

February 19, 2016

Ray Ritcey, Chair  
Halifax Water  
Halifax, Nova Scotia

**\* REVISED**

The regular meeting of the Halifax Water Board will be held on Thursday, February 25, 2016 at 9:00 a.m. in the Boardroom at 450 Cowie Hill Road, Halifax.

**AGENDA**

**In Camera**

- 1C Approval of Minutes of In-Camera Meeting held on Thursday, January 28, 2016, 2015 (5 minutes)
- 2C Business Arising from Minutes (10 minutes)
- 3C Governance Matter (Verbal) (10 minutes)


**Regular Meeting**

- 1. a) Ratification of In-Camera Motions  
b) Approval of the Order of Business and Approval of Additions and Deletions (5 minutes)
- 2. Approval of Minutes of Regular Meeting held on Thursday, January 28, 2016
- 3. Business Arising From Minutes  
a) 2016/17 Business Plan (Verbal) (25 minutes)
- 4. Operating Results for the Ten Months Ended January 31, 2016 (Verbal) (5 minutes)
- 5. Capital Projects: (20 minutes)
  - 5.1 Lake Major Water Supply Plant (WSP) – New Diesel Generator .....\$1,900,000
  - 5.2 Sackville Cross Road Stormwater System Renewal .....\$1,090,000
  - 5.3 Balsam Road Pumping Station (PS) Elimination .....\$770,000
  - 5.4 Waterfront Drive Wastewater System Replacement .....\$500,000
  - 5.5 Sullivan's Pond Storm Sewer System Replacement - Design.....\$400,000
  - 5.6 Northwest Arm Sewer Rehabilitation - Detailed Design.....\$300,000
  - 5.7 Bedford Hwy at Shaunsieve Drive Culvert Upgrade .....\$247,000
- 6. 2016 Spring Debenture (5 minutes)
- 7. Approval Authority List for Purchases (5 minutes)
- 8. Date of Next Meeting

**\$5,207,000**

**Information Reports**

- 1-I Operations and Financial Monthly Update
- 2-I Capital Budget Approvals to Date - 2015/16
- 3-I Bank Balance
- 4-I Service Level Agreement with Halifax Regional Municipality
- 5-I Seasonal Disinfection Program - Update

  
for: James G. Spurr  
Secretary

**HALIFAX REGIONAL WATER COMMISSION  
MINUTES**

**January 28, 2016**

**PRESENT:** Commissioner Ray Ritcey, Chair  
Commissioner Russell Walker, Vice Chair  
Commissioner Mike Savage  
Commissioner Don Mason  
Commissioner Darlene Fenton  
Commissioner Barry Dalrymple

**REGRETS:** Commissioner John Traves  
Commissioner David Hendsbee

**STAFF:** Carl Yates, General Manager, HRWC  
Cathie O'Toole, Director, Finance & Customer Service,  
HRWC  
James Spurr, Legal Counsel, HRWC  
Lorna Skinner, Administrative Assistant, HRWC

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**CALL TO ORDER**

The Chair called the regular meeting to order at 9:03 a.m. in the Board Room of the HRWC, 450 Cowie Hill Road. The Board moved In Camera at 9:03 and the regular meeting reconvened at 10:50 a.m.

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

**MOVED BY Commissioner Mason, seconded by Commissioner Dalrymple that the Halifax Regional Water Commission Board ratify the following In Camera motions:**

MOVED BY Commissioner Mason, seconded by Commissioner Walker that the Halifax Regional Water Commission Board approve the In Camera minutes of November 26, 2015.

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

1. Halifax Water's Corporate Governance Manual, in the substantive form attached to this report.
2. Appointment to Board Committees, as follows:
  - Audit & Finance (Ray Ritcey, Russell Walker, Don Mason)
  - Executive (Ray Ritcey, Russell Walker)
  - Environmental, Health & Safety (Darlene Fenton, David Hendsbee, Barry Dalrymple)

MOVED BY Commissioner Fenton, seconded by Commissioner Walker that the Halifax Regional Water Commission Board approve the attached lease agreement with Rogers Communications Inc., for the use of HRWC lands at 77 Riverview Drive at the existing Lakeside/Timberlea Wastewater Treatment Facility (WWTF) site for a period of 20 years, subject to all local Provincial and Federal regulations pertaining to the installation of telecommunication facilities.

**MOTION PUT AND PASSED.**

**1.b) APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF ADDITIONS AND DELETIONS**

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

**MOTION PUT AND PASSED**

**2. APPROVAL OF MINUTES – November 26, 2015**

**MOVED BY Commissioner Mason, seconded by Commissioner Savage that the Halifax Regional Water Commission Board approve the minutes of November 26, 2015, with the above noted amendment.**

**MOTION PUT AND PASSED.**

**3. BUSINESS ARISING FROM MINUTES**

a) None

**4. OPERATING RESULTS FOR THE NINE MONTHS ENDED DECEMBER 31, 2015**

A report dated January 20, 2016, was submitted.

Cathie O'Toole stated she would address this when Item #6 entitled *2016/17 Water, Wastewater and Stormwater Operating Budget* is discussed.

**5. PROPOSED 2016/17 CAPITAL BUDGET**

A report dated January 18, 2016, was submitted.

Commissioner Mason informed the Board that the Environment, Safety and Capital Projects Planning Committee approved the 2016/17 proposed Capital Budget at their meeting of January 19, 2016, and recommended approval by the Board.

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

- 1. Urban Core System 2016/17 Capital Budget in principal at a total value of \$66,777,000 and;**
- 2. List of routine capital expenditure items required for on-going departmental operation, at a total value of \$5,055,000.**

**MOTION PUT AND PASSED.**

**5.1 2016/17 Water, Wastewater, and Stormwater Collection and Distribution Main Renewal – Integrated Projects**

A report dated January 20, 2016, was submitted.

**5.2 Geizer 158 Reservoir Rehabilitation**

A report dated January 20, 2016, was submitted.

**5.3 Chain Control Transmission Main Realignment**

A report dated January 20, 2016, was submitted.

**5.4 Wastewater System – Trenchless Rehabilitation Program (2016)**

A report dated January 20, 2016, was submitted.

**5.5 Manhole Lining – Crescent Avenue and Stuart Harris Sewershed**

A report dated January 20, 2016, was submitted.

**MOVED BY Commissioner Walker, seconded by Commissioner Mason that the Halifax Regional Water Commission Board approve the above-noted Capital Project Items 5.1 – 5.5.**

**MOTION PUT AND PASSED.**

**6. 2016/17 WATER, WASTEWATER AND STORMWATER OPERATING BUDGET**

A report dated January 18, 2016, was submitted.

Cathie O'Toole gave a presentation on the 2016/17 Operating Budget. The Budget is based on new rates for water and wastewater which take effect April 1, 2016, and the existing rates for stormwater service.

**MOVED BY Commissioner Mason, seconded by Commissioner Fenton that the Halifax Regional Water Commission Board approve the 2016/17 Water, Wastewater and Stormwater Operating Budget covering the period April 1, 2016, to March 31, 2017, including the proposed 2016/17 Budget for unregulated activities.**

**MOTION PUT AND PASSED.**

**7. PROPOSED 2016/17 BUSINESS PLAN**

A report dated January 21, 2016, was submitted.

Carl Yates stated that the annual Business Plan incorporates the Operating and Capital Budgets. This is a highly detailed document that will be submitted to Halifax Regional Council for its review.

**MOVED BY Commissioner Mason, seconded by Commissioner Dalrymple that the Halifax Regional Water Commission Board approve the 2016/17 Business Plan in the substantive form attached and direct the General Manager to submit the 2016/17 Business Plan to Halifax Municipality for review.**

**MOTION PUT AND PASSED.**

**8. PENSION PLAN AMENDMENT #10**

A report dated January 21, 2016, was submitted.

Cathie O'Toole informed the Board that the Superintendent of Pensions has approved the revisions to Amendment #10; once the revisions have been done, it will be re-submitted to the Superintendent for her final approval.

**MOVED BY Commissioner Mason, seconded by Commissioner Walker that the Halifax Regional Water Commission Board approve the revised Pension Plan Amendment #10 and the submission of a certified copy of the Amendment to the Superintendent of Pensions.**

**MOTION PUT AND PASSED.**

**9. DATE OF NEXT MEETING**

The next meeting is scheduled for February 25, 2016.

The meeting was adjourned at 10:55 a.m.

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*James G. Spurr*  
*Secretary*

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*Commissioner Ray Ritcey*  
*Chair*

The following Information Items were submitted:

- 1-I Operations and Financial Monthly Update
- 2-I Capital Budget Approvals to Date – 2015/2016
- 3-I Bank Balance
- 4-I 2014/15 Annual Report
- 5-I 2015 Customer Survey

**February 25, 2016**

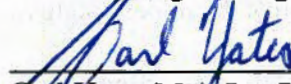
**TO:** Ray Ritcey, Chair and Members of the Halifax Regional Water Commission Board

**SUBMITTED BY:**



Jamie Hannam, P. Eng.  
Director, Engineering & Information Services

**APPROVED:**



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

**DATE:** February 18, 2016

**SUBJECT:** Lake Major Water Supply Plant (WSP) – New Diesel Generator

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**ORIGIN**

The 2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve the Lake Major WSP – New Diesel Generator project at an estimated cost of \$1,900,000.

**BACKGROUND**

The existing diesel generator at the Lake Major WSP is not original to the facility. It was relocated from the Lake Lamont WSP when the Lake Major Plant was constructed in 1999. The generator is nearing the end of its useful life and replacement parts are no longer available.

Recent inspections and testing have concluded that this diesel generator is a priority for replacement. Staff have identified this project as a highest priority.



## ITEM #5.1

HRWC Board

February 25, 2016

### DISCUSSION

In the fall of 2014, Halifax Water engaged Strum Engineering to carry out the concept and detailed design work for a new diesel generator. Strum Engineering has provided recommendations with respect to design and size of the diesel generator. The next step in the design process is the pre-selection of the new switch gear and diesel generator. Strum Engineering is currently finalizing the tender documents for the equipment pre-selection, which will be issued for public tender upon approval of funding for the project. The project cost estimate is based on the consultant's design estimates.

Halifax Water's intent is to purchase and install a new generator at the Lake Major Water Supply Plant as soon as practical.

The estimated total cost of the Lake Major WSP – New Diesel Generator project is \$1,900,000 including net HST.

### BUDGET IMPLICATIONS

Funding in the amount of \$1,900,000 including net HST is available within the 2016/17 Capital Budget under "*Water – Lake Major WSP – New Diesel Generator*".

The proposed expenditure meets the "No Regrets – Unavoidable Needs" approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of "Required to ensure infrastructure system integrity and safety".

### ALTERNATIVES

There are no recommended alternatives.

Report Prepared By: \_\_\_\_\_

Tom Gorman, Manager Water Infrastructure, 490-4716


Financial Reviewed By: \_\_\_\_\_

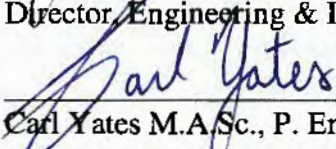
Cathie O'Toole, MBA, CPA, CGA, Director Corporate Services,  
490-3685

**Lake Major WSP Generator Replacement - 2 x 1000 kW Option**

<b>Description</b>	<b>Amount</b>
<b>Construction Cost</b>	<b>\$1,302,752.50</b>
<b>Consulting Detailed Design Services</b>	<b>\$119,200.00</b>
<b>Construction Sub-Total</b>	<b>\$1,421,952.50</b>
<b>20% Construction Contingency</b>	<b>\$284,390.50</b>
<b>Halifax Water Engineering/Inspection</b>	<b>\$7,500.00</b>
<b>Halifax Water Operations/Technical Services</b>	<b>\$10,000.00</b>
<b>Sub-total</b>	<b>\$1,723,843.00</b>
<b>Net HST (4.286%)</b>	<b>\$73,883.91</b>
<b>Overhead/Interest (4%)</b>	<b>\$68,953.72</b>
<b>Total Estimated Project Cost</b>	<b>\$1,866,680.63</b>

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

**SUBMITTED BY:**   
\_\_\_\_\_  
Jamie Hannam, P. Eng.  
Director, Engineering & Information Services

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

**DATE:** February 11, 2016

**SUBJECT:** Sackville Cross Road Stormwater System Renewal

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**ORIGIN**

The 2014/15 and 2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve the Sackville Cross Road Stormwater System Renewal project at an estimated cost of \$1,090,000.

**BACKGROUND**

The Sackville Cross Road is located near the Little Sackville River in the Central region of HRM. The area has experienced various historical flooding occurrences. Complaints by local residents resulted in investigations being conducted by HRWC personnel. The history of drainage complaints in the area have generally centered around the outfall of a section of the local Sackville Cross Road Stormwater system which discharges into an open ditch drainage contained within an easement. The flow through this drainage ditch eventually discharges into the Little Sackville River a short distance away.

## ITEM #5.2

HRWC Board

February 25, 2016

### DISCUSSION

The stormwater drainage system, along with other central municipal services in this area, was constructed in the early 1970's. There have been various drainage complaints in recent years surrounding the outfall of the stormwater system. Upon investigation and discussion with HRWC Operations Staff, it has been determined that approximately three hundred and fifty (350) metres of the existing stormwater system, and the associated outfall pipe, is at the end of its service life and should be replaced. The proposed scope of required work includes 350m of 750mm dia pipe, 150m of 375mm dia. Pipe, 13 manholes and a new outlet structure.

The total estimated cost is \$1,200,000 including net HST. Funding for the design phase of the project in the amount of \$110,000 was previously approved. Therefore the balance of the estimated funding requirement for the Sackville Cross Road Stormwater System Renewal project is \$1,090,000 including net HST. The project is proposed for construction in 2016.

### BUDGET IMPLICATIONS

Funding in the amount of \$1,090,000 including net HST is available within the 2016/17 Capital Budget under "*Stormwater Pipes - Sackville Cross Road Stormwater System Renewal*".

The proposed expenditure meets the "No Regrets – Unavoidable Needs" approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of "Required to ensure infrastructure system and integrity and safety."

### ALTERNATIVES

There are no recommended alternatives.

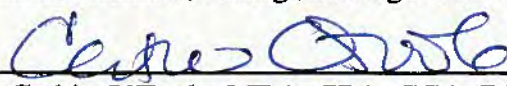
### ATTACHMENT

Sketch – Sackville Cross Road Stormwater System

Report Prepared by:

  
Mark McGonnell, P. Eng., Manager 802-4105

Financial Reviewed By:

  
Cathie O'Toole, MBA, CPA, CGA, Director Corporate Services, 490-3685



Drawn By: G. Mesheau  
 Data Source: Halifax Water / HRM  
 Date: Tuesday, February 18, 2014

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

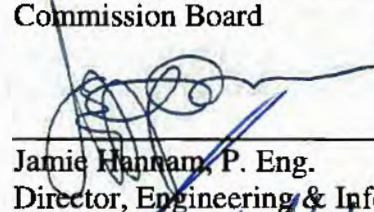
## SACKVILLE CROSS ROAD STORMWATER SYSTEM RENEWAL



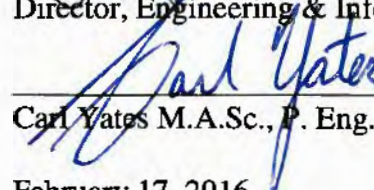
**February 25, 2016**

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

**SUBMITTED BY:**

  
\_\_\_\_\_  
Jamie Hannam, P. Eng.  
Director, Engineering & Information Services

**APPROVED:**

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

**DATE:**

February 17, 2016

**SUBJECT:**

**Balsam Road Pumping Station (PS) Elimination**

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**ORIGIN**

The 2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve the Balsam Road PS Elimination project, at an estimated cost of \$770,000.

**BACKGROUND**

The Balsam Road Wastewater PS was constructed in the early 1960's. The forcemain for this pumping station has reached the end of its useful lifespan and has experienced multiple breaks. Rehabilitation of electrical/mechanical systems is also anticipated in approximately five years.

**DISCUSSION**

The capital cost for the forcemain replacement and rehabilitation of the electrical/mechanical systems for the Balsam Road PS is approximately \$550,000. In addition, the life cycle cost of the pumping station, which includes operation, maintenance, and life cycle capital reinvestments, over a 75 year life (equivalent to the life of a gravity sewer) exceeds \$1.2M (see attached calculation).

## ITEM #5.3

HRWC Board

February 25, 2016

The estimated capital cost to install a gravity sewer to eliminate the pump station is approximately \$770,000 with minimal additional costs over a 75 year life. Thus, it is recommended that a gravity sewer be installed to eliminate the pumping station as the solution has a lower life cycle cost and provides lower operational risk and higher system reliability. The scope of the required work includes approximately 155m of 200mm dia. PVC pipe and four manholes. Significant sections of this proposed sewer will be installed at depths approaching seven (7) metres.

The estimated total project cost for the Balsam Road PS Elimination project is \$770,000 including net HST.

### **BUDGET IMPLICATIONS**

Funding in the amount of \$770,000 including net HST is available within the 2016/17 Capital Budget under "Balsam Road PS Elimination"

The proposed expenditure meets the "No Regrets – Unavoidable Needs" approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of "Required to ensure infrastructure system integrity and safety".


### **ALTERNATIVES**


There are no recommended alternatives.

### **ATTACHMENTS**

Life Cycle Cost Analysis  
Project Location Sketch – "Balsam Road PS Elimination"

Report Prepared by:

  
\_\_\_\_\_  
Greg Rice, P. Eng., 476-3520

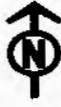
Financial Reviewed By:   
\_\_\_\_\_  
Cathie O'Toole, MBA, CPA, CGA, Director of Corporate  
Services, 490-3685

**75 Year Life Cycle Cost for Balsam Road Pump Station  
(Equivalent to 75 Year Lifespan of Conventional Sewer as an Option)**

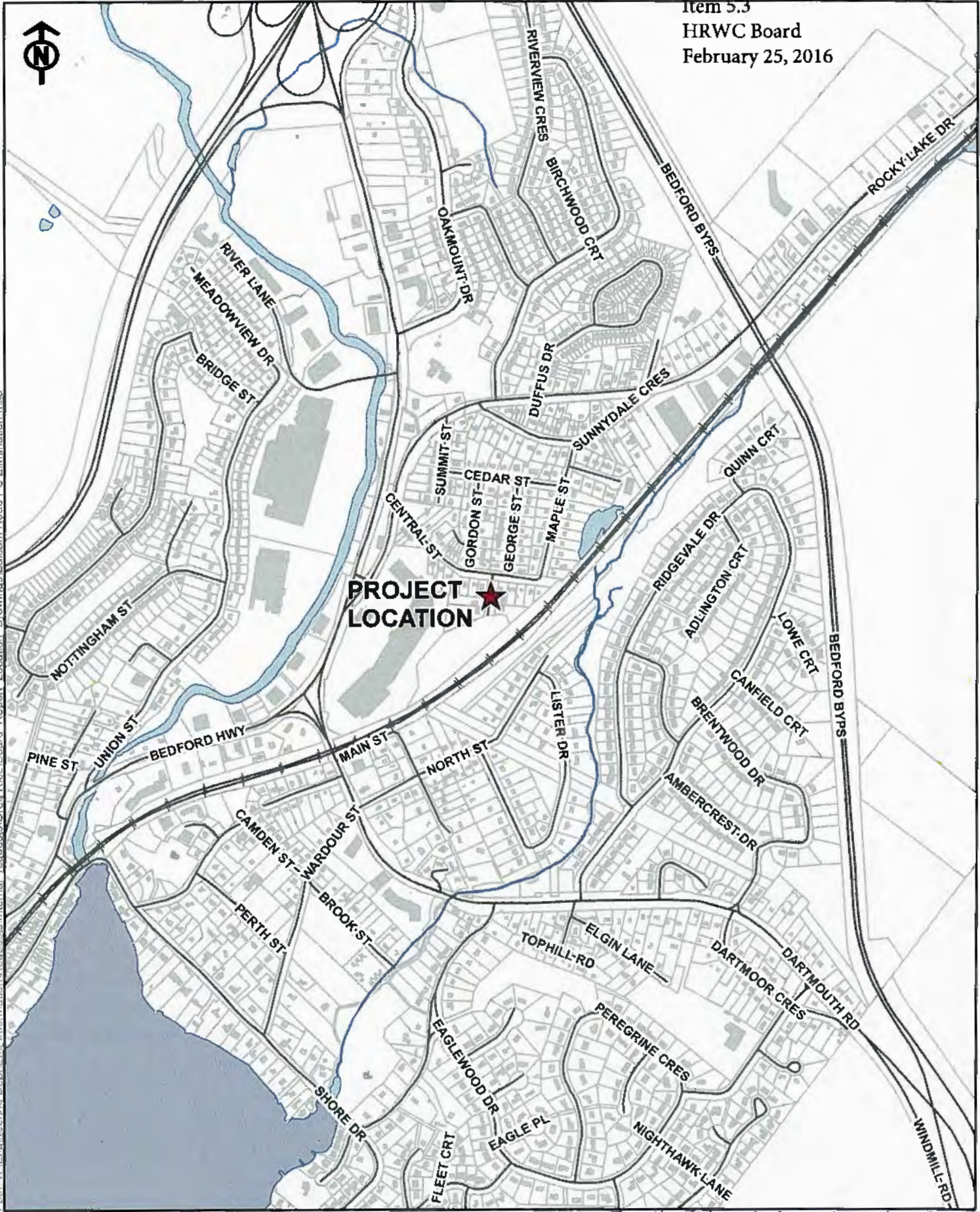
Item	Cycle	Cost	PV @ 1.5% Growth 1.50%	PV @ 2% Growth 2.00%	PV @ 3% Growth 3.00%	PV @ 4% Growth 4.00%
O&M Costs	Monthly	-\$500.00	\$279,781.29	\$239,749.24	\$182,256.49	\$144,332.56
Full Station Replacement (Every 50 years)	Year 25	-\$1,000,000.00	\$727,272.73	\$666,666.67	\$571,428.57	\$500,000.00
Mechanical Replacement (Every 20 years)	Year 5	-\$250,000.00	\$232,558.14	\$227,272.73	\$217,391.30	\$208,333.33
	Year 45	-\$250,000.00	\$149,253.73	\$131,578.95	\$106,382.98	\$89,285.71
Electrical Replacement (Every 40 years)	Year 5	-\$100,000.00	\$93,023.26	\$90,909.09	\$86,956.52	\$83,333.33
	Year 65	-\$100,000.00	\$50,632.91	\$43,478.26	\$33,898.31	\$27,777.78
Forcemain Replacement (Every 75 years)	Year 0	-\$200,000.00 *	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
<b>Present Value</b>			<b>\$1,732,522.05</b>	<b>\$1,599,654.93</b>	<b>\$1,398,314.17</b>	<b>\$1,253,062.71</b>

\* Includes one time cost to relocate watermain





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Drawn By: Dawn M. Matheson  
Data Source: Halifax Water / HRM  
Date: February-10-16

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### Balsam Road PS Elimination

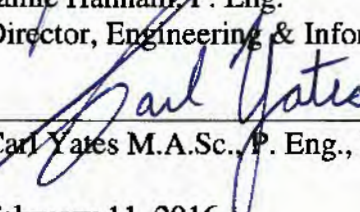


*"To provide world class services for our customers and our environment"*

**February 25, 2016**

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

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

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

**DATE:** February 11, 2016

**SUBJECT:** **Waterfront Drive Wastewater System Replacement**

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**ORIGIN**

The 2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve the Waterfront Drive Wastewater System Replacement project at an estimated cost of \$500,000.

**BACKGROUND**

The Waterfront Drive area of Bedford was developed in the 1990's with the lands below the street along with the park parcel, commercial and condominium developments being created as a result of infilling of the Bedford Basin. Municipal water, wastewater and stormwater services were installed at the time of development.

**DISCUSSION**

Recent complaints of strong odours in the vicinity of the Mill Cove Wastewater Treatment Facility resulted in an investigation by HRWC staff. This investigation revealed that sections of the wastewater sewer pipe along Waterfront Drive was either flat or had a sag and was retaining wastewater resulting in strong odours at the street level.

## ITEM #5.4

HRWC Board

February 25, 2016

In order to mitigate this problem those sections of sagged sewer are proposed to be replaced in order to provide positive drainage and eliminate odour issues. The scope of required work includes approximately 240m of 200mm dia. PVC pipe and four manholes.

The estimated total cost of this project is \$500,000 including net HST.

### **BUDGET IMPLICATIONS**

Funding in the amount of \$500,000 including net HST is available within the 2016/17 Capital Budget under "*Wastewater Collection System - Pipes - Waterfront Drive Wastewater System Replacement*".

The proposed expenditure meets the "No Regrets – Unavoidable Needs" approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of "Required to ensure infrastructure system and integrity and safety."

### **ALTERNATIVES**

There are no recommended alternatives.


### **ATTACHMENT**

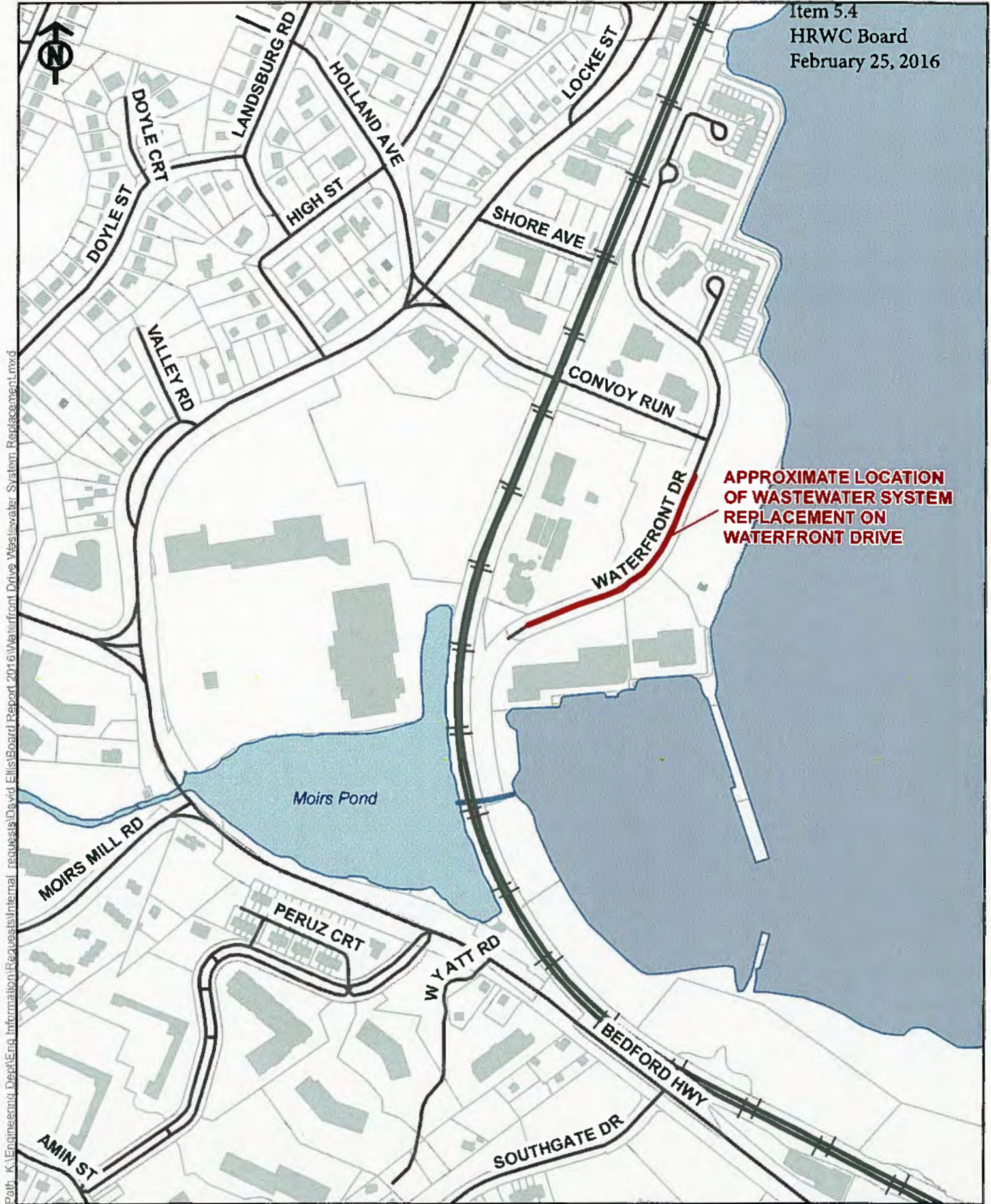
Sketch – Waterfront Drive

Report Prepared by:

  
Mark McGonnell, P. Eng. 802-4105

Financial Reviewed By:

  
Cathie O'Toole, MBA, CPA, CGA, Director of Corporate Services, 490-3685



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Data Source: Halifax Water / HRM  
Date: Friday, February 12, 2016

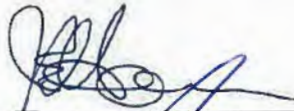
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# Waterfront Drive Wastewater System Replacement

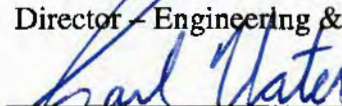


**TO:** Mr. Ray Ritcey, Chair and Members of the Halifax Regional Water Commission Board

**SUBMITTED BY:**

  
\_\_\_\_\_  
Jamie Hannam, MBA, P. Eng.  
Director - Engineering & IS

**APPROVED:**

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

**DATE:** February 18, 2016

**SUBJECT:** Sullivan's Pond Storm Sewer System Replacement - Design

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### **ORIGIN**

HRWC Board approval of initial project funding June 30, 2011.

### **RECOMMENDATION**

The HRWC Board approve a funding increase of \$400,000 for the Sullivan's Pond Storm Sewer Replacement Project Design phase for a total estimated cost of \$971,000.

### **BACKGROUND**

The Sullivan's Pond Stormwater Outlet Structure and Pipe system in Dartmouth conveys stormwater from Sullivan's Pond to Halifax Harbour. Sullivan's Pond receives stormwater from a large watershed (1500 hectare) surrounding the upstream lakes that form part of the former Shubenacadie Canal System. The stormwater pipe system is constructed of 2700 mm diameter corrugated steel pipe (CSP) and was installed in the later 60s/early 70s. The system is approximately 580 m long and transmits flows from Sullivan's Pond to an open channel leading to Halifax Harbour. The system is now at the end of its life and requires replacement.

In 2011, \$300,000 was approved for engineering services and as stated in the corresponding Halifax Water Board Report "The current proposed project includes a review of the existing design options, the preparation of a detailed design and

**ITEM #5.5**  
**HRWC Board**  
**February 25, 2016**

specification document for replacement of an original 450m portion of 2700mm dia. CSP storm pipe and the Sullivan's Pond outlet flow structure." An engineering design consultant (CBCL Limited) was engaged to undertake this work and the scope was based on the premise that there would be a feasible option to rehabilitate the existing infrastructure (i.e. pipe lining) and that fish passage would not be required.

The initial investigative work, which accounted for climate change, determined the system is under capacity and therefore a flood risk during extreme weather events. It was concluded that the current storm system would not accommodate the predicted future major storm event (estimated to be in excess of 30m<sup>3</sup>/sec) and nor could it be rehabilitated to meet this flow requirement. The only solution would be a new structure. The project was reviewed with the Federal Department of Fisheries (DFO). DFO stated that fish passage would not be required if the project was a rehabilitation of the existing system but since the project will result in a new structure then DFO deemed that fish passage must be a project requirement.

Based on a February 18, 2014 HRWC Board report, \$250,000 was approved for additional engineering services bringing the total approved to \$550,000. At the time of this report, approximately \$180,000 had been expended and was anticipated that the total amount of \$550,000 would be sufficient to undertake the engineering detailed design phase for the project. Subsequently, HRWC directed the consultant to proceed with completing the preliminary design so as to incorporate full system replacement and fish passage. The level of effort required was discussed and monitored and the preliminary design report was completed in July 2015.

The resultant costs to date are approximately \$571,000 and are summarized in the following table:

**Table 1**

<b>Item</b>	<b>Amount</b> <small>(inclusive of net HST where applicable)</small>	<b>Comment</b>
1. CBCL Fee	\$416,000	
2. Flood Plain Study	\$34,000	To consider the impact of impounding stormwater in the upstream Lake system. Total cost was \$68K but split 50/50 with HRM
3. Flow Gauging	\$23,000	To assist in confirming the design flow.
4. Field Survey	\$8,000	To consider the impact of impounding stormwater in the upstream Lake system.
5. Staff Salaries/benefits	\$74,000	
6. Interest/Overheads	\$16,000	
<b>Total</b>	<b>\$571,000</b>	

## **DISCUSSION**

The Sullivan's Pond Storm Sewer Replacement project is unique to HRWC and presents significant challenges. The project entails the construction of a 4m x 4.5m (inside dimensions) concrete box in a highly urbanized environment. The new system will accommodate the 1 in 100 year storm event and provide for fish passage between the Harbour and the Lake system.

The scope, schedule and budget requirements to successfully complete this project are outlined in the following sections:

### **Scope**

In July 2015, the design consultant completed the preliminary design report which recommended a preferred solution to lead into full detail design. The recommended approach is a box culvert combined with some open channel elements. It is to be located along the route of the existing system. The preliminary design indicated that this option was the most favourable with respect to DFO approval, had the lowest life cycle cost, and the shortest construction schedule.

The projected total cost of the project is estimated to be in the order of \$17.5M and thus the project will be undertaken in two phases. Phase 1 will be the lower half of the system and Phase 2 will be the upper half of the system.

### **Schedule**

The preliminary design is complete and the resultant report was issued in July 2015. At that time the intent was to construct Phase 1 in 2016. Concurrent to the finalization of the preliminary design report there was a submission to HRM Harbour East Community Council requesting information from HRM staff with respect to the concept of "daylighting" the system. To daylight this system, in the context of recreating a naturalized stream, would require the system to be routed through HRM lands. This resulted in a HRM staff presentation at Regional Council on October 20, 2015. This concluded that no further consideration of this request was required and that the HRM lands were to be utilized for the Canal Greenway project. This removed any remaining uncertainty with respect to the routing of the stormwater system. However at this date it was too late to proceed with construction in 2016 and thus the schedule is now to complete the detailed design in 2016 and construct Phase 1 in 2017.

**ITEM #5.5**  
**HRWC Board**  
**February 25, 2016**

**Budget**

It is now estimated that the total cost to complete the detailed design of the entire project and tender the Phase 1 of the project is \$971,000 including net HST. It is estimated the consultant services during Phase 1 construction will be \$415,000 based on a 30 week construction period in 2017.

Table 2 provides an estimate of the entire project. This is based on the recommended Option 1B from the preliminary design report

**Table 2**

Item	Amount*
Construction Cost (Phase 1 and 2)	\$10,365,000
40% Contingency	<u>\$4,146,000</u>
Subtotal	\$14,511,000
Engineering - Design and Tender Phase Services	\$384,000
Engineering - Construction Phase Services	<u>\$415,000</u>
Subtotal	\$15,310,000
4.286% HST	\$656,000
Staff Salaries/Benefits	<u>\$250,000</u>
Subtotal	\$16,216,000
4% Interest/Overheads	<u>\$650,000</u>
Subtotal	\$16,866,000
Engineering – Work to Date	\$571,000
<b>TOTAL</b>	<b>\$17.44M</b>

\* The figures presented in Table 2 are inclusive of the costs incurred to date which were noted in Table 1.

At this time, it is projected that approximately \$8.3M will be required for the construction of Phase 1; however, this cost estimate will be reviewed at the end of the detailed design phase. Funding for the construction of Phase 1 will be included in the 2017/18 Capital Budget.

**BUDGET IMPLICATIONS**

The additional funding for the design phase of this project, in the amount of \$400,000 is available within the 2015/16 Capital Budget under “*Stormwater Pipes - Sullivan's Pond Storm Sewer Replacement – Phase I*” in the amount of \$100,000 and within the 2016/17 Capital Budget under “*Stormwater Pipes Sullivan's Pond Storm Sewer Replacement – Phase I*” in the amount of \$300,000.



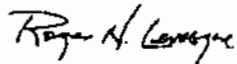
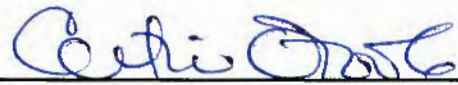
The proposed expenditure meets the “No Regrets – Unavoidable Needs” approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of “Required to ensure infrastructure system integrity and safety”.

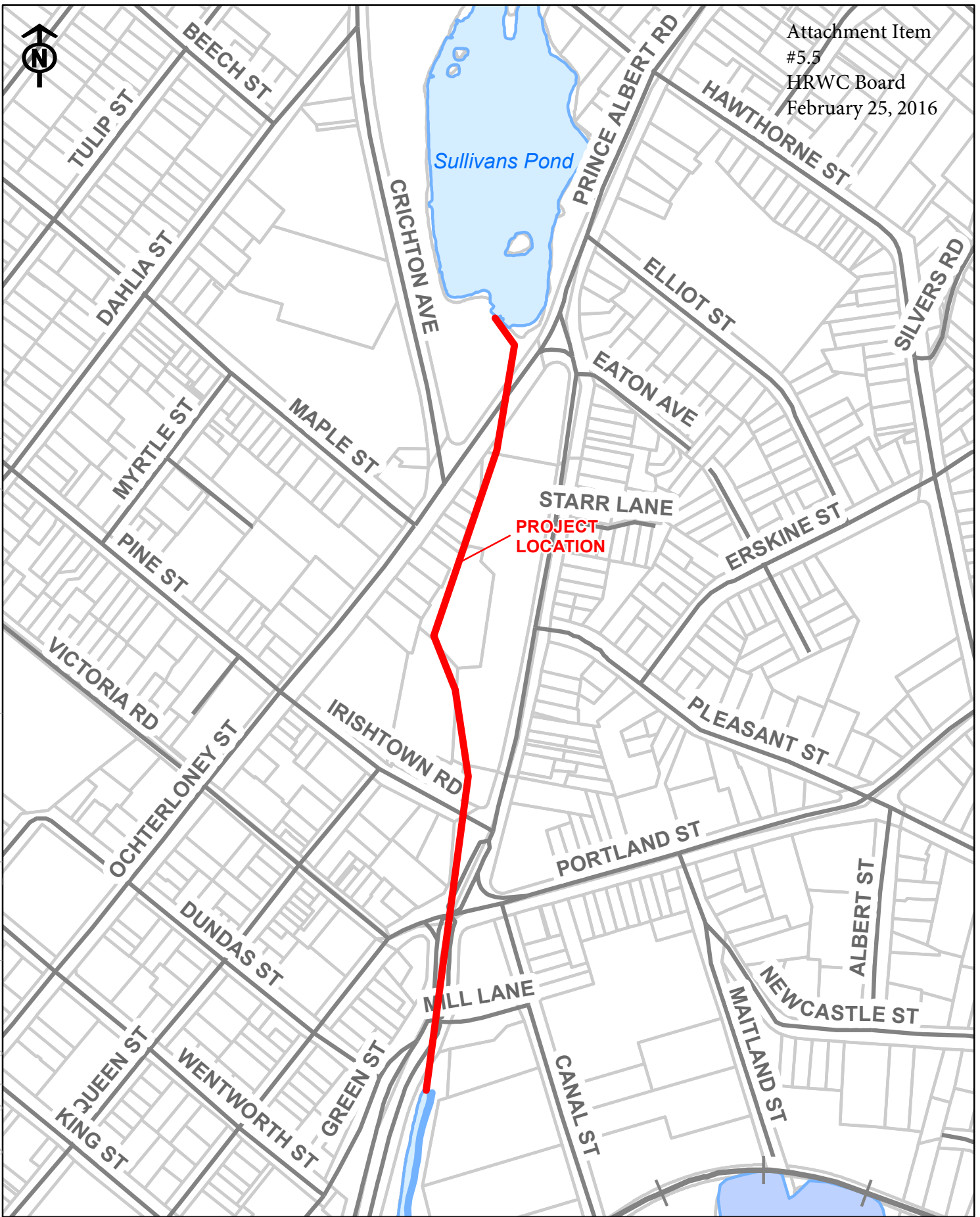
**ALTERNATIVES**

There are no recommended alternatives.

**ATTACHMENT**

Sketch – Sullivan’s Pond Storm Sewer System Replacement

Report Prepared by:	 _____ Roger Levesque, P. Eng. 219-3567
Financial Review by:	 _____ Cathie O'Toole, MBA, CPA CGA, Director, Corporate Services, 490-3685



Path: K:\Engineering\_Dept\Eng\_Information\Requests\Internal\_requests\David Ellis\Board Report\_2016\Sullivan's Pond Storm Sewer System Replacement.mxd

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

Data Source: Halifax Water / HRM  
Date: Friday, February 12, 2016

The information contained on this map may not be complete and/or accurate in all areas. Should accurate information or confirmation of completeness be required, please contact the Engineering Department of Halifax Water. Halifax Water will not be held liable for misuse of this information.


## Sullivan's Pond Storm Sewer System Replacement



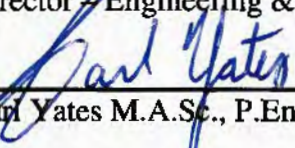
**February 25, 2016**

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

**SUBMITTED BY:**

  
\_\_\_\_\_  
Jamie Hannam, MBA, P. Eng.  
Director – Engineering & IS

**APPROVED:**

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

**DATE:** February 11, 2016

**SUBJECT:** Northwest Arm Sewer Rehabilitation – Detailed Design

---

**ORIGIN**

The 2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve the design of the Northwest Arm Sewer Rehabilitation project at an estimated cost of \$300,000.

**BACKGROUND**

The existing Northwest Arm (NWA) sewer system is approximately 100 years old and is at the end of its service life. The NWA system is a combined sewer (conveying wastewater and storm water) and services the Armdale area which represents approximately 20% of the Halifax peninsula. This collection system comprises a 650 hectare sewershed located within a well-developed portion of land and a population base of some 22,000 people. The NWA sewer is approximately 4.5 km in length and is typically 1200 mm in diameter and was constructed using a combination of materials and cross sections. Approximately one third of the sewer is round precast concrete, one third is segmental clay, and one third is horseshoe shape concrete. Access to the sewer is difficult because of its location between the shore of the Northwest Arm and houses, buildings and other structures that were constructed along the shore.

A condition assessment of the sewer was conducted in 2006 using video and sonar equipment. The assessment identified deficiencies along the entire length of the sewer. Severe sedimentation, root penetrations, exfiltration, infiltration and limited structural problems were identified, thus a rehabilitation strategy was initiated to eliminate these problems, extend the life of the sewer, and improve serviceability.

In 2009, a pilot project was conducted which resulted in approximately 460 metres of the NWA sewer rehabilitated with cured-in-place-pipe (CIPP) lining. The pilot project was successful in establishing that the CIPP method is viable and effective for rehabilitation of the circular portion of the NWA sewer. The cost of the pilot project was \$1,435,000 or approximately \$3,100 per lineal metre.

Following the successful pilot project, a study was completed by Genivar in 2012 to review if other trenchless technologies are viable, potentially more cost effective, or offer additional advantages. The report recommended the continued use of a CIPP lining system to rehabilitate the remaining 4 km of sewer.

### **DISCUSSION**

Based on the success and knowledge gained from the 2009 rehabilitation and 2012 review study, Halifax Water proposes to engage a qualified consultant to undertake the pre-design and detailed design for the rehabilitation of the remaining 4 km of the Northwest Arm trunk sewer. The estimated cost for the design phase of this project is \$300,000 including net HST. The design is anticipated to be complete by early 2017.

The total cost to rehabilitate the remaining length of the NWA sewer is estimated to be in the order of \$15M. The output from the detailed design process will include the provision of recommendations with respect to project phasing and a cost estimate based on the specific design.

The construction phase of the project is currently proposed for 2018 and 2019.

### **BUDGET IMPLICATIONS**

Funding in the amount of \$300,000 including net HST is available within the 2016/17 Capital Budget under "*Wastewater Trunk Sewers – Northwest Arm Sewer Rehabilitation*".

The proposed expenditure meets the "No Regrets – Unavoidable Needs" approach of the 2012 Integrated Resource Plan. The proposed work meets the NR-UN criteria of "Required to ensure infrastructure system integrity and safety".

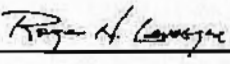
**ALTERNATIVES**

There are no recommended alternatives.


**ATTACHMENT**

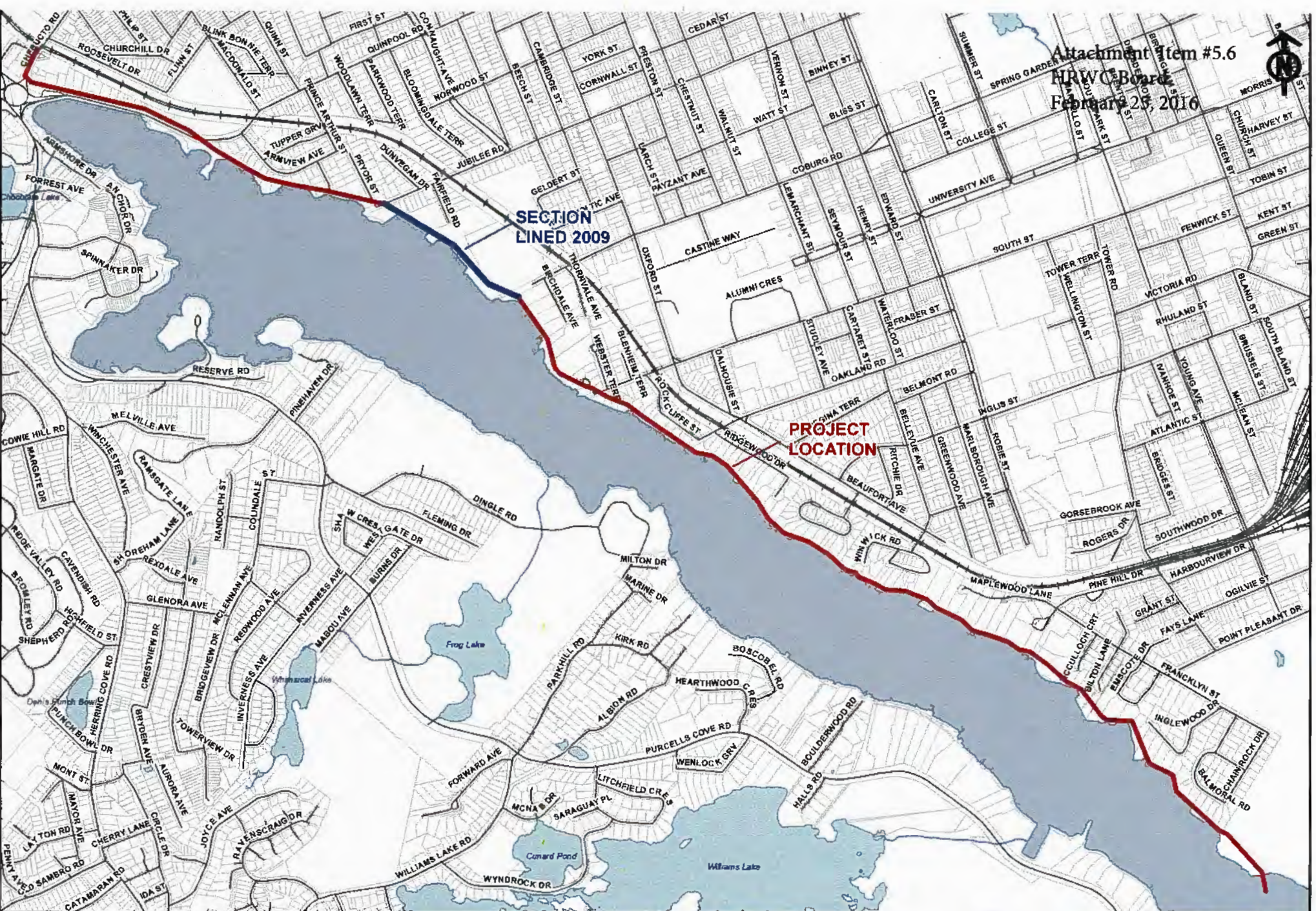
Sketch – Northwest Arm Sewer Rehabilitation

Report Prepared by:

  
\_\_\_\_\_  
Roger Levesque, P. Eng.

Financial Review by:

  
\_\_\_\_\_  
Cathie O'Toole, MBA, CPA, CGA, Director, Corporate  
Services, 490-3685



SECTION  
LINED 2009

PROJECT  
LOCATION

Data Source: Halifax Water / HRM  
Date: Wednesday, February 17, 2016

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### Northwest Arm Sewer Rehabilitation

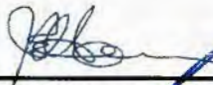


To provide world class services for our customers and our environment

**February 25, 2016**

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

**SUBMITTED BY:**

  
\_\_\_\_\_  
Jamie Hannam, P.Eng.  
Director - Engineering & Information Services

**APPROVED:**

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

**DATE:** February 18, 2016

**SUBJECT:** **Bedford Highway at Shaunslieve Drive Culvert Upgrade**

---

**ORIGIN**

2016/17 Capital Budget.

**RECOMMENDATION**

The HRWC Board approve additional funding for the Bedford Highway at Shaunslieve Drive Culvert Upgrade project in the amount of \$247,000 to reestablish the original \$407,000 project budget.

**BACKGROUND**

The existing 600mm (w) x 900mm (h) concrete, natural stone, and wood box culvert c/w catchbasin, crosses Bedford Highway at Shaunslieve Drive. The culvert has reached the end of its service life and was prioritized for capital renewal in 2015. The proposed new culvert will be approximately 19m in length, and will consist of a 1050mm dia. concrete pipe.

The Bedford Highway at Shaunslieve Drive Culvert Upgrade project was originally approved by the HRWC Board on March 5<sup>th</sup>, 2015 for an estimated cost of \$407,000. The project did not proceed to construction in 2015 due to a delay in the design and approvals process. Subsequently \$247,000 of project funds were reallocated to fund the Bluewater

Road Stormwater Infrastructure Replacement project. (This project was completed in late 2015)

**DISCUSSION**

It is proposed that the Bedford Highway at Shaunslieve Drive Culvert Upgrade project proceed to construction in 2016. \$247,000 in funding is required to return the project budget to the original estimated value of \$407,000.

**BUDGET IMPLICATIONS**

Funding in the amount of \$247,000 including net HST is available within the 2016/17 (Stormwater – Culverts/Ditches) Capital Budget under “Bedford Highway at Sbaunslieve Drive Culvert Upgrade”.



The proposed expenditures meet the “No Regrets – Unavoidable Needs” approach of the 2012 Integrated Resource Plan. The proposed works meet the NR-UN criterion of “required to ensure the system integrity and safety”. The projects meet this criterion based on the following: “Renewal or rehabilitation of system components that by current measures are clearly approaching a condition that could impair normal system operation”.

**ALTERNATIVES**

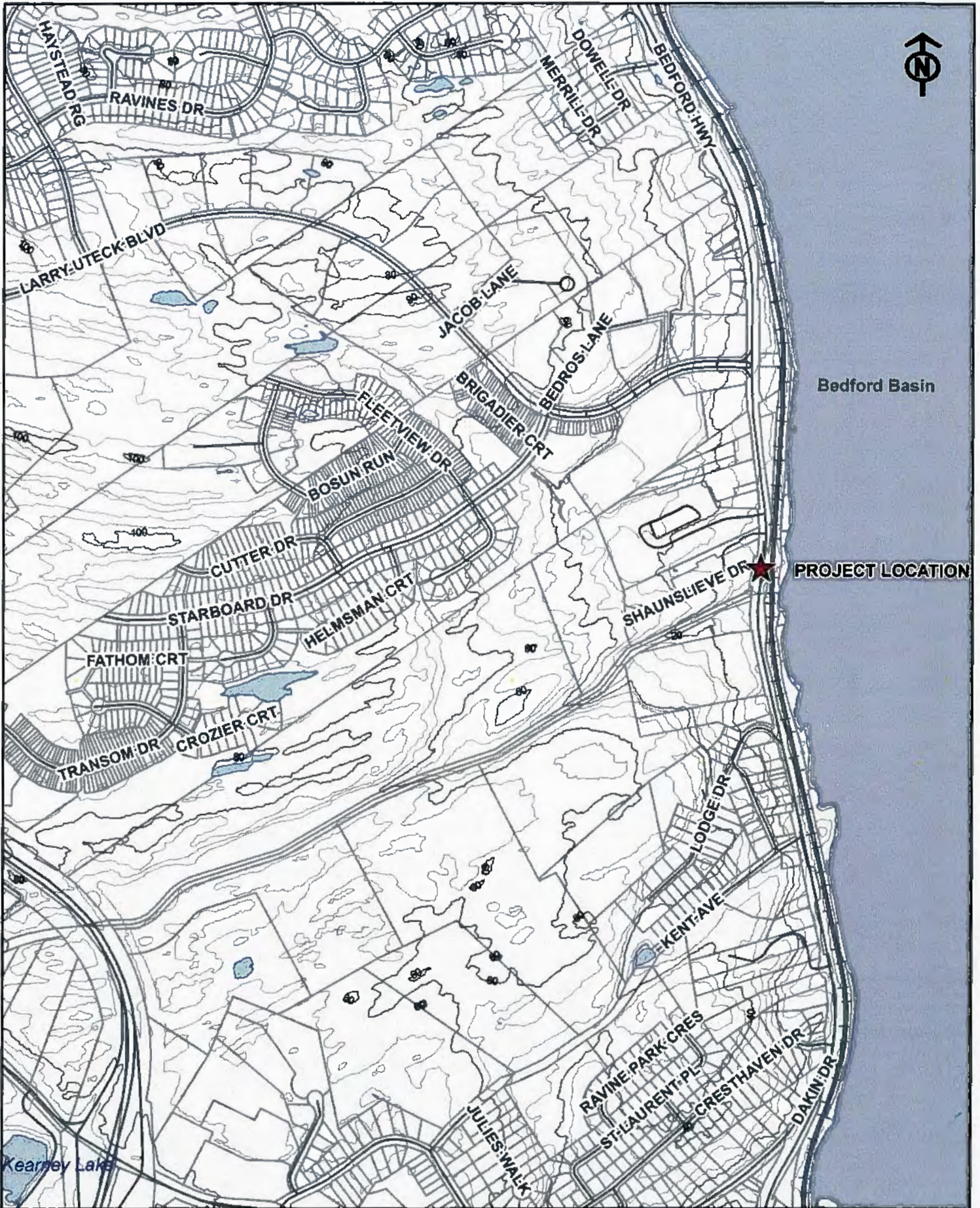
There are no recommended alternatives.

**ATTACHMENT**

Sketch – Bedford Hwy at Shaunslieve Dr Culvert Replacement (Attachment 1)

Report Prepared by:	 Brad Baxter, P. Eng., Engineering Technologist II Engineering & IS Department, 237-5390
Financial Reviewed by:	 Cathie O'Toole, MBA, CPA, CGA, Director Corporate Services, 490-3685





Drawn By: J. White  
 Data Source: Halifax Water / HRM  
 Date: October-24-14

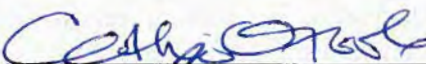
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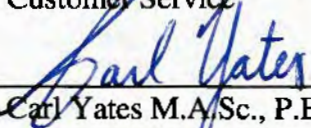
## Bedford Hwy. at Shaunslieve Dr. Culvert Replacement



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

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

**SUBMITTED BY:**   
Cathie O'Toole, MBA, CPA, CGA Director of Finance & Customer Service

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

**DATE:** February 18, 2016

**SUBJECT:** 2016 Spring Debenture

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**ORIGIN**

Halifax Water (HW) participation in the Spring 2016 MFC Debenture issue to secure the re-financing for a balloon payment that comes due June 2016.

**RECOMMENDATION**

It is recommended that the Halifax Water Board:

1. Approve the refinancing of a \$2,000,000 balloon payment for the remaining 10 year term with an all-inclusive rate not to exceed 5.5%.

**BACKGROUND**

The HRWC is legally required to borrow through the MFC. The borrowing proposed in this report is consistent with the Five Year Business Plan, and the Approved Operating and Capital Budgets for 2015/16, and the approved rates.

**DISCUSSION**

Long term debt issued for water and wastewater projects is traditionally amortized for a period of 20 years based on the life of the asset being financed. Traditionally the market for 20 year financing in Canada has been significantly more expensive than 10 year financing so 20 year amortized debt is usually financed for 10 years and the balloon payment refinanced for the remaining 10 years.

HRWC has a balloon payment of \$2,280,000 due June 1, 2016 and \$2,000,000 is eligible for refinancing for a remaining 10 year term. HRWC is proposing to refinance the balloon payment of \$2,000,000 for the remaining 10 year amortization period (original loan June 2006, #26-A-1).

The 2016/17 Capital and Operating Budgets were prepared based on a projection that HRWC will be required to issue \$31,946,215 million of debt in 2016/17 to finance water, wastewater and stormwater additions to utility plant in service. HRWC plans to bring this forward in the fall 2016 debenture. The final amount, timing of the debt issuance and interest rates, will not be known with certainty until the formal debenture process concludes. Additionally, there may be \$825,000 in debt associated with unregulated capital projects depending upon project timing and approvals.

HRWC's debt is covered by a blanket guaranteed approved by HRM Council in September 2014. The blanket guarantee will apply to all HRWC debt with a condition that HRWC must maintain a debt service ratio of 35% or less. HRWC's debt service ratio is 21.7% as of December 31, 2015.

HRWC's outstanding debt at March 31, 2015 was \$231.7 million, and debt outstanding is projected to be \$237.7 million at March 31, 2016. Projected debt is expected to be \$242 million by March 31, 2017, and the projected debt service ratio by March 31, 2017 is 22.83%.

### **BUDGET IMPLICATIONS**

HRWC will has budgeted for \$31.7 M in debt servicing in 2016/17; an 8.5% increase from 2015/16. Halifax Water's capital financing strategy is designed to maintain a debt service ratio of 35% or less; and to use a mixture of infrastructure funding, development related charges (reserves), depreciation, and debt.

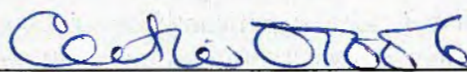
### **ALTERNATIVES**

None

### **ATTACHMENTS**

Balloon Refinancing Letter from Municipal Finance Corporation  
Borrowing Resolution  
Cash Flow Model for 2016/17 based on approved Operating and Capital Budgets

Report Prepared by:



Carie O'Toole, MBA, CPA, CGA Director of Corporate Services, 490-3685

**Mailing address**  
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Station M  
Halifax, NS  
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**Telephone**  
(902) 424-6333  
**Fax**  
(902) 424-0525  
**Website**  
[www.nsmfc.ca](http://www.nsmfc.ca)

January 14, 2016

Cathie O'Toole  
Director of Finance & Customer Service  
Halifax Regional Water Commission  
450 Cowie Hill  
Halifax, N.S.  
B3K 5M1

Dear Ms. O'Toole:

**RE: Notification of Balloon Payment Due in Fiscal 2016-2017**

This letter is a reminder that the Halifax Regional Water Commission has a balloon payment due in the upcoming fiscal year. Balloon payments may be paid in full upon the maturity date as indicated in the table below, or they may be refinanced in full or part through the Nova Scotia Municipal Finance Corporation (MFC) for the remaining life of the term of the original debenture. If your municipality is interested in refinancing their balloon payment, the MFC must receive confirmation that you wish to do so prior to the maturity date of the debenture.

The MFC typically issues debentures in the spring (May or June) and then again in the fall (October or November). For those units seeking refinancing and whose balloon payment maturity date may be in advance of the debenture issue date, the MFC has a short term bridge financing program that may be used to bridge the loan until such time that a debenture financing can be secured.

**Balloon Payment Options**

**Payment of Debenture:**

Original Loan Date	Payment Due Date	Total Balloon Payment Required
June 1, 2006	June 1, 2016	\$2,280,000.00

**Refinancing of Balloon Payment:**

Original Loan Date	Loan Outstanding	Payment Required in 2016-17*	Amount Eligible for Refinancing	Term
June 1, 2006	2,280,000.00	280,000.00	2,000,000.00	10

\* Payments required in 2016-17 are for the balloon payments only and do not include any other outstanding principal and interest payments due to the MFC in fiscal 2016-17.

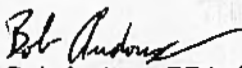
N.S.M.F.C.  
January 14, 2016

Page 2.

Letters seeking confirmation of participation in the MFC debenture issues are typically mailed in February and in July. If you wish to refinance the balloon payment, it is important that the MFC receives a commitment to participate in advance of the maturity date of your balloon payment.

If you have any questions about your balloon payment, the short term bridge financing program or the debenture issue process, please do not hesitate to contact myself at (902) 424-7172. You can also visit our web site at <http://www.nsmfc.ca>

Yours truly,

  
Bob Audoux, BBA, CGA  
Manager, Financial Services

c:c Municipal Advisor

F:UNITS GEN INFO/Balloon Pay.Pg2

Account No.	Account Name	Account Type	Account Status	Account Balance
1000000000	1000000000	1000000000	1000000000	1000000000

**HALIFAX REGIONAL WATER COMMISSION  
BORROWING RESOLUTION**

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

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

AND WHEREAS the Commission wishes to borrow for the purpose of the refinancing of a balloon payment for the remaining 10 year amortization period;

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

**BE IT THEREFORE RESOLVED**

THAT under the authority of Section 16 of the Act the Commission borrow from the Municipal Finance Corporation, for the purpose set forth above, a sum or sums not exceeding \$2,000,000 for a 10 year term amortized over the term at an all-inclusive rate not to exceed 5.5% percent;

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

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

I certify the above to be a true copy of a Resolution approved at a meeting of the Halifax Regional Water Commission held on February 28, 2016.

---


James G. Spurr  
Corporate Secretary and Legal Counsel

Cash Flow Model for 2016-17  
As of Feb 8/16

	Original Budget	Revised Budget	Forecast	Adjustments for Cash Flow	Cash Flow	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Operating Revenue	135,675,302	135,675,302	135,675,302	-	135,675,302	10,093,293	10,093,293	10,393,293	10,393,293	10,893,293	10,893,293	19,908,370	10,393,293	10,393,293	10,093,293	10,093,293	12,033,997	135,675,302
Operating Expenses	(79,599,616)	(79,599,616)	(79,599,616)	3,086,400	(76,513,216)	(6,159,435)	(6,159,435)	(7,459,435)	(6,159,435)	(6,159,435)	(6,159,435)	(6,159,435)	(6,159,435)	(7,459,435)	(6,159,435)	(6,159,435)	(6,159,435)	(76,513,216)
Non Op Revenue	3,290,620	3,290,620	3,314,267	-	3,314,267	109,522	109,522	109,522	109,522	109,522	2,109,522	109,522	109,522	109,522	109,522	109,522	109,522	3,314,267
Non Op Expenses	(59,212,016)	(59,212,016)	(59,485,328)	23,386,668	(36,098,660)	(266,445)	(3,978,841)	(3,339,685)	(646,198)	(1,792)	(6,929,867)	(2,198,900)	(8,704,119)	(188,299)	(3,903,148)	(1,792)	(5,939,576)	(36,098,660)
<b>Operations Total</b>	<b>154,290</b>	<b>154,290</b>	<b>(95,375)</b>	<b>26,473,068</b>	<b>26,377,693</b>	<b>3,776,936</b>	<b>64,540</b>	<b>(296,304)</b>	<b>3,697,183</b>	<b>4,841,589</b>	<b>(86,486)</b>	<b>11,659,558</b>	<b>(4,360,738)</b>	<b>2,855,082</b>	<b>140,233</b>	<b>4,041,589</b>	<b>44,509</b>	<b>26,377,693</b>
Capital Expenditures (incl CCC projects)	(66,777,000)	(66,777,000)	(68,427,000)	(20,600,000)	(89,027,000)	(4,586,828)	(5,787,850)	(7,436,923)	(8,683,669)	(8,018,332)	(8,929,813)	(8,948,141)	(8,719,012)	(7,209,440)	(6,391,394)	(7,301,728)	(7,030,594)	(89,043,725)
New Long Term Debt	32,771,215	32,771,215	32,771,215	1,742,258	34,513,473	-	-	1,985,175	-	-	-	-	32,528,298	-	-	-	-	34,513,473
Other Incoming Cash (CCC, RDC, RDW, etc)	9,166,000	9,166,000	16,491,000	3,290,000	19,781,000	272,345	262,713	3,438,500	125,000	747,344	3,613,500	350,000	350,000	5,827,410	397,794	409,237	3,985,814	19,779,657
Changes in working capital	-	-	-	(350,000)	(350,000)	100,000	100,000	175,000	225,000	50,000	-	-	-	-	-	-	1,000,000	1,650,000
<b>Net Cash Flow</b>	<b>(24,685,495)</b>	<b>(24,685,495)</b>	<b>(19,280,160)</b>	<b>10,555,326</b>	<b>(8,704,834)</b>	<b>(437,547)</b>	<b>(5,360,597)</b>	<b>(2,134,552)</b>	<b>(4,636,485)</b>	<b>(2,379,399)</b>	<b>(5,402,799)</b>	<b>3,061,417</b>	<b>19,798,548</b>	<b>1,473,052</b>	<b>(5,853,367)</b>	<b>(2,850,901)</b>	<b>(2,000,271)</b>	<b>(6,722,901)</b>
Opening Cash Balance					46,000,000	46,000,000	45,562,453	40,201,856	38,067,304	33,430,819	31,051,420	25,648,621	28,710,038	48,508,586	49,981,638	44,128,271	41,277,370	46,000,000
Ending Cash Balance					37,295,166	45,562,453	40,201,856	38,067,304	33,430,819	31,051,420	25,648,621	28,710,038	48,508,586	49,981,638	44,128,271	41,277,370	39,277,099	39,277,099
Peaks & Valleys						Peak					Valley		Peak				Valley	

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

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

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

**DATE:** February 17, 2016

**SUBJECT:** Approval Authority List for Purchases

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**ORIGIN**

In accordance with the HRWC Procurement Policy, the Board approves revisions to the Approval Authority List. This list forms part of the internal control system relied upon by our external auditors.

**RECOMMENDATION**

It is recommended the HRWC Board approve the revised list as presented, with the additions of new positions, as well as other staff transitions.

**BACKGROUND**

The Approval Authority Listing was last approved in October 2012.

**DISCUSSION**

The approval authority list is reviewed by the Board from time to time. The list identifies the employees who are authorized to approve purchases on behalf of HRWC. Individuals are identified by name on the list, however it is the purchasing requirements of the position which forms the basis for providing the authority. Changes in the level of approval authority for a position and the addition of new unique positions with approval authority above \$7,500 require approval of the Board. The administrative practice has been that approval authority of \$2,000 or less for a position may be granted with the approval of the General Manager and the Director of the Department.



**ITEM # 7**  
**HRWC Board**  
**February 25, 2016**

As the employees in positions change over time the list is updated and distributed internally, however approval is not required if the approval level for a position has not changed.

The restructuring of the Corporate Services Department has prompted some changes. Four positions have been placed at the approval level of \$15,000, increasing from the \$7,500 level. Two positions at this level were eliminated, the Controller and the Director of Human Resources. The new positions are:

Position	Employee	Approval
Manager, Accounting	Warren Brake	\$ 15,000
Manager, Customer Care	Heather Singer	\$ 15,000
Manager, Finance	Allan Campbell	\$ 15,000
Manager, Human Resources	Rochelle Bellemare	\$ 15,000

Three positions in the Engineering and Information Services Department require higher purchasing authority due to the purchasing needs of the roles. Similarly, the authority for one position in the Water Services Department requires a change to a \$15,000 approval level. These positions are:

Position	Employee	Approval
Watershed Manager	Barry Geddes	\$ 15,000
GIS Product Coordinator	Bernie Corbett	\$ 7,500
GIS Technical Coordinator	Craig Muir	\$ 7,500
GIS Updating Coordinator	Melissa O'Grady	\$ 7,500

Several new Engineer and Project Manager positions have been created in recent years within the Departments of Engineering & Information Services, Water Services, Wastewater Services, and Regulatory Services. As the positions and purchasing requirements are similar to existing Engineer positions they were provided with the same approval authority and are identified below for information purposes:

Position	Employee	Approval
Modelling Engineer, Asset Management	David Blades	\$ 15,000
Project Manager, Information Services	Kevin O'Reilly	\$ 15,000
Development Engineer, Development Appr	Meghan Woszynski	\$ 15,000
Operations Engineer, Water Services	John Eisnor	\$ 15,000
Operations Engineer, Wastewater Services	Shawn Rowe	\$ 15,000
Environmental Engineer, SIR Program	Patricia Isnor	\$ 15,000
Environmental Engineer, P2 Program	Vacant	\$ 15,000

**BUDGET IMPLICATIONS**

No budget implications.

**ALTERNATIVES**

No logical alternatives.

**ATTACHMENT**

Approval Authority List – Revised February 12, 2016

Report prepared by:



Warren Brake, Manager, Accounting, B.Comm, CPA, CGA

# HALIFAX WATER - Approval Authority List

(amounts shown on a before-tax basis)

Issue Date: February 2016  
Pending Board approval

CORPORATE SERVICES	REGULATORY SERVICES	ENGINEERING & INFORMATION SERVICES	WATER SERVICES	WASTEWATER/ STORMWATER SERVICES
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**Approvals - up to \$50,000**

(over \$50,000 requires any two signatures)

Yates, Carl				
O'Toole, Cathie	MacKenzie, Kenda	Hannam, Jamie	Campbell, Reid	Arora, Sushcel

**Approvals - up to \$15,000**

Bellemare, Rochelle	Bellemare, Pat	Blades, David	Eisnor, John	Avery, Derek
Brake, Warren	Blouin, Tony	Ellis, David	Geddes, Barry	Crouse, Nigel
Campbell, Allan	Campbell, Craig	Fahie, Chris	Hiscock, Dave	Deagle, Mike
Corneau, Michelle	DeYoung, Josh	Feener, Mark	Houlihan, Andrew	MacDonald, Ken
Mathew, Shiju	Gray, Kevin	Gillis, Rob	Krkosek, Wendy (term)	MacNeil, Rory
Singer, Heather	Isnor, Patricia	Gorman, Tom	McMullin, Barry	MacNab, Andrew
Spurr, James	Lloyd, Charles	Guppy, Ian	Oxner, Garry	Parsons, Sheldon
	Woszczynski, Meghan	Healy, Kevin	Stevens, Bill	Patey, Danny
	Vacant (Env Engineer)	Knapp, Jeffrey	Waddell, Colin	Patterson, Jerry
		Levesque, Roger	Vacant (Water Services C)	Reid, Rick
		MacDonald, Jonathan		Rowe, Shawn
		MacNeil, Harold		Shea, Heather
		Maynard, Peter		Titus, Blair
		McGonnell, Mark		White, Peter
		Miller, Heather		Winter, Phillip
		O'Reilly, Kevin		
		Pillay, Dayalan		
		Rice, Greg		
		Roberge, Rene (Term)		
		Slyater, Mike		
		Stewart, Jeremy		
		Tagra, Sanjeev		
		Williams, Valerie		

**Approvals - up to \$7,500**

Campbell, James		Corbett, Bernie	Cameron, Melvin	Amaral, Dino
		Craig Muir	Connolly, Todd	King, Cindy
		O'Grady, Melissa	Doucette, Raymond	Makin, Tony
		Thorne, Terry	Kaiser, Reid	Pelley, Thoren
			Murray, Alana	Weeks, Chris
			Seguin, Robert	Williams, Cedric
			Tooke, Tony	

**Approvals - up to \$2,000**

Fraser, Shelly		Belliveau, Norma	Boiduk, Paul	
Hood, Sandy		Waterfield, David	Bruce, James	
Kearney, Karen			Kennedy, Bruce	
MacKinnon, Maria			Masters, Todd	
MacLean, Cindy			Taylor, Kerry-Anne	
Rowe, Rebecca			White, Chris	
Seguin, Amanda				
Shatford, Tanya				
Slaunwhite, Dawn				
Whalen, Corey				


**Approvals - up to \$1,000**

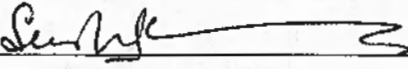
Grace, Ann Marie	Jodrey, Patricia	Button, Nola	Clark, Colette	Awalt, Reg
Lucas, Gina	MacDonald, Shawn	Duffy, Lynn	Dauphinee, Rachel	Barkhouse, Brian
Penney, Amanda	St. Croix, Monica	Levangie, Sonya	Fraser, Jeannie	Bent, George
Pottie, Brittany	Vacant (Admin Assistant)	Nolan, Rebecca (Term)	Gardiner, Karen	Burke, Mike
Reid, Gail			Legassie, Andrea	Oulette, Karen
Skinner, Lorna			MacEachern, Cheryl	Parsons, Sherry
Strathdee, Stephanie			Simms, Trish	Pictou, Murray
Westhaver, Christine (term)				Rafuse, Doug
				White, Melissa
				Zinck, Deborah


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

**SUBMITTED BY:**

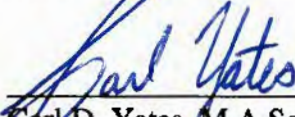
  
Cathie O'Toole, MBA, CPA, CGA, Director, Corporate Services

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

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

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

**APPROVED:**

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

**SUBJECT:** Financial and Operations Monthly Information Report

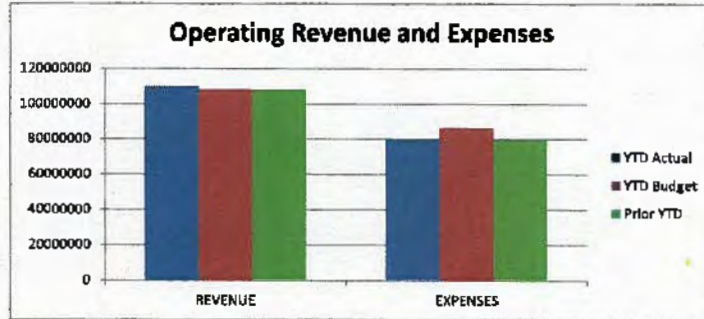
**INFORMATION REPORT**

**ORIGIN:**

Regular monthly update.

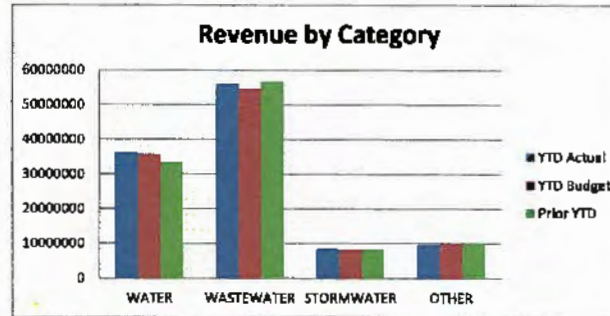
This report provides a high level overview of financial and operational performance for the utility. Financial results are presented first, followed by indicators and statistics for water and wastewater.

HALIFAX WATER  
 UNAUDITED FINANCIAL INFORMATION  
 APRIL 1/15 - JANUARY 31/16 (10 MONTHS)  
 '000



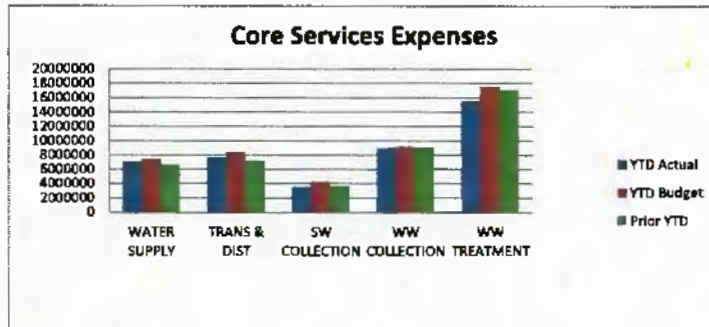
OPERATING REVENUE AND EXPENSES

	YTD Actual	YTD Budget	Prior YTD	% of Budget
REVENUE	\$109,890	\$108,254	\$108,026	84.59%
EXPENSES	\$79,090	\$86,345	\$79,834	76.33%
	<b>\$30,800</b>	<b>\$21,909</b>	<b>\$28,191</b>	<b>117.15%</b>



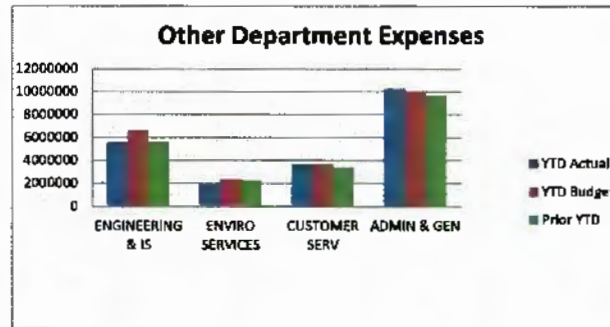
REVENUE BY CATEGORY

	YTD Actual	YTD Budget	Prior YTD
WATER	\$38,194	\$35,619	\$33,213
WASTEWATER	\$56,027	\$54,587	\$56,551
STORMWATER	\$6,183	\$7,997	\$8,060
OTHER	\$9,487	\$10,051	\$10,102
	<b>\$109,890</b>	<b>\$108,254</b>	<b>\$108,026</b>



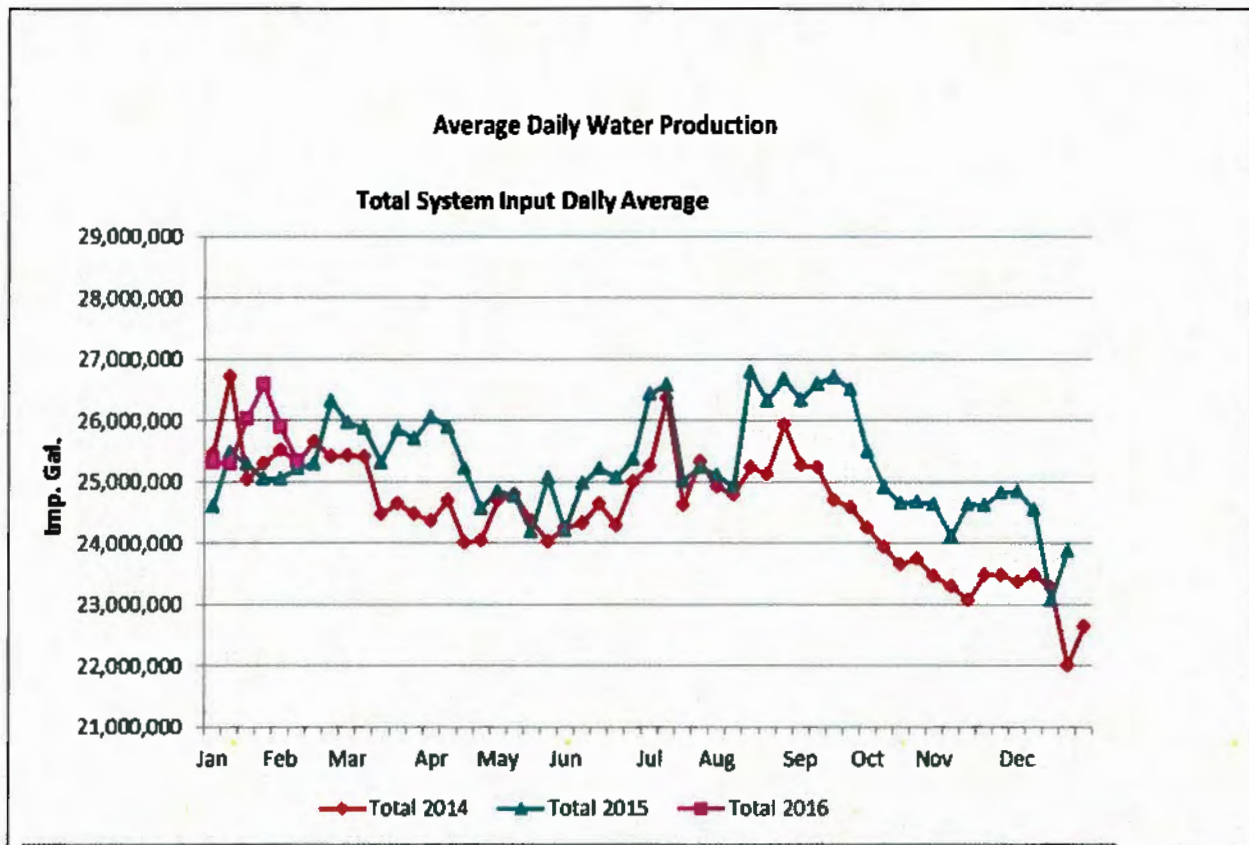
CORE SERVICES EXPENSES

	YTD Actual	YTD Budget	Prior YTD	% of Budget
WATER SUPPLY	\$7,008	\$7,439	\$6,803	78.51%
TRANS & DIST	\$7,581	\$8,301	\$7,131	76.11%
SW COLLECTION	\$3,437	\$4,204	\$3,574	68.13%
WW COLLECTION	\$8,891	\$9,090	\$9,051	81.51%
WW TREATMENT	\$15,515	\$17,477	\$17,029	73.98%
	<b>\$42,433</b>	<b>\$46,510</b>	<b>\$43,588</b>	<b>76.03%</b>



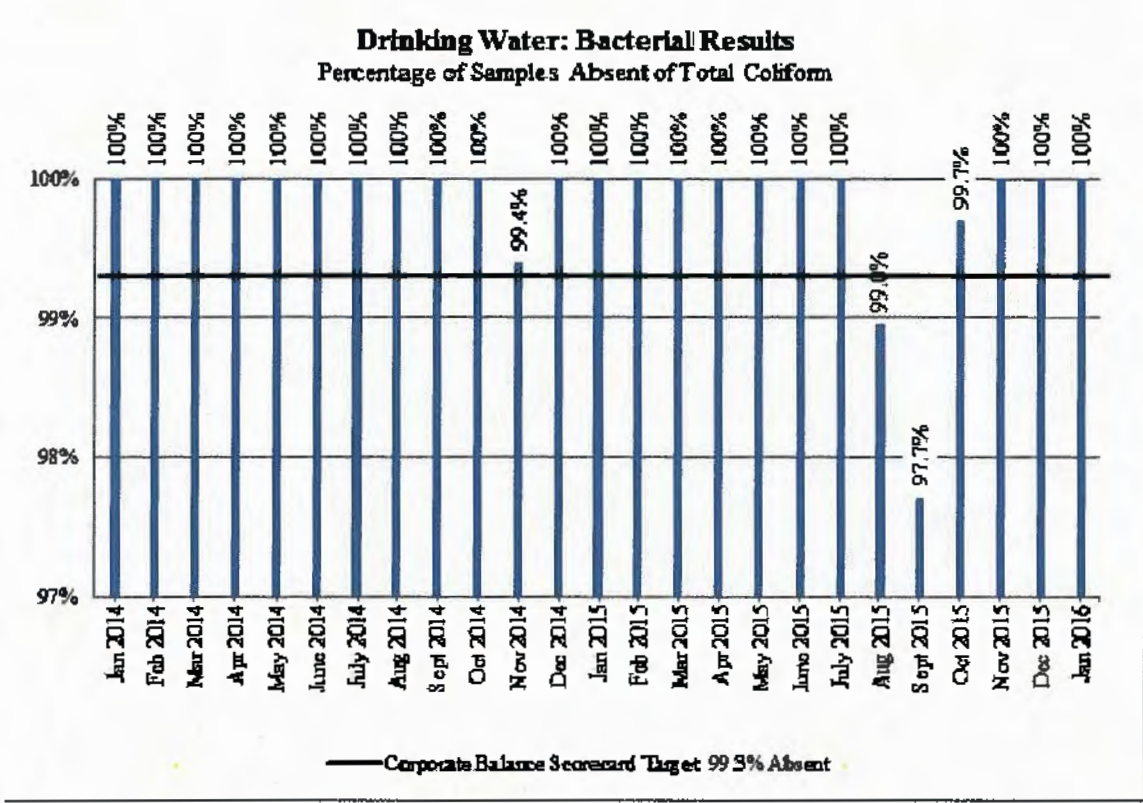
OTHER DEPARTMENT EXPENSES

	YTD Actual	YTD Budget	Prior YTD
ENGINEERING & IS	\$5,559	\$8,559	\$5,601
ENVIRO SERVICES	\$1,868	\$2,330	\$2,229
CUSTOMER SERV	\$3,621	\$3,843	\$3,390
ADMIN & GEN	\$10,248	\$9,959	\$9,838
	<b>\$21,413</b>	<b>\$22,491</b>	<b>\$20,868</b>



<b>Regional Water Main Break/Leak Data</b>		
<b>Year</b>	<b>Total Breaks/Leaks</b>	<b>Current 12 Month Rolling Total (up to February 17/16)</b>
2014/15	210	226
2013/14	213	
2012/13	262	
2011/12	205	
2010/11	198	
<b>Total</b>	<b>1088</b>	
<b>Yr. Avg.</b>	<b>217.6</b>	

<b>Water Accountability</b>
<b>Losses per Service Connection/Day (International Water Association Standard)</b>
<i>Period Ending December 31, 2015</i>
Real Losses: 266 litres
CBS Target: 180



Water Quality Master Plan Objectives				
2015-2016 Q3				
Objective	Total Sites	% of Sites Achieving Target	All Sites: 90th Percentile < 15 µg/L	CBSC Awarded Points
Disinfection	64	95%	---	15
Total Trihalomethanes	24	92%	---	13
Haloacetic Acids	21	100%	---	20
Particle Removal	5	98%	---	18
Corrosion Control*	69	---	8.88	20
<b>TOTAL</b>				<b>86</b>

Score: 86/100

All waste water treatment facilities have had their compliance criteria changed by NSE. Each facility in this report is assessed based on monthly or quarterly averages, depending on the averaging period specified in its Approval variance.

Wastewater Treatment Facility	Wastewater Treatment Facility Compliance Summary																				Q4 Toxicity	Trend		
	Rolling Averages - November and December 2015, January 2016																							
	CBOD <sub>5</sub> (mg/L)		TSS (mg/L)		F. coliform (CFU/100mL)		E. coli (counts/100mL)		pH		Ammonia (mg/L)		O-Phosphate (mg/L)		Phosphorous (mg/L)		TRC (mg/L)		Dissolved Oxygen (mg/L)					
NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.			
Halifax	50	34	40	22	-	5000	9089	6-9	6.8	-	-	-	-	-	-	-	-	-	-	-	-	Continued		
Dartmouth	50	26	40	32	5000	4207	-	6-9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	Continued		
Herring Cove	50	15	40	13	-	5000	499	6-9	7.0	-	-	-	-	-	-	-	-	-	-	-	-	Continued		
Eastern Passage	50	8	40	9	5000	44	-	6.5-9	7.3	-	-	-	-	-	-	-	-	-	-	-	-	Continued		
Mill Cove	25	13	25	17	-	200	939	6.5-9	6.8	-	-	-	-	-	-	-	-	-	-	-	-	Not seasonally limited	Continued	
Springfield	20	4	20	2	-	200	2396	6-9	8.8	-	-	-	-	-	-	0.02	0.24	-	-	-	-	Not seasonally limited	Continued	
Belmont	25	30	25	58	-	200	1842	6-9	7.3	-	-	-	-	-	-	0.02	0.34	-	-	-	-	-	Continued	
Frame	20	6	20	45	-	200	100	6.5-9	7.0	-	-	-	-	-	-	0.02	0.62	-	-	-	-	-	Improved	
Middle Musq.	20	6	20	15	-	200	692	6-9	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	Continued	
Uplands	20	10	20	6	-	200	17	6-9	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	Continued	
Aerotech	5	5	5	9	-	200	10	6-9	7.1	5.7W 1.2S	0.7	-	-	0.5	0.2	-	-	-	-	-	-	-	Not seasonally limited	Continued
North Preston	10	5	10	5	200	10	-	6.5-9	7.4	3	0.3	1.5	0.1	-	-	-	-	-	-	-	-	-	-	Continued
Lockview	20	6	20	16	-	200	30	6.5-9	7.8	8S	1.9	-	-	1.2S	0.5	-	-	-	-	-	-	-	-	Continued
Steeves (Wellington)	15	5	15	2	200	10	-	6.5-9	7.7	3	8.1	1	0.1	-	-	-	-	-	-	-	-	-	-	Continued
BLT	15	10	20	15	-	200	20	6.5-9	7.3	5W 3S	17.0	-	-	3W 1S	1.3	0.02	0.15	5	9.5	-	-	-	Not seasonally limited	Continued
Avg. of all Facilities	12		18		1068		671.8		7.4		5.6		0.1		0.7		0.3		9.5					

**NOTES & ACRONYMS:**

CBOD<sub>5</sub> - Carbonaceous 5-Day Biochemical Oxygen Demand

TSS - Total Suspended Solids

TRC - Total Residual Chlorine

W / S - Winter / Summer compliance limits

NSE requires monthly averages be less than the NSE Compliance Limit for each parameter (Dartmouth, Eastern Passage, Halifax, Herring Cove, Mill Cove)

NSE requires quarterly averages be less than the NSE Compliance Limit for each parameter (Aerotech, Lockview, Mid. Musq., Belmont, Frame, BLT, Uplands, North Preston, Steeves, Springfield)

Continued - All parameters remain essentially unchanged since the last report

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

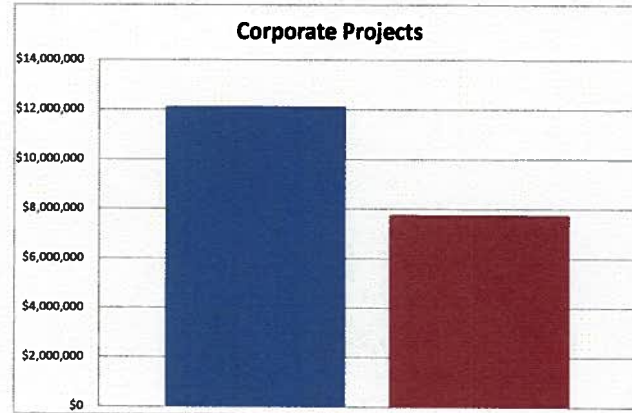
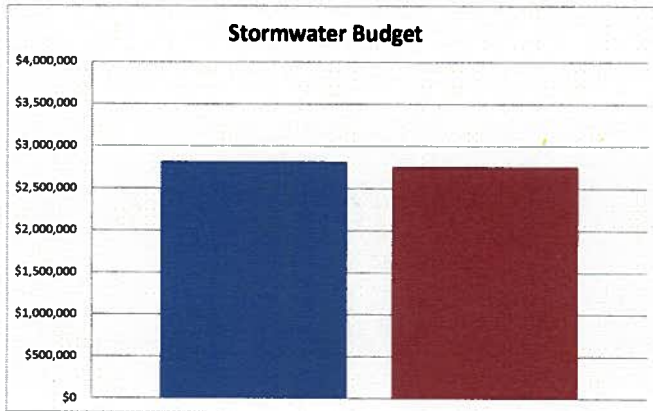
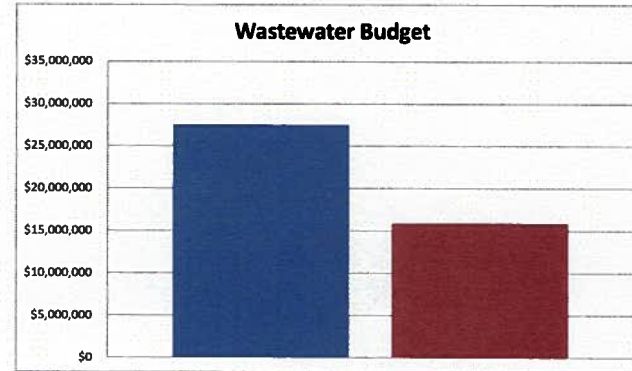
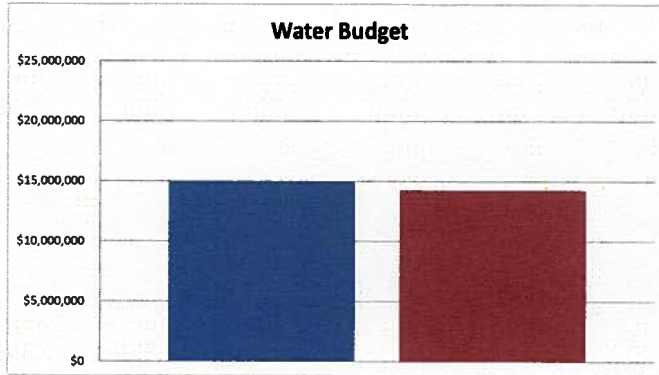
Declined - One or more parameter(s) became non-compliant since the last report

**LEGEND**

  NSE Compliant  
  NSE Non-Compliant



**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**



<b><u>WATER</u></b>	
TOTAL APPROVED BUDGET	\$14,880,000
APPROVALS TO DATE	\$14,183,000

<b><u>WASTEWATER</u></b>	
TOTAL APPROVED BUDGET	\$27,425,000
APPROVALS TO DATE	\$15,801,862

<b><u>STORMWATER</u></b>	
TOTAL APPROVED BUDGET	\$2,815,000
APPROVALS TO DATE	\$2,755,000

<b><u>CORPORATE PROJECTS</u></b>	
TOTAL APPROVED BUDGET	\$12,094,000
APPROVALS TO DATE	\$7,726,000

Report Prepared by:   
 Jamie Hannam, P. Eng.  
 Director of Engineering & IS

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WATER \$14,888,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
<b>2015/16 Water</b>							
29-Jan-15	15-Apr-15	<b>Advanced Funding Integrated Projects</b>					
<b>East</b>							
		Penhorn Drive	\$484,200	\$484,200	Dexter	\$327,628	\$431,089
		Sarnia Avenue	\$172,800	\$172,800	Dexter	\$136,216	\$153,846
		Main Road/Pleasant Street (Watermain Forcemain portion of Belmont WWTF Decommissioning plus watermain renewal)	\$1,650,000	\$1,650,000	Dexter	\$1,506,949	\$1,469,000
<b>West</b>							
		Kempt Road	\$110,000	\$110,000	Dexter	\$352,022	\$397,934
		Pepperell St	\$371,000	\$371,000	Dexter	\$291,908	\$330,306
		Richmond Ave	\$152,000	\$152,000	Cumberland	\$228,515	\$135,327
		MacAlpine Ave	\$232,000	\$232,000	Dexter Construction	\$186,065	\$206,552
		Drysdale Road	\$208,000	\$208,000	Dexter Construction	\$220,670	\$185,185,00
		Brunswick St	\$200,000	\$200,000			
<b>Central</b>							
		First Avenue	\$370,000	\$370,000	ARCP	\$285,378	\$329,416
		Sackville Cross Road Bridge		\$100,000	B. Spicer	\$99,406	\$89,031
		Alder Crescent - Wastewater Collection System Replacement	\$150,000	\$150,000	J.R. Eisenor Contracting	\$130,607	\$133,547
<b>Total of Integrated Projects</b>			<b>\$4,100,000</b>	<b>\$4,200,000</b>			
29-Jan-15		Lake Major WSP - Chlorinator Replacement Project was not identified in 2014/15 - funding in the amount of \$200,000 is available from underspending on the JD Kline Chlorinator System Replacement (SAP #3-1824)	\$200,000	\$0			
29-Jan-15	29-Apr-15	Distribution System Valve Replacement Program	\$125,000	\$125,000			
29-Jan-15	29-Apr-15	Hydrant Replacement Program	\$75,000	\$75,000			

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WATER \$14,888,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
29-Jan-15	29-Apr-15	Service Line Renewal Program	\$190,000	\$190,000			
29-Jan-15	29-Apr-15	Truck Mounted Valve Exercising Machine	\$30,000	\$30,000			
29-Jan-15	29-Apr-15	Leak Detection Equipment	\$16,000	\$16,000			
29-Jan-15	29-Apr-15	Upgrade to Correlator	\$22,000	\$22,000			
29-Jan-15	29-Apr-15	GPS/Total Station for Water Services	\$28,000	\$28,000			
29-Jan-15	29-Apr-15	Diesel Plate Compactor	\$16,000	\$16,000			
<b>Accumulative Total - January 2015</b>				<b>\$4,702,000</b>			
<p>Macdonald Bridge Transmission Main Replacement project \$7,700,000: funding in the amount of \$354,000 is available from underspending on the Kearney Lake Road Water Transmission Main Phase 2: funding in the amount of \$3,750,000 is available from the 2015/16 Capital Budget under "Macdonald Bridge Transmission Main Replacement" and funding in the amount of \$3,295,000 will be included in the 2016/17 Capital Budget</p>							
5-Mar-15	13-Apr-15	Capital Budget	\$3,750,000	\$3,750,000			
27-Mar-15		Lake Major WSP - Butterfly Valve Replacement Program	\$40,000	\$40,000			
27-Mar-15		JD Kline WSP Ampgard III to Vacuum Contactor Conversion Program	\$40,000	\$40,000			
27-Mar-15		Confined Space Entry Retrofit - Titus and Evans Chamber	\$65,000	\$65,000	Lindsay Const.	\$46,511	\$57,870
27-Mar-15		Bennery Lake WSP - Zeta Potential Meter	\$72,000	\$72,000			
27-Mar-15		Lake Major Entrance Road Culvert Replacement	\$76,000	\$76,000			
27-Mar-15		Gaston Road - Circumferential Transmission Main Tie In	\$120,000	\$120,000	Harbour Construction	\$71,983	\$106,837
26-Mar-15		Critical Valve Replacement Program - Gottingen Street	\$250,000	\$250,000			
31-Mar-15		JD Kline WSP Chemical Feed Pump Replacement Program	\$120,000	\$120,000			
<b>Accumulative Total - March 2015</b>				<b>\$4,533,000</b>			

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WATER \$14,888,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
22-Apr-15		Total Station Survey Unit - project was not budgeted for in 2015/16. Funding in the amount of \$26,000 is available from the 2014/15 CB from underspending in the Kearney Lake Road Transmission Main Replacement Project	\$26,000	\$0			
23-Apr-15		Regional Development Charge Application & Hearing Funding in the amount of \$9,804 is available from the 2014/15 CB under the Kearney Lake Road Transmission Main Phase 2 and \$223,617 is available from underspending in the 2014/15 Lakeside Diversion Linear Project	\$9,804	\$0			
30-Apr-15		Collins Park Wastewater Tank Retrofit	\$11,000	\$11,000			
30-Apr-15		Critical Valve Replacement Program	\$250,000	\$250,000			
30-Apr-15		JD Kline Watershed Access Road Bridge Replacements	\$71,000	\$71,000			
30-Apr-15		Lake Major WSP Chlorine Analyzer and Sample Pump	\$12,000	\$12,000			
30-Apr-15		Lake Major WSP Chlorine Vacuum Regulator	\$21,000	\$21,000			
30-Apr-15		Renfrew Street PRV Decommissioning	\$17,000	\$17,000			
30-Apr-15		Lake Major WSP Replace Contactors in the MCC	\$26,000	\$26,000			
30-Apr-15		Lake Major WSP Storage Containers	\$16,000	\$16,000			
30-Apr-15	12-Jun-15	Lake Major Dam Emergency Repairs - Fish Pump & Siphon System Funding Increase - this was not budgeted for in 2015/16. Funding in the amount of \$400,000 is available from underspending on the Kearney Lake Road Transmission Main Phase 2 Project	\$400,000	\$0			
<b>Accumulative Total - April 2015</b>				<b>\$424,000</b>			

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WATER \$14,888,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
5-May-15		JD Kline WSP - Backwash Butterfly Valve Actuators	\$30,000	\$30,000			
5-May-15		Lake Major WSP – Chemical Feed Pumps - Sodium Hydroxide	\$20,000	\$20,000			
5-May-15		Lake Major - Replace recirculating pumps for the Heating System	\$8,000	\$8,000			
5-May-15		Lake Major WSP – Upgrade the PLC	\$30,000	\$30,000			
22-May-15	23-Jul-15	JD Kline Water Supply Plant - Heating System & HVAC Upgrades	\$700,000	\$700,000			
22-May-15	27-Jul-15	Lake Major Dam Replacement - Design Phase	\$400,000	\$400,000			
28-May-15		Watershed Land Acquisition	\$650,000	\$650,000			
<b>Accumulative Total - May 2015</b>				<b>\$1,838,000</b>			
5-Jun-15		Lime Dosing System Upgrade - Lake Major WSP	\$10,000	\$10,000			
10-Jun-15		Chain Control Transmission Main Realignment - Engineering Design	\$45,000	\$45,000			
<b>Accumulative Total - June 2015</b>				<b>\$55,000</b>			
17-Aug-15		Lake Major WSP - Catwalk in the filter gallery	\$15,000	\$15,000			
17-Aug-15		Lake Major - Lighting in the Filter Gallery	\$5,000	\$5,000			
18-Aug-15		M2 Hydrant Replacement Program	\$50,000	\$50,000			
<b>Accumulative Total - August 2015</b>				<b>\$70,000</b>			
11-Sep-15		Lake Major WSP Chlorine Vacuum Regulator funding of \$21,000 Additional funding of \$39,000 is available from underspending in the "Lake Major WSP HVAC at Low Lift Pumping Station" (SAP #3-1934)	\$60,000	\$21,000			
24-Sep-15	Oct-29-15	JD Kline WSP - Filter Media and Underdrain Replacement Project Funding in the amount of \$300,000 was taken from "Water, JD Kline Filter Media Replacement in the amount of \$300,000, and the remaining \$700,000 is available under "Lake Major WSP New Diesel Generator"	\$1,000,000	\$1,000,000			
<b>Accumulative Total - September 2015</b>				<b>\$1,021,000</b>			

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WATER \$14,888,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
1-Oct-15		JD Kline Entrance Road Paving Renewal	\$85,000	\$85,000			
1-Oct-15		JD Kline Parking Lot Resurfacing	\$170,000	\$170,000			
<b>Accumulative Total - October 2015</b>				<b>\$255,000</b>			
10-Nov-15		Budget Adjustments - Lake Major WSP - Various Projects Lake Major WSP Chlorine Vacuum Regulator - \$63K and Lake Major Diesel Generator Replacement Design Phase - \$17K	\$80,000	\$80,000			
30-Nov-15		Bedford West CCC - Various Phases	\$20,000	\$20,000			
<b>Accumulative Total - November 2015</b>				<b>\$100,000</b>			
3-Dec-15	3-Dec-15	Lake Major WSP - Replace the Lime Feed and Delivery System	\$90,000	\$90,000			
<b>Accumulative Total - December 2015</b>				<b>\$90,000</b>			
7-Jan-16		Water Treatment Facility Security Upgrades	\$50,000	\$50,000			
7-Jan-16		JD Kline WSP - Replacement Program for Filter Valve Actuators	\$45,000	\$45,000			
21-Jan-16		Purchase New Trench Box - East Region Water Ops was not budgeted for in 2015/16 CB. Funding in the amount of \$22,000 is available from underspending on the "Water - Upgrade to the Correlator for the Central Region"	\$22,000	\$0			
26-Jan-16		Lakeside Control Chamber - CSE was not included in the 15/16 Capital Budget. Funding in the amount of \$39,000 is available from underspending in the Hare Lane Watermain Replacement Project (SAP 3-2063)	\$39,000	\$0			
28-Jan-16		2015/16 CB Chain Control Transmission Main Realignment Project: Funding is available from the following sources: Chain Control Transmission Main Realignment: \$455,000 Cathodic Protection Program: \$300,000 Critical Valve Replacement Program: \$250,000	\$1,000,000	\$1,000,000			
<b>Accumulative Total - January 2016</b>				<b>\$1,095,000</b>			
<b>Total to Date</b>				<b>\$14,183,000</b>			

**WASTEWATER  
CAPITAL BUDGET APPROVALS TO DATE - 2015/16  
TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
<b>2015/16 Wastewater Advanced Funding Integrated Projects</b>							
29-Jan-15	15-Apr-15	<b>East</b>					
		Penhorn Drive	\$99,000	\$99,000	Dexter	\$33,013	\$85,097
		Sarnia Avenue	\$47,000	\$47,000	Dexter	\$13,896	\$46,046
		Main Road/Pleasant Street (Wastewater Forcemain portion of Belmont WWTF Decommissioning plus watermain renewal)	\$3,000,000	\$3,000,000	Dexter	\$1,313,461	\$2,765,665
		Whynette Place	\$52,000	\$52,000	Cumberland	\$35,760	\$45,051
		Cross Road	\$99,000	\$99,000	Cumberland	\$67,372	\$85,097
		Dewhurst Drive	\$47,000	\$47,000	Cumberland	\$31,747	\$40,046
		Home Road Bridge	\$71,000	\$71,000			\$71,000
		Lahey Road	\$137,000	\$137,000			\$120,137
		Skyvue Terrace	\$99,000	\$99,000	Cumberland	\$67,372	\$85,097
		<b>West</b>					
		Pepperell Street	\$62,000	\$62,000	Dexter	\$41,708	\$51,183
		Richmond Avenue		\$119,000	Cumberland	\$75,184	\$105,433
		<b>Central</b>					
		First Avenue	\$52,000	\$52,000	ARCP	\$7,821	\$45,052
		Sackville Cross Road Bridge	\$71,000	\$71,000	B. Spicer Construction	\$156,022	\$71,000
		Adler Crescent - Wastewater Collection System Replacement	\$635,000	\$635,000	J.R. Eisener	\$461,868	\$599,644
		Cunningham	\$18,000	\$18,000			\$15,017
		<b>Total Integrated Projects</b>		<b>\$4,608,000</b>			

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
29-Jan-15	02-Jun-15	West Region Infrastructure Plan	\$450,000	\$450,000	GM BluePlan		
29-Jan-15	29-Apr-15	Manhole Renewals - Wastewater	\$29,000	\$29,000			
29-Jan-15	29-Apr-15	Lateral Replacements - Wastewater	\$1,490,000	\$1,490,000			
29-Jan-15	29-Apr-15	SIR Program Flow meters and Related Equipment	\$55,000	\$55,000			
29-Jan-15	29-Apr-15	Wastewater Operations Equipment	\$120,000	\$120,000			
21-Jan-15		Regional Centre Local Wastewater Servicing Capacity Analysis	\$25,000	\$25,000			
<b>Accumulative Total January, 2015</b>				<b>\$6,777,000</b>			
<p>Aerotech WWTF Expansion and Upgrade Project - Design Phase            Funding: Funding in the amount of \$1,305,000 was allocated as follows:            Carry Over from Preliminary Design: \$75,000            Internal Funding 2014/15 Capital Budget: \$500,000  <u>Internal Funding: 2015/16 Capital Budget \$730,000</u>  <b>TOTAL AMOUNT: 1,305,000</b></p>							
30-Oct-14	11-Feb-15		\$1,305,000	\$730,000	exp (design work only)		
12-Feb-15		<b>HHSP - OCS Blower Variable Frequency Drive Updates</b>					
		Halifax WWTF	\$150,397	\$150,397			
		Dartmouth WWTF	\$144,381	\$144,381			
		Herring Cove WWTF	\$126,334	\$126,334			
25-Feb-15	21-Apr-15	Jamieson Street Sewer Outfall Replacement Phase 2	\$1,100,000	\$1,100,000	Harbour Construction		\$930,700
<b>Accumulative Total February, 2015</b>				<b>\$2,251,112</b>			



**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
10-Mar-15		Energy Management Retrofit Program Dartmouth WWTF - MCC 190 Ventilation Upgrades	\$110,000	\$50,000			
<b>Accumulative Total March, 2015</b>				<b>\$50,000</b>			
02-Apr-15		Compressed Air System - Biosolids Processing Facility: Funding available from underspending in the 2014/15 CB under "Biosolids Processing Facility Upgrade Program Project"	\$34,500	\$0			
09-Apr-15		UV Ballasts Replacement - Mill Cove WWTF: Funding available from the 2014/15 CB under "Wastewater Treatment Facilities Upgrades (various locations)"	\$40,000	\$0			
23-Apr-15		Regional Development Charge Application & Hearing Funding in the amount of \$9,804 is available from the 2014/15 CB from under spending in the Kearney Lake Road Transmission Main Phase 2 and \$223,617 is available from underspending in the Lakeside Diversion Linear Project	\$223,617	\$0			
30-Apr-15	26-Jun-15	Wastewater - Collection System - Sewer Lining Program	\$1,000,000	\$1,000,000	Insituform Technologies Ltd.	\$442,048	\$845,000
<b>Accumulative Total April, 2015</b>				<b>\$1,000,000</b>			
4-May-15		Treatment Facilities - UV System Local Isolators - DWWTF 2014/15 Capital Budget	\$22,500	\$0			
15-May-15		Combined Sewer at the North Park Cogswell Roundabout: Funding in the amount of \$70,000 is available from underspending on the "2015/16 Wastewater - Structures "new Pump Station and Forcemain plus Belmont WWTF Decommissioning"	\$70,000	\$0			
22-May-15	15-Jul-15	Wastewater Pumping Stations Condition and Performance Assessments	\$125,000	\$125,000			
<b>Accumulative Total May, 2015</b>				<b>\$125,000</b>			

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
24-Jul-15		Aerotech Biosolids Processing Facility - Warehouse Ventilation System & Controls Upgrades - Detailed Design Phase	\$100,000	\$100,000			
24-Jul-15		DWWTF - Replacement & Upgrade Of UV System Control Panels	\$135,000	\$0			
30-Jul-15		2014/15 WW - Treatment facility - Basement Emergency Sump Pump and pipework - DWWTF	\$30,000	\$0			
30-Jul-15	17-Sep-15	Aerotech WWTF Expansion and Upgrade Project - MBR Component Procurement	\$4,285,000	\$4,285,000			
<b>Accumulative Total July, 2015</b>				<b>\$4,385,000</b>			
17-Aug-15		Aerotech Biosolids Processing Facility - New Screening and Loading Addition Project	\$65,000	\$65,000			
<b>Accumulative Total August, 2015</b>				<b>\$65,000</b>			
Oct-22-15		Main Street Wastewater Sewer Main Replacement original amount was \$120,000 - Additional Funding for this project in the amount of \$66,000 is available from the "Main Street Sewer Renewal" project which will not proceed this year	\$66,000	\$66,000			
Oct-22-15		Inglis Street Sewer - Hydraulic Issue	\$33,000	\$33,000			
<b>Accumulative Total October, 2015</b>				<b>\$99,000</b>			

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
09-Nov-15		Centrifuge Winterization Upgrades Project Mill Cove - funding available from 2015/16 CB under "Plant Optimization Audit Program:	\$125,000	\$75,000			
17-Nov-15		Sackville Cross Road Bridge/Wastewater funding increase: Funding in the amount of \$64,000 is available from underspending in the "Hornes Road/ Bridge Wastewater Project which will not be proceeding this year	\$64,000	\$0			
17-Nov-15		Wastewater Security Upgrade Program: WWTF CCTV Upgrades	\$50,000	\$50,000			
26-Nov-15	11-Jan-16	HW Corporate Flow Monitoring Program: funding in the amount of \$710,000 is available from "Wastewater - Corporate Flow Monitoring Program: Revised funding for Year 1 reduced to \$420,000. Year 2 funding in the amount of \$950,000 (from 2016/17 Capital Budget)	\$1,370,000	\$710,000	AMG Environmental	1,332,500	
26-Nov-15	22-Dec-15	West Regional Wastewater Infrastructure Plan - Funding Increase: Funding in the amount of \$344,000 is available from "Central Region - Wastewater Infrastructure Plan"	\$350,000	\$0			
30-Nov-15		Bedford West CCC - Various Phases	\$30,000	\$30,000			
<b>Accumulative Total November, 2015</b>				<b>\$865,000</b>			
04-Dec-15		Market Street Combined Sewer Replacement - project was not budgeted for in 2015/16: Funding in the amount of \$60,000 is available from underspending in the Lakeside Pumping Station Diversion to Halifax	\$60,000	\$0			
<b>Accumulative Total December, 2015</b>				<b>\$0</b>			
06-Jan-16		Gas Monitoring Program was not budgeted for in 2015: Funding in the amount of \$40,000 is available from underspending in the 2014/15 CP under "Lakeside Pumping Station Diversion To Halifax Sewershed" which came in under budget	\$40,000	\$0			

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$27,425,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
07-Jan-16		Wastewater Treatment Facility Security Upgrades	\$50,000	\$50,000			
07-Jan-16		Compressed air system - biosolids processing facility funding in the amount of \$14,750 is available under "Wastewater, Energy, Energy Management Retrofit Program"	\$14,750	\$14,750			
07-Jan-16		Biosolids Processing Facility Upgrade Program	\$120,000	\$120,000			
28-Jan-16		Manhole Lining - Crescent Avenue and Stuart Harris Sewershed funding in the amount of \$195,000 is available from underspending in the 2015/16 CB under "Sewer Lining Program"	\$195,000	\$0			
<b>Accumulative Total January, 2016</b>				<b>\$184,750</b>			
<b>Total To Date</b>				<b>\$15,801,862</b>			

**STORMWATER  
CAPITAL BUDGET APPROVALS TO DATE - 2015/16  
TOTAL CAPITAL BUDGET FOR STORMWATER \$2,815,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
<b>2015/16 Stormwater Advanced Funding Integrated Projects</b>							
29-Jan-15	29-Apr-15	<b>East</b>					
		Penhorn Drive	\$16,000	\$16,000	Dexter	\$7,603	\$13,140
		Merimac Drive	\$21,000	\$21,000			\$17,520
		Whynette Place	\$73,000	\$73,000	Cumberland	\$58,129	\$60,069
		Cross Road	\$99,000	\$99,000	Cumberland	\$67,372	\$85,097
		Dewhurst Drive	\$47,000	\$47,000	Cumberland	\$54,134	\$40,045
		Skyvue Terrace	\$99,000	\$99,000	Cumberland	\$67,372	\$85,097
		<b>West</b>					
		Richmond Avenue	\$54,000	\$54,000	Cumberland	\$36,090	\$44,426
		Thornhill Drive	\$16,000	\$16,000			\$13,035
		<b>Central</b>					
		First Avenue	\$52,000	\$52,000	ARCP	\$7,821	\$45,052
		Cunningham	\$18,000	\$18,000			\$15,017
		Jubilee Lane		\$13,000			\$7,734
		<b>Total Integrated Projects</b>		<b>\$508,000</b>			
29-Jan-15	29-Apr-15	Manhole Renewals - Stormwater	\$26,000	\$26,000			
29-Jan-15	29-Apr-15	Catchbasin Renewals	\$26,000	\$26,000			
29-Jan-15	29-Apr-15	Lateral Replacements - Stormwater	\$80,000	\$80,000			
29-Jan-15	29-Apr-15	Driveway Culvert Replacement	\$427,000	\$427,000			
		<b>Accumulative Total - January 2015</b>		<b>\$1,067,000</b>			

**STORMWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR STORMWATER \$2,815,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
<b>Civic #183 Lakeview Avenue and Holly Court Culvert Replacement Projects</b>							
18-Feb-15		#183 Lakeview Avenue	\$229,000	\$229,000			\$190,843
		Holly Court - Culvert Replacement	\$200,000	\$200,000			\$165,815
18-Feb-15		Rolling Hills Drive Stormwater Rehabilitation	\$157,000	\$157,000			\$137,658
<b>Stormwater Culvert Renewal Program</b>							
23-Feb-15	27-Apr-15	North Preston Road	\$347,000				\$258,421
		Bedford Highway @Shaunslieve Drive Culvert Upgrade	\$407,000	\$754,000			\$333,767
24-Feb-15	8-Apr-15	Stormwater - Pipes Shore Road (Eastern Passage) Storm Sewer Diversion	\$291,000	\$291,000			\$259,297
<b>Accumulative Total - February 2015</b>				<b>\$1,631,000</b>			
23-Jun-15		Armanada Crescent Stormwater Manhole Replacement: not budgeted for in 2015/16: Funding in the amount of \$13,500 is available from Underspending in the "Cross Road Stormwater" integrated project	\$13,500	\$0			
24-Jul-15		Little Sackville River Flood Plain Mapping	\$57,000	\$57,000			
24-Jul-15		Keating Road Stormwater Inlet Structure - was not budgeted for in the 2015/16 CB. Funding is available from underspending in the "Yankeetown Road near Civic #206 Replacement Project" in the amount of \$75,000	\$75,000	\$0			
30-Jul-15		Bluewater Road Replacement of Stormwater Infrastructure project was not budgeted for in 2015/16: funding in the amount of \$247K is available from the "Bedford Highway at Shaunslieve Drive Culvert Upgrade" project which is not proceeding this year.	\$407,000	\$0	Harbour Construction	\$132,993	\$218,000
<b>Accumulative Total - July 2015</b>				<b>\$57,000</b>			

**STORMWATER**

**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**

**TOTAL CAPITAL BUDGET FOR STORMWATER \$2,815,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
16-Nov-15		Dewhurst Drive Stormwater Integrated Project funding increase: Funding in the amount of \$25K is available from underspending in the 2015/16 CB under "Integrated Stormwater Projects - Program"	\$25,000	\$0			
17-Nov-15		Sackville Drive Cross Culvert Replacement: Funding available from underspending in "2015/16 CB under "Integrated Stormwater Projects - Program:"	\$30,000	\$0			
24-Nov-15		Old Sackville Road Integrated Project Funding increase: funding is available from underspending under the "Integrated Stormwater Projects - Program" in the amount of \$14,000	\$14,000	\$0			
26-Nov-15		Grade Adjustments Above 1200 mm Forcemain (Near Old Ferry Road) funding in the amount of \$25,000 is available from underspending in "Integrated Stormwater Projects - Program"	\$25,000	\$0			
<b>Accumulative Total - November 2015</b>				<b>\$0</b>			
7-Jan-16		Culvert Replacement Program - Surveying Services project was not budgeted for in 2015/16; Funding in the amount of \$50,000 is available from underspending in the 2014/15 CB under "Ellenvale Run Retaining Wall Replacement project which came in under budget	\$50,000	\$0			
7-Jan-16		Hammonds Plains Road Flooding Investigation was not budgeted for in 2015/16 funding in the amount of \$50,000 was taken from Bluewater Road Stormwater Infrastructure Replacement Project which was under budget	\$50,000	\$0			

**CORPORATE PROJECTS**  
**CAPITAL BUDGET APPROVALS TO DATE - 2015/16**  
**TOTAL CAPITAL BUDGET FOR CORPORATE PROJECTS \$12,094,000**

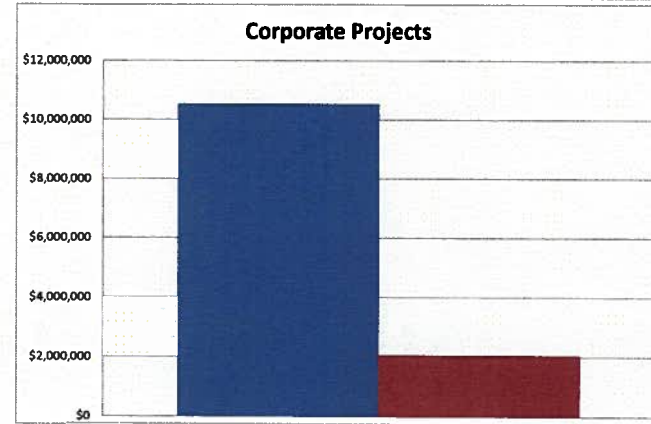
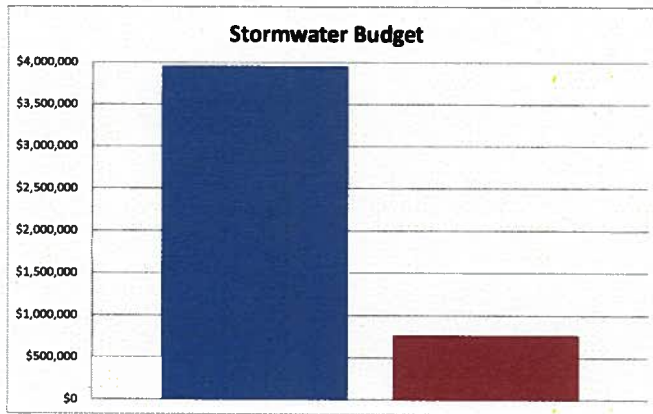
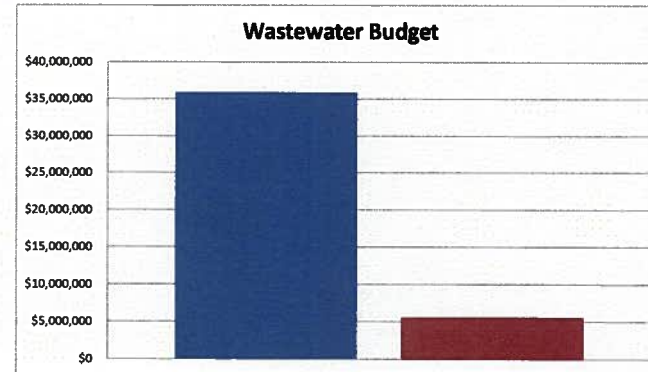
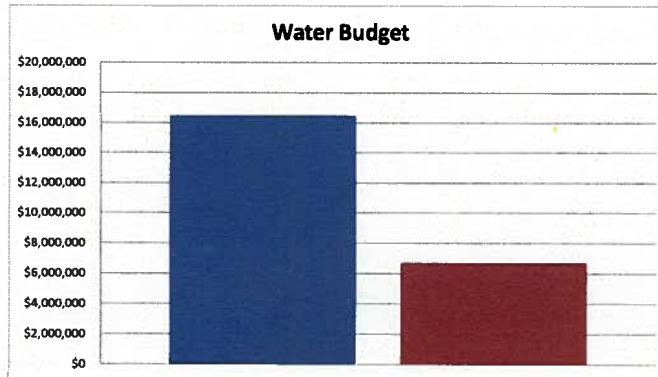
Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/ Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
29-Jan-15	29-Apr-15	Fleet Upgrade - Water	\$16,000	\$16,000			
29-Jan-15	29-Apr-15	Fleet Upgrade - Wastewater	\$988,000	\$988,000			
29-Jan-15	29-Apr-15	Fleet Upgrade - Stormwater	\$247,000	\$247,000			
<b>Accumulative Total - January 2015</b>				<b>\$1,251,000</b>			
8-Apr-15		Interim CRM - Call Centre Business Process Evaluation "Corporate Projects - Customer Relationship Management - Selection and Implementation"	\$50,000	\$50,000	Adam Hall	\$50,000	
30-Apr-15	Jul-30-15	Corporate Projects - GIS Data Program	\$1,500,000	\$1,500,000	AECOM/OPUS/HW	\$992,342	
<b>Accumulative Total - April 2015</b>				<b>\$1,550,000</b>			
6-May-15		Hydrant and Catchbasin Public Information Mapping: Funding is available from the 2014/15 CB under the "GIS Data Program"	\$120,000	\$0	WSP/HW	\$120,000	
28-May-15		Computer Maintenance Management System - Phase 2A Business Process		\$215,000	ESRI	\$215,000	
24-Jul-15		SCADA Control System Enhancements 2015/16 (split 50W/50WW)	\$200,000	\$200,000			
30-Jul-15	15-Oct-15	Computer Maintenance Management System - Phase 2 Implementation	\$4,971,000	\$2,195,000	ESRI	\$1,000,000	
<b>Accumulative Total - May 2015</b>				<b>\$2,610,000</b>			



**CORPORATE PROJECTS  
CAPITAL BUDGET APPROVALS TO DATE - 2015/16  
TOTAL CAPITAL BUDGET FOR CORPORATE PROJECTS \$12,094,000**

Date of Approval		Description	Approved Amount	Net Additions to Budget	Contractor/Consultant	Construction Tender Price	Construction Budget Estimate
HW	NSUARB GM						
30-Aug-15	Oct-14-15	Customer Relationship Management (CRM)	\$550,000	\$550,000	Cayenta	\$550,000	
<b>Accumulative Total - August 2015</b>				<b>\$550,000</b>			
24-Sep-15	9-Oct-15	Meter Renewal and Installation Program - AMI/AMR Meter System Upgrades	\$1,000,000	\$1,000,000			
<b>Accumulative Total - September 2015</b>				<b>\$1,000,000</b>			
Oct-29-15	21-Dec-15	2015/16 SCADA Master Plan Implementation Program	\$500,000	\$500,000			
<b>Accumulative Total - October 2015</b>				<b>\$500,000</b>			
7-Jan-16		Cowie Hill 2nd Floor Renovations Human Resources	\$75,000	\$75,000			
22-Jan-16	Jan-22-16	Asset Management Program	\$100,000	\$100,000			
26-Jan-16	26-Jan-16	Asset Management Software Assessment	\$50,000	\$50,000			
26-Jan-16	26-Jan-16	Modelling Tools Assessment	\$40,000	\$40,000			
<b>Accumulative Total - January 2016</b>				<b>\$265,000</b>			
<b>Total To Date</b>				<b>\$7,726,000</b>			

**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**




<u>WATER</u>	
TOTAL APPROVED BUDGET	\$16,453,000
APPROVALS TO DATE	\$8,683,000

<u>WASTEWATER</u>	
TOTAL APPROVED BUDGET	\$35,838,000
APPROVALS TO DATE	\$5,571,000

<u>STORMWATER</u>	
TOTAL APPROVED BUDGET	\$3,951,000
APPROVALS TO DATE	\$763,000

<u>CORPORATE PROJECTS</u>	
TOTAL APPROVED BUDGET	\$10,535,000
APPROVALS TO DATE	\$2,065,000

Report Prepared by:



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

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**  
**TOTAL CAPITAL BUDGET FOR WATER \$16,453,000**

Date of Approval							
HW	NSUARB GM	Description	Approved Amount	Net Additions to Budget	Consultant/ Contractor	Construction Tender Price	Construction Budget Estimate
		<b>2016/17 Capital Budget</b>					
28-Jan-16		<b>Advanced Funding Integrated Projects</b>					
		<b>East</b>					
		Murray Hill Drive W/M Renewal	\$455,000	\$455,000			
		Farquharson Street Water Main Renewal	\$500,000	\$500,000			
		Brompton Road	\$215,000	\$215,000			
		Everette Street Water Main Renewal	\$410,000	\$410,000			
		<b>West</b>					
		Scarlet Rd	\$335,000	\$335,000			
		Foxglove Lane	\$150,000	\$150,000			
		Parmbelle Lane	\$250,000	\$250,000			
		George Dauphinee Drive	\$620,000	\$620,000			
		Layton Road	\$325,000	\$325,000			
		Inverness Avenue	\$260,000	\$260,000			
		<b>Central</b>					
		Tillock Drive	\$380,000	\$380,000			
		Tillock Court	\$100,000	\$100,000			
		<b>Total Integrated Project</b>	<b>\$4,000,000</b>	<b>\$4,000,000</b>			
28-Jan-16		Valve Renewals	\$125,000	\$125,000			
28-Jan-16		Hydrant Renewals	\$75,000	\$75,000			
28-Jan-16		Service Line Renewals	\$190,000	\$190,000			
28-Jan-16		Large Tapping Machine c/w electric operator and 4" to 12" cutters	\$34,000	\$34,000			
28-Jan-16		Small Hydro Vac for valve box maintenance	\$25,000	\$25,000			

**WATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**  
**TOTAL CAPITAL BUDGET FOR WATER \$16,453,000**

<b>Date of Approval</b>							
<b>HW</b>	<b>NSUARB GM</b>	<b>Description</b>	<b>Approved Amount</b>	<b>Net Additions to Budget</b>	<b>Consultant/ Contractor</b>	<b>Construction Tender Price</b>	<b>Construction Budget Estimate</b>
28-Jan-16		Plastic Shell Cutters for Tapping Marching	\$12,000	\$12,000			
28-Jan-16		Portable valve Exerciser	\$10,000	\$10,000			
28-Jan-16		Confined Space Entry System for Bennery Lake Water Supply Plant	\$14,000	\$14,000			
28-Jan-16		Temporary Water Line - Pipe materials purchase - East Region	\$18,000	\$18,000			
28-Jan-16		Water Distribution Pressure Monitoring Equipment	\$10,000	\$10,000			
28-Jan-16		Geizer 158 Reservoir Rehabilitation	\$2,170,000	\$2,170,000			
<b>Accumulative Total - January, 2016</b>							
<b>Total To Date</b>							

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$35,838,000**

Date of Approval							
HW	NSUARB GM	Description	Approved Amount	Net Additions to Budget	Consultant/ Contractor	Construction Tender Price	Construction Budget Estimate
		<b>2016/17 Capital Budget</b>					
28-Jan-16		<b>Advanced Funding Integrated Projects</b>					
		<b>East</b>					
		Murray Hill Drive W/M Renewal	\$38,000	\$38,000			
		Farquharson Street Water Main Renewal	\$109,000	\$109,000			
		Brompton Road	\$278,000	\$278,000			
		Everette Street Water Main Renewal	\$97,000	\$97,000			
		Alfred Street	\$199,000	\$199,000			
		Beckfoot Drive	\$9,000	\$9,000			
		Strath Lane	\$226,000	\$226,000			
		Westwood Drive	\$121,000	\$121,000			
		<b>West</b>					
		Scarlet Rd	\$206,000	\$206,000			
		Foxglove Lane	\$13,000	\$13,000			
		Parmbelle Lane	\$79,000	\$79,000			
		George Dauphinee Drive	\$54,000	\$54,000			
		Layton Road	\$13,000	\$13,000			
		Inverness Avenue	\$22,000	\$22,000			
		<b>Central</b>					
		Tillock Drive	\$13,000	\$13,000			
		Tillock Court	\$9,000	\$9,000			
		Doyle Street	\$19,000	\$19,000			
		McQuarrie Bridge (Fall River)	\$150,000	\$150,000			
		Lydgate Drive	\$9,000	\$9,000			
		<b>Total Integrated Projects</b>	<b>\$1,664,000</b>	<b>\$1,664,000</b>			
28-Jan-16		Manhole Renewals	\$32,000	\$32,000			
28-Jan-16		Lateral Replacements	\$2,190,000	\$2,190,000			
28-Jan-16		SIR Program Flow Meters and Related Equipment	\$40,000	\$40,000			

**WASTEWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**  
**TOTAL CAPITAL BUDGET FOR WASTEWATER \$35,838,000**

Date of Approval							Construction	Construction
HW	NSUARB GM	Description	Approved Amount	Net Additions to Budget	Consultant/ Contractor		Tender Price	Budget Estimate
28-Jan-16		Miscellaneous Equipment Replacement	\$70,000	\$70,000				
28-Jan-16		Wastewater System - Trenchless Rehabilitation Program: Funding in the amount of \$300,000 from underspending in the 2015/16 Sewer Lining Program; and \$1,500,000 is available from the 2016/17 Capital Budget	\$1,800,000	\$1,500,000				
<b>Accumulative Total - January, 2016</b>				<b>\$5,496,000</b>				
01-Feb-16		Leiblin Pumping Station Elimination Preliminary Design Halifax	\$75,000	\$75,000				
03-Feb-16	03-Feb-16	The \$42,500 in regulated activity funding is available from two sources. \$20,000 is available from underspending on the <i>Mill Cove CHP Fatal Flaw/Due Diligence Analysis, and the Preliminary Design and Cost Analysis</i> , with the remaining \$22,500 available from projected under spending within the 2015/16 <i>Wastewater – Energy – Energy Management Capital Program</i> . The \$42,500 in unregulated activity funding is available from within the 2016/17 Unregulated Capital Budget - Mill Cove Biogas CHP.	\$85,000	\$0				
<b>Accumulative Total - February 2016</b>				<b>\$75,000</b>				
<b>Total To Date</b>				<b>\$5,571,000</b>				

**STORMWATER  
CAPITAL BUDGET APPROVALS TO DATE - 2016/2017  
TOTAL CAPITAL BUDGET FOR STORMWATER \$3,951,000**

Date of Approval								
HW	NSUARB GM	Description	Approved Amount	Net Additions to Budget	Consultant/ Contractor	Construction Tender Price	Construction Budget Estimate	
<b>2016/17 Stormwater Advanced Funding Integrated Projects</b>								
<b>East</b>								
28-Jan-16		Murray Hill Drive W/M Renewal	\$28,000	\$28,000				
		Farquharson Street Water Main Renewal	\$19,000	\$19,000				
		Brompton Road	\$151,000	\$151,000				
		Everette Street Water Main Renewal	\$28,000	\$28,000				
		Alfred Street	\$11,000	\$11,000				
		Beckfoot Drive	\$9,000	\$9,000				
		Strath Lane	\$122,000	\$122,000				
<b>West</b>								
		George Dauphinee Drive	\$34,000	\$34,000				
<b>Central</b>								
		Tillock Court	\$19,000	\$19,000				
		Doyle Street	\$75,000	\$75,000				
		Baker Drive	\$52,000	\$52,000				
		Second Avenue	\$70,000	\$70,000				
<b>Total Integrated Projects</b>			<b>\$618,000</b>	<b>\$618,000</b>				

**STORMWATER**  
**CAPITAL BUDGET APPROVALS TO DATE - 2016/2017**  
**TOTAL CAPITAL BUDGET FOR STORMWATER \$3,951,000**

<b>Date of Approval</b>							
<b>HW</b>	<b>NSUARB GM</b>	<b>Description</b>	<b>Approved Amount</b>	<b>Net Additions to Budget</b>	<b>Consultant/ Contractor</b>	<b>Construction Tender Price</b>	<b>Construction Budget Estimate</b>
28-Jan-16		Manhole Renewals	\$29,000	\$29,000			
28-Jan-16		Catchbasin Renewals	\$29,000	\$29,000			
28-Jan-16		Lateral Replacements	\$87,000	\$87,000			
<b>Accumulative Total January, 2016</b>				<b>\$145,000</b>			
<b>Total to Date</b>				<b>\$763,000</b>			



**CORPORATE PROJECTS  
CAPITAL BUDGET APPROVALS TO DATE - 2016/2017  
TOTAL CAPITAL BUDGET FOR CORPORATE PROJECTS 10,535,000**

<b>Date of Approval</b>						<b>Construction</b>	<b>Construction</b>
<b>HW</b>	<b>NSUARB GM</b>	<b>Description</b>	<b>Approved Amount</b>	<b>Net Additions to Budget</b>	<b>Consultant/ Contractor</b>	<b>Tender Price</b>	<b>Budget Estimate</b>
28-Jan-16		Desktop Computer Replacement Program	\$180,000	\$180,000			
28-Jan-16		Network Infrastructure Upgrades	\$200,000	\$200,000			
28-Jan-16		Survey Equipment - GPS Total Station	\$30,000	\$30,000			
28-Jan-16		Fleet Upgrade Program Water	\$505,000	\$505,000			
28-Jan-16		Fleet Upgrade Program Wastewater	\$920,000	\$920,000			
28-Jan-16		Fleet Upgrade Program Stormwater	\$230,000	\$230,000			
		<b>Accumulative Total January, 2016</b>		<b>\$2,065,000</b>			
		<b>Total To Date</b>		<b>\$2,065,000</b>			

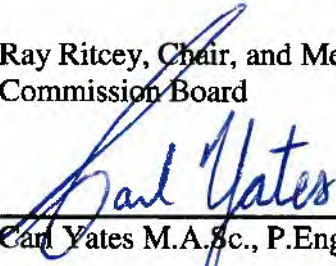
# Item 3-I

18-Feb-16

## FINANCIAL REPORT

Consolidated balance of the four operating accounts maintained by the Commission as of:	18-Feb-16	\$51,558,106
Rate of interest on the above balance - Investment Rate of Return	0.072%	\$51,558,106.24

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

**SUBMITTED BY:**   
Carl Yates M.A.Sc., P.Eng., General Manager

**DATE:** February 18, 2016

**SUBJECT:** Service Level Agreement with Halifax Regional Municipality

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### INFORMATION REPORT

#### ORIGIN

2007 Transfer Agreement

#### BACKGROUND

Consistent with the principles surrounding the 2007 Transfer Agreement, whereby wastewater and stormwater assets were transferred to Halifax Water, it was recognized that Halifax Water and Halifax Regional Municipality exchange many services for the collective benefit of HALIFAX taxpayers and Halifax Water rate payers. After the 2007 transfer of assets, the exchange of services increased with the expanded mandate of the utility. Through this exchange of services, it was agreed that both organizations would work to prevent cross subsidization of services wherever possible.

#### DISCUSSION

Since 2007, HRM and Halifax Water staff have continued to exchange and document services provided to and from each organization to ensure cost recovery and effective service delivery. In an effort to formalize the service exchange, a Service Level Agreement was recently executed to capture services in relation to legal support, fuel and storage, wastewater contracted operations, insurance services, transportation and public works services, finance, investment and cash management, and information, communication and technology.

The scope and associated levels of service are formalized in the Service Level Agreement, attached. It is recognized that the Service Level Agreement is a living document, and as such, over time will be modified to include additional services, or in some cases, a change in service based on cost and resources to provide services between organizations.

**FINANCIAL IMPLICATIONS**

The Service Level Agreement is structured to remain cost neutral between organizations, and as such, there is no financial impact to either organization, other than to provide a cost effective service to HALIFAX tax payers or HRWC rate payers.

**ATTACHMENT**

Service Level Agreement between Halifax Regional Municipality and Halifax Regional Water Commission



# SERVICE LEVEL AGREEMENT

# HALIFAX

Between:

Halifax Regional Municipality

And

### ***Document Information***

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**Title** Service Level Agreement  
**Document Type** Agreement  
**File Name** HRWC – HRM Service Level Agreement Draft 2013.docx  
**File Location** K:\Finance\General\HRM Service Level Agreement  
**Owner** Director of Finance/CFO, HRM  
Director of Finance & Customer Service/CFO, HRWC  
**Approvers** Chief Administrative Officer, HRM  
General Manager, HRWC

### ***History***

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<b>Version</b>	<b>Description</b>	<b>Author</b>	<b>Date</b>
1	Discussion Draft	Director of Finance, HRWC	February 11, 2013
2	Discussion Draft	Greg Keefe CFO, HRM	December 31, 2013
3	Discussion Draft	HRWC	January 13, 2014
4	Discussion Draft	HRM	May 22, 2014
5	Discussion Draft	HRM	September 19, 2014
6	Discussion Draft	HRM	June 19, 2015
7	Discussion Draft	HRWC comments	July 20, 2015
8	Discussion Draft	HRM draft	August 21, 2015
9	Final Draft	HRWC/HRM	January 7, 2016

**THIS SERVICE LEVEL AGREEMENT** is made as of \_\_\_\_\_, the date on which the last signatory executed this SLA (the "Effective Date")

**BETWEEN**

**Halifax Regional Water Commission, as represented by the General Manager (the "HRWC")**

- and -

**Halifax Regional Municipality, as represented by the Chief Administrative Officer (the "HRM")**

Approved as to Form  
and Authority

DRG  
Solicitor

**IN CONSIDERATION** of the foregoing and the mutual covenants and agreements contained in this Agreement, and subject to the terms and conditions hereof, the Parties covenant and agree as follows:

### **1.0 Purpose of this Document**

This service level agreement ("SLA") details the terms and conditions under which Services will flow back and forth between the HRM and HRWC (the "Parties").

The purpose of the SLA is to:

- (i) inventory the Services provided by one Party (the "Providing Party" to the other Party (the "Receiving Party") and to outline the roles and responsibilities of each around the delivery of the Services;
- (ii) detail the process by which the Services are provided, fees and overhead charges are applied, the billing and payment procedure and the process to change the SLA as required; and
- (iii) outline the communication protocol for HRM and HRWC and to develop procedures which will facilitate this relationship and to identify on a continual basis any areas of enhancement and/or improvement.

Unless expressly indicated herein, this SLA is not meant to address or resolve outstanding issues arising out of the 2007 Transfer Agreement or to implement recommended actions of any joint committees set up under the 2007 Transfer Agreement, which recommendations are located in the so-called "Merger Matrix" document.

### **1.1 Mission**

To contribute to the success of both organizations while serving the interests of HRM tax payers and HRWC rate payers.

### **1.2 Principles**

Cross subsidization of services will be avoided wherever possible, in keeping with the principles of the Transfer Agreement.

Full cost recovery principles as defined by the National Guide to Sustainable Municipal Infrastructure - "Water and Sewer Rates: Full Cost Recovery" will be applied wherever appropriate and feasible.

Payment of the HRWC dividend to HRM under a separate agreement covering the period of April 1, 2015 to March 31, 2020 in lieu of commercial tax rates, taxes against HRWC's property and assets is intended to provide for, among other things, the usual services provided by a municipality to its corporate citizens such as policing, fire protective services, streets and roads services, transit, solid waste services, community development and general government.

Direct services, including those Services detailed in the schedules attached hereto, provided to HRWC by HRM or by HRWC to HRM will be tracked and billed for separately as appropriate and in keeping with the principles outlined above.

- Note: HST will not apply in intra-municipal transactions unless required by law: see Excise Act-Schedule V, Part VI, Section 28.

### **1.3 Agreement Objectives**

- Foster effective communication between HRM and HRWC
- Describe the roles and responsibilities of HRM and HRWC to ensure effective service delivery and optimum resource utilization
- Assist in managing service level expectations
- Document the escalation path to address service issues / problems
- Define the service level targets
- Provide for a reporting, billing and payment process to be developed by the Governance Committee

### **1.4 Term of the Agreement**

Unless otherwise specifically provided for herein, Services under this SLA or any part thereof may be terminated by either party upon the provision of 90 days written notice to the other party. In the event of termination, the Receiving Party shall pay to the Providing Party for Services rendered in accordance with this SLA to the effective date of termination and for those reasonable termination expenses incurred by the Providing Party, including but not limited to the costs associated with the transfer of software licenses, dedicated equipment, and dedicated third party contracts.

### **1.5 Scope of Services**

Except as may otherwise be agreed to by the Parties in accordance with the change mechanism detailed below, starting on the Effective Date the Providing Party will provide to the Receiving Party the services described in the schedules attached hereto (collectively, the "Services"), in accordance with the terms and conditions of this SLA.

This SLA details the services that HRM/HRWC provides to each other, and establishes a framework upon which service performance can be measured. Its purpose is to ensure that the ranges of services offered are consistent, cost effective, timely, appropriate and predictable. HRWC and HRM will work closely together to implement and administer this agreement so that all aspects meet the principles outlined in the previous section.



The SLA fosters a positive working relationship and creates the foundation upon which HRM and HRWC can work interdependently to deliver services and programs to HRM residents and HRWC customers.

This document will serve as a guideline that will be revised as required. The agreement is intended to evolve as additional services and / or changes to services are introduced.

Approval and signoff of this document indicates:

- Agreement by both parties that the content is valid
- The objectives are achievable

At a minimum, the agreement will be reviewed annually. Scope, roles / responsibilities and service levels will be assessed and adjusted accordingly.

The Director of Finance of HRM and the Director of Finance for HRWC responsibilities include:

- Document maintenance
- Review of suggested / required updates
- Alignment with HRM and HRWC business plan and strategic priorities
- Ensure all changes are negotiated and approved by all parties
- Maintain an archive of current and past versions

## **1.6 Service Levels**

The Providing Party will endeavor to deliver the Services in satisfaction of the services levels detailed in the applicable schedule. Any failure to meet a service level that is not resolved in accordance with the processes and timeframes set out in the SLA and attached schedules will be escalated in accordance with the Governance Process referenced below.

The Providing Party will be relieved from the measurement of service levels to the extent that delivery of the Services is affected by (1) the Providing Party waiting on the Receiving Party or other third party to undertake an action relative to the delivery of the Services; (2) the Providing Party has made prioritization decisions relative to the Services in light of available resources; (3) either party has undergone a material business change that has yet to be addressed in the change mechanism described below; or (4) circumstances that constitute a force majeure event or are otherwise beyond the Providing Party's reasonable control.

The Parties agree that neither will make any claim, or be a party to any action or lawsuit, against the other related to the provision of Services under this SLA. If service levels are not met the sole remedy of the Receiving Party will be to escalate its complaint through the Governance Process. In no circumstances will the Receiving Party have or advance a claim for financial compensation or other damages as a result of the Providing Party not meeting a service level.

## **1.7 Governance Process - Relationship Management**

The Parties will each assign a representative for the purpose of administering Services under this SLA (the "Director"). Each Director will be available upon reasonable notice during

business hours to meet in order to review and discuss any issues and concerns with respect to this SLA and will have the authority and be responsible for:

- (i) Administering Services under this SLA to achieve service levels by addressing, and if possible resolving, any operational or other issues with respect to the Services or this SLA;
- (ii) Escalating, as appropriate, any unresolved issues with respect to the Services or this SLA;
- (iii) Documenting, updating and distributing service level performance, updates or revisions in accordance with the Parties agreed upon changes;
- (iv) Organizing and facilitating strategic planning sessions for the administration of the Services, timing/planning future work projects to align resources/objectives of both parties to reduce cost and scheduling work to avoid misaligned efforts;
- (v) Recommending areas for service improvement;
- (vi) Making recommendations for changes to Services to be made through the change mechanism; and
- (vii) Reporting, as required, to appropriate levels of management.

The Parties will create a Governance Committee made up of the following persons:

<u>HRM</u>	<u>HRWC</u>
Deputy Chief Administrative Officer	General Manager
Chief Financial Officer	Director of Finance & Customer Service

The Governance Committee will have the authority and be responsible for:

- (i) Implementation of this SLA, including the creation of the procedures to request and approve the provision of Services;
- (ii) Developing a reporting, billing and payment process;
- (iii) Quarterly meetings with Directors to discuss service level performance, outstanding operational issues and other concerns;
- (iv) Considering change requests, if any;
- (v) Participating in strategic planning sessions relative to the Services; and
- (vi) Resolving, if possible, any escalated issues with respect to the Services or this SLA identified by the Directors.

#### 1.8 Governance Process - Incident Resolution Targets

<b>Request for Action</b>	<b>Response to Request</b>	<b>Target Time to Respond</b>	<b>Target Time to Resolve</b>
Director of Requesting Unit	Director of Responding Unit	5 business days	10 business days
Director of Finance/CFO	Director of Finance/CFO	7 business days	14 business days
General Manager/DCAO	General Manager/DCAO	14 business days	28 business days

Requests for actions that are not resolved to the satisfaction of the parties within the timeframe at each level of governance will be escalated to the next level of governance.

## **1.9 Fees**

In consideration for the Providing Party's provision of Services, the Receiving Party will pay the charges associated with the time, materials and expenses incurred as a result of the provision of the Services.

In order to smooth the processing of transactions between the Parties the following procedures will be followed:

- (i) The Receiving Party is responsible to pay the Providing Party reasonable transition costs; that is, costs incurred by the Providing Party as a direct result of the implementation of the Service for the benefit of the Receiving Party.
- (ii) No right of offsets will be transacted by either party unless mutually agreed upon.
- (iii) Approvals for work done by either party on behalf of the other will be given in advance of the work being done. An agreed approach for the billing will be determined and agreed to at that time and an estimate provided.

## **1.10 Change Mechanism**

Should HRM or HRWC desire a change to the Services that will add a new Service, end a Service, increase or decrease a Service and/or alter the Fees, a written change request will be prepared by the Party requesting the change and be sent to the other Party for consideration. The change request will include all relevant information reasonably required for the proper consideration of the proposed change.

Changes that impact Fees will be subject to the approval and agreement of both Parties. If a change may result in either an increase or decrease to the Fees, then the Parties will, acting reasonably and subject to the other provisions of this SLA, determine any increase or decrease to be made to the Fees as a result of such impact, including in appropriate circumstances agreeing that Services adjustments will be provided during an interim period on a time and materials basis to provide a baseline that can be used in order to price the change.

Should HRM or HRWC desire additional Services to be included in this SLA, a written request will be prepared by the Party requesting the addition and be sent to the other Party for consideration. The request will include all relevant information reasonably required for the proper consideration of the proposed addition.

The approval authority to agree to a particular change or additional Service request will be communicated by each Party to the other as part of the negotiations to change or add a Schedule.

Requests for change and/or additional Service will be communicated through the Governance Process and considered by the Governance Committee. If the Parties agree to add an additional Service to this SLA, the SLA will be amended by attaching a new schedule to the SLA in respect of the subject matter of the new Service.

All changes, modifications, amendments or supplements to the Services provided will be undertaken in accordance with the change mechanism and any other express provisions of this SLA that contemplate changes to the Services.

## 2.0 Miscellaneous

This SLA shall become effective on the date upon which both Parties execute the same and insert the Effective Date.

This SLA may not be assigned by either Party hereto without the prior written consent of the other Party. This Agreement will be binding upon and enure to the benefit of the Parties and their respective successors and permitted assigns.

## 3.0 Signatures

Each party is signing this Agreement on the date stated under the signature of the representative of that party:

### For the Halifax Regional Water Commission

Carl Yates  
Name

  
Signature

General Manager  
Title

January 20, 2016  
Date

### For HRM

John Taves *etc.*  
Name

  
Signature

Acting Chief Administrative Officer  
Title

January 18, 2016  
Date

### Index of Schedules

	Schedule	Date of Last Revision or Update
A	Legal Service	
B	Fuel and Stores	
C	Waste Water Contracted Operations	
D	Insurance Services	
E	TPW Services	
F	Finance, Investment and Cash Management	
G	Information, Communication, and Technology	

## **SCHEDULE "A" - LEGAL SERVICES**

**BETWEEN:** Halifax Regional Municipality ("HRM") and Halifax Regional Water Commission ("HRWC")

**PERIOD COVERING:** January 1, 2016 to December 1, 2016  
(To be reviewed on an annual basis)

**OBJECTIVE:** To detail the services to be provided under this schedule on a cost recovery basis.

### **SUMMARY:**

#### **1. Mission**

HRM Legal Services provides efficient and effective legal counsel and representation to HRM and may, if specifically retained, provide legal services to HRM's affiliated boards and commissions.

#### **2. Structure**

HRM Legal Services is comprised of three divisions – Litigation Services, Solicitor Services and Prosecution Services. Each division is led by a Team Lead reporting to the Director of HRM Legal Services. Together, the Team Leads and Director are responsible for overall client service and the effective deployment of resources.

HRM Legal Services' position within HRM affords it a unique advantage: its lawyers are readily accessible to HRM's business units; it understands the environment in which HRM's business units operate; and it has cultivated the expertise needed for the business of municipal government, the delivery of municipal services and the proper administration of public affairs. HRM Legal Services' lawyers have focused areas of practice, and bring the power of teamwork and expertise to any problem.

#### **3. Cost**

The Services are provided to HRWC on a cost recovery basis and are billed quarterly. Estimated costs are calculated based on our past experience of staff time spent on similar matters.

#### **4. Services**

HRM Legal Services will provide legal counsel and representation to HRWC only to the extent agreed-to by both parties in a retainer respecting (i) a specific matter arising out of HRWC's operations in furtherance of a municipal purpose, or (ii) the conduct of a proceeding by or against HRWC before courts and tribunals relative to such operations (the "Services"). Absent specific authorization from the Director of Legal Services, the Services will be limited to Litigation Services and will not normally include work on regulatory issues before the NSUARB, contract review or labour/management issues.

HRWC will provide to HRM Legal Services all governing documents, policies, procedures, systems, documents and information required for HRM to provide the Services.

#### **5. Conflict of Interest and Preservation of Confidentiality**

HRWC will not seek to retain HRM Legal Services to provide Services where HRWC has knowledge of a potential or actual conflict of interest between HRWC and HRM relative to the subject matter of the retainer.

There will be times when HRM Legal Services will not be in a position to provide the Services to HRWC, including where

- (a) a lawyer from HRM Legal Services is not available to do the work;
- (b) the provision of Services relative to a matter may, in the sole determination of the assigned lawyer, Team Lead or Director of HRM Legal Services, cause a conflict of interest; or
- (c) the requested Services require expertise not available within HRM Legal Services.

HRWC acknowledges that HRM Legal Services' primary mandate is to provide legal counsel and representation to HRM. HRWC recognizes that the interests of HRM and HRWC may diverge on a specific matter and in such circumstances HRM Legal Services may have to act adverse to the interests of HRWC. HRWC hereby consents to HRM Legal Services acting for HRM relative to a specific matter in a manner that is adverse to HRWC while it provides other Services to HRWC on another matter, and waives any conflict of interest that could result from HRM Legal Services acting as legal counsel and representative to HRM on such a matter while it provides other Services to HRWC.

HRWC recognizes that HRM Legal Services may acquire confidential information from and about HRWC as a result providing the Services, and hereby acknowledges and agrees

- (a) HRM Legal Services will not provide Services to HRWC in those circumstances where HRWC expects information and documents provided to HRM Legal Services by HRWC will be treated as confidential or privileged insofar as HRM is concerned; and
- (b) HRM Legal Services will treat information and documents received from HRM as confidential or privileged, and will not disclose such information and documents to HRWC without the prior authorization of HRM, even where this information would be relevant to HRM Legal Services' provision of Services to HRWC.

HRM Legal Services will not disclose HRWC's confidential information to others, subject to the disclosure required by law including governing professional conduct rules.

If HRM Legal Services does not accept a retainer for Services to HRWC on a given matter or, if so retained, cannot continue to provide Services to HRWC relative to the matter because of a potential or actual conflict of interest, HRWC acknowledges and agrees that HRM Legal Services reserves the right to decline to act for HRWC in respect of the matter and hereby consents to HRM Legal Services acting for HRM on such a matter.

## **SCHEDULE "B" - FUEL AND STORES PROVISION**

**HRWC will have access to HRM Stores for supplies and materials as per the normal working hours of the Stores. Stores inventory will be billed monthly at cost plus 15% overhead.**

**HRM and HRWC will each have access to the fuel depots of the other. Fuel will be billed monthly at cost, based on the Receiving Party's use of the fuel of the Providing Party.**

**HRWC will pay HRM to inspect and maintain, repair, undertake upgrades and replacements relative to the fuel depots at Mann Street and Bissett Road, and HRM will administer the reordering of fuel.**

**Liability for contamination will be based on negligence and causation and the operation of applicable legislation, as enforced by regulatory authorities.**

## **SCHEDULE "C" - WASTEWATER TREATMENT CONTRACT OPERATIONS AT HRM RECREATION CENTRES**

The 2007 Wastewater Transfer Agreement, Section 14 states that:

### **Incidental Services**

14. Subject to maintaining current charge out rates until April 1, 2008, HRWC will assume responsibility, on a full cost recovery basis, for the operation of the following facilities, which are acknowledged by HRM not to constitute municipal waste-water facilities or municipal storm-water facilities:
- (a) waste-water treatment plants currently being operated by HRM for municipal properties serving other municipal purposes, (such as recreational purposes) or for third parties, including Twin Oaks Hospital/Birches Nursing Home in Musquodoboit Harbour, Harrietsfield Recreation Facility, the Musquodoboit Valley Memorial Hospital, and the Upper Sackville Recreation Facility;
  - (b) various pumping stations, identified in Schedule "F", currently maintained by HRM's Technical and Underground Services Division for municipal buildings serving other municipal purposes (such as ferry terminals); and
  - (c) such other facilities as may be agreed from time to time.

HRWC staff operate the facilities identified in Schedule F of the Transfer Agreement on a full cost recovery basis. HRWC will invoice HRM quarterly for these services.

When capital upgrades are required for infrastructure owned by HRM, HRWC will identify this need to the appropriate HRM Manager. HRWC will instigate and manage the capital work subject to HRM approval in writing and agreement that HRM will reimburse the cost of the capital work.



## **SCHEDULE "D" - INSURANCE SERVICES**

**Duration and Extension:** an annual contract approach will be taken. As HRM's contract with its insurance service provider nears completion HRM will require six months' notice prior to policy renewal date of HRWC's intent to remove itself as an insured under the insurance program. At the beginning of each budget planning process, but not later than January 31st, HRM will provide HRWC with an estimated insurance premium amount for the upcoming fiscal year.

HRM will bill HRWC for the annual premium for inclusion in the insurance program within 30 days of the placement of the insurance renewal and the effective date of the policy. Any substantive change to the estimate will be explained in advance of the billing from HRM to HRWC. Any additional premium due to changes to the insurance policies will be billed or credited as soon as changes are effective.

Payment will be required within 30 days from the receipt of any invoicing. HRM and HRWC may agree to invoicing on a monthly basis.

It is understood that "Halifax Water" is the branded name for Halifax Regional Water Commission. Halifax Regional Water Commission is the formal name which appears on HRM's Insurance policy as Named Insured.

Currently, HRWC is provided insurance coverage under the following lines of insurance coverage; however, policies may be added or deleted during the term of this schedule based on the availability of an insurance product or by agreement of both parties and are subject to adjustments as may be applicable:

- Commercial General Liability
- Excess Liability – Layers 1, 2
- Professional Liability Policy
- Automobile
- Property - Includes coverage for building, contents, furniture and equipment, computers, and servers
- Crime
- Boiler and Machinery

### **Premium Allocation Methodology**

Currently there is a single insurance service provider for both HRM and HRWC. In order to allocate the cost of the insurance program and to provide full cost accounting for HRWC to establish revenue requirements as approved by the NSUARB, the following approach to the assigned premium costs between the HRM and HRWC will be taken. It is noted that the approach below is based on standard underwriting rating tools and may be impacted by claims experience and/or insurance market availability year over year.

**Commercial General Liability** – Premium is calculated based on a proportional basis of HRWC employees to all employees of HRM and HRWC.

**Excess Liability Coverage** - Premium is calculated based on a proportional basis of HRWC employees to all employees of HRM and HRWC.

**Professional Liability Coverage** - Premium is calculated based on a proportional basis of the number of professionals employed by HRWC at the time of the placement of the policy to all professional employees of HRM and HRWC.

**Automobile** - Calculated based on number of vehicles in each of three categories multiplied by the premium per vehicle in a given category:

- a) Buses and large fire trucks;
- b) Emergency vehicles and police cars;
- c) All other.

**Property** - Premium is calculated based on the appraised or estimated values declared by HRWC for property, including buildings, water treatment facilities, sewage treatment plants and other HRWC infrastructure, but excluding the value of piping conduits located underground. Rating for this cover is on a cost per \$100.00 of declared value basis. Declared value should be provided on a replacement cost basis.

**Crime Insurance** - Premium is based on the proportional basis of the number of employees who have access to cash and negotiable instruments.

**Boiler and Machinery Coverage** - Premium is calculated based on the appraised or estimated values declared by HRWC for property, including buildings, water treatment facilities, sewage treatment plants and other HRWC infrastructure, but excluding the value of piping conduits located underground. Rating for this cover is on a cost per \$100.00 of declared value basis. Declared value should be provided on a replacement cost basis.

### **Risk Management and Claims Handling**

In order to ensure the accuracy of the insurance program and the consistency of claims handling practices, HRWC will be provided access to the IVOS Claim System with costs as follows: Integration and Access - Annual Maintenance; two full access concurrent user licenses at a total annual cost of \$3,103.00 per license (this amount is subject to change without notice). HRWC will reimburse HRM for the annual maintenance fee and license fees, in the amounts as are set by the insurance carrier from time to time). In addition, HRM will provide policy maintenance, Claims handling as outlined in "Claims Process" and risk management advice at an annual cost of \$10,000.00, subject to annual CPI increase.

**Deductibles** - HRWC is responsible to pay applicable policy deductibles associated with their operations. The "per occurrence" deductibles are as follows, and are subject to change upon renewal of the insurance program. All deductibles are inclusive of legal, adjusting and investigation costs:

- 1) Automobile (All covers) - \$250,000
- 2) Property - \$100,000
- 3) General Liability - \$100,000
- 4) Professional Errors and Omissions - \$100,000

**Claims Process** - HRWC Commercial General Liability claims are currently being managed through in house HRWC staff, and through an external vendor for adjustment services. It is anticipated that HRWC will continue to manage the claims arising from their operations (exclusive of those arising from the use or operations of "Automobiles", "Property", "Boiler and Machinery", "Crime" and "Professional Liability".)

**Automobile Liability** - All claims arising from the use or operation of automobiles are to be reported to and managed by HRM Risk and Insurance Services. HRM Risk and Insurance Services staff will continue to:

- 1) Complete investigation to determine liability;
- 2) Maintain accurate reserves and payments within the IVOS Claims Management system;
- 3) Upon resolution of the claim forward all substantiating documentation to HRWC requesting reimbursement of all costs associated with the loss.

**All Claims** - In order to ensure the accuracy of the Insurance Reserve fund and reporting to the HRM/HRWC insurers, all claim files must be set up in the IVOS system. In addition, all reserves and payments must be correctly assigned in accordance with HRM Best Practices guidelines.

**Settlement of Claims** - Settlement of claims by or against HRWC managed through Risk and Insurance staff will be determined as follows:

- 1) At the discretion of the Manager of Risk and Insurance Services, where the final settlement costs is less than \$25,000.00.
- 2) At the discretion of the HRWC Director of Finance, where the final settlements are between \$25,001 and \$50,000.
- 3) At the discretion of HRWC Director of Finance and General Manager, where the final settlements are between \$50,001 and \$100,000.
- 4) At the discretion of the HRWC Board, where the final settlements are between \$100,001 and \$250,000.00.

**Note:** Authorization to expend HRWC funds to settle claims must be in accordance with HRWC's signing authority/authorization policies as approved by the HRWC Board.

**Apportionment of deductible and legal costs** - While in most situations it can be readily determined as to which entity's activities (HRM or HRWC) gave rise to the claim, it is anticipated that in certain circumstances there may not be agreement as to which party is involved. In those cases the final determination as to which entity's cover responds will rest with the HRM's Manager of Risk and Insurance Services, acting reasonably.

Should legal action be initiated against both HRM and HRWC, and a Defense is required, HRM and HRWC will confer to determine who initiates the Defense of the Action. It is anticipated that any outside legal fees associated with the defense may erode the applicable insurance policy deductible; however, the extent to which all or a portion of the fees fall within the terms of the insurance program will be adjudicated on a file by file basis. The final determination as to whether or not an expense is applied to the applicable policy deductible rests with the HRM's Manager of Risk and Insurance Services, acting reasonably.

**Additional Insurance Coverages as known to HRWC** - HRWC currently carries a Fiduciary policy regarding the HRWC Employees Pension Plan Administration. This is not sourced or paid for by HRM Risk and Insurance. Note, this policy is separate and apart from the insurance program referred to in the agreement. HRM does not make representations respecting the adequacy of this cover, its wordings or policy limits.

**Insurance Summaries** - HRM Risk and Insurance will provide a Binder of Insurance Summaries with the appropriate insurance and underwriting information to HRWC on an annual basis. The information provided will contain an executive summary of the underwriting information used to obtain insurance on behalf of HRWC through the insurance program

**Annual Renewals** - Renewal Insurance Summaries will be provided to HRWC as a complete package within 30 days of the receipt of the insurance policy renewal documentation by HRM. Approximately 120 days prior to annual renewal date, or at such other time as HRM may reasonably require, HRWC agrees to provide HRM with underwriting data and assist with renewal requirements.

**Certificates of Insurance (COI):**

Certificates of Insurance can be provided upon email request providing request falls within current insurance portfolio. General information required to provide the COI are:

- Purpose of COI request
- Contact name and information for the Party requesting
- Date COI required

**Changes to HRWC Book of Property, Transaction Summaries**

- In order to ensure the availability of insurance coverage, and to comply with HRM's 30 day reporting guidelines, HRWC will develop a method of providing notice of additions, deletions or changes to insured assets or values to the satisfaction of HRM.
- In the event of new buildings or building additions, notice to HRM has to be provided prior to ground breaking and the build commencing.

## **SCHEDULE "E" - TRANSPORTATION AND PUBLIC WORKS SERVICE ISSUES**

### **1.1 Storm Water Infrastructure**

HRWC will clean ditches at HRWC's cost. Asphalt and gravel shoulder reinstatements will be an HRM cost and responsibility.

HRWC will absorb cleaning costs for a catch basin, including where its operation is negatively impacted by HRM's activities, such as the build-up of road construction debris or damage/obstruction caused by winter works operations. HRWC will not be charged for catch basin adjustments or relocation of catch basins as a result of a change in road right-of-way alignment. HRWC will still be responsible for replacement of catch basins should they be structurally unsound.

HRWC will absorb the cost to adjust, repair or replace manholes and other HRWC owned surface appurtenances/hardware that are damaged as a result of winter works operations. However, HRM will absorb the repair or replacement costs for damaged fire hydrants as a result of those operations.

HRM will cover the initial costs for bike lane grates where bike lanes are installed on existing roads; however, HRWC will be responsible for all future maintenance and replacement costs for these grates. HRWC standards have been updated to include this style of grate for new construction.

### **1.2 Valve Box and Manhole Adjustments and Tree Root Repairs**

The Joint Memorandum for Hardware Adjustment and Tree Root Repair Service Exchange dated November 5, 2015 in subject to this Section 1.2.

HRM will absorb the cost to adjust, repair or replace manholes and valve boxes where such action is required as a result of the HRM Streets and Roads Recapitalization Program, but will not absorb these costs in circumstances where HRWC chooses to upgrade, repair or replace manholes, valve boxes or other HRWC owned surface appurtenances/hardware during a cost share or joint project.

HRWC acknowledges that surface appurtenances/hardware adjustments undertaken as part of the HRM Streets and Roads Recapitalization Program constitute an improvement to the condition of HRWC assets and any residual deficiencies are offset by the overall benefit to HRWC asset condition.

HRWC will be responsible for the cost of repairs to storm and sanitary sewers resulting from tree root ingress into storm and sanitary sewers in the right-of-way

### 1.3 Solid Waste Leachate Treatment Plant

#### **Highway 101 Landfill-Leachate Treatment Facility Operation Agreement of Terms**

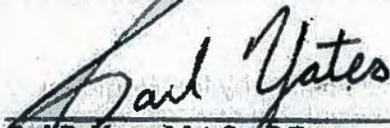
Effective April 1, 2009, in recognition of obligations contained in Section 13 of the Wastewater Transfer Agreement, dated June 12, 2007, Halifax Water will operate the facility for HRM on the following basis:

1. The Leachate Treatment Facility [LTF] operations and maintenance budget will be forwarded by Halifax Water to HRM Solid Waste by no later than December 31<sup>st</sup> of the calendar year for effect at the beginning of the next fiscal year, April 1st.
2. HRM will be financially responsible for all capital improvements and all operating and maintenance costs.
3. Halifax Water will charge direct treatment operator costs [Process Technician and Labourer] to HRM which will include a 15% surcharge to cover managerial oversight of operations, engineering project management support for capital projects and environmental services support for matters related to environmental compliance. Halifax Water will invoice HRM on a quarterly basis for this service.
4. Halifax Water will prepare cost estimates for capital projects which will include third party design and inspection fees for inclusion in HRM's annual capital budget.
5. For greater clarity, planning and implementation of capital projects will follow a staged approval process as follows:
  - a) Halifax Water engineering staff will co-ordinate preparation of tenders for identified capital projects.
  - b) The tender package will be submitted to HRM Procurement for review and approval.
  - c) HRM Procurement will forward to HRM Solid Waste staff for final approval.
  - d) HRM Procurement will tender project and review results with Halifax Water and HRM Solid Waste staff.
  - e) Halifax Water and HRM Solid Waste staff will jointly prepare report to HRM Council to award contract with technical support from Halifax Water including attendance at HRM Council meetings.
6. HRM and Halifax Water will work co-operatively to obtain Operating Approval(s) to lift the Ministerial Order currently in place for operation of the Highway 101 landfill and LTF and allow for the treatment of Otter Lake, New Era and Miller leachates at the LTF.
7. Halifax Water will operate the facility in compliance with the Public Utilities Act.
8. Halifax Water will receive and treat leachate from HRM's Otter Lake Solid Waste facility at the Mill Cove treatment facility on an interim basis for a tipping fee of \$0.00288 per gallon [\$0.6336/m<sup>3</sup>] and invoice HRM for this service on a quarterly basis.

9. It is acknowledged that Highland Energy operates a landfill gas collection and recovery system at the Highway 101 Landfill site under contract with HRM. HRM and Halifax Water agree to work co-operatively in matters related to Highland Energy and the operation of systems and infrastructure located at the Highway 101 Landfill site.

10. If either party wishes to terminate this agreement, written notice must be given one year in advance.

**HALIFAX WATER**

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

**HALIFAX REGIONAL MUNICIPALITY**

 12/1/09  
\_\_\_\_\_  
Jim Bauld  
Manager, Solid Waste Resources

## **SCHEDULE "F" - FINANCE, INVESTMENTS AND CASH MANAGEMENT**

HRM and HRWC Finance have traditionally provided services to each other at no cost, as there was little incremental cost. For example, HRWC billed environmental protection and pollution control charges on behalf of the municipality until the 2007 Wastewater Merger.

### **1.1 Collection of outstanding wastewater and stormwater accounts**

The *HRWC Act* empowers the HRM to collect outstanding wastewater and stormwater accounts on HRWC's behalf. HRWC has an effective collection mechanism for water arrears as the utility can disconnect the service. With respect to wastewater and stormwater arrears, prior to the 2007 transfer the collection mechanism was to establish a lien on the property. With the 2007 transfer, the HRWC Act was amended to enable this collection mechanism to remain in place, as follows:

34 (1) Upon request of the Commission, or in the event of collection by the Regional Municipality of other municipal liens against a property, the Regional Municipality shall collect the lien on behalf of the Commission and, after deducting collection costs, it shall remit the proceeds to the Commission.

(2) Collection costs and proceeds shall be pro-rated between the Commission and the Regional Municipality when the collection is undertaken for both the Regional Municipality and the Commission. 2007, c. 55, s. 34.

The business process where HRM agrees to collect outstanding wastewater and stormwater arrears on behalf of HRM is as follows: HRWC transfers lienable arrears accounts to HRM. HRM establishes an account receivable, initiates collection activities and establishes a lien as required. All of the Wastewater "lienable" account credits appear on HRM's financial statements due to HRWC. HRM will recognize these credits against specific invoices from HRM.

The Due to/From account between HRM and HRWC is being reconciled on a monthly basis.

### **1.2 Stormwater Billing (non-HRWC piped service customers)**

#### **Background**

The *Municipal Government Act* and *HRM Charter* designate the stormwater system as a municipal service. Effective in 2007, responsibility for delivery of this service was transferred from HRM to HRWC; since 2007, HRWC owns and maintains the stormwater system including pipe networks, ditches, drainage channels, catch basins, and retention ponds, to provide drainage during storm events.

With the transfer in 2007, the services that HRWC provide fall under the *Public Utilities Act* and are now subject to regulation by the Nova Scotia Utility and Review Board (NSUARB), which has directed that all customers within the stormwater serviceable boundary are to be billed for stormwater services.



### Impervious Area Data

Satellite imagery/GIS data can be used on properties other than residential properties to measure impervious area. These measurements can be used to determine the stormwater charge payable in respect of the subject properties.

Stormwater charges for residential properties are based on an average impervious area.

HRWC will use satellite imagery and software to produce a GIS layer showing the impervious areas on which calculations can be based. HRWC will make satellite images/GIS layer available to HRM for the Municipality's internal use.

### Site Generated Stormwater Charge

Subject to applicable legislation, HRM will provide HRWC with data to enable HRWC to issue bills for the site generated flow charge for customers within the stormwater serviceable boundary.

### No Fees

There will be no charge back of costs between organizations associated with data sharing or billing, as the incremental costs are minimal.

## **1.3 Capital Cost Contributions**

Section 18 of the Transfer Agreement specified that:

### Regional Capital Cost Charges currently levied under By-law C-600

- (f) After the Effective Date, regional capital cost contribution charges levied in applicable regions by HRWC pursuant to HRWC Regulations shall be collected by HRM for HRWC and shall be remitted to HRWC each month. It is the intention of the parties that these charges shall replace the Regional Capital Cost Charges currently levied pursuant to By-law C-600;

New Capital Cost Contributions for Water, Wastewater and Stormwater are approved by the NSUARB, and are collected by HRM for HRWC and remitted to HRWC each month.

HRWC will be asked to sign-off and approve any configuration changes in HRM Systems or business process changes that impact levy and collection of Water, Wastewater or Stormwater CCCs.

HRM and HRWC agree that both parties must be informed as quickly as possible regarding any calculation or processing errors that result in over or under collection of CCCs.

## **1.4 Local Improvement Charges**

Section 18 (l) of the 2007 Transfer Agreement specifies the manner in which HRM levies Local Improvement Charges on behalf of HRWC.

### Local Improvement Charges under By-Law L-100

- (1) **There shall be no change to the manner in which Local Improvement Charges currently levied by HRM pursuant to By-law L-100 are levied or administered, save and except that municipal waste-water and municipal storm-water facilities shall be dealt with in the same manner as currently applies to municipal water services;**

## **1.5 Banking and Investments**

**HRWC is part of HRM's umbrella banking agreement, and pays a portion of banking related expenses equivalent to the transaction volume represented by HRWC. In addition, HRWC pays any merchant discount fees that are incurred by HRM in collecting revenues and recoveries on behalf of HRWC.**

**Investment of HRWC's funds are managed along with other Agencies, Boards and Commissions of the Municipality, under HRM's Investment Policy and governed by the Investment Policy Advisory Committee (Subcommittee of Audit and Finance).**

## **SCHEDULE "G"- INFORMATION, COMMUNICATIONS AND TECHNOLOGY**

The current Service Level Agreement between ICT, a business unit of HRM and HRWC, is hereby incorporated within and is replaced by this Schedule "G".

HRM and HRWC acknowledge and agree that they are separate legal entities. HRM can only provide HRWC with access to and use of third party software and services procured by HRM where HRM and the third party have agreed in contract that HRM is permitted to provide access and user rights to HRWC.

The ability of HRM to provide HRWC with quality service under this schedule is dependent on the compatibility of the software and hardware maintained by HRM and HRWC; and the level of compatibility is directly related to the procurement choices HRWC has made respecting the information technology it has purchased or licensed from third parties.

HRM will provide the IT services to HRWC as is described in the document reproduced below, as is amended by this Schedule G:

1. HRWC's right to receive the third party services referenced in Section 4.1 of the document below or to subscribe to the third party services detailed in Appendix A – the Service Matrix may be subject to HRWC having negotiated licensing arrangements with the relevant third party software vendors. Where no such arrangements exist, the services to HRWC may be limited or unavailable except where HRM is permitted by agreement with relevant third party vendor to sub-license the software or service to HRWC.
2. The Service Exceptions and Special Arrangements at Appendix B is contingent on HRWC having secured certain rights in the Geographical Information System ("GIS"). HRWC hereby represents that it has secured from relevant third parties all rights necessary for HRM to host, access, use and share the GIS architecture, including but not limited to the hardware, software and services referenced at Appendix C.

# HALIFAX

REGIONAL MUNICIPALITY

SERVICE LEVEL AGREEMENT

Between  
Halifax Regional Water Commission  
And  
Information, Communications & Technology Division

### Document Information

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0.4	Draft SLA including updated Appendices	ICT CRM	Oct 30, 2012
0.5	Jim Kirk and Mark Helm updates	ICT CRM	Nov. 5, 2012
0.6	Update Appendix B – GIS Steering Committee and Appendix C Costing	ICT CRM	Nov. 19, 2012
0.7	Results of review with Daya Pillay and Harold MacNeil with ICT updates.	ICT CRM	Dec. 14, 2012
Final 1.0	Final after Dec. 19 review with Daya Pillay and Harold MacNeil	ICT CRM	Dec. 21, 2012
Final 1.1	Corrections – CRM to ITSM, 4.2 targets, 4.7 charging example and Appendix A Service Names.	ICT ITSM	Dec. 24, 2012

HRWC / ICT Service Level Agreement Final 1.0 (Jan. 2013)

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## 1.0 AGREEMENT

### 1.1 Purpose of this Document

This Service Level Agreement is an agreement between HRM's Information, Communications and Technology (ICT) division and HRM Business Units, Agencies, Boards and Commissions (Clients).

The objective of this agreement is to provide a view of the services provided by ICT, service levels, targets, objectives and reporting available for the services delivered. The agreement facilitates ongoing communications and is expected to evolve over time as operational processes and procedures mature and improve.

#### Agreement Objectives

- Foster effective communication between Clients and ICT
- Describe the roles and responsibilities of the Client and ICT to ensure effective service delivery and optimum resource utilization
- Assist in managing service level expectations
- Document the escalation path to address service issues / problems
- Define the service level targets with the Client
- Describe the annual review and renewal cycle for this agreement
- Describe the reporting that the Client will receive

### 1.2 Terms and Conditions

This agreement makes previous agreements null and void.

Approval and signoff of this document indicates:

- Agreement by both parties that the content is valid
- The objectives are achievable and
- It represents the intent of ICT to meet the information, communication and technology support and delivery needs of the Client.

At a minimum, the agreement will be reviewed annually to allow ICT to respond to the changing needs of the business and ICT capabilities. Scope, roles / responsibilities and service levels will be assessed and adjusted accordingly.

Amendments and additions to this agreement will be reviewed and approved by the Client and ICT. The agreement is intended to evolve as additional services and / or changes to services are introduced.

The Service Level Manager (ICT's Manager of IT Service Management (ITSM)) is the owner of this document and is responsible for all changes. Responsibilities include:

- Document maintenance
- Review of suggested / required updates
- Alignment with ICT Service Catalogue
- Ensure all changes are negotiated and approved by all parties
- Maintain an archive of current and past versions

## 2.0 SERVICE LEVEL MANAGEMENT

ICT is adopting an IT Service Management (ITSM) approach for the delivery, support and management of ICT services. ITSM is based on the ITIL® framework<sup>1</sup>, an international best practices model for IT service management.

In order to enable consistent and repeatable service support and delivery, ICT has implemented a Service Level Management (SLM) process within the ICT organization. The SLM process uses best practices and guidelines as the basis upon which to manage ICT services for HRM.

### 2.1 Service Level Agreement

Service Level Agreements (SLAs) are established between ICT and HRM Clients forming a service provider to client relationship. The intent is to develop a partnership and provide for ongoing communication through a mutually beneficial agreement.

ICT responds to the requirements defined by the Clients by describing the services ICT provides, key service level targets to be achieved and the responsibilities of both parties in the delivery of these services. The SLAs are also used in conjunction with the Service Catalogue to record any agreed service exceptions to the standard services.

### 2.2 Service Management Roles and Responsibilities

ICT will work closely with the Client to ensure a clear understanding of the roles and responsibilities and their dependencies that play a part in the SLM process. The following outlines a high level view of some of the key responsibilities of ICT and the Client.

#### 2.2.1 ICT Responsibilities

The responsibilities of ICT to the Client are to:

- Ensure the SLM process provides value to the Client
- Formulate, agree and maintain an appropriate SLM structure for the organization that will:
  - Maintain the SLA with the Client – Updates to the SLA are reviewed annually and / or when new services are being activated or changed
  - Discuss and agree with both the Client and ICT any service level requirements for proposed new / developing services
  - Document / update the Service Level targets and seek Office of Chief Information Officer (OCIO) approval
  - Determine service level measurement, reporting and monitoring requirements
  - Analyze and review service performance against SLAs
  - Produce regular ICT reports on service performance and achievements
  - Organize and conduct regular service level reviews with the Client
  - Ensure communication channels exist for effective Service Level Management collaboration with the Client
  - Present service improvement initiative opportunities

<sup>1</sup> ITIL® is a registered trademark of the U.K.'s Office of Government Commerce.



- o Identify and coordinate actions required to maintain or improve service levels within ICT
- o Act as coordination point for any temporary changes to service levels required
- Conduct annual reviews of the entire SLM process and recommend SLM process improvements (i.e. measure the process and recommend improvements)
- Execute SLM process improvements
- Promote integration with other IT service management and business processes
- Create and maintain a Service Catalogue of existing services offered by ICT

### 2.2.2 Client Responsibilities

In order for the SLM process to provide the best service to the Client, the Client has an equally important role in the process and has associated responsibilities. These responsibilities are to:

- Identify an individual to represent the Client in the SLM process
- Promote the intent of ICT to meet the documented service and service level requirements of the Client within the Client organization
- Collaborate and agree on service level targets and levels
- Participate in the formulation, documentation, approval and sign-off of the ICT SLA
- Participate in service performance reviews with ICT to identify service improvement opportunities
- Ensure communication channels exist for effective SLM collaboration with ICT
- Assist with service improvement programs where applicable
- Communicate Client / staff roles and responsibilities to ICT

### 2.3 SLM Issue Management and Escalation

The purpose of the SLM issue management and escalation process is to ensure a formalized escalation path exists in the event that service related issues cannot be resolved. This process can be triggered by the following circumstances:

- Service related issues that cannot be resolved at service review meetings
- Customer demands for immediate escalation / attention

The issue management and escalation process is not to be confused with the ICT Service Desk issue / incident management process escalation procedure. All parties agree to make every effort to resolve issues at the lowest level, progressing to the next level only when necessary.

1 <sup>st</sup>	HRWC Designated Contacts	Myrone Lopez ICT Consultant lopezm@halifax.ca 490-6592
2 <sup>nd</sup>	Dayalan Pittay Manager, Information Services dayalanp@halifaxwater.ca	Jim Kirk Manager ICT Planning and CRM kirkj@halifax.ca

Escalation	Customer/ Client Representative	ICT
	490-8921 (office) 266-8778  Harold MacNeil Manager, Engineering Information <a href="mailto:HaroldM@halifaxwater.ca">HaroldM@halifaxwater.ca</a> 490-8234 (office) 441-1064 (mobile)	490-7297 (office) 237-9117 (mobile)
3 <sup>rd</sup>	Jamie Hannam Director, Engineering and Information Services <a href="mailto:Jamie.Hannam@halifaxwater.ca">Jamie.Hannam@halifaxwater.ca</a> 490-4804 (office) 441-1079 (mobile)	Donna Davis Chief Information Officer, ICT <a href="mailto:davisd@halifax.ca">davisd@halifax.ca</a> 490-4447 (office) 476-8486 (mobile)

**Customer**

A person who uses ICT services on a day-to-day basis. Customers are distinct from Clients, as some Clients do not use the IT service directly.

**Client Management**

This is the person or group, representing the Client, who defines and agrees to the service level targets.

**Client Signee**

is the individual who accepts the SLA terms and conditions on behalf of the client organization.

**ICT Consultant**

Each Client has a designated ICT Consultant who acts as a point of contact for management and escalation. The ICT Consultants are critical members of the ITSM team who focus on ensuring customer satisfaction and reporting on achievement of service targets.

**Manager of IT Service Management (ITSM)**

The Manager of ITSM is the owner of the SLM process and is accountable for customer satisfaction and service achievement reporting.

**Chief Information Officer**

The Chief Information Officer is ultimately accountable for the design, implementation, operation and continual improvement of all ICT Services. Focus is on the long-term, lifecycle management of all Services and sign-off on Service Level Targets committed in SLAs and are accountable for target attainment.

### 3.0 QUARTERLY SERVICE PERFORMANCE REVIEWS

The SLA is the primary tool / document used to begin service reviews and service level discussions. The purpose of the review meetings with the Client is to present and discuss the overall service performance of ICT services and to:

- Determine if service level targets defined in the SLA are being achieved or if there are shortfalls
- Provide a measurement point to facilitate service and / or process improvements
- Review service improvement initiatives
- Determine Client satisfaction regarding the services

#### 3.1 Service Review Meetings

The ICT ITSM team works in collaboration with the Client to develop quarterly service reviews to communicate and discuss issues and opportunities regarding ICT services. As a minimum, participants should include the Client Representative and the ICT Consultant. The agenda may include:

- Current quarter service level achievement reports for incident resolution, service request completion and project performance
- Unplanned system outage events, resolution activities, what worked, what didn't and next steps
- High Priority / Major incidents that missed resolution targets
- Status of current service improvement programs
- New service improvement opportunities (Client / ICT specifications)
- Client news / updates (changed service requirements)
- ICT news / updates (upcoming planned outages, releases, new processes)

All services are monitored to verify that the Client's service requirements are being met. When service level targets are not met, causes will be identified and appropriate modifications to service delivery methods will be made to improve service delivery.

Information gathered and collected before or during the service review meetings will be used to develop service improvement plans.

## 4.0 SERVICES AND SERVICE LEVELS

### 4.1 Services

The SLA encompasses ICT services described in the ICT Service Catalogue and are categorized as follows:

Service Category	Description
3.0 Enterprise Services	These are ICT services that address a specific set of processes or functionality and are used or have the potential to be used by all HRM Clients.
4.0 Business Unit - Specific Services	This section describes services that are restricted in their use. They are available only to the Business Units indicated.
5.0 Telecommunication Services	This section describes the Telecommunications Products and Services provided by ICT, supplying HRM management and staff with procedures and time frames for requesting and receiving telecommunications services.
6.0 Professional Services	Professional Services are provided to assist in development of new or changing systems and services, data management and provision of staff training.

Note: Not all Clients subscribe to all services. The Service Matrix in Appendix A illustrates the services delivered to each Client.

[Click here](#) to view the current ICT Services Catalogue.

For each ICT service, several topics are addressed and are intended to provide answers to common customer questions.

- What does the service include and when is it available (e.g. 5 or 7 days a week and 8, 16 or 24 hours a day)?
- Requests for service (e.g. new / changed user access)
- Restrictions or constraints (restricted access, planned maintenance outages, etc.)
- Prerequisites (approvals, training, infrastructure, etc.)
- Costs (if applicable)
- How to order
- Training availability
- How to get help with service issues (incident resolution)
- Staff responsibilities

For requests for service and help with issues, the catalogue presents target time frames (hours / days) for completion of the work. The following illustrates the target categories.

**Complete** The target completion time for service requests (e.g. a new user access request has been completed or new report has been delivered to the requester).

**Resolved** There is an issue / incident with a service. A system is not working or is not performing as agreed. Resolved is the target time (the number of hours or days) within which the issue will be resolved.

**Respond** Where a service request requires consultation with the customer and / or a 3<sup>rd</sup> party, ICT resources commit to confirming receipt of the request (Response) within a specific timeframe. At this time, measurement and reporting of Response targets is not possible. This capability will be added in the future when the existing request management tracking system is replaced.

#### 4.2 Service Targets and Levels

The Service Catalogue and this SLA reflect ICT's understanding of the requirements and expectations of our Clients. ICT will measure performance against these targets.

ICT aims to achieve the Service Target Completion / Resolution times detailed for each service 80% of the time.

If targets are missed, ICT will evaluate why they were missed and, where appropriate, will initiate service improvement plans to get performance back on track. Over time, the aim is to continually improve service performance.

#### 4.3 Service Level Reporting

ICT reporting exists for incident resolution (e.g. system failure) and service request fulfillment. The reports illustrate service volumes and service level achievements and present ICT performance against target levels outlined in the ICT Service Catalogue and SLA. Service Level Reports will be distributed to Clients on a quarterly basis. Improvements to reporting and measurement capabilities are made on an ongoing basis. Each improvement / change will follow the ICT Change Management Process.

Report	Frequency	Description	Customer Communication
ICT Service Trend Report	Quarterly	HRM enterprise-wide service volumes and service level achievement for the current and previous 12 months	Client Management will be advised via email that reports have been published to InsideHRM
Service Request Fulfillment	Quarterly	Three-month report on services requests for the month the work was completed	
Incident Resolution	Quarterly	Three-month report on achievement of incident resolution targets for the month in which the issue was resolved	

## **4.4 Service Interruptions**

### **4.4.1 Planned Maintenance Outages**

ICT systems are kept current and secure through regular system maintenance including the application of software patches and updates. Systems must be taken off-line to do this work. To minimize the business impact of service unavailability, ICT schedules this maintenance activity during non-peak times and these are detailed in the Service Catalogue. For services available during core business hours, the maintenance window is every Wednesday evening from 6:00PM to 9:00PM. The window for 7/24 services or those with extended hours is every Wednesday from 9:00PM to 12:00PM. Customers are advised when a planned outage is scheduled.

### **4.4.2 IT Service Continuity**

In the event of a disaster, currently there are no defined plans or systems for recovery should any or all ICT systems fail. ICT intends to evaluate the need and timing for Service Continuity Plans by the end of fiscal 2012. This is reflected in the operations plan.

## **4.5 Service Exceptions**

The Service Catalogue and this SLA reflect ICT's standard levels of service to Clients. However, certain Clients' business needs demand a higher level of service for issue resolution, services requests and support availability (i.e. support after business hours). These service exceptions are detailed in Appendix B.

## **4.6 Special Arrangements**

Certain services have specific seasonal activities. Client specific special arrangements are detailed in Appendix B.

## **4.7 Charging**

Generally, there are no incremental charges for services. Some service requests are billed back to the Client (e.g. ad hoc use of ICT resources, etc.). Client specific charges, billing cycles and payment methods are detailed in Appendix C.

## **4.8 Data Maintenance and Support**

HRM Corporate data is a valuable resource to ICT Clients allowing them to make informed decisions. ICT and certain Clients share accountability for data integrity and quality. When appropriate, Data Maintenance and Support Agreements are detailed in Appendix D.

## 5.0 SIGNATORIES

### Parties to this Agreement

This agreement is made between HRM's Information, Communications and Technology division and HRM Business Units, Agencies, Boards and Commissions (Clients).

#### For the Halifax Regional Water Commission

Carl Yates  
Name

*Carl Yates*  
Signature

General Manager  
Title

Jan. 10/13  
Date

#### For HRM ICT

Donna Davis  
Name

*Donna Davis*  
Signature

Chief Information Officer  
Information, Communications and Technology  
Title

Feb 11, 2013  
Date

## APPENDIX A – SERVICE MATRIX

The following table illustrates the services that are covered by this Service Level Agreement. With the exception of 4.0 Business Unit Specific Service, B.1 HRWC Application Hosting and Support, a complete description of all services is available in the ICT Service Catalogue. The most recent version can be found at <http://hrm.ctm/BusinessUnits/ICT/Documents/ICTServiceCatalogue.pdf>.

\* B.1 HRWC Application Hosting and Support is described in Appendix B, Service Exceptions.

Ref.#	Service	In Scope	ICT Service Desk
3.0	Enterprise Services		
3.1	Email		
3.2	Enterprise Asset Management		
3.2.1	Asset Management – Buildings and Vehicles		
3.2.2	Asset Management – Financial Consolidation		
3.2.3	Asset Management – Right-of-Way		
3.3	File / Print Services		
3.4	Finance Systems		
3.4.1	Financial Management Systems		
3.4.2	Procurement / Inventory Management Systems		
3.4.3	Payroll System		
3.5	Geographical Information System		
3.6	Human Resource System		
3.7	Permitting and Revenue Systems		
3.7.1	Customer Relationship Management	✓	
3.7.2	Permitting and Licensing Systems	✓	✓
3.7.3	Revenue Systems		
3.8	Personal Computing Services		
3.9	Service Desk		
3.10	Web Development and Support	✓	
4.0	Business Unit Specific Services		
4.1	Emergency Dispatch Systems		
4.2	Fire & Emergency Systems (Fire RMS)		
4.3	Polling Systems		
4.4	Recreation Systems		
4.5	Transit Systems		
B.1*	HRWC Application Hosting and Support	✓	✓
5.0	Telecommunication Services		
5.1	Audio Conferencing Services		
5.2	Internet Access	✓	✓
5.3	Network Service	✓	
5.4	Remote Access	✓	Support only
5.5	Voice, Mobile and Radio Services		
6.0	Professional Services		
6.1	Business Solutions Delivery Service	✓	
6.2	Data Management Services		
6.3	IT Training	✓	
6.4	Reporting Services	✓	

\* Only for requests for new / changed user access to facilitate updates of HRM workorders.



## APPENDIX B – SERVICE EXCEPTIONS AND SPECIAL ARRANGEMENTS

### B.1 Service Exceptions

The Halifax Regional Water Commission (HRWC) does not consume the Geographical Information System services as described in the ICT Service Catalogue. Rather, it shares the responsibility / ownership of the HRM GIS systems and infrastructure hosted within HRM facilities.

The following table describes these services.

B.1.1 HRWC Application Hosting and Support	
<p><b>Service overview –</b> HRM's ICT department hosts and supports the Halifax Regional Water Commission's Geographical Information System in the ICT data centre providing a highly available application environment by maintaining infrastructure and systems.</p>	
What is included in this service?	What options are available?
<p>The Application Hosting &amp; Support Service provides a suite of capabilities to facilitate ...</p> <p><b>Infrastructure Services</b></p> <ul style="list-style-type: none"> <li>• Hardware and software management</li> <li>• Network connectivity</li> <li>• Security</li> <li>• Application &amp; Database support and maintenance</li> <li>• Storage</li> <li>• Capacity planning</li> <li>• Backup and restore</li> <li>• Software Maintenance</li> <li>• GIS Systems and Services</li> <li>• Hardware / Software Environment and Resource Cost Sharing (incl. maintenance and recapitalization)</li> <li>• Maintenance of the SDE Instance and SDE administration</li> <li>• Applications Administration ... all administration for ReGIS and DOE applications, including user/password creation and maintenance.</li> <li>• HRM will maintain its own Flex and Web based applications, including existing IMS, ReGIS and DOE applications.</li> <li>• Both agencies will share all source code.</li> <li>• Maintenance and administration of a separate virtual server for HRWC application development purposes</li> <li>• Shared common QA/Testing environment administered by HRM.</li> </ul> <p>The infrastructure and systems for hosted applications are designed to be available 7 days a week, 24 hours a day.</p>	
What are the restrictions or constraints?	
<ul style="list-style-type: none"> <li>• The systems may not be available during the client's planned maintenance outages. Where HRM systems are impacted, GIS outages are scheduled on Wednesday mornings (7:00AM-8:00AM).</li> </ul>	

<p>Infrastructure outages are scheduled Wednesday evenings (9:00PM-11:00PM). Clients and staff are advised.</p> <ul style="list-style-type: none"> <li>This service excludes HRWC participation in the following applications and software: <ul style="list-style-type: none"> <li>Public on-line mapping application known as ExploreHRM.</li> <li>ESR's Tracking Server</li> <li>Additional software or applications developed by HRM in the future, unless the HRWC chooses to opt in at a later date</li> </ul> </li> <li>Note: No further development will occur for the current ReGIS, IMS and InsideExploreHRM environments.</li> </ul>	
<b>What must I already have to use it?</b>	<b>What does it cost?</b>
	As outlined in Appendix C of this Agreement
<b>How do I order it and how long will it take?</b>	
Contact the Service Desk @ 490-4444, email @ ICT Service Desk < <a href="mailto:ictad@halifax.ca">ictad@halifax.ca</a> > or <a href="#">click here</a> to order these services;	
<b>Standard Requests</b>	<b>Service Target</b>
New / revised user access	Complete 3 business days
Data schema changes	Respond 1 business day
<b>Contact your ICT Consultant for the following requests:</b>	<b>Service Target</b>
New or changed GIS functionality Map cache creation or recreation	The delivery target time is determined after consultation with the HRWC, vendor, ICT staff and confirmation of scope and complexity.
<b>Can I receive training?</b>	
When formalized training is held by either HRM or the HRWC, any un-filled seats will be made available to the other organization. HRM will set the training requirements for all HRWC staff that have administrative access.	
<b>Who do I call for help?</b>	
For service failures, you should telephone the Service Desk @ 490-4444 to log the issue. The Service Desk is staffed Monday to Friday from 8:00AM to 5:00PM.	
<b>Error resolution support is available Monday to Friday from 8:00AM to 4:30PM.</b>	<b>Service Target (based on priority)</b>
Priority 1 (service is unavailable)	Resolved 4 business hours
Priority 2 (service is degraded & affects all users)	Resolved 1 business day
Priority 3 (single user issues)	Resolved 3 business days
<b>Service Outside Standard Business Hours</b>	
Should Infrastructure Services be required outside standard working hours, the HRWC Information Services Manager will contact the HRM Service Desk at 490-4444 to make arrangements for extended services. These services will then be billed at the HRM after-hours	

rates for services and materials as identified in ICT Infrastructure Services detailed in Appendix C of this agreement.

#### **HRWC responsibilities with this service?**

The HRWC is responsible to:

- Telephone the Service Desk for assistance with service failures and errors
- For planned outages that will impact HRM systems, contact your ICT Consultant to coordinate through ICT's Change Management.
- Geomatic Programming - all responsibility for maintaining, developing and administering the custom-built 'Forms' and Flex Applications developed for and by the HRWC remains with the HRWC.
- All stand-alone licensing in place at the HRWC on the signing of this agreement will be retained by the HRWC.
- Reports - The HRWC will be responsible for developing and maintaining all required reports. Should reports create a performance problem on the server, the party running the report will be notified and be asked to run the report outside of standard working hours. On-going use of that report during working hours will be disabled.
- Custom Toolbars - The maintenance of custom toolbars will remain the responsibility of the HRWC.
- The HRWC is required to adhere to HRM's change management processes and policies for all applications residing on HRM hardware.

## **B.2 Special Arrangements**

The HRWC and HRM have shared access to and responsibility for the GIS illustrated at the end of Appendix C.

Decisions on the specific components to be included in the HRWC/HRM shared infrastructure will be reviewed and agreed by the Manager, Engineering Information for the HRWC and the Manager, ICT Planning and CRM for HRM. In scope decisions will include:

- Operating system level
- Infrastructure investment
- Investment to mitigate potential capacity issues
- Planning related issues around software versions, upgrades and application migrations
- Planning related to GIS initiatives and overall direction within HRWC / HRM that have an impact on the shared hardware / software environment

**Dispute Resolution** – Should the HRWC and HRM be unable to reach consensus or resolve an issue through negotiation, the issue will be referred to the HRWC's Director, Engineering and Information Services and HRM's CIO for resolution and decision.

**APPENDIX C – CHARGING**

**Ad hoc Charges**

Ad hoc use of ICT Training, Reporting and GIS Resources will be billed monthly based the following hourly rates.

Resource	2012/2013		2013/2014	
	Regular	Overtime	Regular	Overtime
GIS System Analyst	49.28	73.93	50.28	75.42
GIS Programmer Analyst	45.80	68.71	46.73	70.09
Programmer Analyst (Reports)	45.80	68.71	46.73	70.09
Systems Trainer	41.10	61.65	41.92	62.67

Where possible, the HRWC will provide two weeks' notice to schedule these resources.

**Annual Service Charges**

The tables on the following pages provide details on the annual costs for both ICT Infrastructure and ITC Geographic Information Systems and Services. A snapshot of the GIS architecture is included as the last page of this Appendix.





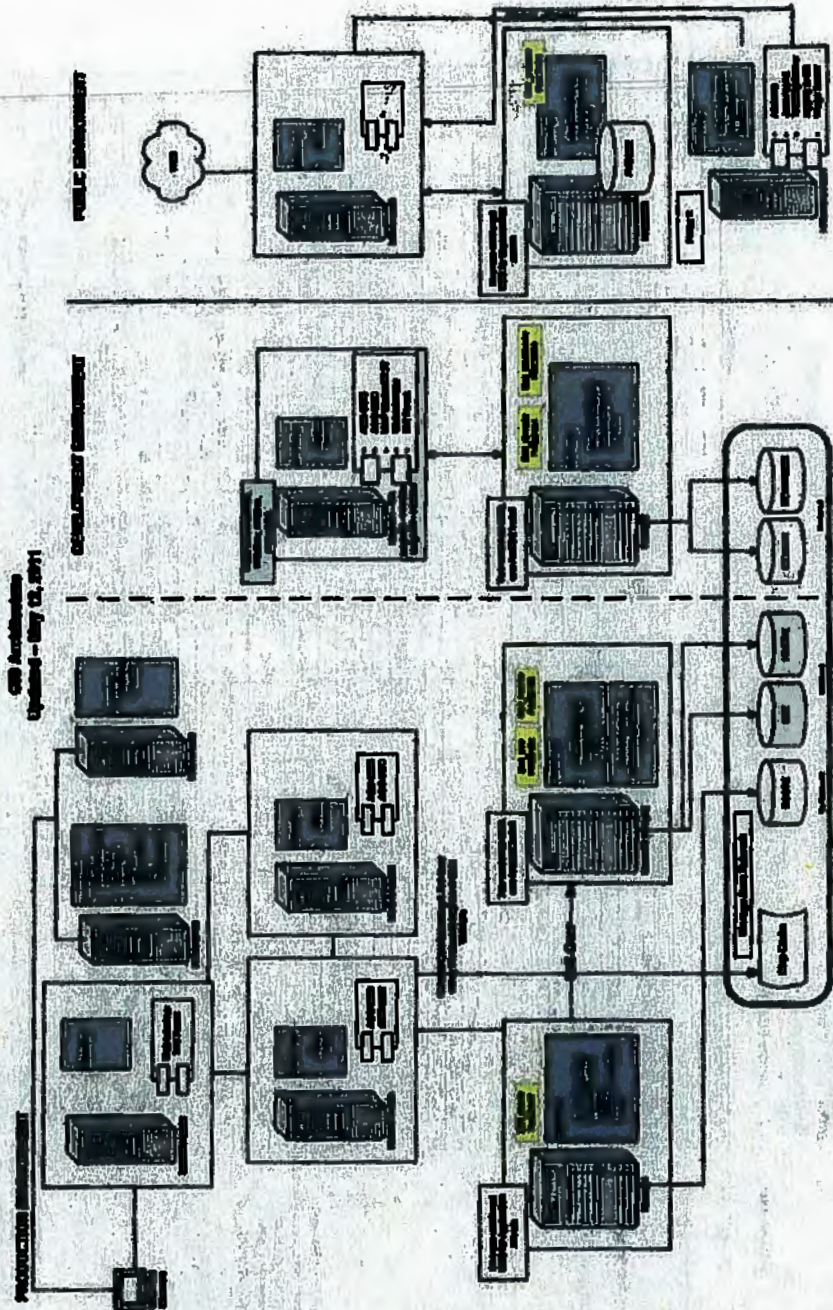
**Inventory of Services Provided to Public Water Communities (PWC)**

ICT Computer Information System/Network Services  
 December 2012

Operational Area  
 Date:

Service Area	Service Title/Description	Unit of Measure/ Priority/ Quantity	Est. Condition	Amount of Service	Cost	Comments	2012 Quantity/ Price @ PWC
Customer Support Services	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
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	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
	ICT Support Services	100 hours	Good	100	10,000		
Network & Database Support	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
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	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	Network Support Services	100 hours	Good	100	10,000		
	<b>Total Costs</b>						

Coating for the ICT Geographic Information Systems and Services is based on the following shared infrastructure.





## **APPENDIX D – DATA MANAGEMENT**

### **Data Security**

Unique user accounts must be created for access to the HWSDE, SDE and ROSDE instances.

- The HRWC staff administer user access and editing ability for the HWSDE instance.
- HRM staff administer user access and editing ability for the SDE and ROSDE instances.

### **Restrictions**

- HRM and the HRWC will continue to be responsible for licensing and releasing their respective data sets to external agencies.

### **Data Maintenance**

- HRM provides the HRWC access to the standard HRM feature classes for use in the HRWC's GIS applications.
- When making schema changes to the HWADM schema, the HRWC will consult with HRM to ensure continuity across to ROSDE.
- The HRWC provides to HRM an annual refresh of all fire hydrants indicating which are suitable for fire protection. This occurs in late June to support the production of the fire protection area rate boundary for tax purposes.

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

**SUBMITTED BY:**

  
Kenda MacKenzie, P. Eng., Director Regulatory Services

**APPROVED:**

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

**DATE:** February 24, 2016

**SUBJECT:** Seasonal Disinfection Program - Update

---

**INFORMATION REPORT**

**ORIGIN**

Information Report presented to the HRWC Board March 26, 2015.

HRWC applied on February 27, 2015 to the Nova Scotia Environment (NSE) for approval to implement a Seasonal Disinfection Program for the Halifax, Dartmouth, Herring Cove and Eastern Passage Wastewater Treatment Facilities (WWTF).

**BACKGROUND**

Since the Application was made to NSE, HRWC staff continued to address questions and concerns surrounding the Stakeholder feedback and future communication protocols. Staff commenced the proposed sampling program in September at 8 locations to establish a baseline prior to implementing the seasonal disinfection program.

**DISCUSSION**

NSE approved a pilot program for the months of March and April. HRWC are planning to turn off the UV systems on March 1, 2016 and will reactivate them on May 1, 2016. The program is being implemented to ensure proactive maintenance of the UV systems in advance of peak use during the summer and fall seasons. During the two month pilot period electrical costs will be reduced by approximately \$60,000.

**ITEM # 5-I**  
**HRWC Board**  
**February 25, 2016**

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The webpage will be updated with a revised Frequently Asked Questions (FAQ), Harbour Stakeholders will be sent a second letter outlining the proposed program and sample results will be available on our website.

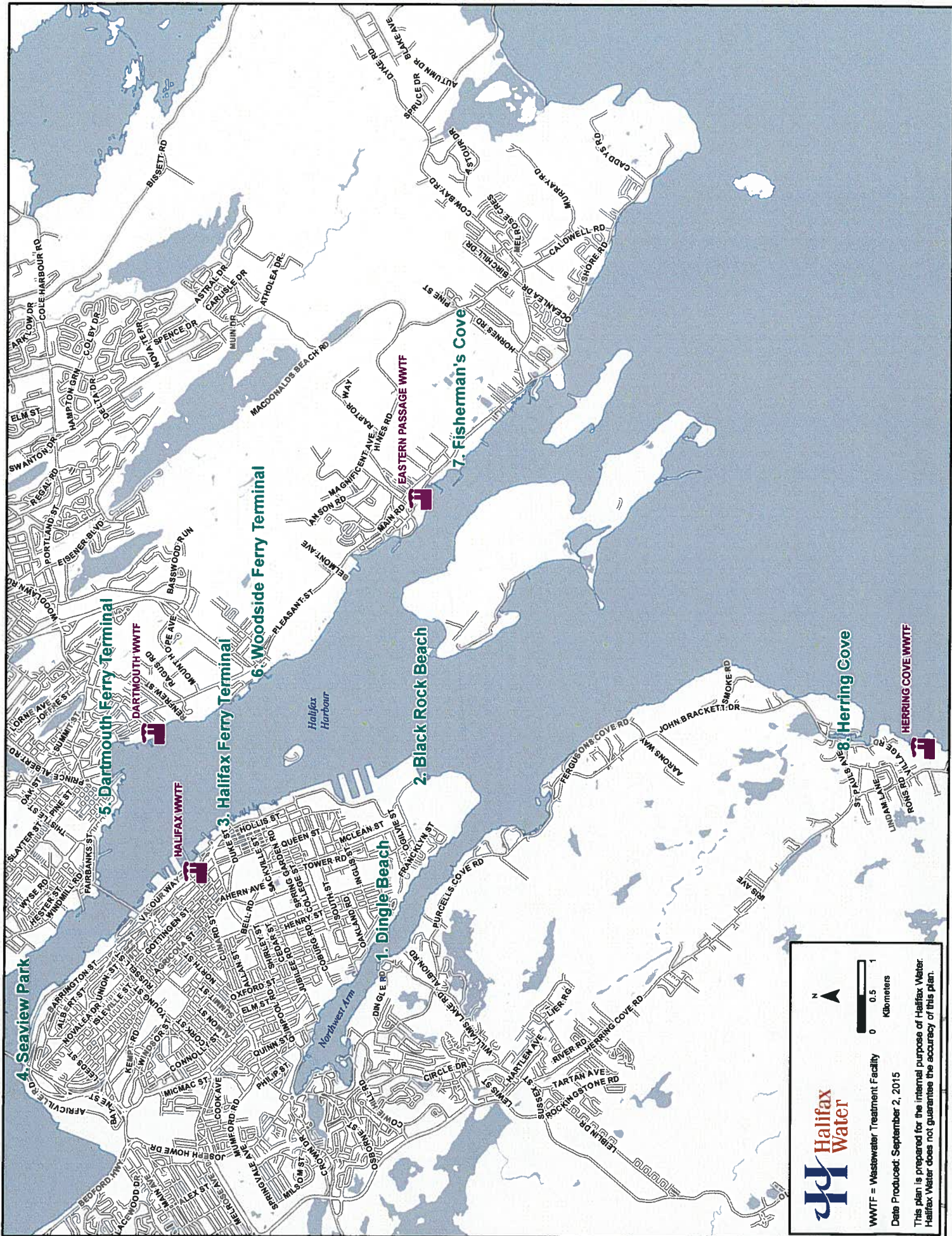
NSE will use sample results and any public feedback in evaluating whether the program can be considered for the fall of 2016 and winter of 2017.

**BUDGET IMPLICATIONS**

The implementation of the Seasonal Disinfection Program would save \$1000/day, when the UV systems are off line.

**ATTACHMENTS**

Sketch indicating facilities participating in pilot program and designated sampling locations.



**Halifax Water**

WWTF = Wastewater Treatment Facility  
 Date Produced: September 2, 2015

This plan is prepared for the internal purpose of Halifax Water. Halifax Water does not guarantee the accuracy of this plan.