

## Cedar Drainage Pump Station

# Pump Upgrade Required for Safety and Flood Protection

The City of Port Coquitlam is upgrading the pump station at Cedar drive – to provide flood and property protection and improve the community's climate change resiliency.



Watersheds in the City of Port Coquitlam are under increasing levels of pressure due to development and climate change.

Wetter winters with more intense storms, drier summers, and sea level rise all present significant challenges.

Infrastructure upgrades help the City mitigate impacts to people and property that result from flooding, sea level rise, and storms while preserving the environment and aquatic life.

The Cedar drainage pump station is planned for an upgrade with fish-friendly pumps and flood box to provide improved flood protection and fish passage. Other works include seismic and structural upgrades, as well as upgrades to the civil, mechanical, and electrical systems. The upgrade may involve a partial dike rebuild.

### PROJECT SNAPSHOT

#### Upgrading Infrastructure

The station requires pump upgrades to provide additional capacity. The upgrade is required to provide adequate flood protection as rainfall increases.

#### Protecting Fish and Property

Upgrade to have fish-friendly pumps and flood box to provide improved flood protection and fish passage.

#### Estimated Project Cost: \$10M

- Cost anticipated to increase significantly resulting from design refinement and market conditions.
- The City is seeking external funding to support this environmental and flood protection project.

## PROJECT BACKGROUND

The Cedar drainage storm pump station was constructed in 1980 and received electrical upgrades in 2012. The station requires pump upgrades to provide additional capacity; it is operating under capacity to manage increased flows which have occurred during significant rain events. The current pump style is not fish passable and the main bearing is open and lubricated via a constant oil drip while running. The lubrication ends up in the creek; environmental grade oil is used but the practice could be eliminated altogether with a pump replacement. The scope of work required for this project includes:

- Site works
- Replacement of existing well and pump with fish-passable pumps
- New piping and valves
- Electrical and mechanical upgrades
- Seismic and structural upgrades
- Permanent generator
- Dike reconstruction



## PROJECT BENEFITS

- Flood protection. Localized flooding was experienced in several locations throughout the watershed during winter atmospheric storm events in 2021.
- Improved juvenile salmonid movement and survival during outmigration, improved access for returning spawners, improved access to/from rearing habitat.

## NEXT STEPS

- The City will continue to work with the following parties on the project:
  - BC Hydro
  - Department of Fisheries and Ocean,
  - Ministry of Forests, Lands and Natural Resource Operations (FLNRO),
  - Inspector of Dikes,
  - Kwikwetlem First Nation and
  - City of Coquitlam

## SCHEDULE

- Detailed design in 2024
- Construction in 2025