

Queensborough Drainage Information Session Frequently Asked Questions (FAQ)

Q: *Why is there a new ditch on Duncan St?*

A: The drainage canal under construction on Duncan Street is a replacement of the existing Beach Street Canal which is being enclosed with development. This work was approved as a part of the Platform Properties rezoning and Official Community Plan Amendment. The new Duncan Street canal cannot be an enclosed conduit because the original Beach canal has ecological value and provides storage capacity.

Q: *How does the ditch network perform?*

A: An interconnected network of ditches collects the water from roads and private properties. The water then drains naturally (by gravity) through floodboxes or is pumped into the Fraser River via four drainage pump stations. The ditches/canals act as storage until the water reaches a certain depth where the pumps or floodboxes are engaged.

The capacity of the ditch system is constrained by the flat topography, high ground water table, and obstructions such as vegetation growth, sediment, and unauthorized works in the ditches.

Q: *How do the ditches work with the Pump Stations?*

A: The internal storm drainage in Queensborough is conveyed by ditches and storm sewers to four pump stations that discharge the flow to the Fraser River. Water is pumped once it reaches a preset water level. Three of the four pump stations have floodboxes that can drain by gravity at low tide.

Q: *Why are the ditches not enclosed?*

A: Historically, Queensborough was a rural community with open ditches as the primary drainage path to take the stormwater to the perimeter pump stations. As the area urbanizes, smaller lots are being created and culverts are installed for driveway access. Residents have expressed a desire for enclosing open ditches with storm sewers. Studies have reviewed the topography of the area and concluded that ditches on many streets can technically be replaced by storm sewers. However, there are some exceptions:

- Some ditches and channels have ecological value and provide runoff storage; hence they cannot be enclosed.
- Some (most mid-island) ditches are located within very low areas where there is not sufficient slope for a replacement storm sewer to drain towards the pump stations. The adjacent lands need to be raised before a storm sewer system can be installed.

Q: *Why can't residents just put in a driveway culvert in front of their property or enclose the ditch?*

A: As ditches and driveway culverts are on City property, the City is responsible for managing the drainage system. Any changes to the drainage system must be reviewed and approved by the City. The City has a policy where ditches are being enclosed as part of new developments which include urban streetscapes with storm sewers, curb and gutter, street lights, etc. Individual property owners can collectively pursue ditch enclosure through a petition for a Local Area Service Project, which is subject to Council approval and contributions from the benefitting property owners. Individual owners may also request the City to enclose their frontage ditch at their costs (where technically feasible). All ditch enclosures with storm sewers or culverts must be properly engineered and constructed by the City.