

North Westside Regional Water System Project Plan Update

Regional Board Meeting

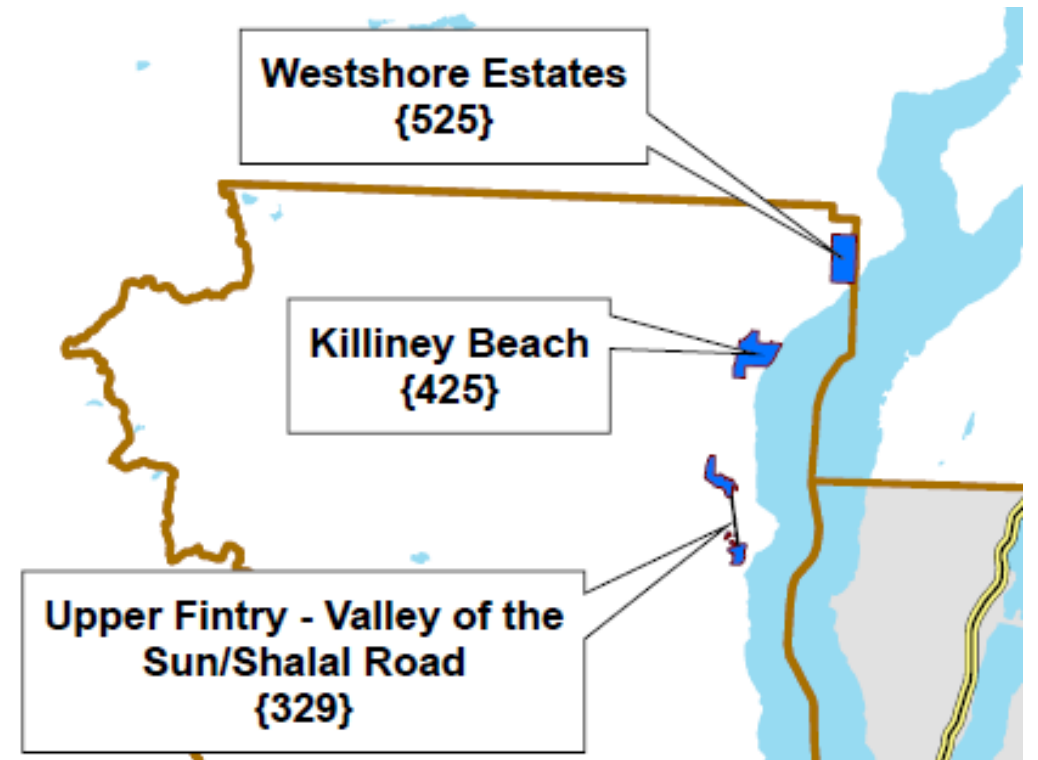
Nov 28, 2024

1450 K.L.O. Road
Kelowna, BC, V1W 3Z4
rdco.com



Background

- Killiney Beach and Westshore Estates Water Systems are owned and operated by RDCO
- Killiney – 425 parcels
- Westshore – 525 parcels
- Source water – Okanagan Lake
- Not in compliance with Drinking Water Treatment Objectives for Objectives in BC



Background – Study

- Urban Systems retained to complete study
 - Summary and Evaluation of Supply and Treatment Options
 - Concept Refinement
 - Asset Management Considerations



Background - Study Options



1A – Fintry Groundwater Supply with Submarine Transmission Main



1B - Fintry Groundwater Supply with Overland Transmission Main



2A – Independent Intakes and Water Treatment Plants

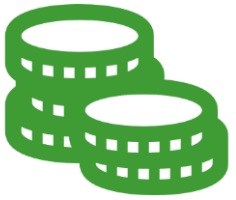


2B – Independent Intakes and Disinfection for Near Term and Common Intake and Water Treatment Plant for Long Term



3 – Common Intake and Water Treatment Plant

Background - Preferred Option



Considerations included:

Technical
Financial
Environmental & Regulatory



Board Resolution (September 2022):

... the Regional Board support staff preparing a Killiney and 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.



Preferred Option: 1B - Fintry Groundwater Supply (Overland)

Cost estimate increased from \$13M to \$23M

Asset Renewal Considerations

- Historical target – Asset renewal fees at 50% of target level
 - Killiney Beach - +\$300 per year, per water connection
 - Westshore Estates - +\$600 per year, per water connection

SYSTEM	ASSET RENEWAL REVENUE (2023)	RESERVE BALANCE (2022)	20 YEAR AVERAGE ANNUAL ASSET INVESTMENT (AAI)*	ANNUAL SHORTFALL
Killiney	\$309,856	\$1,629,837	\$863,652	\$553,796
Westshore	\$405,600	\$2,413,622	\$1,444,076	\$1,038,476

*The 20 Year AAI is shown as current fees are based on the higher of the 20-year AAI and the AACLI.

Project Plan 2025 (2025-2029 Financial Plan \$200,000)

1. Advance regulatory approvals

- a. Engage Environmental Assessment Office
- b. Apply for a water licence amendment
- c. Apply for Crown Tenure
- d. Complete indigenous consultation

2. Secure pipeline alignment

- a. Engage land agent to secure the pipeline alignment
- b. Negotiate with private landowners to secure pipeline Right-of-way
- c. Adjust alignment (as required)
- d. Apply for Crown tenure (as required)

Project Plan 2026 (2025-2029 Financial Plan \$250,000)



1. Complete field investigations

- a. Confirm current and future build out demand data
- b. Complete lidar survey
- c. Complete topo survey
- d. Complete Geotech investigation
- e. Confirm preferred area for future larger well and retain space
- f. Confirm max pumping rates



2. Advance Design

- a. Confirm estimated timeline to reach build-out demands
- b. Prepare preliminary plan/profile drawings
- c. Prepare community connection details
- d. Prepare floor plan for chlorine boosting station at Firwood reservoir
- e. Prepare Class C cost estimate

Recommendation

All Directors - Unweighted Corporate Vote - Simple Majority (LGA s.208)

THAT the Regional Board receives the North Westside Regional Water System Project Plan Update report from the Associate Director, Engineering Services dated November 28, 2024, for information.