



OUR WEST KELOWNA

our vision, our community



Photo: Ken Lang

HOW WE OPERATE

Our infrastructure systems are the bones of our community. Our water distribution system brings us drinking water, our sanitary and solid waste system manages our waste and keeps our community clean, our stormwater system ensures rainfall is managed in a way that supports our watershed and minimizes damage. While we don't see most of these systems that are in the ground below us, they are the bones that support our city.



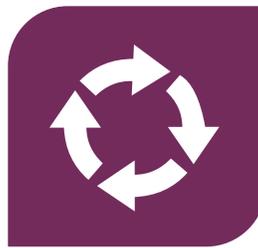
Improving drinking water is a top priority.

The new Rose Valley Water Treatment Plant is planned and will be our biggest infrastructure project ever, improving drinking water for many in the community.¹



How we develop affects costs for infrastructure.

Infrastructure for low-density sprawl costs a lot because pipes and roads travel long distances to serve only a few. Compact development shares costs between many.



Nothing lasts forever.

Like anything, infrastructure only lasts so long and when it comes time to repair or replace our community pays the costs, requiring preparation and saving.



Water is a precious resource.

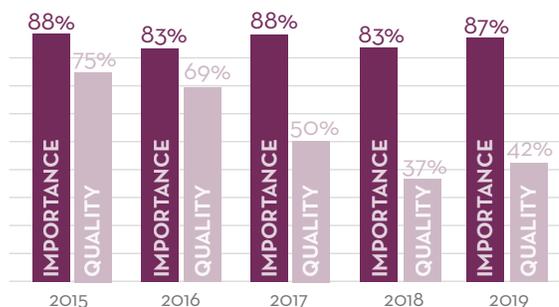
The Okanagan has a limited supply of water and we are prone to summer droughts, even more so as our climate changes. Conservation is essential.



Infrastructure is expensive.

Infrastructure capital and operations costs are typically the highest costs a community faces. Planning to be efficient is essential to managing taxes.

CITIZEN SURVEY RESULTS FOR WATER QUALITY²



Past Citizen Survey results show that the importance of water quality has remained consistently high for residents, but perceptions around water quality have decreased. The new Rose Valley Water Treatment Plant is intended to help reverse this trend.



Only 1% of the world's water supply is available for human consumption. Of this, the majority is diverted to irrigation and lawn care and to operate household conveniences like washing machines, dishwashers, and toilets.³

References:

¹ westkelownacity.ca - Rose Valley Water Treatment Plant, 2020

² West Kelowna Citizen Surveys, 2016-2019

³ West Kelowna Water Conservation Plan, 2010



INFRASTRUCTURE

WHAT DOES OUR OFFICIAL COMMUNITY PLAN SAY NOW?

- ▶ Provide efficient and integrated infrastructure
- ▶ Provide clean, safe drinking water
- ▶ Support water conservation and protection
- ▶ Manage stormwater to mitigate risks and damages from flooding, utilizing an integrated approach to stormwater management
- ▶ Reduce solid waste generation
- ▶ Encourage energy efficiency, greenhouse gas reduction, and minimizing of waste
- ▶ Collaborate with other organizations including WFN and RDCO to maximize co-benefits
- ▶ Use life cycle analysis to plan for the long-term

OUR CURRENT INFRASTRUCTURE SYSTEM



WATER DISTRIBUTION

- **277 km** of water mains
- **5** water systems (Lakeview, Pritchard, Sunnyside, Westbank, WK Estates)
- **1** water treatment plant (Powers Creek) + **1** planned (Rose Valley)



SANITARY

- **236 km** of sanitary sewer mains
- **29** sanitary lift stations
- **1** wastewater treatment plant (RDCO)



SOLID WASTE

- curbside collection program for green bin, recycling, and garbage
- **1** residential waste and recycling centre (Westside Transfer Station)
- **1** regional landfill (Glemore in Kelowna)

CHALLENGES

- ▶ Our infrastructure has been installed over many years under different authorities and to different standards, meaning work is needed towards an integrated system that meets current standards
- ▶ Our hillsides and lower-density development taxes our infrastructure and costs more per capita to operate and maintain than more compact communities
- ▶ Water quality and quantity challenges are intensifying with climate change
- ▶ West Kelowna has two very different water customer classes: homes and agriculture. This combination requires unique solutions that are fair and equitable
- ▶ Weather events affect our infrastructure; drought, floods, and fire can impact water needs and quality
- ▶ Changes in upper-government regulations can lead to costly adaptation requirements

OPPORTUNITIES

- ▶ Infrastructure plans including the [Sanitary Sewer Utility Master Plan](#), [Stormwater Management Plan](#), and [Water Utility Master Plan](#) provide short-term actions and strategic long-term planning
- ▶ Funding has been secured to build the new [Rose Valley Water Treatment Plant](#) which will significantly improve water quality for many
- ▶ We have a [Water Conservation Plan](#) that provides guidance on how to reduce our water use, even as our population grows
- ▶ In 2018, the City introduced sustainability-based water rates, encouraging residents to reduce water use
- ▶ Innovations around energy, stormwater, and low impact design are helping to make our infrastructure more sustainable
- ▶ Infill and compact, complete development makes infrastructure more efficient and cost-effective