

SCHEDULE "A"

HALIFAX REGIONAL WATER COMMISSION

SCHEDULE OF RATES AND CHARGES FOR WATER, WASTEWATER AND STORMWATER SERVICES

(Effective for water, wastewater and stormwater services rendered on and after January 1, 2011)

The schedule of rates set out below are the rates and charges approved by the Nova Scotia Utility and Review Board for water, wastewater and stormwater services as follows:

Bills other than those for a specific one time service or charge shall be issued on a monthly or quarterly basis.

In this Schedule, the word "Commission" means Halifax Regional Water Commission.

1. Rates for Metered Water Service

Effective for water consumed after January 1, 2011:

(i) Minimum Water Bills (Base Charge)

Size of Meter		Minimum Water Quarterly Bill	Minimum Water Monthly Bill
MM	Inches		
15	5/8	\$ 38.66	\$12.89
20	3/4	\$ 55.41	\$18.47
25	1	\$ 88.92	\$29.64
40	1½	\$172.70	\$57.57
50	2	\$273.24	\$91.08
80	3	\$541.33	\$180.44
100	4	\$842.93	\$280.98
150	6	\$1,680.71	\$560.24
200	8	\$3,021.17	\$1,007.06
250	10	\$5,031.85	\$1,677.28

(ii) Consumption Rate

For all water consumed - \$0.413 per cubic metre.

(iii) <u>Non-metered Service:</u>	<u>Quarterly</u>	<u>Monthly</u>
Domestic Service (5/8" or 15 MM) (Based on 204 CM per year)	\$ 59.72	\$ 19.91
North Preston (5/8" or 15 MM) 204 CM/yr	\$ 59.72	\$ 19.91
North Preston (3/4" or 20 MM) 677 CM/yr	\$ 125.31	\$ 41.77
North Preston (1" or 25 MM) 1,402 CM/yr	\$ 233.68	\$ 77.89

**2. Public Fire Protection Rate**

- a. Effective after January 1, 2011: The Halifax Regional Municipality shall pay, annually, to the Commission for public fire protection services, the sum of \$9,502,450 for the number of months or part thereof in the financial year at the new rate, based on the date of the Order and the number of months in the financial year at the previous rate of \$9,502,450.

**3. Rates for Wastewater and Stormwater Service**

The following wastewater/stormwater charges apply after January 1, 2011:

(i) Minimum Wastewater and Stormwater Discharge Bills (Base Charge)

Size of Meter		Minimum WW & SW Quarterly Bill	Minimum WW & SW Monthly Bill
MM	Inches		
15	5/8	\$ 34.32	\$ 11.44
20	3/4	\$ 51.49	\$17.16
25	1	\$ 85.81	\$28.60
40	1½	\$171.62	\$57.21
50	2	\$274.59	\$91.53
80	3	\$549.18	\$183.06
100	4	\$858.09	\$286.03
150	6	\$1,716.19	\$572.06
200	8	\$3,089.14	\$1,029.71
250	10	\$5,148.57	\$1,716.19

ii) Wastewater and Stormwater Discharge Rate

For all water consumed - \$1.1690 per cubic metre

iii) <u>Non-metered Service</u>	<u>Quarterly</u>	<u>Monthly</u>
Domestic (5/8" or 15 MM (Based on 204 CM per year)	\$ 93.94	\$ 31.31
North Preston (5/8" or 15 MM 204 CM/yr	\$ 93.94	\$ 31.31
North Preston (3/4" or 20 MM) 677 CM/yr	\$ 249.34	\$ 83.11
North Preston (1" or 25 MM) 1,402 CM/yr	\$ 495.54	\$165.18

A customer, to whom wastewater service is available in an abutting street or abutting service easement but is not connected to the wastewater system, is required to pay the Wastewater Discharge Rate but is entitled to a credit of \$0.8404 per cubic meter.

**4. Charge for Temporary Water Service** - The Commission may furnish water, wastewater and/or stormwater service to customers requiring temporary service for construction of buildings or other work.

a) Water Service:

When required such persons shall deposit with the Commission such sum as may be determined by the Commission as sufficient to defray the cost of making the necessary connection to the services provided together with the cost of the meter to be installed to measure the water consumed. Upon completion of the work and the return of the undamaged meter to the Commission, a refund will be made after payment of the services and the connection/disconnection charges as calculated based on the time and materials used and the standard hourly rates including overheads for those staff involved in providing the service together with the meter base charge and the consumption and/or discharge rates in respect of such installation.

b) Wastewater and/or Stormwater Service

The Commission may upon approval, allow the temporary discharge of wastewater or stormwater to wastewater facilities or stormwater systems. The Commission will approve the measures to determine discharged volumes and the discharger will be charged the appropriate rate. All discharges will be in compliance with the provisions of the Rules and Regulations.

**5. Special Service Supplied from Fire Hydrants** -

(a) Water supplied from fire hydrants is reserved for firefighting or for Commission water, wastewater or stormwater system maintenance purposes only. Whenever

any person, other than the HRM fire and emergency service or the Commission personnel, desires to use a fire hydrant for the supply of water, written permission must be obtained from the Commission.

- (b) The Commission may furnish water from a fire hydrant to persons requiring temporary supply as outlined in the Rule titled "Charge for Temporary Service" as specified elsewhere in the Schedule of Rates and Charges.
- (c) Any connection to a fire hydrant other than in accordance with this regulation shall be illegal and shall constitute an offence.
- (d) Any person guilty of an offence hereunder shall be subject, for a first offence, to a penalty of \$1,000.00, and for any subsequent offence, to a penalty of \$5,000.00.

**6. Designated Bulk Fill Station**

- (a) Annual designated bulk fill station permit fee:
  - i) An annual permit fee will be charged for each and every vehicle equipped for access to the bulk fill stations. Permit fees will be charged as follows:
    - First Card - \$225.00
    - Additional Cards - \$20.00
    - Replacement of Lost/Stolen Card - \$200.00
- (b) Consumption Rates:
  - i) Consumption rates for water accessed through the 'urban core' bulk fill stations will be \$1.83 per cubic metre after January 1, 2011.
  - ii) Consumption rates for water accessed through the Middle Musquodoboit bulk fill station will be \$2.00 per cubic metre.
- (c) Access Cards:
  - i) Bulk water access cards will be pre-loaded by specific dollar amounts and will be recorded as deferred revenue.
  - ii) Bulk water access cards will be assigned to specific vehicles identified for access to the designated fill stations.
  - iii) Access cards may be returned and any outstanding balance refunded.
- (d) Consumption charges will be deducted from the card balance based on the volume of water sold as per the rate schedule.

- (e) Vehicles accessing the designated bulk fill stations must be inspected and approved by the Commission on an annual basis as part of the permit process.
- (f) Designated bulk fill station procedures as prescribed by the Commission must be adhered to at all times in order to retain the permit. Contravention of the permit requirements shall result in termination of the designated bulk fill station permit.
- (g) The Commission reserves the right to control flow rates at each and every designated bulk fill station.

**7. Re-establishing Service**

When water, wastewater or stormwater service has been suspended for any violation of the Rules and Regulations of the Commission, such service shall not be re-established until a reconnection charge of \$55.00 has been paid.

**8. Connection/Disconnection of Service**

The Commission shall charge \$55.00 for connection/disconnection of service during regular working hours (\$210.00 for outside regular working hours).

**9. New Water, Wastewater or Stormwater Account**

The Commission shall charge \$25.00 for the creation of a water, wastewater and/or stormwater account.

**10. Water Meter Installation**

The Commission shall charge \$45.00 for the installation of a new meter up to and including 25 MM (1 inch) meters in the customer's premises in the meter setting as specified by the Commission and provided by the customer during regular working hours (\$210.00 for outside regular working hours). The charge for meters 40 MM (1.5 inches) or larger in the customer's premises in the meter setting as specified by the Commission and provided by the customer shall be calculated based on the time and materials used and the standard hourly rates including overheads for those staff involved in providing the service.

**11. Non-Negotiable Payments**

The Commission shall charge a \$25.00 fee plus bank charges for cheques that due to non-negotiability have been charged back by the Commission's bank, or payment through a pre-authorized payment plan which has been reversed or dishonoured by the bank/financial institution.

**12. Collection of Overdue Bills**

The Commission may charge a \$35.00 fee for each visit by the Commission staff to a customer whose payment is overdue, if in the judgement of the Commission, it is warranted.

**13. Missed Appointment by Customer**

Where an appointment has been made with a customer to have a water, wastewater and/or stormwater service connection made, a water meter installed, water turned on or off to a property and/or other Commission requested service related visits, or customer requested visits to the property and the customer fails to keep the appointment or the plumbing is not completed to allow for installation of a water meter and Commission staff have to return to the property; there shall be a charge of \$45.00 for each missed appointment.

**14. Theft of Service**

The Commission may charge penalties in addition to the applicable charges for each illegal service connection as follows:

- i) 1<sup>st</sup> offence            \$300.00
- ii) 2<sup>nd</sup> offence            \$750.00

**15. Building Fire Protection Systems**

Each building having a fire protection system installed shall pay annually for the service as follows:

Domestic accounts having a service of 2 inches or less in diameter	\$ 50.00
Each building serviced by a primary pipe of 6 inches or less in diameter	\$ 170.00
Each building serviced by a primary pipe of 8 inches or greater in diameter	\$ 218.00

The customer shall be responsible for the cost of installing a sprinkler line from the street main to the building, including a proper sized shut-off valve so that the line may be shut off if necessary. The Commission shall either install the sprinkler line or it shall approve the installation of same. The portion of the sprinkler line that extends from the main to the street line shall become the property of the Commission and its portion shall be maintained and eventually replaced by the Commission when necessary.

Discharge of fire protection systems for maintenance purposes shall be in accordance with the Rules and Regulations.

**16. Customer Monitoring Service**

The Commission may enter into an arrangement with customers to monitor the metered flow to the customer and allow the customer to access the data. The cost of providing this service will be billed to the customers at the rate of \$120.00 per month, per meter.

**17. Customer Bill Retrievals/Copies**

The Commission will charge a fee of \$12.00 per bill copy for water bill retrievals/copies issued outside the regular billing cycle.

**18. Inspection of New Building Service Connections**

The Commission requires all new water, wastewater and stormwater building service connections to be inspected by the Commission prior to activation of the water, wastewater and/or stormwater service. The fee for this inspection is \$90.00 per inspection visit for water connections less than 2 inch in diameter and \$165.00 for water connections greater than 2 inch in diameter. The fee for this inspection is \$90.00 per inspection visit for wastewater and/or stormwater connections less than 6 inch in diameter and \$165.00 for connections 6 inch or greater in diameter. If multiple services are inspected at the same time only one charge will apply.

**19. Staff Review of Drawings and Specifications**

The Commission shall charge for the review of Final Design drawings and specifications for additions and or extensions to its system at the following rates:

Item 1	Water Mains	\$1.18 per linear metre
Item 2	Wastewater Mains	\$1.18 per linear metre
Item 3	Stormwater Mains/Ditches/Culverts	\$1.18 per linear metre

The charges will be identified in the Services Agreement.

**20. Serviced Land Charge**

- a) Notwithstanding Item 3, every owner of serviced, vacant land shall pay a minimum Serviced Land Charge calculated at a rate of \$0.1538 per day for each lot or parcel of land.
- b) The Serviced Land Charge will be billed on the same date as the water bills and shall be due and payable on the same date as the water bills.
- c) The Serviced Land Charge shall be used to cover the annual cost of operating, maintaining, and administering the wastewater and stormwater primary collection

system and shall be recorded in the Wastewater and Stormwater Account and used for the purposes for which it is collected.

**21. Sewer Redevelopment Charge**

- a) A Sewer Redevelopment Charge shall be levied and imposed on all new buildings, including buildings which are moved onto a new lot, and all building additions in serviced areas.
- b) This charge shall be \$0.30 per square foot of floor space. The payment will be due and payable to the Halifax Regional Municipality as agent for the Halifax Regional Water Commission, prior to the issuing of a building permit.
- c) The Sewer Redevelopment Charge shall only be payable in cases of accessory buildings that contain facilities which can discharge effluent to the public sewer.
- d) Notwithstanding Item 21(b), the payment of a Sewer Redevelopment Charge shall not apply to buildings or building additions which are located on a parcel of land which was subject to an Infrastructure Charge containing a component related to new or expanded wastewater facilities or stormwater systems.
- e) The Sewer Redevelopment Charge collected will be placed in a separate reserve account and will be used to upgrade or oversize trunk sewers upon application and approval of the Board.

**22. Trunk Sewer Charge**

- a) A Trunk Sewer Charge shall be levied and imposed on an unserviced lot of land occupied by a building when it becomes serviced with the wastewater and/or stormwater system. The Trunk Sewer Charge is as follows:

Dwelling Units	\$500.00 per unit
All other Buildings	\$0.30 per square foot

- b) The payment will be due and payable to the Halifax Regional Municipality as agent for the Halifax Regional Water Commission when the lot is serviced.
- c) The Trunk Sewer Charge collected will be placed in a separate reserve account and will be used to upgrade or oversize trunk sewers upon application and approval of the Board.

**23. Extra Strength Surcharge**

On application and approval by the Commission, a user of wastewater system may be allowed to discharge extra strength wastewater into the wastewater system as set out in

the Schedule of Wastewater Rules and Regulations. The Extra Strength Surcharge will be in addition to the approved rate. The Extra Strength Surcharge shall be established by the Commission as set out in the attached Addendum "A". The additional cost is to be added to the monthly or quarterly wastewater bill of the customer.

**24. Capital Cost Contribution Charge**

- a) The Commission may establish a Water, Wastewater and Stormwater Capital Cost Contribution Charge from developers and/or future users requiring extension or improvements to the systems. The total amount of the Capital Cost Contribution Charge shall ensure that the Commission is cost neutral to the design, construction, financing and applicable overhead, as prescribed by the Commission. The Water, Wastewater and Stormwater Capital Cost Contribution Charge shall be calculated for charge areas and allocated on the basis of the Water, Wastewater and Stormwater Capital Cost Contribution Formula, as set out in Addendum "B" attached.
- b) Funds collected under the Water, Wastewater and Stormwater Capital Cost Contribution Charge will be placed in a reserve account and will be used for extension or improvements of the applicable system within the area related to the charge upon application and approval by the Board.

**25. Capital Cost Charge for Wastewater Treatment Facilities**

- a) A charge in the amount of \$877.00 shall be paid to the Halifax Regional Municipality as agent for the Halifax Regional Water Commission prior to the issuing of a building permit for all new single detached residential buildings that will be connected to the wastewater system.
- b) A charge in the amount of \$584.00 per dwelling unit shall be paid to Halifax Regional Municipality as agent for the Halifax Regional Water Commission prior to the issuing of a building permit for all new multiple unit residential buildings that will be connected to the wastewater system.
- c) A charge at a rate of \$0.27 per square foot of floor space shall be paid to the Halifax Regional Municipality as agent for the Halifax Regional Water Commission prior to the issuing of a building permit for all other new buildings and building additions in serviced areas.
- d) When an unserviced lot of land, occupied by a building, existed prior to the coming into force of these Rates and Charges, the charge shall be payable to the Commission, when the building is connected to the wastewater system.
- e) Buildings accessory to a residential use and containing facilities which can discharge to the wastewater system shall pay a charge at a rate of \$0.27 per square foot of

floor space payable to the Commission when the building is connected to the wastewater system.

- f) Funds collected under the Capital Cost Charge for Wastewater Treatment Facilities will be placed in a reserve account and will be used for providing capacity in Wastewater Treatment Facilities upon application and approval by the Board.

**26. Rebate**

Where the volume of sewage or wastewater discharged into the wastewater facilities is less than half of the volume of water used by the property, as established by the customer to the satisfaction of the Commission, a rebate of the Wastewater/Stormwater Discharge Charge attributable to the difference between the amount of the water used and the amount of sewage or wastewater discharged to the wastewater facilities shall be given. The rebate does not apply to the Wastewater/Stormwater Discharge Base Charge. Application for this rebate must be made annually by the customer to the Commission.

**NOTE: HST WILL BE ADDED WHERE APPLICABLE**

## ADDENDUM "A"

### EXTRA STRENGTH SURCHARGE FORMULA

The Extra Strength Surcharge shall be based on the following formulas. The surcharge may apply to one or more of the parameters. When more than one parameter applies, the surcharge shall be calculated for each parameter separately and then added together to arrive at the total Extra Strength Surcharge.

#### Surcharge Parameters

BOD <sub>5</sub>	= Biochemical Oxygen Demand
S.S.	= Suspended Solids, Total
T.P.	= Total Phosphorus
TKN	= Total Kjeldahl Nitrogen
Oil & Grease	= Solvent Extractable - animal or vegetable in origin

#### Limit Values

Surcharges shall be calculated based on the following limit values:

Parameter	Limit (Milligrams per Litre)
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300
Suspended Solids, Total (S.S.)	300
Total Phosphorus (T.P.)	10
Total Kjeldahl Nitrogen (TKN)	100
Oil & Grease	150

#### Rate

The rate shall be calculated based on the actual costs from Mill Cove Wastewater Treatment Facility from the previous year's records and the total amount of the surcharge parameter handled during the same period.

#### Load

The value of the load shall be based on test results from the customer. The testing program to be used to arrive at the limit shall be approved by the Commission.

**Flow**

The flow will be the flow from the customer measured at the location approved by the Commission. The measurement method and frequency shall be approved by the Commission.

**Extra Strength Surcharge Formulas**

The surcharge shall be calculated for each parameter using the following formulas:

$$\text{BOD}_5 \text{ CHARGE} = (\text{Load (mg/L)} - \text{Limit (mg/L)}) \times \frac{\text{Flow (m}^3\text{)} \times \text{Rate (\$/kg)}}{1000}$$

$$\text{S.S. CHARGE} = (\text{Load (mg/L)} - \text{Limit (mg/L)}) \times \frac{\text{Flow (m}^3\text{)} \times \text{Rate (\$/kg)}}{1000}$$

$$\text{T.P. CHARGE} = (\text{Load (mg/L)} - \text{Limit (mg/L)}) \times \frac{\text{Flow (m}^3\text{)} \times \text{Rate (\$/kg)}}{1000}$$

$$\text{TKN Charge} = (\text{Load (mg/L)} - \text{Limit (mg/L)}) \times \frac{\text{Flow (m}^3\text{)} \times \text{Rate (\$/kg)}}{1000}$$

$$\text{O \& G CHARGE} = (\text{Load (mg/L)} - \text{Limit (mg/L)}) \times \frac{\text{Flow (m}^3\text{)} \times \text{Rate (\$/kg)}}{1000}$$

## ADDENDUM "B"

### **WATER, WASTEWATER AND STORMWATER CAPITAL COST CONTRIBUTION POLICY**

#### **PART I: WATER, WASTEWATER AND STORMWATER CAPITAL COST CONTRIBUTION POLICY**

##### **Preamble**

The Water, Wastewater and Stormwater Capital Cost Contribution (WWS CCC) Policy provides for the recovery of costs required to provide oversized water, wastewater and stormwater infrastructure within a 'charge area'. The costs of providing this infrastructure are shared by developers, and in some cases, by the Commission. After the completion of a Master Plan Study, a charge area will be established that becomes the basis for the development of a WWS CCC Charge. The WWS CCC Charge shall take into consideration all aspects of the required infrastructure, financial risks to the Commission, timing of contributions, phasing of development and any other considerations that could have a financial impact on the Commission.

##### **Policy 1 Master Plan Study Area & Charge Area**

- 1.1 The Master Plan area and terms of reference for the study as it relates to the Commission must consider such factors as density, existing stormwater and wastewater systems, drainage basins, existing and proposed water service districts, service boundaries, land use development areas, soil conditions, topography, and other factors deemed appropriate. The Master Plan area is not constrained by land ownership.
- 1.2 The charge area will generally be the Master Plan study area. However, depending on service considerations, the charge area may also include areas outside the Master Plan area.

Oversized water, wastewater and stormwater infrastructure will be defined in the Master Plan for the charge area. Notwithstanding, the impact on existing or planned infrastructure outside the Master Plan study area will be taken into account in the Master Plan Study.

The Commission may require information from the developer(s) regarding the planning and system requirements in the preparation of the Master Plan.

##### **Policy 2 Oversized Components**

- 2.1 Oversizing components of a charge area may include, but are not necessarily limited to water distribution and transmission system including pumping stations, pressure reducing chambers and reservoirs, wastewater collection system including pumping stations and stormwater collection systems including retention ponds. The infrastructure required to service a charge area may be located outside of the charge area and may include land costs (including easements) associated with providing required infrastructure.
- 2.2 Infrastructure which is exterior to a charge area, such as water and wastewater treatment plants and related infrastructure may be included in the capital cost

calculations. In any event, all costs of Oversized Infrastructure to provide service to the charge area will form part of the WWS CCC.

**Policy 3      Oversized Infrastructure Required to Serve Future Developments**

Where oversizing of infrastructure within a charge area is identified as providing benefit to future development, the Commission may invest in the Oversized Water, Wastewater and Stormwater Infrastructure required for the future development. The oversizing required to service future development on lands adjacent the charge area, shall be determined, and the investment by the Commission shall be evaluated in accordance with the Funding Criteria defined in Policy 18.

**Policy 4      Drainage from Adjacent Lands**

In a Master Plan area, if drainage from adjacent lands requires the oversizing of storm sewers, the cost of providing the oversizing will form part of the WWS CCC for the charge area.

**Policy 5      Oversized Infrastructure that Benefits Existing Developed Areas**

- 5.1      Where an existing developed area receives a direct service benefit from Oversized Water, Wastewater and Stormwater Infrastructure, the Commission may pay a share of the oversized system costs based upon the Capital Costs per acre. The Commission's share is not included in the WWS CCC recovered from new development within the charge area.
- 5.2      The Commission will establish the extent to which the existing developed areas receive a benefit from Oversized Water, Wastewater and Stormwater Infrastructure. This benefit will be determined according to the procedures and guidelines of this Policy.
- 5.3      Where system capacity provided by new infrastructure within a charge area is used by existing serviced areas, to a degree less than or equal to that existing system capacity used by the charge area, the Oversized Water, Wastewater and Stormwater Infrastructure required for the charge area will not be considered a benefit to the existing area.
- 5.4      Existing developed areas may be excluded from a charge area if they are not included in the new infrastructure design calculation, or do not derive a direct benefit from these new systems.
- 5.5.      Where the Commission has contributed to existing developed areas contained in a charge area, the Commission may recover from WWS CCC from infilling or by way of rezoning, or subdivision, the Equivalent Capital Cost Contributions from new development within the existing community. In effect, the Commission may make payment of Water, Wastewater and Stormwater Capital Cost Contributions in advance for future development in existing areas and recover the contributions when new development occurs.
- 5.6      The Commission's expenditures shall be evaluated in accordance with the Funding Criteria defined in Policy 18, Funding Criteria.

**Policy 6 Upfront Payment of Oversized Infrastructure by the Commission**

To fulfill its leadership role, the Commission may consider it necessary to invest in the oversized and required water, wastewater and stormwater infrastructure in a charge area in advance of the revenue stream necessary to construct the systems. The Commission may also decide to facilitate the acquisition of rights-of-ways, land, and other required systems or facilities beyond the control of one or more developers. Commission investments shall be evaluated in accordance with the criteria determined in Policy 18, Funding Criteria.

**Policy 7 Infrastructure Exterior to the Charge Area**

- 7.1 Oversized and required infrastructure exterior to the charge area will be included in the capital Oversized Water, Wastewater and Stormwater Infrastructure for the charge area. The Commission will be required to accurately establish the Oversized Infrastructure that is attributed to a specific charge area.
- 7.2 Water, Wastewater or Stormwater facilities would only be included in the capital cost if their upgrade or expansion can be directly attributable to a specific charge area.

**Policy 8 Cost Estimates**

- 8.1 The basis for the WWS CCC is an estimate of the Oversized Infrastructure required to service the charge area. The estimated costs shall be escalated to account for the year in which the construction takes place and shall include interest during construction. The Commission will use the ENR Canada Indices to estimate costs in the future, in accordance with Policy 14, Timing and Sequencing of Development. In addition, the Commission will include appropriate administration costs for the projects.
- 8.2 The Commission, in consultation with the developers, will develop the cost estimates for Oversized Water, Wastewater and Stormwater Infrastructure, both within and outside the charge area, that will form the basis of the CCC. The Commission will make every effort to establish cost estimates in consultation with the Stakeholders. The Commission may accept the developers' estimates to construct the systems if the developers agree to construct the Oversized Water, Wastewater and Stormwater Infrastructure at the estimated cost.

**Policy 9 Cost Apportionment Criteria**

The revenue stream arising from cost apportionment will be used in the Financial Plan of the charge area.

For water, wastewater and stormwater infrastructure costs, a density factor related to system demand will be utilized to apportion costs.

The WWS CCC is based on average density per acre for the entire charge area, adjusted for the actual density or land use within the parcel being subdivided. Actual density of the parcel being subdivided shall be determined at the time of Subdivision Approval using the maximum density which is permitted by the Municipal Planning Strategy or land use permitted by the Municipality's Land Use Bylaw.

If the density in a subdivision is lower than the average, the WWS CCC may be accelerated based on the average, ratio amount until the total WWS CCC for the subdivision is collected from a developer. This process may be applied if cash flow requirements dictate more funds are needed to pay for required infrastructure.

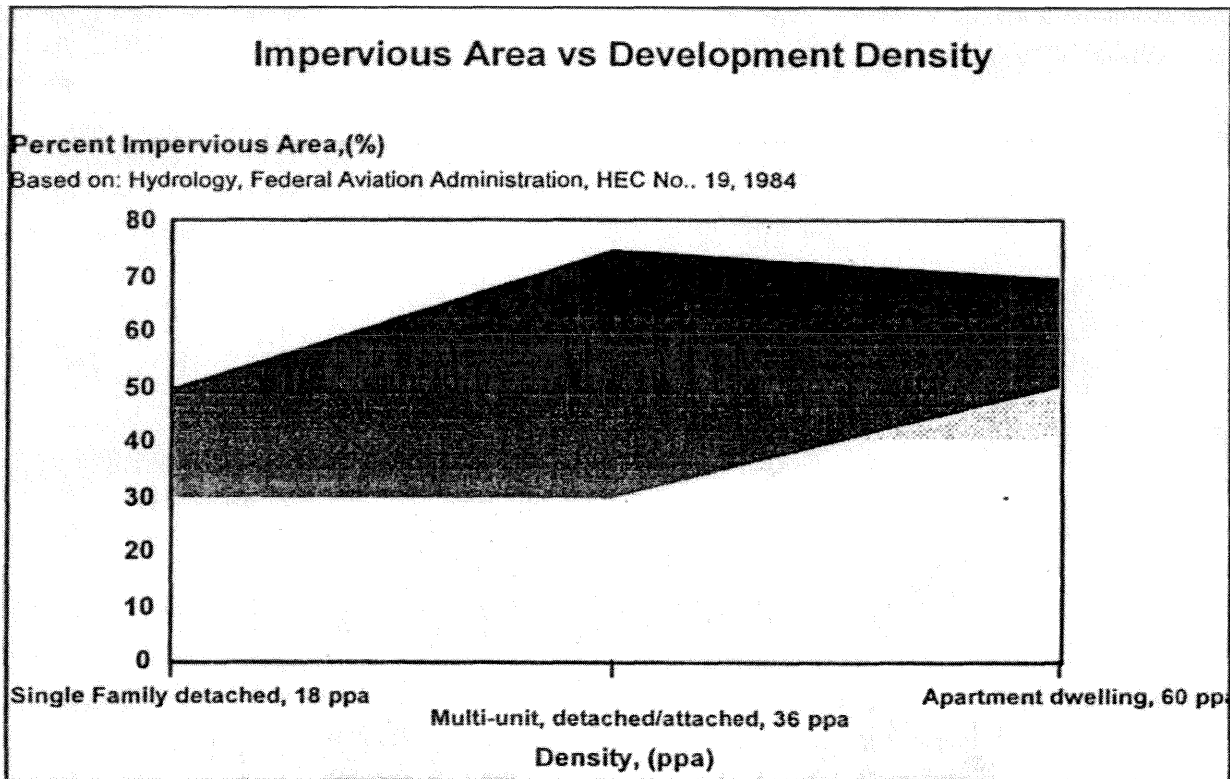
In institutional, commercial or industrial zones or uses, the average density for the charge area will apply. The area of the parcel being developed will be adjusted to allow for multiple units or equivalent people.

Stormwater Collection Systems are considered in the same manner as wastewater systems. This approach implies there is a relationship between development density and the amount of stormwater run-off which is generated. Given the accuracy and factor of safety inherent in estimating run-off, there is a direct relationship between density and run-off for residential development. (Refer to Figure 1).

Although the same relationship does not exist for industrial, commercial, or institutional uses, this policy accepts that apportioning stormwater collection system costs on the basis of density is a reasonable, fair, and equitable approach. This approach is also supported by the fact that storm sewers often share the same trench as other services, and are administered in the same construction contract.

The fairness and equity of this approach may be enhanced by implementing design specifications which require run-off levels to be maintained at residential levels. Such policies are easily implemented through the site design specifications.

Figure 1



### Policy 10 Charge Area Boundary Changes

After a charge area has been established and phased development has commenced, there may be reasons to increase or decrease the charge area. The Commission may permit a change in the charge area based on the Oversized Water, Wastewater and Stormwater Infrastructure capacity to provide service to the new area. Changes to charge area boundaries will be considered as either minor additions or major changes.

- 10.1 A minor addition to a charge area may be considered when the infrastructure within the existing charge area is adequate to provide the required service to the additional area. All new development within the adjusted charge area boundary will pay WWS CCCs, based on the same charges that apply to the original charge area.
- 10.2 A major change to a charge area is required when the proposed additional area cannot be adequately serviced by the existing infrastructure. New, Oversized Water, Wastewater and Stormwater Infrastructure will be required and a new WWS CCC must be calculated. Capital costs collected from the original charge area will be applied to the funding of the new infrastructure.

Where a major change in the charge area is required, a revised Master Plan Study, a new charge area and corresponding WWS CCC will be calculated. These changes may require amendments to the Rules and Regulations or established Charge Area as per NSUARB to the

charge area under consideration. Major changes may include expansion or extension of the charge area boundary or; a combination of two existing charge areas requiring a revision to the capital cost contributions calculated from the area.

A developer in the original charge area will not be required to pay a WWS CCC which exceeds the amount calculated in the original charge area.

#### **Policy 11 Combined Charge Areas**

Where two charge areas are adjacent and there are valid reasons to share some or all of the entire Oversized Water, Wastewater and Stormwater Infrastructure, the Commission may combine the charge areas and recalculate the WWS CCCs.

The Commission will determine the components of Oversized Water, Wastewater and Stormwater Infrastructure that will be included in the new charge area.

WWS CCCs collected from the original charge area will be included in the new charge area, and they will be collected on a go forward basis.

#### **Policy 12 Cost Exceptions**

Costs that will be deducted from the developers' portion of the WWS CCC include the following:

- The proportion which is considered to benefit the existing Customers of the Commission, as determined in accordance with Policy 5.
- Commission investments in infrastructure for future development or another charge area, determined in accordance with Policy 3.

#### **Policy 13 Interest and Risk Mitigation**

13.1 The Commission supports new development; however, it is not prepared to accept the financial risk of new development. As a result, where the Commission decides to invest in the Oversized Water, Wastewater and Stormwater Infrastructure before the required contribution is collected, interest will be added to the WWS CCC.

13.2 In the event that a major component of infrastructure is required before the contributions are collected, the Commission may require the developers to assume the risk and invest in the infrastructure. The developer(s) would be subsequently reimbursed when CCCs are received by the Commission through continued development in the charge area.

#### **Policy 14 Timing and Sequencing of Development**

14.1 The development phasing will be taken into consideration when designing and costing oversized infrastructure in the charge area. Since WWS CCCs are calculated on the basis of best estimates, reasonable and appropriate estimates must also be made in respect of development timing and corresponding cost escalators and interest rates that are dependent on the developers' schedule.

- 14.2 The infrastructure capital cost estimate will be factored upwards to reflect prudent and appropriate cost escalators based upon interests and escalated cost of servicing, indicated through the ENR Canada index factor.

The Commission will track and record all WWS CCC funds and expenditures. Interest will be charged when the account is in deficit and will be credited when the account is in surplus.

The Commission may require significant components of infrastructure be built at a predetermined time frame; or based upon system demands or capacity loading arising from new or existing development. The significant components will be constructed within the time frame established by the Commission. As an example, the timing of a major interchange, pumping station or water reservoir which may be required and administered by an outside agency.

The timing and sequence of development phasing may also have an impact upon the design capacity (or size) of infrastructure needed to provide adequate interim service standards throughout development stages in the charge area. It would be inappropriate for the Commission to approve the installation of services that did not adequately meet the design guidelines and minimum service standards to provide requisite services to its citizens. Therefore, additional Oversized Water, Wastewater and Stormwater Infrastructure may be required at interim stages of the development as deemed appropriate by the Commission. Costs associated with interim infrastructure needed to advance the timing of the development may not be included in the CCC costs if no benefit is achieved by the Commission.

The Commission may require security (irrevocable, automatically renewing letter of credit) on the property when a development agreement has been approved by the Municipality, to indemnify the Commission in the event that the development does not proceed in the prescribed period of time. The amount of the lien will be equal to the WWS CCC that would have been collected from the area in question.

The Commission will determine the sequence of oversized system construction, based upon information from the developer, and the requirements of the development. The Commission in consultation with the Municipality will determine the densities for each phase of the development in the charge area. The Commission may, in some cases, construct infrastructure prior to receiving the necessary WWS CCC; or require the developers to construct the Oversized Water, Wastewater and Stormwater Infrastructure. Developers may be required to construct Oversized Water, Wastewater and Stormwater Infrastructure in an earlier phase that will be used in latter phases of the development.

## **Policy 15      Developers Acting as Contractors**

- 15.1 The developer may be allowed to construct some or all of the Oversized Water, Wastewater and Stormwater Infrastructure based on the agreed upon estimates in compliance with the Commission's standards and guidelines. In most cases developers will be required to construct Oversized Systems in their development lands, but the Commission reserves the right to construct oversized or required infrastructure for the charge area.

- 15.2 When the Developer is acting as a contractor, the Commission will inspect service system construction to ensure the system(s) meet Commission Design Guidelines. The developer will be required to build the infrastructure as required by the phased development determined in the Master Plan Study.
- 15.3 Cost estimates for Oversized Systems and associated payment schedules will require a WWS Service Agreement to determine and implement WWS CCCs. The payment to the developer is based upon agreed cost estimates amongst the participating Stakeholders and approved by the Board.
- 15.4 The Commission will inspect the system construction to ensure it meets its guidelines. The Developer will provide full inspection services and certification by a consultant for design compliance.

#### **Policy 16 Specific Infrastructure Components**

- 16.1 Specific components of Water, Wastewater and Stormwater systems such as sewage pumping stations, and stormwater storage facilities will form part of the Capital Cost if they provide a Direct Benefit to more than one developer within the charge area. In this instance, the costs will be apportioned in accordance with the WWS CCC Policy using the appropriate design criteria, and may include land costs.
- 16.2 Components that provide only local benefits, and service a part of one development within the charge area, are solely the responsibility of the developer of the parcel.
- 16.3 The Commission may require the developer who first requires a pumping station to build the Oversized Infrastructure and subsequently reimburse oversizing costs when the Commission has collected from future developments or apply a WWS CCC credit to the developer for the Oversized Water, Wastewater and Stormwater Infrastructure investment.

#### **Policy 17 Oversized Infrastructure Criteria**

##### **17.1 Oversizing Criteria**

The cost of providing Oversized Water, Wastewater and Stormwater Infrastructure will be funded through the WWS CCCs levied in a charge area.

The cost of providing Oversized Water, Wastewater and Stormwater Infrastructure may also include discrete upgrades of, or new connection to, existing systems outside of the charge area.

There are several methods of calculating the oversize cost, which generally fall into one of two broad categories:

Incremental basis - where the oversize cost would be calculated by determining the incremental or marginal cost of up-sizing to the required Oversized Water, Wastewater and Stormwater Infrastructure defined in the Master Plan. This method is most fairly applied if there is a base value or benefit associated with

providing the minimum service requirements without considering oversizing. For the purpose of oversizing, minimum service requirements would be those necessary to provide service to an area being developed and may be based on minimum pipe sizes and local road standards.

Flow Proportioning - The incremental costs of the oversized component(s) in a Master Plan Area may be distributed amongst the land owners on a flow proportionate basis as determined by their allowable densities noted in the Municipal Planning Strategies or land use in the Land Use Bylaws.

Capacity basis - where the oversize cost is determined on the basis of capacity allocated to the charge area. The cost to be recovered through a WWS CCC would be calculated by pro-rating total cost on the basis of capacity. This method is most fairly applied for a discrete upgrade of an existing system outside of the charge area.

#### 17.2 Water, Wastewater and Stormwater Systems within a Charge Area

The oversized costs to provide water, wastewater and stormwater systems within a charge area will be determined on an incremental basis. There are various methods for calculating incremental costs of piped systems:

Dual Design Method - where the oversize cost is determined by deducting the total cost of the minimum required pipe size from the total cost of the oversized pipe.

Cost Ratio Method - which assumes a direct relationship between the cost of providing a service and the size of the pipe. A cost factor can be determined and applied similar to the Cost Sharing Policy of the former City of Halifax, or a simple percentage based on nominal dimensions may be applied.

#### 17.3 Infrastructure Exterior to a Charge Area

The portion of the cost of an upgrade, expansion, or provision of a discrete component of water, wastewater and stormwater infrastructure to be recovered through a WWS CCC will be determined on the basis of capacity allocated to the charge area.

### **Policy 18 Funding Criteria**

18.1 Opportunity costs should be considered and calculated in an effort to prioritize the Commission's investment. These costs may be used to compare and contrast the investment potential in one charge area versus another request for funding. Opportunity costs may include consideration of existing system capacities, potential diversion of demand and capacity allocations, or mitigation of future capital expenditures arising from strategic Commission investments from a regional perspective. Other cost factors for consideration include treatment plants, trunk piping systems and other support services including operations and maintenance.

18.2 The Commission in consultation with the HRM may opt to encourage development and growth in strategic areas by supporting Master Plan funding on a priority basis. The

Commission may initially invest in comprehensive Master Plan studies where it wishes to promote growth and development optimizing use of existing systems and services.

- 18.3 Inevitably, the demand for the Commission's and the HRM's contributions and investments for Capital Cost Contribution Policy may require priority decisions from the Commission's Board and Council. A balance of strategic master planning will mitigate future capital costs through good planning and optimized infrastructure utilization.
- 18.4 The Commission may determine the risk too high in consideration of upfront payments for Oversized Water, Wastewater and Stormwater Infrastructure. In this case, development may proceed if the developers build the required infrastructure. The developers may be given Water, Wastewater and Stormwater Capital Cost credits to future contributions or may be re-paid when the Commission collects future WWS CCC from subsequent development utilizing these Oversized Water, Wastewater and Stormwater Systems.

The requirement for security would reduce the risk to the Commission if development does not proceed. Time will be the essence of any agreement and may determine the type and condition of the security required to mitigate the Commission's financial risk.

**PART II: WWS CCC POLICY TEMPLATES**

The capital cost templates and supporting notes will be used to calculate Water, Wastewater and Stormwater Capital Cost Contributions.

**WATER, WASTEWATER AND STORMWATER CAPITAL COST CONTRIBUTION FORMULA**

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**Water, Wastewater and Stormwater**

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Total cost of Oversized Infrastructure and other required infrastructure (wastewater, stormwater)	A
Total cost of Oversized Infrastructure and other required infrastructure (water)	B
Interest during construction	C
Total cost of infrastructure (A + B + C)	D
Deduct infrastructure that benefits the Commission	E
Deduct fire protection charges paid by the HRM from water infrastructure only (Item "B" above)	F
Total Capital Cost Contribution (D - E - F)	G
Gross area (acres) in charge area	H
Area of land that cannot be developed	I
Area of land that can be developed (H - I)	J
Development charge per acre	$K = \frac{G}{J}$
Average Density (ppa) of charge area	L

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**Adjustments for Density of the Parcel being Subdivided**

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Area of Parcel Being Subdivided	M
Density (ppa) for parcel being subdivided	N
Capital Cost Contribution per Acre	$O = K \times \frac{N}{L}$
Total Capital Cost Contribution	$P = O \times M$

**Notes to Capital Cost Formula**

- (1) The cost of Oversized Infrastructure and other required infrastructure is based on an estimate of construction that includes engineering design. Other items to be included are planning studies, land purchases, surveying costs, legal costs and Commission audit inspection costs. The costs will be escalated based on the ENR index to the year costs are incurred for each component of the infrastructure.
- (2) The interest rate shall be the prime bank rate plus one percent. The construction period is assumed to be two years.
- (3) Benefits to the Commission may include infrastructure costs that benefit the existing population of the Commission.
- (3a) If there is an area within the charge area that benefits the Commission and the Commission pays a portion of the oversized and other infrastructure costs, any vacant land within the area that is developed shall pay a WWS CCC equal to cost per acre paid by the Commission.
- (4) The fire protection charge paid by the Municipality to the Commission is a percentage of the cost of the oversized water related infrastructure. The current 39% has been calculated based on the fire protection component of the demand assets of the Commission as contained in the current rate study. Future rate studies may result in a change in the percentage.
- (5) Gross area includes all land, including streams and lakes within the charge area.
- (6) Area that cannot be developed will include streams, lakes, flood plains and any other land deemed non-developable by the Commission.
- (7) Average density shall be established by the Commission or the Municipality.
- (8) For industrial, commercial, and institutional uses with multiple storeys, the area of the parcel being sub-divided shall be increased by an amount equal to the *allowable* floor space of the additional storeys. For the purpose of this calculation, underground parking is considered an additional storey.
- (9) Development of a parcel of land within a charge area that has density below the average may be required to accelerate contributions on the basis of the average density, until the total required WWS CCC for the original parcel has been made.

For industrial, commercial, and institutional uses, density shall be taken as the average density for the charge area.