

**NOVA SCOTIA UTILITY AND REVIEW BOARD**

**IN THE MATTER OF THE PUBLIC UTILITIES ACT**

**- and -**

**IN THE MATTER OF AN APPLICATION** by **HALIFAX REGIONAL WATER COMMISSION** for approval of adjustments to Rates for Stormwater Service and Rules and Regulations for Stormwater Service

**BEFORE:** Peter W. Gurnham, Q.C., Chair  
Murray E. Doehler, CPA, CA, P.Eng., Member  
Steven M. Murphy, MBA, P.Eng., Member

**APPLICANT:** **HALIFAX REGIONAL WATER COMMISSION**  
John C. MacPherson, Q.C.  
Sara Mahaney, LL.B.

**INTERVENORS:** **CONSUMER ADVOCATE**  
John Merrick, Q.C.  
Erin Cain, LL.B.

**DARTMOUTH CROSSING LIMITED**  
Nancy G. Rubin, Q.C.  
Jeffrey Waugh, LL.B.

**HALIFAX PORT AUTHORITY**  
Nancy G. Rubin, Q.C.  
Jeffrey Waugh, LL.B.

**HALIFAX REGIONAL MUNICIPALITY**  
E. Roxanne MacLaurin, LL.B.

**BOARD COUNSEL:** S. Bruce Outhouse, Q.C.

**HEARING DATE:** February 15, 2017

**FINAL SUBMISSIONS:** March 14, 2017

**DECISION DATE:** **April 12, 2017**

**DECISION:** **Application is approved as amended.**

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## **1.0 INTRODUCTION and BACKGROUND**

[1] This is a Decision of the Nova Scotia Utility and Review Board (“Board”) in respect of an application dated October 31, 2016, by the Halifax Regional Water Commission (“HRWC”, or “Utility”), for approval of adjustments to Rates for Stormwater Service, effective April 1, 2017, and HRWC’s Rules and Regulations pertaining to Stormwater Service (“Application”).

[2] HRWC provides water, including fire protection, wastewater and stormwater services to customers located within a specific boundary in the Halifax Regional Municipality (“HRM”).

[3] In May 2011, HRWC applied to the Board for approval of the Cost of Service (“COS”) for water, wastewater and stormwater service. In January 2012, the Board approved the COS and directed that a COS Manual be developed. The Manual was submitted to the Board in October 2012 as part of a rate application.

[4] On January 9, 2013, HRWC submitted a two-year rate application to increase rates for water, wastewater and stormwater services effective July 1, 2013, and April 1, 2014. This was the first rate application based on the new COS Manual and proposed separate rates for stormwater service.

[5] The Board, in its Decision of June 24, 2013, [2013 NSUARB 127] approved separate rates for stormwater effective July 1, 2013, and an increase in those rates effective April 1, 2014.

[6] After two years of implementation and experience administering the stormwater rates, HRWC conducted a review of the current cost of service and rate design methodology for stormwater service, including a comparison to industry norms

and best practice. Based on the results of this review, HRWC proposed modifications to the COS Manual and rate design which were considered in a public hearing in February 2016 (M07147).

[7] On May 12, 2016, the Board rendered its Decision regarding the COS and rate design issues.

[8] In a Compliance Filing, HRWC submitted final amendments to the Stormwater section of the COS, which were approved by the Board in a Supplemental Order dated September 2, 2016.

[9] HRWC stated this Application reflects the direction provided by the Board in its Decision (M07147).

[10] HRWC's proposed rates are based on the 2017/18 test year. HRWC's current rates for stormwater service are based on a 2014/15 test year. HRWC provided a comparison to the current rates for stormwater service in order to allow a comparison of changes and customer impacts. HRWC provided a COS Study supporting the proposed rates.

[11] The hearing with respect to the Application was held on February 15, 2017. John MacPherson, Q.C., and Sara Mahaney represented HRWC at the hearing. John Merrick, Q.C., and Erin Cain, LL.B. represented the Consumer Advocate ("CA"). Nancy Rubin, Q.C. and Jeffrey Waugh, LL.B. represented Dartmouth Crossing Limited ("Dartmouth Crossing") and Halifax Port Authority ("HPA"). Roxanne MacLaurin, LL.B. represented Halifax Regional Municipality ("HRM"). S. Bruce Outhouse, Q.C., appeared as Board Counsel.

[12] Board Counsel consultant, who did not appear at the hearing, was Mel Whalen, president of Multeese Consulting Inc. (“Multeese”).

[13] The Board received seven letters of comment, including submissions by the Retail Council of Canada and the Ecology Action Centre. One member of the public spoke during the hearing.

[14] The Issues List for the Application, included the following:

1. Revenue Requirements
  - a. Capital
  - b. Depreciation phase-in
2. Cost allocation
3. Rates
4. Credit system for non-residential properties
  - a. Calculation and administration of the credit
  - b. Proposal to allow a switch from residential to non-residential to take advantage of credit program
5. Tier 2 rate for properties which only receive a driveway culvert service
6. Charges for residential properties which straddle the Commission's Stormwater Service Boundary
7. Changes to the Regulations
8. Changes to the Cost of Service Manual

[15] HRWC's witness panel consisted of Cathie O'Toole, Director, Corporate Services/Chief Financial Officer; Kenda MacKenzie, Director, Regulatory Services and Andrew Reese, Vice President, AMEC Foster Wheeler, Americas – Environment & Infrastructure. HRM's witness panel was composed of Peter Duncan, Manager, Infrastructure Planning, Planning and Development Services and Andre MacNeil, Senior Financial Consultant, Financial Planning.

[16] HRWC, Dartmouth Crossing and HRM filed a settlement agreement dated February 8, 2017 (“Settlement Agreement”) which resolved certain matters among these parties. A copy of the Settlement Agreement is attached hereto as Appendix A. The terms of the Settlement Agreement are discussed in Section 2.9 of this Decision.

## **2.0 ISSUES**

### **2.1 Revenue Requirements**

[17] HRWC, in the determination of its revenue requirements for stormwater service, has included all operating costs plus financing expenditures. The operating costs include depreciation on the stormwater assets, whereas the financing expenditures are to service the existing and new debt required for the stormwater system capital program.

[18] The operating expenses are based on the actual costs to operate the stormwater system. As stated by HRWC:

Budgeting and accounting for stormwater service has become precise since the 2007 Transfer,...

[Exhibit H-1, p. 28]

[19] The stormwater system has a significant amount of contributed assets, and contributions towards the cost of the assets. HRWC intends, in compliance with Board approved policy, to include depreciation on these contributed assets in the revenue requirements. This has not been included in revenue requirements for prior years. To smooth out the effect on rates, HRWC intends to phase-in this recognition:

The Application proposes the phase in of depreciation on contributed assets in four phases with \$426,490 (25%) added to revenue requirements in 2017/18 and the remainder phased in over future rate adjustments.

[Exhibit H-1, p. 11]

[20] No evidence was submitted by any Intervenor that questioned any aspects of the revenue requirements.

## **Findings**

[21] The Board accepts the revenue requirements as submitted by HRWC. This includes the phase-in of the depreciation on contributed assets and the financing requirements.

### **2.2 Cost allocation**

[22] HRWC allocated the revenue requirements in accordance with the COS Manual. Cost of service issues are dealt with in other sections of this Decision. However, the Board accepts the cost allocations in the Application.

### **2.3 Rates**

[23] The COS Manual amended the definition of HRWC stormwater service as follows:

...properties within the service boundary, which receive one or more of the following services, shall be considered a customer:

- (a) Stormwater from the property enters into HRWC's stormwater system:
- (b) The property is accessed directly by a driveway which crosses over an HRWC culvert.

[2016 NSUARB 73, pp. 40-41]

[24] Current HRWC stormwater service rates are divided into two primary categories; namely a Site Generated Flow Charge and a Right-of-Way (ROW) Charge.

The definitions of Site Related Flow Charge and ROW Charge are as follows:

"Site Related Flow Charge" means the charge for Service and for the benefit a Customer receives, including access to a property over a Commission owned culvert, and management of stormwater from a property that enters any part of the Commission's stormwater system.

“Right of Way Charge” means the charge imposed by the Regulations on HRM for the impervious area in the street right of way.

[Exhibit H-1, p. 205]

[25] HRWC has requested Board approval for a change to the HRWC *Rules and Regulations* to rename Site Generated Flow Charge to Site Related Flow Charge (as discussed in Section 2.7 of this Decision). HRWC further subdivides Site Related Flow Charges into those for residential customers and those for non-residential (Industrial, Commercial, Institutional) customers.

[26] The current HRWC rates for stormwater service are as follows:

- Residential Customers Site Related Flow Charge: \$33.39 per year
- Non-Residential Customers Site Related Flow Charge: \$0.149 per m<sup>2</sup> of impervious area per year
- ROW Charge (billed to HRM): \$3,881,408 per year

[27] Since 2013, HRWC advised it has been working to refine and improve the structure and application of stormwater rates and help its customers better understand the concept of stormwater service and the benefits it provides. The HRWC Application is intended to address these issues.

[28] The Application contains a detailed stormwater rate study. This rate study describes the methodology used by HRWC to calculate the proposed stormwater service rates. The study is based upon the HRWC COS Manual, complete with any changes resulting from updated stormwater data and customer numbers.

[29] The stormwater rate study indicates that the projected HRWC revenue requirement for stormwater service in 2017/18 is approximately \$10.6 million, which is 3% higher than the revenue requirement upon which the current HRWC stormwater rates are based.

[30] Although the cost of providing stormwater service has increased slightly since the last adjustment of rates, HRWC noted that the amount of impervious area has increased and the number of billable customers has also changed. The number of billable residential customers has decreased due to exemptions based on the service definition and other proposed exemptions (see Section 2.3.3 of this Decision). However, the number of billable non-residential customers has increased.

[31] HRWC indicated that its proposed stormwater service rates are sufficient to support its projected revenue requirements (to cover both operating and non-operating expenditures). The COS rate study indicates that the proposed rates will provide only a very slight net revenue deficiency (compared to revenue requirements) of \$81,516, which amounts to 0.8% of total revenue requirements.

### **2.3.1 Site Related Flow Charge**

#### **2.3.1.1 Residential Customers**

[32] HRWC residential customers are currently billed an annual flat fee of \$33.39 for stormwater service, regardless of the amount of impervious area on their respective properties. At the 2016 hearing regarding the COS Manual for stormwater service, HRWC raised the possibility of billing residential customers on a "tiered" basis. In its decision of May 12, 2016 [2016 NSUARB 73], the Board found:

[148] ...that the tiering by impervious area of residential rates, as subsequently amended by HRWC, is a more equitable way to bill properties (or parcels) within this class of customers.

[149] The Board finds the evidence of HRWC on the differences between rural and urban properties to be persuasive, and does not see any reason to delay the implementation of residential tiering. If there are issues that arise upon implementation they could be resolved through a future application.

[2016 NSUARB 73, p. 41]

[33] In response, HRWC proposed a tiered rate structure for residential customers. Using this approach, properties with more impervious area would pay more than those with less impervious area. The tiers are based on an Equivalent Residential Unit (ERU) of 200 m<sup>2</sup>, whereby the ERU is calculated based on the median impervious area associated with residential properties divided by the number of parcels.

[34] The proposed tiered rate structure for Site Related Flow Charges for residential customers would result in five (5) tiers (each based on the amount of impervious area on a property rounded to the nearest 10m<sup>2</sup>) as follows:

Tier	Tier Parameters (in units)		Equivalent Residential Unit (ERU)	Rate per Billing Unit	Rate Adjustment	Tier Rate	Standard Annual Charge
	Each unit equals 10 square meters		A	B	C	B X C	A X B X C, rounded to the nearest \$
1	less than	5 units	200	\$0.135	0%	\$0.000	\$0.000
2	5 units	20 units	200	\$0.135	50%	\$0.068	\$14.000
3	21 units	40 units	200	\$0.135	100%	\$0.135	\$27.000
4	41 units	80 units	200	\$0.135	200%	\$0.270	\$54.000
5	81 units	or more	200	\$0.135	300%	\$0.405	\$81.000

[Exhibit H-1, p. 68]

[35] Using this rate structure, HRWC indicated approximately 89% of existing residential customers would see a decrease in their Site Related Flow Charge.

[36] There were no objections by Intervenor with respect to HRWC's proposed Site Related Flow Charges for residential customers.

[37] The Board did, however, receive several Letters of Comment from the public regarding the proposed changes to the Site Related Flow charges for residential customers. For the most part, these Letters of Comment did not object to the proposed changes in rates, but rather took issue with how the rates are applied to condominium

owners, how the definition of stormwater services applies to particular properties, the use of impervious area alone to determine tier level, and the potential for tiered rates to result in rural/suburban residential customers subsidizing urban residential customers.

### **Findings**

[38] The Board understands the concerns presented in the Letters of Comment received from the public. However, for the following reasons, the Board finds the concerns have been either adequately addressed by HRWC or have been dealt with in previous Board decisions.

[39] The concern expressed by condominium owners relates to how HRM applies the ROW charge on property tax bills. The means by which HRM chooses to bill the ROW charge to property owners is solely a decision of HRM Council. While the Board does have authority to establish a ROW charge for stormwater service, it does not have jurisdiction with respect to how HRM bills the ROW charge to property owners.

[40] The definition of HRWC stormwater service was previously amended by the Board and was not challenged by Intervenors. This change in definition will increase the number of properties that are exempt from stormwater service charges. Furthermore, HRWC has proposed changes to its *Rules and Regulations* (see Section 2.7 of this Decision) that will allow property owners to appeal their non-exempt status and/or their amount of billable impervious area.

[41] The use of impervious area as the stormwater billing determinant has been previously confirmed by the Board:

[185] The Board finds the impervious area is the fairest and most cost effective billing determinate for the stormwater charges.

[2013 NSUARB 127, p. 58]

[42] This concept was not challenged by Intervenors.

[43] The issue of differences between rural/suburban and urban stormwater services has been previously considered by the Board:

[78] In HRWC's rebuttal evidence the differences in service and costs for rural and urban properties was highlighted. These differences were described as follows:

The cost of the provision of stormwater services on a per-person or per-unit of revenue generated basis is significantly higher in rural areas than in urban areas. While the density of drainage system is far less, the density of revenue generation is even less. The revenue generated from rural areas is less than the cost to HRWC to service those areas.

If HRWC were to attempt to develop rates for piped storm sewer systems versus ditch and culvert systems, the rates for service for rural customers would be higher than the rates for customers on a piped storm sewer system. HRWC does not believe this would be beneficial as it would be contrary to the regional approach the utility employs, and akin to calculating different costs of service for different types of water production and distribution or wastewater treatment and collection. HRWC feels that the modification of the rate structure for rural areas as a class is contrary to the "postage stamp rate" approach employed for water and wastewater services.

[Exhibit H-18, pp. 13-14]

### 3.5.1 Findings

[79] The Board finds that the tiering by impervious area of residential rates, as subsequently amended by HRWC, is a more equitable way to bill properties (or parcels) within this class of customers.

[80] The Board finds the evidence of HRWC on the differences between rural and urban properties to be persuasive, and does not see any reason to delay the implementation of residential tiering.

[2016 NSUARB 73, pp. 22-23]

[44] The Board, therefore, believes that tiering of Site Related Flow Charges for residential customers will not result in rural/suburban residential customers subsidizing urban residential customers.

[45] The Board finds that the proposed HRWC rates (and the methodology for determining these rates) for Site Related Flow Charges for residential customers are reasonable and appropriately address the related revenue requirements, and orders that they be implemented.

### **2.3.1.2 Non-Residential Customers**

[46] HRWC non-residential customers are currently billed an annual stormwater service fee of \$0.149 per m<sup>2</sup> of impervious area on their respective properties.

[47] HRWC's proposed stormwater service rate for non-residential customers is \$0.135 per m<sup>2</sup> of impervious area on their respective properties (based on the amount of impervious area on a property rounded to the nearest 10m<sup>2</sup>). This results in a reduction of approximately 10% from current rates.

[48] There were no objections by Intervenors with respect to HRWC's proposed Site Related Flow Charges for non-residential customers.

[49] The Board received a letter of comment from the Retail Council of Canada regarding the proposed changes to the Site Related Flow charges for non-residential customers. Although critical of stormwater services charges in general, the letter spoke favorably of the proposed reduction in Site Related Flow Charge for non-residential customers.

### **Findings**

[50] The Board finds that the proposed HRWC rate (and the methodology for determining this rate) for Site Related Flow Charges for non-residential customers is reasonable and appropriately addresses related revenue requirements, and orders that it be implemented.

### 2.3.2 Right-of-Way Charge

[51] HRWC currently bills HRM an annual ROW stormwater service charge of \$3,881,408.

[52] HRWC's proposed HRM ROW stormwater service charge is \$3,835,012. This results in a reduction of approximately 1% from the current rate. This reduction is based on a revision to the proportion of impervious area in the HRM street right-of-way to the total billable impervious area.

[53] HRM argued that it should not be subject to the ROW charge. For reasons noted in Section 3.0 of this Decision, the Board does not accept this contention.

[54] In the event the Board found that HRM would remain subject to the ROW charge, HRM submitted the following:

Again, should HRM continue to be subject to the ROW charge, HRM submits that impervious area by itself is not an appropriate measure for apportionment. HRM submits that there should be some modifiers that recognize the stormwater management that occurs within the right of way. Unlike most private property that stormwater passively flows over, municipal ROW infrastructure is part of an engineered public system. Consideration should be given to the infrastructure within the ROW that aids in the storage, distribution and management of stormwater, one of the benefits of which is to assist in the mitigation of flooding on private property.

At the hearing, Peter Duncan testified about the maintenance requirements of the infrastructure within the ROW. This included de-icing and snow removal, asphalt, curb and sidewalk maintenance and grass management. While catch basins and manholes are treated collectively, HRWC indicated that if directed by the Board, an allocation could be made in relation to catch basins. The current calculation of the ROW charge based solely on the impervious portion does not recognize the role of the ROW in the management of stormwater entering the HRWC system.

[HRM Closing Submission, p. 10]

[55] This position was further supported by HRM's evidence:

More to the point, the fact that the right of way, at least the impervious portion of the right of way is a bona fide drainage system, integral to the HW system, makes assigning benefit solely by comparing impervious area unfair. The majority of site related flow is eventually managed by HRM within the right of way before entering the HW system. For this reason, direct comparison of impervious area between private property and the public right of way is not an appropriate determinant for billing purposes.

[Exhibit H-6, Page 5]

[56] Furthermore, in response to NSUARB IR-6, HRM stated:

HRM proposes that the ROW charge should be adjusted to account for the site generated flow that enters the ROW and is managed by HRM prior to entering the HRWC system.

[Exhibit H-9, p. 3]

[57] There is no question that HRM is a HRWC stormwater service customer, and, as a result, should pay for the related services it receives. This was confirmed by HRM during the Hearing testimony of Mr. Duncan:

MR. OUTHOUSE: So you agree with me, and you've agreed with Mr. MacPherson, that you have – you consider yourself; that is, you consider HRM to be a customer of stormwater services from HRWC; correct?

MR. DUNCAN: Yes.

MR. OUTHOUSE: So in some way you have to pay for that service?

MR. DUNCAN: Yes.

[Transcript, pp. 169-170]

## **Findings**

### **Use of Impervious Area Alone as a Measure for Calculating and Apportioning Stormwater Service Costs to the Right-of-Way Charge**

[58] The use of impervious area as the stormwater billing determinant has been previously confirmed by the Board:

[185] The Board finds the impervious area is the fairest and most cost effective billing determinate for the stormwater charges.

[2013 NSUARB 127, p. 58]

[59] HRM argued that the calculation of the ROW charge should not be based solely on impervious area, but should also consider HRM's own infrastructure (i.e., curbs, gutters and catch basins), which HRM contends is integral to the HRWC stormwater system. The Board understands how these particular infrastructure components may assist in stormwater conveyance. However, the Board has difficulty understanding how

consideration of these infrastructure elements could be incorporated into the calculation of the ROW charge.

[60] When questioned on this issue during the Hearing, HRM provided the following response:

MR. DUNCAN: So what I meant when I wrote that was imperviously -- the direct comparison of impervious area by itself is not the appropriate measure. And really what I mean by that is there should be some modifier for that to recognize the stormwater management that HRM does within the right-of-way, and that would be beyond simple conveyance of the stormwater, you know, to the extent that the street acts like a storage system for, you know, storms that exceed the -- you know, one-in-five-year minor flows.

So there should be -- and I sort of -- I'm going to break it down into customers downstream and customers that are upstream of the street right-of-way. So for customers that are downstream I would see the street performing in very much a similar fashion to an onsite pond -- an onsite detention pond, you know, to the extent that the street itself would retain flows and they would essentially meter flows into the storm -- into the HRWC storm sewer.

With regards to properties and other customers, those residential customers that are upstream, the point of this statement was to say that there should also be some reasonable benefit recognized by the Halifax Water -- or by the HRM, rather, street managing those flows.

MR. MURPHY: So do you have any suggestions or recommendations for how those particular benefits would get incorporated into that right-of-way charge?

MR. DUNCAN: No, I'm sorry, not at this time, I don't.

[Transcript, pp. 174-176]

[61] The Board acknowledges HRM's position on this point. However, HRM has not provided any evidence to present viable alternatives to the use of impervious area alone as an appropriate measure for apportionment of stormwater service costs to the ROW charge. The Board finds, therefore, that the use of impervious area alone remains an appropriate measure for apportionment of stormwater services costs to the ROW charge. In fact, nothing has been presented in this proceeding to persuade the Board to alter its earlier Decision regarding the use of impervious area as the fairest and most cost-effective billing determinate for HRWC stormwater service charges.

[62] The Board notes, however, that under the terms of the Settlement Agreement (see Section 2.9 of this Decision), there may be future opportunities for HRM to be eligible for stormwater credits applied against the ROW charge. These credits would be for HRM owned and implemented stormwater management Best Management Practices (“BMPs”) within the right-of-way aimed at reducing peak stormwater flows.

**Adjustment of Right-of-Way Charge to Account for Site Related Flow that Enters the Right-of-Way**

[63] HRM also asserted that the ROW charge should be adjusted to account for the site related flow that enters the right-of-way and is managed by HRM prior to entering the HRWC stormwater system. HRWC objected to this assertion:

Halifax Water is opposed to this proposal as it is no different than other properties as site related stormwater flow may travel across multiple properties and/or watercourses before reaching HRWC infrastructure. Site related flow traveling across an HRM ROW is viewed in the same manner. HRM ROW being used as a conduit to direct stormwater to a HRWC system, is no different than stormwater being conveyed over non-HRM lands. This would also be contrary to how all other properties are treated. All properties must ensure that they do not create a nuisance through the imposition of damaging flows or flow modifications in their discharge of stormwater from their property and must also accept such flows from upstream properties and convey such flow along the water course through their properties. The fact that HRM has long linear properties does not change their responsibility as a property owner to be responsible for both aspects of flow.

[Exhibit H-11, p. 9]

[64] During the Hearing, the Board questioned HRM on this issue:

MR. MURPHY: ... if you can call up H-9. It's a response to UARB IR-6.

... it says:

“HRM proposes the right-of-way charge should be adjusted to account for site generated flow that enters the right-of-way and is managed by HRM prior to entering the HRWC system.” (As read)

So I'm just curious how -- if that's the case, how would HRM envision how that, I guess, component of site related flow would be measured versus total flow entering the system?

MR. DUNCAN: I don't have -- at this time I don't have a rationale or a methodology. Really what I was trying to do was to test the principle, and if -- you know, if the principle carries the day of, you know, how measuring or somehow recognizing the benefit that the right-of-

way provides, then we can go away and come up with something, but I don't have anything here to share with you today.

[Transcript, pp. 176-177]

[65] The Board finds the evidence presented by HRWC in this regard to be persuasive. In particular, the Board agrees with HRWC that conveyance of site related stormwater flow via the HRM right-of-way to the HRWC stormwater system is no different than stormwater being conveyed over non-HRM lands. In addition, HRM has not provided any evidence to suggest how the ROW charge could be adjusted to account for Site Related Flow that enters the right-of-way. As such, the Board finds no reason to modify the ROW charge to account for Site Related Flow entering the right-of-way.

### **Summary of Findings**

[66] In summary, the Board does not agree with HRM's contentions that a) the ROW charge should not be based solely on impervious area, and b) the ROW charge should be adjusted to account for Site Related Flow entering the right-of-way.

[67] As such, the Board finds the proposed HRWC rate (and the methodology for determining this rate) for the ROW charge is reasonable and appropriately addresses related revenue requirements, and orders that it be implemented.

### **2.3.3 Exemptions**

[68] As directed by the Board [2016 NSUARB 73], should the proposed HRWC stormwater service rates become effective, properties with less than 50m<sup>2</sup> of impervious area will be exempt from the stormwater service charge. In addition, HRWC indicated that implementation of the amended definition of stormwater service in conjunction with approval of the proposed rates will mean that on a go forward basis:

- 2,411 properties will be exempt because they do not receive service (this number is expected to change regularly);
- 2,326 properties with less than 50 m<sup>2</sup> of impervious area will be exempt;
- 190 properties that were initially billed, but then found to be exempt, but are receiving a service because they have a driveway culvert owned and maintained by HRWC will now receive a bill for stormwater service (these customers will receive a letter from the Utility explaining the change in advance of issuance of a bill); and
- 74 properties not previously billed as they did not receive service under the current service definition, will receive service under the new definition and will be billed, because they have a driveway culvert (these customers will receive a letter from the Utility explaining the change in advance of issuance of a bill).

[69] The Board previously approved the concept of treating all properties the same, with exemptions based on the specific circumstances. As such, some complex properties (such as pits, quarries and refineries), which were previously exempted because they had “stormwater management facilities” on the property, would now be included in billable impervious area. These properties will be treated like any other property, meaning that each will be considered to be exempt, or not, based upon the specific circumstances.

[70] HRWC agreed to evaluate those properties (such as the Port Authority) which have impervious areas which drain away from the HRWC system and make the necessary billing adjustment to exempt those areas.

### **Findings**

[71] During the course of this proceeding, there was some confusion expressed by the Board related to the proposed exemption for properties with less than 50m<sup>2</sup> of impervious area. Consequently, the Board requested that HRWC confirm whether the proposed exemption is intended to apply to properties with “less than 50m<sup>2</sup> of impervious

area” or properties with “less than 50m<sup>2</sup> of impervious area and no culvert”. HRWC subsequently confirmed that the exemption is intended to apply to properties with “less than 50m<sup>2</sup> of impervious area and no culvert”.

[72] There were no objections by Intervenors with respect to proposed stormwater service charge exemptions, including the proposed change to the exemption for properties with less than 50m<sup>2</sup> of impervious area.

[73] With the noted change to the exemption for properties with less than 50m<sup>2</sup> of impervious area, the Board approves the proposed stormwater service charge exemptions. HRWC is to include the change to the exemption for properties with less than 50m<sup>2</sup> of impervious area in its Compliance Filing.

#### **2.4 Credit system for non-residential properties**

[74] Some non-residential customers, because of either new HRM and HRWC development requirements or self-interest, have constructed some manner of private stormwater management system. These systems, such as has been constructed by Dartmouth Crossing, help to mitigate the flow impacts and wear on the public stormwater system. As a consequence, in the application for approval of revisions to the COS Manual, HRWC suggested the development of a “credit” system. The Board found in its Decision [2016 NSUARB 73]:

[113] With respect to the implementation of a credit system for nonresidential properties based upon best practices (Proposal 11), **the Board approves the proposal in principle, with the expectation that the matter will be the subject of stakeholder consultation, with specific details to be proposed in the next rate application.** (emphasis added)

[75] The stakeholder consultations were held and the Application originally proposed a program based on a credit of 30% of the stormwater charge. During the course of the proceeding, the credit program was refined and expanded to a maximum

50% credit. The revised credit program was then the subject of the Settlement Agreement.

[76] The main determinant for stormwater run-off causation is the impervious area of a property. The credit is based on the ability of a customer to reduce the flow impact on the public stormwater system of the actual impervious area to something less, or an “apparent” impervious area. Reducing the “apparent” impervious area reduces flow impacts and the costs of maintaining the public system. Mr. Reese further explained:

...If we think of in a water or wastewater scenario where someone that puts in conservation fixtures and things that reduces their actual use of water, we recognize that actual reduction of water because the meter doesn't turn as fast, and so they -- their bill is lower. And we might say that we require everyone to put in conservation fixtures now, but we still bill them on the basis of the meter, whether they use a lot or a little.

In the same way with stormwater, the meter that we have that we use to measure of their use of their system is tied to impervious area. And to the extent that they make their site look less impervious than it actually is, because they've modified the response to rainfall and runoff, then we recognize that through a reduction in their fee in the same way we would recognize a conservation fixture as a reduction in their use of water.

[Transcript pp. 104-105]

[77] This is a benefit to all the customers of the system. As stated by Mr. Reese:

... The things that cause cost to Halifax Water are peak flow increase and volume increase.

[Transcript, p. 89]

[78] For a non-residential customer to qualify for a credit it must have constructed a private stormwater management system on its property. This system must use some form of BMP to reduce peak flows and/or the volume of discharge, in effect reducing the impact of the actual impervious area on the public system. As stated by Mr. Reese:

And we felt it was far more equitable and far more in line with best practice to recognize it as a change in use of the system, rather than as a blanket fee reduction across all properties. We thought that would pull in people who had no detention, people who had great detention, and people who had minimal detention and treat them all the same way, which we felt wasn't as equitable.

[Transcript, p. 105]

[79] Newer developments in HRM, since 2000/01, have been required to reduce the impact of the property's impervious area on the public stormwater system. In essence, at a minimum, they have been required to use private stormwater management systems to reduce the impact of a one-in-five year storm on the public system. This has required an outlay of capital, plus ongoing maintenance costs. This puts the newer developments at an operating cost disadvantage to older properties. As stated by Ms. O'Toole:

But the fact of the matter is that it's almost a competitive disadvantage for one ICI customer because, in addition to paying the stormwater bill that all of the other retailers pay on the same basis, in addition to that they've got all of these capital costs and operating costs they've had to incur to meet this higher level of stormwater management.

[Transcript, p. 115]

[80] To try and level the costs, HRWC proposes a credit system to be, as described by Ms. O'Toole:

It's really an equity modifier. So all ICI customers are billed in the same manner on the basis of a rate per square metre of impervious area.

[Transcript, p. 102]

[81] The operating cost reduction to HRWC, by having private stormwater management systems, was calculated to be 30% of the non-residential stormwater rate. It is only to be offered to those customers who have installed and maintained a private system built, as a minimum, to manage a one-in-five year storm event. As stated by Mr. Reese:

It was thought at the time that because the stormwater system here has generally historically the pipe system been designed for a five-year storm, that we wanted to strongly

encourage maintenance of those kinds of minimal systems because they provide a first level of protection for downstream systems, and therefore the 30 percent credit was assigned to that.

[Transcript, p. 82]

[82] The credit needs to be sufficient to benefit those that have detention as opposed to those who do not. As stated by Mr. Reese:

Not all properties have detention and not all properties have the same kind of detention. It's our intent to recognize private investment which reduces private use of a public system with a credit that's in line with both best practices and with court precedent in the United States and that was felt to be appropriate here.

To your point, there are some -- very few stormwater utilities in the States who have had detention standards since the sixties. For example, Columbus, Ohio, who said that our fee is lower than it would be because everyone has detention; and therefore, there is an imputed or a virtual credit because the fee is lower than it would be because of everyone's detention. Therefore, we're not giving a detention credit because in fact every single property has it.

I wouldn't say that that's the case here, nor do I -- would I say that it has been universally applied consistently, and therefore, we felt this was the best approach.

[Transcript, p. 101]

[83] Dartmouth Crossing has installed, and maintained, a series of private systems that are designed for greater than a one-in-five year storm event. It argued it should be entitled to a higher credit percentage. This was subsequently reviewed by HRWC and a maximum credit of 50% established. As outlined by Mr. Reese:

At the other end of the spectrum you could have -- ... an over-detention process, which we would take, for example, Dartmouth Crossing, who said, "We're going to take the 1-in-100-year storm and we're going to provide such volume on our site that it discharges like the one-in-five-year or the 1-in-10-year predevelopment storm. That is a much larger, much more costly and also much more effective pond."

When we went through the analysis process it was decided by staff that all of the credit available revenue should be provided -- every penny of the credit available revenue should be provided for that level of detention because that would be, in a sense, the other end of the spectrum. You would not expect anyone to detain or provide protection beyond that level. It wouldn't -- it would be very cost ineffective to do that.

And, therefore, those two provided the two brackets, 30 percent for the one-in-five only singular storm and 50 percent to take the 100-year storm and intervening storms back to the five or the 10-year storm.

[Transcript, pp. 82-83]

[84] There are many different levels to define the severity of a storm event between the base of a one-in-five year and one-in-one hundred year storm. As is to be expected, the more stringent the requirement, the higher the costs. HRWC has proposed to grant a sliding scale of credits, between 30% and 50%, dependent on the design parameters used in the private systems. The credit manual is being developed to define the BMPs, and the eligibility percentages and will allow for gradations between 30% and 50%. As Mr. Reese explained:

... Our approach was to recognize the investment as it's reflected in the effectiveness of the detention and the volume that's detained and to recognize that with an appropriate escalation of credit, thus the Dartmouth Crossing standard, for example.

...

... And we have done further research and analysis in that and have developed an approach we believe is appropriate to reflect all comers, hopefully.

[Transcript, p. 50]

[85] The proposal for the credit is:

Halifax Water submits it would provide more equity for non-residential customers to implement a tiered system of credits to recognize these varying levels of investment and complexity. Thus Halifax Water is proposing five levels of credit matching the specific return periods (5-, 10-, 25-, 50-, and 100-year). The designs would ensure that that specific return period flow and all lesser flows are discharged at a rate not exceeding the 5-year pre-development flow.

The table below gives information on the five credit levels. Vol/Vol5 is the outcome of an example calculation for a one hectare detention pond for a 100% impervious parking area and is the storage volume ratio of the designed pond volume to the minimum 5-year level 1 credit storage volume. It can be seen that the storage increments are similar and the credit increments are each 5%. The Level 5 credit for detaining the 100-year storm provides a 100% credit of the credit available charge. That is, all of the credit available charge is given as credit. We believe this is similar to one of the Dartmouth Crossing ponds (the Level Three example).

Credit Level	Year Storm	Released As Pre-Dev	% Credit	Vol/Vol5
1	5	5	30%	100%
2	10	5	35%	130%
3	25	5	40%	170%
4	50	5	45%	201%
5	100	5	50%	233%

[Exhibit H-11, p. 7]

[86] In some cases, adjoining properties may share a private stormwater management system. If so, they will qualify for a credit, which would be shared. As explained by Ms. MacKenzie:

It would have to be assessed on a case-by-case basis, but what we would look to is if two properties shared a parking lot and shared a retention system, we'd have to look at the percentage of flow that each property was contributing to the retention system, cross-reference the proposed table that we have to see where they fit from the 30 to 50 percent range, and then allocate a credit based on that to each of the respective customers.

So it's going to be a bit more cumbersome than just one property but there is rationale behind it.

[Transcript, pp. 62-63]

[87] The credit will not be made available for those older parts of HRM that are serviced by combined sewers. The reason is that if a development does reduce its stormwater system usage, it would free up capacity on the system for wastewater. By so doing, the development could be built to a higher density. As Ms. MacKenzie explained:

It was viewed that potentially you could have a stormwater system on a property that would retain additional stormwater from the combined system that would allow for a benefit of increased density, for example. And to give that property the benefit of increased density and a credit could be seen as a double benefit.

[Transcript, p. 127]

[88] HRM, the largest single customer of HRWC for the stormwater ROW charge, requested eligibility for a credit. HRWC has agreed that HRM would be eligible on the following basis:

Given that the municipality is being allocated costs based on the impervious area in the ROW, Halifax Water agrees that the municipality should be eligible for a credit if BMP's are adopted that meet the criteria of Halifax Water's stormwater credit program, provided that the infrastructure in relation to the BMP's are owned and maintained by the municipality.

[Exhibit H-11, p. 5]

[89] When questioned about how this potential credit to HRM would apply to roads Ms. MacKenzie stated:

Yes. I believe we would look at delineating sections or segments of roadways, and if a BMP or a management structure was put in place by the Municipality, it would have to be delineated for the area that it's benefiting and the storm that it's managing and fit in to the criteria.

[Transcript, p. 53]

[90] HRM raised the issue about stormwater quality. At present, there are no standards about the quality of stormwater that can enter the environment. The Settlement Agreement touches on this issue in deferring it to further discussion. However, at present:

... Halifax Water does not have a direct mandate for stormwater quality and does not incur costs in that regard.

[Exhibit H-11, p. 4]

## **Findings**

[91] In its Decision [2016 NSUARB 73] the Board stated:

[111] ... The Board agrees with the concept that if all customers benefit from an action, then all customers should pay for that benefit. ...

[92] All customers of the HRWC stormwater system benefit from private management of on-site stormwater flows that reduce costs within the public stormwater system. Therefore, the Board finds that the stormwater credit program is to be funded through the revenue requirements.

[93] The Board approves the stormwater credit program as developed by HRWC for non-residential customers, including HRM. The approved credit is to have the following characteristics:

- a) Available to any customer who pays the non-residential rate.
- b) Available to HRM.
- c) The credit range is 30% to 50% of the normal stormwater charge for the property.
- d) To earn the minimum credit, the private stormwater management system must be sufficient to handle a one-in-five year storm. Any private system that does not achieve this minimum is not eligible for a credit.
- e) Customers that share a private stormwater management system are proportionally eligible to receive the credit.
- f) The credit is not available for those customers that discharge to a combined sewer.
- g) There is no credit for any private stormwater management system based solely on the treatment of stormwater quality.

[94] The Board notes that the table used to describe the proposed stormwater credit system in Section 1 of the Settlement Agreement (see Section 2.9 of this Decision) is slightly different than the table noted above from HRWC's rebuttal evidence. Specifically, the table in Section 1 of the Settlement Agreement does not include the "Released as Pre-Dev" column. Thus, the Board finds the table in Section 1 of the Settlement Agreement to be unclear with respect to the maximum allowed flow release rate from stormwater detention facilities associated with each proposed credit level. The Board, therefore, directs HRWC to address this issue in its stormwater credit system Compliance Filing. For each proposed stormwater credit level, HRWC shall identify the maximum allowed flow release rate from the related stormwater detention facilities.

[95] The Board directs HRWC to address calculation and administration of the HRM credit in its Compliance Filing.

[96] Other issues the Board directs HRWC to address in its stormwater credit system Compliance Filing include:

- What BMPs are eligible under the stormwater credit system?

- How will stormwater detention facilities/BMPs designed to standards other than those identified in Section 1 of the Settlement Agreement be assessed?

#### **2.4.1 Administration of the credit**

[97] To earn the credit a customer must apply for it annually and confirm that the private stormwater management system has been maintained and cleaned in accordance with the designers/installers instructions. As stated by Mr. Reese:

One of the things is that out of the stakeholder process this credit was highly recommended. Secondly, what the credit does is it provides a built-in incentive to maintain those structures where there is no other incentive. And we find that that incentive can be effective for ongoing maintenance, whereas voluntary maintenance tends to not be very effective unless you use a stick approach and have inspections and enforcement.

[Transcript, pp. 106-107]

[98] Even though customers are required to confirm the private system is maintained, it can be checked by HRWC. Ms. O'Toole commented upon compliance:

... So we would propose to have an audit inspection. What we would have is annually the building property manager/maintainer would submit the application and they would sign and certify that the stormwater detention system, whatever it is, was maintained and is functioning and is cleaned and is operating as per the design engineer's recommendations or the manufacturer's recommendations, whatever that piece of equipment would be.

[Transcript, pp. 108-109]

[99] HRM expressed concern that the credit program uptake may be much higher than provided for in the revenue requirements. HRWC has confidence in the proposed figure based on the experience of other stormwater utilities and HRWC's own experience with the wastewater credit. Ms. O'Toole added:

... according to the Municipality's own projections, 25 percent of the new non-residential customer growth is going to be in the city centre area where there are combined sewers, so they would not be eligible to apply for credits. Secondly, there are a number of non-residential customers who we believe would be not interested in committing to the annual maintenance requirement in order to achieve and maintain the credit. The application process itself Mr. Reese spoke to, there are a lot of customers who may be not interested in going through that.

[Transcript, p. 93]

[100] HRM suggested that HRWC provide a semi-annual update to monitor the volume and cost of applications. Such a report could be used as an early warning if the budget is materially understated and allow HRWC to take remedial action. HRWC agreed to this request.

### **Findings**

[101] The Board accepts the proposal that to be eligible for the credit a customer must apply annually. The annual application should confirm that the stormwater management system has been maintained and cleaned and that HRWC can check on such compliance.

[102] The Board directs that HRWC provide a semi-annual update on March 31 and September 30 of each year on the status of the credit program participation. This should be filed with the Board and any interested parties, and be made available on the HRWC website.

[103] The Compliance Filing should address the following:

- Stormwater credit application requirements, including:
  - Application form format,
  - Frequency of application, and
  - Supporting documentation.
- Operation and maintenance requirements to ensure stormwater credit system compliance.
- How often will HRWC staff inspect stormwater detention facilities/BMPs to ensure compliance with the stormwater credit system?
- Enforcement actions.
- How will properties that share stormwater detention facilities/BMPs be allocated stormwater credits?
- The billing cycle for stormwater credits.

#### **2.4.2 Proposal to allow a switch from residential to non-residential to take advantage of credit program**

[104] The credit program is available to those customers that pay the non-residential stormwater charge and do not discharge to a combined sewer. The CA, in his opening statement, supports HRWC pursuing the possibility of giving residential customers the ability to earn credits. HRWC agrees that if a residential customer wants to take advantage of the credit program they could do so. In order for a residential customer to earn a credit they must agree to be billed as a non-residential customer and then follow all the same requirements. In general, HRWC does not support a credit for all residential customers:

80. HRWC, for the reasons previously stated, submits that a credit system for residential customers is not appropriate given the relatively small amount of the credit when compared to the costs of installing BMP's on a residential property. However this proposal will provide the option to residential customers to be billed as if they were nonresidential which may provide a viable option for those few properties for which this may be a benefit.

[HRWC Post Hearing Submission, p. 21]

[105] If a residential customer decides to apply for the credit and then change back, they could do so. As stated by Ms. O'Toole:

I think we would like to see the flexibility that if they opt to go back they could. Also, if they opt to be treated as a non-residential customer for the purpose of obtaining that credit, they would have to maintain their system. So if we found that they weren't maintaining their system, then they would lose the credit and could go back to being treated as residential customer.

[Transcript, p. 113]

#### **Findings**

[106] The Board approves the conditions for a residential customer to earn a credit. The conditions are that:

- a) The customer must agree to be billed as a non-residential customer and must agree to all the relevant conditions and terms.

- b) The residential customer can opt to return to being billed solely as a residential customer and not earn any credit on an annual basis.

[107] In the Compliance Filing HRWC is directed to address:

- How HRWC will make residential customers aware of the opportunity and requirements to take advantage of the stormwater credit system.
- How a residential customer would apply to switch to non-residential status.
- If a residential customer has not maintained the private system, how will they be charged for the coming billing period?

## **2.5 Tier 2 Rate for Properties which only Receive a Driveway Culvert Service**

[108] There are a relatively small number of properties in the HRWC service territory where customers receive service solely due to the existence of a driveway culvert.

[109] In the original Application, HRWC placed those properties in a billing tier based on their impervious area and they would be charged the rate for that tier. Although it did not originally propose it, HRWC put forward an alternative method to bill these properties by placing them in Tier 2 (\$14 per year) likening that charge to a base charge for the culvert.

[110] In response to an IR from the Board, HRWC indicated, upon reflection, that a Tier 2 approach would improve equity.

[111] The Board asked whether Tier 3 might be a more accurate reflection of actual costs. HRWC stated:

e) Yes, the Tier 3 charge of \$27 per year would be a better reflection of the actual costs **however HRWC recommends the lower Tier 2 rate for initial implementation.** New culverts have a longer life-cycle and lower operations costs, so the operations costs related to culverts should decrease over time as corrugated culverts are phased out. Also, new development outside the urban core results in growth in the number of driveway culverts each year, and also HRWC's data around the number of driveway culverts and operating and maintenance costs will continue to improve. [Emphasis added in original]

[Exhibit H-3, p.2, Response to IR-7]

[112] The Board considers the Tier 2 revised recommendation from HRWC to be a reasonable approach to bill customers who have a culvert service only and approves that recommendation.

## **2.6 Charges for residential properties which straddle the Commission's Stormwater Service Boundary**

[113] HRWC intends to bill residential customers the full amount of their respective stormwater service charge, even if a part of their property is located outside the Utility's Stormwater Service Boundary.

[114] The rationale for this approach rests with the methodology used to develop and apply the proposed tiered rates structure for residential customers. Residential properties are generally smaller, and the tiered rate structure is based upon an Equivalent Residential Unit, which results in residential customers not being charged on the basis of their actual impervious area.

[115] There were no objections by Intervenor with respect to this issue.

## **Findings**

[116] The Board finds that Residential Customer billing based on a tier using a ERU approach provides appropriate equity in a cost-effective manner. As such, the Board finds that it is appropriate for HRWC to bill residential customers the full amount of

their respective stormwater service charge even if a part of their property is located outside the Utility's Stormwater Service Boundary.

## **2.7 Changes to the Regulations**

[117] HRWC proposes a number of changes to its Schedule of Rates, Rules and Regulations for Water, Wastewater and Stormwater Service ("Regulations"), to reflect the various issues contained in the Application.

[118] Part I (Interpretation) proposes amendments to the definitions to reflect those in the approved COS Manual.

[119] Part II (Rates) amends the rates proposed in the Application, including the exemption of properties of less than 50 m<sup>2</sup> of impervious area (without a culvert) (Section 7(6)) and the proposed credit program for non-residential customers (Section 7(7)).

[120] The Settlement Agreement specified a range of credit percentages from 30% to 50% related to BMPs utilized on properties to reduce peak flow. This has an impact on proposed Section 7(7), which originally proposed a credit of 30% only. HRWC acknowledged in its Post Hearing Submission that a change to allow for the credit range is necessary.

[121] Part III (Billing) proposes amendments to billing adjustments which allow HRWC to make modifications to the chargeable impervious area due to inaccuracies, or other inequitable results identified through the Notice of Objection or Credit Process (Section 11(7) and Section 11(8)). HRWC noted that the proposed change to Section 11(8) would require further modifications if a base charge for properties that have a driveway culvert that drains away from the system was implemented, or if there is a base charge for properties which receive service solely due to the existence of a driveway culvert. As

noted above, the Board approved HRWC's recommendation with respect to billing customers who have culvert service only under Tier 2.

[122] Part IV (Provision of Service) includes an amendment related to the revised definition of stormwater service as set out in the approved COS Manual (Section 36(2)).

[123] Prior to the hearing, HRWC filed a Summary of Errata which included three typos in relation to Section 7(3), Section (7) and Section 7(7) of the Regulations.

[124] No evidence was filed by the Intervenor with respect to HRWC's proposed changes to the Regulations.

### **Findings**

[125] The Board finds the proposed changes to the Regulations, which reflect the various items contained in the Application, to be reasonable. As part of its Compliance Filing, HRWC is directed to refile the Regulations to correct the typos, and to provide wording consistent with the items approved by the Board in the Application.

### **2.8 Changes to the Cost of Service Manual**

[126] Included in the HRWC Application was a copy of HRWC's COS Manual, with any proposed changes shown as "red-lined". The proposed changes are a result of updated stormwater data and/or customer numbers collected by HRWC since the previous version of the COS Manual was approved by the Board. In addition to the proposed changes in the Stormwater Section, HRWC noted that there are minor proposed changes in other COS Manual Sections, listed as follows:

- Engineering & IS: to reflect the move of the "Developmental Approvals" group to the "Regulatory Services" group;
- "Regulatory Services": changing the name from "Environmental Services" to "Regulatory Services" throughout the document; and

- Adding new cost centres (“Stormwater Engineering”, “Environmental Management System”, and “Developmental Approvals”).

[127] The Board notes that the method of allocating stormwater costs to Site Related Flow and ROW charges is not an issue in this proceeding, as this was previously approved by the Board.

### **Findings**

[128] The Board accepts the proposed changes to the COS Manual. However, several items that were clarified through this proceeding’s Information Request process have yet to be addressed in the revised version of the COS Manual.

[129] Furthermore, in its rebuttal evidence, Halifax Water noted that if approved by the Board, the Stormwater Credit Manual will need to be revised and appended to the COS Manual. The Stormwater Credit Manual will need to be updated to incorporate any orders that result from this Decision.

[130] The Board, therefore, directs HRWC to refile the COS Manual to incorporate the updated stormwater data, customer data, and any changes confirmed through the Information Request process. The updated Stormwater Credit Manual should not be appended to the COS Manual at this time, pending Board approval of its related Compliance Filing.

### **2.9 Settlement Agreement**

[131] By Settlement Agreement dated February 8, 2017, among HRWC, Dartmouth Crossing Limited and HRM, certain matters were resolved among the parties. A copy of the Settlement Agreement is attached as Appendix A to this Decision.

[132] Items 1 through 6 of the Settlement Agreement related to the credit proposal and those issues are dealt with in Section 2.4 of this Decision.

[133] The final three items relate to future actions:

7. Halifax Regional Municipality ("HRM") will be eligible for credits for BMPs utilized in the right of way, provided that such BMPs are owned and maintained by HRM and meet the criteria of HRWC's credit program. Any such credit is to be based on the revenue from the right of way charge, less non-operating costs, similar to the approach for non-residential credits.

8. HRWC and HRM agree to work together with interested stakeholders to develop a quality program for stormwater which would include the development and administration of joint design and construction standards and the possible development of a credit for water quality as part of best management practices as described in the stormwater credit program in place from time to time.

9. HRWC commits to harmonize its stormwater credit program in place from time to time with any future joint design and construction standards.

[Exhibit H-15, p. 4]

[134] The Board has no objection to provisions 7, 8 and 9 of the Settlement Agreement and accordingly, for this reason and for the reasons outlined in Section 2.4 of this Decision, the Board approves the Settlement Agreement, subject to the directions for the Compliance Filing.

### **3.0 JURISDICTIONAL ISSUES RAISED BY HALIFAX REGIONAL MUNICIPALITY**

#### **3.1 Background**

[135] Pursuant to the Board approved COS, HRM is charged a ROW charge for the stormwater service provided to the streets' right-of-way owned by HRM within the HRWC service territory.

[136] Although not on the Issues List for the hearing, HRM took the position that it should not be billed by HRWC for stormwater service, arguing that the Board is without authority to impose such a charge.

[137] Dartmouth Crossing argued the Board should not entertain arguments from HRM to reverse or renew the regulatory rationale for the ROW charge (as opposed to the dollar amounts) without explicit notice, a complete record, and the opportunity for interested parties who participated in the original proceeding to be heard. In the event the Board were inclined to make any change to the regulatory rationale for the ROW charge, the Board agrees with Dartmouth Crossing's comments.

[138] However, given the Board's views on the matter it has chosen to comment on the issues raised by HRM in an attempt to provide some clarity.

[139] Prior to 2007, wastewater and stormwater service was not a regulated service pursuant to the *Public Utilities Act* ("PUA"). Like all other municipalities in the province, those services were furnished by the Municipality (HRM) and none of the wastewater and stormwater services provided by HRM were subject to the jurisdiction of the Board.

[140] In 2007, at the request of HRM and HRWC, the *Halifax Regional Water Commission Act* was amended, in part, as follows:

**Public utility**

19 The *Public Utilities Act* applies to the Commission and any water, wastewater or stormwater facility or system owned, operated, managed or controlled by the Commission for service to the public is deemed to be a public utility within the meaning of that Act.

[141] Thus, the Legislature of the Province of Nova Scotia determined, as a matter of public policy, that HRWC may operate a wastewater and stormwater system and that such a system would be subject to regulation by the Board pursuant to the *PUA*.

[142] HRWC then agreed to assume responsibility for the wastewater system and stormwater system and by Motion of Council dated May 29, 2007, HRM agreed to transfer

to HRWC its wastewater system and stormwater assets pursuant to a Transfer Agreement which was dated June 12, 2007.

[143] As noted earlier in this Decision, through several proceedings, HRWC developed for approval of the Board a COS Manual for stormwater. Pursuant to that COS Manual, HRM, like any other stormwater customer, is billed a Board approved rate for the service provided.

### **3.2 Public Utilities Act**

[144] The basic principles of regulation of public utilities in Nova Scotia were extensively and definitively dealt with by the Court of Appeal in *Board of Commissioners of Public Utilities v. Nova Scotia Power Corporation*, (1976), 75 D.L.R. (3rd) 72, commonly known as the "Contracts Case".

[145] Nova Scotia Power Corporation had been declared by the Legislature to be a public utility effective the 16<sup>th</sup> of July, 1976. Previously, it had been unregulated. This placed Nova Scotia Power under the "comprehensive control" of the Board, which had the duty to regulate all rates, tolls, charges or schedules of the public utility.

[146] The contracts which were dealt with in the Contracts Case, included five municipal contracts and some dozen or more industrial contracts. The rates under these contracts were set as indirect subsidies at levels below the rates which might have been set had accepted regulatory standards been applied.

[147] The issue which the case squarely raised was, with Nova Scotia Power having become a regulated public utility, did the Board's powers and duties to supervise public utilities and to make orders as to the rates to be charged by them, give the Board jurisdiction over rates previously set under these contracts?

[148] In answering these questions, the Court of Appeal reviewed the powers and duties of the Board in regulating a utility, such as Nova Scotia Power and stated:

Such industries are peculiarly charged with a public interest. Economic efficiency requires that such an industry be assured of a monopoly in its market, but the consequent lack of competition dictates that the monopoly be controlled in the interest of the consumers. (Contracts Case, p.75).

[149] The general powers of the Board are found in s.18 of the *PUA*:

18 The Board shall have the general supervision of all public utilities, and may make all necessary examinations and inquiries and keep itself informed as to the compliance by the said public utilities with the provisions of law and shall have the right to obtain from any public utility all information necessary to enable the Board to fulfil its duties.

[150] The Court found that in exercising control of the public utility, the two principal objectives of regulation are that all rates must be just, reasonable, sufficient and not discriminatory or preferential and that the service must be adequately, efficiently and reasonably supplied to the public.

[151] Almost all of the provisions of the *PUA* are directed to securing these two objects - that a public utility give adequate service and charge only just and reasonable rates.

[152] Relevant to HRM's submission in this matter, it is s.67 of the *PUA* which requires the Board to ensure utilities charge like rates for like service. Section 67 reads as follows:

**Equal rates and charges for similar services**

67 (1) All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.

(2) The taking of tolls, rates and charges contrary to the provisions of this Section and the regulations made pursuant thereto is prohibited and declared unlawful.

### 3.3 Authority

[153] HRM argued that the Board has no authority to set rates which apply to the Municipality in relation to water, wastewater and stormwater services. HRM stated:

It is then necessary to look to the PUA to determine the powers of the Board in relation to the services and facilities provided by the HRWC. Section 42(1) of the PUA provides that the Board has jurisdiction to fix and determine rates with respect to services supplied by the HRWC to the public.

42(1) The Board shall fix and determine a separate rate base for each type or kind of service furnished, rendered or supplied **to the public** by a public utility. [emphasis added in original]

HRM is the owner of HRWC, and is a municipal entity responsible for governance of the public within its jurisdictional boundaries. It is not a member of the public for the purposes of the PUA as it relates to HRWC. It is up to HRM and HRWC to determine what if any charges HRWC can levy against the Municipality in relation to **water, wastewater** and stormwater services. The Board's jurisdiction is limited by s. 42(1) of the PUA to instances where the service is being provided to the public. [emphasis added]

[HRM Closing Submission, p. 3]

[154] The logical extension of HRM's argument is that the Board is without authority to set any utility rates, including electricity, which apply to HRM. An odd result.

[155] In the Board's view, HRM has misconstrued, and indeed misinterpreted, the use of the word "public" in s.42 of the *PUA*. In order for an entity to be a public utility it must provide a regulated service to the "public" as opposed to a private service. So, for example, if HRWC had only one customer, it would not be providing service to the "public" and, therefore, would not be regulated. However, HRWC has many thousands of customers so meets, quite clearly, the definition of public service. That is the context and meaning of the use of the word "public" in s.42. Indeed, HRM witness Peter Duncan, confirmed in cross-examination HRM is a customer of HRWC:

MR. MacPHERSON: And does HRM agree that for the purposes of the right-of-way charge it's a customer of Halifax Water?

MR. DUNCAN: Yes.

MR. MacPHERSON: And would you also agree, like any other customer, HRM can choose the manner in which it pays its bill? You know, I can pay it from my savings account, my chequing account; or, in the case of HRM, from a tax rate or from something else, but that's HRM's decision.

MR. DUNCAN: Yes.

[Transcript, pp. 162-163]

### **3.4 Right-of-Way held in Trust**

[156] In the alternative, HRM argued that it holds the street properties in trust for the citizens of HRM and should not be billed for stormwater service. HRM went on to state:

HRM can only deal with its streets in accordance with the powers given to it by its Charter. It is not open to HRM to permanently close any street or part of a street without holding a public hearing (except in the very limited circumstances set out in s. 325(2) of the HRM Charter). The public user rights in a street can only be extinguished by policy following a public hearing and upon filing the policy at the registry. At that point in time, and only then, can the Municipality sell and convey the lands.

When the streets are vested in a municipality, the municipality is said to hold the title to its streets in trust for the benefit of the public and subject to their right to pass and repass without obstruction. This is a paramount right that cannot be infringed by the municipality except under express statutory powers. Because the municipality holds the streets in trust for the public, it cannot be divested of ownership by right of sale under a mechanics' lien statute. This it is submitted, would also apply to any lien under s. 33 of the WCA.

[HRM Closing Submission, p. 4]

[157] HRM does not dispute that it is the owner of the streets in the sense that it has legal title.

[158] The Board fails to see the relevance of this trust argument. The fact that there may be restrictions as a matter of law on what HRM can do with its street assets does not change the fact that HRM owns the right-of-way assets and, as Mr. Duncan conceded, HRM is a customer of HRWC receiving stormwater service.

### **3.5 Public Interest**

[159] HRM argued that the transfer of wastewater and stormwater services to HRWC was done in the public interest to ensure that the public came under the protection

and regulation of the Board with respect to wastewater and stormwater services. HRM argued that the current ROW charge somehow defeats or violates this objective.

[160] With respect, HRM is confusing the issue.

[161] The Board is regulating stormwater service. The charge that HRWC levies on HRM for the right-of-way is a Board ordered rate determined in accordance with the Board approved COS Manual. So the objectives of the 2007 Transfer Agreement, as articulated by HRM have, through the Board's oversight of the stormwater charges, in fact, been achieved.

[162] What has caused the public confusion is the manner in which HRM has chosen to fund its stormwater rate obligation.

[163] All other utility services paid by HRM including electricity, water, wastewater, and natural gas are, generally speaking, funded from the general tax rate. HRM, in a decision entirely within the control of HRM, chose initially to rebill its ROW charge to taxpayers receiving stormwater service and then, when it received public opposition to that, it added a specific charge to the tax bill.

[164] How HRM funds its obligation is clearly a decision for HRM to make, but it does not detract from the fact that the rate that is charged HRM by HRWC is a Board supervised rate.

[165] HRM persisted in this argument under the heading "Regulation":

...It is submitted that the intent of the legislature is that the Board supervise and oversee the setting of rates for water, wastewater and stormwater that are charged to the public. This can only be accomplished through the Board's full supervision and oversight. Currently, the site generated flow charge is under Board supervision while the ROW charge is not. One of the most important roles of the Board is to regulate and oversee rates for water, wastewater and stormwater services provided to the public. The Board has the expertise to do so, and has powers under the legislature not available to Council. It is HRM's submission all stormwater charges should be within the regulatory scheme consistent the Board's jurisdiction.

[HRM Closing Submission, p. 9]

[166] Again, HRM misconstrued what has happened. The Board has full supervision and oversight of HRWC and the Board has set, in an adjudicative proceeding, the rate charged to HRM for stormwater service in the rights-of-way. The Board has done all of the things under the *PUA* it is required to do.

[167] HRM pointed to the significant confusion in relation to stormwater charges. With respect, that confusion is a consequence of the various decisions HRM has made to fund the charge.

[168] To be clear, it was a decision of HRM Council to forego its control over wastewater and stormwater service and request the Province to enact legislation to enable the Board to regulate that service and then convey those wastewater and stormwater assets to HRWC.

[169] This entire regulatory regime is as a consequence of decisions made by HRM Council.

### **3.6 Like Rates for Like Service**

[170] As noted, under s.67 of the *PUA*, the Board is obliged to ensure that "All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons at the same rate".

[171] In the Board's view, this section requires the Board set a rate for stormwater service which HRWC must levy against HRM for the service it provides. If you take the service – you pay for the service. To directly download those costs on other customers and not charge HRM, for a service it concedes it is getting, would be a violation of s.67.

### **Findings**

[172] The Board is satisfied that it has the legal authority to order that HRWC charge HRM the stormwater rate charge and has an obligation to see that happens.

[173] Indeed, the only rates expert qualified in the proceeding, Mr. Reese, on behalf of HRWC, testified that billing HRM for the impervious area in the streets was "best practice". In other words, the manner in which HRM is being billed for the stormwater service is, in his opinion, best practice based on his experience in North America.

[174] The Board finds the arguments of HRM on this matter are not persuasive.

### **4.0 COMPLIANCE FILING**

[175] HRWC is to file a Compliance Filing as soon as reasonably possible following which the Board will issue a Compliance Order establishing the effective date of rates. If HRWC chooses it may file the Compliance Filing in two phases, the first to deal with rates in order to have an early implementation date for rates. The Board contemplates the Compliance Filing related to the credit system may take more time to complete and HRWC can file that subsequently if it so chooses.

## **5.0 SUMMARY OF BOARD FINDINGS**

[176] The Board accepts the revenue requirements as submitted by HRWC. This includes the phase-in of the depreciation on contributed assets and the financing requirements.

[177] HRWC allocated the revenue requirements in accordance with the COS Manual. As such, the Board accepts the cost allocations in the Application.

[178] The Board understands the concerns presented in the Letters of Comment received from the public. However, the Board finds the noted concerns have been either adequately addressed by HRWC or have been dealt with in previous Board Decisions.

[179] The Board finds that the proposed HRWC rates (and the methodology for determining these rates) for Site Related Flow Charges for residential and non-residential customers are reasonable and appropriately address the related revenue requirements, and orders that they be implemented.

[180] The Board does not agree with HRM's contentions that a) the ROW charge should not be based solely on impervious area, and b) the ROW charge should be adjusted to account for Site Related Flow entering the right-of-way.

[181] The Board finds the proposed HRWC rate (and the methodology for determining this rate) for the ROW charge is reasonable and appropriately addresses related revenue requirements, and orders that it be implemented.

[182] The Board approves the proposed HRWC stormwater service charge exemptions, including the change to exempt properties with "less than 50m<sup>2</sup> of impervious area and no culvert" (rather than just properties with "less than 50m<sup>2</sup> of impervious area").

[183] The Board approves the stormwater credit program as developed by HRWC for non-residential customers, including HRM. The approved credit is to have the following characteristics:

- a) Available to any customer who pays the non-residential rate;
- b) Available to HRM;
- c) The credit range is 30% to 50% of the normal stormwater charge for the property;
- d) To earn the minimum credit, the private stormwater management system must be sufficient to handle a one-in-five year storm. Any private system that does not achieve this minimum is not eligible for a credit;
- e) Customers that share a private stormwater management system are proportionally eligible to receive the credit;
- f) The credit is not available for those customers that discharge to a combined sewer; and
- g) There is no credit for any private stormwater management system based solely on the treatment of stormwater quality.

[184] The Board accepts the proposal that to be eligible for the credit a customer must apply annually. The annual application should confirm that the stormwater management system has been maintained and cleaned and that HRWC can check on such compliance.

[185] The Board directs HRWC to provide a semi-annual update on March 31 and September 30 of each year on the status of the credit program participation. This should be filed with the Board and any interested parties, and be made available on the HRWC website.

[186] The Board approves the ability for a residential customer to earn a stormwater credit. The conditions are that:

- a) The customer must agree to be billed as a non-residential customer and must agree to all the relevant conditions and terms.

- b) The residential customer can opt to return to being billed solely as a residential customer and not earn any credit on an annual basis.

[187] The Board considers the Tier 2 revised recommendation from HRWC to be a reasonable approach to bill customers who have culvert service only and approves that recommendation.

[188] The Board finds that it is appropriate for HRWC to bill residential customers the full amount of their respective stormwater service charge even if a part of their property is located outside the Utility's Stormwater Service Boundary.

[189] The Board finds the proposed changes to the *Regulations*, which reflect the various items contained in the Application, to be reasonable.

[190] The Board directs HRWC to refile the COS Manual to incorporate updated stormwater data, customer data, and any changes confirmed through the Information Request process. The updated Stormwater Credit Manual should not be appended to the COS Manual at this time, pending Board approval of the related Compliance Filing.

[191] The Board has no objection to provisions 7, 8 and 9 of the Settlement Agreement and accordingly, for this reason and for the reasons outlined in Section 2.4 of this Decision, the Board approves the Settlement Agreement.

[192] Although not on the Issues List for the hearing, HRM took the position that it should not be billed by HRWC for stormwater service arguing that the Board is without authority to impose such a charge. The Board finds the arguments of HRM on this matter are not persuasive. The Board is satisfied that it has the legal authority to order that HRWC charge HRM the stormwater ROW charge and has an obligation to see that happens.

[193] HRWC is to file a Compliance Filing as soon as reasonably possible following which the Board will issue a Compliance Order establishing the effective date of rates. Some issues to be addressed in the compliance filing include:

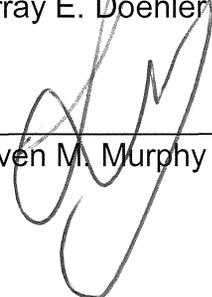
- What BMPs are eligible under the stormwater credit system;
- How stormwater detention facilities/BMPs designed to standards other than those identified in Section 1 of the Settlement Agreement will be assessed;
- Stormwater credit application requirements, including:
  - Application form format;
  - Frequency of application; and
  - Supporting documentation.
- Operation and maintenance requirements to ensure stormwater credit system compliance;
- How often HRWC staff will inspect stormwater detention facilities/BMPs to ensure compliance with the stormwater credit system;
- Enforcement actions;
- How properties that share stormwater detention facilities/BMPs will be allocated stormwater credits;
- The billing cycle for stormwater credits;
- How HRWC will make residential customers aware of the opportunity and requirements to take advantage of the stormwater credit system;
- How a residential customer could apply to switch to non-residential status;
- If a residential customer has not maintained the private system, how they will be charged for the coming billing period; and
- Refiling of the Regulations to correct the typos, and to provide wording consistent with the items approved by the Board in the Application.

[194] An Order will issue accordingly.

**DATED** at Halifax, Nova Scotia, this 12<sup>th</sup> day of April, 2017.

  
\_\_\_\_\_  
Peter W. Gurnham

  
\_\_\_\_\_  
Murray E. Doehler

  
\_\_\_\_\_  
Steven M. Murphy

Appendix A

2016

NSUARB M07731

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF:

The *Public Utilities Act*

- and -

IN THE MATTER OF:

An Application by the Halifax Regional Water Commission for an Order approving adjustments to Rates for Stormwater Service and the HRWC Rules and Regulations pertaining to Stormwater Service

MINUTES OF SETTLEMENT

WHEREAS on October 31, 2016, the Halifax Regional Water Commission ("HRWC"), filed an Application for an Order approving adjustments to Rates for Stormwater Service and the HRWC Rules and Regulations pertaining to Stormwater Service;

AND WHEREAS HRWC and the undersigned Intervenors have reached agreement on certain matters in issue in this Application, as represented by the attached Appendix "A";

AND WHEREAS this Agreement is subject to review and approval by the Nova Scotia Utility and Review Board.

THE UNDERSIGNED PARTIES ("the parties") HEREBY AGREE and respectfully request the Utility and Review Board ("UARB") to approve the Settlement Agreement attached hereto as Appendix A.

AGREED, and signed by legal Counsel or other authorized representative, this 8<sup>th</sup> day of February, 2017.

HALIFAX REGIONAL WATER COMMISSION

DARTMOUTH CROSSING LIMITED

Per: John C. MacPherson, Q.C.

Per: Nandy Rubin, Q.C.

HALIFAX REGIONAL MUNICIPALITY

Per: Jacques Dube

(Minutes of Settlement - HRWC Stormwater Rate Application - Redline Feb 8, 2017)

**APPENDIX A  
SETTLEMENT AGREEMENT**

The parties agree as follows:

1. Non-Residential customers of HRWC shall be entitled to a credit for best management practices designed to detain stormwater and reduce peak flow ("BMP") utilized on their properties. The credits will be based on the design criteria of the BMPs as contained in the HRWC Design and Construction Specification as amended from time to time and will range from 30% of the stormwater charge for the property based on the design and construction standard of the detention of the one in five year storm to a maximum 50% based on the design and construction standard of a 1 in 100 storm. The credits are as set forth in the table below:

Credit Level	Year Storm	%Credit
1	5	30%
2	10	35%
3	25	40%
4	50	45%
5	100	50%

2. To initially qualify for this credit, the customer must:
  - a. file an application form in the format as from time to time approved by HRWC;
  - b. provide a stormwater management plan or site grading plan stamped by a qualified professional. Record drawings prepared in support of the Building Permit Application can be considered "as built" plans in regard to the BMP's on site to verify entitlement to the level of credit sought;
  - c. for facilities where the documents referred to in 2(b) are not available, the customer must provide calculations performed by a professional engineer who certifies the facility meets the design standard for the amount of credit sought.
3. There is a requirement to annually re-apply for a continuation of the credit. The process for such re-application is as follows:
  - a. complete the form in the format as from time to time approved by HRWC;
  - b. provide certification by a person familiar with the facility that the facility is being adequately maintained.
4. Properties designed to standards other than those specified in #1 above may be eligible for a credit based on an individual assessment of the property by HRWC.

(Minutes of Settlement - HRWC Stormwater Rate Application - Redline Feb 8, 2007)

5. HRWC reserves the right to inspect facilities to ensure that they meet the design and construction standard for the level of credit provided and are being adequately maintained.
6. Section 7(7) of the proposed amended HRWC Regulations is further amended to provide "for a credit for up to 50%..."
7. Halifax Regional Municipality ("HRM") will be eligible for credits for BMPs utilized in the right of way, provided that such BMPs are owned and maintained by HRM and meet the criteria of HRWC's credit program. Any such credit is to be based on the revenue from the right of way charge, less non-operating costs, similar to the approach for non-residential credits.
8. HRWC and HRM agree to work together with interested stakeholders to develop a quality program for stormwater which would include the development and administration of joint design and construction standards and the possible development of a credit for water quality as part of best management practices as described in the stormwater credit program in place from time to time.
9. HRWC commits to harmonize its stormwater credit program in place from time to time with any future joint design and construction standards.