

# Planning a Future for Liquid Waste

The Comox Valley Regional District (CVRD) is planning how the sewer service will be managed in the years and decades to come. Your feedback is important as we complete a long-term plan that's appropriate and sustainable.

## About the Comox Valley Sewer System

The CVRD has been working on a long-term plan for the Comox Valley Sewer System since 2018 with extensive technical evaluation and public consultation.

The service collects, moves and treats wastewater from Courtenay, Comox, Department of National Defence and the K'ómoks First Nation. This long-term plan will ensure the system will operate safely for our growing community.

## Liquid Waste Management Plan (LWMP):

A process established by the BC Government to assist communities in planning for wastewater management.

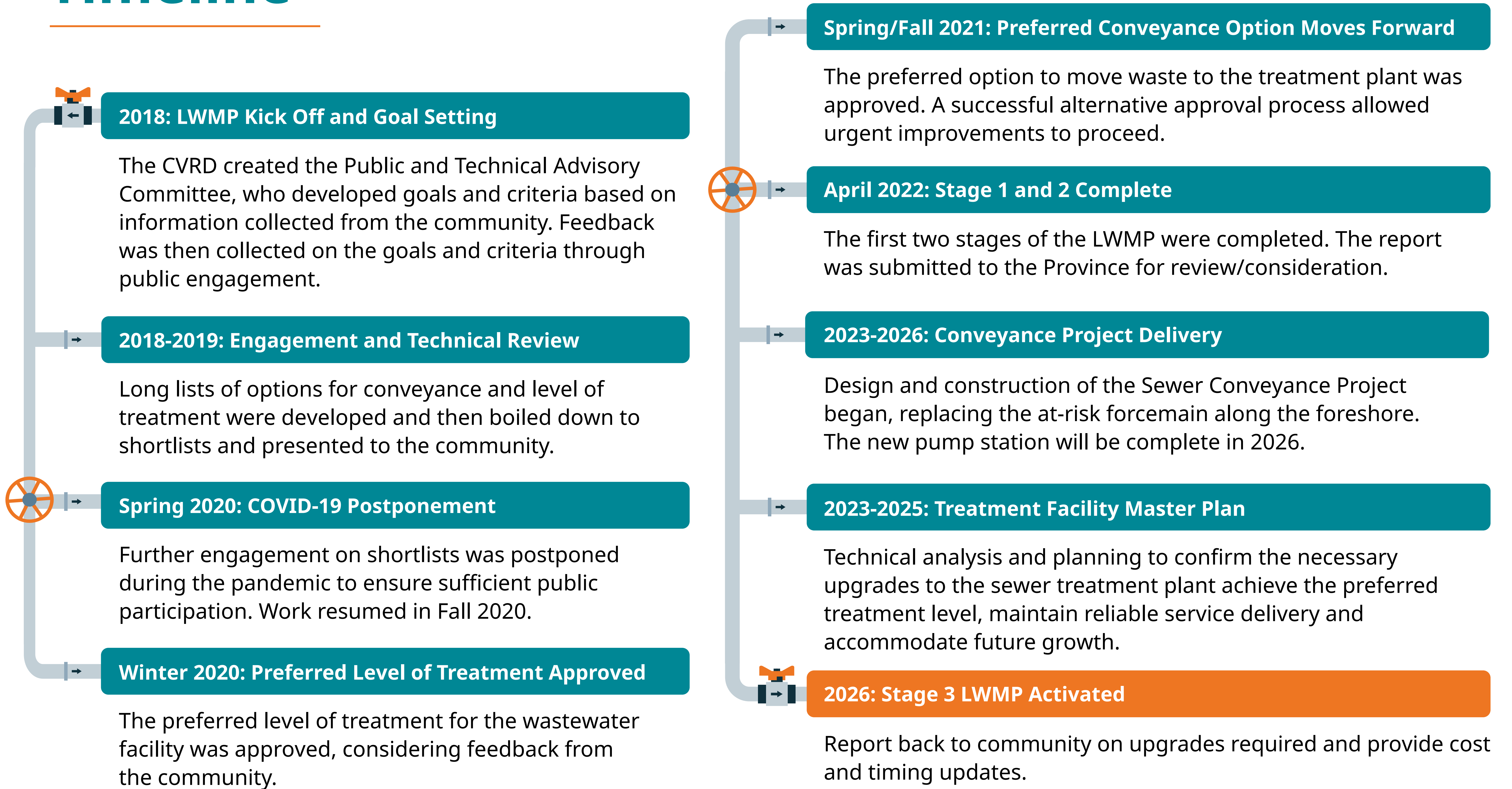
## What a LWMP involves:

- ▶ Reviewing information
- ▶ Setting goals and developing evaluation criteria for decisions
- ▶ Development of options
- ▶ Choosing a preferred option
- ▶ Assessing and creating financial and implementation plans

**Public engagement and consultation** is key to the process, as is the creation of a Public Advisory Committee. The CVRD has actively engaged the community throughout the plan's development and incorporated feedback as decisions have been made.

**Provincial review** of the final LWMP is required — and if approved — gives local government the ability to borrow funds for construction without further elector assent.

# Timeline



# Preferred Treatment Option

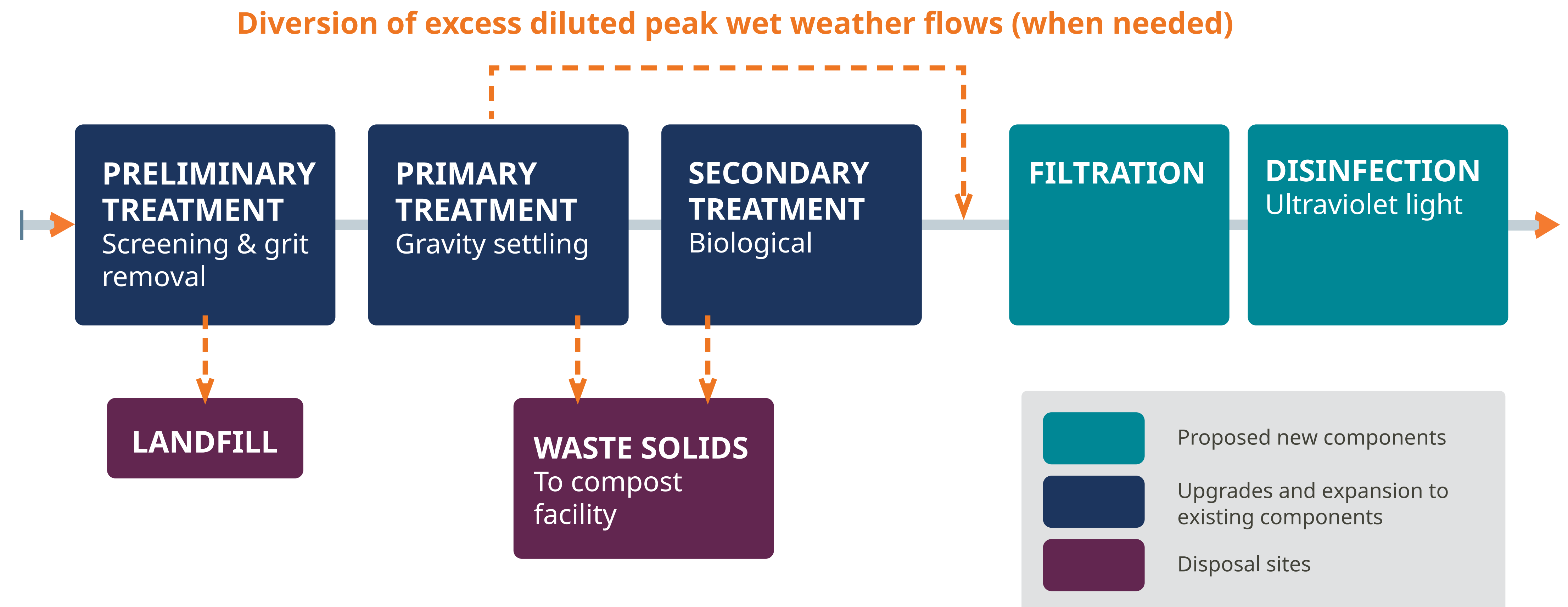
The preferred option selected for treatment includes filtration and disinfection of all flows while also addressing management of peak flows when they occur. It includes upgrades and expansion to existing components to increase capacity and comply with regulations.

## Managing High Flows

The average dry weather flow at the plant is 12,000 m<sup>3</sup>; however, during the winter months, the volume of wastewater that needs to be treated can double or triple.

These peak flows — despite their occasional occurrence — are the major driver for additional treatment capacity. More tank space is costly, especially when it isn't needed year-round.

In order to achieve the selected level of treatment as determined through the LWMP process, a hybrid wet weather treatment approach has been developed.



## What do I need to know?

During the majority of the year, the wastewater treatment process would operate with all flows receiving secondary treatment, filtration and UV disinfection.

However, during peak wet weather events, chemically enhanced primary treatment will be activated to ensure sufficient primary treatment capacity for short-duration peak flows.

When diluted primary effluent flows exceed the secondary treatment capacity, the excess flows will be diverted around the secondary treatment process to the filter and UV disinfection.

# Updating the Treatment Plant

A Site Master Plan - developed as part of the LWMP process - has been completed. It maximizes the useful life of existing infrastructure and future-proofs the Comox Valley Water Pollution Control Centre through scalable, sustainable and cost-effective upgrades for the next 50 years.

## Planned updates to Treatment Plant



## Goals of the Site Master Plan



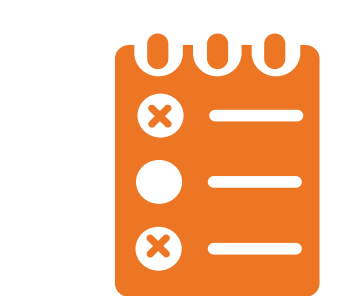
**Update population projections** in the service area and design criteria



**Develop cost-effective, resilient infrastructure strategies** that maximize the use of existing infrastructure



**Identify bottlenecks that affect capacity** and end-of-life equipment



**Consider the cost and benefits** of resource recovery options



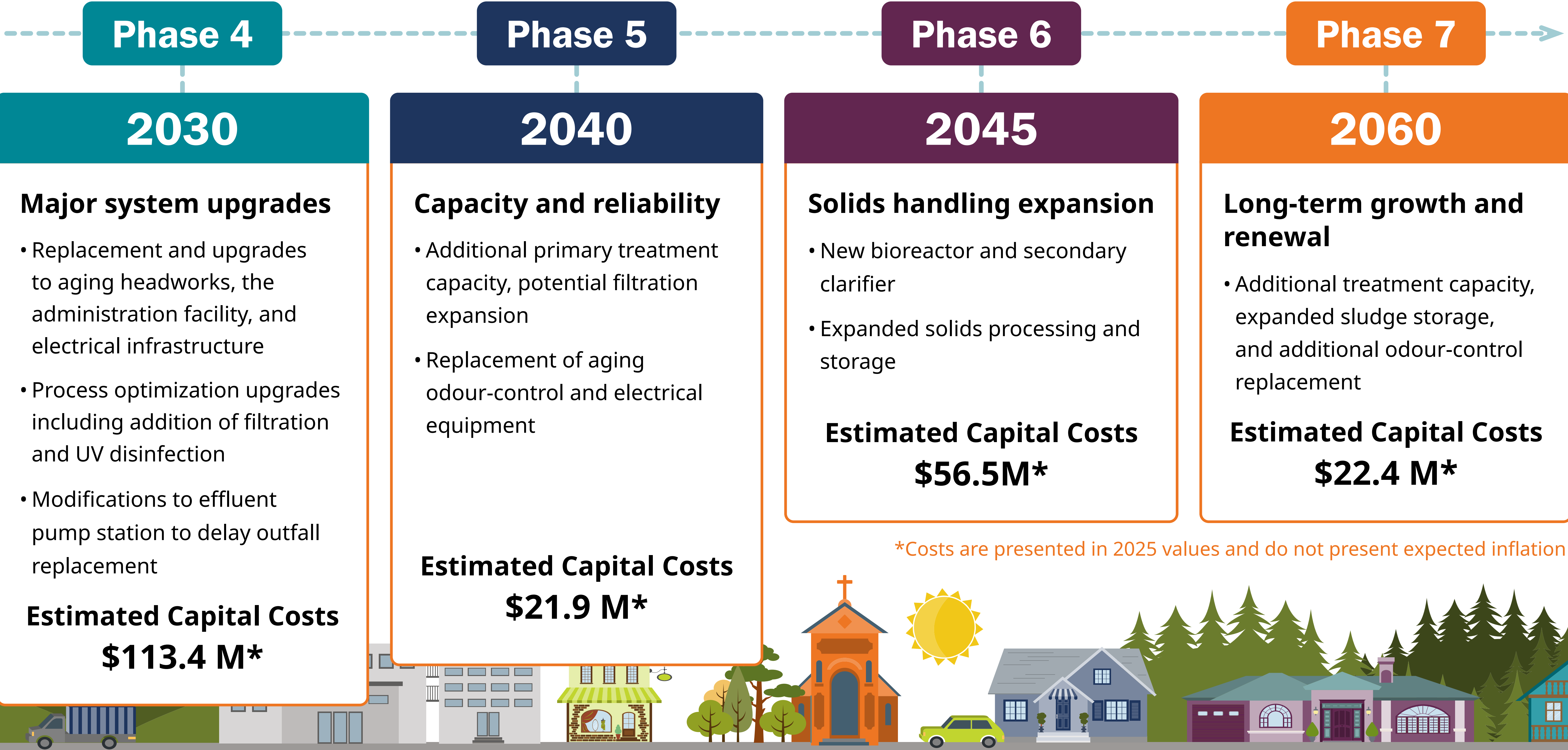
**Establish timing** of upgrades based on flows and loads



**Estimate cost and scope** for each required phase of upgrades

# Improvement Phases

Improvements will take place in a phased approach to support community growth as it occurs over the coming decades.



\*Costs are presented in 2025 values and do not present expected inflation

# What Will It Cost?

The estimated borrowing for Phase 4 is \$82.4 million, or \$220 to \$240 per household, depending on the availability of Strategic Priorities Fund (SPF) grants.

### Reducing Project Costs

The CVRD is working to limit cost impacts by:

- Finding design and construction efficiencies
- Completing a value-engineering review in spring 2026
- Pursuing all available grants
- Using competitive bidding to get the best value



Financial Breakdown	Scenario 1: No SPF Grant	Scenario 2: With SPF Grant
Phase 4 Total Capital Costs *	\$113.4M	\$113.4M
Reserves & Upfront Capital Contributions Applied	\$30.6M	\$30.6M
SPF Grant	\$0M	\$7M
Total Anticipated Borrowing	\$82.4M	\$75.4M
Annual Debt Payment	\$5.51M	\$5.04M
Cost Impact Per Connection for Long Term Borrowing in 2030	\$240	\$220
Cost Impact Per Connection for Long Term Borrowing in 2050	\$170	\$150

\* Based on a Class D estimate +/- 25-40% of probable costs

# What's Next?

Once design, costs and engagement with the public and First Nations are completed, the CVRD will share the Stage 3 Report before submitting it to the provincial government for approval. If approved by the province, the LWMP allows local government the ability to borrow funds for construction without further elector assent (referendum or alternate approval process).

