



## Backgrounder

### Refinement of Project Scope

The majority of the Wastewater Treatment Project is now under construction with only four components of the conveyance system remaining to be procured. The need for these components was identified in 2004, and they were designed to convey excess wet weather flows to Clover Point, where they could be discharged out of the long outfall, rather than through a number of shorter outfalls in Oak Bay.

These components are:

- Upgrades to the Currie Pump Station
- Twinning of the Currie Forcemain
- Twinning of the East Coast Interceptor
- Extension of the Trent Forcemain

Over the last 15 years there have been significant changes to factors influencing the need for these components including the availability of considerably more flow data that indicates a substantial reduction in water use per person. The CRD engaged KWL in January 2019 to build an updated model of the core area's wastewater system to enable informed decisions to be made regarding capital investments required to meet future demands.

The results show that there is no benefit to building three of the remaining components and that they are not required to meet federal and provincial regulations. This is primarily due to three factors:

- The average dry weather flow has fallen significantly (flows measured in 2018 are 63% of what they were in 2003);
- The contribution from non-residential sources (industrial, commercial and institutional) has not been as great as previously forecasted; and
- Water use per person has decreased as the population has increased due to replacement of old water fixtures and appliances driven by public education, changes in building code and incentive programs through the CRD's water conservation efforts.

Maintenance and upgrade work performed on sewer systems has also played a role as these improvements reduce the amount of rainwater entering the system (inflow and infiltration).

When the system reaches capacity (projected to be beyond 2045), the Arbutus Attenuation Tank can be expanded. The tank temporarily stores excess water flows so that they can be treated at McLoughlin Point Wastewater Treatment Plant rather than being discharged untreated out of the Clover Point outfall.

