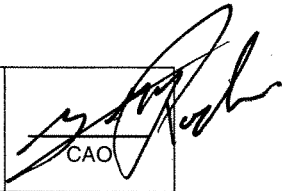


COUNCIL AGENDA/INFORMATION		
<input type="checkbox"/> Closed	Date: _____	Item # _____
<input checked="" type="checkbox"/> Reg. Council	Date: Dec 14, 2009	Item # 8
<input type="checkbox"/> Supplemental	Date: _____	Item # _____

RF	
Director	CAO

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DISTRICT OF WEST VANCOUVER  
750 - 17<sup>TH</sup> STREET, WEST VANCOUVER, BC V7V 3T3

## COUNCIL REPORT

Date: November 23, 2009 File: 1815-19  
From: Phil Bates, Manager, Engineering Services  
Subject: **Water Utility Fees for 2010**

### RECOMMENDED THAT:

1. Water Utility fees be increased for 2010 to the amounts set out in Schedule A of Bylaw No. 4622 as attached;
2. "Waterworks Regulation Bylaw No. 4490, 2006, Amendment Bylaw No. 4622, 2009" be introduced and read a first, second and third time.

### Purpose

This report presents information in support of proposed Water Utility fee adjustments and details the recommended increases for 2010.

### 1.0 Background

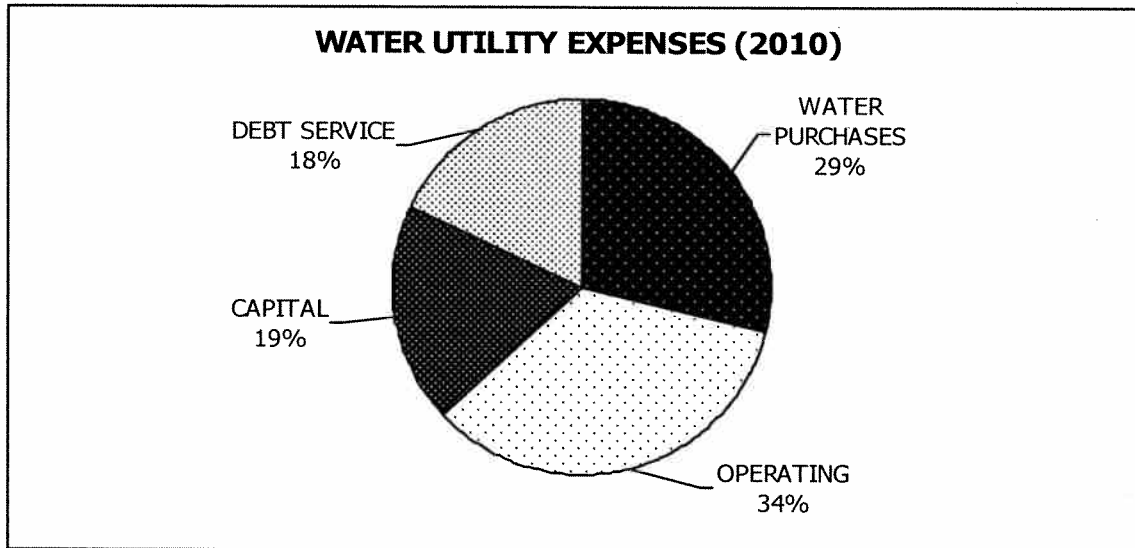
Water Utility fees support the production and delivery of potable water to all residents and businesses within the municipality. The costs for providing this service can be broken down into four main areas:

- Purchase of potable water from Metro Vancouver (MV);
- Operation and maintenance of the Eagle Lake and Montizambert supply systems (dams, intakes, pumps, pipelines, treatment plants, chlorination stations, etc.);
- Operation and maintenance of the distribution system (storage tanks, pump stations, valves, mains, etc.) and;
- Renewal of the supply and distribution systems.

Historically the Water Utility has predominantly operated under a pay-as-you-go policy. All costs attributable to the production and delivery of potable water are borne by the utility and paid for in the year that they occur. The exceptions to this policy are the

investments made in universal metering and the development of Eagle Lake water source.

The proposed Water Utility expenses for 2010 are shown in the following chart



Currently the Water Utility maintains a reserve of approximately \$2.7 million; a reserve is intended to address the impact of fluctuations in revenue, to accommodate unanticipated emergency repairs, to smooth out rate increase peaks, and to provide available funding to leverage opportunities, such as the current Build Canada grant project.

## 2.0 Discussion

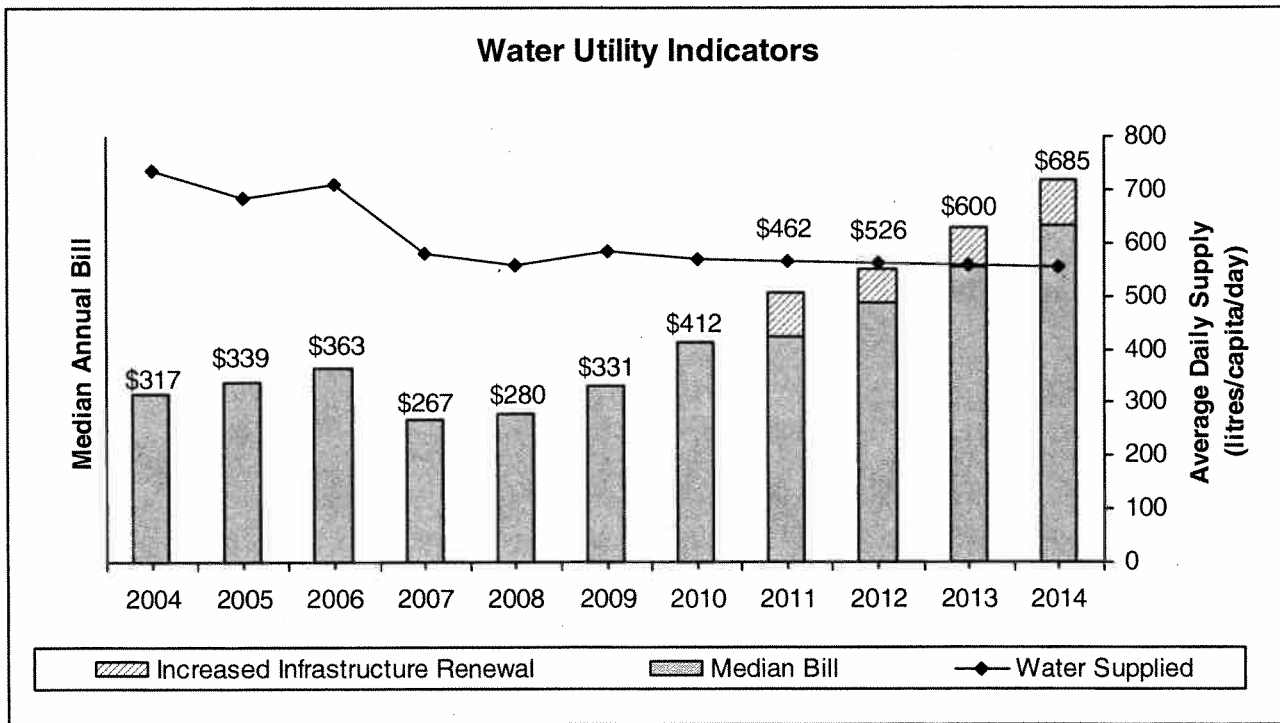
### *Eagle Lake Development (Progress & Indicators)*

The Eagle Lake water source was developed over a series of years culminating in the commissioning of the membrane filtration plant in 2008. Approximately \$20 Million has been invested to date in the Eagle Lake Development Plan, in part to offset the rising costs of water purchases from MV, but also to enhance the District's capability to be self-sufficient and redundant in its water supply. The plant currently supplies approximately 40% of the municipality's water at a unit cost below that available from MV. By 2014, use of the water source at Eagle Lake is expected to save the District approximately \$800,000 annually when compared to purchasing the equivalent amount of water at MV rates. Once the debt associated with the construction of the plant has been retired, these savings will increase. A program to optimize use of Eagle Lake water and to reduce pumping costs will also increase the anticipated savings.

**Universal Metering (Progress & Indicators)**

While the first residential water meter was installed in 1985, mandatory universal metering of all properties began in 2006 with a major investment of \$5,800,000. The District began billing all consumers for water consumption under a full user-pay system on January 1, 2007. The Universal Metering Project was implemented to provide equity amongst customers, to promote water conservation, and to enhance the ability to detect leaks. Charging based on an escalating tariff structure and the actual volume consumed has resulted in an environment that is both equitable and one that rewards conservation efforts.

The graph below depicts potable water flow (represented by the average daily per capita supplied), and the annual single family median consumer bill.



Between 2004 and 2009 total water consumption decreased by 21% with the largest reductions occurring during 2006 and 2007 due to the identification and repair of leaks following implementation of universal metering. It should also be noted that in the three years since the metered rate structure was implemented, the median single family user has had a lower Water Utility bill than the previous flat rate last levied in 2006.

**Significant Contributors for 2010 and Long Term Revenue Requirements**

- **MV Rate Increases:** The increase to the regional bulk water rate is 11.9% in 2010.

- **Build Canada Fund - Montizambert Creek Water Treatment Plant:** West Vancouver has maintained a water supply drawing from Montizambert Creek since 1966. With the new drinking water regulations outlined by the *Drinking Water Protection Act* and *Drinking Water Protection Regulation*, the primary chlorination alone no longer meets the present day standards. The District was awarded a Build Canada Grant from the Federal and Provincial governments to construct a water filtration plant to bring the Montizambert supply up to standards similar to that of the Eagle Lake supply. The total investment will be \$2,615,100 of which one third of the funding is the responsibility of the District.
- **Long Range Infrastructure Renewal:** The District recently engaged AECOM to conduct a series of infrastructure management planning studies to assess the long range implications of infrastructure renewal for the potable water, sanitary sewage, and storm drainage systems. These studies are currently underway and the preliminary results suggest substantial financial challenges when compared with current funding levels. Taking a long range view allows staff to address the need to renew the system in a proactive manner and limit the potential for capital requirements to suddenly overcome the ability of residents to pay. The effect of this "Infrastructure Renewal Funding Gap" has been built into the Five Year Financial Plan being proposed. It is noted that staff will be implementing a public consultation strategy in 2010 to engage residents regarding infrastructure issues prior to incorporating infrastructure renewal needs starting in 2011.

### ***Financial Projection for 2009***

Attached as Schedule "A" are **Water Utility Operating Projections for 2009** (Appendix A). There is a projected surplus of some \$425,300 which is higher than the budgeted amount of \$243,811. This is primarily due to a dry summer season, which resulted in higher than expected water consumption revenues.

### ***Five Year Financial Plan (2010-2015)***

**The Water Utility 5 Year Financial Plan (2010-2015) is attached as Schedule "B"** (Appendix B). This five year plan incorporates the following assumptions:

- Continuing water conservation reductions of approximately 3% per annum and maximization of water from our Eagle Lake source;
- The latest MV bulk water rate increases, currently set at 11.9%, 17.4%, 9.7%, 9.5% and 6.6% for the next five years;
- Operation and maintenance costs of the supply and distribution system.
- Renewal costs of the supply and distribution system; and
- A gradual increase of the Water Utility capital program to address the municipality's infrastructure renewal funding gap starting in 2011.

The financial impacts associated with the following factors are not yet known and thus have not been included:

- Renewal/Rehabilitation costs associated with aging MV infrastructure; and
- Possible future MV rate reductions resulting from potential legal settlements between MV and contractors involved with the Seymour/Capilano Water Filtration Project.

The revenue increases anticipated for the 2011-2015 budget years have been projected to be 14% for each year. These estimates are subject to change primarily based on the finalization of the asset management studies, future changes to the GVWD bulk water rate, and the potential to increase usage of Eagle Lake water within the District.

This version of the financial plan requires a 2010 utility rate revenue increase of 14%. This overall rate revenue increase results in annual charges of \$412.21 for a median single family consumer. This represents an increase of 25% over the \$331.05 charged in 2009 (net of discount).

Due to the metered rate structure and the unique nature of water usage patterns, specific individual customer impacts cannot be estimated. Users have the ability to control the relative size of their bill by implementing conservation measures to reduce their consumption.

### ***Additional Bylaw Amendments***

A number of amendments to the Waterworks Regulation Bylaw are proposed which provide clarification surrounding the District's leak adjustment policy, and the addition of a \$75.00 dollar fee for resident requested service calls related to inspection, leak testing, or meter reading.


### **3.0 Recommendation**

Staff recommend an overall rate revenue increase of 14% be approved for 2010. This overall rate revenue increase results in quarterly charges for single family, multi-family, and commercial class users, as specified in Schedule A of Waterworks Regulation Bylaw No. 4490, 2006, Amendment Bylaw No. 4622, 2009.

Author:

  
\_\_\_\_\_  
Phil Bates, Manager, Engineering Services

Concurrence:

  
\_\_\_\_\_  
Richard Laing, Director, Financial Services

Date: November 23, 2009  
From: Phil Bates, Manager, Engineering Services  
Subject: **Water Utility Fees for 2010**

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**Appendices:**

Appendix A, Schedule "A" - Water Utility Operating Projections for 2009

Appendix B, Schedule "B" - Water Utility 5 Year Financial Plan (2010-2015)

Appendix C, Waterworks Regulation Bylaw No. 4490, 2006, Amendment Bylaw No. 4622, 2009

**DISTRICT OF WEST VANCOUVER**WATER UTILITY FUND  
2009**SCHEDULE A****WATER UTILITY - OPERATING PROJECTIONS FOR 2009**

The Water Utility continues to effectively manage the operational requirements and the 2009 capital program. A significant project that has been completed both on time and under budget is the replacement of the Bonnymuir & Craigmohr Reservoirs. However, the District's aging infrastructure continues to place a strain on the Water Utility's operations budget due to a large number of water main breaks and service repairs. Staff have also begun work on a comprehensive asset management plan in order to predict future resource requirements and to effectively manage the infrastructure.

**FINANCIAL INFORMATION - WATER UTILITY**

	2009			
	Annual Budget	Year End Forecast	% YE	
<b>REVENUES</b>				
Utility Billings	7,149,100	7,738,100	108.2%	<b>1</b>
MicroPower Generation	85,000	42,500	50.0%	<b>2</b>
Debt Proceeds	2,440,000	1,600,000	65.6%	<b>3</b>
	<u>9,674,100</u>	<u>9,380,600</u>	<u>97.0%</u>	
<b>EXPENDITURE</b>				
Water Purchases	2,070,700	2,390,000	115.4%	<b>4</b>
Debt Service	858,400	858,400	100.0%	
Operations & Maintenance	3,111,200	3,206,000	103.0%	<b>5</b>
	<u>6,040,300</u>	<u>6,454,400</u>	<u>106.9%</u>	
Capital Program				
System Rehabilitation	950,000	900,900	94.8%	<b>6</b>
Eagle Lake Development Plan	2,440,000	1,600,000	65.6%	<b>7</b>
	<u>3,390,000</u>	<u>2,500,900</u>	<u>73.8%</u>	
	<u>9,430,300</u>	<u>8,955,300</u>	<u>95.0%</u>	
Net Revenue	<u>243,800</u>	<u>425,300</u>		
Utility Reserve				
Surplus - Opening Balance	2,495,753	2,495,755		
Surplus - Closing Balance	<u>2,739,553</u>	<u>2,921,055</u>		

**VARIANCE NOTES - WATER UTILITY**

- |   |  |
|---|--|
| <b>1</b> Utility Billings                 | Increased water consumption due to dry summer has resulted in additional revenue.  |
| <b>2</b> MicroPower Generation            | One time revenue received in 2008 was included in the base level budget, will be adjusted in 2010.   |
| <b>3</b> Debt Proceeds                    | Efficiencies in the construction of the Bonnymuir & Craigmohr Reservoirs resulted in savings, and as this project is debt funded, proceeds have been reduced to match.                           |
| <b>4</b> Water Purchases                  | Increased water consumption due to dry summer has resulted in the need to purchase additional water from Metro Vancouver to meet peak demands.   |
| <b>5</b> Operations and Maintenance       | A number of significant water main breaks have been experienced, including a large incident off Madrona Crescent, which alone incurred rehabilitation costs estimated at approximately \$80,000. |
| <b>6</b> Capital - System Rehabilitation  | Regular Capital projects have been adjusted to offset the costs associated with the Madrona water main break.  |
| <b>7</b> Capital - Eagle Lake Development | Efficiencies in the construction of the Bonnymuir & Craigmohr Reservoirs resulted in savings, and as this project is debt funded, proceeds have been reduced to match.                           |

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**District of West Vancouver  
Water Utility - 5 Year Financial Plan  
Summary**

**SCHEDULE B**

Revenue Requirements	2009 (FC)	2010	2011	2012	2013	2014
	FORECAST	PROPOSED	PROPOSED	PROPOSED	PROPOSED	PROPOSED
<b>Revenues</b>						
Utility Fee Revenue	\$ 7,158,100	\$ 8,124,400	\$ 9,221,200	\$ 10,466,100	\$ 11,879,000	\$ 13,482,700
Meter Rental Charges	\$ 580,000	\$ 580,000	\$ 580,000	\$ 580,000	\$ 580,000	\$ 580,000
Micro Power Generation	\$ 42,500	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000
Federa/Provincial Infrastructure Grants	\$ -	\$ 1,400,000	\$ 340,000	\$ -	\$ -	\$ -
Other Revenue	\$ -	\$ 28,000	\$ -	\$ -	\$ -	\$ -
<b>Total Revenues</b>	<b>\$ 7,780,600</b>	<b>\$ 10,167,400</b>	<b>\$ 10,176,200</b>	<b>\$ 11,081,100</b>	<b>\$ 12,494,000</b>	<b>\$ 14,097,700</b>
<b>Expenses</b>						
Operating Expenses	\$ 5,596,000	\$ 5,770,800	\$ 6,416,700	\$ 6,794,400	\$ 7,196,800	\$ 7,525,600
Debt Service	\$ 858,400	\$ 1,629,900	\$ 1,871,400	\$ 2,130,700	\$ 2,135,700	\$ 2,140,700
Capital Improvement Program	\$ 900,900	\$ 1,028,000	\$ 1,588,000	\$ 2,148,000	\$ 2,708,000	\$ 3,268,000
Montizambert Treatment Plant	\$ -	\$ 2,100,000	\$ 510,000	\$ -	\$ -	\$ -
<b>Total Expenses</b>	<b>\$ 7,355,300</b>	<b>\$ 10,528,700</b>	<b>\$ 10,386,100</b>	<b>\$ 11,073,100</b>	<b>\$ 12,040,500</b>	<b>\$ 12,934,300</b>
<b>FINAL NET REVENUE</b>	<b>\$ 425,300</b>	<b>\$ (361,300)</b>	<b>\$ (209,900)</b>	<b>\$ 8,000</b>	<b>\$ 453,500</b>	<b>\$ 1,163,400</b>
<b>Annual Rate Revenue Requirement</b>		<b>14%</b>	<b>14%</b>	<b>14%</b>	<b>14%</b>	<b>14%</b>
<b>Metro Vancouver Rate Increases</b>		<b>11.9%</b>	<b>17.4%</b>	<b>9.7%</b>	<b>9.5%</b>	<b>6.6%</b>

Operating Expenses	2009 (FC)	2010	2011	2012	2013	2014
Water Consumed @ GVRD Rate	3,537,400	4,686,500	5,524,000	6,084,000	6,688,700	7,158,600
Less - Water Consumed from Own Sources	(1,622,400)	(2,048,500)	(2,498,500)	(2,765,500)	(3,054,700)	(3,284,900)
<b>Water Purchased from GVRD</b>	<b>2,390,000</b>	<b>2,638,000</b>	<b>3,025,500</b>	<b>3,318,500</b>	<b>3,634,000</b>	<b>3,873,700</b>
Administration Fee	150,000	150,000	153,800	157,600	161,500	165,600
Operations Centre	113,100	118,800	121,800	124,800	127,900	131,100
Meters Maintenance	211,800	214,900	220,300	225,800	231,400	237,200
<b>System Operating</b>						
Administration	354,900	447,200	458,400	469,800	481,600	493,600
Supply	562,200	501,400	513,900	526,800	540,000	553,500
Distribution	1,235,000	1,134,900	1,163,300	1,192,400	1,222,200	1,252,700
Membrane Filtration	579,000	565,600	759,700	778,700	798,200	818,200
<b>Total</b>	<b>\$ 5,596,000</b>	<b>\$ 5,770,800</b>	<b>\$ 6,416,700</b>	<b>\$ 6,794,400</b>	<b>\$ 7,196,800</b>	<b>\$ 7,525,600</b>

Capital Funding	2009 (FC)	2010	2011	2012	2013	2014
<b>Capital Projects</b>						
Eagle Lake Development Expenditures	\$ 1,600,000	\$ 580,000	\$ -	\$ -	\$ -	\$ -
Montizambert Treatment Plant	\$ -	\$ 2,100,000	\$ 510,000	\$ -	\$ -	\$ -
Capital Improvement Program	\$ 900,900	\$ 1,028,000	\$ 1,588,000	\$ 2,148,000	\$ 2,708,000	\$ 3,268,000
<b>Total</b>	<b>\$ 2,500,900</b>	<b>\$ 3,708,000</b>	<b>\$ 2,098,000</b>	<b>\$ 2,148,000</b>	<b>\$ 2,708,000</b>	<b>\$ 3,268,000</b>
<b>Funding Sources</b>						
Grant/Third Party Funding	\$ -	\$ 1,428,000	\$ 340,000	\$ -	\$ -	\$ -
Rate/Reserve Funding	\$ 900,900	\$ 1,700,000	\$ 1,758,000	\$ 2,148,000	\$ 2,708,000	\$ 3,268,000
Debt Proceeds	\$ 1,600,000	\$ 580,000	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 2,500,900</b>	<b>\$ 3,708,000</b>	<b>\$ 2,098,000</b>	<b>\$ 2,148,000</b>	<b>\$ 2,708,000</b>	<b>\$ 3,268,000</b>

Fund Balances	2009 (FC)	2010	2011	2012	2013	2014
Water - Reserve Balance	\$ 2,921,100	\$ 2,559,800	\$ 2,349,900	\$ 2,357,900	\$ 2,811,300	\$ 3,974,700
<b>Total</b>	<b>\$ 2,921,100</b>	<b>\$ 2,559,800</b>	<b>\$ 2,349,900</b>	<b>\$ 2,357,900</b>	<b>\$ 2,811,300</b>	<b>\$ 3,974,700</b>

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District of West Vancouver

**Waterworks Regulation  
Bylaw No. 4490, 2006  
Amendment Bylaw No. 4622, 2009**

Effective Date –

District of West Vancouver

**Waterworks Regulation  
Bylaw No. 4490, 2006  
Amendment Bylaw No. 4622, 2009**

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District of West Vancouver

# **Waterworks Regulation Bylaw No. 4490, 2006 Amendment Bylaw No. 4622, 2009**

A bylaw to amend the fees related to the use of water

WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to amend "Waterworks Regulation Bylaw No. 4490, 2006",

NOW THEREFORE, the Council of the District of West Vancouver, in open meeting assembled, enacts as follows:

## **Part 1 Citation**

- 1.1 This bylaw may be cited as Waterworks Regulation Bylaw No. 4490, 2006, Amendment Bylaw No. 4622, 2009.

## **Part 2 Severability**

- 2.1 If a portion of this bylaw is held invalid by a Court of competent jurisdiction, then the invalid portion must be severed and the remainder of this bylaw is deemed to have been adopted without the severed section, subsequent, paragraph, subparagraph, clause or phrase.

## **Part 3 Substantive Provisions**

- 3.1 That "Waterworks Regulation Bylaw No. 4490, 2006" be amended by deleting Schedule "A", "B" and "C" and substituting new Schedules "A", "B" and "C" as attached hereto.

3.2 That "Waterworks Regulation Bylaw No. 4490, 2006" be amended by adding section 5.5.9

5.5.9 Where the Owner(s) and Occupier(s) of a metered property request a service call to inspect and test a meter, the service call will be subject to a Service Call Fee in accordance with Schedule "C"

3.3 That "Waterworks Regulation Bylaw No. 4490, 2006" be amended by adding section 5.27.1.1

5.27.1.1 Where the Owner(s) and Occupier(s) request a special reading of water meters between scheduled reading dates a Special Meter Reading Fee will be charged in accordance with Schedule "C"

3.4 That Section 5.30 of "Water Regulation Bylaw No. 4490, 2006" be deleted and replaced with the following:

5.30 No rebate, refund or credit whatever of any moneys paid or payable for water shall be made except as follows. Where it is determined that a water leak has occurred on the buried portion of the service between the water meter and the point where the service pipe enters the building, a rebate for the metered water utility fee to compensate for the water leak will be made at the discretion of the Treasurer based on the following requirements and criteria. A firm that has repaired the water leak will provide an attestation to the District that a) there was a leak on the buried water service, b) that they have properly repaired the leak, and c) that a leak of that nature would have caused the volume of excess water usage. The Treasurer will recalculate the metered water utility fee for the most recent quarterly period by estimating the normal volume based on usage history and trends for like quarters over the previous two years. The recalculated metered water volume utility fee will be the sum of the following:

- a) Normal volume multiplied by the unit rate in Schedule "B".
- b) Excess volume multiplied by 25% of the unit rate of Schedule "B".
- c) Water leaks administration fee in accordance with Schedule "C".

Provided that the total recalculated fee as determined above is less than the original quarterly billing, the Treasurer may rebate the difference.

## Schedules

- Schedule A – Schedule of Water Meter Base Rates
- Schedule B – Schedule of Water Meter Volume Rates
- Schedule C – Schedule of Service Charges

READ A FIRST TIME on

READ A SECOND TIME on

READ A THIRD TIME on

ADOPTED by the Council on

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Mayor

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Municipal Clerk

## Schedule A Water Meter Base Rates

### 1 Water Base Charge (Quarterly)

Meter Size	Single Family Residential	Multi Family Residential	Commercial
16mm	43.22	92.23	123.52
19mm	43.22	92.23	123.52
25mm	43.22	92.23	123.52
38mm	68.21	166.24	228.82
50mm	107.62	264.47	364.59
75mm	283.52	577.61	765.34
100mm	404.74	894.90	1207.28
150mm	700.21	1680.52	2306.30
200mm	-	2617.21	3618.44

### 2 Meter Fee Per Unit (Quarterly) For Universal Metered Customers

	Single Family Residential	Multi Family Residential	Commercial
Per Unit	16.67	16.67	16.67

## **Schedule B Water Meter Volume Rates**

**1 Metered Water Volume Rates  
Based On Quarterly (3 months) Consumption**

<b>Single Family Residential</b>	<b>Per Cubic Metre</b>
First 60 Cubic Metres	\$0.67
From 61 - 180 Cubic Metres	\$0.89
All in excess of 181 Cubic Metres	\$1.11

<b>Multi Family Residential</b>	<b>Per Cubic Metre</b>
All Usage	\$0.77

<b>Commercial</b>	<b>Per Cubic Metre</b>
All Usage	\$0.78

## Schedule C – Schedule of Service Charges

1	Turn on or turn off (free if at time of service installation)	\$102
2	Locate shut off	\$240
3	After hours call-out charge	\$290
4	Special Meter Reading Fee	\$75
5	Service Call Fee	\$75
6	Water Leaks Administration Fee	10% of original water charge up to \$200.00

For work other than listed above or where extraordinary conditions prevail such as rock excavation, creek crossings, other utility interference, sidewalks etc. the estimated cost to be actual installation cost plus 20% overhead. Estimated cost plus 50% contingency to be paid in advance as security see Section 5.26 Fee for Laying of Water Service.

The District does not guarantee the accuracy of its records. The cost to locate a shut off applies whether or not the shut off is found in the location shown on the records.