</sup></b>									
Participants:									
Current service (inc AVC's)	\$2,594,000	\$601,457	648,500	(47,043)	-7%	\$2,484,448	\$2,655,143		
Reciprocal transfers	\$0	\$0					\$598,383		
Sponsors:									
Current service (inc LTD)	\$2,487,000	\$547,426	621,750	(74,324)	-12%	\$2,265,591	\$2,741,953		
Unfunded liability	\$825,000	\$206,315	206,250	65	0%	\$825,200	\$2,952,200		
	<b>\$5,906,000</b>	<b>\$1,355,198</b>	<b>1,476,500</b>	<b>(121,302)</b>	<b>-8%</b>	<b>\$5,575,239</b>	<b>\$8,947,679</b>		
<b>Expenses<sup>3</sup></b>									
Benefit payments:									
Benefit payments	\$3,699,000	\$927,445	924,750	(2,695)	0%	\$3,536,894	\$3,246,032		
Termination payments	\$800,000	\$48,066	200,000	151,934	76%	\$992,572	\$1,021,997		
Death benefit payments	\$0	\$0	0	0	n/a	\$509,236	\$0		
Administrative:									
Actuarial & consulting fees	\$130,000	\$8,709	32,500	23,791	73%	\$128,676	\$134,296		
Audit & accounting fees	\$8,000		2,000	2,000	100%	\$15,999	\$660		
Bank custodian fees	\$22,000	\$7,557	5,500	(2,057)	-37%	\$26,510	\$21,567		
Insurance	\$8,000		2,000	2,000	100%	\$7,950	\$7,950		
Miscellaneous	\$13,000	\$4,681	3,250	(1,431)	-44%	\$14,433	\$11,641		
Professional fees	\$20,000	\$2,498	5,000	2,502	50%	\$12,845	\$18,313		
Registration fees	\$2,000		500	500	100%	\$2,158	\$2,074		
Training (Trustees/ Administration/ Pension Committee)	\$5,000		1,250	1,250	100%	\$1,127			
	<b>\$4,707,000</b>	<b>\$998,956</b>	<b>1,176,750</b>	<b>177,795</b>	<b>15%</b>	<b>\$5,248,400</b>	<b>\$4,464,530</b>		
<b>Increase (decrease) in net assets available for benefits</b>	<b>\$6,459,000</b>	<b>\$3,711,560</b>	<b>1,614,750</b>	<b>2,096,810</b>	<b>130%</b>	<b>\$6,633,552</b>	<b>\$13,958,356</b>		
<b>Net assets available for benefits, beginning of period</b>	<b>\$106,198,705</b>	<b>\$107,067,996</b>				<b>\$100,434,444</b>	<b>\$86,476,088</b>		
Increase (decrease) in net assets available for benefits	<b>\$6,459,000</b>	<b>\$3,711,560</b>				<b>\$6,633,552</b>	<b>\$13,958,356</b>		
<b>Net assets available for benefits, end of period</b>	<b>\$112,657,705</b>	<b>\$110,779,556</b>				<b>\$107,067,996</b>	<b>\$100,434,444</b>		

**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 financial statements.

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

**SUBMITTED BY:** Original Signed By:  
Kenda MacKenzie, P.Eng., Director, Regulatory Services

**APPROVED:** Original Signed By:  
Carl Yates, M.A.Sc., P.Eng., General Manager

**DATE:** June 16, 2017

**SUBJECT:** **Capital Cost Contribution – Financial Status Report for the Fiscal Year ended March 31, 2017**

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**INFORMATION REPORT**

**ORIGIN**

Halifax Water and NSUARB approval of various capital cost contribution charges.

**BACKGROUND/DISCUSSION**

Beginning in 1998, the Halifax Water Board and subsequently the NSUARB approved ten (10) area specific capital cost contribution (CCC) charges consistent with our CCC policy. The overall CCC policy and the specific charge rate were developed for the equitable facilitation of master water and wastewater infrastructure within new development areas or new service extension areas. In addition, in conjunction with the 2007 wastewater/stormwater merger, Halifax water inherited and endorsed three (3) additional wastewater CCC charges established by HRM.

In accordance with the approved policy, Halifax Water is obligated to provide an accounting of all funds received and all costs incurred with respect to the infrastructure improvement. Attached is an annual report showing the cumulative accounting of all CCC funds received and disbursed as of the end of the fiscal year at March 31, 2017. The format provides a detailed entry of each individual debit and credit transaction with a cumulative total to date for each individual charge area from inception to the applicable year-end.

# ITEM # 10-I

HRWC Board

June 28, 2017

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As of March 31, 2017, the results show that eight (8) charge areas are in a negative cash position and four (4) are in a positive cash position. Combined the net current deficit is \$6.9 million with the implementation of over \$33.0 million in infrastructure projects. The CCC program is anticipated to be cost neutral within each charge area over the life of the development and fulfilling the desired facilitation role within these development areas.

This report will be forwarded to the NSUARB for information in accordance with the policy requirements.

## ATTACHMENT

Halifax Water Capital Cost Contribution Report – Summary to March 31, 2017

Report Prepared by:	<u>Original Signed By:</u> Michelle Bennett, B.Comm Accountant, 902-490-5242
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Financial Review by:	<u>Original Signed By:</u> Allan Campbell, B.Comm, CPA, CMA Manager, Finance, 902-490-4288
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**HALIFAX WATER**  
**Capital Cost Contribution Report**  
**Summary to March 31, 2017**

Capital Cost Contribution Area	Receivables	Disbursements	Cumulative
Beaverbank	\$1,332,814	(\$1,762,046)	(\$429,232)
Bedford South - Water	\$3,093,299	(\$2,074,291)	\$1,019,007
Bedford South - Wastewater	\$2,239,457	(\$1,022,796)	\$1,216,661
Bedford West - Water	\$4,163,855	(\$4,435,592)	(\$271,738)
Bedford West - Wastewater	\$8,125,285	(\$16,374,194)	(\$8,248,909)
Birch Cove North - Water	\$1,986,386	(\$2,187,869)	(\$201,482)
Herring Cove	\$1,385,726	(\$698,579)	\$687,148
Lakeside Timberlea	\$741,708	(\$1,264,654)	(\$522,946)
Morris Russell Lake	\$1,128,095	(\$363,291)	\$764,804
Northgate	\$585,772	(\$788,960)	(\$203,188)
Sackville Lively	\$400,096	(\$567,455)	(\$167,359)
Geizer Hill	\$967,154	(\$1,504,806)	(\$537,652)
<b>Grand Total</b>	<b>\$26,149,646</b>	<b>(\$33,044,532)</b>	<b>(\$6,894,886)</b>

**HALIFAX WATER**  
**BEAVERBANK - WATER**  
**Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/17</b>	<b>\$1,332,814.04</b>	<b>(\$1,762,045.74)</b>	<b>(\$429,231.70)</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: March 31, 2000; Revised: December 21, 2000

Total Acreage: 1,302.03

Acreage Developed to Date: 802.85 (61.66%)

Acreage Rate: \$1,515.00 (Proposed amendment to \$850/acre)

Total Infrastructure Cost: \$3,198,896.00

Benefit to Existing HRWC Customer Base - 0%

Benefit to HRM Fire Protection - 37%

Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 34.6%

Infrastructure to be completed: None

\* Based on NSURB review

**HALIFAX WATER**  
**BEDFORD SOUTH - WATER**  
**Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$3,047,071.37</b>	<b>(\$1,958,431.39)</b>	<b>\$1,088,639.98</b>
Bedford South Water - 772 Bedford Highway	\$3,359.24		
Accrue Fire Protection Wentworth Estates Ph 2B	\$42,868.21		
Close 3-2313 Wentworth Estates Ph 2B (Transom Dr)		(\$115,860.03)	
<i>Fiscal 2017 Yearly Totals</i>	<i>\$46,227.45</i>	<i>(\$115,860.03)</i>	<i>(\$69,632.58)</i>
<b>Balance as of March 31/17</b>	<b>\$3,093,298.82</b>	<b>(\$2,074,291.42)</b>	<b>\$1,019,007.40</b>

**Project Information**

Nova Scotia Utility & Review Board Approval Date: June 19, 1998  
Total Acreage: 598.0  
Acreage Developed to Date: 498.41 (83.35%)  
Acreage Rate: \$4,621.00  
Total Infrastructure Cost: \$6,155,269.00  
Benefit to Existing HRWC Customer Base - 21%  
Benefit to HRM Fire Protection - 37%  
Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 42%  
Infrastructure to be completed: Reservoir

**HALIFAX WATER**  
**BEDFORD SOUTH - WASTEWATER / STORMWATER**  
**Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$2,068,071.21</b>	<b>(\$1,016,201.85)</b>	<b>\$1,051,869.36</b>
Wentworth Estates Ph 2A	\$16,609.08		
Bedford South WW - 772 Bedford Hwy	\$2,402.78		
Wentworth Estates Ph 2B	\$42,993.70		
Bedford South CCC Ph C5A WW-Block 4	\$16,609.08		
Bedford South CCC-WW - 652 Bedford Hwy	\$553.64		
Bedford Hwy Lot BH-1 CCC Bedford S CCC	\$36,440.82		
Overpmt of CCC On TR100 Density Changed		(\$6,594.05)	
Bedford South WW Wentworth Estates Block E-R10	\$55,776.77		
<i>Fiscal 2017 Yearly Totals</i>	<i>\$171,385.87</i>	<i>(\$6,594.05)</i>	<i>\$164,791.82</i>
<b>Balance as of March 31/17</b>	<b>\$2,239,457.08</b>	<b>(\$1,022,795.90)</b>	<b>\$1,216,661.18</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: August 1, 2007  
Total Acreage: 624  
Acreage Developed to Date: 535.97 (85.89%)  
Acreage Rate: \$3305.29  
Total Infrastructure Cost: \$2,273,400.00  
Benefit to Existing HRWC Customer Base - 0%  
Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 100%  
Infrastructure to be completed: oversized piping

**HALIFAX WATER**  
**BEDFORD WEST - WATER**  
**Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$4,004,794.02</b>	<b>(\$4,277,036.17)</b>	<b>(\$272,242.15)</b>
West Bedford Ph 1H	\$12,469.98		
West Bedford Ph 2-3 B&C	\$7,279.52		
West Bedford Ph 2-4A	\$8,438.13		
West Bedford Ph 2-4B	\$20,189.76		
West Bedford Ph 2-1A Block GC2	\$12,938.89		
West Bedford Block 3-5	\$6,779.98		
West Bedford GC2-1A	\$5,752.56		
West Bedford GCM-1	\$19,757.28		
West Bedford Additional Portion to Block 3-10A	\$1,394.70		
Accrue Fire Protection West Bedford Ph 2-4A	\$17,007.69		
Close 3-2401 West Bedford Ph 2-4A		(\$45,966.72)	
Halifax Water Capital Budget benefit to existing customers (3-2401)	\$1,563.79		
Accrue Fire Protection West Bedford Ph 2-3B & C	\$41,658.07		
Close 3-2280 West Bedford Ph 2-3B & C		(\$112,589.38)	
Halifax Water Capital Budget benefit to existing customers (3-2280)	\$3,830.29		
<i>Fiscal 2017 Yearly Totals</i>	<i>\$159,060.64</i>	<i>(\$158,556.10)</i>	<i>\$504.54</i>
<b>Balance as of March 31/17</b>	<b>\$4,163,854.66</b>	<b>(\$4,435,592.27)</b>	<b>(\$271,737.61)</b>

**Project Information**

Nova Scotia Utility & Review Board Approval Date: September 2012

Total Acreage: 1611.00

Acreage Developed to Date: 523.79 (32.51%)

Acreage Rate: \$3,149.83 (2012)

Total Infrastructure Cost: \$9,290,316

Benefit to Existing HRWC Customer Base - 5.4%

Benefit to HRM Fire Protection - 37%

Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 57.6%

Infrastructure to be completed: Proportionate amount of Bedford South Reservoir, PRV's, and Pipe Oversizing



**HALIFAX WATER**  
**BIRCH COVE NORTH - WATER**  
**Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$1,789,420.88</b>	<b>(\$2,174,506.86)</b>	<b>(\$385,085.98)</b>
Wentworth Estates Ph 2A	\$39,695.70		
Wentworth Estates Ph 2B	\$59,289.14		
Birch Cove North BS Ph C5A Block 4	\$31,625.00		
Birch Cove North CCC Water-652 Bedford Hwy	\$863.99		
Bedford Hwy Lot BH01 Birch Cove Water	\$19,951.58		
Birch Cove North W Wentworth Est Block E-R10	\$45,540.00		
Birch Cove North CCC		(\$13,361.83)	
<i>Fiscal 2017 Yearly Totals</i>	<i>\$196,965.41</i>	<i>(\$13,361.83)</i>	<i>\$183,603.58</i>
<b>Balance as of March 31/17</b>	<b>\$1,986,386.29</b>	<b>(\$2,187,868.69)</b>	<b>(\$201,482.40)</b>

**Project Information**

Nova Scotia Utility & Review Board Approval Date: September 17, 1999  
Total Acreage: 494.0  
Acreage Developed to Date: 335.36 (67.89%)  
Acreage Rate: \$5,060.00  
Total Infrastructure Cost: \$3,717,646.00  
Benefit to Existing HRWC Customer Base - 0%  
Benefit to HRM Fire Protection - 37%  
Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 63%  
Infrastructure to be completed: Reservoir and Pipe Oversizing

**HALIFAX WATER  
HERRING COVE  
Summary to March 31, 2017**

<b>Transaction Description</b>	<b>Receivables</b>	<b>Disbursements</b>	<b>Cumulative</b>
<b>Balance as of March 31/17</b>	<b>\$1,385,726.23</b>	<b>(\$698,578.68)</b>	<b>\$687,147.55</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: April 10, 2002; Revised: October 26, 2005

Total Acreage: 787.7

Acreage Developed to Date: 311.22 (39.51%)

Acreage Rate: \$3,622.00

Total Infrastructure Cost: \$4,957,204.00

Benefit to Existing HRWC Customer Base - 0%

Benefit to HRM Fire Protection - 37%

Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 63%

Infrastructure to be completed: Future Reservoir

**HALIFAX WATER  
LAKESIDE TIMBERLEA  
Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$736,758.06</b>	<b>(\$1,251,813.46)</b>	<b>(\$515,055.40)</b>

Lakeside Timberlea (int on debt)		(\$4.75)	
Accrue Fire Protection Lakeside PRV Upgrades (3-2079)	\$4,749.07		
Close 3-2079 Lakeside PRV Upgrade for CCC		(\$12,835.33)	
Halifax Water Capital Budget benefit to existing customers (3-2079)	\$200.54		
<i>Fiscal 2017 Yearly Totals</i>	<i>\$4,949.61</i>	<i>(\$12,840.08)</i>	<i>(\$7,890.47)</i>

<b>Balance as of March 31, 2017</b>	<b>\$741,707.67</b>	<b>(\$1,264,653.54)</b>	<b>(\$522,945.87)</b>
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Project Information
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Nova Scotia Utility & Review Board Approval Date: December 14, 2012  
 Overall Acreage 277.79  
 Acreage Developed to Date: 41.812 (15.1%)  
 Acreage Rate: \$14,926.23  
 Total Infrastructure Cost: \$ 8,062,204.55  
 Benefit to Existing HRWC Customer Base - 2.7%  
 Benefit to HRM Fire Protection - 37%  
 Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 60.3%  
 Infrastructure to be completed: Pipe Oversizing

**HALIFAX WATER**  
**MORRIS RUSSELL LAKE**  
**Summary to March 31, 2017**

<b>Transaction Description</b>	<b>Receivables</b>	<b>Disbursements</b>	<b>Cumulative</b>
<b>Balance as of March 31/17</b>	<b>\$1,128,094.67</b>	<b>(\$363,290.75)</b>	<b>\$764,803.92</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: Interim June 10, 2002

Total Acreage: 1,178.7

Acreage Developed to Date: 574.84 (48.77%)

Acreage Rate: \$1,300.00

Total Infrastructure Cost: \$2,641,851.00

Benefit to Existing HRWC Customer Base - 8.2%

Benefit to HRM Fire Protection - 37%

Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 54.8%

Infrastructure to be completed: Pipe Oversizing

**HALIFAX WATER**  
**NORTHGATE**  
**Summary to March 31, 2017**

<b>Transaction Description</b>	<b>Receivables</b>	<b>Disbursements</b>	<b>Cumulative</b>
<b>Balance as of March 31/17</b>	<b>\$585,772.08</b>	<b>(\$788,960.44)</b>	<b>(\$203,188.36)</b>

<b>Project Information</b>
----------------------------

Nova Scotia Utility & Review Board Approval Date: September 28, 2008  
Total Acreage: 485.4 (plus 16.8 acres of adjacent benefitting lands)  
Acreage Developed to Date: 188.9 (38.91%)  
Acreage Rate: \$1,168.00  
Total Infrastructure Cost: \$900,041.00  
Benefit to Existing HRWC Customer Base - 13.4%  
Benefit to HRM Fire Protection - 37%  
Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 49.6%  
Infrastructure to be completed: Pipe Oversizing

**HALIFAX WATER  
SACKVILLE LIVELY  
Summary to March 31, 2017**

Transaction Description	Receivables	Disbursements	Cumulative
<b>Balance as of March 31/16</b>	<b>\$400,096.42</b>	<b>(\$567,455.00)</b>	<b>(\$167,358.58)</b>
<i>Fiscal 2017 Yearly Totals</i>	<i>\$0.00</i>	<i>\$0.00</i>	<i>\$0.00</i>
<b>Balance as of March 31/17</b>	<b>\$400,096.42</b>	<b>(\$567,455.00)</b>	<b>(\$167,358.58)</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: October 29, 2007  
 Total Acreage: 335.5 acres  
 Acreage Developed to Date: 199.57 (59.48%)  
 Acreage Rate: \$1,253.00 / acre  
 Total Infrastructure Cost: \$567,455  
 Benefit to HRWC Existing Customer: \$26,133 (25 acres)  
 Benefit to HRM through LIC: \$50,746 (40.5 acres)  
 Benefit to HRM Fire Protection: \$205,972.71  
 Total Infrastructure of the Project, including financing: \$667,497  
 Percentage of Total Infrastructure Cost to be recovered through CCC Charge: 50.2%  
 Infrastructure to be completed: 0%

**HALIFAX WATER**  
**GEIZER HILL**  
**Summary to March 31, 2017**

<b>Transaction Description</b>	<b>Receivables</b>	<b>Disbursements</b>	<b>Cumulative</b>
<b>Balance as of March 31/17</b>	<b>\$967,153.88</b>	<b>(\$1,504,805.54)</b>	<b>(\$537,651.66)</b>

<b>Project Information</b>
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Nova Scotia Utility & Review Board Approval Date: 2014  
Total Acreage: 99  
Acreage Developed to Date: 52.1 (52.63%)  
Acreage Rate: \$1,253.00  
Total Infrastructure Cost: \$1,528,000  
Benefit to Existing HRWC Customer Base - 0%  
Benefit to HRM Fire Protection - 37%  
Percentage of Total Infrastructure Cost to be recovered through CCC Charge - 63%  
Infrastructure to be completed: Water Main Extension