EAST HANTS

STAFF REPORT

Finance & Administration Department

Subject:	***East Hants Water Utility Rate Application***
To:	Corporate & Residential Services Committee
Date Prepared:	September 8, 2016
Related Motions:	C16(188)
Prepared by:	Water Rate Review Steering Committee
Approved by:	Connie Nolan - CAO

Summary

Staff have completed a water rate review application to be submitted to the Nova Scotia Utility and Review Board (NSUARB). This entails a detailed financial and operational analysis of the East Hants Water Utility order to calculate what the rates should be to make the Water Utility sustainable. A review of the Rules & Regulations of the Utility was also undertaken, with recommended changes forming part of this report. The proposed rate application, if approved by the NSUARB, will result in the average 5/8" water customer seeing a $46/year increase in year one (2017/2018) to a $105/year increase by year three (2019/2020). The last rate review was done in 2009 with rates being approved for 2010, 2011 and with the last increase seen by rate payers in 2012.

Financial Impact Statement

Once the rate application is approved by Council and the NSUARB, the Water Utility Customers will notice an increase in their quarterly water bill. The increase in rates will also mean an increase in the revenue of the East Hants Water Utility. The schedules prepared by staff are attached to this report.

Recommendation

Staff recommend to Committee to recommend to Council that the East Hants Water Rate Application be approved and submitted to the Nova Scotia Utility and Review Board as presented.

Recommended Motion

Move that the Corporate & Residential Services Committee recommend that Council authorize staff to forward the completed East Hants Water Utility Rate application to the Nova Scotia Utility and Review Board as presented.

Background

The last water rate review was prepared in 2009 with rates approved by the NSUARB from April 1 2010 to present. In the first three years, the Utility had become more financially stable with revenues over expenditures of $229,972 in 2010/2011, $290,877 in 2011/2012 and $13,437 in 2012/2013. The water rate review application (Schedule B-1) Statement of Operations show both the depreciation of assets and contributed assets reflecting a higher projected deficit in years 2016/2017 to 2021/2022, if no rate review is done.

Since 2012/2013, the surplus and deficits have ranged from an $87,939 surplus in 2013/2014 to a $45,221 deficit in 2015/2016. The NSUARB Statement results (below) do not reflect the additional $90,000 relating to the contributed asset portion of the depreciation expense.

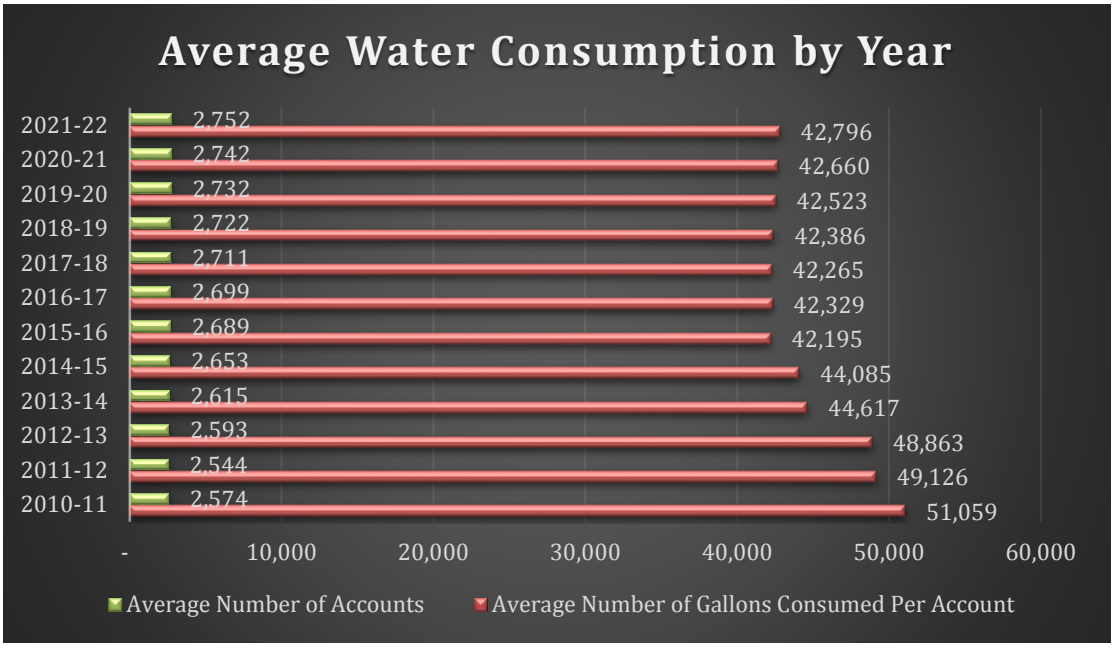
Year	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Rate Calculation (Deficit)/Surplus	$199,383	$252,112	$(81,791)	$(8,869)	$(69,754)	$(155,490)
NSUARB Statement (Deficit)/Surplus*	$229,972	$290,877	$13,437	$87,939	$27,053	$(45,221)

* Large surpluses were the result of not recognizing the depreciation expense of donated and contributed assets on the income statement based on the Water Utility Handbook. Although the contributed asset portion of the depreciation expense was not recognized, the Utility's customers are still required to fund the full amount of the depreciation.

In fiscal year 2015/2016 the financial situation had worsened with a deficit of $45,221. The deficit would have been larger had the Utility not received $74,000 in Provincial Capital Assistance Program funding from the Province of Nova Scotia.

Since April 1, 2012 the consumption rate has remained at $9.55 per 1,000 gallons, the Utility has been combating cost increases without increases in the water consumption charge. In addition, water consumption has been decreasing which has magnified the problem. In the previous rate review the Utility was expecting annual consumption of 127,580,000 gallons by 2562 customers (49,797 gallons per customer annually) but actual results show the Utility in 2015/2016 had 113,461,476 gallons consumed with 2689 customers (42,195 gallons per customer annually). The decrease of 14,118,524 gallons annually has result in lost revenue of $134,832 annually even though the number of water customers grew by 5% or 127 customers.

Below is a graphical representation of the average water consumption per average customer with projections to 2021/2022.



This data tells us that water customers are more conservative with their water usage. The installation of low flow toilets and washers that are not only energy efficient but use less water are resulting in low overall consumption in Water Utility. For example, an average person's usage of water daily using a low flush toilet is 9.1 gallons compared to 18.8 gallons using a non low-flush toilet. The current water rates are not sufficient to sustain the financial stability of East Hants Water Utility.

Discussion

Staff have prepared a water rate application for Council's approval; Included in the application are the revised operating and capital budgets proposed for the East Hants Water Utility over the next three years.

If Council approves the current application it will be submitted to the Nova Scotia Utility and Review Board (NSUARB) for their approval. The NSUARB will review the application, approve a rate review timeline, plan discussions with the Water Utility at a public hearing, and then make a decision on the proposed rates. The NSUARB may approve rates for one or three years.

When hearing dates are set, the NSUARB and East Hants Water Utility will have information on their websites. For more details on the Water Rate Review process please visit https://nsuarb.novascotia.ca/mandates/water. This site provides other valuable regulatory information for the Water Utility.

The Schedule below (D-1 in the Water Rate Review Application) provides a summary of the total **all-in water bills** based on the proposed rates. The table shows a Water Utility customer with 5/8" meter will pay an additional $45.83 (9%) per year or $11.46 per quarter in the first year. The same customer by year 2019/2020 (if the NSUARB approves a three-year rate schedule) will see an annual increase of $104.50 (21%) or $26.12 per quarter.

Average Annual Bill	2016/2017	2017/2018	2018/2019	2019/2020	% Increase
5/8"	$500.38	$546.21	$587.31	$604.88	21%
3/4"	$1,535.71	$1,591.10	$1,726.77	$1,780.90	25%
1"	$1,966.58	$2,191.21	$2,374.13	$2,448.07	24%
1.5"	$4,438.22	$5,006.80	$5,234.78	$5,398.81	12%
2"	$5,980.10	$6,653.50	$7,206.95	$7,431.40	24%
3"	$20,553.50	$23,192.11	$25,241.82	$26,044.67	27%

This table shows the actual amount for the annual **base charge** in 2016/2017 compared to the estimated charge over the next five years. The base charge is influenced primarily by the purchase of capital assets and the related depreciation. Projects including the Enfield and Lantz Transmission Main Projects and the Radio-read Meter Replacement Plan will not start recording depreciation until 2018/2019. It is anticipated that by year five, staff will have completed the majority of the major projects in the Water Utility including the conversion to radio-read meters. The annual base charge increase is a total of $7.62 over three years.

Annual Base Charge	2016/2017	2017/2018	2018/2019	2019/2020
5/8"	$180.40	$177.65	$183.63	$188.02
3/4"	$265.08	$260.60	$269.52	$276.04
1"	$434.48	$426.49	$441.29	$452.09
1.5"	$857.92	$841.24	$870.73	$892.21
2"	$1,366.08	$1,338.93	$1,386.05	$1,420.35
3"	$2,733.20	$2,666.11	$2,760.25	$2,828.73

This table shows the estimated **consumption charge** rate per year over the next five years. The consumption charge is influenced primarily by increases in operating costs (transmission/distribution & water treatment) and secondly by decreased consumption. The rate application proposes a gradual rate increase in years 2017/2018 and 2018/2019; the water consumption charge is proposed to be below break-even to help ease the burden of higher water bills. Appendix D lists the neighboring municipal units' consumption rates per 1,000 gallons – of these, East Hants is among the highest before and after the rate review. Significant recent investment in water treatment and storage, along with high maintenance costs for an aging distribution network, influence this.

Consumption Charge per 1,000 gallons	2016/2017	2017/2018	2018/2019	2019/2020
Proposed	n/a	$11.00	$12.00	$12.34
Actual	$9.55	$11.81	$12.19	$12.34

BULK WATER RATE

Staff are also proposing an increase of the bulk water rate from $8.78 to $13.10 for 2017/2018; to $13.74 for 2018/2019 and to remain at $13.95 until the next rate review. The bulk water customer's account for 3% of the total consumption billed so 3% of the Water Treatment Costs were allocated to the Bulk Water Customers along with 2.5% of all other costs of the Utility. The 2.5% is the portion of depreciation for the Bulk Water Assets over the total Depreciation of the Utility's assets.

Consumption Charge per 1,000 gallons	2016/2017	2017/2018	2018/2019	2019/2020
Bulk Water	$8.78	$13.10	$13.74	$13.95

In the water rate review application, staff have used the Council approved three-year operating budget based on the projections from August 2016 and forecasted an additional three years. The financial impact on the East Hants Water Utility is in the Comparative Statement of Operations, Schedule B-1 using the current rates and Schedule D-2 using the proposed rates.

The differences between the Council approved three-year operating budget and Schedule B-1are as follows:

OPERATING BUDGET REVISIONS

Year	Water Utility Budget (Deficit) Surplus	Rate Review Operations Projection - Existing Rates (Deficit) Surplus	Variance	Explanation
2016/2017	$(142,496)	$(213,149)	$(70,653)	Less Public Fire Protection Revenue ($47k); Less metered revenue from lower consumption ($17k) and additional bank & audit fees ($6k)
2017/2018	$(236,787)	$(254,247)	$(17,460)	Less Public Fire Protection Revenue($14k); Less metered revenue from lower consumption($15k); additional bank & audit fees ($11k); New meter purchased moved to capital budget ($20k); Miscellaneous ($3k)
2018/2019	$(284,598)	$(320,315)	$(35,717)	Less Public Fire Protection Revenue($4k); Less metered revenue from lower consumption($10k); additional depreciation from capital projects anticipated to occur earlier to receive CWWF funding($41k); New meter purchased moved to capital budget ($20k); Miscellaneous ($1k)

It should be noted that Schedule D-2 which is the Statement of Operations using the new rates, shows deficits of $92,557 (2017/2018) and $21,426 (2018/2019) with a break even position in the water utility at year three (2019/2020) once the new rates are fully in effect.

CAPITAL BUDGET REVISIONS

Staff have updated the approved five year water utility capital budget and have added the following projects:

- Radio-read Water Meter Replacement Plan: $1,053,550 project budget starting in 2017/2018 and to be completed by 2021/2022. Approved for submission in rate review by council motion C16(188); originally recommended to fund this project by debenture, with the approval of two CWWF projects, this is now

able to be funded by depreciation reserves. This project will require NSUARB approval prior to proceeding.

- Water Meter (annual purchase of meters for new homes): In prior year budgets, this was an operating expense (TDMETERS). Commencing in 2017/2018 these meters will be capitalized and funded from depreciation reserves and will cost $160,000 over 5 years as part of the larger project.
- Guidelines for Canadian Drinking Water Quality (GCDWQ) Plant Improvements: $20,000 in each year, commencing in 2020/2021 and finishing in 2021/2022, to be funded from depreciation reserves
- Leak Detection equipment: $25,000 commencing and finishing in 2017/2018 funded by depreciation reserves

In order to meet the Clean Water and Wastewater funding deadline, Staff recommend the project 10-046 Lantz Transmission Main proceed in 2016/2017 as opposed to 2018/2019 to maximize the funding of $1,106,250. Both this project and the Enfield Transmission Main project are to be funded by the CWWF and the balance to be funded from Water Infrastructure (Obligatory) and Fire Protection reserves as opposed to Depreciation Reserves.

The Evergreen Crescent Transmission Main was approved by Council to start in 2019/2020 but is proposed to start in 2016/2017 as there are potential pricing synergies with the Lantz Transmission Main Project. The project cost is $125,000 and will be funded from Depreciation Reserves and Water Infrastructure Reserves (Obligatory Reserves).

Staff have also recommended removing the Water Connector project on Towerview Drive from the rate application. This project will no longer be required and will be removed from the upcoming 2017/2018 Capital Budget.

OTHER RATES

Staff have reviewed the other charges in the rates of the water utility, including a jurisdictional scan to ensure our other rates are in line with other utilities. Appendix A outlines the Proposed changes to East Hants Water Utility Rates and Charges April 2017, April 2018 & April 2019.

CHANGES TO RULES & REGULATIONS

The NSUARB will also be asked to approve rules and regulations for the East Hants Water Utility. The proposed changes are in Appendix B of this report – Proposed changes to East Hants Water Utility Rules and Regulations April 2017. Readers will note, any rates that were included in this section in past reviews have all been moved to the Schedule of Rates and Charges and any reference to dollar values here have been removed.

JURISDICTION SCAN

Consumption Rates in neighbouring Municipalities are below:

Consumption Rate	Halifax Metro	Stewiacke	Truro	East Hants - 2016/2017	East Hants Proposed 2017/208
000's Gallons	$ 4.44	$ 9.88	1st 330,000 $4.46 '+330,000 / $2.64	$ 9.55	$ 11.00

Base Rates in neighbouring Municipalities are below:

Base Charge	Halifax Metro	Stewiacke	Truro	East Hants - 2016/2017	East Hants proposed 2017/2018
5/8"	$ 39.00	$48.98	$63.44	$45.10	$44.41
3/4"	$ 54.00	$72.64	$94.29	$66.27	$65.15
1"	$87.00	$119.97	$155.99	$108.62	$106.62
1 ½"	$165.00	$238.28	$301.24	$214.48	$210.31
2"	$255.00	$380.25	$495.34	$341.52	$334.73
3"	$510.00	$758.86	$988.34	$680.30	$666.53

Alternatives

The alternative to making this recommendation would be to charge the actual consumption rate of $11.81 in 2017/2018 and $12.19 in 2018/2019 opposed to a gradual rate of $11.00 and $12.00 in 2017/2018 and 2018/2019 respectively. Currently, the rate application is prepared with a gradual consumption rate increase from $9.55 to $11.00 in the first year and an increase from $11.00 to $12.00 in 2018/2019. The financial impact of the current proposal will result in deficits of $92,557 in 2017/2018 and $21,426 2018/2019.

Council could decide to reduce the consumption rate less than the proposed $11.00 in 2017/2018 and request staff to bring back other options. This would mean less revenue for the water utility and a larger deficit.

Council could decide not to do a rate review and stay status quo. As per worksheet B-1 in the Rate Review Schedules, the Water Utility will continue to be in a deficit position at which time the NSUARB would request a viability report from staff before 2020/2021 at which time the accumulated surplus would be depleted. Staff would not recommend this alternative.

Council may choose to alter the capital investment plan of the Utility. This would not be recommended as funding is already in place for two of the larger projects and other projects will bring improvements and efficiencies to the Utility that are needed (hydrant installation, meter replacement program, leak detection, etc.)
Council could also decide that a different Bulk Water rate should be use resulting in different consumption and base charge rates. Staff feel that the rate of $13.10 for 2017/2018 is reasonable. An average customer having a 5/8" meter will be billed approximately $541 and whereas a bulk water user drawing an equivalent amount of water would be charge approximately $432 (before any applicable bulk water hauler fees). The bill for bulk water does not include the portion the urban service rate users are charged on their tax bill towards the cost of the public fire protection.

Conclusion

Staff conclude that the East Hants Water Utility requires a water rate review to ensure future financial sustainability.

Recommendation

Staff recommend to Committee to recommend to Council that the East Hants Water Rate Application be approved and submitted to the Nova Scotia Utility and Review Board as presented. And recommend approving the proposed changes as presented in Appendix A and Appendix B.

Appendix A – Proposed changes to East Hants Water Utility Rates and Charges April 2017, April 2018 & April 2019

Section	Description	Current	Proposed
2	Bulk Water Meter Amendment	Smart Card	Key Fob
7	Rates for Water Supplied from Fire Hydrants	Sentence starting – "A charge of $100.00 per permit shall be charged by the Utility."	Added additional text after sentence starting - A charge of $100.00 per permit shall be charged by the Utility "plus consumption rate per 1000 gallons as outlined in the rates."
9	Connection/Disconnection/Reconnection Fee	The fee shall be $40.00 for first time violations and $75.00 for successive violations.	The fee shall be $50.00 for first time violations and $85.00 for successive violations within a period of one year.
12	Charge for Missed Appointment by Customer	$25.00	$40.00
13	Charge for Theft of Service	1st Offence $200 2nd Offence $500	1st Offence $300 2nd Offence $600
14	Special Service Charge		And the following end paragraph "Despite subsection 9 where suspension of service is for non-payment only, the fees set out therein respecting connection or disconnection of service during regular working hours do not apply. There will only be one charge of $50.00 for disconnection & reconnection once per year or in any 12 month period, otherwise it is $50.00 per visit."

Appendix B – Proposed changes to East Hants Water Utility Rules and Regulations April 2017

Section	Description	Current	Proposed
1	Definitions	Added Definition for Engineer and Metered Rate Service and removed definition of Clerk (no reference to Clerk in the document)	"Engineer" means the Engineer of the Utility. "Metered Rate Service" means that type of service charged for at metered rates. Metered rate service is required for all new services.
7d	Liability for Payment of Water Bill	(d) At the discretion of the Utility, a property owner who rents or leases a property of self-contained unit to a tenant or lessee may be required to contract for the provision of water at the address of the property rented or leased	(d) a property owner who rents or leases a property or self-contained unit to a tenant or lessee shall be required to contract for the provision of water at the address of the property rented or leased. At the discretion of the Utility the tenant or lessee may be permitted to contract for their own water subject to Section 3.
10	Resumption of Service	In all cases where water service has been suspended for non-payment of bills or any violation of these Rules or Regulations, service shall not be restored until all such arrears, together with a $40.00 reconnection charge, have been paid, and where a violation existed, by the termination of the violation to the satisfaction of the Utility and payment of a $40.00 reconnection charge.	The customer shall pay the reconnection fee as set out in the Section 9 of the Schedule of Rates & Charges after each suspension. Service suspension can be delayed if approved payment arrangements have been made and the customer is in compliance with arrangements.
12	Water to be Supplied by Meter	No water will be supplied to a domestic service or commercial service customer without a meter first being connected to the service line	No water will be supplied to a domestic service or commercial service customer without a meter first being connected to the service line except in

		except in emergency situations, the Utility may elect to supply water to a customer without a meter on a temporary basis. A meter shall be installed at the very earliest opportunity.	emergency situations. Except where water is used for construction purposes from a hydrant under the supervision of the Utility as in these regulations otherwise provided, all services other than those used exclusively for fire protection shall be metered. A meter shall be installed at the very earliest opportunity. The Utility may elect to supply water to a customer without a meter on a temporary basis.
19	Meter Testing	On the request of a customer to have his meter tested, the Utility may charge a sum equal to the estimated cost of making the test. If the test shows that the meter is over-registering by more than 3%, the sum so deposited shall be refunded to the customer, and the bill for service rendered to such customer shall be adjusted accordingly.	On the request of a customer to have their meter tested, the Utility may charge a sum of $100.00 for cost of making the test. If the test shows that the meter is over-registering by more than one and one-half percent (1.5%) for positive displacement meters and three percent (3%) for turbine or compound meters then the sum so deposited shall be refunded to the customer.
21	Cross connection Control & Backflow Prevention	added item (d)	(d) The Utility shall maintain a program for the issuance, renewal and cancellation of Cross Connection Control Tester's Licenses. The Utility's program shall establish minimum standards, fees and administrative procedures.
23	Prohibited Devices	Added additional device examples	“rod-hopper water closets”,” private fire hydrants,”
25	Service Pipes	Added metric measurements	1. “ 3/4" (19mm) in diameter shall be laid for any service. 2. laying a “1" (25mm) or smaller” service pipe and fittings”

			3. For services larger than” 1" (25mm)” the whole
27	Deposits in Advance for Request for Utility Work	Added this new section	Whenever a customer requests the Utility to do work for which they are required to pay and the Utility agrees to do the work, they shall deposit with the Utility, before the work is started, a sum of money equal to the Utility's estimate of the probable cost of said work and execute an agreement to pay the actual cost. When the actual cost is determined, an adjustment in the payment shall be made. Regular service shall not be established by the Utility until all charges are paid in full. Installations shall be made in accordance with the Municipality of the District of East Hants Municipal Services Systems General Specifications and be subject to inspection by the Utility's Engineer or representative prior to water service being made available.
28	Unauthorized Extensions, Additions or Connections	No person shall, without the written consent of the Utility, make or cause to be made any connections to any pipe or main or any part of the water system, or in any way obtain or use water therefrom in any manner other than as set out in these Regulations.	No person shall, without the written consent of the Utility, make or cause to be made any connections to any pipe or main or any part of the water system, or in any way obtain or use water therefrom in any manner other than as set out in these Regulations. Any unauthorized connection shall be subject to removal by the Utility. The cost of the removal including labour, materials together with any applicable charges as outlined in the Utility Schedule of Rates and Charges shall be paid by those

			who made the unauthorized connection.
35	Pressure Reducing Valves	Added this new section	Where, in the opinion of the Utility, it is necessary for proper water service, a customer shall install on the service pipe, between the meter and the shut off valve on the customer's side of the meter, a pressure reducing valve of a type satisfactory to the Utility. The customer shall be responsible for the cost of installing and maintaining the pressure reducing valve at all times.
36	Pressure Relief Valves	Added this new section	Whenever a pressure reducing valve has been installed by a customer in accordance with Regulation 34, the customer shall, for their own safety and protection, install on their hot water boiler and any other hot water heating device connected to the building's plumbing system, a pressure relief valve of an approved type, as well as an approved temperature limiting device. It shall be the customer's responsibility to maintain and keep in service the pressure relief valve at all times.