



Agenda No: 6.5

Mtg. Date: October 26, 2015

## Regional Board Report

**TO:** Regional Board

**FROM:** Chris Radford  
Director of Community Services

**DATE:** October 19, 2015

**SUBJECT:** Water System Fees and Charges Bylaws and Regulations Bylaw for Regional District of Central Okanagan owned Water Systems

**Purpose:** The purpose of this bylaw is to establish regulations under which water will be provided to any parcel located within a Regional District of Central Okanagan water system service area.

**Executive Summary:**

Currently the RDCO water systems are regulated by Regional District of Central Okanagan Water Systems Fees and Regulations Bylaw No. 1268. Corporate Services obtained a legal review which indicated that each of the six water systems should have a distinct fee bylaw associated with it. Therefore, Bylaw No. 1268 will be repealed and replaced with the following bylaws identified below.

**RECOMMENDATION:**

THAT the Regional District of Central Okanagan Water System Regulations Bylaw No. be given first, second and third readings and adopted;

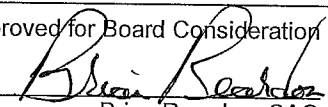
AND FURTHER THAT the following Regional District of Central Okanagan Water System Fees and Charges Bylaws be given first, second and third readings and adopted:

- Killiney Beach Water System Fees & Charges Bylaw
- Falcon Ridge Water System Fees & Charges Bylaw
- Sunset Ranch Water System Fees & Charges Bylaw
- Dietrich Water System Fees & Charges Bylaw
- Westshore Estates Water System Fees & Charges Bylaw
- Upper Fintry, Shalal Road, and Valley of the Sun Water System Fees & Charges Bylaw

Respectfully Submitted:

  
Chris Radford  
Director of Community Services

Approved for Board Consideration

  
Brian Reardon, CAO

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**Implications of Recommendation:**

Financial:	Accountability and transparency
Social:	More equitable financial structure
Environmental:	Promotes water conservation

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**Background:**

The Regional District of Central Okanagan (RDCO) owns and operates six distinct water systems in the East and West Electoral areas. All of the water users are residential with the exception of the Sunset Ranch Golf Clubhouse and Westshore Estates Community Park. A summary of each system is provided in the table below.

Water System	Location	Number of Users <sup>1</sup>	Number of Lots <sup>1</sup>	Water Source	Age of System <sup>1</sup>
Killiney Beach	West Electoral Area. North of Fintry Provincial Park.	282	425	Okanagan Lake	35
Falcon Ridge	East Electoral Area. Joe Rich.	54	55	Mission Creek	26
Sunset Ranch	East Electoral Area. Ellison Area.	236	274	Groundwater	13
Dietrich	West Electoral Area near Peachland.	8	8	Trepanier Creek	25
Westshore	West Electoral Area. North of Fintry Provincial Park.	253	522	Okanagan Lake	45
Upper Fintry	West Electoral Area. Upslope from Fintry Provincial Park	81	338	Groundwater	3

<sup>1</sup> As of October 5, 2015

The current water fees are composed of User fees and Asset Renewal fees. The User fees apply to all lots connected to the water system and are intended to cover all annual operational costs of the water system. The Asset Renewal fees apply to all lots within the service area and are intended to fund capital reserves that will be utilized on capital projects. This fee review focused on the User fees and changes are not proposed to the Asset Renewal fees. Asset Renewal fees will be re-evaluated in 2017/2018. The current 2016 Asset Renewal fee will remain in place until Asset Renewal fees are re-evaluated.

The current User fee structure is composed of a basic fee and a consumption fee. The basic fee is a flat fee that applies to all lots connected to the water system. The consumption fee is based on actual individual metered water consumption. The current water fee structure is the same for all RDCO water systems; however, the specific fee values vary.

User fee and Asset Renewal fee revenue is not pooled or shared between water system service areas or other RDCO cost centres. Revenue from each water system is only used to cover operational and capital costs within the water system where the revenue originated.

The water fees differ between each of the RDCO water systems and amongst water systems throughout North America for numerous reasons including, but not limited to:

- factors that impact economies of scale (e.g., number of users, service area),
- types and cost of water treatment,
- population density,
- age and efficiency of infrastructure,
- elevation of water source and users (i.e., pumping vs. gravity), and
- funding, asset replacement planning, and subsidizations.

The recommended fee changes proposed within this report are required to address a number of ongoing deficiencies with our current fee structure. Specifically, over the last few years revenue from User fees has been insufficient to cover operating costs for each of the water systems and as a result revenue from Asset Renewal fees was used to cover the difference. As a result, capital reserves have not been funded to the level that was originally planned when the current Asset Renewal fee structure was implemented in 2011. These Asset Renewal reserves are required to partially fund the replacement of the existing assets and as illustrated with the recent success of the New Building Canada Fund – Small Communities Fund (NBCF – SCF) funding application for Killiney Beach are required to leverage additional Provincial and Federal grants (i.e., turned every \$0.33 of reserve into \$1.00).

Since the current fee structure was implemented, RDCO staff have received significant feedback from customers indicating that they would like the fee structure changed so the consumption fee makes up a greater proportion of the revenue required to fund operations thereby allowing residents to have more control over their fees and rewarding them for their conservation efforts. Presently, approximately 96% of User fee revenue is generated from the fixed basic fee and only approximately 4% is generated from the consumption fee. The recommended User fees were designed to generate approximately 80% of User fee revenue from the basic fees and approximately 20% from consumption fees. The 80/20 ratio is approximately aligned with the fixed/variable costs ratio to operate RDCO water systems. Therefore, as expenses associated with water consumption increase or decrease so will revenue with the projection that the basic fee will cover the fixed costs. User fees will be reviewed on an annual basis to ensure that increases and decreases in fixed and variable costs are properly reflected.

Under the current rate structure, low and average users (approximately 80% of customers) are unfairly subsidizing high and extreme water users. The changes recommended to the consumption fee will result in a more equitable rate structure, incentivize water conservation, and fulfil the customer demand for more of a user-pay fee structure.

RDCO staff and environmental consultants reviewed a large number of fee structures including fee structures that were based entirely on fixed fees, entirely on variable fees, various combinations/weightings of fixed and variable fees including fee structures with single variable tiers, multiple variable tiers and seasonal variations in variable fees. Three options were considered in more detail as they aligned with the original rate review objectives and/or customer feedback and the options are summarized in the table below:

<b>Rate Structure Summary</b>	<b>Option #1</b>	<b>Option #2</b>	<b>Option #3</b>
Basic Fee	Increase to cover fixed costs	No change – only partially covers fixed costs	Increase to cover fixed costs
Consumption Fee	Increase – flat rate to cover variable costs	Increase – flat rate to cover variable and some fixed costs	Increase - 4-tier rates to cover variable costs
<b>Key Objectives</b>			
Financial Accountability	Most Stable	Most uncertain	Stable
Encourage Conservation	Least conservation	Mid conservation	Most conservation
Equitable	Most equitable	Equitable – some subsidization	Equitable – some subsidization

### **Customer Feedback**

The Regional District hosted several open houses in June which were well attended and provided customers of all water systems an opportunity to review the three different proposed rate structures, ask questions, and provide feedback on their preferences.

Customers were requested to complete a survey with their preferences and comments. Approximately 100 customers from the six water systems completed the survey and the results were very even with Option #2 only slightly leading the way as the most preferred. In addition, customers indicated that they either agreed or strongly agreed that their preferred rate structure will encourage conservation (58%), is equitable for all users (59%) and is simple to understand (70%). 63% of respondents also indicated that they either agreed or strongly agreed that the open house answered their questions regarding the proposed rate structures.

As expected, we received a number of comments during the open houses that residents are not happy with the proposed increases; however, some of the more constructive comments include:

#### *Financial Accountability*

- “We need to have a water system that sustains itself cost wise. Fees must cover operation of the system now and have a plan for the future maintenance of the system.”
- “As a vacant parcel owner, I would like the asset renewal charge to be lower. I am very concerned that funds I pay to replace the assets in the system are used to fund the operation. This depletes the reserves I have paid into the system and could result in an unfair cash call when major items do need to be renewed. Operating charge need to fund operating costs to keep the reserves for infrastructure improvements.”

#### *Lower Basic Fee*

- “Strongly recommend low Basic Rate for those of us who go south for winter.”
- “We are at our home in Westshore 6 months which means we pay for 2 quarters when no water is being used at all. A more equitable system, in our opinion, would be to do the consumption on a yearly basis rather than quarterly. The only way water meters work in an equitable way is if you pay for the water you use, period. That is the also the only way to encourage conservation.”

### Higher Consumption Fee

- “Although there are savings to be realized by decreasing usage. I do not believe that low water users are rewarded enough and that high water users are not penalized enough. This in my opinion is not a conversation proposal but solely an increase.”
- “Higher variable rate with lower base rate. More like Calgary rate structure.”
- “Would like to see another option that would substantially increase the usage fee for heavy water consumers. As it is – Option 2 would be my lowest cost option but my savings would be only about \$2.00 per month. This is not nearly enough to encourage a significant change in anybody’s water consumption. I believe an equitable water rate structure is one that really encourages reducing water consumption and has a significant financial savings.”

### BC Water & Waste Association Study

A recent assessment of the financial sustainability of BC’s water systems completed by the BC Water and Waste Association (BCWWA) and Urban Systems indicated that the majority of water systems do not generate sufficient revenues from fees to pay for the full costs of providing services.

The most important reason for the recommended fee changes is to ensure that RDCO water systems are not included in this majority and we have the funds needed to deliver a high standard of service that doesn’t risk the health and safety of our communities.

### Recommendation

Option 3 is being recommended as it provides the most effective combination of financial sustainability (i.e. low financial risk), promotion of water conservation and equitable distribution of fees amongst customers. Although the most equitable, Option 1 does not provide the water conservation incentives of Option 3. Option 2 is financially risky as it relies of consumption revenue to cover fixed operating costs.

Overall, total annual fees for the average user are recommended to increase as outlined in the table below for each RDCO water system. The increases are significant but are necessary to bridge the operating revenue deficit that currently exists in each RDCO water system budget. The increase will be higher than average for “high” and “extreme” water users and lower than average for “low” water users. However, given the increased ability for users to control their fees through enhanced consumption fees, users have the ability to minimize this increase through behaviour change.

Water System	Cost for an “Average” User <sup>2</sup>		
	Annual Change		Total Annual Cost
	\$	%	\$
Killiney Beach	\$146.76	13%	\$1,238
Falcon Ridge	\$208.62	21%	\$1,195
Sunset Ranch	\$106.32	18%	\$685
Dietrich <sup>3</sup>	\$1,020.10	44%	\$3,358
Westshore Estates	\$288.39	28%	\$1,315
Upper Fintry	\$331.10	52%	\$963

<sup>2</sup> Based on calculated average consumption for each water system.

<sup>3</sup> Average skewed by two “extreme” users of the eight total users in the system.

Summary of current (2015 and 2016) and proposed annual fixed fees are summarized in the tables below:

Water System	Fee	2015 (current)	2016 (current)	Proposed
Killiney Beach	User	\$424.48	\$432.00	\$466.00
	Asset Renewal	\$632.00	\$657.00	\$657.00
Falcon Ridge	User	\$499.00	\$509.00	\$548.00
	Asset Renewal	\$459.00	\$459.00	\$459.00
Sunset Ranch (<0.25ha)	User	\$333.23	\$340.00	\$360.00 <sup>4</sup>
	Asset Renewal	\$219.00	\$219.00	\$219.00
Sunset Ranch (Club House)	User	\$850.00	\$866.00	\$360.00
	Asset Renewal	N/A	N/A	\$219.00
Sunset Ranch (>0.25ha)	Investment	\$1,800.00	\$1,800.00	\$1,800.00
Dietrich	User	\$1380.00	\$1,407.16	\$1,612.00
	Asset Renewal	\$732.00	\$757.00	\$757.00
Westshore	User	\$424.48	\$432.00	\$550.00
	Asset Renewal	\$557.00	\$582.00	\$582.00
Upper Fintry	User	\$424.48	\$432.00	\$690.00
	Asset Renewal	\$200.00	\$200.00	\$200.00

<sup>4</sup> Presented at open houses at \$383.00 but reduced due to the number of new connections with completion of new phase of subdivision.

Summary of current and proposed quarterly consumption fees:

Water System <sup>5</sup>	Current Consumption Fee <sup>6</sup>		Proposed Consumption Fee (\$/m <sup>3</sup> )			
	Rate/m <sup>3</sup>	Threshold (m <sup>3</sup> )	0-30m <sup>3</sup>	30-90m <sup>3</sup>	90-200m <sup>3</sup>	>200m <sup>3</sup>
Killiney Beach	\$0.35	90	\$0.50	\$0.70	\$1.05	\$2.00
Falcon Ridge	\$0.35	90	\$0.40	\$0.55	\$0.80	\$2.00
Sunset Ranch	\$0.35	90	\$0.25	\$0.35	\$0.55	\$2.00
Sunset Ranch Club House	\$0.20	0	\$0.35			
Dietrich	\$0.35	90	\$0.50	\$0.70	\$1.05	\$2.00
Westshore	\$0.35	90	\$0.50	\$0.70	\$1.05	\$2.00
Upper Fintry <sup>7</sup>	\$0.35	90	\$0.40	\$0.55	\$0.80	\$2.00

<sup>5</sup> Rates and thresholds based on consumption per quarter.

<sup>6</sup> The consumption fee was initially implemented in 2011 at a threshold of 235m<sup>3</sup>/quarter and was amended in 2013 to 90m<sup>3</sup> threshold.

<sup>7</sup> Consumption rates presented at open houses as \$1.10/\$1.35/\$2.00/\$3.00 but reduced as a result of increased number of connections.

## Bylaw Changes

All six RDCO water systems are regulated by Regional District of Central Okanagan Water Systems Fees and Regulations Bylaw No. 1268. Bylaw 1268 has been amended four times since it was implemented in December, 2009.

Significant changes are required to ensure RDCO water systems are regulated and managed in a legal, equitable and financially sustainable way that promotes water conservation. Important changes being proposed to the bylaws include:

- A new water fee structure that minimizes financial risk, promotes conservation and is more equitable for users; and
- Creating separate distinct Water System Fees and Charges Bylaws for each RDCO water system.
  - A legal review recommended that separate bylaws for each RDCO water system be created to ensure water service areas are regulated and managed as distinct service areas.
  - The Water System Regulations Bylaw will be common among all RDCO water systems.

Other secondary but important improvements are also proposed within the Regulations Bylaw including:

- Improvements to readability, language and definitions;
- Improvements to Right of Entry section and inaccessible properties;
- Improvements to Water Meters section;
- Improvements to Owner's Responsibilities that reduce risk to the RDCO;
  - Backflow prevention device maintenance and installation responsibility
- Elimination of Consumption Restrictions;
- Elimination of Special Use Irrigation permit;
- Addition of a pit water meter surcharge over an in-home meter;
- Addition of Call-Out Service Fees for locates, elevation adjustments and miscellaneous;
- Increase to the Inaccessible Property Penalty
- Addition of Late Payment Penalty (i.e., A late payment penalty of four percent (4%) will be assessed each quarter (compounded quarterly 16.99% per annum) on all outstanding balances not paid by the due date);
- Clarification that the User fees apply when the water service is on and not tied to status of building permit; and
- Update to the Hydrant Use Permit fees and requirements.

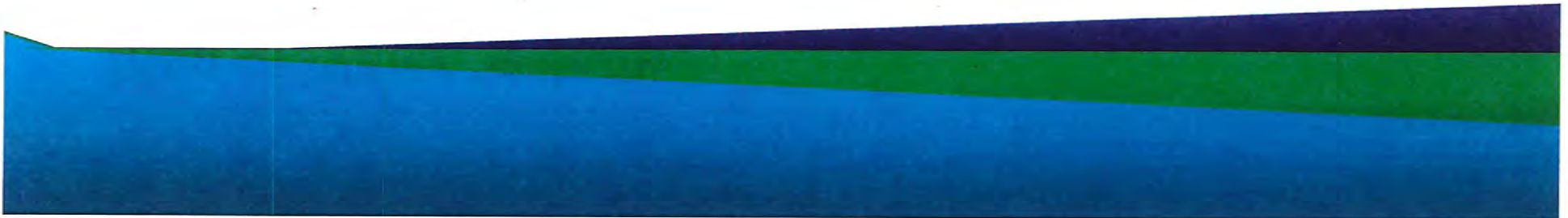
A comprehensive legal review was completed on the new proposed bylaws, which supported all aspects of the bylaws.



# Water System Fees and Regulation Bylaw

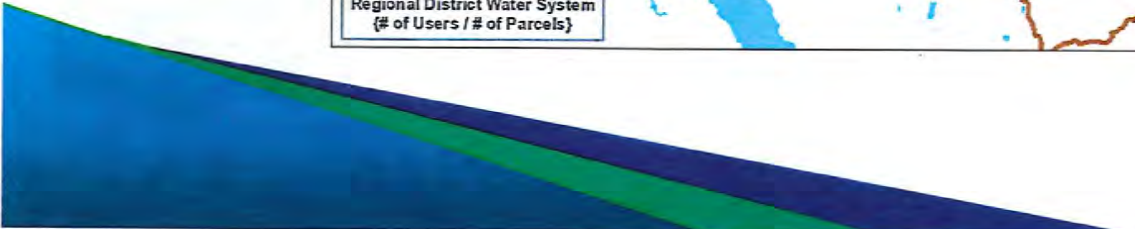
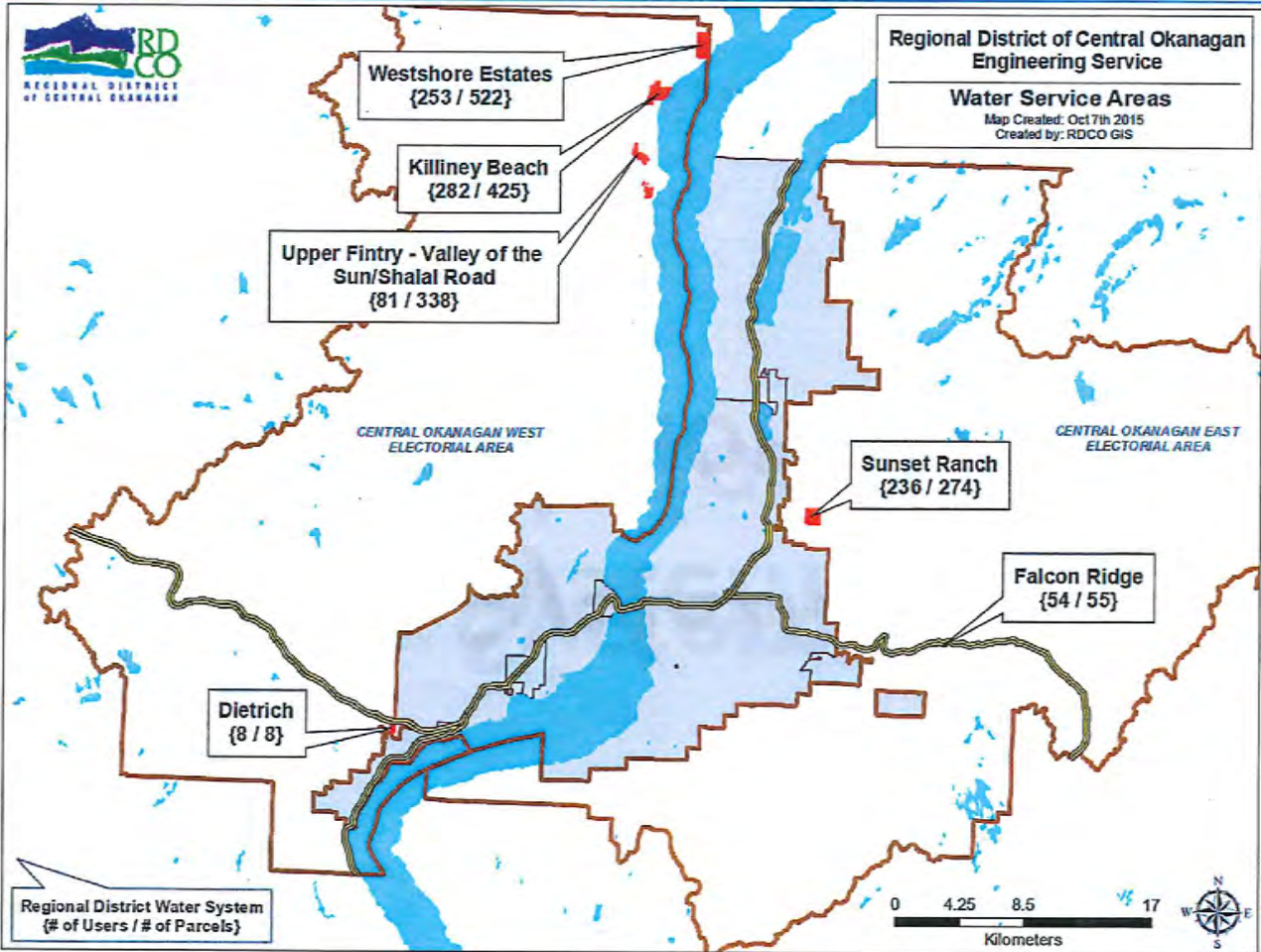
October 26, 2015

Chris Radford, Director of Community Services



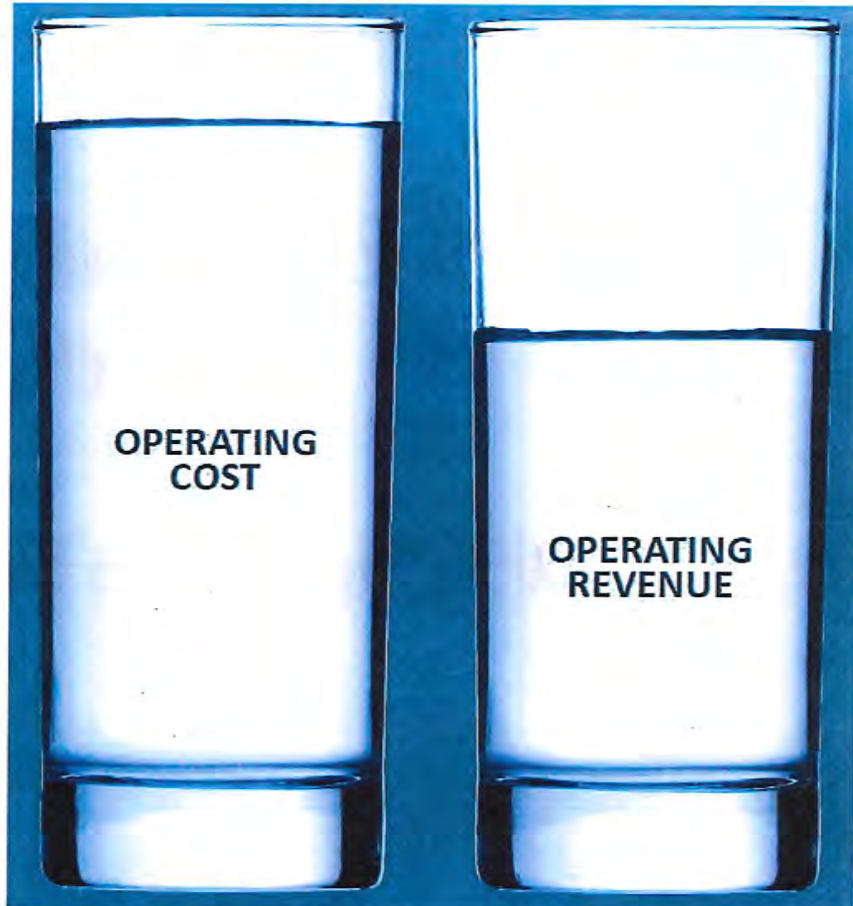


# Map of Water Systems



# Why Water Rates Need to Change

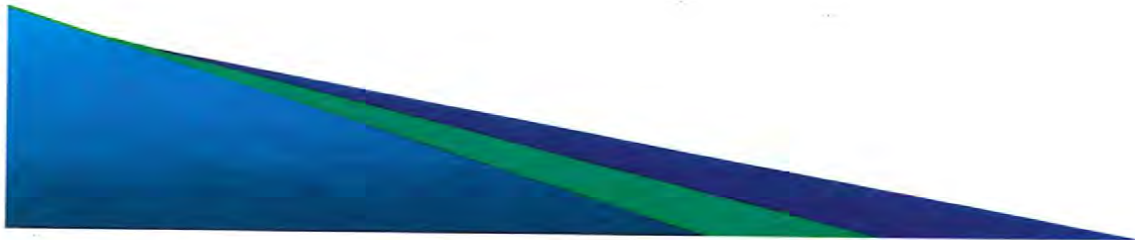
- ▶ The current operating revenue is not sufficient to fund operating costs
  - Each system is financially independent and must be self-sustaining



# Objectives of the Rate Structure Review

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- ▶ Financial Accountability
  - Operation and maintenance costs to be fully funded by users
- ▶ Encourage Conservation
  - Promote conservation and the value of water
- ▶ Equitably Funded
  - Rates should be equitable and defensible





# Recommendation – Option #3

Water System	Cost for an "Average" User <sup>2</sup>		
	Annual Change		Total Annual Cost
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<sup>2</sup> Based on calculated average consumption for each water system.

<sup>3</sup> Average skewed by two "extreme" users of the eight total users in the system.

# Are our Water Systems at Risk?

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- ▶ Report completed by BC Water & Waste Association (BCWWA)
  - “Assessing the Financial Sustainability of BC’s Municipal Water and Sewer Systems” – February 2015
- ▶ Report investigated:
  - Are water rates recovering the full cost of service?
  - How much investment is needed to sustain our water infrastructure?

“Our water doesn’t magically appear and disappear – it requires a complex network of people and infrastructure.”

Assessing the Financial Sustainability of BC’s Municipal Water and Sewer Systems, BC Water & Waste Association – February 2015



# Are our Water Systems at Risk?

- ▶ The majority of BC municipalities do not generate sufficient revenues from fees to pay for the full cost of providing services
- ▶ All water utilities in BC should implement water rates that cover the full cost of these essential services
  - Half of BC municipalities' water rates need to increase by **125% or more**

