

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

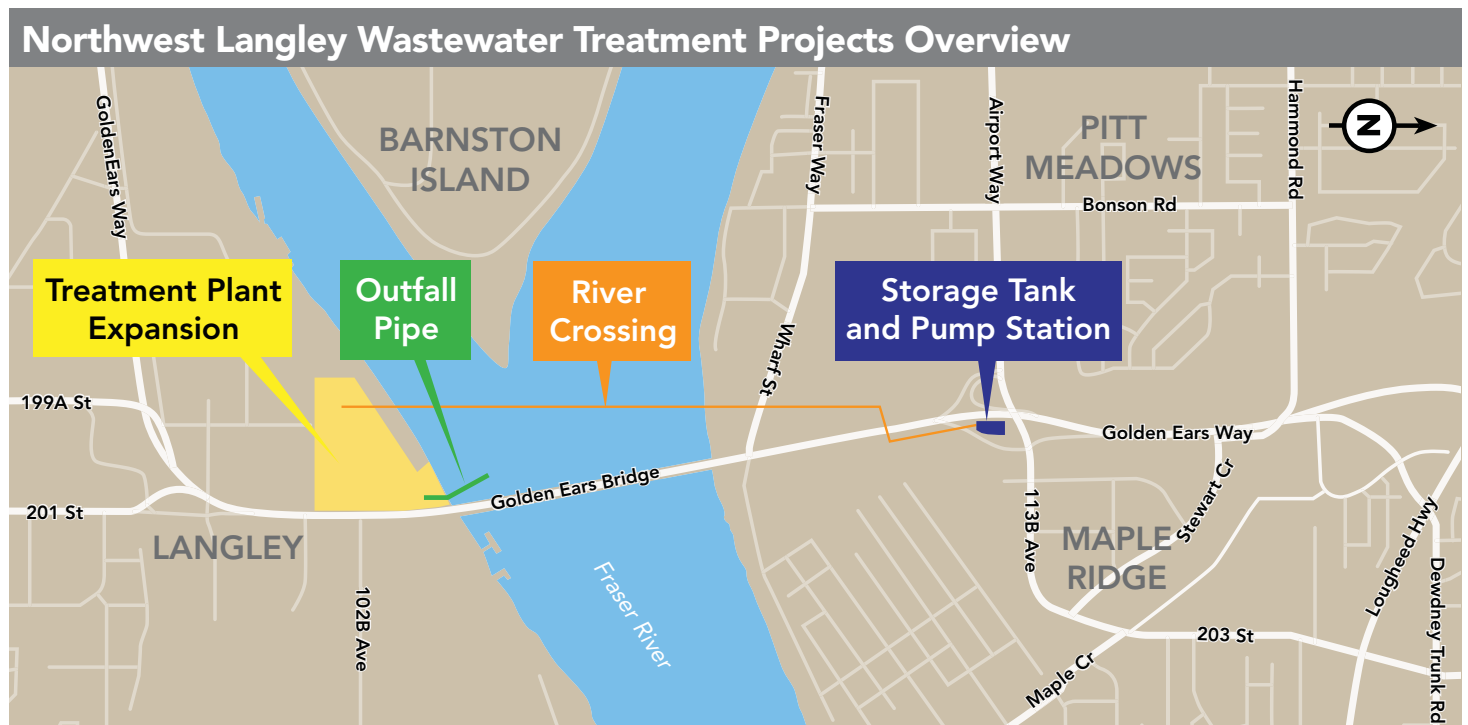
Overview of the Projects

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

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:

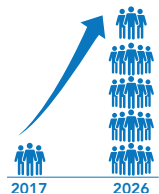
- Meet the needs of our growing population
- Help prevent untreated wastewater back-ups and overflows
- Strengthen the plant to ensure it will continue to operate in the event of an earthquake
- Adapt to sea level rise from climate change
- Reduce treatment plant water and energy use
- Continue to treat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



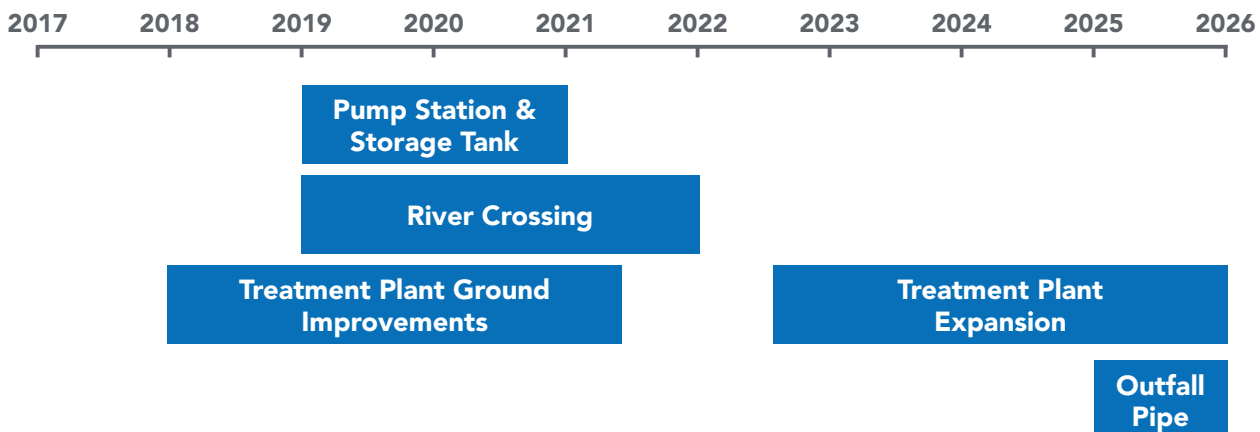
DID YOU KNOW



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



Project Timeline



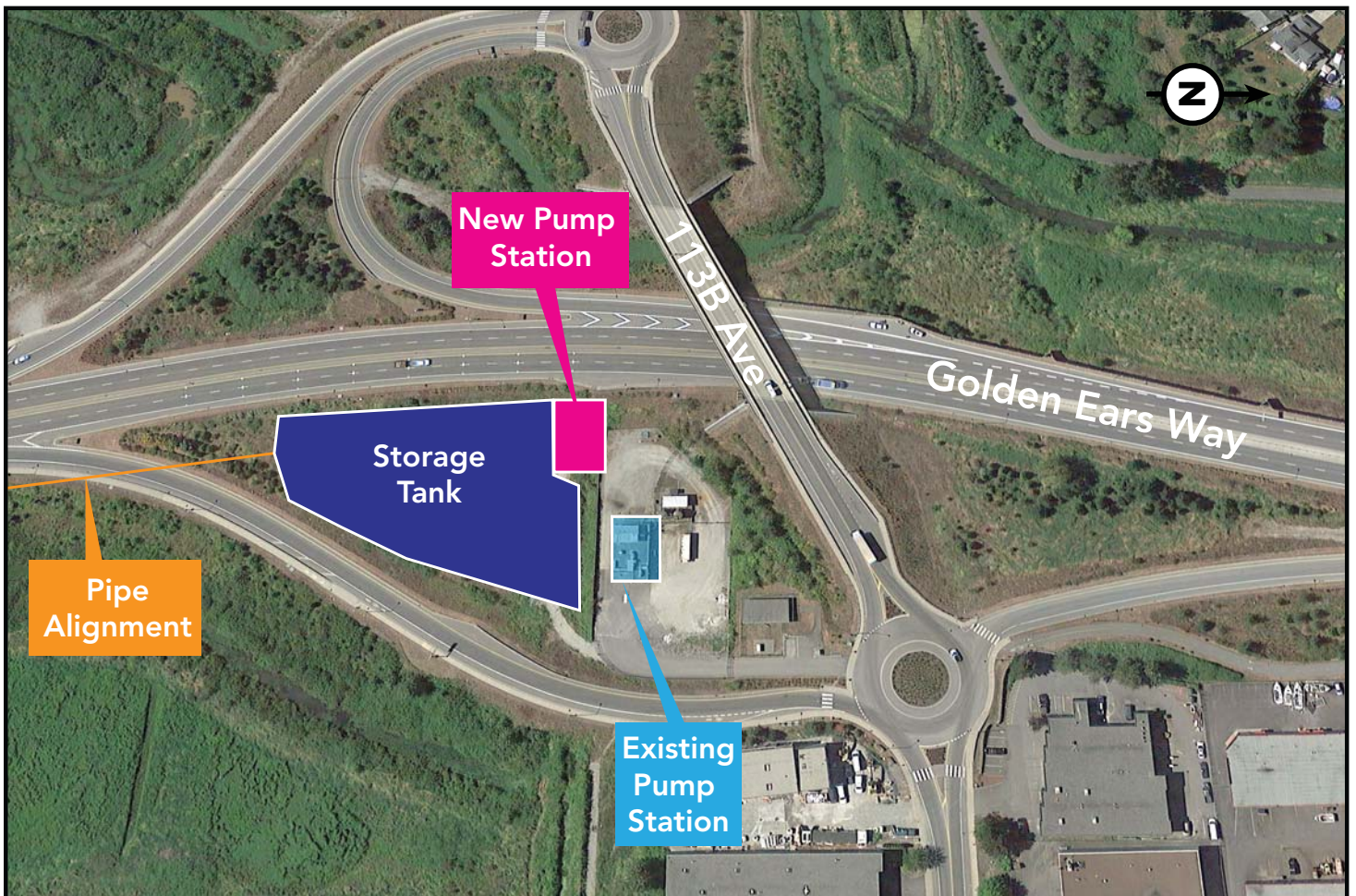
NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Pump Station and Storage Tank – Overview

A new pump station and storage tank will be built in Maple Ridge near Golden Ears Way and 113B Avenue.

The new pump station will replace the existing pump station and will help move wastewater from Maple Ridge and Pitt Meadows to the treatment plant in the Township of Langley.

The new storage tank will temporarily store wastewater to prevent overflows during storms.



Pump Station and Storage Tank site plan

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Pump Station and Storage Tank – Design Concept



Design concept looking north



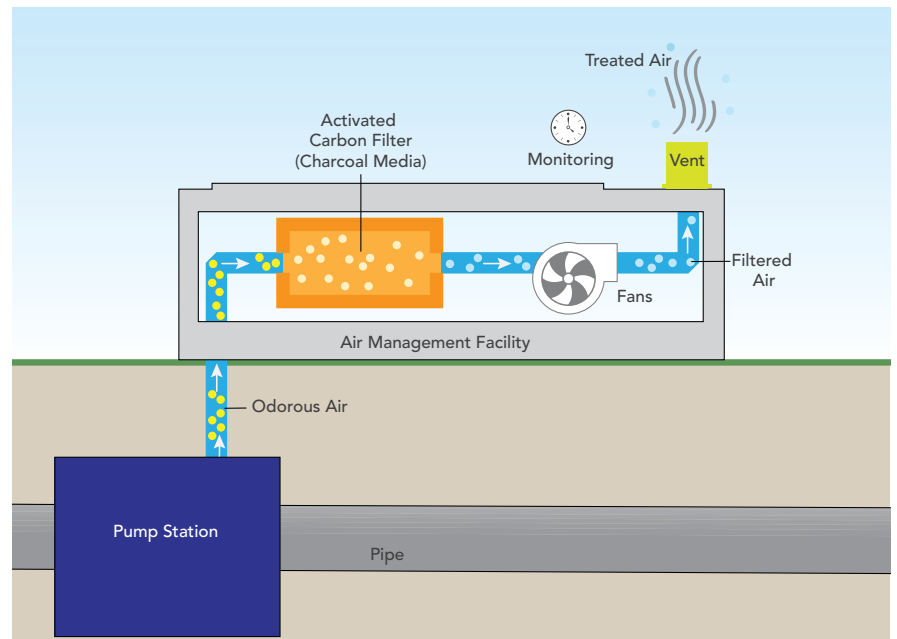
Design concept looking southwest

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Pump Station and Storage Tank – Managing Odour

Metro Vancouver is committed to minimizing odour at the pump station and storage tank

Odour at the pump station will be controlled by an odour control system (see image) and odour at the storage tank will be controlled with a masking agent. When operational, residents and businesses should not be able to smell odour under normal operating conditions.



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

How Will the Odour Control System Work?

The odour control system will be designed to minimize or eliminate odours using 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 these facilities to ensure the odour control system is effective.

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Pump Station and Storage Tank – Feedback

Please share your comments about the Pump Station and Storage Tank below:

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

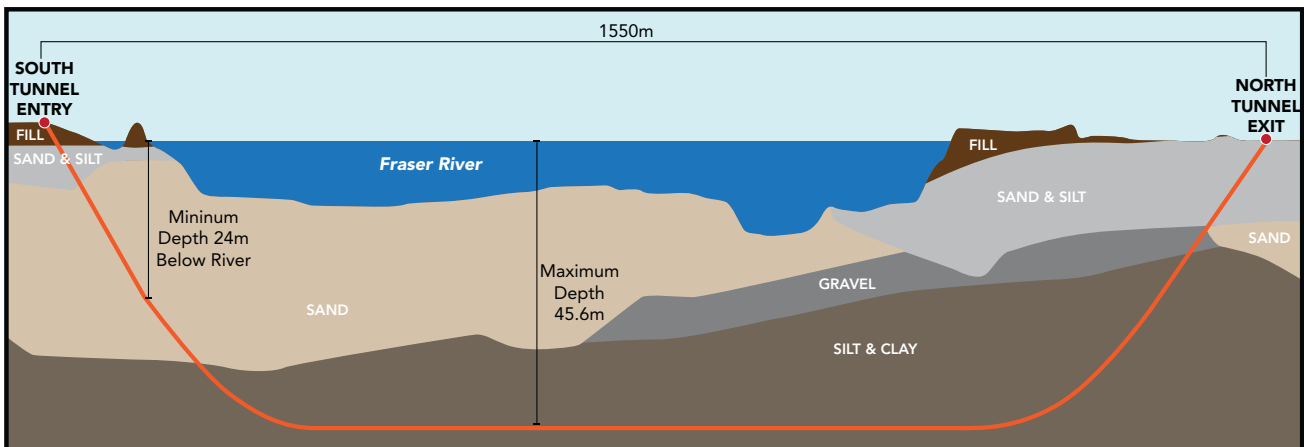
Fraser River Crossing

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

Fraser River Crossing – Feedback

Please share your comments about the Fraser River Crossing below:

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



LEGEND

- First Phase Build
- Future 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.

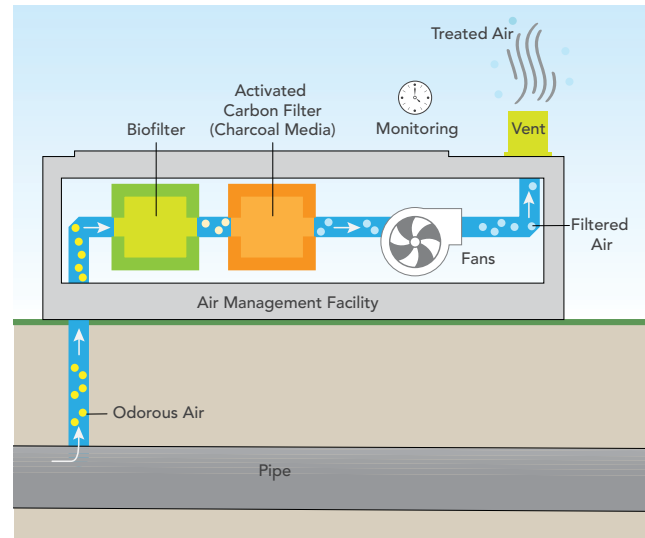
When plant expansion is complete, residents should not be able to smell odour under normal operating conditions and odour in the industrial area will be significantly reduced.

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.



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.

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

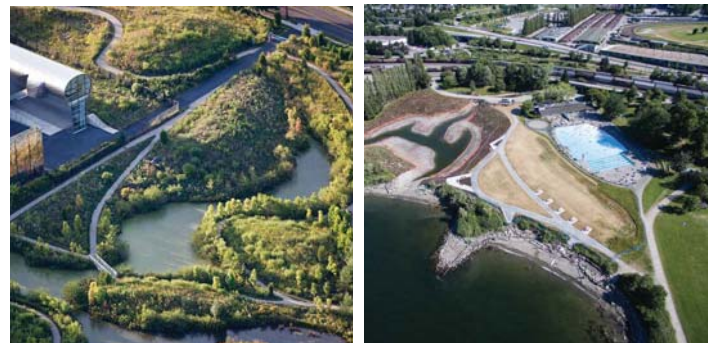
Opportunities at the Fraser River Foreshore

Metro Vancouver is considering opportunities for the Fraser River foreshore at the Northwest Langley Wastewater Treatment Plant. Foreshore restoration/enhancement could include the creation of shallow sub-tidal areas and salmon habitat.

Key elements of the foreshore design could also include:



Typical Section Through Foreshore



Examples of Foreshore Habitats

Riparian Vegetation

For waterfowl and shorebirds in particular, the riparian vegetation along the shoreline could be protected and expanded.



Songbirds

Songbirds make use of a wide variety of habitat types: deciduous forest, mixed forest, riparian, old field, meadow and park.



Juvenile Salmon

The introduction of new rearing habitats off the tidal channel is an important enhancement for juvenile salmon as is the inclusion of foraging habitat in the intertidal wetlands.



Pollinators

To improve support of pollinators, a variety of herbaceous, flowering plants and larval food source plants could be provided.



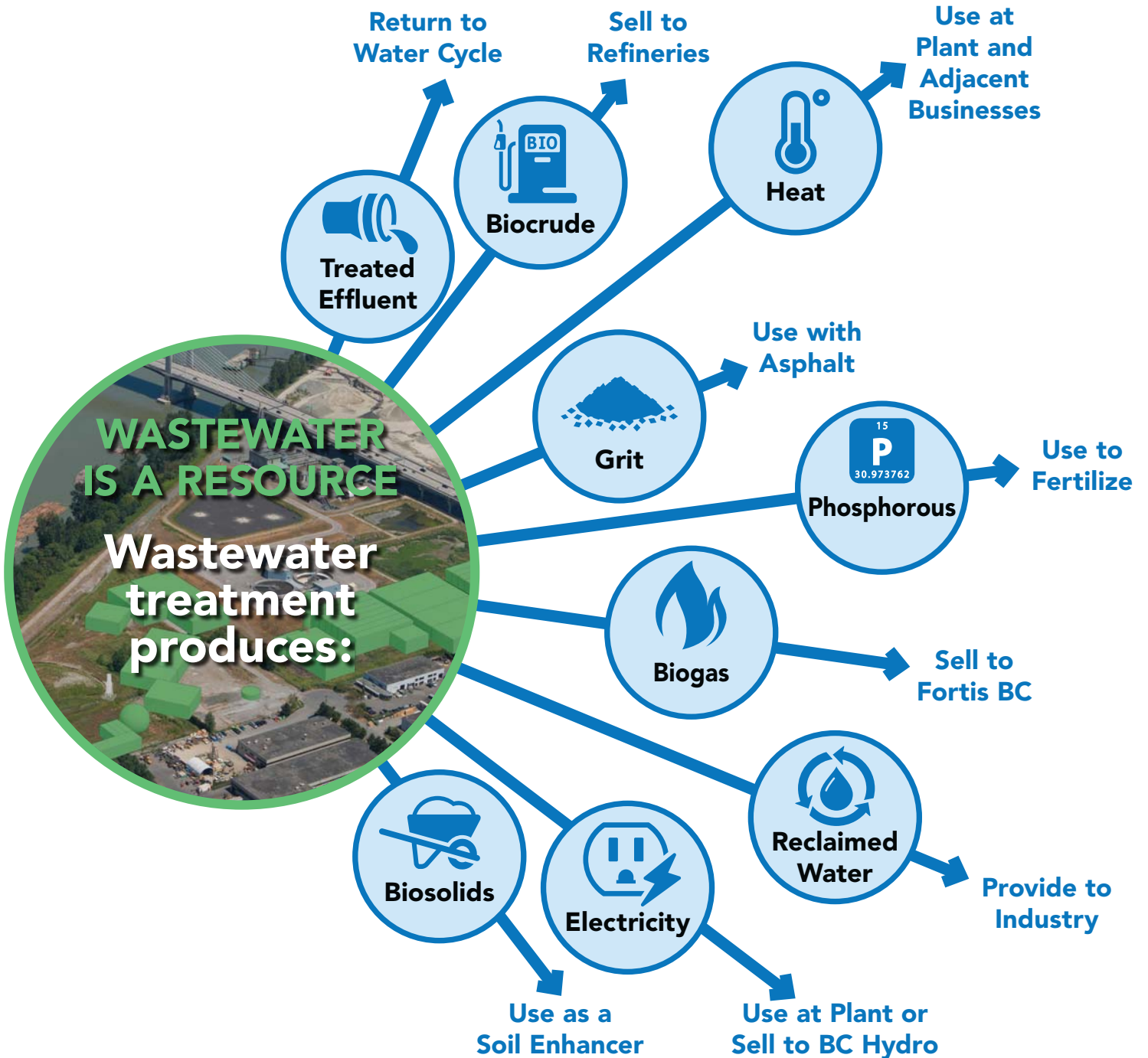
NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Opportunities at the Fraser River Foreshore – Feedback

Please share your comments about the Opportunities at the Fraser River Foreshore below:

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Recovering Resources from the Treatment Process



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

Wastewater Treatment Plant Expansion – Feedback

Please share your comments about the Wastewater Treatment Plant Expansion below:

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

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Outfall Pipe Location – Feedback

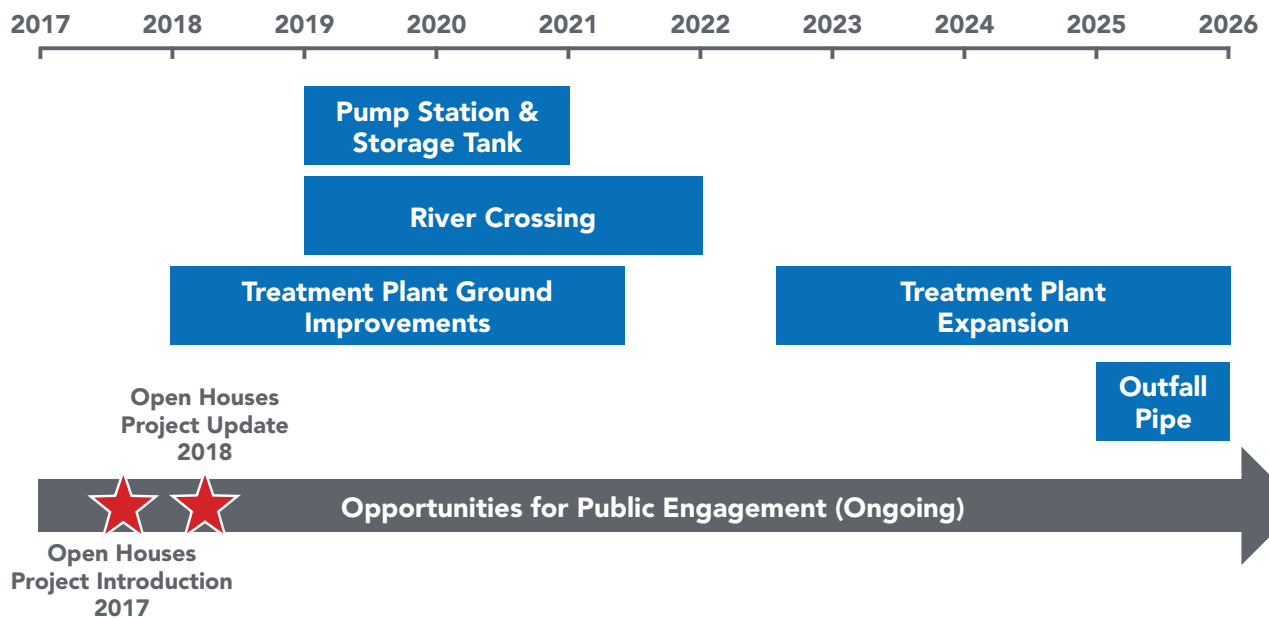
Please share your comments about the Outfall Pipe Location below:

NORTHWEST LANGLEY WASTEWATER TREATMENT PROJECTS

Working with Our Partners and the Community

Metro Vancouver is committed to working closely with its government partners, First Nations and local communities throughout the project. We will:

- Hold meetings and public events to identify interests, set priorities and listen to feedback
- Send regular project updates to local residents and businesses; people can also sign up to receive regular email updates
- Maintain a project website with up-to-date information
- Provide a Community Liaison Officer to respond to queries and concerns during construction



Thank you for joining us at this open house. Please complete a feedback form and share your comments with us.

Metro Vancouver Information Centre: 604-432-6200 (Monday to Friday from 8 a.m. to 4:30 p.m.)
icentre@metrovancover.org (please include "Northwest Langley" in the subject line)
www.metrovancover.org (search for "Northwest Langley")