

Killiney Beach and Westshore Estates Water Systems

Regional Board Meeting

September 26, 2022

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North Westside Water Systems

Purpose

- To present the Regional Board with information required to select a preferred path forward for providing the Killiney and Westshore water systems with a water supply and treatment plan that meets the British Columbia Drinking Water Protection Regulation and the Guidelines for Canadian Drinking Water Quality; and
- To review options for the provision of water during periods of power failure in the North Westside.

Background

- There are 3 distinct water systems owed and operated by the Regional District in the North Westside Electoral Area:
 - Killiney Beach Water System - 268 Connections (427 at buildout)
 - Westshore Estates Water System - 293 Connections (526 at buildout)
 - Fintry/Shalal/Valley of the Sun Water System - 164 Connections (330 at buildout)

Drinking Water Guidelines

- Currently, only Fintry/Shalal/Valley of the Sun Water System meets all the requirements of the Canadian Drinking Water Guidelines.
- Killiney Beach and Westshore Water Systems:
 - Do not provide a 3-log reduction or inactivation of Giardia and Cryptosporidium.
 - Do not reduce turbidity below 1 NTU, and
 - Do not provide a second form of treatment (UV).
- Interior Health working with RDCO to find a path forward to meet the current standards.

Numerous Studies

Report

Interior Health

ISSUE PAPER

Name of Issue: Criteria
Background and Issue

Interior Health Authority systems using surface water Source water monitoring filtration. Water supply Guidelines for Canadian proposal to Interior Health technologies. The proposal over a minimum of one

Interior Health's direct GCDWQ and other regulatory Filtration in Waterworks criteria cannot guarantee filtration "adequate" criteria

A suggestion is that to on a case-by-case basis

The IH Water Excellence Senior Water Executive

1. Should we defend
2. Should we defend
3. Should IH take filtration?

The response by SW1

- Agreement that
- To take direct IHA will meet
- There is a need
- IHA and the permanent;
- Criteria will meet
- Interior Health expectations
- Water supply them in long objectives.

HP19019 February 2008

Report

Source / Okanagan Systems

EXECUTIVE SUMMARY

The objective identify current the risk position intake. This research available

This assessment as physical document water currents from the intake (IPZ), based At both intake the region, use, power

Specific re the best water of filtration shoreline with 3 m (the intake

Acknowledgements

Funding Infrastructure

Principal Massey Assistant Lambre Technic Bakelaar

LARRATT AQUATIC

Near-Shore Water Quality and Periphyton Production in Okanagan Lake at Killiney Beach and Westshore Estates Area

Prepared for: Regional District of Central Okanagan

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Water **AECOM** **AECOM**

Water System Report Review

Okanagan

Investigations: Killiney Beach Water Systems – Final

Requested that Associated Engineering (AE) Westshore Estates Water System report by recent high turbidity event in Okanagan Lake, updated in drinking water provided by Interior Health,

Advised that the reader is familiar with the content of the background data on the water systems and the has been prepared for the technical staff at the

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entral dates from 2016 up to May 9, 2017. The data at the existing intakes, as well as Sites A, B and C and 30m depths. The RDCO was not able to obtain increasing flood levels of Okanagan Lake. The Killiney and Westshore Estates Water System (WEWS) compared to the hand samples taken. The online water turbidity recording through the spring of 2017 for recorded at the Killiney Beach intake. The online data. It is therefore assumed that the grab samples

Water Systems – Final Report, December 2015

BEST MANAGED COMPANIES

Review of All Past Studies

- July/2021 - Urban System was commissioned to review all past recommendations, alternatives, and options in order to determine the best approach available to meet the Provincial drinking water objectives.
- February/22 - Urban Systems has reviewed the need for generators and considered various options available to meet drinking water objectives.
- Jeremy Clowes, P.Eng. – Urban Systems

Recommendation #1

THAT the Regional Board receive the Killiney Beach and Westshore Estates Water Systems Study: Summary and Evaluation of Supply and Treatment Options (rev.5) as prepared by Urban Systems and attached to the report from the Director of Engineering Services dated September 26, 2022, for information.

AND THAT the Regional Board support staff preparing a Killiney & Westshore Water System Upgrade project plan for Board consideration at a future meeting based on the recommended Option 1 (A or B) as outlined in the Killiney Beach and Westshore Estates Water Systems Study;

Recommendation #2

THAT the Regional Board receive the RDCO Backup Power Review Memorandum dated September 20, 2022 as prepared by Urban Systems, and attached to the report from the Director of Engineering Services dated September 26, 2022;

AND THAT the Regional Board, based on the data provided by BC Hydro regarding the frequency of outages, support Option 1 of the recommendation of Urban Systems and not consider the addition of generators at this time.