

Antigonish Water Utility
Water Rate Study

Prepared By

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in Association with

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**TOWN OF ANTIGONISH
WATER UTILITY
NOTES ON WORKSHEETS**

Worksheet B-1

This worksheet includes a summary of the operating revenues, operating expenditures, non-operating revenues and non-operating expenditures for the years 12/13 and 13/14 (estimated) as provided by the Utility.

Operating Revenues - The operating revenue for 14/15, 15/16 and 16/17 is based on the Utility's budget. There is no projected customer growth in the test years. The fire protection rate is based on rate approved in the last rate hearing.

Operating Expenditures - The projection of expenses for the test years is derived from Worksheet B-2a/2b/2c/2d/2e. The Depreciation has been calculated based on the addition of the planned infrastructure.

Non-operating Revenues – The non-operating revenue projected during the test years relates to interest on overdue accounts.

Non-operating Expenditures – The non-operating expenditures include debt repayment, principal and interest, and projected Capital out of Revenue expenses for each of the test years.

Accumulated Surplus (Deficit) The Utility has a projected deficit in all years based on the current customer and fire protection rates.

Worksheet B-2

This worksheet takes the information from Worksheet B-1 to develop revenue requirements for the years 14/15, 15/16 and 16/17.

Worksheet B-2a/2b/2c/2d/2e

This worksheet provides the breakdown of the operating expenditures as estimated by the Utility for the year 13/14. The projected expenditures for the years 14/15, 15/16 and 16/17 are taken from the Utility's budget.

Worksheet B-3

This worksheet calculates the depreciation per year and the depreciation fund balance based on the proposed capital works for the years 13/14, 14/15, 15/16 and 16/17. The depreciation fund balance for the year 12/13 is taken from the financials statements of the Utility.

Worksheet B-4

This worksheet calculates the amortization of the capital contributions for those test years when outside funding has been identified.

Worksheet B-5

This worksheet allocates the assets of the Utility between general service and fire protection. Each year includes the addition of the proposed capital works identified in Worksheet B-3. Production assets are allocated 90% general service and 10% fire protection. Demand assets are allocated 40% to general service and 60% to fire protection to reflect the capability of the system.

Worksheet C-1

This worksheet uses the percentage of total assets allocated to fire protection from Worksheet B-5 to determine the allocation of transmission and distribution; depreciation, taxes and return on rate base to the fire protection charge. The remaining expenses are allocated at 10% to fire protection.

Worksheet C-2

This worksheet calculates the return on rate base

Worksheet C-3a

This worksheet allocates the joint use expenses between Antigonish County and Antigonish based on the joint use of the expenses, assets and the percentage of water consumed by each unit as set out in Appendix 2. Flows for the County have been taken from Utility records as noted in Appendix 2. The Return on Rate Base has been allocated 40% to base and 60% to commodity which is consistent with the previous rate study.

Worksheet C-3

This worksheet allocates the Town of Antigonish expenses among customer charge, base charge, delivery and production. Return on Rate Base is allocated 40% to base and 60% to the commodity as suggested in the Accounting and Recording Handbook.

Worksheet C-4

This worksheet sets out the number and size of meters in the Utility and by use of the capacity ratio establishes the system equivalents. There is no growth in customers predicted in the test years.

Worksheet C-5

This schedule uses the information from Worksheet's C-3 and C-4 to calculate the yearly quarterly or bi-monthly base charge for each size of meter.

Worksheet C-6

This worksheet sets out the water consumption by meter size. The data for current year is based on the most current 12 months of data as provided by the Utility. The Utility currently has a two block system and it is not proposing any changes to the current block structure. The average flow for the 5/8" customers has been decreasing since the last rate hearing at a rate of approximately 3.5% per year. The current rate study is based on the average flow per 5/8" customer continuing to decrease at a rate of 3% per year.

Worksheet C-7

This worksheet uses information from Worksheet's C-3 and C-6 to calculate the consumption charge for years 14/15, 15/16 and 16/17 based on the existing two block system.

Worksheet C-8

This worksheet is used as a check to determine that the potential revenues will be the same as the requirements on Worksheet C-3a

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Worksheet D-1

This worksheet is a comparison of existing and proposed rates.

Worksheet D-2

This worksheet provides a comparative statement of Operations for the current year as well as the test years at the proposed rates.

Appendix 1

This appendix calculates the principal and interest charges for the long term debt (not used in this application as no new borrowing is proposed).

Appendix 2

This appendix sets out the allocations used to determine the joint usage of expenses for the Antigonish County used in Worksheet C-3a

Appendix 3

This appendix is used to calculate the allocation of fire protection charge for the Town and Antigonish County for inclusion Schedules A, B, and C.

Antigonish Water Utility
Comparative Statement of Operations
 Fiscal Years ending March 31st

	2012/13 (Actual)	2013/14 (Estimated)	Projection Using Current Rates		
			2014/15 Budget	2015/16 Budget	2016/17 Budget
OPERATING REVENUES					
Metered Sales	973,905	964,000	964,000	964,000	964,000
Flat Rate Sales	0	250	250	250	250
Public Fire Protection	154,995	154,995	154,995	154,995	154,995
Private Fire Protection (County)	101,448	101,448	101,448	101,448	101,448
Sprinkler Service/Private Hydrants	0	15,350	15,350	15,350	15,350
Sales to Other Utilities	0	0	0	0	0
Other Income	0	0	0	0	0
Total	1,230,348	1,236,043	1,236,043	1,236,043	1,236,043
OPERATING EXPENDITURES					
Source of Supply	23,520	38,221	39,218	40,242	41,296
Power and Pumping	57,993	16,100	16,413	16,732	17,058
Purification	414,698	374,895	383,460	392,254	401,287
Transmission and Distribution	139,789	115,572	116,997	118,465	119,977
Administration and General	225,499	277,012	269,967	271,466	273,009
Depreciation	155,698	167,242	177,839	190,261	199,249
Taxes	37,648	38,000	39,140	40,314	41,524
Total	1,054,844	1,027,042	1,043,033	1,069,733	1,093,400
OPERATING PROFIT (LOSS)	175,504	209,001	193,010	166,310	142,643
			0		
NON-OPERATING REVENUES					
Miscellaneous Income	162	0	0	0	0
Interest on Overdue accounts	13,999	6,000	6,000	6,000	6,000
Other	0	0	0	0	0
Total	14,161	6,000	6,000	6,000	6,000
NON-OPERATING EXPENDITURES					
Debt Charges - Principal	160,000	160,000	160,000	160,000	160,000
Debt Charges - Interest	107,911	100,000	93,816	86,960	80,016
New Debt - Principal	0	0	0	0	0
New Debt - Interest	0	0	0	0	0
New Debt - Principal	0	0	0	0	0
New Debt - Interest	0	0	0	0	0
Interest and Bank charges	0	0	0	0	0
Interest Paid on consumer deposits	0	0	0	0	0
Capital out of Revenue	0	42,500	60,267	39,000	50,000
Earnings	0	0	0	0	0
Total	267,911	302,500	314,083	285,960	290,016
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	-78,246	-87,499	-115,073	-113,650	-141,373
SURPLUS AT BEGINNING OF YEAR	160,751	82,505	-4,994	-120,068	-233,718
ACCUMULATED SURPLUS (DEFICIT)	82,505	-4,994	-120,068	-233,718	-375,091

Antigonish Water Utility				
Statement of Operating Expenditures and Revenue Requirements				
	2013/14 (Estimated)	2014/15 Budget	2015/16 Budget	2016/17 Budget
OPERATING EXPENDITURES				
Source of Supply	38,221	39,218	40,242	41,296
Power and Pumping	16,100	16,413	16,732	17,058
Purification	374,895	383,460	392,254	401,287
Transmission and Distribution	115,572	116,997	118,465	119,977
Administration and General	277,012	269,967	271,466	273,009
Depreciation	167,242	177,839	190,261	199,249
Taxes	38,000	39,140	40,314	41,524
Total	1,027,042	1,043,033	1,069,733	1,093,400
NON OPERATING EXPENSES				
Debt Charges - Principal	160,000	160,000	160,000	160,000
Debt Charges - Interest	100,000	93,816	86,960	80,016
New Debt - Principal	0	0	0	0
New Debt - Interest	0	0	0	0
New Debt - Principal	0	0	0	0
New Debt - Interest	0	0	0	0
Interest and Bank charges	0	0	0	0
Interest Paid on consumer deposits	0	0	0	0
Capital out of Revenue	42,500	60,267	39,000	50,000
Earnings	0	0	0	0
Total	302,500	314,083	285,960	290,016
LESS NON-OPERATING REVENUES				
Miscellaneous Income	0	0	0	0
Interest on Overdue accounts	6,000	6,000	6,000	6,000
Other	0	0	0	0
Total	6,000	6,000	6,000	6,000
LESS OTHER OPERATING REVENUE				
Sundry	0	0	0	0
Sprinkler Service/Private Hydrants	15,350	15,350	15,350	15,350
Other Revenue	0	0	0	0
Total	15,350	15,350	15,350	15,350
REVENUE REQUIRED FROM FIRE PROTECTION AND WATER CUSTOMERS				
	1,308,192	1,335,766	1,334,343	1,362,066

Antigonish Water Utility				
Statement of Operating Expenditures				
	2013/14	2014/15	2015/16	2016/17
	(Estimated)	Budget	Budget	Budget
SOURCE OF SUPPLY				
Public Works/Engineering Supervision Charges	2,171	2,171	2,171	2,171
Public Works Operational Wages and Benefits	8,050	8,207	8,366	8,529
SOS - Other sources	15,000	15,450	15,914	16,391
SOS Supplies and Expenses	4,000	4,120	4,244	4,371
SOS - Watershed Mgmt	5,000	5,150	5,305	5,464
SOS - Other	4,000	4,120	4,244	4,371
Other	0	0	0	0
TOTAL SOURCE OF SUPPLY	38,221	39,218	40,242	41,296
PURIFICATION				
Public Works/Engineering Supervision Charges	41,245	41,245	41,245	41,245
Public Works Operational Wages and Benefits	136,850	139,511	142,224	144,993
Pur - Supplies & Expenses	6,000	6,180	6,365	6,556
Pur - Other chemicals	59,000	60,770	62,593	64,471
Pur - Chlorine	12,000	12,360	12,731	13,113
Pur - Sampling and related	11,000	11,330	11,670	12,020
Building Maint - Fuel	25,000	25,750	26,523	27,318
Building Maint - Electricity	38,000	39,140	40,314	41,524
Building Maint - Cleaning/Janitorial	200	206	212	219
Building Maint - Water/Sewer	1,600	1,648	1,697	1,748
Building Maint - General Repairs	4,000	4,120	4,244	4,371
Equipment - Parts	5,000	5,150	5,305	5,464
Equipment - Maint. Contracts	14,000	14,420	14,853	15,298
Equipment - Repairs	21,000	21,630	22,279	22,947
TOTAL PURIFICATION	374,895	383,460	392,254	401,287
POWER AND PUMPING				
Public Works Operational Wages and Benefits	16,100	16,413	16,732	17,058
Equipment Maintenance	0	0	0	0
Building Maintenance	0	-	-	-
TOTAL POWER AND PUMPING	16,100	16,413	16,732	17,058

Worksheet B-2a/2b/2c/2d/2e

TRANSMISSION AND DISTRIBUTION				
Public Works/Engineering Supervision Charges	68,072	68,072	68,072	68,072
Public Works Operational Wages	0	0	0	0
T & D Supplies & Expense	4,000	4,120	4,244	4,371
T & D Mntce Of Mains	15,000	15,450	15,914	16,391
T & D Mntce Of Meters	15,000	15,450	15,914	16,391
T & D Mntce Other	8,000	8,240	8,487	8,742
Truck Maintenance	1,000	1,030	1,061	1,093
Mntce Storage Tanks	1,500	1,545	1,591	1,639
Mntce Hydrants	3,000	3,090	3,183	3,278
Other - Permits	0	0	0	0
TOTAL TRANSMISSION AND DISTRIBUTION	115,572	116,997	118,465	119,977
ADMINISTRATION AND GENERAL				
Administration - Town Charges	195,000	195,000	195,000	195,000
Public Works/Engineering Supervision Charges	22,512	22,512	22,512	22,512
Engineering and Consulting	3,000	3,090	3,183	3,278
Adm-Rate Study	8,500			
Regulatory - UARB	2,000	2,060	2,122	2,185
Regulatory - Other				-
Audit	4,500	4,635	4,774	4,917
Advertising	3,000	3,090	3,183	3,278
Legal	2,500	2,575	2,652	2,732
Admin and Office				
Office - kitchen supplies				
Office - Supplies	1,000	1,030	1,061	1,093
Telephone - Landline	3,000	3,090	3,183	3,278
Telephone - Mobile Devices	4,500	4,635	4,774	4,917
Council Conference/Travel				
Staff Conference/Travel				
Meetings				
Socials/other events				
Asset Insurance	25,000	25,750	26,523	27,318
Collection Charges				
Provision for Uncollectible Water	2,500	2,500	2,500	2,500
TOTAL ADMINISTRATION AND GENERAL	277,012	269,967	271,466	273,009

20-Jan-14

Antigonish Water Utility
Calculation of Depreciation of Tangible Plant at Total Cost
2013/14

	Additions to Utility Plant in Service	Capital Cost Contribution from Others	Utility Cost of Plant in Service	Depreciation Rate	Annual Depreciation
				Depreciation rate as March 31, 2013	155,698
					0
LAND AND LAND RIGHTS					
Source of Supply Land	0		0		0
Land - General	0		0		0
STRUCTURES AND IMPROVEMENTS					
Source of Supply Structures	0		0	0.01333	0
Power and Pumping Structures	0		0	0.02	0
Purification	0		0	0	0
Distribution Reservoirs and Standpipes	45,000	0	45,000	0.05	2,250
Water Treatment Plant	0		0	0.01333	0
General - Watershed Study	0	0	0	0.04	0
Other	0		0	0.05	0
Equipment	0		0		0
Electrical Pumping	0	0	0	0.05	0
Purification Equipment	0	0	0	0.05	0
Office Furniture and Equipment	0		0	0.05	0
Transportation Equipment	0	0	0	0.1	0
Tools and Work Equipment	0		0	0.1	0
SCADA Equipment/Process Automation	45,000		45,000	0.1	4,500
Distribution Mains Equipment	0		0	0.05	0
Other		0	0	0.2	0
Mains	0		0		0
Transmission	60,000	30,000	30,000	0.0133	798
Distribution	117,000	50,000	67,000	0.0133	1,556
Meters	40,000	0	40,000	0.05	2,000
Hydrants	12,000	0	12,000	0.02	240
Services	10,000	0	10,000	0.02	200
Other	0	0	0	0.3333	0
TOTAL	329,000	80,000	249,000	1	11,544
Source of Funding					
			Depreciation Fund Balance beginning of year		152,640
Outside Funding	80,000		Interest on Fund balance		1,526
Depreciation fund	218,500		Fund balance before expenditures		154,166
Long Term Debt	-12,000		Plus Depreciation in Current Year		167,242
Capital out of revenue	42,500		Less Expenditures in Current Year		-218,500
TOTAL	329,000		Balance after expenditures		102,909

Antigonish Water Utility
Calculation of Depreciation of Tangible Plant at Total Cost
2014/15

	Additions to Utility Plant in Service	Capital Cost Contribution from Others	Utility Cost of Plant in Service	Depreciation Rate	Annual Depreciation
			Depreciation as March 31, 2014		167,242
LAND AND LAND RIGHTS					
Source of Supply Land	0	0	0	0	0
Land - Water Storage Tank					0
STRUCTURES AND IMPROVEMENTS					0
Source of Supply Structures	35,000	0	35,000	0.05	1,750
Power and Pumping Structures	0	0	0	0.02	0
Purification	0		0	0	0
Distribution Reservoirs and Standpipes	0	0	0	0.04	0
Water Treatment Plant	0	0	0	0.01333	0
General - Watershed Study	0	0	0	0.1	0
Other - Sludge Drying Bed	40,000	0	40,000	0.05	2,000
Equipment		0	0		0
Electrical Pumping	0	0	0	0.05	0
Purification Equipment	0	0	0	0.05	0
Office Furniture and Equipment	0	0	0	0.05	0
Transportation Equipment		0	0	0.1	0
Tools and Work Equipment	0	0	0	0.1	0
SCADA Equipment/Process Automation	20,000	0	20,000	0.1	2,000
Distribution Mains Equipment		0	0	0.05	0
Other - Plant Op/Assess Discharge	0	0	0	0.2	0
Mains		0	0		0
Transmission	120,000	60,000	60,000	0.0133	1,596
Distribution	61,000	28,000	33,000	0.0133	811
Meters	40,000	0	40,000	0.05	2,000
Hydrants	12,000	0	12,000	0.02	240
Services	10,000	0	10,000	0.02	200
Other	0		0	0.02	0
TOTAL	338,000	88,000	250,000	1	10,597
Source of Funding					
			Depreciation Fund Balance beginning of year		152,640
Outside Funding	88,000			Interest on Fund balance	1,526
Depreciation fund	189,733			Fund balance before expenditures	154,166
Long Term Debt	0			Plus Depreciation in Current Year	177,839
Capital out of revenue	60,267			Less Expenditures in Current Year	-189,733
TOTAL	338,000			Balance after expenditures	142,273

Antigonish Water Utility					
Calculation of Depreciation of Tangible Plant at Total Cost					
2015/16					
	Additions to Utility Plant in Service	Capital Cost Contribution from Others	Utility Cost of Plant in Service	Depreciation Rate	Annual Depreciation
		Depreciation as March 31, 2015			177,839
LAND AND LAND RIGHTS					
Source of Supply Land			0		0
Source Water Protection			0		0
STRUCTURES AND IMPROVEMENTS			0		0
Source of Supply Structures	75,000		75,000	0.01333	1,000
Power and Pumping Structures			0	0.02	0
Purification			0	0	0
Distribution Reservoirs and Standpipes	25,000	0	25,000	0.04	1,000
Water Treatment Plant BW Pond	40,000	0	40,000	0.05	2,000
Road Improvements	0	0	0	0.1	0
Other - Source of Supply Investigations	50,000	25,000	25,000	0.1	5,000
Equipment			0		0
Electrical Pumping		0	0	0.05	0
Purification Equipment	0	0	0	0.05	0
Office Furniture and Equipment			0	0.05	0
Transportation Equipment		0	0	0.1	0
Tools and Work Equipment	0		0	0.1	0
SCADA Equipment/Process Automation	10,000		10,000	0.1	1,000
Distribution Mains Equipment			0	0.05	0
Other - Plant Op/Assess Discharge		0	0	0.05	0
Mains			0		0
Transmission	0		0	0.0133	0
Distribution	55,000	24,000	31,000	0.0133	732
Meters	25,000		25,000	0.05	1,250
Hydrants	12,000		12,000	0.02	240
Services	10,000	0	10,000	0.02	200
Other					0
TOTAL	302,000	49,000	253,000		12,421
Source of Funding					
			Depreciation Fund Balance beginning of year		142,273
Outside Funding	49,000		Interest on Fund balance		1,423
Depreciation fund	214,000		Fund balance before expenditures		143,696
Long Term Debt	0		Plus Depreciation in Current Year		190,261
Capital out of revenue	39,000		Less Expenditures in Current Year		-214,000
TOTAL	302,000		Balance after expenditures		119,956

Antigonish Water Utility
Calculation of Depreciation of Tangible Plant at Total Cost
2016/17

	Additions to Utility Plant in Service	Capital Cost Contribution from Others	Utility Cost of Plant in Service	Depreciation Rate	Annual Depreciation
		Depreciation as March 31, 2016			190,261
LAND AND LAND RIGHTS					
Source of Supply Land			0		0
Land - General			0		0
STRUCTURES AND IMPROVEMENTS					
Source of Supply Structures	40,000		40,000	0.02	800
Power and Pumping Structures			0	0.02	0
Purification			0	0	0
Distribution Reservoirs and Standpipes	15,000	0	15,000	0.04	600
Water Treatment Plant - Discharge Line	40,000	0	40,000	0.02	800
Other - Hydraulic/Backflow Studies	0	0	0	0.1	0
Other - Signage	5,000	0	5,000	0.1	500
Equipment					
Electrical Pumping		0	0	0.05	0
Purification Equipment	0	0	0	0.05	0
Office Furniture and Equipment			0	0.05	0
Transportation Equipment	25,000	0	25,000	0.1	2,500
Tools and Work Equipment	0		0	0.1	0
SCADA Equipment/Process Automation	15,000		15,000	0.05	750
Distribution Mains Equipment			0	0.05	0
Other - Plant Op/Assess Discharge		0	0	0.05	0
Mains					
Transmission	139,000	69,500	69,500	0.0133	1,849
Distribution	0	0	0	0.0133	0
Meters	15,000		15,000	0.05	750
Hydrants	12,000		12,000	0.02	240
Services	10,000	0	10,000	0.02	200
Other					0
TOTAL	316,000	69,500	246,500	1	8,989
Source of Funding					
			Depreciation Fund Balance beginning of year		119,956
Outside Funding	69,500			Interest on Fund balance	1,200
Depreciation fund	196,500			Fund balance before expenditures	121,156
Long Term Debt	0			Plus Depreciation in Current Year	199,249
Capital out of revenue	50,000			Less Expenditures in Current Year	-196,500
TOTAL	316,000			Balance after expenditures	123,905

Antigonish Water Utility			
Calculation of Amortization on Capital Contributions (to Plant)			
2014/15			
	Capital Contributions to Utility Plant in Service	Amortization Rate	Annual Amortization
LAND AND LAND RIGHTS			
Source of Supply Land	0	0.00	0
Land - General	0	0.00	0
STRUCTURES AND IMPROVEMENTS	0	0.00	0
Source of Supply Structures	0	0.05	0
Power and Pumping Structures	0	0.02	0
Purification	0	0.00	0
Distribution Reservoirs and Standpipes	0	0.04	0
Water Treatment Plant	0	0.01	0
General - Watershed Study	0	0.10	0
Other - Well Study	0	0.05	0
Equipment	0	0.00	0
Electrical Pumping	0	0.05	0
Purification Equipment	0	0.05	0
Office Furniture and Equipment	0	0.05	0
Transportation Equipment	0	0.10	0
Tools and Work Equipment	0	0.10	0
SCADA Equipment	0	0.10	0
Distribution Mains Equipment	0	0.05	0
Other - Plant Op/Assess Discharge	0	0.20	0
Mains	0	0.00	0
Transmission	60,000	0.01	798
Distribution	28,000	0.0133	372
Meters		0.05	0
Hydrants	0	0.02	0
Services	0	0.02	0
Other - Water Rate Study/Hearing	0	0.02	0
TOTAL	88,000		1,170

Antigonish Water Utility			
Calculation of Amortization on Capital Contributions (to Plant)			
2015/16			
	Capital Contributions to Utility Plant in Service	Amortization Rate	Annual Amortization
LAND AND LAND RIGHTS			
Source of Supply Land	0	0.00	0
Land - General	0	0.00	0
STRUCTURES AND IMPROVEMENTS	0	0.00	0
Source of Supply Structures	0	0.01	0
Power and Pumping Structures	0	0.02	0
Purification	0	0.00	0
Distribution Reservoirs and Standpipes	0	0.04	0
Water Treatment Plant	0	0.05	0
General - Watershed Study	0	0.10	0
Other - Well Study	25,000	0.10	2,500
Equipment	0	0.00	0
Electrical Pumping	0	0.05	0
Purification Equipment	0	0.05	0
Office Furniture and Equipment	0	0.05	0
Transportation Equipment	0	0.10	0
Tools and Work Equipment	0	0.10	0
SCADA Equipment	0	0.10	0
Distribution Mains Equipment	0	0.05	0
Other - Plant Op/Assess Discharge	0	0.05	0
Mains	0	0.00	0
Transmission	0	0.01	0
Distribution	24,000	0.0133	319
Meters	0	0.05	0
Hydrants	0	0.02	0
Services	0	0.02	0
Other - Water Rate Study/Hearing	0	0.00	0
TOTAL	49,000		2,819

Antigonish Water Utility			
Calculation of Amortization on Capital Contributions (to Plant)			
2016/17			
	Capital Contributions to Utility Plant in Service	Amortization Rate	Annual Amortization
LAND AND LAND RIGHTS			
Source of Supply Land	0	0.00	0
Land - General	0	0.00	0
STRUCTURES AND IMPROVEMENTS	0	0.00	0
Source of Supply Structures	0	0.02	0
Power and Pumping Structures	0	0.02	0
Purification	0	0.00	0
Distribution Reservoirs and Standpipes	0	0.04	0
Water Treatment Plant	0	0.02	0
General - Watershed Study	0	0.10	0
Other - Well Study	0	0.10	0
Other - Dam Study	0	0.05	0
Other - Hydraulic/Backflow Studies	0	0.10	0
Equipment	0	0.00	0
Electrical Pumping	0	0.05	0
Purification Equipment	0	0.05	0
Office Furniture and Equipment	0	0.05	0
Transportation Equipment	0	0.10	0
Tools and Work Equipment	0	0.10	0
SCADA Equipment	0	0.05	0
Distribution Mains Equipment	0	0.05	0
Other - Plant Op/Assess Discharge	0	0.05	0
Mains	0	0.00	0
Transmission	0	0.01	0
Distribution	69,500	0.0133	924
Meters	0	0.05	0
Hydrants	0	0.02	0
Services	0	0.02	0
Other - Water Rate Study/Hearing	0	0.00	0
TOTAL	69,500		924

Antigonish Water Utility Allocation of the Total Cost of Utility Plant in Service Between General Service and Fire Protection 2013/14							
	Utility Plant in Service Previous Year	Additions	Utility Plant in Service	Percent	General Service	Percent	Fire Protection
Intangible Plant							
Organization and Working Capital			-	100.0%	0	0.0%	0
Tangible Plant							
LAND AND LAND RIGHTS	-	-	-				
Source of Supply Land	479,994	-	479,994	90.0%	431,995	10.0%	47,999
Land - Reservoir/Treatment/Transmission	130,151	-	130,151	90.0%	117,136	10.0%	13,015
STRUCTURES AND IMPROVEMENTS	-	-	-		0		0
Source of Supply Structures	1,395,914	-	1,395,914	90.0%	1,256,323	10.0%	139,591
Purification	3,789,586	-	3,789,586	90.0%	3,410,627	10.0%	378,959
Distribution Reservoirs and Standpipes	934,078	45,000	979,078	40.0%	391,631	60.0%	587,447
Other Structures and Improvements	-	-	-	90.0%	0	10.0%	0
Other	-	-	-	90.0%	0	10.0%	0
Equipment			-		0		0
Electrical Equipment	-	-	-	90.0%	0	10.0%	0
Purification Equipment	-	-	-	90.0%	0	10.0%	0
Office Furniture and Equipment	-	-	-	90.0%	0	10.0%	0
Transportation Equipment	41,455	-	41,455	90.0%	37,310	10.0%	4,146
Tools and Work Equipment	67,093	-	67,093	90.0%	60,384	10.0%	6,709
SCADA Equipment/Process Automation	-	45,000	45,000	90.0%	40,500	10.0%	4,500
Distribution Mains Equipment	-	-	-	40.0%	0	60.0%	0
Meter Shop Equipment	-	-	-	90.0%	0	10.0%	0
Other - Office Equipment	639	-	639	90.0%	575	10.0%	64
Mains		-	-		0		0
Transmission	1,806,270	60,000	1,866,270	40.0%	746,508	60.0%	1,119,762
Distribution	1,334,654	117,000	1,451,654	40.0%	580,662	60.0%	870,992
Meters	803,581	40,000	843,581	100.0%	843,581	0.0%	0
Hydrants	189,434	12,000	201,434	0.0%	0	100.0%	201,434
Services	323,879	10,000	333,879	100.0%	333,879	0.0%	0
Other Water rate study	-	-	-	90.0%	0	10.0%	0
TOTAL	11,296,728	329,000	11,625,728	71.0%	8,251,110	29.0%	3,374,618

Antigonish Water Utility Allocation of the Total Cost of Utility Plant in Service Between General Service and Fire Protection 2014/15							
	Utility Plant in Service Previous Year	Additions	Utility Plant in Service	Percent	General Service	Percent	Fire Protection
Intangible Plant							
Organization and Working Capital	-		-	100.0%	0	0.0%	0
Tangible Plant	-	-					
LAND AND LAND RIGHTS	-		-				
Source of Supply Land	479,994	-	479,994	90.0%	431,995	10.0%	47,999
Land - General	130,151	-	130,151	90.0%	117,136	10.0%	13,015
STRUCTURES AND IMPROVEMENTS	-	-	-		0		0
Source of Supply Structures	1,395,914	35,000	1,430,914	90.0%	1,287,823	10.0%	143,091
Purification	3,789,586	-	3,789,586	80.0%	3,031,669	20.0%	757,917
Distribution Reservoirs and Standpipes	979,078	-	979,078	40.0%	391,631	60.0%	587,447
Other Structures and Improvements	-	-	-	90.0%	0	10.0%	0
Other Sludge Dry Bed	-	40,000	40,000	90.0%	36,000	10.0%	4,000
Equipment		-	-		0		0
Electrical Pumping	-	-	-	90.0%	0	10.0%	0
Purification Equipment	-	-	-	90.0%	0	10.0%	0
Office Furniture and Equipment	-	-	-	90.0%	0	10.0%	0
Transportation Equipment	41,455	-	41,455	90.0%	37,310	10.0%	4,146
Tools and Work Equipment	67,093	-	67,093	90.0%	60,384	10.0%	6,709
SCADA Equipment/Process Automation	45,000	20,000	65,000	90.0%	58,500	10.0%	6,500
Distribution Mains Equipment	-	-	-	40.0%	0	60.0%	0
Meter Shop Equipment	-	-	-	90.0%	0	10.0%	0
Other - Office Equipment	639	-	639	90.0%	575	10.0%	64
Mains		-	-		0		0
Transmission	1,866,270	120,000	1,986,270	40.0%	794,508	60.0%	1,191,762
Distribution	1,451,654	61,000	1,512,654	40.0%	605,062	60.0%	907,592
Meters	843,581	40,000	883,581	100.0%	883,581	0.0%	0
Hydrants	201,434	12,000	213,434	0.0%	0	100.0%	213,434
Services	333,879	10,000	343,879	100.0%	343,879	0.0%	0
Other-Water Rate Study	-	-	-	90.0%	0	10.0%	0
TOTAL	11,625,728	338,000	11,963,728	67.5%	8,080,051	32.5%	3,883,677

Antigonish Water Utility Allocation of the Total Cost of Utility Plant in Service Between General Service and Fire Protection 2015/16							
	Utility Plant in Service Previous Year	Additions	Utility Plant in Service	Percent	General Service	Percent	Fire Protection
Intangible Plant							
Organization and Working Capital	-		-	100.0%	0	0.0%	0
Tangible Plant							
LAND AND LAND RIGHTS							
Source of Supply Land	479,994	0	479,994	90.0%	431,995	10.0%	47,999
Land - General	130,151	0	130,151	90.0%	117,136	10.0%	13,015
STRUCTURES AND IMPROVEMENTS							
Source of Supply Structures	1,430,914	75,000	1,505,914	90.0%	1,355,323	10.0%	150,591
Water Treatment Plant	3,789,586	0	3,789,586	80.0%	3,031,669	20.0%	757,917
Distribution Reservoirs and Standpipes	979,078	25,000	1,004,078	40.0%	401,631	60.0%	602,447
WTP - Backwash Pond	-	40,000	40,000	90.0%	36,000	10.0%	4,000
Other Structures and Improvements	-	0	-	90.0%	0	10.0%	0
Other - Sludge Dry Bed	40,000		40,000	90.0%	36,000	10.0%	4,000
Other - Source of Supply Investigations		50,000	50,000	90.0%	45,000	10.0%	5,000
Equipment							
Electrical Pumping	-	0	-	90.0%	0	10.0%	0
Purification Equipment	-	0	-	90.0%	0	10.0%	0
Office Furniture and Equipment	-	0	-	90.0%	0	10.0%	0
Transportation Equipment	41,455	0	41,455	90.0%	37,310	10.0%	4,146
Tools and Work Equipment	67,093	0	67,093	90.0%	60,384	10.0%	6,709
SCADA Equipment/Process Automation	65,000	10,000	75,000	90.0%	67,500	10.0%	7,500
Distribution Mains Equipment	-	0	-	40.0%	0	60.0%	0
Meter Shop Equipment	-		-	90.0%	0	10.0%	0
Other - Office Equipment	639	0	639	90.0%	575	10.0%	64
Mains							
Transmission	1,986,270	0	1,986,270	40.0%	794,508	60.0%	1,191,762
Distribution	1,512,654	55,000	1,567,654	40.0%	627,062	60.0%	940,592
Meters	883,581	25,000	908,581	100.0%	908,581	0.0%	0
Hydrants	213,434	12,000	225,434	0.0%	0	100.0%	225,434
Services	343,879	10,000	353,879	100.0%	353,879	0.0%	0
Other-Water Rate Study	-	0	-	90.0%	0	10.0%	0
TOTAL	11,963,728	302,000	12,265,728	67.7%	8,304,551	32.3%	3,961,177

Antigonish Water Utility Allocation of the Total Cost of Utility Plant in Service Between General Service and Fire Protection 2016/17							
	Utility Plant in Service Previous Year	Additions	Utility Plant in Service	Percent	General Service	Percent	Fire Protection
Intangible Plant							
Organization and Working Capital	-		-	100.0%	0	0.0%	0
Tangible Plant							
LAND AND LAND RIGHTS	-		-				
Source of Supply Land	479,994	0	479,994	90.0%	431,995	10.0%	47,999
Land - General	130,151	0	130,151	90.0%	117,136	10.0%	13,015
STRUCTURES AND IMPROVEMENTS	-	0	-		0		0
Source of Supply Structures	1,505,914	40,000	1,545,914	90.0%	1,391,323	10.0%	154,591
Water Treatment Plant	3,789,586	0	3,789,586	80.0%	3,031,669	20.0%	757,917
Distribution Reservoirs and Standpipes	1,004,078	15,000	1,019,078	40.0%	407,631	60.0%	611,447
WTP- Backwash Pond	40,000	40,000	80,000	90.0%	72,000	10.0%	8,000
Other - Sludge Drying Bed	40,000	0	40,000	90.0%	36,000	10.0%	4,000
Other - Source of Supply Investigations	50,000	0	50,000	90.0%	45,000	10.0%	5,000
Other - Signage		5,000	5,000	90.0%	4,500	10.0%	500
Equipment	-	0	-				
Electrical Pumping	-	0	-	90.0%	0	10.0%	0
Purification Equipment	-	0	-	90.0%	0	10.0%	0
Office Furniture and Equipment	-	0	-	90.0%	0	10.0%	0
Transportation Equipment	41,455	25,000	66,455	90.0%	59,810	10.0%	6,646
Tools and Work Equipment	67,093	0	67,093	90.0%	60,384	10.0%	6,709
SCADA Equipment	75,000	15,000	90,000	90.0%	81,000	10.0%	9,000
Distribution Mains Equipment	-	0	-	40.0%	0	60.0%	0
Meter Shop Equipment	-		-	90.0%	0	10.0%	0
Other - Office Equipment	639	0	639	90.0%	575	10.0%	64
Mains	-	0	-		0		0
Transmission	1,986,270	139,000	2,125,270	40.0%	850,108	60.0%	1,275,162
Distribution	1,567,654	0	1,567,654	40.0%	627,062	60.0%	940,592
Meters	908,581	15,000	923,581	100.0%	923,581	0.0%	0
Hydrants	225,434	12,000	237,434	0.0%	0	100.0%	237,434
Services	353,879	10,000	363,879	100.0%	363,879	0.0%	0
Other	-	0	-	90.0%	0	10.0%	0
TOTAL	12,265,728	316,000	12,581,728	67.6%	8,503,651	32.4%	4,078,077

Antigonish Water Utility			
Allocation of Fire Protection Charges			
Projected Expenses for 2014/15			
	Estimated Expenses	PerCent Allocation to fire Protection	Fire Protection Charge
Source of Supply	39,218	10.0%	3,922
Power and Pumping	16,413	10.0%	1,641
Purification	383,460	10.0%	38,346
Transmission and Distribution	116,997	32.5%	37,980
Administration and General	269,967	10.0%	26,997
Depreciation	177,839	32.5%	57,730
Taxes	39,140	32.5%	12,706
Return on Rate Base	292,733	32.5%	95,027
Total	1,335,766	20.5%	274,349

Antigonish Water Utility			
Allocation of Fire Protection Charges			
Projected Expenses for Year 2015/16			
	Estimated Expenses	PerCent Allocation to fire Protection	Fire Protection Charge
Source of Supply	40,242	10.0%	4,024
Power and Pumping	16,732	10.0%	1,673
Purification	392,254	10.0%	39,225
Transmission and Distribution	118,465	32.3%	38,258
Administration and General	271,466	10.0%	27,147
Depreciation	190,261	32.3%	61,444
Taxes	40,314	32.3%	13,019
Return on Rate Base	264,610	32.3%	85,455
Total	1,334,343	20.3%	270,245

Antigonish Water Utility			
Allocation of Fire Protection Charges			
Projected Expenses for Year 2016/17			
	Estimated Expenses	PerCent Allocation to fire Protection	Fire Protection Charge
Source of Supply	41,296	10.0%	4,130
Power and Pumping	17,058	10.0%	1,706
Purification	401,287	10.0%	40,129
Transmission and Distribution	119,977	32.4%	38,888
Administration and General	273,009	10.0%	27,301
Depreciation	199,249	32.4%	64,582
Taxes	41,524	32.4%	13,459
Return on Rate Base	268,666	32.4%	87,082
Total	1,362,066	20.4%	277,276

Antigonish Water Utility				
Calculation of rate Base and required Return on rate Base				
Years Ending March 31st				
	2013/14	2014/15	2015/16	2016/17
	(Actual)	(Estimate)	(Estimate)	(Estimate)
RATE BASE				
Utility plant in Service March 31st	11,625,728	11,963,728	12,265,728	12,581,728
Less Accumulated Depreciaiton on actual cost of plant in service (Estimated)	(2,606,100)	(2,783,940)	(2,974,200)	(3,173,450)
Less unamortized amount of capital contribution for plant in service	(76,000)	(155,600)	(193,750)	(248,925)
Estimated Rate Base at Year End	8,943,628	9,024,189	9,097,778	9,159,354
REQUIRED RETURN				
Non-operating Expenditures (B-2)	302,500	314,083	285,960	290,016
Less Non-operating Revenue	(6,000)	(6,000)	(6,000)	(6,000)
Less Other Non-operating Revenue (B-2)	(15,350)	(15,350)	(15,350)	(15,350)
Return on Rate Base	281,150	292,733	264,610	268,666
Required Rate of Return (Req'd Return/Est Rate Base)	3.14%	3.24%	2.91%	2.93%

Antigonish Water Utility									
Calculation of Revenue Requirements Between the Municipality and the Utility									
2014/15									
	Total Revenue Required	Fire Protection Revenue	Revenue Required from Metered Rates	Joint Use %	Joint Use	County %	Base Charge County	Commodity Charge County	Revenue Required Utility
Source of Supply	39,218	3,922	35,296	100%	\$ 35,296	29.70%		\$ 10,484	24,812
Power and Pumping	16,413	1,641	14,772	100%	\$ 14,772	29.70%		\$ 4,387	10,384
Purification	383,460	38,346	345,114	100%	\$ 345,114	29.70%		\$ 102,506	242,608
Transmission and Distribution	116,997	37,980	79,017	50.66%	\$ 40,031	29.70%		\$ 11,890	67,127
Administration and General	269,967	26,997	242,970	47.41%	\$ 115,185	29.70%	\$ 34,212		208,758
Depreciation	177,839	57,730	120,109	79.11%	\$ 95,013	29.70%	\$ 28,221		91,888
Taxes	39,140	12,706	26,434	31.87%	\$ 8,426	29.70%	\$ 2,503		23,932
Return on Rate Base	292,733	95,027	197,706	86.71%	\$ 171,422	29.70%	\$ 20,366	\$ 30,549	146,790
Sub-Total	1,335,766	274,349	1,061,418		825,258		85,302	159,816	816,300
TOTAL	1,335,766	274,349	1,061,418				85,302	159,816	816,300

County Base Charge $\frac{85,302}{12} = 7,108$ Month

County Commodity Charge $\frac{159,816}{93,892,571} = 1.70$ Per 1000 gal.

Antigonish Water Utility									
Calculation of Revenue Requirements Between the Municipality and the Utility									
2015/16									
	Total Revenue Required	Fire Protection Revenue	Revenue Required from Metered Rates	Joint Use %	Joint Use	County %	Base Charge County	Commodity Charge County	Revenue Required Utility
Source of Supply	40,242	4,024	36,218	100%	\$ 36,218	29.90%		\$ 10,830	25,389
Power and Pumping	16,732	1,673	15,059	100%	\$ 15,059	29.90%		\$ 4,503	10,556
Purification	392,254	39,225	353,028	100%	\$ 353,028	29.90%		\$ 105,559	247,469
Transmission and Distribution	118,465	38,258	80,207	50.66%	\$ 40,634	29.90%		\$ 12,150	68,057
Administration and General	271,466	27,147	244,319	47.42%	\$ 115,860	29.90%	\$ 34,643		209,676
Depreciation	190,261	61,444	128,817	79.11%	\$ 101,901	29.90%	\$ 30,470		98,347
Taxes	40,314	13,019	27,295	31.87%	\$ 8,700	29.90%	\$ 2,601		24,693
Return on Rate Base	264,610	85,455	179,155	93.33%	\$ 167,205	29.90%	\$ 19,998	\$ 29,998	129,159
Sub-Total	1,334,343	270,245	1,064,098		838,605		87,712	163,039	813,347
TOTAL	1,334,343	270,245	1,064,098				87,712	163,039	813,347

County Base Charge $\frac{87,712}{12} = 7,309$ Month

County Commodity Charge $\frac{163,039}{93,892,571} = 1.74$ Per 1000 gallons

Antigonish Water Utility									
Calculation of Revenue Requirements Between the Municipality and the Utility									
2016/17									
	Total Revenue	Fire Protection	Revenue Required	Joint Use	Joint Use	County	Base Charge	Commodity	Revenue Required
	Required	Revenue	from	%		%	County	Charge	Utility
			Metered Rates				County	County	
Source of Supply	41,296	4,130	37,167	100%	\$ 37,167	30.10%		\$ 11,186	25,981
Power and Pumping	17,058	1,706	15,352	100%	\$ 15,352	30.10%		\$ 4,620	10,732
Purification	401,287	40,129	361,158	100%	\$ 361,158	30.10%		\$ 108,696	252,462
Transmission and Distribution	119,977	38,888	81,089	50.66%	\$ 41,081	30.10%		\$ 12,364	68,725
Administration and General	273,009	27,301	245,708	47.44%	\$ 116,554	30.10%	\$ 35,079		210,630
Depreciation	199,249	64,582	134,667	79.11%	\$ 106,530	30.10%	\$ 32,062		102,606
Taxes	41,524	13,459	28,065	31.87%	\$ 8,945	30.10%	\$ 2,692		25,373
Return on Rate Base	268,666	87,082	181,584	89.34%	\$ 162,220	30.10%	\$ 19,529	\$ 29,294	132,761
Sub-Total	1,362,066	277,276	1,084,790		849,007		89,362	166,160	829,268
TOTAL	1,362,066	277,276	1,084,790				89,362	166,160	829,268

County Base Charge $\frac{89,362}{12} = 7,447$ Month
County Commodity Charge $\frac{166,160}{93,892,571} = 1.77$ per 1,000 gallons

Antigonish Water Utility
Calculation of Revenue Required for Each Billing/Cost Category
2014/15

	Revenue Required from Metered Rates	Charge				Commodity Charge			
		Customer		Base		Delivery		Production	
Source of Supply	24,812						100%		24,812
Power and Pumping	10,384						100%		10,384
Water Treatment	242,608						100%		242,608
Transmission and Distribution	67,127			0%	0	100%	67,127		
Administration and General	208,758	10%	20,876	70%	146,131	20%	41,752		
Depreciation	91,888			100%	91,888				
Taxes	23,932			100%	23,932				
Return on Rate Base	146,790			40%	58,716	0%	0	60%	88,074
SUBTOTAL	816,300		20,876		320,667		108,879		365,878
TOTAL	816,300		20,876		320,667		108,879		365,878

Antigonish Water Utility
Calculation of Revenue Required for Each Billing/Cost Category
2015/16

	Revenue Required from Metered Rates	Charge				Commodity Charge			
		Customer		Base		Delivery		Production	
Source of Supply	25,389						100%		25,389
Power and Pumping	10,556						100%		10,556
Water Treatment	247,469						100%		247,469
Transmission and Distribution	68,057			0%	0	100%	68,057		
Administration and General	209,676	10%	20,968	70%	146,773	20%	41,935		
Depreciation	98,347			100%	98,347				
Taxes	24,693			100%	24,693				
Return on Rate Base	129,159			40%	51,664	0%	0	60%	77,495
SUBTOTAL	813,347		20,968		321,477		109,992		360,910
TOTAL	813,347		20,968		321,477		109,992		360,910

Antigonish Water Utility
Calculation of Revenue Required for Each Billing/Cost Category
2016/17

	Revenue Required from Metered Rates	Charge				Commodity Charge			
		Customer		Base		Delivery		Production	
Source of Supply	25,981						100%		25,981
Power and Pumping	10,732						100%		10,732
Water Treatment	252,462						100%		252,462
Transmission and Distribution	68,725			0%	0	100%	68,725		
Administration and General	210,630	10%	21,063	70%	147,441	20%	42,126		
Depreciation	102,606			100%	102,606				
Taxes	25,373			100%	25,373				
Return on Rate Base	132,761			40%	53,105	0%	0	60%	79,657
SUBTOTAL	829,268		21,063		328,523		110,851		368,831
TOTAL	829,268		21,063		328,523		110,851		368,831

Worksheet C-4

20-Jan-14

Antigonish Water Utility Service Connections and Equivalents 2014/15			
Meter Size	Number of Services	Capacity Ratio	System Equivalents
Unmetered	0	1	0
5/8"	1320	1	1,320
3/4"	147	1.5	221
1"	44	2.5	110
1.5"	45	5	225
2"	30	8	240
3"	19	16	304
4"	1	25	25
6"	1	50	50
8"	0	90	0
TOTAL	1607		2,495

Antigonish Water Utility Service Connections and Equivalents 2015/16			
Meter Size	Number of Services	Capacity Ratio	System Equivalents
Unmetered	0	1	0
5/8"	1320	1	1,320
3/4"	147	1.5	221
1"	44	2.5	110
1.5"	45	5	225
2"	30	8	240
3"	19	16	304
4"	1	25	25
6"	1	50	50
8"	0	90	0
TOTAL	1607		2,495

Antigonish Water Utility Service Connections and Equivalents 2016/17			
Meter Size	Number of Services	Capacity Ratio	System Equivalents
Unmetered	0	1	0
5/8"	1320	1	1,320
3/4"	147	1.5	221
1"	44	2.5	110
1.5"	45	5	225
2"	30	8	240
3"	19	16	304
4"	1	25	25
6"	1	50	50
8"	0	90	0
TOTAL	1607		2,495

Antigonish Water Utility
Service Connections and Equivalents
2014/15

Meter Size	Capacity Ratio	Base Charge	Customer Charge	Total Base Charge		
				Annual	Quarterly	Bimonthly
Unmetered	1	128.55	12.99	141.54	35.38	
5/8"	1	128.55	12.99	141.54	35.38	
3/4"	1.5	192.82	12.99	205.81	51.45	
1"	2.5	321.37	12.99	334.36	83.59	
1.5"	5	642.75	12.99	655.74	163.93	
2"	8	1,028.40	12.99	1,041.39		173.56
3"	16	2,056.79	12.99	2,069.78		344.96
4"	25	3,213.74	12.99	3,226.73		537.79
6"	50	6,427.47	12.99	6,440.46		1,073.41
8"	90	11,569.45	12.99	11,582.44		1,930.41
TOTAL						

Antigonish Water Utility
Service Connections and Equivalents
2015/16

Meter Size	Capacity Ratio	Base Charge	Customer Charge	Total Base Charge		
				Annual	Quarterly	Bimonthly
Unmetered	1	128.87	13.05	141.92	35.48	
5/8"	1	128.87	13.05	141.92	35.48	
3/4"	1.5	193.31	13.05	206.36	51.59	
1"	2.5	322.19	13.05	335.23	83.81	
1.5"	5	644.37	13.05	657.42	164.35	
2"	8	1,031.00	13.05	1,044.04		174.01
3"	16	2,061.99	13.05	2,075.04		345.84
4"	25	3,221.86	13.05	3,234.91		539.15
6"	50	6,443.72	13.05	6,456.77		1,076.13
8"	90	11,598.70	13.05	11,611.75		1,935.29
TOTAL						

Antigonish Water Utility
Service Connections and Equivalents
2016/17

Meter Size	Capacity Ratio	Base Charge	Customer Charge	Total Base Charge		
				Annual	Quarterly	Bimonthly
Unmetered	1	131.70	13.11	144.81	36.20	
5/8"	1	131.70	13.11	144.81	36.20	
3/4"	1.5	197.55	13.11	210.66	52.66	
1"	2.5	329.25	13.11	342.35	85.59	
1.5"	5	658.50	13.11	671.60	167.90	
2"	8	1,053.59	13.11	1,066.70		177.78
3"	16	2,107.19	13.11	2,120.29		353.38
4"	25	3,292.48	13.11	3,305.58		550.93
6"	50	6,584.95	13.11	6,598.06		1,099.68
8"	90	11,852.92	13.11	11,866.03		1,977.67
TOTAL						

Antigonish Water Utility Water Consumption by Block				
Meter Size	Actual Current Consumption		2014/15 Consumption	
	1st Block Imp Gallons	2nd Block Imp Gallons	1st Block Imp Gallons	2nd Block Imp Gallons
Unmetered	0		0	
5/8"	72,296,111		70,127,228	
3/4"	22,100,928		22,100,928	
1"	13,583,003		13,583,003	0
1.5"	19,928,661		19,928,661	
2"	28,852,104		28,852,104	
3"	44,677,909		44,677,909	
4"	3,000,000	2,608,209	3,000,000	2,608,209
6"	3,000,000	14,344,860	3,000,000	14,344,860
8"	0		0	
TOTAL	207,438,716	16,953,069	205,269,833	16,953,069
	TOTAL BOTH BLOCKS	224,391,785	TOTAL BOTH BLOCKS	222,222,902

Antigonish Water Utility Water Consumption by Block				
Meter Size	2015/16 Current Consumption		2016/17 Consumption	
	1st Block Imp Gallons	2nd Block Imp Gallons	1st Block Imp Gallons	2nd Block Imp Gallons
Unmetered	0		0	
5/8"	68,023,411		65,982,709	
3/4"	22,100,928		22,100,928	
1"	13,583,003		13,583,003	
1.5"	19,928,661		19,928,661	
2"	28,852,104		28,852,104	
3"	44,677,909		44,677,909	
4"	3,000,000	2,608,209	3,000,000	2,608,209
6"	3,000,000	14,344,860	3,000,000	14,344,860
8"	0		0	
TOTAL	203,166,016	16,953,069	201,125,314	16,953,069
	TOTAL BOTH BLOCKS	220,119,085	TOTAL BOTH BLOCKS	218,078,383

Worksheet C-7

20-Jan-14

Antigonish Water Utility Calculation of Consumption Charge 2014/15		
NET PRODUCTION EXPENSE	BLOCK 1	BLOCK 2
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	1.65	1.65
NET DELIVERY EXPENSES		
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	0.53	
TOTAL CONSUMPTION CHARGE PER 1000 Imp.Gallons	2.18	1.65

Antigonish Water Utility Calculation of Consumption Charge 2015/16		
NET PRODUCTION EXPENSE	BLOCK 1	BLOCK 2
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	1.64	1.64
NET DELIVERY EXPENSES		
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	0.54	
TOTAL CONSUMPTION CHARGE PER 1000 Imp.Gallons	2.18	1.64

Antigonish Water Utility Calculation of Consumption Charge 2016/17		
NET PRODUCTION EXPENSE	BLOCK 1	BLOCK 2
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	1.69	1.69
NET DELIVERY EXPENSES		
<u>Total Charge Worksheet C-3</u> Quantity Worksheet C-6	0.55	
TOTAL CONSUMPTION CHARGE PER 1000 Imp.Gallons	2.24	1.69

Worksheet C-8

20-Jan-14

**Antigonish Water Utility
Water Consumption by Block
2014/15**

BASE CHARGE

<u>Meter Size</u>	<u>Number</u>	<u>Base Rate</u>	<u>Dollar Revenue</u>
Unmetered	0	141.54	0
5/8"	1,320	141.54	186,833
3/4"	147	205.81	30,255
1"	44	334.36	14,712
1.5"	45	655.74	29,508
2"	30	1,041.39	31,242
3"	19	2,069.78	39,326
4"	1	3,226.73	3,227
6"	1	6,440.46	6,440
8"	0	11,582.44	0
		Antigonish County	85,302
TOTAL BASE REVENUE			426,844

CONSUMPTION CHARGE

	Quantity	\$/ 1,000 gallons	
1st Block	205,269,833	2.18	446,845
2nd Block	16,953,069	1.65	27,912
Antigonish County	93,892,571	1.70	159,816
TOTAL CONSUMPTION REVENUE			634,573

TOTAL OPERATING REVENUES FOR YEAR (BASE + CONSUMPTION) 1,061,418

**Antigonish Water Utility
Water Consumption by Block
2015/16**

BASE CHARGE

<u>Meter Size</u>	<u>Number</u>	<u>Base Rate</u>	<u>Dollar Revenue</u>
Unmetered	0	141.92	0
5/8"	1,320	141.92	187,337
3/4"	147	206.36	30,335
1"	44	335.23	14,750
1.5"	45	657.42	29,584
2"	30	1,044.04	31,321
3"	19	2,075.04	39,426
4"	1	3,234.91	3,235
6"	1	6,456.77	6,457
8"	0	11,611.75	0
		Antigonish County	87,712
TOTAL BASE REVENUE			430,157

CONSUMPTION CHARGE

	Quantity	\$/ 1,000 gallons	
1st Block	203,166,016	2.18	443,105
2nd Block	16,953,069	1.64	27,796
Antogonish County	93,892,571	1.74	163,039
TOTAL CONSUMPTION REVENUE			633,941

TOTAL OPERATING REVENUES FOR YEAR (BASE + CONSUMPTION) 1,064,098

**Antigonish Water Utility
Water Consumption by Block
2016/17**

BASE CHARGE			
<u>Meter Size</u>	<u>Number</u>	<u>Base Rate</u>	<u>Dollar Revenue</u>
Unmetered	0	144.81	0
5/8"	1,320	144.81	191,144
3/4"	147	210.66	30,966
1"	44	342.35	15,064
1.5"	45	671.60	30,222
2"	30	1,066.70	32,001
3"	19	2,120.29	40,286
4"	1	3,305.58	3,306
6"	1	6,598.06	6,598
8"	0	11,866.03	0
		Antigonish County	89,362
TOTAL BASE REVENUE			438,948
CONSUMPTION CHARGE			
	Quantity	\$/ 1,000 gallons	
1st Block	201,125,314	2.24	451,010
2nd Block	16,953,069	1.69	28,672
Antigonish County	93,892,571	1.77	166,160
TOTAL CONSUMPTION REVENUE			645,842
TOTAL OPERATING REVENUES FOR YEAR (BASE + CONSUMPTION)			1,084,790

Antigonish Water Utility													
Comparison of Current Water Rates with Proposed New Rates													
2014/15													
Meter Size	Average Consumption	Average Consumption	Current Base Charge		Proposed Base Charge		Percent Change	Commodity Charge		Percent Change	Quarterly/Bimonthly Water Bill		Percent Change
	1st Block	2nd Block	Monthly	Bimonthly	Monthly	BiMonthly		Current	Proposed		Current	Proposed	
Unmetered		-									-	-	0.0%
5/8"	13,282	-	41.07	-	35.38	-	-13.8%	24.31	28.91	19.0%	65.38	64.30	-1.6%
3/4"	37,587	-	57.19	-	51.45	-	-10.0%	68.78	81.82	19.0%	125.97	133.27	5.8%
1"	77,176	-	89.44	-	83.59	-	-6.5%	141.23	168.00	19.0%	230.67	251.59	9.1%
1.5"	110,715	-	170.05	-	163.93	-	-3.6%	202.61	241.01	19.0%	372.66	404.95	8.7%
2"	160,289	-		177.86		173.56	-2.4%	293.33	348.93	19.0%	471.19	522.49	10.9%
3"	391,911	-		349.84		344.96	-1.4%	717.20	853.14	19.0%	1,067.04	1,198.10	12.3%
4"	500,000	26,082		543.32		537.79	-1.0%	915.00	1,088.43	19.0%	1,458.32	1,626.22	11.5%
6"	500,000	2,390,810		1,080.76		1,073.41	-0.7%	4,309.95	5,024.78	16.6%	5,390.71	6,098.19	13.1%
8"	-	-		-		1,930.41	0.0%	-	-		-	1,930.41	

Antigonish Water Utility													
Comparison of Current Water Rates with Proposed New Rates													
2015/16													
Meter Size	Average Consumption	Average Consumption	Current Base Charge		Proposed Base Charge		Percent Change	Commodity Charge		Percent Change	Quarterly/Bimonthly Water Bill		Percent Change
	1st Block	2nd Block	Monthly	Bimonthly	Monthly	BiMonthly		Current	Proposed		Current	Proposed	
Unmetered		-									-	-	0.0%
5/8"	12,497	-	35.38	-	35.48	-	0.3%	28.91	27.26	-5.7%	64.30	62.74	-2.4%
3/4"	37,587	-	51.45	-	51.59	-	0.3%	81.82	81.98	0.2%	133.27	133.57	0.2%
1"	77,176	-	83.59	-	83.81	-	0.3%	168.00	168.32	0.2%	251.59	252.13	0.2%
1.5"	110,715	-	163.93	-	164.35	-	0.3%	241.01	241.47	0.2%	404.95	405.82	0.2%
2"	160,289	-		173.56		174.01	0.3%	348.93	349.59	0.2%	522.49	523.60	0.2%
3"	391,911	-		344.96		345.84	0.3%	853.14	854.76	0.2%	1,198.10	1,200.60	0.2%
4"	500,000	26,082		537.79		539.15	0.3%	1,088.43	1,090.50	0.2%	1,626.22	1,629.65	0.2%
6"	500,000	2,390,810		1,073.41		1,076.13	0.3%	5,024.78	5,010.50	-0.3%	6,098.19	6,086.63	-0.2%
8"	-	-		1,930.41		1,935.29		-	-		1,930.41		

Antigonish Water Utility													
Comparison of Current Water Rates with Proposed New Rates													
2016/17													
Meter Size	Average Consumption	Average Consumption	Current Base Charge		Proposed Base Charge		Percent Change	Commodity Charge		Percent Change	Quarterly/Bimonthly Water Bill		Percent Change
	1st Block	2nd Block	Monthly	Bimonthly	Monthly	BiMonthly		Current	Proposed		Current	Proposed	
Unmetered		-									-	-	0.0%
5/8"	12,497	-	35.48	-	36.20	-	2.0%	27.26	28.02	2.8%	62.74	64.22	2.4%
3/4"	37,587	-	51.59	-	52.66	-	2.1%	81.98	84.29	2.8%	133.57	136.95	2.5%
1"	77,176	-	83.81	-	85.59	-	2.1%	168.32	173.06	2.8%	252.13	258.65	2.6%
1.5"	110,715	-	164.35	-	167.90	-	2.2%	241.47	248.27	2.8%	405.82	416.17	2.5%
2"	160,289	-		174.01		177.78	2.2%	349.59	359.44	2.8%	523.60	537.22	2.6%
3"	391,911	-		345.84		353.38	2.2%	854.76	878.83	2.8%	1,200.60	1,232.22	2.6%
4"	500,000	26,082		539.15		550.93	2.2%	1,090.50	1,121.22	2.8%	1,629.65	1,672.15	2.6%
6"	500,000	2,390,810		1,076.13		1,099.68	2.2%	5,010.50	5,164.74	3.1%	6,086.63	6,264.42	2.9%
8"	-	-		1,935.29		1,977.67		-	-				

Antigonish Water Utility				
Comparative Statement of Operations				
Fiscal Years ending March 31st				
	2013/14 Year	Projection Using Proposed Rates		
		2014/15 Test Yr 1	2015/16 Test Yr 2	2016/17 Test Yr 3
OPERATING REVENUES				
Metered Sales	964,000	816,300	813,347	829,268
Flat Rate Sales	250			
Public Fire Protection	154,995	159,165	156,784	160,863
Private Fire Protection (County)	101,448	115,184	113,461	116,413
Sales to Other Utilities	0	245,118	250,751	255,522
Other Income	0	0	0	0
Total	1,220,693	1,335,766	1,334,343	1,362,066
OPERATING EXPENDITURES				
Source of Supply	38,221	39,218	40,242	41,296
Power and Pumping	16,100	16,413	16,732	17,058
Purification	374,895	383,460	392,254	401,287
Transmission and Distribution	115,572	116,997	118,465	119,977
Administration and General	277,012	269,967	271,466	273,009
Depreciation	167,242	177,839	190,261	199,249
Taxes	38,000	39,140	40,314	41,524
Total	1,027,042	1,043,033	1,069,733	1,093,400
OPERATING PROFIT (LOSS)				
NON-OPERATING REVENUES				
Sundry	0	0	0	0
Sprinkler Service	15,350	15,350	15,350	15,350
Other Revenue	6,000	6,000	6,000	6,000
Total	21,350	21,350	21,350	21,350
NON-OPERATING EXPENDITURES				
Debt Charges - Principal	160,000	160,000	160,000	160,000
Debt Charges - Interest	100,000	93,816	86,960	80,016
New Debt - Principal	0	0	0	0
New Debt - Interest	0	0	0	0
New Debt - Principal	0	0	0	0
New Debt - Interest	0	0	0	0
Interest and Bank charges	0	0	0	0
Interest Paid on consumer deposits	0	0	0	0
Capital out of Revenue	42,500	60,267	39,000	50,000
Owners Return on Rate Base	0	0	0	0
Total	302,500	314,083	285,960	290,016
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES				
	-87,499	0	0	0

Appendix 1

**Loan Calculator
Long Term Debt
2014/15**

Interest Rate	6.0%
Term in years	15
Capital \$	-

Payment Schedule

Year	Principal	Interest	Total	Balance
1	\$0.00	-	-	-
2	\$0.00	-	-	-
3	\$0.00	-	-	-
4	\$0.00	-	-	-
5	\$0.00	-	-	-
6	\$0.00	-	-	-
7	\$0.00	-	-	-
8	\$0.00	-	-	-
9	\$0.00	-	-	-
10	\$0.00	-	-	-
11	\$0.00	-	-	-
12	\$0.00	-	-	-
13	\$0.00	-	-	-
14	\$0.00	-	-	-
15	\$0.00	-	-	-

**Loan Calculator
Long Term Debt
2015/16**

Interest Rate	6.0%
Term in years	15
Capital \$	-

Payment Schedule

Year	Principal	Interest	Total	Balance
1	\$0.00	-	-	-
2	\$0.00	-	-	-
3	\$0.00	-	-	-
4	\$0.00	-	-	-
5	\$0.00	-	-	-
6	\$0.00	-	-	-
7	\$0.00	-	-	-
8	\$0.00	-	-	-
9	\$0.00	-	-	-
10	\$0.00	-	-	-
11	\$0.00	-	-	-
12	\$0.00	-	-	-
13	\$0.00	-	-	-
14	\$0.00	-	-	-
15	\$0.00	-	-	-

**Loan Calculator
Long Term Debt
2016/17**

Interest Rate	6.0%
Term in years	15
Capital \$	-

Payment Schedule for Capital Works

Year	Principal	Interest	Total	Balance
1	\$0.00	\$0.00	-	-
2	\$0.00	\$0.00	-	-
3	\$0.00	\$0.00	-	-
4	\$0.00	\$0.00	-	-
5	\$0.00	\$0.00	-	-
6	\$0.00	\$0.00	-	-
7	\$0.00	\$0.00	-	-
8	\$0.00	\$0.00	-	-
9	\$0.00	\$0.00	-	-
10	\$0.00	\$0.00	-	-
11	\$0.00	\$0.00	-	-
12	\$0.00	\$0.00	-	-
13	\$0.00	\$0.00	-	-
14	\$0.00	\$0.00	-	-
15	\$0.00	\$0.00	-	-

Appendix 2

Calculation of Joint use expenses

Total County Consumption	93,892,571	93,892,571
	Total Consumption	316,115,473
Percentage joint use Antigonish County		29.70%

2015/16

Total Antigonish consumption	220,119,085	220,119,085
Total County Consumption	93,892,571	93,892,571
	Total Consumption	314,011,656
Percentage joint use Antigonish County		29.90%

2016/17

Total Antigonish consumption	218,078,383	218,078,383
Total County Consumption	93,892,571	93,892,571
	Total Consumption	311,970,954
Percentage joint use Antigonish County		30.10%

2. Source of Supply Joint Use **100%**

3. Power and Pumping **100%**

3. Transmission and Distribution

Length of Pipe Used		
Joint Use Transmission and Distribution pipe	95,462	95,462
Distribution Pipe (not Joint Use)	92,970	92,970
\	188,432	188,432
	Joint Use Percentage	50.66%

4. Administration and General

Total Administration and General based on 2014/15 budget		269,967
Less meter reading and collection (Estimated at \$12,000)		-12,000
Less 1/2 Town salaries (217,512)		(108,756)
Less 1/2 all other costs. (42,455)		(21,228)
	Total	127,984
	Joint Use Percentage	47.41%

Total Administration and General based on 2015/16 budget		271,466
Less meter reading and collection (Estimated at \$12,000)		-12,000
Less 1/2 Town salaries	(217,512)	(108,756)
Less 1/2 all other costs.	(43,954)	(21,977)
	Total	128,733
	Joint Use Percentage	47.42%

Total Administration and General based on 2016/17 budget		273,009
Less meter reading and collection (Estimated at \$12,000)		-12,000
Less 1/2 Town salaries	(217,512)	(108,756)
Less 1/2 all other costs.	(45,497)	(22,749)
	Total	129,505
	Joint Use Percentage	47.44%

5. Depreciation

Depreciation 13/14			167,242
Less 49.1% of Distribution (remainder is Joint Use)	655,315	0.0133	(8,716)
Less 100% Meters	843,581	0.02	(16,872)
Less 100% Hydrants	201,434	0.0133	(2,679)
Less 100% Services	333,879	0.02	(6,678)
		Total	132,298
		Joint Use Percentage	79.11%

6. Taxes

Total taxes 13/14		37,648
Portion for Joint use watershed and other lands		12,000
	Joint Use Percentage	31.87%

7. Return on rate base

2013/14

Treatment plant loan	253,816	100% joint use	253,816
Dividend to owner	0	0% joint use	
Water Fund land purchase	0	100% joint use	
		Total	253,816
Rate base from Worksheet C-2	292,733		
		Joint Use Percentage	87%
		USE	87%

2014/15

Treatment plant loan	246,960	100% joint use	246,960
Dividend to owner	0	0% joint use	
Water Fund land purchase	0	100% joint use	
		Total	246,960
Rate base from Worksheet C-2	264,610		
		Joint Use Percentage	93%
		USE	93%

2015/16

Treatment plant loan	240,016	100% joint use	240,016
Dividend to owner	0	0% joint use	
Water Fund land purchase	0	100% joint use	
		Total	240,016
Rate base from Worksheet C-2	268,666		
		Joint Use Percentage	89%
		USE	89%

Appendix 3

FIRE PROTECTION CHARGES
(All flows in Gallons per Minute)

LOCATION OF METERS	AVAILABLE FLOW AT 20 psi	MAX. HOUR DOMESTIC FLOW (Note 1)	AVAILABLE FLOW FOR FIRE	MAXIMUM FIRE FLOW REQUIRED	PERCENT AVAILABLE
Cloverville Road	2095	34	2,061	1800	100.0%
Arbor Drive	2610	12	2,598	2500	100.0%
Sylvan Valley	2525	39	2,486	4000	62.1%
Locharbor Road	1600	72	1,528	2900	52.7%
Church Street	1450	24	1,426	1200	100.0%
St. Andrews	3000	101	2,899	2300	100.0%
Post Road	1556	109	1,447	3400	42.5%
Highland Drive	1230	31	1,199	1600	74.9%
Thome Ridge	2875	152	2,723	1200	100.0%
Mount Cameron	1150	54	1,096	1200	91.4%
Briery Brook	3200	8	3,192	1200	100.0%
			Average		84.0%

Note 1: Calculated on Max. quarterly flow

Cloverdale Road	4,479,637	gallons per year
	12,273	gpd
	8.5	gpm
	4	Factor for Maximum hour
	34	gpm for maximum hour
Arbor Drive	1,289,138	gallons per year
	3,532	gpd
	2.5	gpm
	5	Factor for Maximum hour
	12	gpm for maximum hour
Sylvan Valley	5,922,100	gallons per year
	16,225	gpd
	11.3	gpm
	3.5	Factor for Maximum hour
	39	gpm for maximum hour
Locharbor Road	15,120,244	gallons per year
	41,425	gpd
	28.8	gpm
	2.5	Factor for Maximum hour
	72	gpm for maximum hour
Church Street	2,752,748	gallons per year
	7,542	gpd
	5.2	gpm
	4.5	Factor for Maximum hour
	24	gpm for maximum hour
St. Andrews	26,569,014	gallons per year
	72,792	gpd
	50.5	gpm
	2	Factor for Maximum hour
	101	gpm for maximum hour
Post Road	19,164,956	gallons per year
	52,507	gpd
	36.5	gpm
	3	Factor for Maximum hour
	109	gpm for maximum hour
Highland Drive	5,468,446	gallons per year
	14,982	gpd
	10.4	gpm
	3	Factor for Maximum hour
	31	gpm for maximum hour

Thome Ridge 2,848,166 gallons per year
 7,803 gpd
 5.4 gpm
 4.5 Factor for Maximum hour
 24 gpm for maximum hour
 152 gpm for maximum hour

Mount Cameron 9,409,624 gallons per year
 25,780 gpd
 17.9 gpm
 3 Factor for Maximum hour
 54 gpm for maximum hour

Brierly Brook 868,500 gallons per year
 2,379 gpd
 1.7 gpm
 5 Factor for Maximum hour
 8 gpm for maximum hour

Required Fire Flow Analysis carried out by C.G. Insurance Business Services on November 25, 2003.

Maximum required Fire Flow Town: 4,000 gpm
 Maximum required Fire Flow County: 4,000 gpm
 Total: 8,000 gpm

Percent of Fire Protection to County: 4,000 or 50.0%
 8,000

YEAR	TOTAL FIRE PROTECTION \$	% COUNTY	COUNTY FIRE PROTECTION CHARGE	AVAILABLE FIRE FLOW %	NET COUNTY FIRE PROTECTION
2014/15	274,349	50.0%	137,174	84.0%	115,184
2015/16	270,245	50.0%	135,123	84.0%	113,461
2016/17	277,276	50.0%	138,638	84.0%	116,413

**SCHEDULES A, B, AND C
RATES AND CHARGES**

SCHEDULE "A"
TOWN OF ANTIGONISH
WATER UTILITY
SCHEDULE OF RATES FOR WATER AND WATER SERVICES

(Effective for water supplied on and after 1 April, 2014)

RATES

The rates set out below are the rates approved by the Board for water and water services when payment is made within 30 days from the date rendered as shown on the bill.

When payment is made after 30 days from the date rendered as shown on the bill, the rates will include interest charges of 1.5 % per month, or part thereof.

Each bill shall show the amount payable within 30 days from the date rendered as shown on the bill.

In this Schedule, the word "Utility" means the Town of Antigonish Water Utility.

1. **RATES:**

<u>(a) Base Charges</u>	<u>Quarterly</u>	<u>Bi-Monthly</u>
Unmetered (based on 15,000 gallons per quarter)	68.04	
Size of Meter		
5/8"	35.38	
3/4"	51.45	
1"	83.59	
1.5"	163.93	
2"		173.56
3"		344.96
4"		537.79
6"		1,073.41
8"		1,930.41
<u>(b) 1st Block Consumption Rate (per 1,000 imp. gallons)</u>		
1st Block	\$2.18	per 1,000 imp. gallons
For the first 750,000 gallons per quarter or 500,000 gallons Bimonthly		
<u>(c) 2nd Block Consumption Rate (per 1,000 imp. gallons)</u>		
2nd Block	\$1.65	per 1,000 imp. gallons
For all additional gallons		

- (d) Wholesale Rates for the Municipality of Antigonish County
For water supplied at all metered service points.

County Base Rate	7,108.50	per Month
County Consumption Rate	\$ 1.70	per 1,000 imp. gallons

- (e) Minimum Bill

The minimum bill shall be the Base Charge.

2. PUBLIC FIRE PROTECTION RATE

The Town of Antigonish and the Municipality of the County of Antigonish shall pay to the Water Utility on or before the first day of October, 2014 a total of \$274,349 divided between the County, \$115,184 and the Town, \$159,165.

3. RATES FOR SPRINKLER SERVICE

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

Each building serviced by a sprinkler service pipe of 6" or less in diameter	\$200.00
Each building serviced by a sprinkler service pipe of 8" or more in diameter	\$250.00

4. WATER FOR BUILDINGS OR WORKS UNDER CONSTRUCTION

The Utility may furnish water to any person requiring a supply thereof for the construction of a building or other works. This person shall deposit with the Utility such sum as may be determined by the Utility as is sufficient to defray the cost of making the necessary connection to any water service or main 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 meter to the Utility, a refund will be made after deducting the cost, if any, of repairing the meter and of testing the same and payment of the base and connection charges and the consumption rates in respect to such installation.

5. PRIVATE HYDRANT RATES

Per hydrant per year \$200.00.

6. RATES FOR WATER SUPPLIED FROM FIRE HYDRANTS

Whenever the use of any fire hydrant is desired for supplying water for any purpose, excepting those of the Fire Department for fire use, the Utility may grant a permit containing such terms and conditions as it may provide, including arrangements regarding supervision of the opening and closing of the hydrant, and a service charge for commercial consumers of \$70.00 for connection and disconnection and a consumption charge for the amount of water used, as estimated by the water utility, at meter consumption rates.

7. CHARGES FOR RE-ESTABLISHING WATER SERVICE

When water service has been suspended for any violation of the Rules and Regulations of the Utility, such water service shall not be re-established until a reconnection charge of \$50.00 has been paid to the Utility. If reconnection is outside of regular working hours, the charge is \$200.00.

8. CONNECTION FEE

The Utility shall charge a \$50.00 fee for the creation of a water account, notwithstanding the fact that no physical disconnection of the system may have occurred.

9. DISCONNECTION FEE

Whenever a customer, for any reason requests that the water be turned off from any premises, a charge of \$50.00 shall be made for turning off the water, and no additional charge shall be made for turning it on again when this is requested unless such request is after regular working hours of the Utility when a fee of \$200.00 shall apply.

10. CHARGE FOR NON-NEGOTIABLE CHEQUES

The Utility may charge a \$20.00 administration fee for cheques that, due to non-negotiability, have been rejected by the Utility's bank.

11. CHARGE FOR MISSED APPOINTMENT BY CUSTOMERS

Where an appointment has been made by a customer to have a water service hooked up or a meter inspected, or water turned on to a property, or other visits to the property for the inception or maintenance of water service 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 the Utility's staff have to return to the property, there may be a charge of \$50.00 for each visit if, in the judgment of the Utility, it is required.

SCHEDULE "B"
TOWN OF ANTIGONISH
WATER UTILITY
SCHEDULE OF RATES FOR WATER AND WATER SERVICES

(Effective for water supplied on and after 1 April, 2015)

RATES

The rates set out below are the rates approved by the Board for water and water services when payment is made within 30 days from the date rendered as shown on the bill.

When payment is made after 30 days from the date rendered as shown on the bill, the rates will include interest charges of 1.5 % per month, or part thereof.

Each bill shall show the amount payable within 30 days from the date rendered as shown on the bill.

In this Schedule, the word "Utility" means the Town of Antigonish Water Utility.

1. **RATES:**

<u>(a) Base Charges</u>	<u>Quarterly</u>	<u>Bi-Monthly</u>
Unmetered (based on 15,000 gallons per quarter)	68.20	
Size of Meter		
5/8"	35.48	
3/4"	51.59	
1"	83.81	
1.5"	164.35	
2"		174.01
3"		345.84
4"		539.15
6"		1,076.13
8"		1,935.29
(b) 1st Block Consumption Rate (per 1,000 imp. gallons)		
1st Block \$ 2.18 per 1,000 imp. gallons		
For the first 750,000 gallons per quarter or 500,000 gallons Bimonthly		
(c) 2nd Block Consumption Rate (per 1,000 imp. gallons)		
2nd Block \$ 1.64 per 1,000 imp. gallons		
For all additional gallons		

- (d) Wholesale Rates for the Municipality of Antigonish County
For water supplied at all metered service points.

County Base Rate	7,309.37	per Month
County Consumption Rate	\$ 1.74	per 1,000 imp. gallons

- (e) Minimum Bill

The minimum bill shall be the Base Charge.

2. PUBLIC FIRE PROTECTION RATE

The Town of Antigonish and the Municipality of the County of Antigonish shall pay to the Water Utility on or before the first day of October, 2015 a total of \$270,245 divided between the County, \$113,461 and the Town, \$156,784.

3. RATES FOR SPRINKLER SERVICE

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

Each building serviced by a sprinkler service pipe of 6" or less in diameter	\$200.00
Each building serviced by a sprinkler service pipe of 8" or more in diameter	\$250.00

4. WATER FOR BUILDINGS OR WORKS UNDER CONSTRUCTION

The Utility may furnish water to any person requiring a supply thereof for the construction of a building or other works. This person shall deposit with the Utility such sum as may be determined by the Utility as is sufficient to defray the cost of making the necessary connection to any water service or main 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 meter to the Utility, a refund will be made after deducting the cost, if any, of repairing the meter and of testing the same and payment of the base and connection charges and the consumption rates in respect to such installation.

5. PRIVATE HYDRANT RATES

Per hydrant per year \$200.00.

6. RATES FOR WATER SUPPLIED FROM FIRE HYDRANTS

Whenever the use of any fire hydrant is desired for supplying water for any purpose, excepting those of the Fire Department for fire use, the Utility may grant a permit containing such terms and conditions as it may provide, including arrangements regarding supervision of the opening and closing of the hydrant, and a service charge for commercial consumers of \$70.00 for connection and disconnection and a consumption charge for the amount of water used, as estimated by the water utility, at meter consumption rates.

7. CHARGES FOR RE-ESTABLISHING WATER SERVICE

When water service has been suspended for any violation of the Rules and Regulations of the Utility, such water service shall not be re-established until a reconnection charge of \$50.00 has been paid to the Utility. If reconnection is outside of regular working hours, the charge is \$200.00.

8. CONNECTION FEE

The Utility shall charge a \$50.00 fee for the creation of a water account, notwithstanding the fact that no physical disconnection of the system may have occurred.

9. DISCONNECTION FEE

Whenever a customer, for any reason requests that the water be turned off from any premises, a charge of \$50.00 shall be made for turning off the water, and no additional charge shall be made for turning it on again when this is requested unless such request is after regular working hours of the Utility when a fee of \$200.00 shall apply.

10. CHARGE FOR NON-NEGOTIABLE CHEQUES

The Utility may charge a \$20.00 administration fee for cheques that, due to non-negotiability, have been rejected by the Utility's bank.

11. CHARGE FOR MISSED APPOINTMENT BY CUSTOMERS

Where an appointment has been made by a customer to have a water service hooked up or a meter inspected, or water turned on to a property, or other visits to the property for the inception or maintenance of water service 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 the Utility's staff have to return to the property, there may be a charge of \$50.00 for each visit if, in the judgment of the Utility, it is required.

SCHEDULE "C"
TOWN OF ANTIGONISH
WATER UTILITY
SCHEDULE OF RATES FOR WATER AND WATER SERVICES

(Effective for water supplied on and after 1 April, 2016)

RATES

The rates set out below are the rates approved by the Board for water and water services when payment is made within 30 days from the date rendered as shown on the bill.

When payment is made after 30 days from the date rendered as shown on the bill, the rates will include interest charges of 1.5 % per month, or part thereof.

Each bill shall show the amount payable within 30 days from the date rendered as shown on the bill.

In this Schedule, the word "Utility" means the Town of Antigonish Water Utility.

1. **RATES:**

<u>(a) Base Charges</u>	<u>Quarterly</u>	<u>Bi-Monthly</u>
Unmetered (based on 15,000 gallons per quarter)	69.84	
Size of Meter		
5/8"	36.20	
3/4"	52.66	
1"	85.59	
1.5"	167.90	
2"		177.78
3"		353.38
4"		550.93
6"		1,099.68
8"		1,977.67
(b) 1st Block Consumption Rate (per 1,000 imp. gallons)		
1st Block \$ 2.24 per 1,000 imp. gallons		
For the first 750,000 gallons per quarter or 500,000 gallons Bimonthly		
(c) 2nd Block Consumption Rate (per 1,000 imp. gallons)		
2nd Block \$ 1.69 per 1,000 imp. gallons		
For all additional gallons		

- (d) Wholesale Rates for the Municipality of Antigonish County
For water supplied at all metered service points.

County Base Rate		7,446.83	per Month
County Consumption Rate	\$	1.77	per 1,000 imp. gallons

(e) Minimum Bill

The minimum bill shall be the Base Charge.

2. PUBLIC FIRE PROTECTION RATE

The Town of Antigonish and the Municipality of the County of Antigonish shall pay to the Water Utility on or before the first day of October, 2016 a total of \$277,276 divided between the County, \$116,413 and the Town, \$160,863.

OR

- a) The sum of 32.4% of transmission and distribution, depreciation, taxes expenses of the Utility and return on rate base of the immediately preceding year, plus
- b) 10% of all other expenses.
- c) The Sum to be divided between the Town and the County on the basis of the County paying 42.0% of the amount calculated and the Town paying 58.0% of the amount calculated.
- d) The payment shall be made on or before the first day of October in all subsequent years.

whichever is greater.

3. RATES FOR SPRINKLER SERVICE

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

Each building serviced by a sprinkler service pipe of 6" or less in diameter	\$200.00
Each building serviced by a sprinkler service pipe of 8" or more in diameter	\$250.00

4. WATER FOR BUILDINGS OR WORKS UNDER CONSTRUCTION

The Utility may furnish water to any person requiring a supply thereof for the construction of a building or other works. This person shall deposit with the Utility such sum as may be determined by the Utility as is sufficient to defray the cost of making the necessary connection to any water service or main 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 meter to the Utility, a refund will be made after deducting the cost, if any, of repairing the meter and of testing the same and payment of the base and connection charges and the consumption rates in respect to such installation.

5. PRIVATE HYDRANT RATES

Per hydrant per year \$200.00.

6. RATES FOR WATER SUPPLIED FROM FIRE HYDRANTS

Whenever the use of any fire hydrant is desired for supplying water for any purpose, excepting those of the Fire Department for fire use, the Utility may grant a permit containing such terms and conditions as it may provide, including arrangements regarding supervision of the opening and closing of the hydrant, and a service charge for commercial consumers of \$70.00 for connection and disconnection and a consumption charge for the amount of water used, as estimated by the water utility, at meter consumption rates.

7. CHARGES FOR RE-ESTABLISHING WATER SERVICE

When water service has been suspended for any violation of the Rules and Regulations of the Utility, such water service shall not be re-established until a reconnection charge of \$50.00 has been paid to the Utility. If reconnection is outside of regular working hours, the charge is \$200.00.

8. CONNECTION FEE

The Utility shall charge a \$50.00 fee for the creation of a water account, notwithstanding the fact that no physical disconnection of the system may have occurred.

9. DISCONNECTION FEE

Whenever a customer, for any reason requests that the water be turned off from any premises, a charge of \$50.00 shall be made for turning off the water, and no additional charge shall be made for turning it on again when this is requested unless such request is after regular working hours of the Utility when a fee of \$200.00 shall apply.

10. CHARGE FOR NON-NEGOTIABLE CHEQUES

The Utility may charge a \$20.00 administration fee for cheques that, due to non-negotiability, have been rejected by the Utility's bank.

11. CHARGE FOR MISSED APPOINTMENT BY CUSTOMERS

Where an appointment has been made by a customer to have a water service hooked up or a meter inspected, or water turned on to a property, or other visits to the property for the inception or maintenance of water service 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 the Utility's staff have to return to the property, there may be a charge of \$50.00 for each visit if, in the judgment of the Utility, it is required.

SCHEDULE D
RULES AND REGULATIONS

ANTIGONISH WATER UTILITY

**SCHEDULE OF RULES AND REGULATIONS
GOVERNING THE SUPPLY OF WATER AND WATER SERVICES
(Effective 1 April, 2014)**

- 1) In these Rules and regulations, unless the context otherwise requires, the expression:

“Town” means the Town of Antigonish

“Utility” means the Antigonish Water Utility.

“County” means the Municipality of the County of Antigonish

“Customer” means a person, a property owner, firm or corporation who, or which, contracts to be supplied with water at a specific location or locations.

“Metered Rate Service” means that type of service charged for at metered rates. Metered rate service is required for all new services.

- 2) **LIABILITY FOR PAYMENT OF WATER BILL:** An agreement is deemed to exist between a customer and the Utility for the supply of water service at such rates and in accordance with these Regulations by virtue of:

- a) the customer applying for and receiving approval for water service;
- b) the customer consuming or paying for water service from the date that the customer who is a party to an agreement pursuant to clause (a) (the customer of record) moves out of the premises, in which case the customer of record shall remain jointly and severally liable for the water service account up to the date the Utility is notified that the customer of record wishes to terminate the supply of water service.

At the discretion of the Utility, a property owner who rents or leases a property or self contained unit to a tenant or lessee may be required to open an account for the provision of water at the property rented or leased.

- c) Any person, business or corporation that receives water service without the consent of the Utility, shall be liable for the cost of such water service which cost shall be determined in the sole discretion of the Utility based upon its reasonable estimate of the amount of water utilized.
- d) Where service is supplied to a condominium unit, the Condominium Corporation in which the unit is situated shall be deemed to be the customer of record and shall be liable for payment of the service bill for the condominium unit.

- 3) **DEPOSITS:** When required, an applicant for service shall deposit with the Utility a sum equal to the previous year's average bill for the meter size for such service for a period of three months, or such lesser amount as the Utility may demand (a minimum of \$50.00). This deposit shall be held by the Utility as collateral security for the payment of the customer's bills, but is not to be considered as a payment on account thereof. When the customer ceases to use the service and discharges all their liability to the Utility in respect of such service, the deposit shall be returned to him with interest based on 2% per annum, not compounded.
- 4) **REFUSAL OF SERVICE:** Service may be refused or suspended to any customer who has failed to discharge all of his liabilities to the Utility.
- 5) **BILLING:** If a contract is entered into or terminated at any time other than a regular billing date, the amount to be charged to the customer shall be the pro rata proportion to the next billing date, of the regular service charge for the billing period, plus the consumption charge, if any.
- 6) **PAYMENT OF BILLS:** Bills shall be rendered to each customer at intervals of either bi-monthly for meter sizes 2 inches or larger or approximately three months (quarterly) for meter sizes up to and including 1 ½ inch. Bills are due on the billing date and bills not paid within thirty days after the billing date shall be subject to the interest charge as set out in the Schedule of Rates and Charges.
- 7) **ESTIMATED READINGS FOR BILLING PURPOSES - METERED CUSTOMERS:** If the Utility is unable to obtain a meter reading for billing purposes, after exercising due diligence in the usual practice of meter reading, the bill for that service shall be estimated in accordance with the best data available, subject, however, to the provision that in no circumstance will an estimated reading be used for more than two (2) consecutive billing periods. If an estimated bill is rendered for two (2) consecutive billing periods, the Utility shall notify the customer by regular mail that arrangements must be made for the Utility to obtain a reading and failing such arrangements, the Utility may suspend service until such arrangements are made. When such meter reading has been obtained the previous estimated bill or bills shall be adjusted accordingly.
- 8) **ADJUSTMENT OF BILLS:**
 - (a) Where meters exist - If the seal of a meter is broken or if a meter does not register correctly, the bill for that water service shall be estimated in accordance with the best data available. Any customer desiring to question a water bill must do so in writing within 30 days of the bill being rendered.
 - (b) Customers Under billed - Should it be necessary for the Utility to make a billing adjustment as a result of a customer being under billed for any reason, such adjustment shall be retroactive for a maximum of four billing periods or one year, whichever is the longest. Notwithstanding the above, in the event that a billing adjustment is the result of the customer's illegal connection to the water system or willful interference or damage of metering equipment (where they exist), the billing adjustment in such circumstances will

not be limited to one year or four billing periods, but rather the customer shall be responsible for all payments of such accounts from the date such illegal connection or interference to meter equipment took place.

- (c) Customer Over billed - Should it become necessary for the Utility to make a billing adjustment as a result of a customer being over billed for any reason, such adjustment will be estimated by the Utility, and the Utility will be responsible for payment of the over billed amount with interest calculated on the basis of current simple interest paid by the bank.
- 9) **SUSPENSION OF SERVICE FOR NON PAYMENT BILLS:** The Utility shall have the right to enter onto customers' premises within reasonable hours to suspend service to customers whose bills remain unpaid for more than forty calendar days after the date rendered. The customer shall pay the reconnection fee as set out in the Schedule of Rates and Charges for Re-establishing Water Service after each suspension. Service suspension can be delayed if approved payment arrangements have been made and the customer is in compliance with arrangements.
- 10) **METER READING:** In the case of Metered Service Customers who are billed quarterly, meters shall be read in at least two of the four quarters, normally, the second and fourth, and, subject to Regulation 7, each billing for these quarters shall be based upon the meter reading with adjustment for any earlier estimated reading. The Utility may, at its option, estimate the readings in the alternate quarters based on the actual consumption from the previous quarter. In the case of Metered Service Customers who are billed bi-monthly, meters shall be read bi-monthly.
- 11) **WATER TO BE SUPPLIED BY METER:** Except where water is used for construction purposes from a hydrant under the supervision of the Utility and except as in these regulations otherwise provided, all services other than those used exclusively for fire protection shall be metered. Any building occupied by more than one tenant may have a separate meter with appropriate isolation valves for each tenant. With the Utility's approval, such a building may be serviced by one meter, provided the landlord is the customer. The Utility shall determine the size and type of meter to be installed in each case. All meters shall be the property of the Utility.
- 12) **INSTALLATION AND REMOVAL OF METERS:** Meters shall be installed and removed only by employees of the Utility or duly authorized representatives of the Utility and no other person shall install, alter, change or remove a meter without the written permission of the Utility. The plumbing and connections shall be properly prepared to receive the installation of such meters to the approval of and without expense to the Utility.
- 13) **METER READERS:** Each meter reader shall be provided with an official identification, which he/she shall exhibit on request.
- 14) **REMOTE REGISTERING WATER METERS:** When a remote registering water meter is installed on a customer's premises under a general outside register installation program of the Utility, then the cost of the meter and its installation shall be paid by the Utility. The meter shall become the property of the Utility which shall become responsible for its operation, maintenance and replacement. Any damage to the meter caused by the negligence or wrongful acts or

omissions by the customer, his agents or members of his family, shall be paid for by the customer, and the failure by the customer to make the payment shall entitle the Utility, after making a forty day written demand for the payment, to disconnect the water service to the customer.

- 15) **DAMAGE TO WATER METERS:** Each customer shall be responsible for the meter installed on his service and shall protect it. He shall be liable for any damage to the meter resulting from carelessness, hot water or steam, or the action of frost or from any other cause not the fault of the Utility or its employees. The cost to the Utility occasioned by such damage to the meter shall be paid by the customer. If after the rendering of a bill by the Utility to the customer for such cost the same is not paid within 40 days from the date rendered, the supply of water to the customer concerned may be suspended until all charges are paid.
- 16) **METER TESTING.** On the request to have their meter tested, the Utility may charge the sum of \$100.00 to defray, in part, the cost of making the test for meters up to 1 inch in size. In the case of meters 1-1/2 inches and larger, the actual cost of the test will be paid by the customer. If the test shows that the meter is over registering by more than one and one half percent (1 ½%) for positive displacement meters and three percent (3%) for turbine or compound meters, the sum so deposited will be refunded to the customer.
- 17) **PLUMBING TO BE SATISFACTORY:** All plumbing, pipes and fittings, fixtures, and other devices for conveying, distributing, controlling, or utilizing water which are used by a customer and are not the property of the Utility, shall be installed in the manner provided by the Regulations of and be approved by the proper official of the Municipality and/or the operators of the Utility. The water shall not be turned on (except for construction or testing purposes) until the applicant for service has satisfied the Utility that these requirements have been met. The supply of water may be discontinued to any customer at any time if, in the opinion of the proper official of the Municipality and/or the operator of the Utility, the plumbing, pipes, fittings, fixtures, or other devices as hereinbefore mentioned, or any of them, fail to comply with the above requirements, or if any part of the water system of such customer or the meter is in any unsuitable, dirty, unsanitary or inaccessible place. Service shall not be re-established until such condition is corrected to the satisfaction of the Utility.
- 18) **DANGEROUS CONNECTIONS:** No connection shall be permitted to any installation; equipment or source in such a manner as may allow any contamination to pass from such installation, equipment or source into the Utility's water supply system. If any such connection exists the Utility may discontinue the supply of water to such customer.
- 19) **PROHIBITED DEVICES:** Service may be refused or suspended by the Utility to any customer who installs or uses any device or appurtenance, as, for example, booster pumps, quick-opening or quick-closing valves, flushometers, water operated pumps or siphons, standpipes, or large outlets, which may occasion sudden large demands of short or long duration, thereby requiring oversize meters and pipe lines, or affect the stability or regulation of water pressure in the Utility's system. Permission to install or use any such device or appurtenance must be obtained from the Utility, which permission shall specify what special arrangements, such as elevated storage tanks, surge tanks or equalizing tanks, etc., must be provided by the customer.

20) **IMPROPER USE OR WASTE OF WATER:** No customer shall permit the improper use or waste of water, such as providing water to more than one single family dwelling and /or apartment building from a single service, nor shall he sell or give water to any person except upon such conditions and for such purposes as may be approved in writing by the Utility.

21) **SERVICE PIPES:** Upon receipt of an application for service to any premises located on any portion of a street through which portion a main water pipe is laid and which premises are not already provided with water service, the Utility shall install a service pipe which it considers to be of suitable size and capacity from the water main to the street line. No pipe smaller than 3/4" in (19 mm) diameter shall be laid for any service.

The necessary excavation for the laying of the service pipe, backfilling and replacement of the street and sidewalk surfaces from the water main in the street to the street line, including supplying and laying a service pipe and fittings between the main pipe and the street line shall be the responsibility of the Utility. A service box (standpipe) and curb stop valve shall be installed at the property line by the Utility. The cost of supplying and installing the water pipe from the street line to the premises including all excavation, backfilling and surface restoration shall be paid for by the customer.

For water service pipes larger than 3/4", the cost shall be borne by the customer, less the cost of the 3/4" service pipe and trench from the main in the street to the street line.

Should any person make application for more than one service to his premises, the decision as to the necessity of the additional service shall be made by the Utility, and if the additional service is installed, the total cost thereof from the main to the customer's premises shall be paid by such applicant.

All services must be installed in accordance to the satisfaction of the Utility. The excavation may be the same excavation as is used for the sewer service pipe or, if minimum horizontal and vertical separation between the water and sewer pipes cannot be obtained, a separate excavation for the water service pipe shall be required.

When a service has been installed without objection from the customer as to the location of the same, any subsequent removal of or alteration to the position of the pipe shall be made except at the expense of the customer requesting such removal or alteration.

22) **REPAIRS TO SERVICES:** If a leak or other trouble occurs it shall be repaired as soon as possible. If the leak or trouble occurs in a service line providing non-fire protection water supplies between the main and the street line it shall be repaired by the Utility at its expense. If the leak or trouble occurs elsewhere in a service line providing non-fire protection water supplies, it shall be repaired by the customer at their expense.

If the leak or trouble occurs in a service line which provides private fire protection services (sprinkler or hydrant) it shall be repaired by the customer at his expense.

The Utility may make such repairs for any customer provided the customer agrees to pay the cost of same. When required, each customer desiring the Utility to do such work shall deposit with the Utility a sum equal to the estimated cost of the work.

If a leak occurs on the customer's portion of their service pipe and, after being notified of same, they refuse or unduly delay to have repairs made, the Utility may discontinue the supply of water to such service pipe if, in its opinion, such action is necessary in order to prevent wastage of water. The Utility shall notify the customer affected of its intention to discontinue such supply.

- 23) **SPRINKLER SERVICE MAINS AND HYDRANT SYSTEM:** The customer shall be responsible for the cost of installing and maintaining a sprinkler service pipe from the main in the street to the building. It shall include a proper size control valve so that the service may be shut off if necessary. If requested by the applicant, a domestic service pipe may be connected to the sprinkler service pipe, but only if it is connected outside the building foundation wall and is provided with an approved shutoff valve located outside the building to permit control of the domestic service pipe without the necessity to enter the building. Before any domestic service pipe is connected to a sprinkler service pipe, the applicant must obtain approval from the appropriate authority and provide the Utility with a certified copy of such approval. The Utility shall supervise the installation of same. When the private fire protection system includes private hydrants, these hydrants must be flushed during the Utility's regular flushing periods, under the supervision of the Utility's personnel. These hydrants shall be maintained in a manner, or on a regular basis as approved by the Utility. Fire protection lines within buildings shall be so installed that all pipes will be open and readily accessible for inspection at any time and no connection other than for fire protection shall be made thereto.

The location and spacing of hydrants in new construction shall be installed in accordance with the Antigonish Water Utility requirements.

- 24) **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. Any unauthorized connection shall be subject to removal by the Utility. The cost of the removal including labour and materials and an estimate of the water used together with a \$200 service charge shall be paid by those who made the unauthorized connection.
- 25) **ACCESS TO CUSTOMER'S PREMISES:** Representatives of the Utility shall have right of access to all parts of a customer's property or premises at all reasonable hours for the purpose of inspecting any water pipes or fittings, or appliances, or discontinuing service, or for the purpose of installing, removing, repairing, reading or inspecting meters. The Utility shall have the right to suspend service to any customer who refuses such access.
- 26) **LOCATION OF METERS:** The Utility shall have the right to refuse service to, or suspend the service of, any customer who does not provide a place which, in the opinion of the Utility, is suitable for the meter. It should be in the building served, at or near the point of entry of the service pipe, in a place where it can be easily read and exchanged and where it will not be

exposed to freezing temperatures.

Where the premises of a customer are of such a nature that a meter cannot be properly installed in a building or if the building is not sufficiently frost-proof as to guarantee the safety of the meter, the Utility may order the construction of a suitable frost-proof box in which the meter can be installed. Service to such premises may be refused or suspended until such a frost-proof box approved by the Utility is installed.

27) CROSS CONNECTION CONTROL & BACKFLOW PREVENTION:

(a) No owner, consumer, customer or other person hereinafter collectively referred to in this rule and regulation as “person” shall connect, cause to be connected, or allow to remain connected to the water system, or plumbing installation, without the express written consent of the Utility, any piping fixtures, fittings container or appliance in a manner which, under any circumstances, may allow water, wastewater, or any other liquid, chemical or substance, to ingress or egress the water system.

(b) Where, in the opinion of the Utility, there may be a risk of contamination to the potable water system, notwithstanding the provisions of subparagraph (a), the Utility may require the customer, at the customers sole cost and expense, to install at any point on the customers water service connection or water service pipe, one or more backflow prevention (BFP) devices, which devices shall be of a quality and type approved by the Utility.

(c) All BFP devices shall be maintained in good working order. Such devices must be inspected and tested by a certified tester, approved by the Utility, at the expense of the customer. Such inspections shall take place upon installation, and thereafter annually, or more often if required by the Utility. The customer shall submit a report in a form approved by the Utility on any or all tests performed on a BFP device within 30 days of a test. A record card shall be displayed on or adjacent to the BFP device on which the tester shall record the name and address of the owner of the device; the location, type, manufacturer, serial number and size of the device; and the test date, the tester’s initials, the tester’s name, the name of his employer, and the tester’s license number.

(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, minimum insurance requirements, fees and administrative procedures.

(e) Installation, maintenance, field-testing and selection of all BFP devices shall fully conform to the latest revision of CSA B64.10 and CSA B64 series.

(f) In the event of any breach, contravention or non-compliance by a person of any of the provision and regulations in a sub-paragraphs (a),(b),(c) or (d) the Utility may:

(i) suspend water service to such person, or

(ii) give notice to the person to correct the breach, contravention or non-compliance

within 96 hours, or a specified lesser period. If the person fails to comply with such notice, the Utility may immediately thereafter suspend water service to such person.

- 28) **ALTERNATE WATER SUPPLY PROHIBITED:** Connection of any customer's installation served by the Utility to any other source of water supply is prohibited. Failure to comply with this regulation shall entitle the Utility to suspend the service.
- 29) **DEPOSITS IN ADVANCE:** Whenever a customer requests the Utility to do work for which he/she is required to pay and the Utility agrees to do the work, he/she 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 or execute an agreement to pay the actual cost. When the actual cost is determined, an adjustment in the payment shall be made. Water service shall not be established by the Utility until all charges are paid in full. Installations shall be made in accordance with the Antigonish Water Utility specifications and be subject to inspection by the Utility's Staff prior to water service being made available.
- 30) **SEASON FOR LAYING PIPES:** The Utility shall not be required to lay any pipe at any season of the year or at any time which, in its opinion, is not suitable.
- 31) **PRIVATE FIRE PROTECTION:** Fire protection lines within buildings shall be installed so that all pipes will be open and readily accessible for inspection at any time, and no connection for any purpose other than fire protection shall be made thereto. Unless approved by the Utility in writing, no fire protection line shall be connected in any way to a metered service. Responsibility for the installation, maintenance of any and all privately owned fire protections systems, including fire protection lines, sprinkler systems and hydrants shall be the responsibility of the owner.
- 32) **RESELLING OF WATER:** It is prohibited for a customer of the Utility to resell water to others, without the express written consent of the Utility. In the event that a customer is reselling water to others, without prior approval by the Utility, the Utility may suspend service to the premises until such time as the activity ceases or approval to resell is granted.
- 33) **LIABILITY OF UTILITY:** The Utility shall not be deemed to guarantee an uninterrupted supply or a sufficient or uniform pressure and shall not be liable for any damage or injury caused or done by reason of the interruption of supply, variation of pressure or on account of the turning off or turning on of the water for any purpose.
- 34) **INTERFERENCE WITH UTILITY PROPERTY:** No person, unless authorized by the Utility in writing, shall draw water from, open, close, cut, break, or in any way injure or interfere with any fire hydrant, water main, water pipe, or any property of the Utility or obstruct the free access to any hydrant, stop cock, meter, building, etc., provided, however, that nothing in this paragraph contained shall be deemed to prevent an officer or member of the Fire Department engaged in the work of such Department, from using any hydrant or other source of water supply designated by the Utility for fire protection purposes.

- 35) **SUSPENDING SERVICE FOR VIOLATION:** Whenever, in the opinion of the Utility, violation of any of these Rules and Regulations is existing or has occurred, the Utility may cause the water service to be suspended from the premises where such violation has occurred or is existing and may keep the same so suspended until satisfied that the cause for such action has been removed.
- 36) **RESUMPTION OF SERVICE:** In all cases where water service has been suspended for violation of any of these rules, service shall not be restored until the cause for violation has been removed.
- 37) **PRESSURE REDUCING VALVES:** 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 time.
- 38) **PRESSURE RELIEF VALVES:** Whenever a pressure reducing valve has been installed by a customer in accordance with Regulation 37, the customer shall, for his own safety and protection, install on his 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.
- 39) **UNMETERED RATE TO THE MUNICIPALITY OF THE COUNTY OF ANTIGONISH:** For unmetered (meter by-pass) service to the Municipality of the County of Antigonish , a consumption rate identical to the first block for Town customers shall be used. The Utility shall establish the amount of the unmetered water.
- 40) **WATER CONSERVATION DIRECTIVES:** The Utility may issue conservation of water directives to its customers, if in the opinion of the Utility, such directives are required to permit the Utility to provide reliable continuous water service to all customers served by the Utility. During such times as these directives are in force, customers who do not comply with the directives may have their water service suspended until such time as they agree to comply with the directive or upon suspension of the water conservation directive, whichever occurs first. Such customers shall be required to pay the Charge for Re-establishing Water Service as laid out in the approved Schedule of Rates for the Utility.
- 41) **REQUESTS FOR EXTENIONS OF SERVICE:** The Utility has no obligation to extend water service into areas with no water service. Requests for such extensions will be reviewed by the Utility on a case by case basis.