



Making a difference...together

**REPORT TO HIGHLAND WATER AND SEWER LOCAL SERVICES COMMITTEE AND
FERNWOOD WATER LOCAL SERVICE COMMITTEE
MEETING OF THURSDAY 14 JANUARY 2010**

SUBJECT PROPOSED AMENDMENTS TO FEE AND CHARGE STRUCTURES

PURPOSE

To present alternatives and a recommendation to the Highland Water and Sewer Local Services committee (HWSLSC) and the Fernwood Water Local Service Committee (FWLSC) for amendments to fee and charge structures for water and sewer services.

BACKGROUND

A staff report to the 17 July 2009 meeting of the HWSLSC and FWLSC presented background and rationale for amending fee and charge structures, and included example structures for the Highland and Fernwood Water Local Services. The primary rationale for amending fee structures is to simplify billing structures and reduce ambiguity relating to the concept of the *single family equivalent* (SFE) that is currently used as the basis for billing for water and sewer service; and to prepare for migration of billing processes to a new system that will improve efficiency of the billing process and add new features to water bills such as bar charts showing water consumption history. Fee structures for water and sewer service should be fair and understandable by customers, and should discourage excessive use of services that have limited capacity. Although the current rate structures provide effective incentives to conserve water, they are not easy to understand and are difficult to apply fairly where a water or sewer connection may serve more than a single dwelling unit.

Currently, a portion of the annual cost of Maliview sewer service is recovered based on winter water use. The portion of revenue based on consumption is established in the budget each year, and cost per customer is calculated based on water use per SFE as a fraction of overall billed water use in the period. This approach is unconventional and relies on a single, annual calculation that must be performed manually to determine the cost of sewer service. It is proposed that the portion of revenue to be billed based on consumption be recovered using a more conventional sewer service charge per unit of water used during each of the four water billing cycles in a year. For Maliview customers, sewer charges would appear on a consolidated quarterly bill for water and sewer service, with the variable portion of the sewer service bill charged at a uniform rate per cubic metre of water used in the previous three months.

An administrative change to all fee and charge bylaws for local services is also required in order to standardize the calculation of late payment charges at 2.5% per billing cycle for balances outstanding beyond thirty days from the date a bill is issued.

Proposed Fee and Charge Structures

This report presents three alternative rate structures for consideration in (Attachment 1). All of the alternatives are revenue neutral (i.e. no significant overall increase or decrease), and compare actual and

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proposed cost per customer versus annual total water consumption. There are four pages relating to each of the three alternatives: Fernwood, Highland, Maliview and Highland + Maliview. Although parcel tax and fixed annual user charge levels differ for Highland and Fernwood, for each scenario the variable rates and tier thresholds are identical as is currently the case. This is intended to ensure that when the services are merged for operational purposes, the rate structure can be harmonized simply by setting a single fixed charge to recover annual operating revenue required for the service, and the parcel tax levels for each existing service can be set as required to cover borrowing costs. Highland + Maliview charts represent the combined cost of water and sewer service to Maliview customers for each of the three alternatives.

ALTERNATIVES

1. That the Highland Water and Sewer Local Services Committee and the Fernwood Water Local Service Committee recommend to the Capital Regional District Board that fee and charge bylaws for the Fernwood Water Local Service, the Highland Water Local Service, and the Maliview Sewer Local Service be amended in accordance with Alternative 1 of Attachment 1.
2. That the Highland Water and Sewer Local Services Committee and the Fernwood Water Local Service Committee recommend to the Capital Regional District Board that fee and charge bylaws for the Fernwood Water Local Service, the Highland Water Local Service, and the Maliview Sewer Local Service be amended in accordance with Alternative 2 of Attachment 1.
3. That the Highland Water and Sewer Local Services Committee and the Fernwood Water Local Service Committee recommend to the Capital Regional District Board that fee and charge bylaws for the Fernwood Water Local Service, the Highland Water Local Service, and the Maliview Sewer Local Service be amended in accordance with Alternative 3 of Attachment 1.
4. That the Highland Water and Sewer Local Services Committee and the Fernwood Water Local Service Committee receive this report for information.

FINANCIAL IMPLICATIONS

None of the proposed alternatives will significantly change the overall annual cost of service to an average customer. However, the general result of changing the basis of billing from the SFE to a service connection (Alternatives 1-3) is that connections currently serving multiple SFEs will pay significantly less on average for water and sewer service, while the average customer with only one SFE per connection will pay slightly more. Alternative 1 provides an increased incentive to conserve water, reducing the annual cost of service to low water users while increasing costs to high users. Alternative 2 minimizes the change in annual cost to most users. Alternative 3 reduces costs to high users, and increases costs to low users.

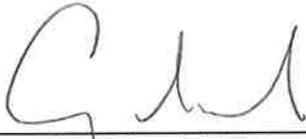
SUMMARY

Changes to the fee and charge structures are recommended in order to simplify and standardize billing processes and to improve the fairness and transparency of charges for water and sewer services.

**Highland Water and Sewer Local Services Committee and
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RECOMMENDATION

That the Highland Water and Sewer Local Services Committee and the Fernwood Water Local Service Committee recommend to the Capital Regional District Board that fee and charge bylaws for the Fernwood Water Local Service, the Highland Water Local Service, and the Maliview Sewer Local Service be amended in accordance with Alternative 1 of Attachment 1.



Colwyn Sunderland, AScT
Local Services Engineering Coordinator

CS:ls
Attachments: 1

ALTERNATIVE 1

FERNWOOD WATER SYSTEM

RATE STRUCTURE ANALYSIS

EXISTING	Annual Parcel Tax = \$ 334.14	x	78	folios	Tier 1	<=	60.00	m ³ =	\$ 0.50	/ m ³
	Fixed Charge/SFE = \$ 531.27	/ year =	\$ 132.82	/ cycle	Tier 2	<=	100.00	m ³ =	\$ 1.00	/ m ³
	Cycles per year = 4				Tier 3	<=	140.00	m ³ =	\$ 2.00	/ m ³
	# of SFE = 80				Tier 4	>	140.00	m ³ =	\$ 4.00	/ m ³

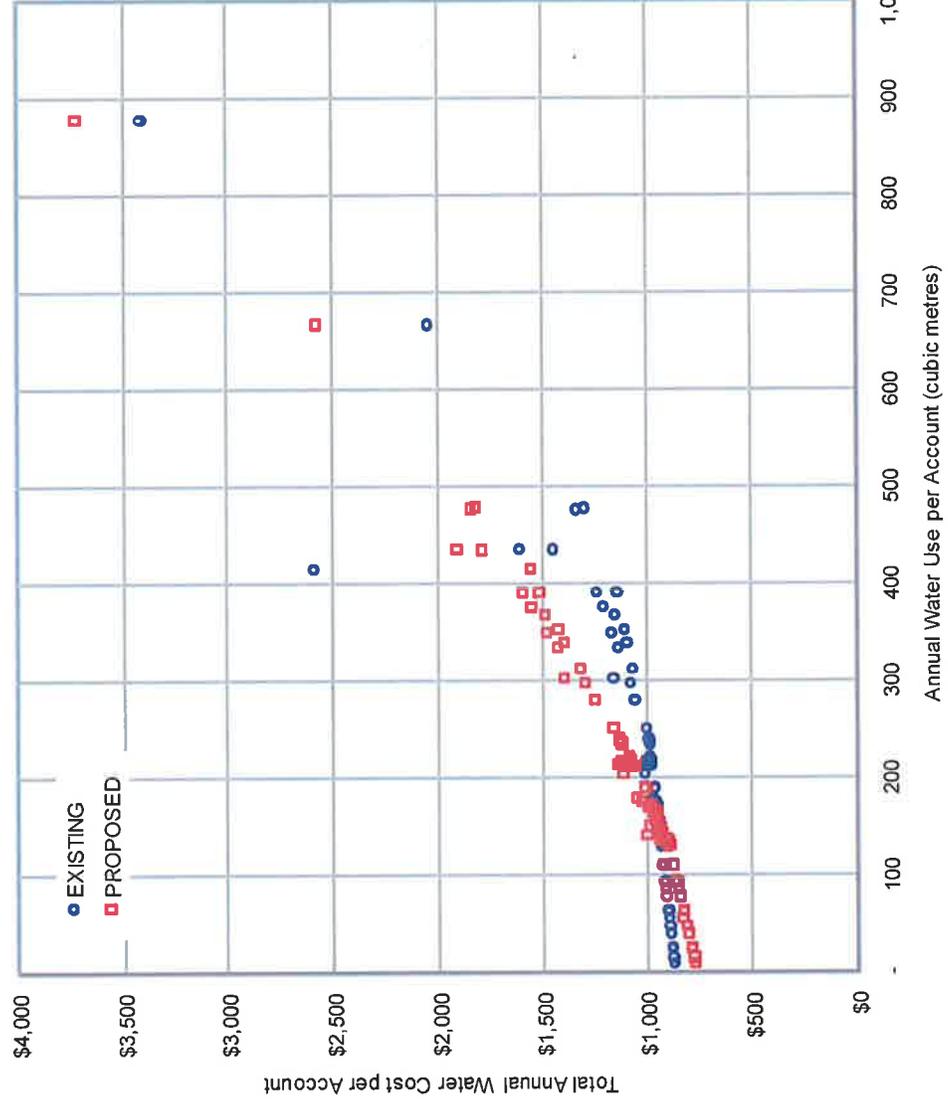
PROPOSED	Annual Parcel Tax = \$ 334.14	x	78	folios	Tier 1	<=	37.50	m ³ =	\$ 1.00	/ m ³
	Fixed Charge/Conn = \$ 425.00	/ year =	\$ 106.25	/ cycle	Tier 2	<=	105.00	m ³ =	\$ 2.50	/ m ³
	Cycles per year = 4				Tier 3	>	105.00	m ³ =	\$ 4.00	/ m ³
	# of Connections = 73								\$ 1.75	/ m ³

Multi-family / ICI variable charge =

Fixed charge based on meter size:

Meter Size	Existing	Proposed	% change
<25mm	\$ 83,351	\$ 84,492	1.4%
26-30mm	\$ 24,763	\$ 24,763	0.0%
31-40mm	\$ 42,502	\$ 31,025	-27.0%
41-60mm	\$ 16,086	\$ 28,704	78.4%
61-90mm	\$ 1,071.10	\$ 1,147.99	7.2%
>90mm	\$ 882.94	\$ 794.20	-10.1%

Total Water Taxes and Fees vs. Water Use per Account - FERNWOOD



NOTES

Existing formula based on SFE, with several accounts at 2 SFE. Institutional rate calculation based on proportion of overall budget includes school.

Assume school has 2" meter for the purpose of the new structure, and that all other properties are classified as residential (single family or duplex)

EXISTING

Annual Parcel Tax =	\$ 481.71	x	254	folios
Fixed Charge/SFE =	\$ 175.00	/ year =	\$ 43.75	/ cycle
Cycles per year =	4			
# of SFE =	259			

m ³ =	60.00	/ m ³
m ³ =	100.00	/ m ³
m ³ =	140.00	/ m ³
m ³ =	140.00	/ m ³

\$	0.50	/ m ³
\$	1.00	/ m ³
\$	2.00	/ m ³
\$	4.00	/ m ³

PROPOSED

Annual Parcel Tax =	\$ 481.71	x	254	folios
Fixed Charge/conn =	\$ -	/ year =	\$ -	/ cycle
Cycles per year =	4			
# of Connections =	240			

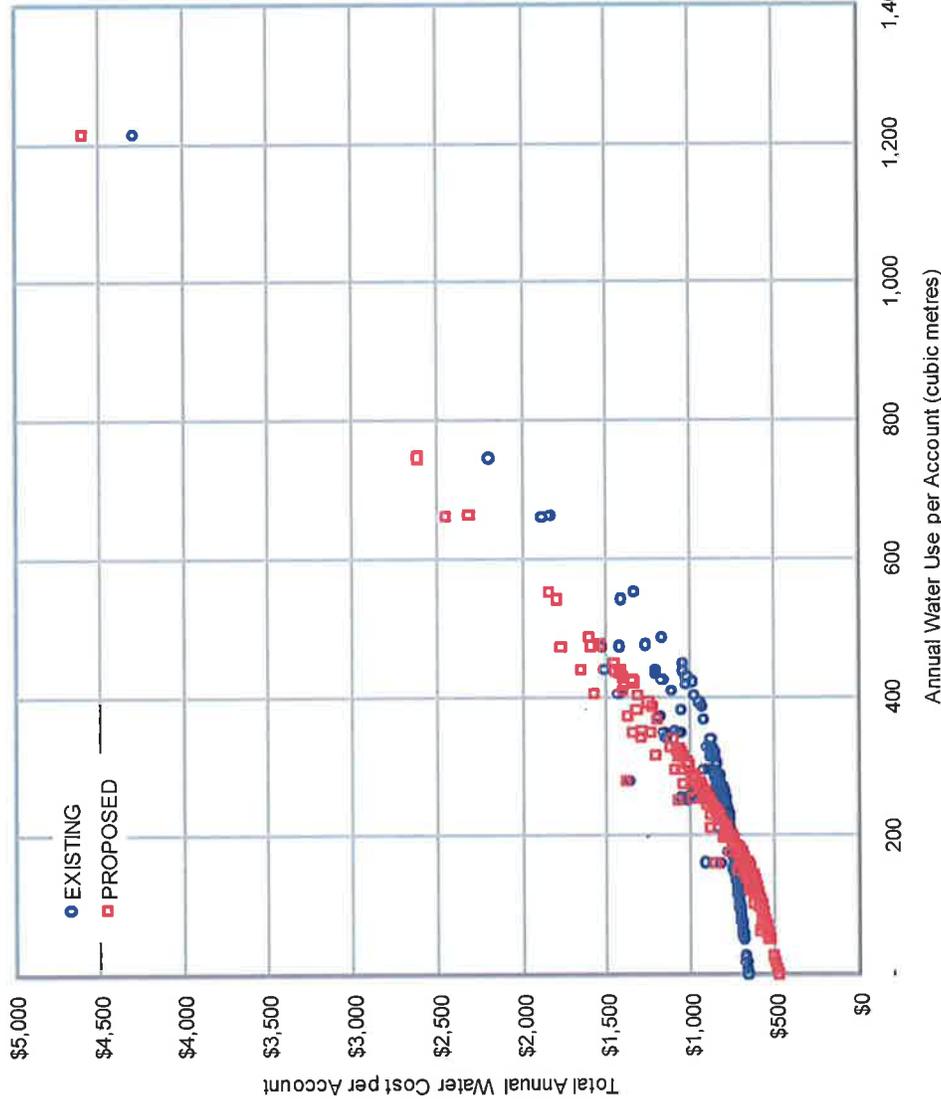
m ³ =	37.50	/ m ³
m ³ =	105.00	/ m ³
m ³ =	105.00	/ m ³

\$	1.00	/ m ³
\$	2.50	/ m ³
\$	4.00	/ m ³
\$	1.75	/ m ³

variable charge =

Meter Size	n
<25mm	-
26-30mm	-
31-40mm	-
41-60mm	-
61-90mm	-
>90mm	-

Total Water Taxes and Fees vs. Water Use per Account - HIGHLAND



	Existing	Proposed	% change
Total revenue	\$ 201,601	\$ 204,966	1.7%
Parcel tax	\$ 116,251	\$ 116,251	0.0%
Fixed charge	\$ 45,325	\$ -	-100.0%
usage charge	\$ 40,024	\$ 88,715	121.7%

Avg/acct	\$ 837.42	\$ 851.36	1.7%
P5	\$ 691.76	\$ 555.21	-19.7%
P10	\$ 698.76	\$ 570.66	-18.3%
P25	\$ 716.56	\$ 609.26	-15.0%
P50 (median)	\$ 748.19	\$ 716.96	-4.2%
P75	\$ 828.44	\$ 933.96	12.7%
P90	\$ 1,052.46	\$ 1,337.11	27.0%
P95	\$ 1,264.31	\$ 1,534.99	21.4%

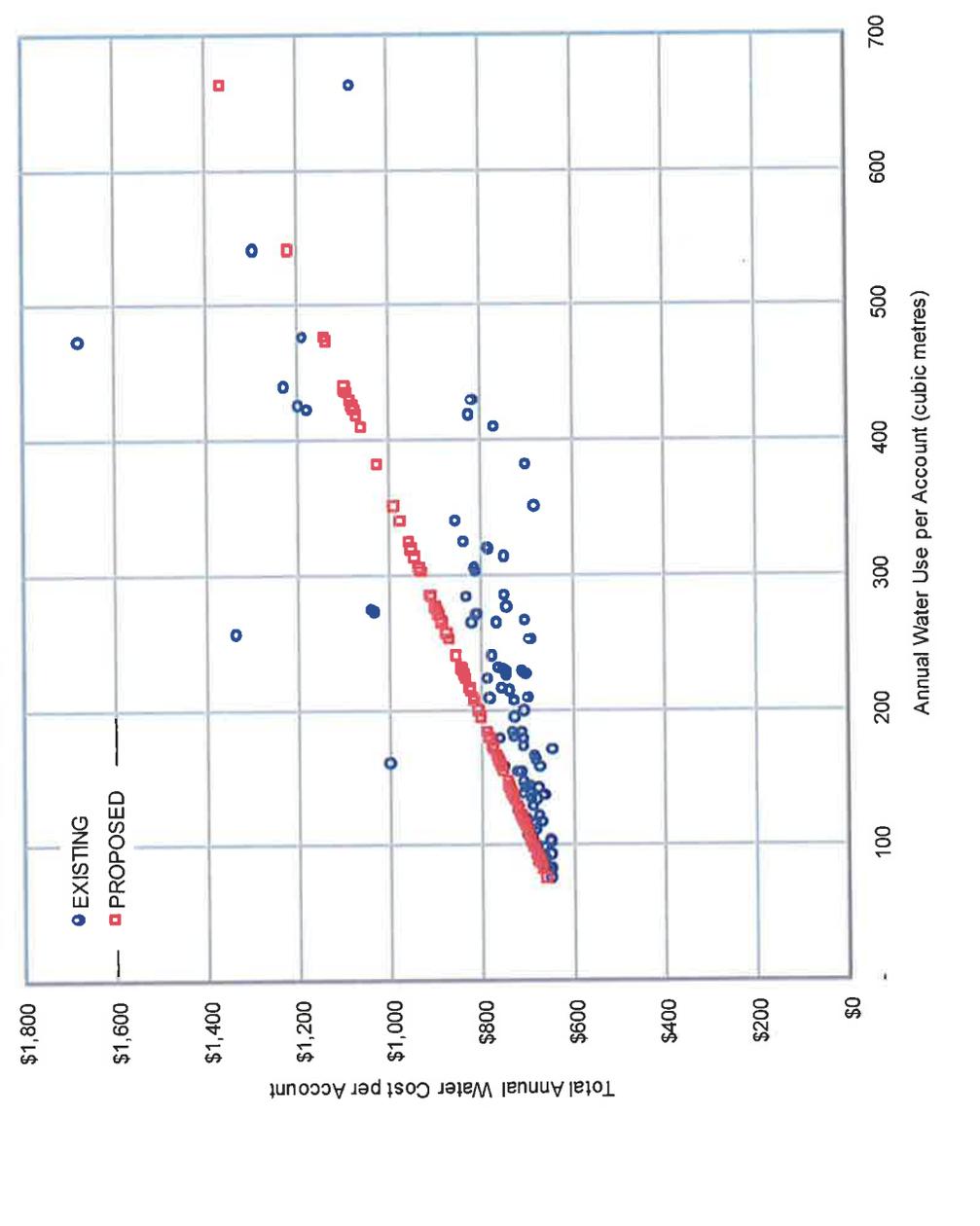
NOTES

Existing formula based on SFE, includes two duplexes, several secondary dwellings, one connection with 4 SFE and one with 6.12 SFE.

Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

EXISTING		PROPOSED	
Annual Parcel Tax =	\$ 322.88	Annual Parcel Tax =	\$ 322.88
Fixed Charge/SFE =	\$ 346.73 / year	Fixed Charge/conn =	\$ 246.73 / year
Cycles per year =	1	Cycles per year =	4
# of SFE =	107	# of Connections =	95
x 94 folios / year = \$ 346.73 / cycle		x 94 folios / year = \$ 61.68 / cycle	
Tier 1	<=	Tier 1	<=
Tier 2	<=	Tier 2	<=
Tier 3	<=	Tier 3	>
Tier 4	>	Multi-family / ICI	
m ³ =		variable charge =	
m ³ =		Meter Size	
m ³ =		n	
m ³ =		<25mm	
		\$ 246.73 /year	
		26-30mm	
		\$ 370.10 /year	
		31-40mm	
		\$ 555.14 /year	
		41-60mm	
		\$ 832.71 /year	
		61-90mm	
		\$ 1,249.07 /year	
		>90mm	
		\$ 1,873.61 /year	

Total Water Taxes and Fees vs. Water Use per Account - MALIVIEW



	Existing	Proposed	% change
Total revenue	\$ 76,723	\$ 77,095	0.5%
Parcel tax	\$ 28,837	\$ 28,837	0.0%
Fixed charge	\$ 37,100	\$ 23,439	-36.8%
usage charge	\$ 10,786	\$ 24,818	130.1%
Avg/acct	\$ 782.55	\$ 833.64	6.5%
P5	\$ 650.16	\$ 672.75	3.5%
P10	\$ 662.24	\$ 683.54	3.2%
P25	\$ 684.22	\$ 725.70	6.1%
P50 (median)	\$ 714.67	\$ 797.07	11.5%
P75	\$ 787.86	\$ 899.07	14.1%
P90	\$ 1,038.91	\$ 1,068.86	2.9%
P95	\$ 1,192.65	\$ 1,093.96	-8.3%

NOTES
 Existing formula based on SFE, includes duplexes, secondary dwellings, and one connection with 4 SFE.
 Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

RATE STRUCTURE ANALYSIS

FERNWOOD WATER SYSTEM

ALTERNATIVE 2

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 334.14	x	78	folios
Fixed Charge/SFE =	\$ 531.27	/ year =	\$ 132.82	/ cycle
Cycles per year =	4			
# of SFE =	80			

m^3 =	60.00
m^3 =	100.00
m^3 =	140.00
m^3 =	140.00

\$	0.50	/ m^3
\$	1.00	/ m^3
\$	2.00	/ m^3
\$	4.00	/ m^3

PROPOSED

Annual Parcel Tax =	\$ 334.14	x	78	folios
Fixed Charge/Conn =	\$ 575.00	/ year =	\$ 143.75	/ cycle
Cycles per year =	4			
# of Connections =	73			

m^3 =	37.50
m^3 =	105.00
m^3 =	105.00

\$	0.50	/ m^3
\$	1.00	/ m^3
\$	4.00	/ m^3
\$	0.75	/ m^3

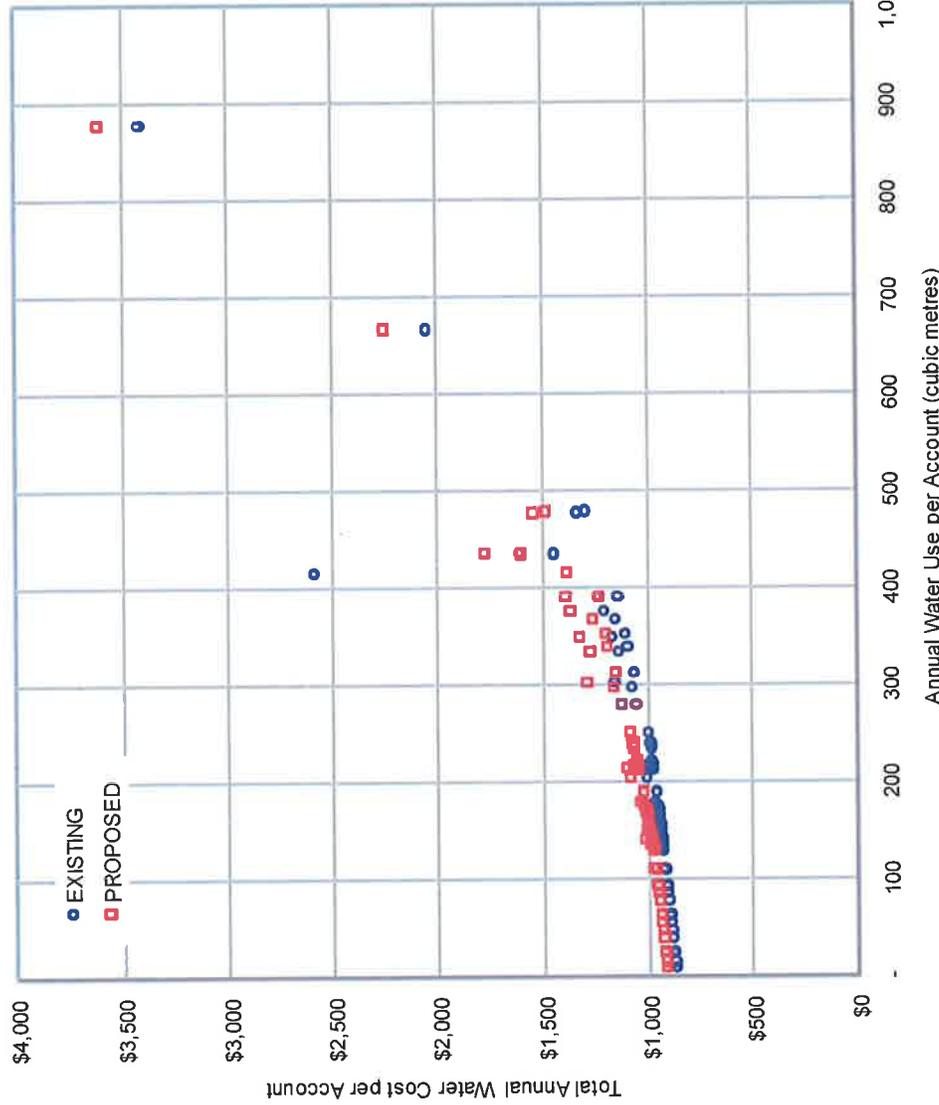
Fixed charge based on meter size:

<25mm	\$ 575.00	/year
26-30mm	\$ 718.75	/year
31-40mm	\$ 898.44	/year
41-60mm	\$ 1,123.05	/year
61-90mm	\$ 1,403.81	/year
>90mm	\$ 1,754.76	/year

variable charge =

Multi-family / ICI

Total Water Taxes and Fees vs. Water Use per Account - FERNWOOD



	Existing	Proposed	% change
Total revenue	\$ 83,351	\$ 83,123	-0.3%
Parcel tax	\$ 24,763	\$ 24,763	0.0%
Fixed charge	\$ 42,502	\$ 41,975	-1.2%
usage charge	\$ 16,086	\$ 16,385	1.9%

Avg/acct	\$ 1,071.10	\$ 1,130.56	5.6%
P5	\$ 882.94	\$ 926.67	5.0%
P10	\$ 896.99	\$ 941.13	4.9%
P25	\$ 933.19	\$ 978.95	4.9%
P50 (median)	\$ 955.57	\$ 1,019.32	6.7%
P75	\$ 1,049.09	\$ 1,119.15	6.7%
P90	\$ 1,229.17	\$ 1,382.94	12.5%
P95	\$ 1,504.87	\$ 1,564.91	4.0%

NOTES

Existing formula based on SFE, with several accounts at 2 SFE. Institutional rate calculation based on proportion of overall budget includes school.

Assume school has 2" meter for the purpose of the new structure, and that all other properties are classified as residential (single family or duplex)

RATE STRUCTURE ANALYSIS

HIGHLAND WATER SYSTEM

ALTERNATIVE 2

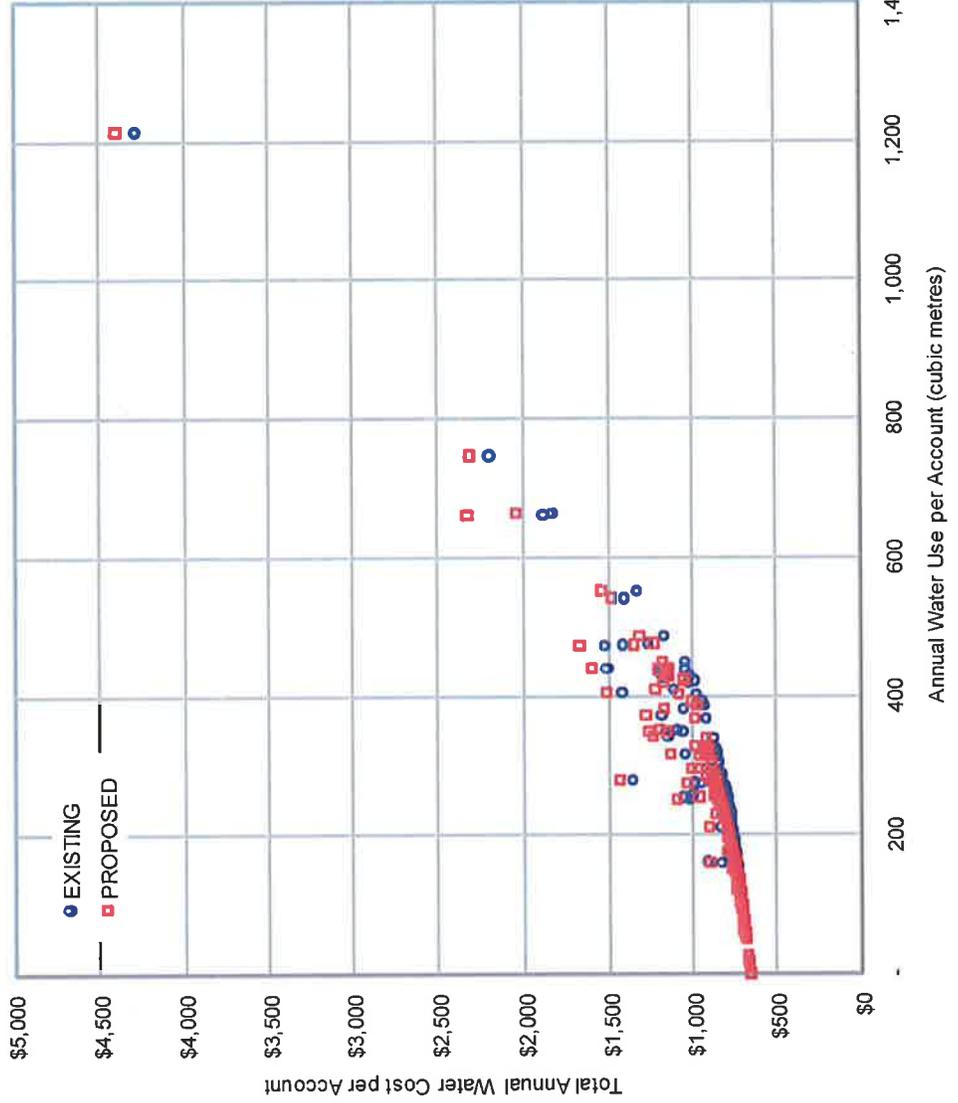
January 14, 2010

EXISTING	Annual Parcel Tax =	\$ 481.71	x	254	folios	Tier 1	<=	60.00	m ³ =	\$ 0.50	/ m ³
	Fixed Charge/SFE =	\$ 175.00	/ year =	\$ 43.75	/ cycle	Tier 2	<=	100.00	m ³ =	\$ 1.00	/ m ³
	Cycles per year =	4				Tier 3	<=	140.00	m ³ =	\$ 2.00	/ m ³
	# of SFE =	259				Tier 4	>	140.00	m ³ =	\$ 4.00	/ m ³

PROPOSED	Annual Parcel Tax =	\$ 481.71	x	254	folios	Tier 1	<=	37.50	m ³ =	\$ 0.50	/ m ³
	Fixed Charge/conn = <td>\$ 175.00 <td>/ year = <td>\$ 43.75</td> <td>/ cycle</td> <td>Tier 2</td> <td><=</td> <td>105.00 <td>m³ = <td>\$ 1.00</td> <td>/ m³</td> </td></td></td></td>	\$ 175.00 <td>/ year = <td>\$ 43.75</td> <td>/ cycle</td> <td>Tier 2</td> <td><=</td> <td>105.00 <td>m³ = <td>\$ 1.00</td> <td>/ m³</td> </td></td></td>	/ year = <td>\$ 43.75</td> <td>/ cycle</td> <td>Tier 2</td> <td><=</td> <td>105.00 <td>m³ = <td>\$ 1.00</td> <td>/ m³</td> </td></td>	\$ 43.75	/ cycle	Tier 2	<=	105.00 <td>m³ = <td>\$ 1.00</td> <td>/ m³</td> </td>	m ³ = <td>\$ 1.00</td> <td>/ m³</td>	\$ 1.00	/ m ³
	Cycles per year = <td>4</td> <td></td> <td></td> <td></td> <td>Tier 3</td> <td>></td> <td>105.00 <td>m³ = <td>\$ 4.00</td> <td>/ m³</td> </td></td>	4				Tier 3	>	105.00 <td>m³ = <td>\$ 4.00</td> <td>/ m³</td> </td>	m ³ = <td>\$ 4.00</td> <td>/ m³</td>	\$ 4.00	/ m ³
	# of Connections = <td>240</td> <td></td> <td></td> <td></td> <td colspan="6">Multi-family / ICI variable charge =</td>	240				Multi-family / ICI variable charge =					

Meter Size	n	Existing	Proposed	% change
<25mm		\$ 175.00	\$ 175.00	0.0%
26-30mm		\$ 262.50	\$ 262.50	0.0%
31-40mm		\$ 393.75	\$ 393.75	-7.3%
41-60mm		\$ 590.63	\$ 590.63	23.6%
61-90mm		\$ 885.94	\$ 885.94	
>90mm		\$ 1,328.91	\$ 1,328.91	

Total Water Taxes and Fees vs. Water Use per Account - HIGHLAND



NOTES

Existing formula based on SFE, includes two duplexes, several secondary dwellings, one connection with 4 SFE and one with 6.12 SFE.

Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

RATE STRUCTURE ANALYSIS

MALIVIEW SEWER SYSTEM

ALTERNATIVE 2

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 322.88	x	94	folios
Fixed Charge/SFE =	\$ 346.73	/ year =	\$ 346.73	/ cycle
Cycles per year =	1			
# of SFE =	107			

m^3 =		/ m^3

PROPOSED

Annual Parcel Tax =	\$ 322.88	x	94	folios
Fixed Charge/conn =	\$ 346.73	/ year =	\$ 86.68	/ cycle
Cycles per year =	4			
# of Connections =	95			

	1000.00
	1000.00
	1000.00

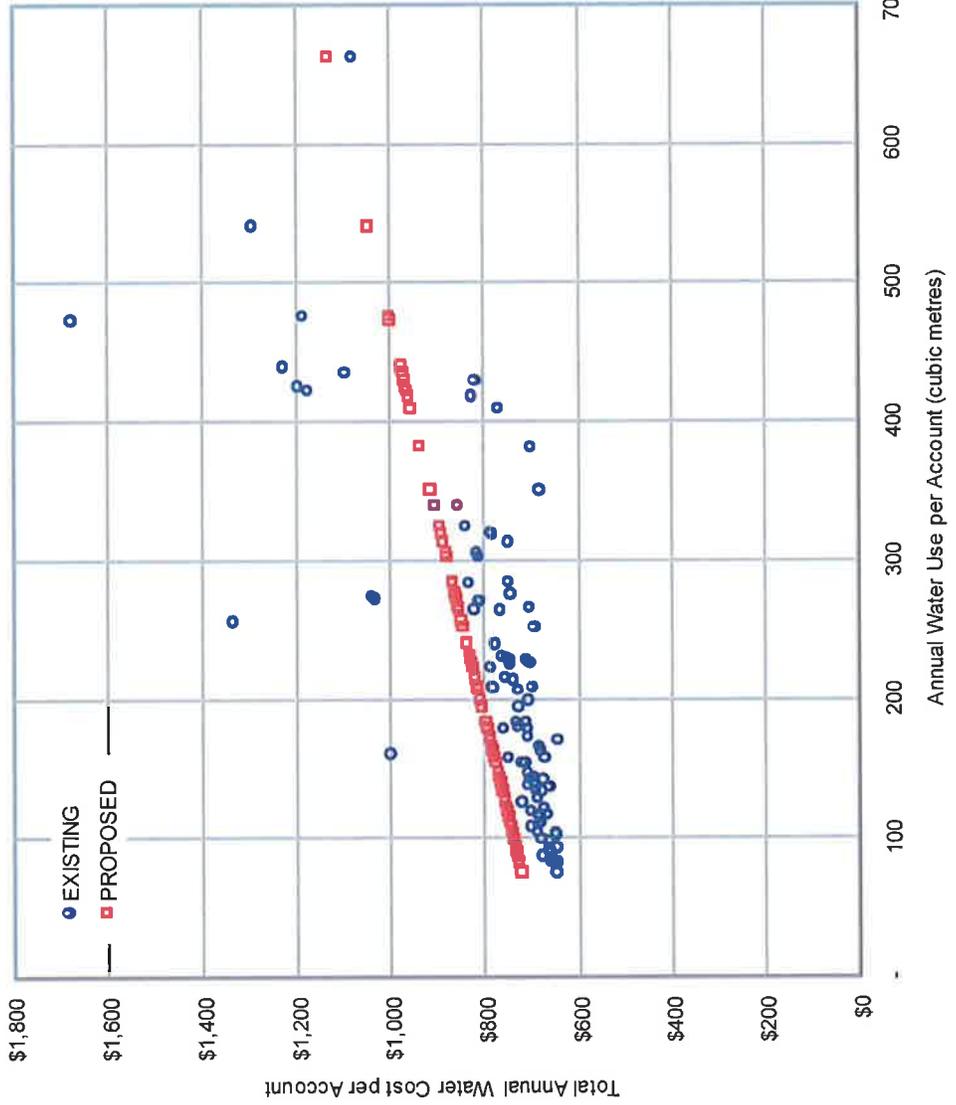
m^3 =	\$ 0.70	/ m^3
m^3 =	\$ 0.70	/ m^3
m^3 =	\$ 0.70	/ m^3
m^3 =	\$ 0.70	/ m^3

variable charge =

Meter Size

<25mm	\$ 346.73	/year
26-30mm	\$ 520.09	/year
31-40mm	\$ 780.14	/year
41-60mm	\$ 1,170.21	/year
61-90mm	\$ 1,755.32	/year
>90mm	\$ 2,632.97	/year

Total Water Taxes and Fees vs. Water Use per Account - MALIVIEW



	Existing	Proposed	% change
Total revenue	\$ 76,723	\$ 76,253	-0.6%
Parcel tax	\$ 28,837	\$ 28,837	0.0%
Fixed charge	\$ 37,100	\$ 32,939	-11.2%
usage charge	\$ 10,786	\$ 14,477	34.2%
Avg/acct	\$ 782.55	\$ 823.62	5.2%
P5	\$ 650.16	\$ 729.77	12.2%
P10	\$ 662.24	\$ 736.07	11.1%
P25	\$ 684.22	\$ 760.66	11.2%
P50 (median)	\$ 714.67	\$ 802.29	12.3%
P75	\$ 787.86	\$ 861.79	9.4%
P90	\$ 1,038.91	\$ 960.84	-7.5%
P95	\$ 1,192.65	\$ 975.48	-18.2%

NOTES

Existing formula based on SFE, includes duplexes, secondary dwellings, and one connection with 4 SFE.

Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

EXISTING

Annual Parcel Tax =	\$ 804.59	x	<input type="text"/>	folios
Fixed Charge/SFE =	\$ 521.73	/ year =	<input type="text"/>	/ cycle
Cycles per year =	<input type="text"/>			
# of SFE =	<input type="text"/>			

Tier 1	<=	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³
Tier 2	<=	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³
Tier 3	<=	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³
Tier 4	>	0.00	m ³ =	<input type="text"/>	/ m ³

PROPOSED

Annual Parcel Tax =	\$ 804.59	x	0	folios
Fixed Charge/conn =	\$ 521.73	/ year =	\$ 130.43	/ cycle
Cycles per year =	4			
# of Connections =	<input type="text"/>			

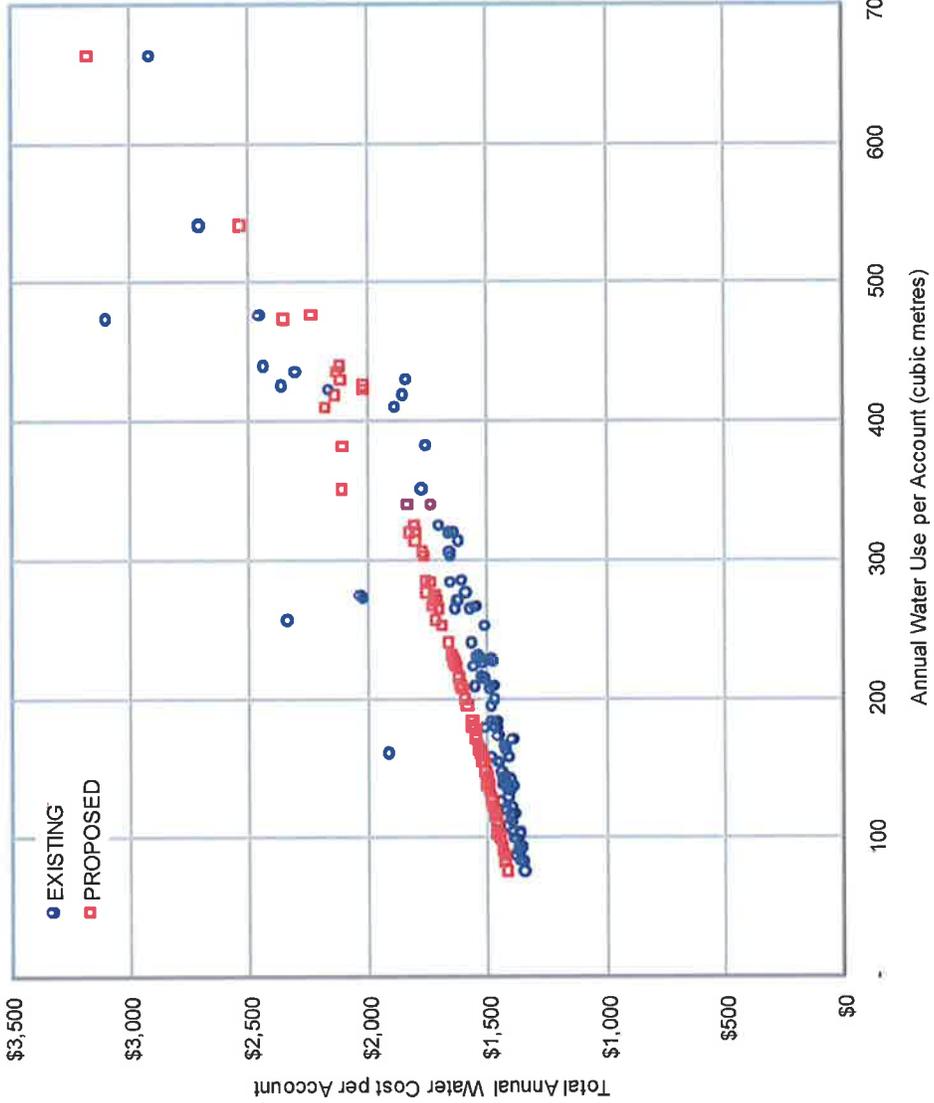
Tier 1	<=	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³
Tier 2	<=	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³
Tier 3	>	<input type="text"/>	m ³ =	<input type="text"/>	/ m ³

Multi-family / ICI variable charge =

Meter Size n

<25mm	<input type="text"/>	/ year
26-30mm	<input type="text"/>	/ year
31-40mm	<input type="text"/>	/ year
41-60mm	<input type="text"/>	/ year
61-90mm	<input type="text"/>	/ year
>90mm	<input type="text"/>	/ year

Total Water Taxes and Fees vs. Water Use per Account
HIGHLAND + MALIVIEW



	Existing	Proposed	% change
Total revenue	\$ 278,323	\$ 283,961	2.0%
Parcel tax	\$ 145,088	\$ 145,088	0.0%
Fixed charge	\$ 82,425	\$ 74,939	-9.1%
usage charge	\$ 50,811	\$ 63,934	25.8%
Avg/acct	\$ 1,610.71	\$ 1,666.96	3.5%
P5	\$ 1,358.10	\$ 1,429.93	5.3%
P10	\$ 1,366.18	\$ 1,440.25	5.4%
P25	\$ 1,406.21	\$ 1,484.14	5.5%
P50 (median)	\$ 1,483.64	\$ 1,573.82	6.1%
P75	\$ 1,642.11	\$ 1,727.71	5.2%
P90	\$ 2,027.67	\$ 2,110.58	4.1%
P95	\$ 2,387.92	\$ 2,152.22	-9.9%

NOTES

Existing formula based on SFE, includes duplexes, secondary dwellings, and one connection with 4 SFE.
Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

RATE STRUCTURE ANALYSIS

FERNWOOD WATER SYSTEM

ALTERNATIVE 3

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 334.14	x	78	folios
Fixed Charge/SFE =	\$ 531.27	/ year =	\$ 132.82	/ cycle
Cycles per year =	4			
# of SFE =	80			

m^3 =	60.00
m^3 =	100.00
m^3 =	140.00
m^3 =	140.00

\$	0.50	/ m^3
\$	1.00	/ m^3
\$	2.00	/ m^3
\$	4.00	/ m^3

PROPOSED

Annual Parcel Tax =	\$ 334.14	x	78	folios
Fixed Charge/Conn =	\$ 625.00	/ year =	\$ 156.25	/ cycle
Cycles per year =	4			
# of Connections =	73			

m^3 =	37.50
m^3 =	105.00
m^3 =	105.00

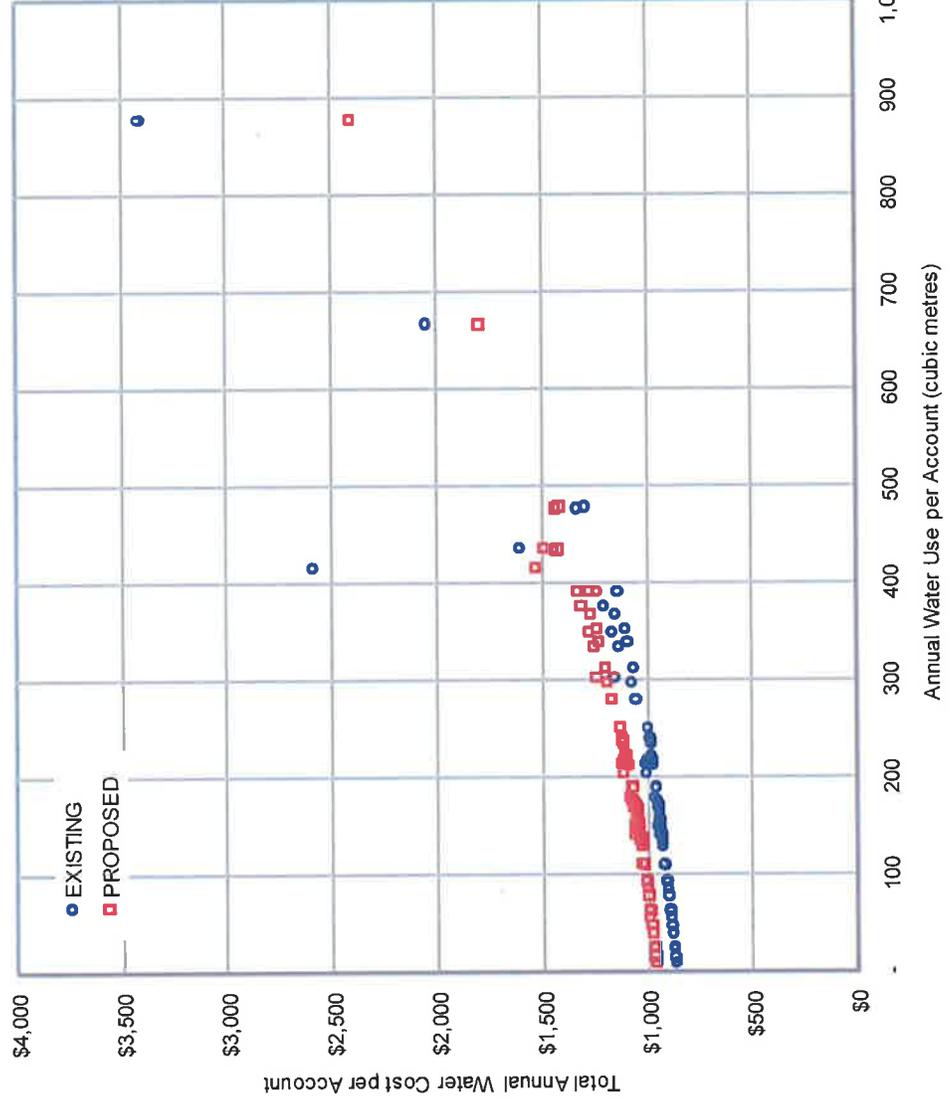
\$	0.50	/ m^3
\$	1.00	/ m^3
\$	2.00	/ m^3
\$	0.75	/ m^3

Multi-family / ICI variable charge =

Fixed charge based on meter size:

<25mm	\$ 625.00	/year
26-30mm	\$ 781.25	/year
31-40mm	\$ 976.56	/year
41-60mm	\$ 1,220.70	/year
61-90mm	\$ 1,525.88	/year
>90mm	\$ 1,907.35	/year

Total Water Taxes and Fees vs. Water Use per Account - FERNWOOD



	Existing	Proposed	% change
Total revenue	\$ 83,351	\$ 83,404	0.1%
Parcel tax	\$ 24,763	\$ 24,763	0.0%
Fixed charge	\$ 42,502	\$ 45,625	7.3%
usage charge	\$ 16,086	\$ 13,016	-19.1%

	Existing	Proposed	% change
Avg/acct	\$ 1,071.10	\$ 1,138.57	6.3%
P5	\$ 882.94	\$ 976.67	10.6%
P10	\$ 896.99	\$ 991.13	10.5%
P25	\$ 933.19	\$ 1,028.95	10.3%
P50 (median)	\$ 955.57	\$ 1,069.32	11.9%
P75	\$ 1,049.09	\$ 1,161.43	10.7%
P90	\$ 1,229.17	\$ 1,325.15	7.8%
P95	\$ 1,504.87	\$ 1,459.05	-3.0%

NOTES

Existing formula based on SFE, with several accounts at 2 SFE. Institutional rate calculation based on proportion of overall budget includes school.

Assume school has 2" meter for the purpose of the new structure, and that all other properties are classified as residential (single family or duplex)

RATE STRUCTURE ANALYSIS

HIGHLAND WATER SYSTEM

ALTERNATIVE 3

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 481.71	x	254	folios
Fixed Charge/SFE =	\$ 175.00	/ year =	\$ 43.75	/ cycle
Cycles per year =	4			
# of SFE =	259			

Tier 1	<=	60.00	m ³ =	\$ 0.50	/ m ³
Tier 2	<=	100.00	m ³ =	\$ 1.00	/ m ³
Tier 3	<=	140.00	m ³ =	\$ 2.00	/ m ³
Tier 4	>	140.00	m ³ =	\$ 4.00	/ m ³

PROPOSED

Annual Parcel Tax =	\$ 481.71	x	254	folios
Fixed Charge/conn =	\$ 190.00	/ year =	\$ 47.50	/ cycle
Cycles per year =	4			
# of Connections =	240			

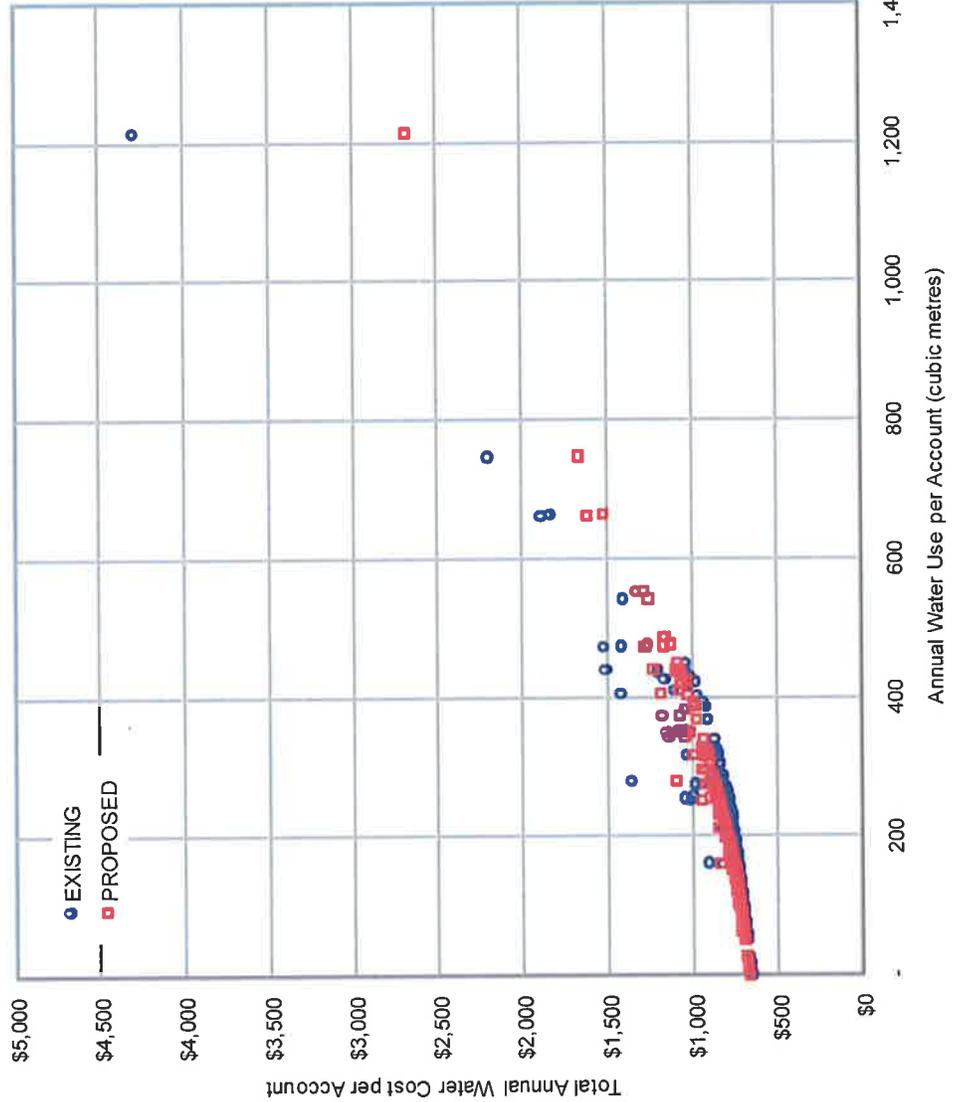
Tier 1	<=	37.50	m ³ =	\$ 0.50	/ m ³
Tier 2	<=	105.00	m ³ =	\$ 1.00	/ m ³
Tier 3	>	105.00	m ³ =	\$ 2.00	/ m ³

variable charge =

Meter Size

Meter Size	n	Existing	Proposed	% change
<25mm		\$ 190.00	\$ 202.159	0.3%
26-30mm		\$ 285.00	\$ 116.251	0.0%
31-40mm		\$ 427.50	\$ 45,600	0.6%
41-60mm		\$ 641.25	\$ 40,307	0.7%
61-90mm		\$ 961.88		
>90mm		\$ 1,442.81		

Total Water Taxes and Fees vs. Water Use per Account - HIGHLAND



NOTES

Existing formula based on SFE, includes two duplexes, several secondary dwellings, one connection with 4 SFE and one with 6.12 SFE.

Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

RATE STRUCTURE ANALYSIS

MALIVIEW SEWER SYSTEM

ALTERNATIVE 3

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 322.88	x	94	folios
Fixed Charge/SFE =	\$ 346.73	/ year =	\$ 346.73	/ cycle
Cycles per year =	1			
# of SFE =	107			

Tier 1	<=	
Tier 2	<=	
Tier 3	<=	
Tier 4	>	0.00

m^3 =		/ m^3

PROPOSED

Annual Parcel Tax =	\$ 322.88	x	94	folios
Fixed Charge/conn =	\$ 396.73	/ year =	\$ 99.18	/ cycle
Cycles per year =	4			
# of Connections =	95			

m^3 =	1000.00	/ m^3
m^3 =	1000.00	/ m^3
m^3 =	1000.00	/ m^3

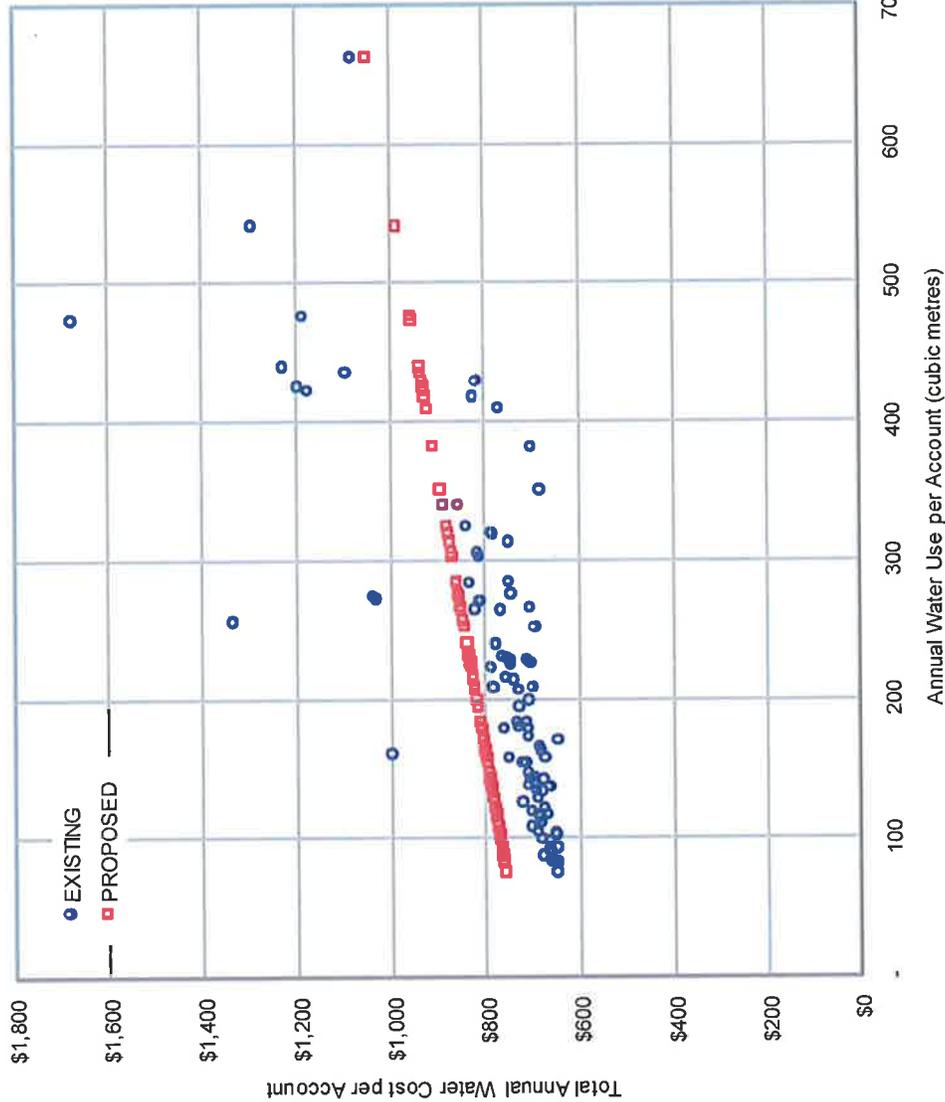
m^3 =	\$ 0.50	/ m^3
m^3 =	\$ 0.50	/ m^3
m^3 =	\$ 0.50	/ m^3
m^3 =	\$ 0.50	/ m^3

variable charge =

Meter Size

<25mm	\$ 396.73	/year
26-30mm	\$ 595.10	/year
31-40mm	\$ 892.64	/year
41-60mm	\$ 1,338.96	/year
61-90mm	\$ 2,008.45	/year
>90mm	\$ 3,012.67	/year

Total Water Taxes and Fees vs. Water Use per Account - MALIVIEW



	Existing	Proposed	% change
Total revenue	\$ 76,723	\$ 76,867	0.2%
Parcel tax	\$ 28,837	\$ 28,837	0.0%
Fixed charge	\$ 37,100	\$ 37,689	1.6%
usage charge	\$ 10,786	\$ 10,341	-4.1%
Avg/acct	\$ 782.55	\$ 829.62	6.0%
P5	\$ 650.16	\$ 762.58	17.3%
P10	\$ 662.24	\$ 767.08	15.8%
P25	\$ 684.22	\$ 784.65	14.7%
P50 (median)	\$ 714.67	\$ 814.39	14.0%
P75	\$ 787.86	\$ 856.89	8.8%
P90	\$ 1,038.91	\$ 927.63	-10.7%
P95	\$ 1,192.65	\$ 938.09	-21.3%

NOTES

Existing formula based on SFE, includes duplexes, secondary dwellings, and one connection with 4 SFE.

Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).

RATE STRUCTURE ANALYSIS

HIGHLAND + MALIVIEW

ALTERNATIVE 3

January 14, 2010

EXISTING

Annual Parcel Tax =	\$ 804.59	x	<input type="text"/>	folios
Fixed Charge/SFE =	\$ 521.73	/ year =		/ cycle
Cycles per year =				
# of SFE =				

Tier 1	<=		m ³ =	/ m ³
Tier 2	<=		m ³ =	/ m ³
Tier 3	<=		m ³ =	/ m ³
Tier 4	>	0.00	m ³ =	/ m ³

PROPOSED

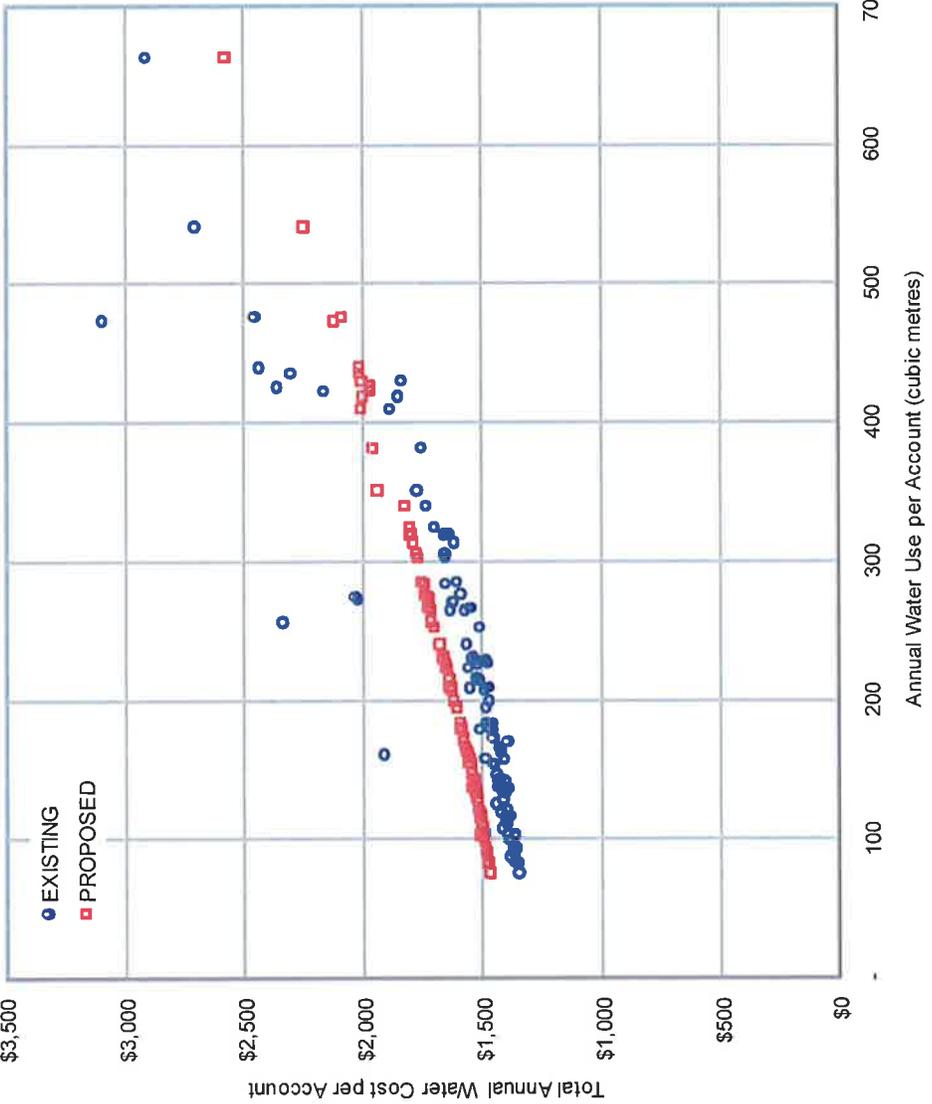
Annual Parcel Tax =	\$ 804.59	x	0	folios
Fixed Charge/conn =	\$ 586.73	/ year =	\$ 146.68	/ cycle
Cycles per year =	4			
# of Connections =				

Tier 1	<=		m ³ =	/ m ³
Tier 2	<=		m ³ =	/ m ³
Tier 3	>		m ³ =	/ m ³

Multi-family / ICI variable charge =

Meter Size	n
<25mm	
26-30mm	
31-40mm	
41-60mm	
61-90mm	
>90mm	

**Total Water Taxes and Fees vs. Water Use per Account
HIGHLAND + MALIVIEW**



	Existing	Proposed	% change
Total revenue	\$ 278,323	\$ 279,026	0.3%
Parcel tax	\$ 145,088	\$ 145,088	0.0%
Fixed charge	\$ 82,425	\$ 83,289	1.0%
usage charge	\$ 50,811	\$ 50,648	-0.3%
Avg/acct	\$ 1,610.71	\$ 1,665.97	3.4%
P5	\$ 1,358.10	\$ 1,477.78	8.8%
P10	\$ 1,366.18	\$ 1,486.26	8.8%
P25	\$ 1,406.21	\$ 1,523.09	8.3%
P50 (median)	\$ 1,483.64	\$ 1,601.41	7.9%
P75	\$ 1,642.11	\$ 1,729.14	5.3%
P90	\$ 2,027.67	\$ 1,968.23	-2.9%
P95	\$ 2,387.92	\$ 2,015.17	-15.6%

NOTES

Existing formula based on SFE, includes duplexes, secondary dwellings, and one connection with 4 SFE. Assume all accounts are residential, or have a meter smaller than 25mm (no need for non-residential rate class at this time).