

HALIFAX

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Item No. 13.1

Halifax Regional Council

July 31, 2018

August 14, 2018

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: *Original Signed By:*

Ray Ritcey, Chair, Halifax Water Board

DATE: July 16, 2018

SUBJECT: Halifax Water 2017/18 Accountability/Financial Results Report

INFORMATION REPORT

ORIGIN

Annual reporting requirement.

LEGISLATIVE AUTHORITY

Section 17(1) and 17(2), of the Administrative Order, as approved by HRM Council on March 20, 2018.

BACKGROUND

In conjunction with the Administrative Order approved by Council on March 20, 2018, the Halifax Regional Water Commission is to prepare an Annual Accountability Report, and submit financial statements within three months of the end of the fiscal year. The Accountability Report is to include:

- a) an Accountability Statement;
- b) a message from the Board Chair and the General Manager;
- c) actions taken by Commission on Strategic objectives through the prior fiscal year and;
- d) Corporate Balanced Scorecard results for the fiscal year showing the Commissions performance and the metrics used to measure such performance, any new or changed measures used to measure performance in the upcoming fiscal year.

DISCUSSION

Accountability Statement

Halifax Water continues to meet all its obligations under the Halifax Regional Water Commission Act and the Public Utilities Act. In addition to Legislation obligations, the utility is also in compliance with all of its operating permits for its water and wastewater systems for the fiscal year ending March 31, 2018.

Of particular note, with respect to wastewater operations, Halifax Water has been successful to receive transitional authorization from Environment Canada for the continued operation of advanced primary treatment facilities in Halifax and Dartmouth. These transitional authorizations are in conjunction with the Federal Wastewater System Effluent Regulations, which mandate a national performance standard equivalent to secondary treatment. In recognition that these two plants constitute low risk as defined by the Federal framework, Halifax and Dartmouth will need to meet the secondary treatment equivalency by 2040.

The Commission realized a strong financial performance for 2017/18 with a net profit of \$8.8 million under the Nova Scotia Utility and Review Board (NSUARB) Accounting Handbook. In comparison to the NSUARB Handbook, revenues were \$4.3 million better than budget, with water consumption tracking flat for the last fiscal year. With respect to Operating Expenditures, they were \$6.3 million less than budget. In regard to long-term debt, the utility debt stood at \$191.8 million at March 31, 2018; a decrease of \$12.5 million from the previous fiscal year. The debt service ratio for combined water, wastewater, and stormwater services was 21.2% for 2017/18, well below the approved benchmark of 35%.

Rates for water and wastewater service did not change during the past fiscal year, having last been adjusted on April 1, 2016. A new rate structure for stormwater service took effect July 1, 2017. This rate structure reset the rates, but did not increase revenues. In keeping with the current agreement with the municipality, Halifax Water declared a Dividend/Grant in Lieu of Taxes of \$4.8 million, which is based on the net value of water assets, as approved by the NSUARB.

Overview from the Board Chair and General Manager

The 2017/18 fiscal year brought many challenges and opportunities for the utility in the pursuit of its mission to provide world class services to customers and the environment. Last year marked a significant increase in capital expenditures as the utility took advantage of \$31 million in funding available through the Clean Water and Wastewater Fund with an emphasis on renewal of aging infrastructure. These projects had tight time-lines that the Commission was able to achieve or seek extensions where appropriate to ensure full utilization of external funds. The utility will continue to pursue these opportunities to mitigate impact on rates to ensure affordability for customers. In that regard, there were no rate increases in the last fiscal year, however, the stormwater rate structure was amended to ensure fair and equitable charges across the rate base.

In keeping with the vision of enhanced customer service and more efficient operations, last year saw the continued rollout of advanced metering infrastructure through the Customer Connect project. As of June 30, 2018 approximately 20,000 meters were installed or upgraded to the latest technology.

Recognizing that Halifax Water has extensive investments to make in aging infrastructure, focus for the next several years will be placed on renewal, guided by the next iteration of the Integrated Resource Plan which will be developed in 2018/19. In addition, the utility will continue to conduct research with Dalhousie University to take a long-term view on optimization of its water and wastewater systems, with a particular focus on meeting the wastewater system effluent regulations in 2040, and adjusting to the unintended consequences of lake recovery in response to a decrease in acid rain. The Commission continues to adopt best practices to operate effectively and efficiently, including continued high performance with leakage reduction in the distribution system and a reduction of inflow and infiltration into the wastewater system.

The latter has benefited tremendously from efforts over the last two years, with a multi-pronged approach by all departments of the Commission.

With regard to water quality, Halifax Water produces water to meet the highest quality standards in the land with a particular focus on the control of lead. The utility has pursued the latest best practice approach in North America by adopting the framework approved by the American Waterworks Association. Key to the approach is the replacement of lead service lines in older parts of the municipality with incentives for homeowners to partner with the utility to get the lead out.

Halifax Water also continues to pursue compliance with all wastewater treatment facilities, and with the completion of the Aerotech Wastewater Treatment Facility this year, puts it in position to achieve one of the long-term goals that was set as part of the 2007 merger that saw Halifax Water become the first regulated water, wastewater and stormwater utility in Canada.

Cost containment remains a focus of the utility with an intentional focus on sustainable results over the long term. Through ongoing efforts with procurement, human resource, information technology, treatment process, and technology and business process strategies, Halifax Water realized \$6.6 million in direct savings for the 2017/18 fiscal year. These savings have contributed to the continued strong financial performance which has delayed applications for rate increases. Based on the current financial position of the utility, a rate application is not anticipated until the fall of 2019 with rates effective spring 2020.

Strategic Objectives

The following outlines the strategic priorities for 2017/18 and a status update on their progress:

- Develop Five Year Business Plan [2018/19 to 2022/23]
 - ✓ Approved by HW Board in January/18
- Complete IT Strategic Plan [contract awarded to Mariner Innovations]
 - ✓ Completed in October/17
- Refine Asset Management plans to close the information gaps
 - ✓ 14 Distinct Asset Management Plans Developed
- Ramp up lead service line replacement program [application in front of NSUARB to permit financial incentive for private service laterals and establish By-Law through HRM for loan program].
 - ✓ NSUARB approved application in August/17 for financial incentive and subsequent application for loan program in February/18.
- Complete construction of Aerotech WWTF
 - ✓ Construction completed by July/18
- Complete construction of Sullivan's Pond stormwater system
 - ✓ Construction completed by December/17
- Complete rehabilitation of NW Arm Trunk Sewer
 - ✓ Construction completed by December/17
- Complete replacement of cast iron pipes from Chain Lake to Quinpool Road [circa 1856, 1862 and 1896]
 - ✓ Construction completed by November/17
- Replace transmission main along #102 Highway from Hammonds Plains Road to Bedford reservoir
 - ✓ Construction completed in October/17

- Construct new dam at Lake Major
 - ✓ Contractor selected but construction delayed pending regulatory approval from NS Environment; Construction underway in June/18.
- Complete replacement of filter underdrains and media at J.D. Kline water supply plant [Pockwock]
 - ✓ Initial pilot project uncovered asbestos in underdrain formwork which increased costs and necessitated a revised tender; two of eight filters completed with the rest to be completed this fiscal year.
- Complete Phase 2 of Cityworks [linear infrastructure] and develop and implement Phase 3 [treatment plants and pump stations].
 - ✓ Both Phases completed successfully.
- Full customer service through the Customer Care Centre [further integration of Cayenta, Cityworks and SAP and implementation of enhanced telephony systems].
 - ✓ Integration work completed but telephony system delayed to 2018/19.
- Implementation of AMI project; complete pilot in Tucker Lake, Beaverbank area, refine the business processes and extend to other service areas [3 Year program].
 - ✓ Pilot completed successfully, business processes refined and roll out extended to Halifax area; 20,000 meters installed by end of June/18.
- Implement Stormwater Rate amendments consistent with NSUARB Decision [tiered rate for residential customers and credit system for non-residential].
 - ✓ Amendments implemented in July 2017. In October 2017 Halifax Water began to bill the HRM ROW charge on the utility bill, pursuant to direction from Council.
- Wet Weather Management; measure progress in current priority areas and expand reach to next priorities [contributions from operations, engineering and regulatory services].
 - ✓ Measurement framework developed with clear targets to be achieved in priority areas.
- Push for regulatory compliance for all Wastewater Treatment Facilities by end of fiscal year.
 - ✓ Target objective surpassed with 94% compliant by March/18.
- Complete Central and East Wastewater Master Plan and Regional Water Plan.
 - ✓ Master Plans in progress. To be complete by Fall 2018.
- Recalibrate Regional Development Charge in light of master plan results [including West Wastewater Master Plan].
 - ✓ RDC reviewed and results within tolerance limits set by NSUARB.

Corporate Balance Scorecard

Halifax Water has been utilizing a Corporate Balanced Scorecard to measure performance since 2001 and covers a broad range of critical success factors to support the utility mission. Attached is a full overview of the Corporate Balanced Scorecard results for the 2017/18 fiscal year, as contained in a staff report to the Halifax Water Board for its meeting on June 21, 2018. The attachment also indicates the revised targets and new measures for the upcoming 2018/19 fiscal year.

Audited Financial Statements

The audited financial statements for Halifax Water and the Halifax Water Employees' Pension Plan are attached as Appendices 2 and 3, respectively.

FINANCIAL IMPLICATIONS

Halifax Water is a regulated utility with cost recovery in compliance with the Public Utilities Act. It is financed through utility rates and is not reliant upon any tax revenues. A dividend is paid to the municipality (Grant in Lieu of Taxes) that increases as the water utility plan in service increases.

Halifax Water is a Government Business Enterprise and the financial statements are prepared in accordance with International Financial Reporting Standards. Halifax Water statements are consolidated with the municipality's financial statements on a modified equity basis.

Halifax Water debt is guaranteed by the municipality under a blanket guarantee subject to the utility maintaining a debt service ratio less than 35%.

ATTACHMENT

Appendix 1: Report to Halifax Water Board; 2017/18 Corporate Balanced Scorecard Results, June 21, 2018

Appendix 2: Halifax Water Audited Financial Statements

Appendix 3: Halifax Water Employees' Pension Plan Audited Financial Statements

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Original Signed By:
Carl D. Yates, M.A.Sc., P.Eng., General Manager, Halifax Water, 902.490.4840

Report Approved by: Original Signed By:
Ray Ritcey, Chair, Halifax Water Board, 902.717.5483

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

SUBMITTED BY: Original Signed By:
James Campbell, Communications and PR Coordinator

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

DATE: June 7, 2018

SUBJECT: Corporate Balanced Scorecard - 2017/18 Results

INFORMATION REPORT

ORIGIN

Annual Corporate Performance Measurement.

BACKGROUND

Halifax Water has been utilizing a corporate balanced scorecard (CBS) to measure performance since 2001. With the merger in 2007, Halifax Water developed an expanded CBS to include wastewater and stormwater measurements. As well, this provided an opportunity to refine measurements related to water service delivery. This report provides a reconciliation of final results for the 2017/18 fiscal year.

As part of the CBS refinement in 2007, staff developed new mission and vision statements, as follows:

Our Mission:

- To provide world-class services for our customers and our environment.

Our Vision:

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

With the vision statement entrenched, Halifax Water staff defined eight Critical Success Factors (CSFs) derived from the vision statement as follows:

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

DISCUSSION

Under each of the CSFs, staff developed organizational indicators to track performance and allow for the establishment of targets. The following lists the CSFs and corresponding results for the organizational indicators [OIs] under each category.

High Quality Drinking Water

Under the category of High Quality Drinking Water, we are continuing to seek adherence to five key objectives associated with our Water Quality Masterplan. Performance was measured through our ability to maintain a disinfection residual throughout the distribution system, control disinfection byproducts like trihalomethanes and haloacetic acids, ensure particle removal through our filtration systems, and ensure corrosion control in the distribution system, as measured by the level of lead at the customers' taps. Our results in these five categories scored 0.87 out of a total maximum score of 1.00, a reduction from last year's result of .94.

As for water safety, our bacteriological test results were 99.97%, a slight increase from last year's 99.9%, and above our target of 99.3% of our samples free of total coliform for the fiscal year.

Results from our annual customer survey indicate that 85% of our customers rated their drinking water quality as good to excellent, down slightly from last year's figure of 88%, meeting the top end of the target of 80%-85%.

Service Excellence

Under the Service Excellence CSF, the annual customer survey indicated that 96% of our customers are satisfied or very satisfied with our overall service, surpassing the target of 90%, and on par with last year's result of 95%.

In terms of service outage for water and wastewater services, overall results were up compared to last year, particularly for water, with outages of 361 connection hours per 1,000 customers this year compared to 149 connection hours per 1,000 customers for water service last year, with a target of 200. Wastewater results improved from 4.6 to 2.7 connection hours per 1,000 customers, as compared to a target of 8 connection hours per 1,000 customers, remaining well below the target.

Also under Service Excellence, our call centre had an average call wait time of 84 seconds, compared with the target of 80 seconds. This represents an increase from last year's number of 51 seconds. Increased call volumes in March 2018 from stormwater only customers played a large role in this overall result.

Responsible Financial Management

Under Responsible Financial Management, the expense to revenue ratio was recorded as 0.716, compared to the benchmark of 0.748 for the fiscal year. Also tied to the theme of Responsible Financial Management is the annual cost per connection for water and wastewater service. For water, the annual cost per connection increased to \$439 from \$407 in 2016/17, compared to a target of \$458. For wastewater, the annual cost increased to \$653 from \$625 per connection, remaining below the target of \$667.

Effective Asset Management

The leakage performance measure for 2017/18 was 199 litres per service connection per day, a decrease from 227 last year and just above the target range of 180 - 190 litres per connection per day.

On the wastewater side, reduction of inflow and infiltration is a key measurement of performance, and as such, 1,100 inspections were carried out on private property, up from 904 last year, and well above the target of 600 inspections.

Updating our GIS database is crucial to our Asset Management Program. Results for this OI were excellent again last year with 99.3% of linear infrastructure embedded in GIS compared to a target range of 98-99%. This is up from 96.9% last year.

Also under Effective Asset Management is Capital Budget Expenditures, recognizing that we need to maximize the annual funds approved by the NSUARB. This year saw an improvement to 63.7% of funds spent, compared to 46% last year but still well below target. The target for this OI is 80%-90%. A revised OI is in place for 2018/19 as well as a new business process to optimize spending derived from rate base funding.

Workplace Safety and Security

Under the theme of Workplace Safety and Security, the organization saw two labour infractions resulting in a written warning. The target range for this OI is 0 - 2. While this is up from one labour infraction last year, it continues to indicate that a culture of safety remains embedded and implemented into every aspect of our operation.

With regard to lost-time accidents, which are a key indicator for workplace safety, the organization saw 2.81 accidents per 100 employees as compared to a target of 3.0-4.0 (with a maximum of 4.5) per 100 employees, which is an improvement from the 2016/17 figure of 3.4 accidents per 100 employees. This OI is a Gateway Indicator for the Organizational Performance Award program.

Halifax Water has a large fleet to support service delivery. Accordingly, the organization tracks the number of traffic accidents per million kilometers driven. For 2017/18, 4.38 traffic accidents per million km were recorded. This is a reduction from 2016/2017's number of 4.84, and falls within the target range of 4 to 5.

Regulatory Compliance

Under the critical success factor of Regulatory Compliance, 2017/18 saw one written warning from NS Environment, up from zero for 2016/2017. The target for this Indicator is a maximum of two.

Also under regulatory compliance, we tracked the percentage of wastewater treatment facilities meeting discharge requirements of their operating permits for the 2017/18 fiscal year. Our wastewater treatment facilities met their discharge requirements 94.6% of the time, up from 91.4% and exceeding the target range of 85-90%. Compliance with federal wastewater system effluent regulations [WSER] is a key aspect of our strategic plan and shows a continued focus on stewardship of the environment.

Environmental Stewardship

During the 2017/18 fiscal year, our Pollution Prevention division of Regulatory Services inspected 507 businesses in the Halifax municipality, a slight decrease from 528 in 2016/17. The target for this OI was 400.

We also continued to improve on energy management associated with our water and wastewater treatment facilities with an energy reduction of 7.1% in 2017/2018 with associated capital projects. This figure significantly exceeds the target of 2.0% and is a

marked improvement over the 2016/17 number of 3.8%. As one of the Utility's largest expenses, these on-going energy reductions represent real savings, as well as reduction in our environmental foot print.

Under biosolids residuals handling, 98.3% of the biosolids residuals met the desired solids concentration, as compared to a target of 97%. This result is down slightly from the 2016/17 figure of 99.4%.

Motivated and Satisfied Employees

There are several organizational indicators under this category, including filling jobs with Halifax Water incumbents. For the 2017/18 fiscal year, 62% of jobs were filled from within as compared to a target of 80%. This is a reduction from the 2016/17 figure of 71%.

To promote harmonious labour management relations, an organizational indicator was chosen to recognize the number of grievances and arbitrations throughout the fiscal year. There were a total of 12 grievances filed during the 2017/18 fiscal year, with 1 arbitration as compared to 18 grievances and 0 arbitrations for 2016/17.

The Corporate Balanced Scorecard also includes an indicator of employee satisfaction which is derived from a survey that is carried out in the fall of the year. The 2017/18 survey result was a B+, matching our previous high of B+ in 2013. The 2016/17 survey result was a B. The target for this OI is an A-.

The number of days of absenteeism for employees is also a measure of satisfaction and motivation. Accordingly, the average number of days that an employee was absent this year stood at 7.35, down marginally from 7.51 in 2016/17, and just above the target of less than 7 days. This result compares favourably with the private sector.

Organizational Award Program

Similar to previous years, 12 organizational indicators were incorporated into an Organizational Award Program. The selected organizational indicators are determined to be the most objective and outward looking to the customers and environment we serve. The following is a summary of our organizational indicators and corresponding award point values for the 2017/18 fiscal year:

<u>Organizational Indicator</u>	<u>2017/18 Results</u>
Water Quality Master Plan Objectives	0.87
Customer Water Quality Survey Results	1.0
Customer Service Survey Results	1.0
Operating Expense/Revenue Ratio (Gateway Indicator)	1.0
Water Loss Control Reduction	0.0
Inflow & Infiltration Reduction	1.0
Percentage of Network on GIS	1.0
# of Lost Time Accidents per 100 Employees (Gateway Indicator)	1.0
# of Accidents per 1,000,000 kms driven	0.60
Percentage of WWTFs Compliant with NS Environment Permits	1.0
Energy Management - Water & Wastewater	1.0
Biosolids Residuals Handling	1.0
	<hr/>
*TOTAL SCORE	10.47
*The maximum attainable score is 12.0	

In accordance with the Organizational Award Program criteria, eligible employees received \$947 each in recognition of the good performance.

BUDGET IMPLICATIONS

With the operating expense-to-revenue ratio less than the target, funds were available within the 2017/18 operations budget for the Organizational Award Program.

ATTACHMENT

Presentation - 2017-18 Corporate Balanced Scorecard – Final Results, June 21, 2018

Report Prepared by: *Original Signed By:*

 James Campbell, Communications and PR Coordinator
 902-490-4604



2017-18 Corporate Balanced Scorecard

2017/18 Final Results and
2018/19 Targets

**STRAIGHT from
the SOURCE**



CSF: High Quality Drinking Water



Organizational Indicator:



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

Objective	Total Sites	Result to March 31/18 (% of Sites Achieving Target)	Target	Distrib. Pts.
Disinfection – Chlorine Residual	64	92%	80 – 100%	12/20
Disinfection By-products (THMs)	25	100%	< 80 ug/l	20/20
Disinfection By-products (HAAs)	21	100%	< 60 ug/l	20/20
Particle Removal	5	95%	<0.2 && 1.0 NTU	15/20
Corrosion Control	n/a	5.59 ug/L	Lead; <15 ug/l <i>*New Target for 2018/19 <10 ug/l</i>	20/20
Summary Total				87/100

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

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

HAAs – Annual Avg. of < 60 ug/L at all HAA sampling sites

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

Corrosion Control – Achieve 90th percentile standing lead sample of <15 ug/L for all sample sites

CSF: High Quality Drinking Water

Organizational Indicator:

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

	% Samples Free of Coliform	Target
2017/18	99.97%	99.3%



CSF: High Quality Drinking Water



Organizational Indicator:

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

	Survey Results(actual)	Target
From Fall 2017 Survey	85%	80% - 85%



CSF: Service Excellence

Organizational Indicator:



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

	Survey Result (actual)	Target
From Fall 2017 Survey	96%	85% - 90%



CSF: Service Excellence

Organizational Indicator:

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

	Hours (actual)	Target
2017/18	361	200



CSF: Service Excellence

Organizational Indicator:

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

	Hours (actual)	Target
2017/18	2.70	8



CSF: Service Excellence

Organizational Indicator:

- Average call wait time over the year

	Seconds	Target
2017/18	84	80

**New target
approved by Board
March 29/18*

2018/19 Target
70



CSF: Responsible Financial Management

Organizational Indicator:

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

	Exp/Rev ratio (actual)	Target
2017/18	0.716	0.748

**New target approved by Board March 29/18*

2018/19 Target
0.797



CSF: Responsible Financial Management

Organizational Indicator:

- Annual Cost per Customer Connection [Water]

	Cost/connection	Target
2017/18	\$439	\$458

**New target approved by Board March 29/18*

2018/19 Target
\$482



CSF: Responsible Financial Management

Organizational Indicator:

- Annual Cost per Customer Connection [Wastewater]

	Cost/connection	Target
2017/18	\$653	\$667

**New target approved by Board March 29/18*

2018/19 Target
\$687



CSF: Effective Asset Management

Organizational Indicator:



- Water Loss Control; target leakage allowance of 190 Litres/Service Connection/Day

	Leakage Actual	Target
2017/18	199	180 - 190

Note: Target adjusted in 2015/16 to be consistent with the latest IWA/AWWA methodology.



CSF: Effective Asset Management

Organizational Indicator:

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

	I&I Inspections	Target
2017/18	1,100	600

**New target approved by Board March 29/18*

2018/19 Target
900



CSF: Effective Asset Management

Organizational Indicator:

- % of Water, Wastewater and Stormwater Network Available on GIS

	% Available	Target
2017/18	99.3%	98.0% - 99.0%

**New target approved by Board - March 29/18*

- Hours of unplanned outages of GIS and CityWorks

	Outage Hours	Target
2018/19		*90% to 85% of 2017/18 actual

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



CSF: Effective Asset Management

• Organizational Indicator

- Capital Budget Expenditures – Maximize spend of funds approved by Halifax Water Board by March 31, 2018

	Maximize Annual Capital Budget Expenditures	Target
2017/18	63.7%	80% to 90% spent

**New target approved by Board - March 29/18*

- Capital Budget Expenditures – Optimize Capital Budget Spend Derived from Rate Regulated Funding

	% of Capital Budget Derived from Rate Regulated Funding	Target
2018/19		*85% to 95% spent



CSF: Workplace Safety & Security

Organizational Indicator:

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

	Labour Infractions	Target
2017/18	2	0 - 2 (max.)



CSF: Workplace Safety & Security



Organizational Indicator:

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

	Lost time accidents	Target
2017/18	2.81	3.0 – 4.0 per 100 employees (with a maximum of 4.5)

**New target approved by Board March 29/18*

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

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



CSF: Workplace Safety & Security



Organizational Indicator:

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

	Traffic Accidents/1,000,000 Kms	Target
2017/18	4.38	4.0 per 1,000,000 km (maximum of 5)



CSF: Workplace Safety & Security

Organizational Indicator:

- Employees are retrained or recertified before due date

	% of Employees Retrained or Recertified Before Due Date	Target
2017/18	77%	80 - 90%



CSF: Workplace Safety & Security

Organizational Indicator:

- Supervisors complete weekly or bi-weekly safety talks

	% of Completed Safety Talks	Target
2017/18	82%	80 - 90%



CSF: Regulatory Compliance

Organizational Indicator:

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

	Public Health & Env. Infract.	Target
2017/18	1	0 - 2 (max.)



CSF: Regulatory Compliance



Organizational Indicator:

- % of WWTFs complying with NSE approval permits.

	% of WWTF samples meeting NSE discharge limits	Target
2017/18	94.6%	85 - 90%

**New target approved by Board March 29/18*

2018/19 Target
93% - 98%



CSF: Environmental Stewardship

Organizational Indicator:

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

	Actual Inspected	Target
2017/18	507	400

**New target approved by Board March 29/18*

2018/19 Target
500



CSF: Environmental Stewardship



Organizational Indicator:

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

	% Energy Reduction	Target
2017/18	7.1%	2%

**New target approved by Board March 29/18*

2018/19 Target
3%



CSF: Environmental Stewardship

Organizational Indicator:



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

	% Meet Solids Concentration Target	Target
2017/18	98.3%	97.0 %

**New target approved by Board March 29/18*

2018/19 Target
92% - 97%



CSF: Motivated and Satisfied Employees

Organizational Indicator:

- # of arbitrations divided by total # of grievances.

	Arbitrations/Grievances	Target
2017/18	1/12	0 Arbitrations



CSF: Motivated and Satisfied Employees

Organizational Indicator:

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

	% Jobs filled within	Target
2017/18	62%	80%



CSF: Motivated and Satisfied Employees

Organizational Indicator:

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

	Survey Result (actual)	Target
Survey in Fall 2017	B+	A-



CSF: Motivated and Satisfied Employees

Organizational Indicator:

- Average number of days of absenteeism

	Avg. No. of days absenteeism	Target
2017/18	7.35	< 7 days



2017/18 Organizational Award Final Results

Organizational Indicator	2017/18 Results
Water Quality Master Plan Objectives	0.87
Customer Water Quality Survey Results	1.00
Customer Service Survey Results	1.00
Operating Expense/Revenue Ratio <i>[Gateway Indicator]</i>	1.00
Water Loss Control Reduction	0.00
Inflow & Infiltration Reduction	1.00
Percentage of Network on GIS	1.00
Energy Management – Water & Wastewater	1.00
Biosolids Residual Handling	1.00
# of Lost Time Accidents per 100 Employees <i>[Gateway Indicator]</i>	1.00
# of Traffic Accidents per 1,000,000 km	0.60
Percentage of WWTFs Compliant with NS Environment Permits	1.00
TOTAL SCORE	10.47





Financial Statements

Halifax Regional Water Commission

March 31, 2018

Contents

	Page
Independent auditor's report	1
Statement of earnings	2
Statement of comprehensive earnings	3
Statement of financial position	4
Statement of changes in equity	5
Statement of cash flows	6
Notes to the financial statements	7-19
Schedules	
A Schedule of utility plant in service	
Water	20
Wastewater	21
Stormwater	22
B Schedule of long term debt	23
C Schedule of operations for water service	24
D Schedule of operations for wastewater service	25
E Schedule of operations for stormwater service	26
F Regulated and unregulated activities	
Schedule of regulated activities	27
Schedule of unregulated activities	28
G Nova Scotia Utility and Review Board information	29



Independent auditor's report

To the Members of the Board of the
Halifax Regional Water Commission

We have audited the accompanying financial statements of the Halifax Regional Water Commission, which comprise the statement of financial position as at March 31, 2018, and the statement of comprehensive earnings, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

Other matter

Our audit was conducted for the purposes of forming an opinion on the financial statements taken as a whole. Schedules A to G are presented for purposes of additional information and are not a required part of the financial statements. Such information has been subjected to the auditing procedures applied, only to the extent necessary to express an opinion, on the audit of the financial statements taken as a whole.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Halifax Regional Water Commission as at March 31, 2018 and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

Halifax, Canada
June 21, 2018



Chartered Professional Accountants
Licensed Public Accountants

Halifax Regional Water Commission

Statement of earnings

Year ended March 31, 2018 (in thousands)

	2018	2017
Operating revenues		
Water	\$ 47,220	\$ 47,183
Wastewater	69,994	69,475
Stormwater	10,016	10,542
Fire protection	7,074	7,074
Private fire protection	856	831
Other operating revenue	<u>2,985</u>	<u>2,892</u>
	<u>138,145</u>	<u>137,997</u>
Operating expenditures (Note 14)		
Water supply and treatment	8,646	8,050
Water transmission and distribution	9,410	8,997
Wastewater collection	12,642	11,639
Stormwater collection	4,842	4,097
Wastewater treatment	19,647	19,794
Engineering and information services	8,105	7,576
Regulatory services	2,450	2,356
Customer service	4,896	4,432
Administration and pension	12,553	11,799
Depreciation and amortization	<u>41,625</u>	<u>43,433</u>
	<u>124,816</u>	<u>122,173</u>
Earnings from operations before financial and other revenues and expenditures	<u>13,329</u>	<u>15,824</u>
Financial and other revenues		
Interest	694	780
Contributed capital	17,372	17,980
Other	<u>3,792</u>	<u>2,543</u>
	<u>21,858</u>	<u>21,303</u>
Financial and other expenditures		
Interest on long term debt	7,884	8,475
Amortization of debt discount	202	199
Grant in lieu of taxes	4,774	4,578
Other	<u>354</u>	<u>467</u>
	<u>13,214</u>	<u>13,719</u>
Earnings for the year before regulatory deferral account balance amortization	21,973	23,408
Regulatory deferral account balance amortization (Note 5)	<u>(192)</u>	<u>(192)</u>
Earnings for the year	<u>\$ 21,781</u>	<u>\$ 23,216</u>

See accompanying notes to the financial statements.

Halifax Regional Water Commission

Statement of comprehensive earnings

Year ended March 31 (in thousands)	2018	2017
Earnings for the year	\$ 21,781	\$ 23,216
Other comprehensive (loss) income		
Items that will not be reclassified subsequently to earnings:		
Re-measurement on defined benefit plans	<u>(1,750)</u>	<u>743</u>
Total comprehensive earnings for the year	<u>\$ 20,031</u>	<u>\$ 23,959</u>

See accompanying notes to the financial statements.

Halifax Regional Water Commission

Statement of financial position

March 31 (in thousands)

2018

2017

Assets

Current

Cash and cash equivalents	\$ 51,470	\$ 55,879
Receivables		
Customer charges and contractual	17,494	13,321
Unbilled service revenues	16,640	17,158
Halifax Regional Municipality	5,274	1,880
Inventory	1,442	1,601
Prepays	1,013	867
	<u>93,333</u>	<u>90,706</u>

Intangible assets (Note 11)	13,877	10,275
Capital work in progress	24,550	28,406
Utility plant in service (Note 12)	1,200,430	1,144,152
Total assets	<u>1,332,190</u>	<u>1,273,539</u>

Regulatory deferral account balance (Note 5)	<u>3,196</u>	<u>3,388</u>
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Total assets and regulatory deferral account debit balances	<u>\$ 1,335,386</u>	<u>\$ 1,276,927</u>
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Liabilities

Current

Payables and accruals		
Trade	\$ 22,715	\$ 16,790
Interest on long term debt	2,030	2,101
Halifax Regional Municipality	2,439	295
Contractor and customer deposits	186	191
Current portion of deferred contributed capital	13,405	12,889
Current portion of long term debt (Note 13)	22,630	21,669
Unearned revenue	584	787
	<u>63,989</u>	<u>54,722</u>

Deferred contributed capital	842,967	808,632
Long term debt (Note 13)	190,871	203,299
Employee benefit obligation – pension plan (Note 4)	65,486	58,480
Employee benefit obligation – post-retirement benefits (Note 4)	430	341
Employee benefit obligation – pre-retirement benefits (Note 4)	3,983	3,824
	<u>1,167,726</u>	<u>1,129,298</u>

Equity

Accumulated other comprehensive (loss) (page 5)	(44,943)	(43,193)
Accumulated surplus (page 5)	212,603	190,822
	<u>167,660</u>	<u>147,629</u>
	<u>\$ 1,335,386</u>	<u>\$ 1,276,927</u>

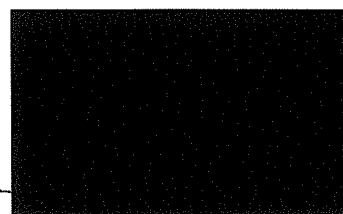
Contingent liabilities (Note 3)

Commitments (Note 6)

Approved by the Board



Commissioner



Commissioner

See accompanying notes to the financial statements.

Halifax Regional Water Commission

Statement 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 March 31, 2016	\$ (43,936)	\$ 167,606	\$ 123,670
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>
Balance at March 31, 2017	<u>\$ (43,193)</u>	<u>\$ 190,822</u>	<u>\$ 147,629</u>
Earnings for the year	-	21,781	21,781
Other comprehensive loss	<u>(1,750)</u>	<u>-</u>	<u>(1,750)</u>
Comprehensive earnings for the year	<u>(1,750)</u>	<u>21,781</u>	<u>20,031</u>
Balance at March 31, 2018	<u>\$ (44,943)</u>	<u>\$ 212,603</u>	<u>\$ 167,660</u>

See accompanying notes to the financial statements.

Halifax Regional Water Commission

Statement of cash flows

Year ended March 31 (in thousands)	2018	2017
(Decrease) increase in cash and cash equivalents		
Operating		
Comprehensive earnings for the year	\$ 20,031	\$ 23,959
Depreciation and amortization	25,926	26,692
Employee benefit obligations	7,254	4,191
(Gain) loss on disposal of plant in service	<u>(127)</u>	<u>59</u>
	53,084	54,901
Change in non-cash operating working capital items (Note 7)	<u>754</u>	<u>5,172</u>
	<u>53,838</u>	<u>60,073</u>
Financing		
Proceeds from issuance of long term debt	10,000	9,053
Contributed capital	11,162	9,231
Debt issue costs, net	121	122
Principal repayment on Harbour Solutions long term debt	(6,500)	(6,500)
Principal repayments of long term debt	<u>(15,089)</u>	<u>(16,695)</u>
	<u>(306)</u>	<u>(4,789)</u>
Investing		
Deferred capital contributions	3,701	629
Proceeds from sale of plant in service	120	197
Purchase of capital work in progress	(14,405)	(19,393)
Purchase of utility plant in service	<u>(47,357)</u>	<u>(27,316)</u>
	<u>(57,941)</u>	<u>(45,883)</u>
Net change in cash and cash equivalents	(4,409)	9,401
Cash and cash equivalents, beginning of year	<u>55,879</u>	<u>46,478</u>
Cash and cash equivalents, end of year	<u>\$ 51,470</u>	<u>\$ 55,879</u>

See accompanying notes to the financial statements.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

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.

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 21, 2018.

(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. The Commission'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.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

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.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

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 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.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

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
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(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.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

2. Summary of significant accounting policies (continued)

(o) Employee benefits obligations (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. 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 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 may 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. The Commission has assessed the impact of the new standard and concluded it will not be material to the financial statements.

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. The Commission has assessed the impact of the new standard and concluded it will not be material to the financial statements.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

2. Summary of significant accounting policies (continued)

(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. The Commission is currently assessing the impact of this new standard.

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 \$1,000 - \$2,000.

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 2018, the Commission funded \$635 (2017 - \$674) 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. 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 with employees contributing 10.65% of regular employee earnings. The Commission 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, 2018 (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, 2018, is as follows:

	Pension Plan		Post-retirement benefits		Pre-retirement benefits	
	2018	2017	2018	2017	2018	2017
Change in accrued benefit obligation						
Balance, beginning of year	\$ 168,363	\$ 152,633	\$ 341	\$ 466	\$ 3,824	\$ 3,724
Current service cost	6,112	5,020	-	-	339	308
Interest cost	6,484	6,160	8	11	132	129
Contributions by plan participants	2,725	2,417	-	-	-	-
Benefit payments	(4,265)	(4,715)	(63)	(61)	(227)	(377)
Re-measurements – actuarial (gains)/ losses from changes in demographic assumptions	-	-	(42)	31	-	-
Re-measurements – actuarial (gains)/ losses from changes in financial/experience assumptions	7,762	6,848	186	(106)	(85)	40
Balance, end of year	<u>187,181</u>	<u>168,363</u>	<u>430</u>	<u>341</u>	<u>3,983</u>	<u>3,824</u>
Change in fair value of plan assets						
Balance, beginning of year	109,883	98,368	-	-	-	-
Interest income	4,206	3,934	-	-	-	-
Administrative expenses	(69)	(144)	-	-	-	-
Actual return on plan assets	5,952	7,639	-	-	-	-
Benefit payments	(4,265)	(4,715)	(63)	(61)	(227)	(377)
Contributions: Employee	2,725	2,417	-	-	-	-
Employer	3,263	2,384	63	61	227	377
Balance, end of year	<u>121,695</u>	<u>109,883</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Accrued benefit liability at March 31	<u>\$ 65,486</u>	<u>\$ 58,480</u>	<u>\$ 430</u>	<u>\$ 341</u>	<u>\$ 3,983</u>	<u>\$ 3,824</u>

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

4. Employee benefit obligations (continued)

Included in the statement of earnings is pension expense of \$8,461 (2017 - \$7,390).

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

	2018	2017	2018	2017	2018	2017
	Pension	Pension	Post-	Post-	Pre-	Pre-
	Plan	Plan	Retirement	Retirement	Retirement	Retirement
			Benefits	Benefits	Benefit	Benefit
Discount rate	3.60%	3.80%	3.20%	2.70%	3.60%	3.40%
Expected return on plan assets	3.60%	3.80%	N/A	N/A	N/A	N/A
Rate of compensation increase	3.75%	3.75%	N/A	N/A	3.75%	3.75%
Expenses for life benefits as a % of claims	N/A	N/A	10.00%	10.00%	N/A	N/A
Health benefit inflation per year	N/A	N/A	6.92%	7.16%	N/A	N/A
Dental benefit inflation per year	N/A	N/A	4.50%	4.50%	N/A	N/A

The measurement date used to determine the Plan assets and the accrued benefit obligation was March 31, 2018. 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 \$3,366.

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 2018 is \$192 (2017 - \$192).

	2018	2017
Beginning balance	\$ 3,388	\$ 3,580
Amortization	<u>(192)</u>	<u>(192)</u>
Ending balance	<u>\$ 3,196</u>	<u>\$ 3,388</u>

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (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 \$4,999 for the 2019 fiscal year.

At March 31, 2018, the Commission had \$85,728 in expenditures from current and past approved capital budgets not yet expended.

7. Supplemental cash flow information

	<u>2018</u>	<u>2017</u>
Changes in non-cash operating working capital items		
Receivables, customer charges and unbilled	\$ (3,655)	\$ 1,333
Payable to/receivable from HRM, net	(1,250)	3,389
Inventory	159	83
Prepays	(146)	(5)
Payables and accruals, trade	5,925	104
Accrued interest on long term debt	(71)	(128)
Contractor and customer deposits	(5)	(2)
Unearned revenue	<u>(203)</u>	<u>398</u>
	<u>\$ 754</u>	<u>\$ 5,172</u>

Interest paid during the year was \$7,884 (2017 - \$8,475).

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>2018</u>	<u>2017</u>
Long term debt (current portion)	\$ 22,630	\$ 21,669
Long term debt	<u>190,871</u>	<u>203,299</u>
Funded debt	213,501	224,968
Equity	<u>167,660</u>	<u>147,629</u>
Capital under management	<u>\$ 381,161</u>	<u>\$ 372,597</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, 2018 (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 receivables. 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>2018</u>	<u>2017</u>
Receivables		
Customer charges, contractual and unbilled	\$ 36,552	\$ 32,702
Less: allowance for doubtful accounts	<u>(2,418)</u>	<u>(2,223)</u>
	<u>\$ 34,134</u>	<u>\$ 30,479</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.

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

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.

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 \$5,097 (2017 - \$5,025).
- The Commission recorded fire protection revenue from HRM of \$7,074 (2017 - \$7,074).
- The Commission paid a grant in lieu of tax of \$4,774 (2017 - \$4,578).
- 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>2018</u>	<u>2017</u>
Short term benefits	\$ 1,388	\$ 1,345
Post-employment benefits	<u>219</u>	<u>243</u>
Total compensation	<u>\$ 1,607</u>	<u>\$ 1,588</u>

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

11. Intangible assets	<u>2018</u>	<u>2017</u>
Cost		
Beginning balance, April 1	\$ 13,213	\$ 12,232
Additions	<u>4,675</u>	<u>981</u>
Total cost, March 31	<u>17,888</u>	<u>13,213</u>
Accumulated amortization		
Beginning balance, April 1	2,938	2,031
Amortization	<u>1,073</u>	<u>907</u>
Total accumulated amortization, March 31	<u>4,011</u>	<u>2,938</u>
Net book value	<u>\$ 13,877</u>	<u>\$ 10,275</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>Tools and work equipment</u>	<u>Total</u>
Cost						
Beginning balance, April 1, 2017	\$ 20,780	\$ 214,875	\$ 218,773	\$ 787,646	\$ 18,322	\$ 1,260,396
Additions	592	4,011	11,464	74,724	7,758	98,549
Disposals	-	(10)	(429)	(13)	-	(452)
Total cost, March 31, 2018	<u>21,372</u>	<u>218,876</u>	<u>229,808</u>	<u>862,357</u>	<u>26,080</u>	<u>1,358,493</u>
Accumulated depreciation						
Beginning balance, April 1, 2017	\$ -	\$ 33,807	\$ 34,671	\$ 43,744	\$ 4,022	\$ 116,244
Depreciation	-	9,378	12,409	16,224	3,808	41,819
Total accumulated depreciation March 31, 2018	<u>-</u>	<u>43,185</u>	<u>47,080</u>	<u>59,968</u>	<u>7,830</u>	<u>158,063</u>
Net book value, March 31, 2018	<u>\$ 21,372</u>	<u>\$ 175,691</u>	<u>\$ 182,728</u>	<u>\$ 802,389</u>	<u>\$ 18,250</u>	<u>\$ 1,200,430</u>

	<u>Land</u>	<u>Structures and improvements</u>	<u>Treatment and network equipment</u>	<u>Distribution and collection network</u>	<u>Tools 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>-</u>	<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>

Halifax Regional Water Commission

Notes to the financial statements

March 31, 2018 (in thousands)

13. Long-term debt	<u>Interest rates</u>	<u>2018</u>	<u>2017</u>
Payable to Municipal Finance Corporation (MFC)			
Water	1.040% to 6.750%	\$ 63,181	\$ 68,380
Halifax Harbour Solutions	0.900% to 4.329%	7,800	8,450
Wastewater/stormwater	1.040% to 4.500%	86,209	85,120
Stormwater	1.040% to 4.114%	<u>11,723</u>	<u>11,985</u>
		<u>168,913</u>	<u>173,935</u>
Payable to Halifax Regional Municipality			
MFC Wastewater/stormwater	1.200% to 4.940%	<u>45,500</u>	<u>52,066</u>
		214,413	226,001
Less: debt issue costs		<u>(912)</u>	<u>(1,033)</u>
		213,501	224,968
Less: amount payable within one year		<u>(22,630)</u>	<u>(21,669)</u>
		<u>\$ 190,871</u>	<u>\$ 203,299</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:

2019	\$ 22,630
2020	\$ 23,759
2021	\$ 18,084
2022	\$ 16,039
2023	\$ 40,752

14. Operating expenditures by nature

	<u>2018</u>	<u>2017</u>
Salaries and benefits	\$ 41,948	\$ 39,839
Training	618	656
Contract services	13,619	12,118
Electricity	6,323	6,295
Operating supplies	9,945	9,423
Professional services	4,559	4,768
Chemicals	4,698	4,404
Depreciation and amortization	<u>43,106</u>	<u>44,670</u>
	<u>\$ 124,816</u>	<u>\$ 122,173</u>

Halifax Regional Water Commission

Schedule of utility plant in service

Schedule A

Year ended March 31, 2018 (in thousands)

Water

	Land	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
Cost												
Beginning balance, April 1, 2017												
Cost	\$ 15,417	\$ 92,334	\$ 9,720	\$ 23,771	\$ 5,046	\$ 350,101	\$ 35,633	\$ 14,920	\$ 19,332	\$ 9,564	\$ 26,871	\$ 602,709
Additions	592	2,997	593	1,451	125	22,706	1,608	1,501	585	270	4,001	36,429
Disposals	-	(5)	(10)	-	-	(13)	-	(839)	-	-	(2,748)	(3,615)
Total cost, March 31, 2018	16,009	95,326	10,303	25,222	5,171	372,794	37,241	15,582	19,917	9,834	28,124	635,523
Accumulated depreciation												
Beginning balance, April 1, 2017	-	28,034	7,028	15,478	3,689	80,244	6,377	5,950	3,902	2,922	18,309	171,933
Depreciation	-	1,526	263	1,013	171	4,675	612	125	305	328	(914)	8,104
Total accumulated depreciation, March 31, 2018	-	29,560	7,291	16,491	3,860	84,919	6,989	6,075	4,207	3,250	17,395	180,037
Net book value, March 31, 2018	\$ 16,009	\$ 65,766	\$ 3,012	\$ 8,731	\$ 1,311	\$ 287,875	\$ 30,252	\$ 9,507	\$ 15,710	\$ 6,584	\$ 10,729	\$ 455,486
Cost												
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)
Total cost, March 31, 2017	15,417	92,334	9,720	23,771	5,046	350,101	35,633	14,920	19,332	9,564	26,871	602,709
Accumulated depreciation												
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
Net book value, March 31, 2017	\$ 15,417	\$ 64,300	\$ 2,692	\$ 8,293	\$ 1,357	\$ 269,857	\$ 29,256	\$ 8,970	\$ 15,430	\$ 6,642	\$ 8,562	\$ 430,776

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, 2018 (in thousands)

Wastewater

	Structures and Land improvements	Pumping equipment	Treatment equipment	SCADA equipment	Collection system	Laterals	Meters	Tools and work equipment	Aerotech and small systems	Total	
Cost											
Beginning balance, April 1, 2017											
Cost	\$ 5,329	\$ 175,208	\$ 17,579	\$ 161,122	\$ 8,210	\$ 290,169	\$ 19,108	\$ -	\$ 25,407	\$ 12,089	\$ 714,221
Additions	-	1,003	3,387	1,377	197	29,640	2,790	1,501	7,665	475	48,035
Disposals	-	(5)	-	-	-	-	-	-	(143)	-	(148)
Total cost, March 31, 2018	5,329	176,206	20,966	162,499	8,407	319,809	21,898	1,501	32,929	12,564	762,108
Accumulated depreciation											
Beginning balance, April 1, 2017	-	53,697	6,577	47,255	1,366	57,418	1,502	-	11,573	3,450	182,838
Depreciation	-	4,319	712	8,035	503	4,186	410	38	2,421	443	21,067
Total accumulated depreciation, March 31, 2018	-	58,016	7,289	55,290	1,869	61,604	1,912	38	13,994	3,893	203,905
Net book value, March 31, 2018	\$ 5,329	\$ 118,190	\$ 13,677	\$ 107,209	\$ 6,538	\$ 258,205	\$ 19,986	1,463	\$ 18,935	\$ 8,671	\$ 558,203
Cost											
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)
Total cost, March 31, 2017	5,329	175,208	17,579	161,122	8,210	290,169	19,108	-	25,407	12,089	714,221
Accumulated depreciation											
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
Net book value, March 31, 2017	\$ 5,329	\$ 121,511	\$ 11,002	\$ 113,867	\$ 6,844	\$ 232,751	\$ 17,606	\$ -	\$ 13,834	\$ 8,639	\$ 531,383

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, 2018 (in thousands)

Stormwater

	Structures and improvements	Collection system	Laterals	Tools and work equipment	Total
Cost					
Beginning balance, April 1, 2017					
Cost	\$ 9,785	\$ 227,751	\$ 4,611	\$ 3,045	\$ 245,192
Additions	11	17,696	285	767	18,759
Disposals	-	-	-	-	-
Total cost, March 31, 2018	<u>9,796</u>	<u>245,447</u>	<u>4,896</u>	<u>3,812</u>	<u>263,951</u>
Accumulated depreciation					
Beginning balance, April 1, 2017	1,402	36,380	301	870	38,953
Depreciation	177	5,889	95	477	6,638
Total accumulated depreciation, March 31, 2018	<u>1,579</u>	<u>42,269</u>	<u>396</u>	<u>1,347</u>	<u>45,591</u>
Net book value, March 31, 2018	<u>\$ 8,217</u>	<u>\$ 203,178</u>	<u>\$ 4,500</u>	<u>\$ 2,465</u>	<u>\$ 218,360</u>
Cost					
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	-	-	-	-	-
Total cost, March 31, 2017	<u>9,785</u>	<u>227,751</u>	<u>4,611</u>	<u>3,045</u>	<u>245,192</u>
Accumulated depreciation					
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>
Net book value, March 31, 2017	<u>\$ 8,383</u>	<u>\$ 191,371</u>	<u>\$ 4,310</u>	<u>\$ 2,175</u>	<u>\$ 206,239</u>

During the year, \$267 of interest was capitalized to Utility Plant in Service (2017 - \$491).

Cumulative utility plant in service	Water	Wastewater	Stormwater	Total
Net book value, March 31, 2018	\$ 455,486	\$ 558,203	\$ 218,360	\$ 1,232,049
Net book value, March 31, 2017	\$ 430,776	\$ 531,383	\$ 206,239	\$ 1,168,398

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 B

Schedule of long term debt

Year ended March 31, 2018 (in thousands)

	<u>Interest rate</u>	<u>Final Maturity</u>	<u>Balance Remaining</u>	
			<u>2018</u>	<u>2017</u>
Payable to Municipal Finance Corporation				
Water				
Debenture 23 A 1	4.250% to 6.125%	2018	\$ 600	\$ 700
Debenture 27 A 1	4.650% to 5.010%	2017	-	1,108
Debenture 28 A 1	6.500% to 6.750%	2018	1,100	1,200
Debenture 98 A 1	3.750% to 5.088%	2019	3,671	7,128
Debenture 29 A 1	0.900% to 4.329%	2019	450	675
Debenture 30 A 1	1.550% to 3.870%	2020	525	700
Debenture 31 A 1	1.630% to 4.221%	2021	600	750
Debenture 32 A 1	1.636% to 3.480%	2022	1,000	1,200
Debenture 32 C 1	1.510% to 3.160%	2022	8,051	8,587
Debenture 33 A 1	1.330% to 3.489%	2023	8,090	8,595
Debenture 33 B 1	1.285% to 4.114%	2023	5,930	6,300
Debenture 34 B 1	1.200% to 3.190%	2024	11,622	12,305
Debenture 35 B 1	1.040% to 2.894%	2025	12,120	12,794
Debenture 36 A 1	1.150% to 2.925%	2026	1,800	2,000
Debenture 36 B 1	1.150% to 2.506%	2026	4,122	4,338
Debenture 37 A 1	1.734% to 3.073%	2027	3,500	-
Halifax Harbour Solutions				
Debenture 29 A 1	0.900% to 4.329%	2019	7,800	8,450
Wastewater/stormwater				
Debenture 30 A 1	1.510% to 4.500%	2020	2,210	2,380
Debenture 32 A 1	1.636% to 3.480%	2022	1,797	1,917
Debenture 32 B 1	1.380% to 3.156%	2022	24,000	25,600
Debenture 32 C 1	1.510% to 3.160%	2022	3,447	3,676
Debenture 33 A 1	1.330% to 3.489%	2023	13,488	14,331
Debenture 33 B 1	1.285% to 4.114%	2023	8,714	9,259
Debenture 34 A 1	1.245% to 3.347%	2024	4,734	5,012
Debenture 34 B 1	1.200% to 3.190%	2024	7,298	7,727
Debenture 35 B 1	1.040% to 2.894%	2025	12,699	13,405
Debenture 36 B 1	1.150% to 2.506%	2026	1,722	1,813
Debenture 37 A 1	1.735% to 3.073%	2027	6,100	-
Stormwater				
Debenture 33 A 1	1.330% to 3.489%	2023	432	459
Debenture 33 B 1	1.285% to 4.114%	2023	2,111	2,243
Debenture 34 B 1	1.200% to 3.190%	2024	5,017	5,313
Debenture 35 B 1	1.040% to 2.894%	2025	2,907	3,069
Debenture 36 B 1	1.150% to 2.506%	2026	856	901
Debenture 37 A 1	1.734% to 3.073%	2027	400	-
			<u>168,913</u>	<u>173,935</u>
Payable to Halifax Regional Municipality				
Municipal Finance Corporation – Wastewater/stormwater				
Debenture 24 B 1	2.840% to 5.940%	2024	38,500	44,000
Debenture 27 A 1	4.650% to 5.010%	2017	-	66
Debenture 34 B 1	1.200% to 3.190%	2024	7,000	8,000
			<u>45,500</u>	<u>52,066</u>
			<u>214,413</u>	<u>226,001</u>
Less: debt issue costs			<u>(912)</u>	<u>(1,033)</u>
			<u>213,501</u>	<u>224,968</u>
Less: amount payable within one year			<u>(22,630)</u>	<u>(21,669)</u>
			<u>\$ 190,871</u>	<u>\$ 203,299</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:

2019	\$ 22,630
2020	\$ 23,759
2021	\$ 18,084
2022	\$ 16,039
2023	\$ 40,752

Halifax Regional Water Commission

Schedule of operations for water service

Schedule C

Year ended March 31, 2018 (in thousands)

	<u>2018</u>	<u>2017</u>
Operating revenues		
Water service	\$ 47,220	\$ 47,183
Fire protection	7,074	7,074
Private fire protection services	856	831
Other operating revenue		
Bulk water stations	304	330
Customer late payment fees	220	282
Miscellaneous	176	153
	<u>55,850</u>	<u>55,853</u>
Operating expenditures		
Water supply and treatment	8,645	8,050
Water transmission and distribution	9,410	8,997
Engineering and information services	3,850	3,828
Regulatory services	496	493
Customer service	2,348	2,290
Administration and pension	6,910	5,966
Depreciation	8,550	7,756
	<u>40,209</u>	<u>37,380</u>
Earnings from operations before financial and other revenues and expenditures	<u>15,641</u>	<u>18,473</u>
Financial and other revenues		
Interest	313	351
Other	485	375
	<u>798</u>	<u>726</u>
Financial and other expenditures		
Interest on long term debt	2,131	2,378
Repayment of long term debt	8,247	8,400
Amortization of debt discount	94	95
Grant in lieu of taxes	4,774	4,578
Other	149	17
	<u>15,395</u>	<u>15,468</u>
Earnings for the year	<u>\$ 1,044</u>	<u>\$ 3,731</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, 2018 (in thousands)

	<u>2018</u>	<u>2017</u>
Operating revenues		
Wastewater service	\$ 69,994	\$ 69,475
Other operating revenue		
Leachate and other contract revenue	417	440
Septage tipping fees	812	909
Over strength surcharge	219	23
Customer late payment fees	169	189
Miscellaneous	471	428
	<u>72,082</u>	<u>71,464</u>
 Operating expenditures		
Wastewater collection	12,644	11,639
Wastewater treatment	19,647	19,793
Engineering and information services	3,419	3,223
Regulatory services	929	1,095
Customer service	2,270	1,842
Administration and pension	4,853	5,017
Depreciation	11,905	10,669
	<u>55,667</u>	<u>53,278</u>
 Earnings from operations before financial and other revenues and expenditures	<u>16,415</u>	<u>18,186</u>
 Financial and other revenues		
Interest	311	351
Other	3,307	2,168
	<u>3,618</u>	<u>2,519</u>
 Financial and other expenditures		
Interest on long term debt	5,185	5,509
Repayment of long term debt	11,747	11,699
Amortization of debt discount	98	95
Other	120	32
	<u>17,150</u>	<u>17,335</u>
 Earnings for the year	<u>\$ 2,883</u>	<u>\$ 3,370</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, 2018 (in thousands)

	<u>2018</u>	<u>2017</u>
Operating revenues		
Stormwater site generated service	\$ 6,169	\$ 6,661
Stormwater right-of-way service	3,847	3,881
Other operating revenue		
Customer late payment fees	93	51
Miscellaneous	105	88
	<u>10,214</u>	<u>10,681</u>
Operating expenditures		
Stormwater collection	4,842	4,096
Engineering and information services	556	525
Regulatory services	1,304	768
Customer service	278	300
Administration and pension	789	816
Depreciation	807	677
	<u>8,576</u>	<u>7,182</u>
Earnings from operations before financial and other revenue and expenditures	<u>1,638</u>	<u>3,499</u>
Financial and other revenues		
Investment income	<u>70</u>	<u>78</u>
Financial and other expenditures		
Interest on long term debt	568	588
Repayment of long term debt	1,253	1,221
Amortization of debt discount	10	9
	<u>1,831</u>	<u>1,818</u>
(Loss) earnings for the year	<u>\$ (123)</u>	<u>\$ 1,759</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, 2018 (in thousands)

	<u>2018</u>	<u>2017</u>
Operating revenues		
Water service	\$ 47,220	\$ 47,183
Wastewater service	69,994	69,475
Stormwater service	10,016	10,542
Public fire protection	7,074	7,074
Private fire protection services	856	831
Other operating revenue	<u>1,230</u>	<u>1,207</u>
	<u>136,390</u>	<u>136,312</u>
Operating expenditures		
Water supply and treatment	9,802	9,137
Water transmission and distribution	10,810	10,411
Wastewater collection	11,252	10,347
Stormwater collection	4,793	4,039
Wastewater treatment	18,054	17,797
Engineering and information services	7,265	7,576
Regulatory services	3,291	2,356
Customer service	4,861	4,396
Administration and pension	12,501	11,768
Depreciation	<u>21,241</u>	<u>19,095</u>
	<u>103,870</u>	<u>96,922</u>
Earnings from operations before financial and other revenues and expenditures	<u>32,520</u>	<u>39,390</u>
Financial and other revenues		
Interest	694	780
Other	<u>3,096</u>	<u>2,289</u>
	<u>3,790</u>	<u>3,069</u>
Financial and other expenditures		
Interest on long term debt	7,884	8,475
Repayment of long term debt	21,247	21,320
Amortization of debt discount	202	199
Grant in lieu of taxes	<u>4,774</u>	<u>4,578</u>
	<u>34,107</u>	<u>34,572</u>
Earnings for the year	<u>\$ 2,203</u>	<u>\$ 7,887</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, 2018 (in thousands)

	<u>2018</u>	<u>2017</u>
Operating revenues		
Dewatering	\$ 210	\$ 210
Septage tipping fees	812	909
Leachate treatment and contract revenue	417	440
Airplane effluent	121	89
Other operating revenue	<u>196</u>	<u>196</u>
	<u>1,756</u>	<u>1,844</u>
Operating expenditures		
Water supply and treatment	18	16
Wastewater treatment	456	830
Other	87	111
Depreciation	<u>21</u>	<u>6</u>
	<u>582</u>	<u>963</u>
Earnings from operations before financial and other revenues and expenditures	<u>1,174</u>	<u>881</u>
Financial and other revenues		
Other	<u>696</u>	<u>139</u>
Financial and other expenditures		
Other	<u>269</u>	<u>49</u>
Earnings for the year	<u>\$ 1,601</u>	<u>\$ 971</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, 2018 (in thousands)

Return on rate base	2018	2017
Rate of return on rate base for water service	3.39%	4.54%
Rate of return on rate base for wastewater service	5.65%	6.71%
Rate of return on rate base for stormwater service	3.45%	11.78%

Special purpose reserves

	<u>Wastewater & Stormwater Reserves</u>	<u>RDC Water Reserve</u>	<u>RDC Wastewater Reserve</u>	<u>Other Capital Reserves</u>	2018 Total	2017 Total
Reserve, beginning of year	\$ 3,819	\$ 1,246	\$ 11,842	\$ 5	\$ 16,912	\$ 8,070
Contributions and interest	-	1,086	10,075	1	11,162	9,230
Expenditures	(213)	-	-	-	(213)	(388)
Reserve, end of year	<u>\$ 3,606</u>	<u>\$ 2,332</u>	<u>\$ 21,917</u>	<u>\$ 6</u>	<u>\$ 27,861</u>	<u>\$ 16,912</u>

Summarized consolidated operating results

	<u>Actual 2018</u>	<u>Actual 2017</u>
Operating revenues	\$ 138,145	\$ 137,997
Operating expenditures	<u>99,437</u>	<u>97,839</u>
Earnings from operations before financial and other revenues and expenditures	38,708	40,158
Non-operating revenues	4,486	3,322
Non-operating expenditures	<u>34,376</u>	<u>34,622</u>
Earnings for the year	<u>\$ 8,818</u>	<u>\$ 8,858</u>

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



Financial Statements

Halifax Regional Water Commission

Employees' Pension Plan

December 31, 2017

Contents

	Page
Independent auditor's report	1
Statement of financial position	2
Statement of changes in net assets available for benefits	3
Statement of changes in pension obligations	4
Notes to the financial statements	5-16



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Independent auditor's report

To the Board of Trustees of the
Halifax Regional Water Commission
Employees' Pension Plan

We have audited the accompanying financial statements of Halifax Regional Water Commission Employees' Pension Plan, which comprise the statement of financial position as at December 31, 2017 and the statement of changes in net assets available for benefits and the statement of changes in pension obligations for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

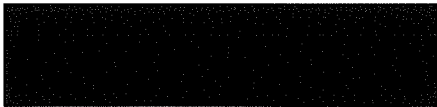
An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained in our audit is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Halifax Regional Water Commission Employees' Pension Plan as at December 31, 2017, and the changes in net assets available for benefits and changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Halifax, Canada
June 21, 2018



Chartered Professional Accountants
Licensed Public Accountants

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

December 31	2017	2016
Assets		
Investment assets	\$ 119,713,036	\$ 107,043,865
Contributions receivable	<u>43,194</u>	<u>40,166</u>
	119,756,230	107,084,031
Liabilities		
Payables and accruals		
Trade	<u>24,348</u>	<u>16,035</u>
Net assets available for benefits (note 4)	119,731,882	107,067,996
Pension obligations (page 4)	<u>121,473,083</u>	<u>114,046,900</u>
Deficiency	<u>\$ (1,741,201)</u>	<u>\$ (6,978,904)</u>

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	2017	2016
Revenue		
Net investment income (note 6)	\$ 2,475,604	\$ 2,250,455
Changes in the fair value of investment assets	<u>8,712,459</u>	<u>4,056,258</u>
	<u>11,188,063</u>	<u>6,306,713</u>
Contributions (note 7)		
Participants	2,665,078	2,484,448
Sponsor	<u>3,247,727</u>	<u>3,090,791</u>
	<u>5,912,805</u>	<u>5,575,239</u>
Expenses		
Benefit payments (note 8)	4,296,017	5,038,702
Administrative (note 9)	<u>140,965</u>	<u>209,698</u>
	<u>4,436,982</u>	<u>5,248,400</u>
Increase in net assets available for benefits	<u>\$ 12,663,886</u>	<u>\$ 6,633,552</u>
<hr/>		
Net assets available for benefits, beginning of year	\$ 107,067,996	\$ 100,434,444
Increase in net assets available for benefits	<u>12,663,886</u>	<u>6,633,552</u>
Net assets available for benefits, end of year	<u>\$ 119,731,882</u>	<u>\$ 107,067,996</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	2017	2016
Pension obligations, beginning of year	<u>\$ 114,046,900</u>	<u>\$ 108,055,300</u>
Change in pension obligations		
Interest accrued on benefits	6,637,300	6,259,500
Benefits accrued	5,084,900	4,770,802
Benefits paid (note 8)	<u>(4,296,017)</u>	<u>(5,038,702)</u>
	<u>7,426,183</u>	<u>5,991,600</u>
Pension obligations, end of year	<u>\$ 121,473,083</u>	<u>\$ 114,046,900</u>

See accompanying notes to the financial statements.

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

December 31, 2017

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.

Effective June 1, 2015, 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, vesting, small benefit payouts and death benefits. On March 29, 2018 the Halifax Regional Water Commission's Board of Directors approved Amendment #11, effective retroactively to June 1, 2015. The purpose of Amendment #11 is to formalize the required changes to the Plan text, bringing the text into compliance with the Pension Benefits Act of Nova Scotia. Amendment #11 is subject to final approval of the Regulator. Amendment #11 has no impact on the pension plan financial statements as the plan has been administered in accordance with the June 1, 2015 changes to the Nova Scotia Pension Benefits Act.

(b) Funding policy

Employees' required contributions in 2017 were 10.65% (2016 – 10.65%) 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% (2016 – 9.85%). Basic contributions from employers and members due to the Plan at the end of the year are recorded on an accrual basis.

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

December 31, 2017

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.

On June 1, 2015, revisions to the Pension Benefits Act and Regulations came into effect. A change impacting the Plan was a survivor pension payable to the members surviving spouse for pension credits accrued between January 1, 1988 and May 31, 1998 is the greater of: 1) 60% of the survivor pension, or 2) the commuted value of the normal retirement benefits. The beneficiary or estate of a single employee who dies during this same time period would be entitled to the commuted value of the normal retirement benefits.

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

December 31, 2017

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.

(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.

Halifax Regional Water Commission

Employees' Pension Plan

Notes to the financial statements

December 31, 2017

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 Canadian 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.

Halifax Regional Water Commission

Employees' Pension Plan

Notes to the financial statements

December 31, 2017

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.

Halifax Regional Water Commission

Employees' Pension Plan

Notes to the financial statements

December 31, 2017

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

(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.

(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 \$121,473,083 (2016 - \$114,046,900) 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 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. The Plan 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, 2017

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 6.11% (December 31, 2016 – 6.01%) 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>
Wellington Management Global Total Return Fund	Foreign Bonds	\$ 5,106,962
Putnam Canadian Fixed Income Global Alpha Fund	Canadian Bonds	3,910,459
Wellington Emerging Markets Local Equity Fund	Emerging Market Equities	3,226,427
GCM Grosvenor Opportunistic Investments, LP	Limited Partnership	2,748,659
Blackrock Active Canadian Equity Fund	Canadian Equities	2,715,343
UBS (UK) Real Estate Funds Selection Global Ex Canada, L.P.	Limited Partnership	<u>2,483,348</u>
		<u>\$ 20,191,198</u>

4. Net assets available for benefits

Allocation of net assets available for benefits

To pension plan	\$ 119,238,702	\$ 106,638,861
To extra voluntary contribution benefits	245,513	204,657
To individual locked in amounts	<u>247,667</u>	<u>224,478</u>
	<u>\$ 119,731,882</u>	<u>\$ 107,067,996</u>

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

December 31, 2017

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 (2016 – 5.80%);
- c) salary scale assumption of 3.90% per annum (2016 – 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 (2016 - \$825,200) 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.

6. Net investment income	<u>2017</u>	<u>2016</u>
Income from investment funds	\$ 2,622,024	\$ 2,389,377
Investment manager fees	<u>(146,420)</u>	<u>(138,922)</u>
	<u>\$ 2,475,604</u>	<u>\$ 2,250,455</u>
7. Contributions	<u>2017</u>	<u>2016</u>
Participants' contributions		
Required	\$ 2,619,586	\$ 2,453,597
Voluntary	<u>45,492</u>	<u>30,851</u>
	<u>\$ 2,665,078</u>	<u>\$ 2,484,448</u>
Sponsor's contributions		
Required	\$ 2,422,527	\$ 2,265,591
Unfunded liability	<u>825,200</u>	<u>825,200</u>
	<u>\$ 3,247,727</u>	<u>\$ 3,090,791</u>

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

December 31, 2017

8. Benefit payments	<u>2017</u>	<u>2016</u>
Retirement benefit payments	\$ 3,738,659	\$ 3,536,894
Termination benefit payments	314,591	992,572
Death benefit payments	<u>242,767</u>	<u>509,236</u>
	<u>\$ 4,296,017</u>	<u>\$ 5,038,702</u>

During 2017, there were 18 termination benefit payments (2016 – 16) and 1 death benefit payment (2016 – 1). Termination benefits are paid out as described in note 1(f) and death benefit payments are paid out as described in note 1(e).

9. Administrative expenses	<u>2017</u>	<u>2016</u>
Actuarial and consulting fees	\$ 67,394	\$ 128,676
Audit and accounting fees	9,283	15,999
Bank custodian fees	20,132	26,510
Insurance	8,347	7,950
Miscellaneous	18,965	15,560
Professional fees	14,623	12,845
Registration fees	<u>2,221</u>	<u>2,158</u>
	<u>\$ 140,965</u>	<u>\$ 209,698</u>

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.

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.

Halifax Regional Water Commission

Employees' Pension Plan

Notes to the financial statements

December 31, 2017

11. Financial instruments (continued)

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.

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 \$119,713,036 at December 31, 2017 (2016 - \$107,043,865). A one percent (1%) change in market risk (holding all variables constant) will impact the fair value of these investments by approximately \$1,119,713 (2016 - \$1,070,439).

(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").

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

December 31, 2017

11. Financial instruments (continued)

(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, 2017

	<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	<u>\$ 24,348</u>	<u>\$ 24,348</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

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	<u>\$ 16,035</u>	<u>\$ 16,035</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).

Halifax Regional Water Commission

Employees' Pension Plan

Notes to the financial statements

December 31, 2017

11. Financial instruments (continued)

Fair value disclosure (continued)

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, 2017

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
Pooled fund	\$ <u> -</u>	\$ <u>119,713,036</u>	\$ <u> -</u>	\$ <u>119,713,036</u>

There were no transfers between the three levels between December 31, 2016 and December 31, 2017.

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>

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

There were no transfers between the three levels between December 31, 2015 and December 31, 2016.

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.