NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Project Benefits

Metro Vancouver is undertaking the Northwest Langley Wastewater Treatment Projects to continue to protect public health and the environment in a growing region

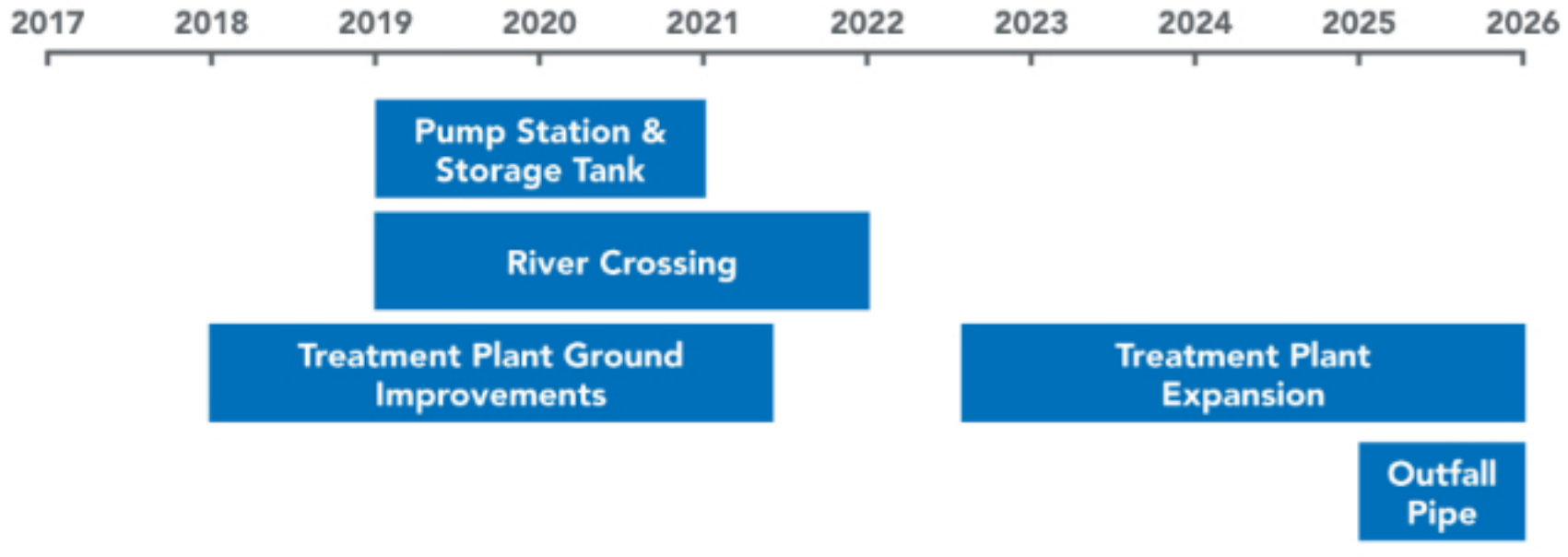
The Northwest Langley Wastewater Treatment Projects will:

- Help prevent untreated wastewater back-ups and overflows
- Strengthen the plant to ensure it will continue to operate in the event of an earthquake
- Adapt to sea level rise from climate change
- Reduce treatment plant water and energy use
- Continue to treat wastewater to the level designed to protect the environment set by provincial and federal regulations
- Meet the needs of our growing population

DID YOU KNOW

The Northwest Langley plant currently serves 30,000 people. In 2026, the plant will be able to serve 230,000 people.

Project Timeline



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NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

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Overview of the Projects

The Northwest Langley Wastewater Treatment Plant, which currently serves 30,000 people in Langley, will be expanded on the same site to serve 230,000 people, including residents and businesses in Maple Ridge and Pitt Meadows across the Fraser River. Several other projects will support the treatment plant expansion.

Untreated wastewater from Maple Ridge and Pitt Meadows currently flows to the Annacis Island Wastewater Treatment Plant. To divert the flows to Northwest Langley Wastewater Treatment Plant, a new pump station is required north of the Fraser River, along with two pipes under the Fraser connecting the pump station in Maple Ridge to the treatment plant. A new storage tank will temporarily store wastewater to prevent overflows during storms.

The projects are:

- **Storage Tank and Pump Station:** a new pump station and storage tank in Maple Ridge near Golden Ears Way and 113B Avenue.
- **Fraser River Crossing:** two new pipes under the Fraser River to carry wastewater from the new pump station in Maple Ridge to the treatment plant in the Township of Langley.
- **Northwest Langley Wastewater Treatment Plant Expansion:** expansion of the existing wastewater treatment plant in the Township of Langley.
- **Outfall Pipe:** a new outfall pipe to carry treated water from the plant to the Fraser River.

Northwest Langley Wastewater Treatment Projects Overview

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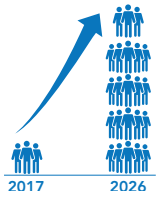

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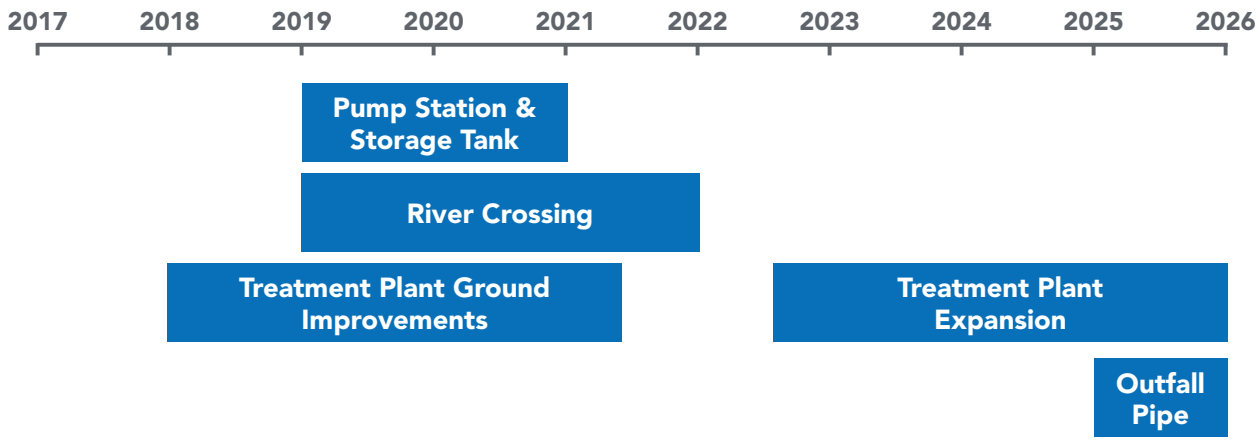


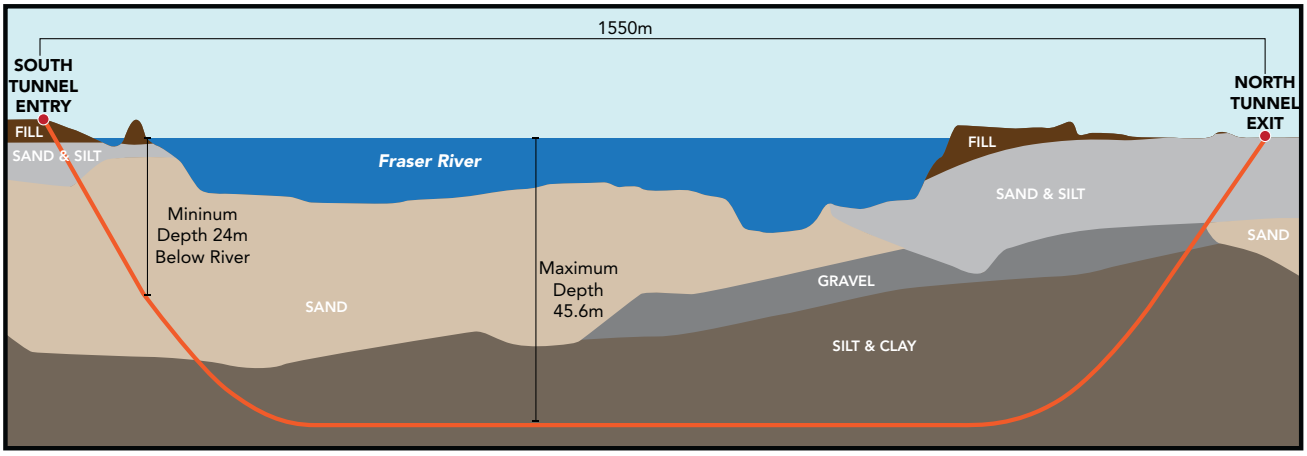
NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Fraser River Crossing

Two new pipes will be constructed under the Fraser River to carry wastewater from the new pump station in Maple Ridge to the treatment plant in the Township of Langley.

The pipes will be located in a tunnel beneath the riverbed to avoid impacts to the river.

Tunnel Crossing



Cross-section of Tunnel Crossing

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Wastewater Treatment Plant Expansion

Plans for the plant expansion are in the preliminary design phase.

First Phase Build: complete 2026

Future Build

LEGEND

- First Phase Build
- Future Build

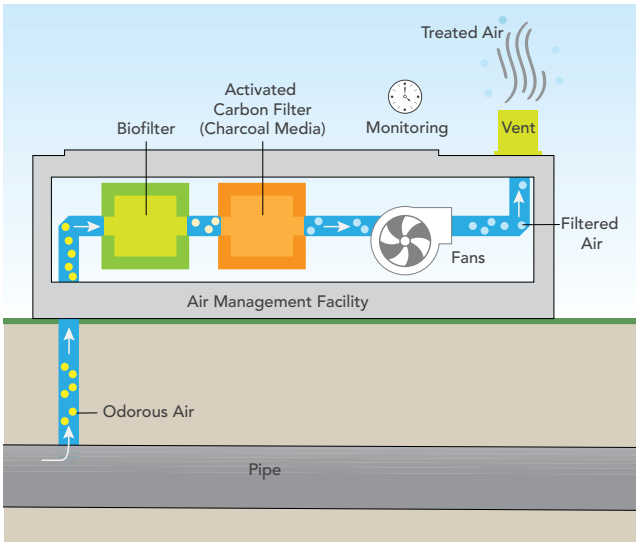
NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Wastewater Treatment Plant Expansion – Managing Odour

Metro Vancouver is committed to minimizing odour at the wastewater treatment plant

Odour controls at the upgraded plant will be greatly improved. Odours from the plant will be controlled by scrubbers, a carbon unit and dispersion.

When plant expansion is complete, residents should not be able to smell odour under normal operating conditions and odour in the industrial area will be significantly reduced.



The odour control system will be designed to use both active treatment and dispersion to minimize odours, as illustrated above.

The primary treatment tank will be fully enclosed to contain odour.

How Will the Odour Control System Work?

The odour control system will be designed to minimize or eliminate odours, using biological treatment and activated carbon (charcoal) to scrub the air. Activated carbon is a natural product, is completely biodegradable and is used in many home air filters.

Once air is treated inside the facility and stripped of odour, it is dispersed through the vent stack. It is unlikely that residents will be able to detect any odour from this facility.

Metro Vancouver will monitor and maintain this facility to ensure the odour control system is effective.

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Water Quality and Treatment Level

Metro Vancouver is committed to managing wastewater safely and responsibly

Metro Vancouver treats all wastewater to the level designed to protect human health and aquatic life as set by provincial and federal laws and regulations. Metro Vancouver is now determining the appropriate level of treatment for the expanded plant based on these regulations.

Monitoring programs are in place to ensure the wastewater treatment plant meets or exceeds all regulatory requirements.

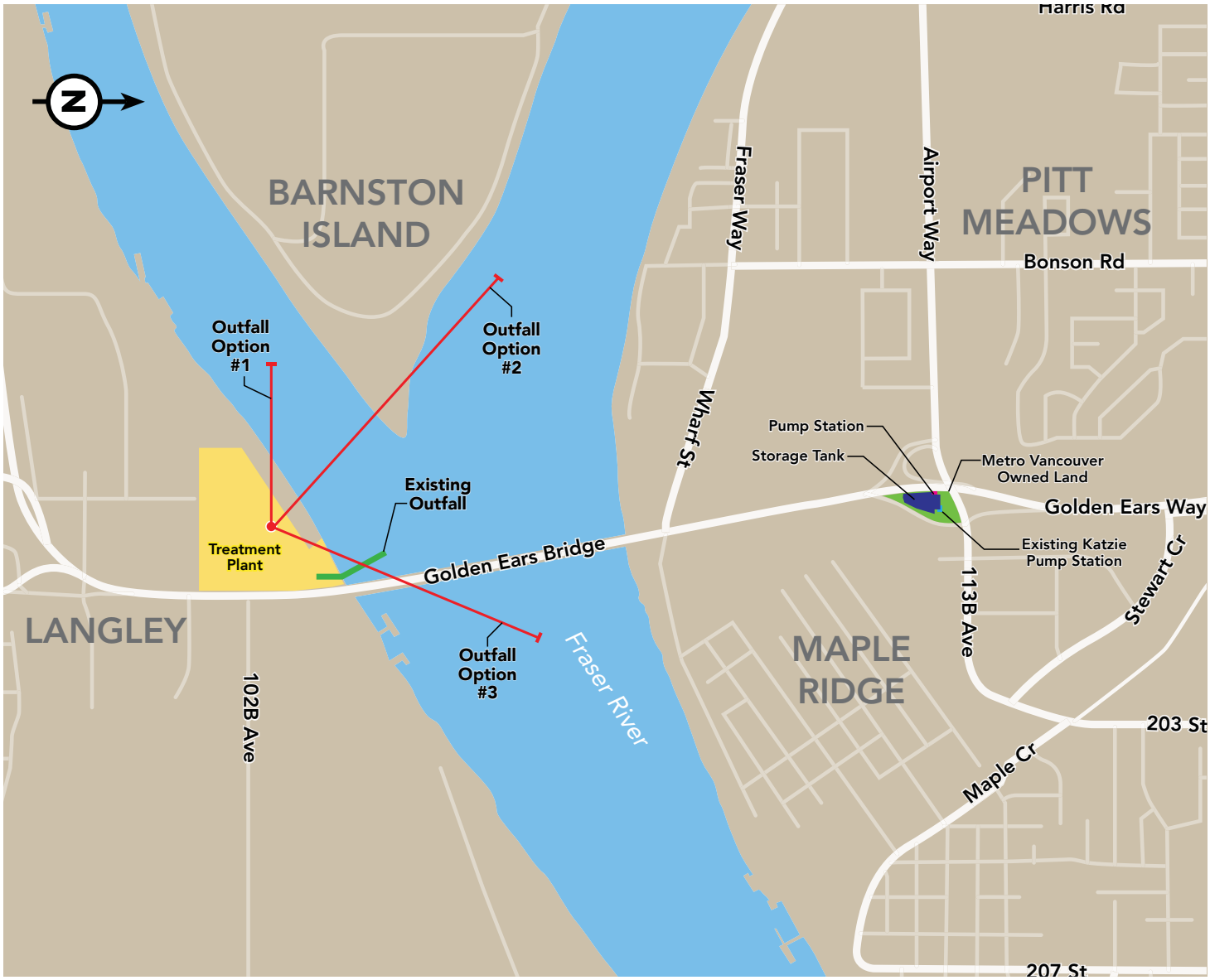
Metro Vancouver monitors and reports on water quality and the overall environmental health of the Fraser River.

Metro Vancouver is committed to minimizing the impacts of the projects on the surrounding communities and the environment, including the Fraser River

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Outfall Pipe Location

A new outfall pipe will be constructed to carry treated wastewater from the plant to the Fraser River. The location and construction of the new outfall pipe will be planned in consultation with Fraser River users and permitting agencies to minimize impacts to the river and river activities.



Options for the new outfall pipe location