

# 2017 Kelowna Integrated Water Supply Plan

City-wide, integrated water system would achieve:

- ▶ Best, lowest cost city-wide solution
- ▶ Drinking water that meets Canadian Drinking Water Quality Standards
- ▶ Flexibility for administration and operational functions
- ▶ Maintain agriculture interests

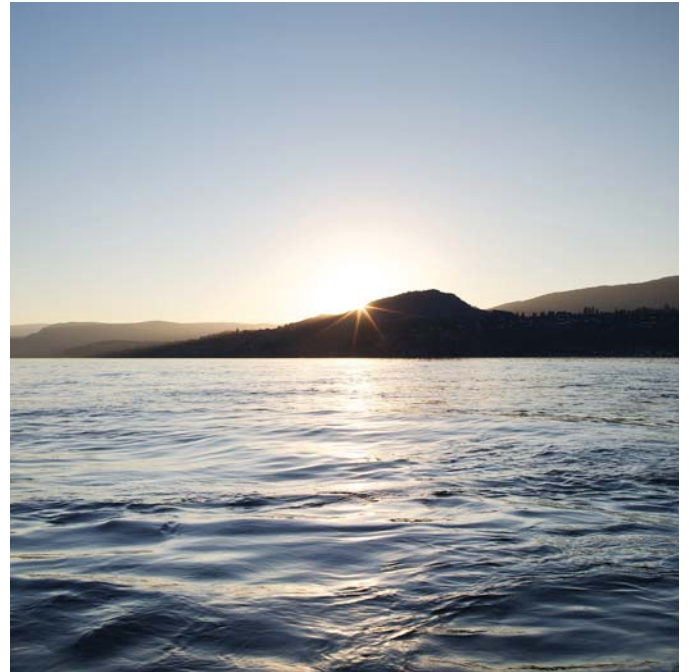
Integration plan benefits include:

- ▶ Equitable water rates, quality, supply and service levels for all users
- ▶ Resilient and redundant system that meets long-term domestic and agriculture needs
- ▶ Efficient operations and administration



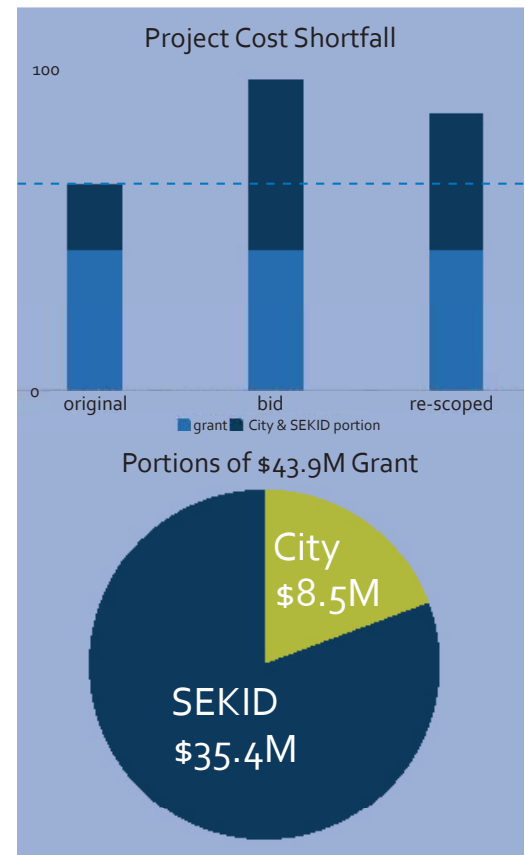
# Project Overview

- ▶ Separate agricultural and domestic water systems for rural South East Kelowna Irrigation District (SEKID) customers.
- ▶ Extend City of Kelowna water distribution system to supply domestic water to SEKID.
- ▶ Reduce treatment needs by drawing high quality water from Okanagan Lake.
- ▶ Sustainable water connection to South Okanagan Mission Irrigation District (SOMID) from City of Kelowna supply.
- ▶ Upgrades to City of Kelowna water utility system to supply SEKID and SOMID and accommodate future growth.



# Project Cost

- ▶ Total cost of the project is now \$86M, leaving a shortfall of \$22M from the original project budget.
- ▶ Additional funds are required to deliver the project.
- ▶ The rise in project cost is due to the high volume of infrastructure projects across the province as well as increased service demand requirements in some areas of South East Kelowna.
- ▶ SEKID ratepayers directly benefit from more than 80 per cent of the grant.
- ▶ Portions of project costs and shortfalls are allocated based on the transition agreement between the City utility and South East Kelowna Irrigation District (SEKID).
- ▶ While SEKID's portion of the original project cost was met, the unforeseen shortfall of \$15.3M must be covered through financing.



# 2018 Project Cost

SEKID portion (70%)	(millions)
reserves	\$7.5
city financing	\$15.3
grant (80%)	\$35.4
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subtotal	<b>\$58.2</b>
City portion (30%)	
utility reserves	\$19.3
grant (20%)	\$8.5
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subtotal	<b>\$27.8</b>
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TOTAL	<b>\$86.0</b>

- ▶ project was re-scoped to manage escalating costs. Infrastructure deliverables have changed from those originally outlined in 2017.

# SEKID Customer Cost

- ▶ The City will finance \$15.3M to SEKID ratepayers to cover the budget shortfall and allow the project to proceed.
- ▶ SEKID ratepayers will repay the financing over 20 years through a project levy of \$32 per month effective July 1, 2018. In 2021, ratepayers will move to lower City water rates and repayment will increase to \$40 per month. Average domestic consumers should see total costs remain relatively stable over the transition.

## Efforts to reduce costs

- ▶ \$8.8M in grant funding originally planned for a main transmission line on KLO Road and expansion of reservoir capacity has been re-allocated to SEKID to reduce SEKID's shortfall to \$15.3M.
- ▶ Domestic and agricultural rates and allocations for water set by SEKID remain in place until 2021.
- ▶ Without the financing and access to grant funding, SEKID ratepayers would face costs of approximately \$1,900 annually to receive clean drinking water as per Interior Health's mandate.

# SEKID Customer Cost

## Project cost recovery

Based on average 2017 domestic water consumption in the City Utility, ratepayers can expect costs similar to the following in 2021.\*\*

2018 - 2020	(per month)	(per year)***
SEKID water toll	\$55	\$662
Project fee	\$32	\$379
<b>TOTAL*</b>	<b>\$87</b>	<b>\$1,041</b>

\*Does not include SEKID annual water tax. \$92/year for properties under 1 acre.

2021 - 2038		
City water rates & fees	\$45	\$534
Project fee	\$40	\$478
<b>TOTAL</b>	<b>\$85</b>	<b>\$1,012</b>

\*\*Preliminary costs used for illustration only and based on average single family domestic useage of 41 cubic metres per month. Exact City billing amounts will vary depending on average water usage and rates set bi-annually by Council.

\*\*\*Rounding of per month totals means per year totals may not be equal.

# Metered Water

- ▶ City of Kelowna rates will be introduced in 2021.
- ▶ The City of Kelowna takes a cost recovery approach to domestic water delivery. Through a variety of means (fees, rates and taxes), the City works to ensure sustainable management of water infrastructure to meet current and future needs.
- ▶ The City of Kelowna uses volumetric rates. Metered water is important to understand water use and encourage conservation.
- ▶ As meters are installed in each home, ratepayers will be able to learn about usage prior to the first volumetric based statement.
- ▶ City water rates are set by Council and billed bi-monthly.



Bi-monthly average of single family home consumption in the City Utility (annual average).

# SEKID Transition

- ▶ To access funding from federal and provincial sources, irrigation districts must integrate with local governments.
- ▶ As a legislative requirement of self-financing, SEKID will dissolve earlier than originally anticipated.
- ▶ The City of Kelowna and SEKID have been working closely on a transition plan over the past year to ensure a seamless transition to the City Utility.
- ▶ In the short term, all operations, billing and customer service will remain as per usual for SEKID ratepayers.
- ▶ A Transition Rural Irrigation Operations Manager currently in place at the Gulley Road office will work with staff to slowly amalgamate services with the City Utility through 2019.
- ▶ The City welcomes all SEKID employees to continue their employment with the City utility for continuity of service, security and valuable knowledge transfer.





# Agriculture is a Priority



of Kelowna's land base is zoned for agricultural use (12,000 ha)



of Kelowna's land (approximately 40% of the landbase) is in the Agricultural Land Reserve

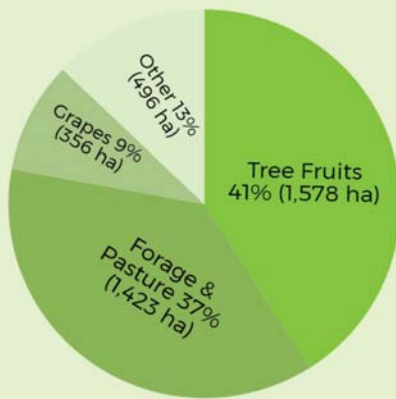


Kelowna had 10,054 ha in the ALR when it was established in 1973



**3,915 ha** of Kelowna' ALR land is in active farm use (as of 2014)

**3,853 ha of Kelowna's land is used to grow field crops**



86 % of Kelowna's cultivated crops use irrigation



parcels of land involved in agriculture



properties with farm class status



average farm parcel size



of farm parcels are smaller than 4 ha



Average gross farm receipts in the Central Okanagan have grown 36% since 2001 to \$96,558 per farm



1% of the Central Okanagan's population is employed in farming (2011 census)



Average age of a farmer in the Central Okanagan is 56.8 years old (2011 census)

## Kelowna Integrated Water Supply Plan

Spring 2018



# Agriculture Vitality

- ▶ The City of Kelowna recognizes the need and importance of a vibrant agricultural industry.
- ▶ Kelowna's new Agricultural Plan and recent consultations for Imagine Kelowna clearly indicate the importance of protecting agriculture and promoting sustainable farming for Kelowna's future.
- ▶ During the SEKID transition and beyond, a number of actions are being considered to support Agriculture and ensure a strong transition of the existing distribution system.
  - ▶ Maintaining agricultural rates and allocations for water set by SEKID until 2021.
  - ▶ Developing a transition advisory committee on agricultural water matters in South East Kelowna.
  - ▶ Committing to an inclusive engagement process with the agricultural industry around the delivery and security of irrigation water.

# Agricultural Water Service

- ▶ The integration of SEKID starts the beginning of a new era that will see the City of Kelowna Water Utility also operating and delivering irrigation water to support agriculture.
- ▶ SEKID has a long history of service to Kelowna's agricultural community, and the City of Kelowna is committed to carrying on this tradition.
- ▶ Once the new domestic system is in place, the existing distribution system will become a dedicated supply of treated water for irrigation and some fire protection.

## Project benefits to Agriculture

- ▶ This model of separated systems supports agriculture interests by reclaiming the capacity used by previous domestic customers, and spreads costs of ongoing maintenance and future infrastructure of this aging system over the entire City utility.
- ▶ For resiliency, the domestic water supply could also be used in an emergency or water shortage.

# Agricultural Water Rates & Design

- ▶ Agricultural water rates and allocations set by SEKID will be maintained through 2020.
- ▶ City of Kelowna and South Okanagan Mission Irrigation District agriculture customers will be transitioned to the SEKID rate design for consistency in agriculture billing.

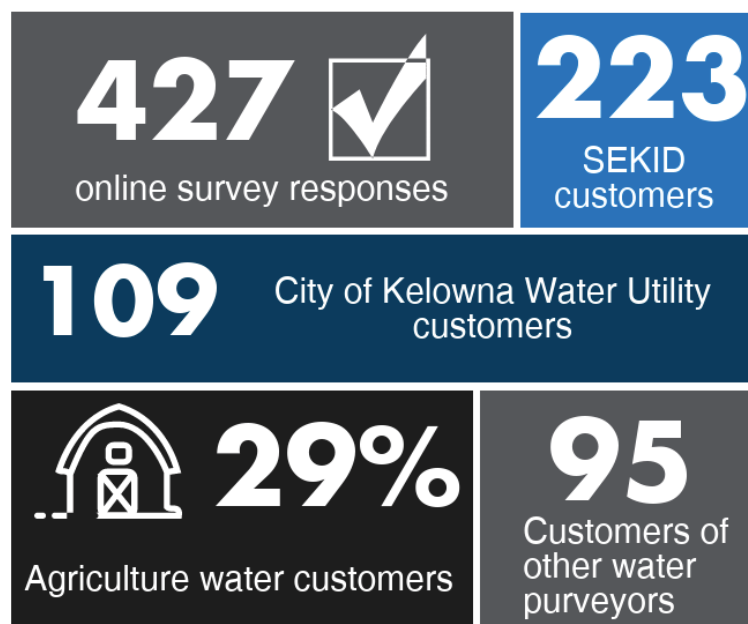


## The Irrigation System

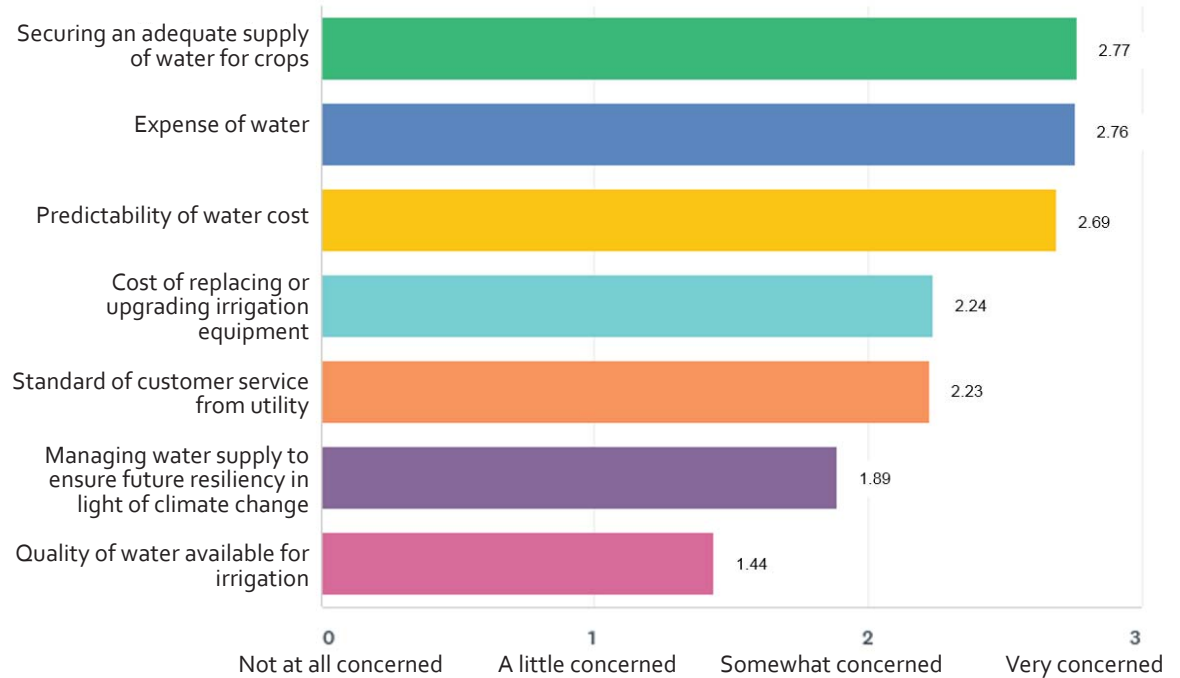
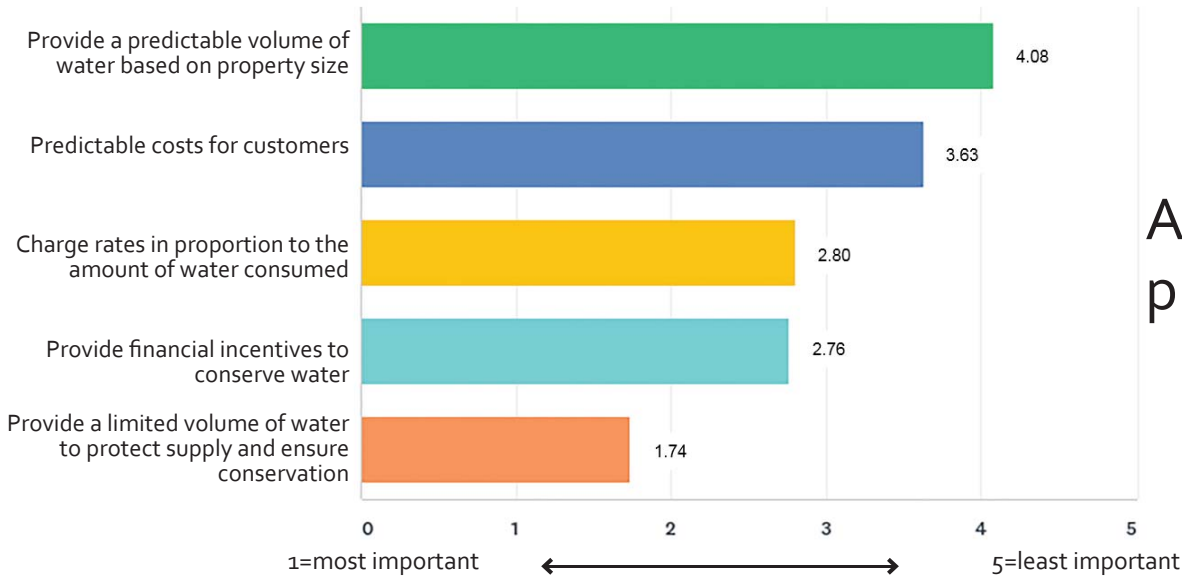
- ▶ The SEKID system has more asset renewal required than what is currently budgeted, and costs of owning and operating the separated irrigation system are likely to rise faster than inflation due to the quality and aging nature of the system, and the lack of replacement reserves.

# Agricultural Water Rate Design: What We Heard

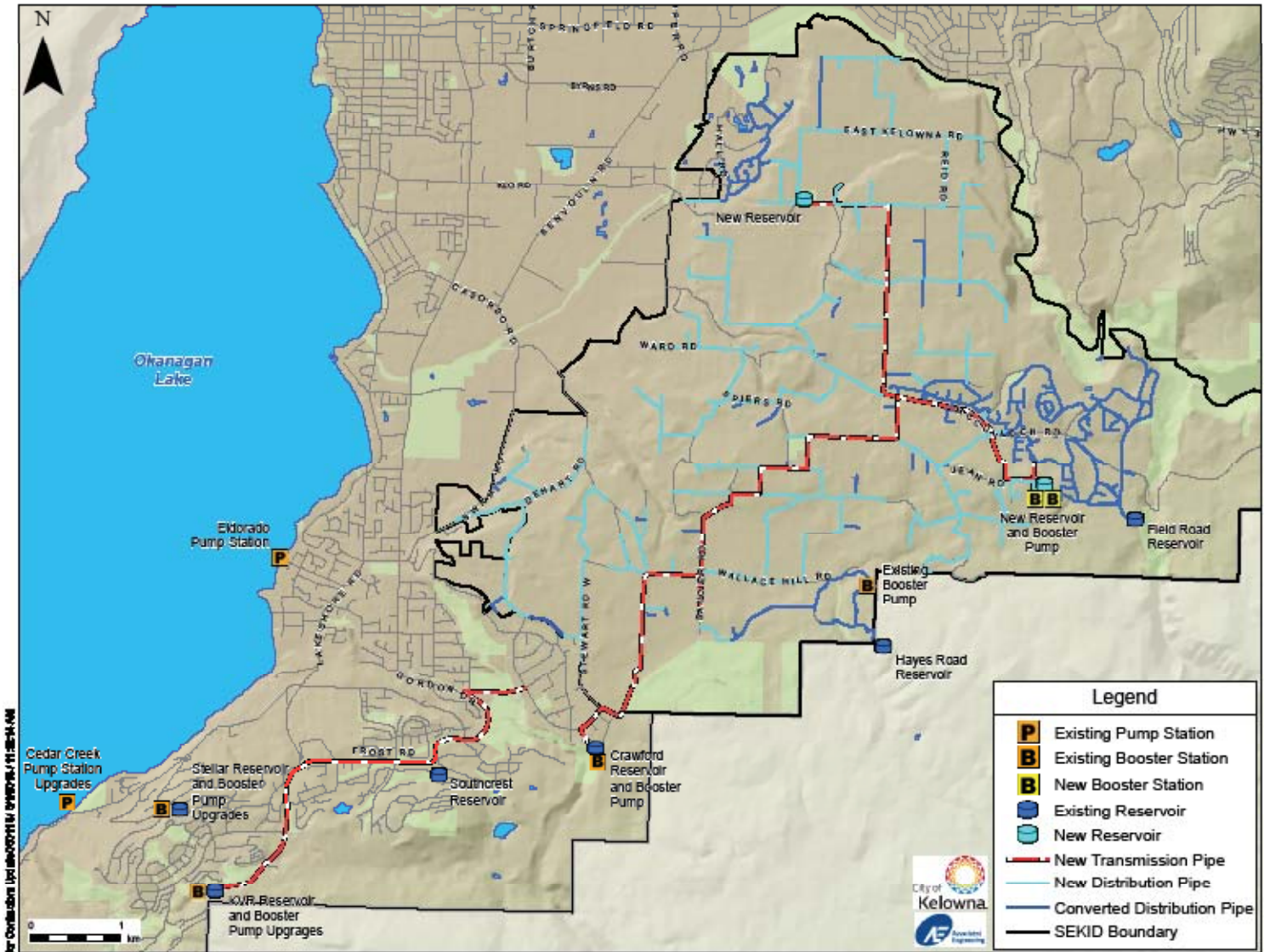
- ▶ The community engagement process highlighted many farmers' concerns about the security of supply and the cost of water .
- ▶ Concerns about the investment made in the SEKID agricultural water system, the security of that limited supply, and how the City might use or allocate that water differently in the long term.
- ▶ Widespread support for charging lower water rates for properties actively being farmed.



# Agricultural Water Rate Design: What We Heard



# Project Area Map



# Phase 1 Project Information

- ▶ Work will begin in July 2018 in the South Mission Area

- ▶ Upper Mission Dr
- ▶ Chute Lake Rd
- ▶ Frost Rd
- ▶ Gordon Dr
- ▶ Raymer Rd



- ▶ Work within South East Kelowna will be done by the same contractor and will start later this summer.
- ▶ An Information Session regarding more details about the infrastructure and construction details is expected in June 2017.

e-subscribe for project updates:  
[kelowna.ca/water](http://kelowna.ca/water)



# What to expect during construction

- ▶ Traffic impact is to be expected.
- ▶ Waterlines will typically follow the existing SEKID waterlines installed in the road right-of-way and statutory right-of-ways.
- ▶ New domestic water service lines will be installed and reconnected to existing domestic service lines at the property line.
- ▶ New water meters will be installed on domestic water service lines.
- ▶ Detour routes will be signed.
- ▶ Where detour routes are not possible, alternating traffic will be implemented with no more than 15 minute wait times.
- ▶ Businesses should plan pro-actively, keep up-to-date with project information and communicate with customers and suppliers in advance.
- ▶ Construction is expected to start in July 2018 for three years.



# Construction information

- ▶ Contractor will provide a letter of notification directly to affected properties .
- ▶ Designated person will be point of contact for impacted residents and businesses to act as a Community Liaison with contractor.
- ▶ Community Liaison will be available to facilitate unique requests and to address construction-related concerns.
- ▶ Project updates will be posted on the City and SEKID websites, or you can sign up for email updates at [kelowna.ca/water](http://kelowna.ca/water).

