



# Regional Board Report

## Request for Decision

**To:** Regional Board

**From:** Director of Engineering Services

**Date:** January 19, 2023

**Subject:** North Westside Water System Generators – Financial Implications

**Voting Entitlement:** *All Directors – Unweighted Corporate Vote – Simple Majority (LGA s.208)*

**Purpose:** To inform the Board of the Financial Implications to incorporate five (5) back-up generators into the Killiney Beach and Westshore Estates water systems.

**Executive Summary:**

In 2020 the RDCO retained Urban Systems to conduct a comprehensive technical review of the Killiney Beach and Westshore Estates water systems in Electoral Area West.

As one deliverable of the review, Urban Systems was commissioned to develop a staged 20-year plan that would summarize projects and provide recommendations to address and/or validate water treatment and distribution risks within the Killiney Beach and Westshore Estates water systems.

On February 28, 2022, the RDCO Board directed staff to bring forward a report which identified options for the provision of backup power to Electoral Area West public water systems.

Given the technical knowledge acquired by Urban Systems of these water systems parameters and performance levels, the assessment of options for the provision of backup power to the Electoral area West public water systems was added to their existing scope of technical review. This leveraged Urban Systems existing knowledge of these systems, accelerated the backup power assessment, and was conducted within the RDCO purchasing policy requirements.

Included in the report are the projected cost implications to install automatic transfer switches and generators to the Electoral Area Water Systems, and the two funding options for the board’s consideration.

Community	Land Purchase	Engineering and Design	Equipment and Improvements	Community Total
Killiney Beach	\$50,000	\$72,725	\$405,000	\$527,725
Westshore Estates	\$0	\$66,675	\$262,500	\$329,175
				<b>\$856,900</b>

**Recommendation(s):**

**THAT** the Regional Board receives the North Westside Water System Generators – Financial Implications from the Director of Engineering Services report, dated January 19, 2023, for information.

**AND THAT** a Board Policy on the apportionment of gas tax funds be developed for Board consideration prior to the allocation of Community Works (Gas Tax) funds in 2023.

Respectfully Submitted:



David Komaike, P.Eng.  
Director of Engineering Services

**Attachment(s):**

- a) September 26, 2022 Board Report: Killiney Beach and Westshore Estates Water Study – Summary and Evaluation of Supply and Treatment Options
- b) September 20, 2022 Urban Systems Memorandum – RDCO Backup Power Review
- c) PowerPoint presentation

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**Strategic Plan Alignment:**

Priorities: Sustainable Communities

Values: Resiliency

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**Background:**

In 2020 the RDCO retained Urban Systems to conduct a comprehensive technical review of the public water systems for the communities of Killiney Beach and Westshore Estates. As one deliverable of the review, Urban Systems was commissioned to develop a staged 20-year plan that would summarize projects and provide recommendations to address and/or validate water treatment and distribution risks within the Killiney Beach and Westshore water systems.

On February 28, 2022 the RDCO Board directed staff to bring forward a report which identified options for the provision of back up power to Electoral Area West public water systems.

In efforts to accelerate this Board direction as well as leverage Urban Systems current technical knowledge of the parameters and performance of the Electoral Area West Water systems, and to minimize cost, staff recommended that the assessment of backup power options for these public water systems be added to the water systems review scope of work already well underway. The chronology of board direction and staff implementation included:

- February 28th, 2022, the Regional Board directed staff to bring forward a report which identified options for the provision of back up power to Electoral Area West public water systems.

- With the assessment of backup power options underway and in efforts to be best prepared for procurement of generators should the board provide such direction, the Board Chair directed staff to bring forward implications of the installation of transfer switches should staff be directed following the water system review presentation by Urban Systems to install generators as a provision of back up power.
- April 6th, 2022, Administration provided correspondence via email to the RDCO Board providing an update advising the Board of the request for Urban Systems scope of work to be expanded to include the assessment of the provision of back-up power to the public water systems.
- April 14, 2022, following discussion during the Regional Board Meeting, the CAO distributed a briefing note via email to the Regional Board to provide an update on the actions to date related to back-up generators based on direction from the board. This email briefing note included an outline of the technical considerations and related components of procuring and installing generators, and the approach being taken to secure the professional advice required for the board to make an informed decision. This briefing note included several references to these efforts being guided by seeking the 'quickest way' in respect of the upcoming fire season.
- May 30th, 2022, Administration brought forward a recommendation to the Regional Board to install manual transfer switches which would have facilitated the connection of generators to the public water systems in Electoral Area West. The estimated budget for the work totalled \$100,000. The Regional Board resolved to defer consideration of the North Westside Water Systems – Back-up Power report until the report from Urban Systems Ltd. had been completed.
- September 26th, 2022, Urban Systems presented the [Killiney Beach and Westshore Estates Water Study](#) to the Regional Board. The study provided recommendations and options available to meet or exceed the Canadian Drinking Water and Provincial Water Quality Guidelines. Also, as directed by the Board, the report included the RDCO Backup Power Review memorandum, assessing the back up power requirements in the two water systems. Based upon the last 10 years of BC Hydro records of outages, Urban Systems recommended Option 1 (Do Nothing).
- September 26<sup>th</sup>, 2022, the Regional Board received the Urban Systems memorandum for information and directed staff to return to the Board with a report outlining the financial implications of installing back-up generators to support the Killiney Beach and Westshore Estates water systems.

The cost implications of installing generators as a back-up power supply for the Electoral Area West Water systems (Killiney and Westshore Estate Water Systems) is based on Urban Systems generator review provided to the Board on September 26, 2022 plus applicable overhead costs. It is based on a Class D estimate. Operational expense for each of the five generators was estimated to be \$20,000 per generator. Capital expenses for each of the five generators was more specific, based on the generators electrical rating.

Staff have identified the two funding options and the related cost implications of installing generators as a backup power supply. Water Fees paid by the rate payer, or by distribution of Community Works Funds (often referred to as Gas Tax Funds). Considerations of each are as follows:

**Water Fees**

The Annual Total Fees tables summarize the projected financial impacts on the Killiney Beach and Westshore Estates Water Systems – User Fees (base and consumption) and Asset Renewal Fees. This summary is based upon the data provided by the consultant, in the context of the existing and forecasted 2023 budget. The baseline comparison reflects the increase to the average utility bill based upon the January 12, 2023 – Water System Fees and Charges Bylaw Amendments report to the Regional Board.

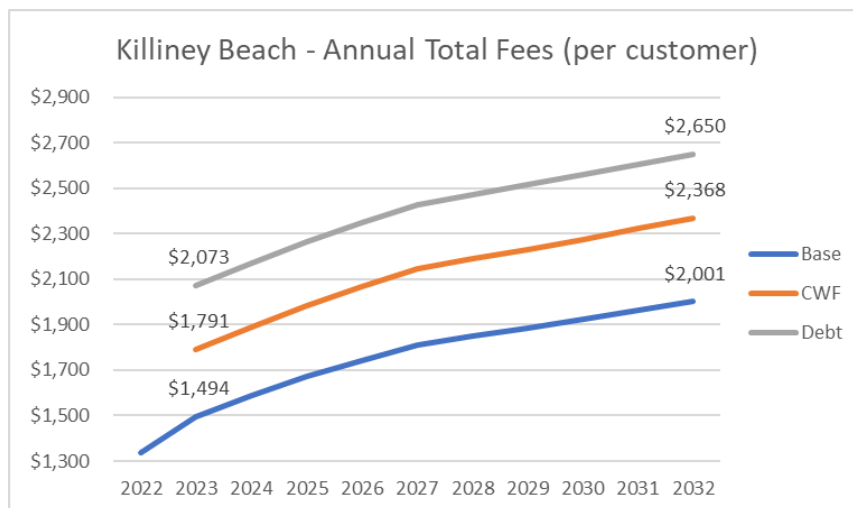
**Community Works Fund**

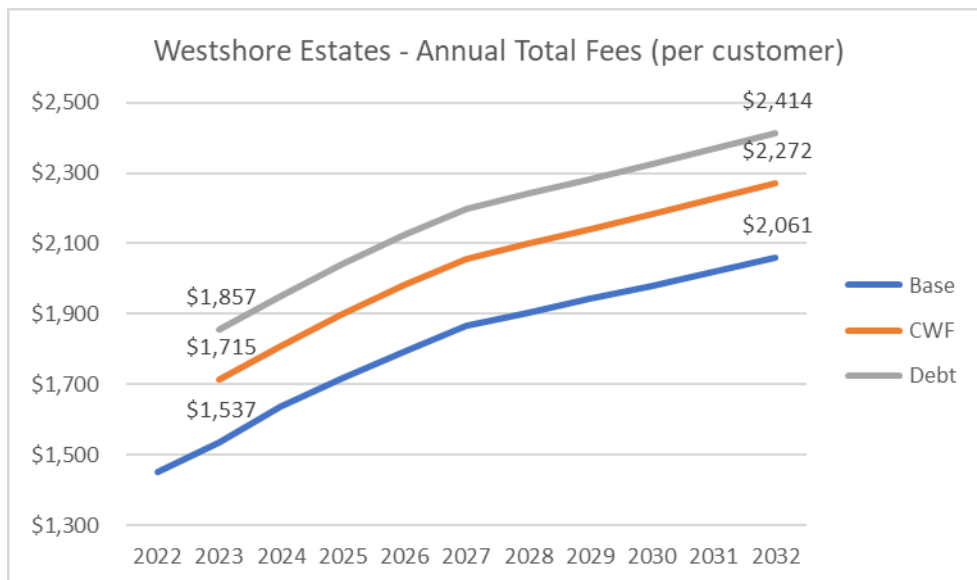
The Community Works Fund (CWF), often referred to as Gas Tax Funds, allocates funding to all local governments in British Columbia based on a per capita formula that includes a funding floor. Local governments may direct the funding towards eligible costs of eligible projects as set out in the CWF agreement and report annually on these projects and their outcomes. Finance has reviewed the use of the CWF revenues since 2013 and a summary is included in the table below:

REGIONAL DISTRICT OF CENTRAL OKANAGAN								
Apportionment of Gas Tax Revenues								
Year	Description	Current			Analysis			
		Westside	Eastside	Total	Westside	WFN	Eastside	Total
TOTAL	Received	6,944,420	2,699,606	9,644,026	2,609,863	4,334,556	2,699,606	9,644,025
	Interest	147,680	80,032	227,712	46,032	101,648	80,032	227,712
	Spent	(3,093,942)	(1,836,062)	(4,930,004)	(3,093,942)	-	(1,836,062)	(4,930,004)
	Balance	3,998,158	943,576	4,941,734	(438,047)	4,436,205	943,576	4,941,733

The CWF annual allocation, based on population, is administered by UBCM on behalf of the Province. These funds are received as a lump sum and has been distributed between Electoral Area East and Electoral Area West based on population. Those figures are summarized under the “**Current**” column in the table above.

**Annual Total Fees Tables**





The average customers annual water bill will change as follows, based on the funding option selected:

Community (# of lots)	2022 Total Fees	<u>Baseline</u> 2023 Total Fees (difference from 2022)	<u>Option 1 (Debt)</u> + Generator (difference from 2022)	<u>Option 2 (CWF)</u> + Generator (difference from 2022)
Killiney Beach (272)	\$1337	\$1494 <b>+\$157 (+11.7%)</b>	\$2073 <b>+\$736 (+55.0%)</b>	\$1791 <b>+\$454 (+34.0%)</b>
Westshore Estates (298)	\$1450	\$1537 <b>+\$87 (+6.0%)</b>	\$1857 <b>+\$407 (+28.1%)</b>	\$1715 <b>+\$265 (18.3%)</b>

Un-serviced lots (150 in Killiney Beach, 223 in Westshore Estates) within the established water service area will be charged for increased Asset Renewal Fees as follows, based on the funding option selected:

Community (# of lots)	2022 Asset Renewal Fee	<u>Baseline</u> 2023 AR Fee (difference from 2022)	<u>Option 1 (Debt)</u> + Generator (difference from 2022)	<u>Option 2 (CWF)</u> + Generator (difference from 2022)
Killiney Beach (150)	\$696	\$736 <b>+\$40 (+5.7%)</b>	\$1058 <b>+\$362 (+52.0%)</b>	\$776 <b>+\$80 (+11.5%)</b>
Westshore Estates (223)	\$736	\$780 <b>+\$44 (+6.0%)</b>	\$946 <b>+\$210 (+28.5%)</b>	\$804 <b>+\$68 (+9.2%)</b>

Operating costs are proportioned in each system for salaries, fuel, replacement parts, consumables, and reserves as set out within the Urban Systems report, and are CLASS D estimates. Maintenance expenses for the first year of operations are expected to be included within a warranty period, and actual costs will be used to improve upon the initial CLASS D expense estimates.

Capital expenses have also been proportioned in each system as per the Urban Systems report and are also considered to be CLASS D estimates. Further design level effort is required before initiating procurement to confirm expenses and budget adequacy.

Debt expenses have been proportioned to all lots within the service area, including those not physically connected to the system.

## Westbank First Nation

Westbank First Nation (WFN) is a recognized order of government in Canada. WFN has not signed Treaty with the Province of British Columbia. Because of this, UBCM, acting on behalf of the Province does not provide a CWF annual allocation directly to WFN. Instead, they include the equivalent CWF amount in the Electoral Area West allocation.

Historically, staff has worked with the Electoral Area Directors to distribute CWF projects throughout their electoral area on an equitable basis. The CWF program has been evolving over the years. In the early days of CWF, the project criteria were very restrictive with a narrow scope and a requirement that the local government owned the asset at the end of the day. This was particularly problematic for WFN. Over time, and in particular over the past 5 years, the CWF criteria has been relaxed to allow greater project scope and flexibility in regard to ownership of the assets at the end of the day. That said, UBCM is still allocating CWF funding through the Electoral Areas.

In today's era of reconciliation and considering the RDCO Board's priority to advance reconciliation efforts, staff have re-calculated the internal distribution of the CWF annual allocation received from UBCM breaking out WFN based on population (same methodology as UBCM). That information, going back to 2013, is summarized under the "**Analysis**" column in the table on page four of this report.

This summary shows a significant shortfall of monies being spent on WFN projects, due primarily to historically restrictive criteria for CWF projects. Now that this has changed the Board could advocate for, and RDCO staff should work more closely with WFN Administration to identify projects that do meet CWF criteria in order that WFN benefits from the program.

Because the RDCO cannot simply transfer CWF allocations directly to WFN, as that does not meet project criteria, the Board could consider advocating on this, should WFN wish us to do so, and formally request UBCM to send CWF annual allocations directly to WFN in the future.

At the very least, it is suggested the Board task RDCO staff to bring forward a Board Policy dealing with internal apportionment of Community Works Funding within the RDCO.

### **Alternate Recommendation:**

**THAT** the Regional Board receives the report North Westside Water System Generators – Financial Implications from the Director of Engineering Services, dated January 12, 2023 for information.

**AND THAT** a Board Policy on the apportionment of gas tax funds be developed for Board consideration prior to the allocation of Community Works (Gas Tax) funds in 2023.

**AND FURTHER THAT** an amendment to the Killiney Beach Water System Fees and Charges Bylaw, and the Westshore Estates Water System Fees and Charges Bylaw to fund the installation of backup generators using short term debt financing, be prepared for reading consideration.

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**Considerations:**

## Organizational/External:

- The summary of Community Works Funds identifies a misalignment of how funds were calculated to how they have been apportioned. Staff recommend the board consider a Community Works Fund Allocation policy for future allocation of Community Works Funds.

## Financial:

- Initial cost estimates reflected within this report are based on the Urban Systems presentation and accompanying report to the Board on September 26, 2022.
- Forecasted 2023 rate increases for the Killiney Beach Water System next year are 18.2%, rising to a maximum of 55.0% if generators are installed as per the report received by the Board on September 26, 2022.
- Forecasted 2023 rate increases for the Westshore Estates Water System next year are 5.9%, rising to a maximum of 28.1% if generators are installed as per the report received by the Board on September 26, 2022.

## Considerations not applicable:

- Legal/Statutory Authority

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**Approved for Agenda**



**Brian Reardon, CAO**