

Liquid Waste Management Plan

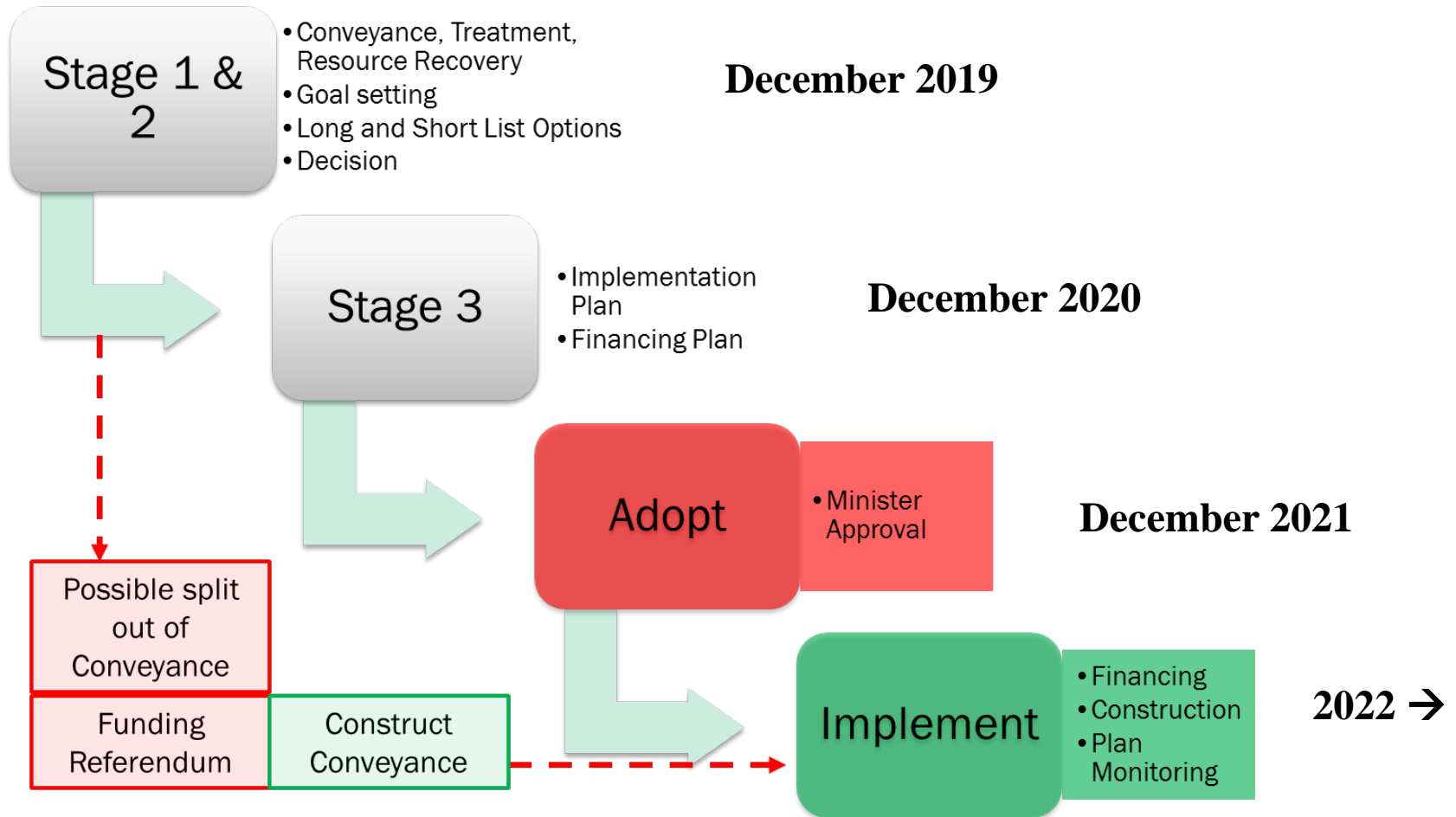
Presentation to the Sewage Advisory
Committee



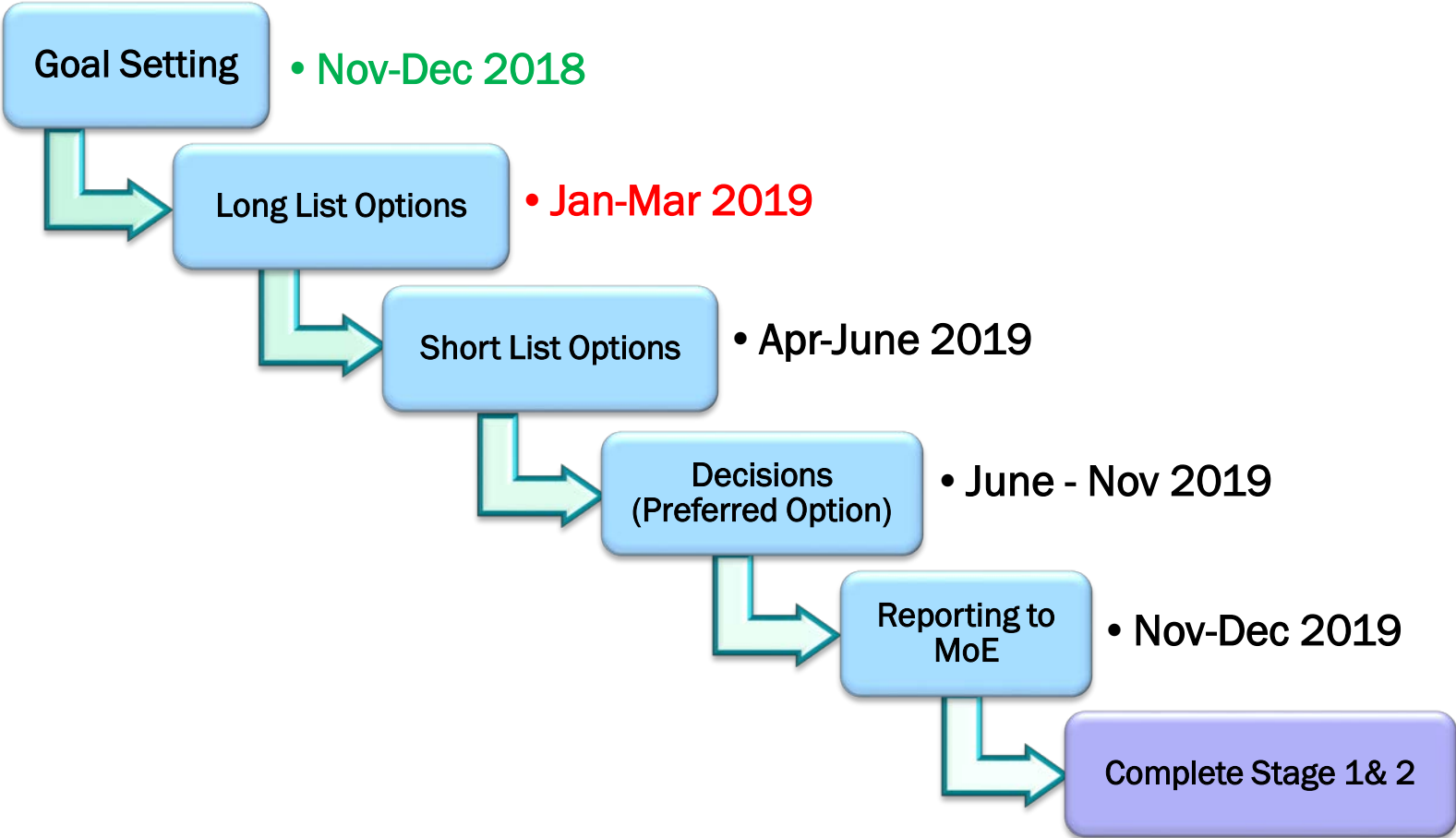
Regional Infrastructure



LWMP Process Timeline



Where We Are At - timeline



LWMP Components and Objectives

Conveyance (Pump Station & Pipes)

- Identify optimum long term conveyance solution

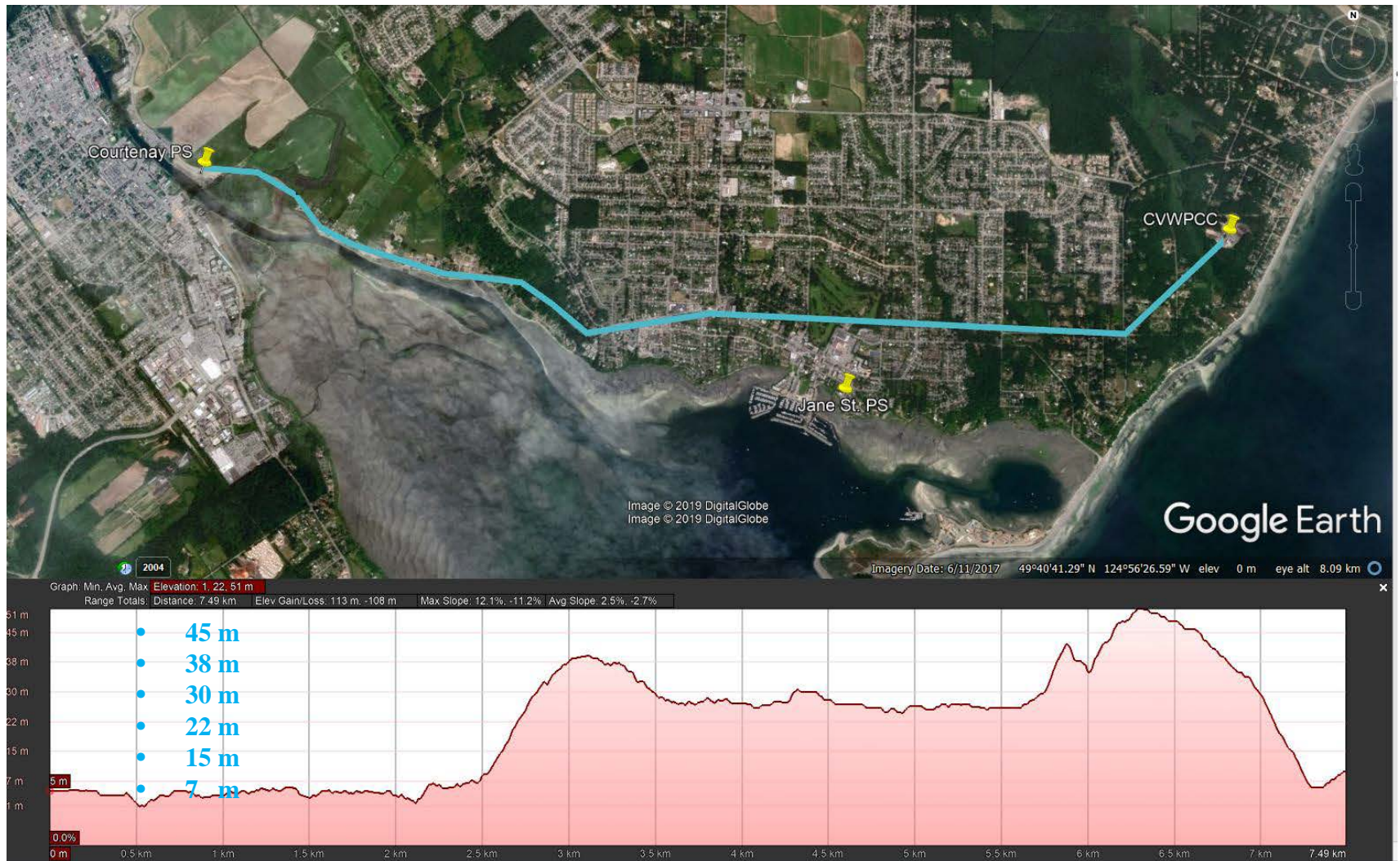
Treatment

- Identify level of treatment for upgraded CVWPCC

Resource Recovery

- Identify opportunities to extract resources from treatment process

Conveyance Constraints



Conveyance Long List of Options

1. Estuary Alignments (3 options)

- Installation of new forcemain within or along foreshore from CPS to CVWPCC

2. Overland Alignments (2 options)

- Installation of new forcemain overland from CPS to CVWPCC

3. Tunneling Alignments (3 options)

- Installation of new forcemain through the Comox Rd. and Lazo Rd. Hills

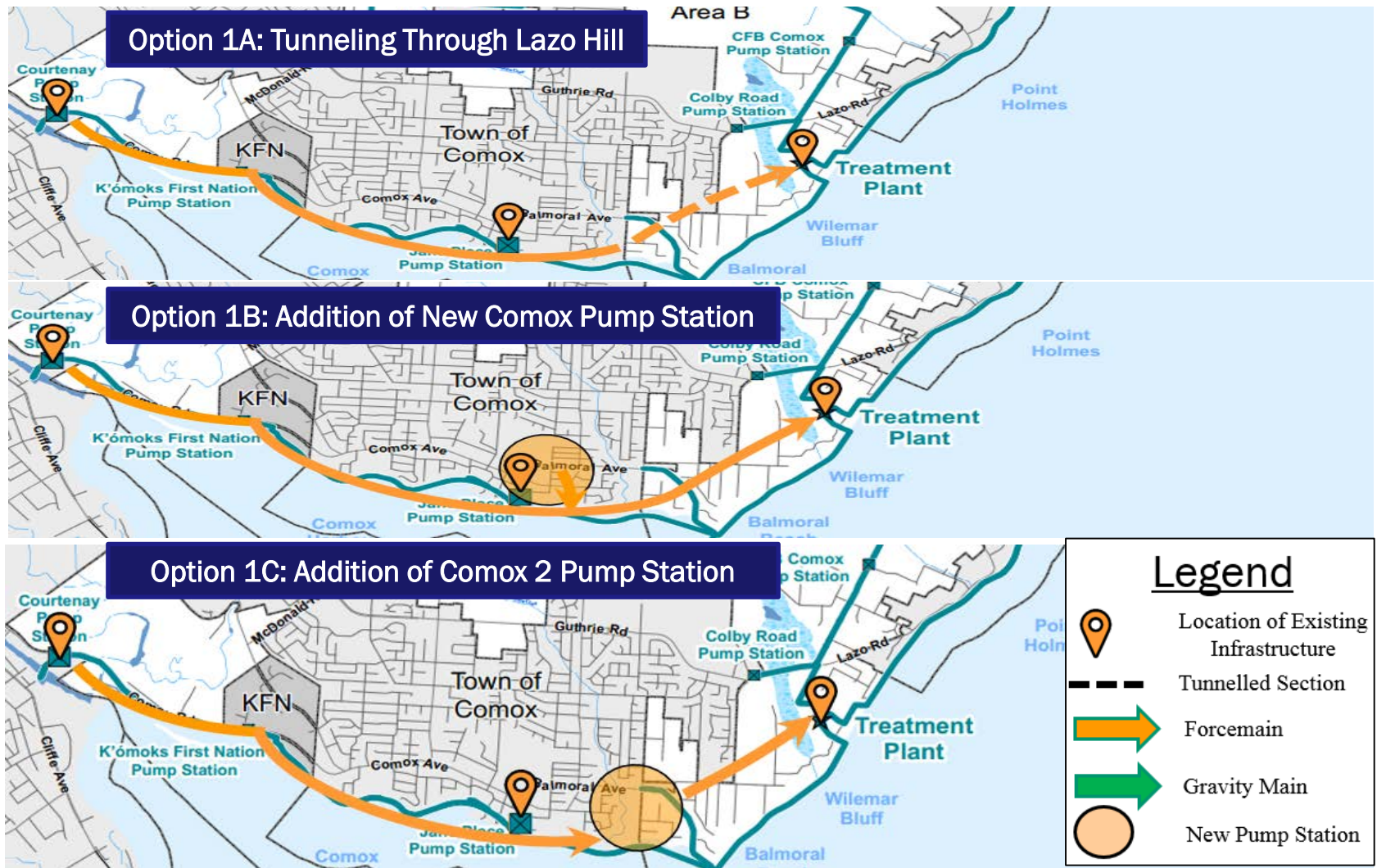
4. Northside Alignment Concept

- Installation of new separate forcemains from CPS and from Jane PI PS to CVWPCC

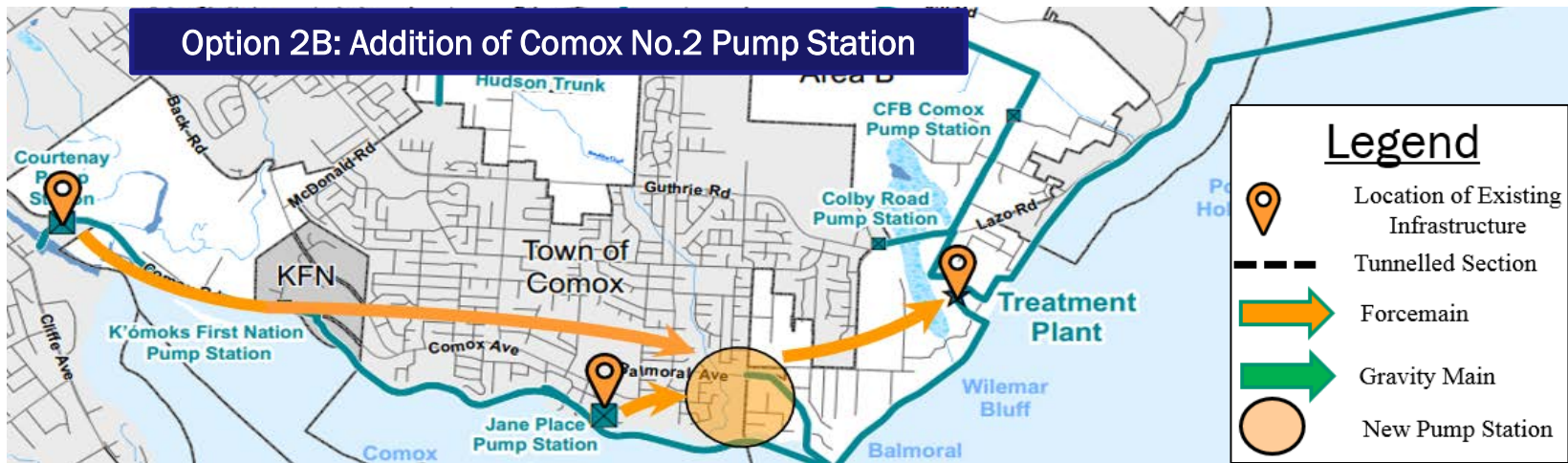
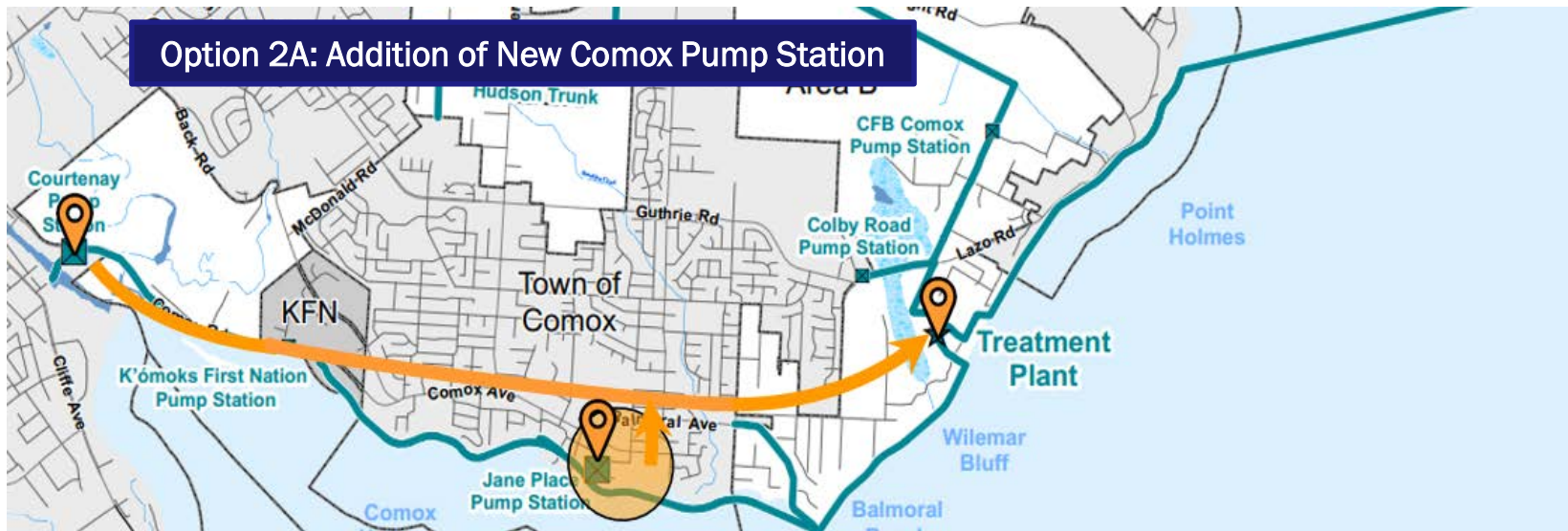
5. Decentralized Treatment Concept

- Building a new treatment plant in Courtenay and pump treated effluent to the outfall

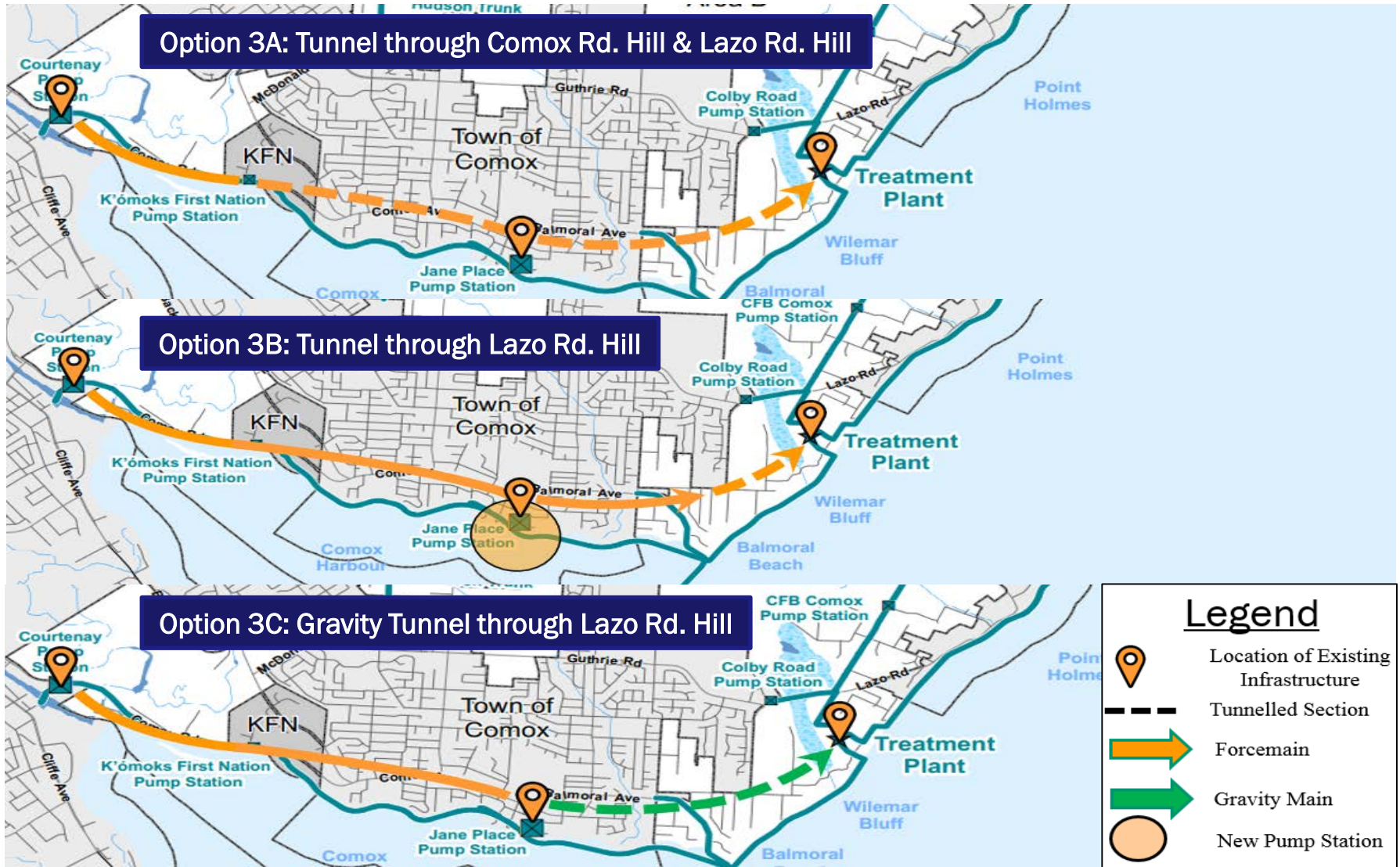
Option 1: Estuary Alignments



Option 2: Overland Alignments

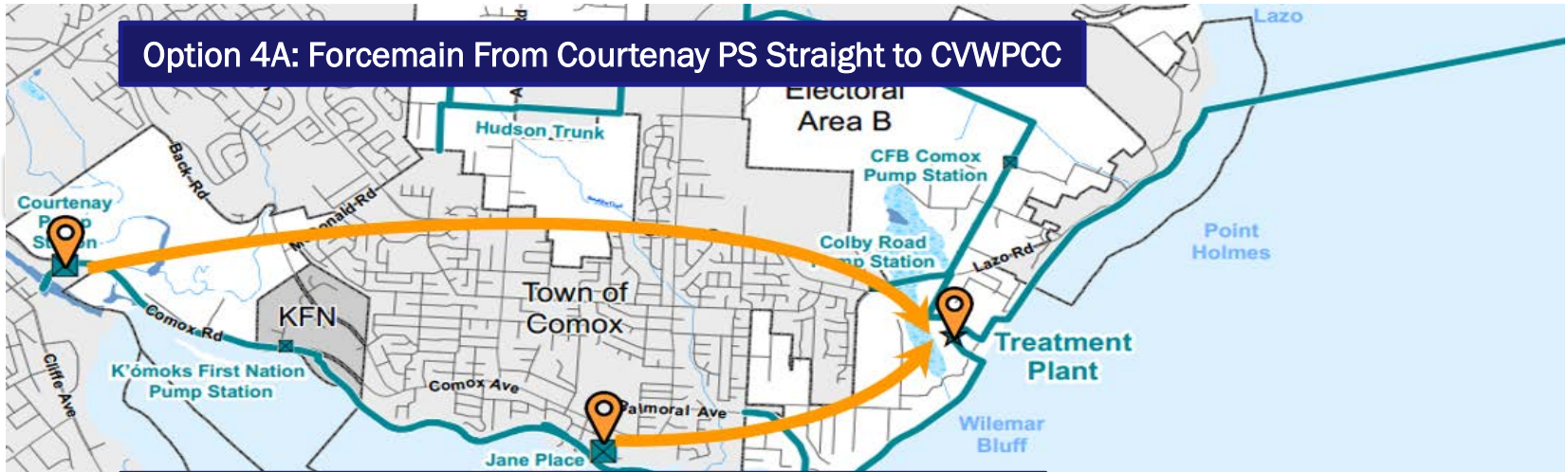


Option 3: Tunneling Alignments

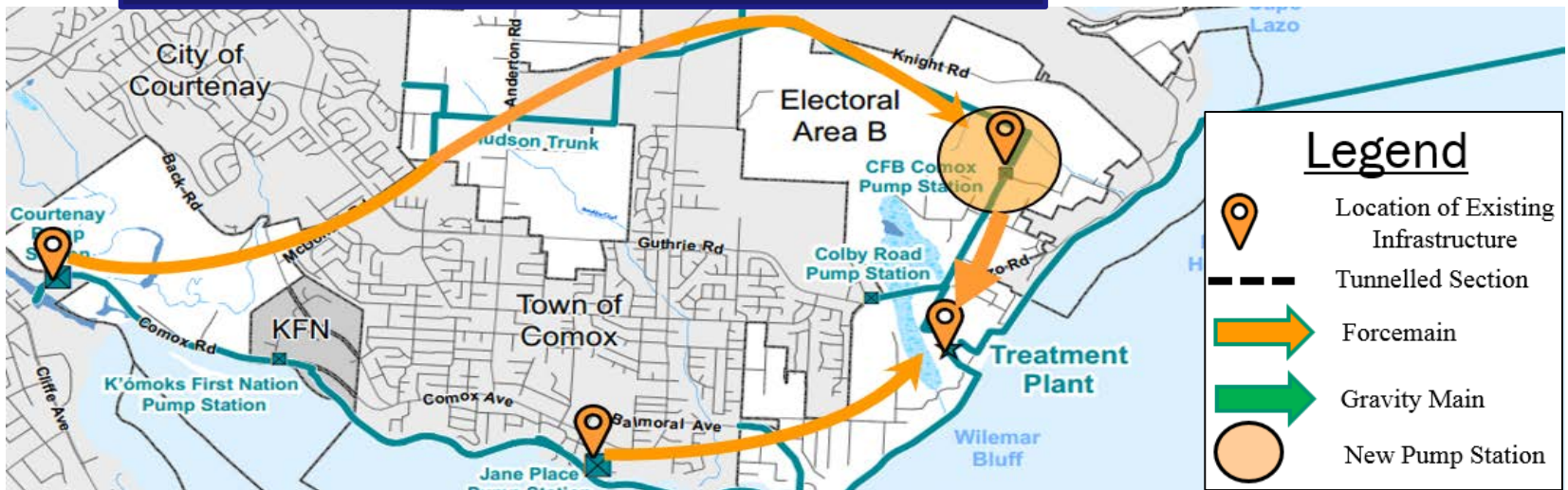


Option 4: North Side Concept






Option 4A: Forcemain From Courtenay PS Straight to CVWPCC



Option 4B: Forcemain to CVWPCC through CFB Comox PS

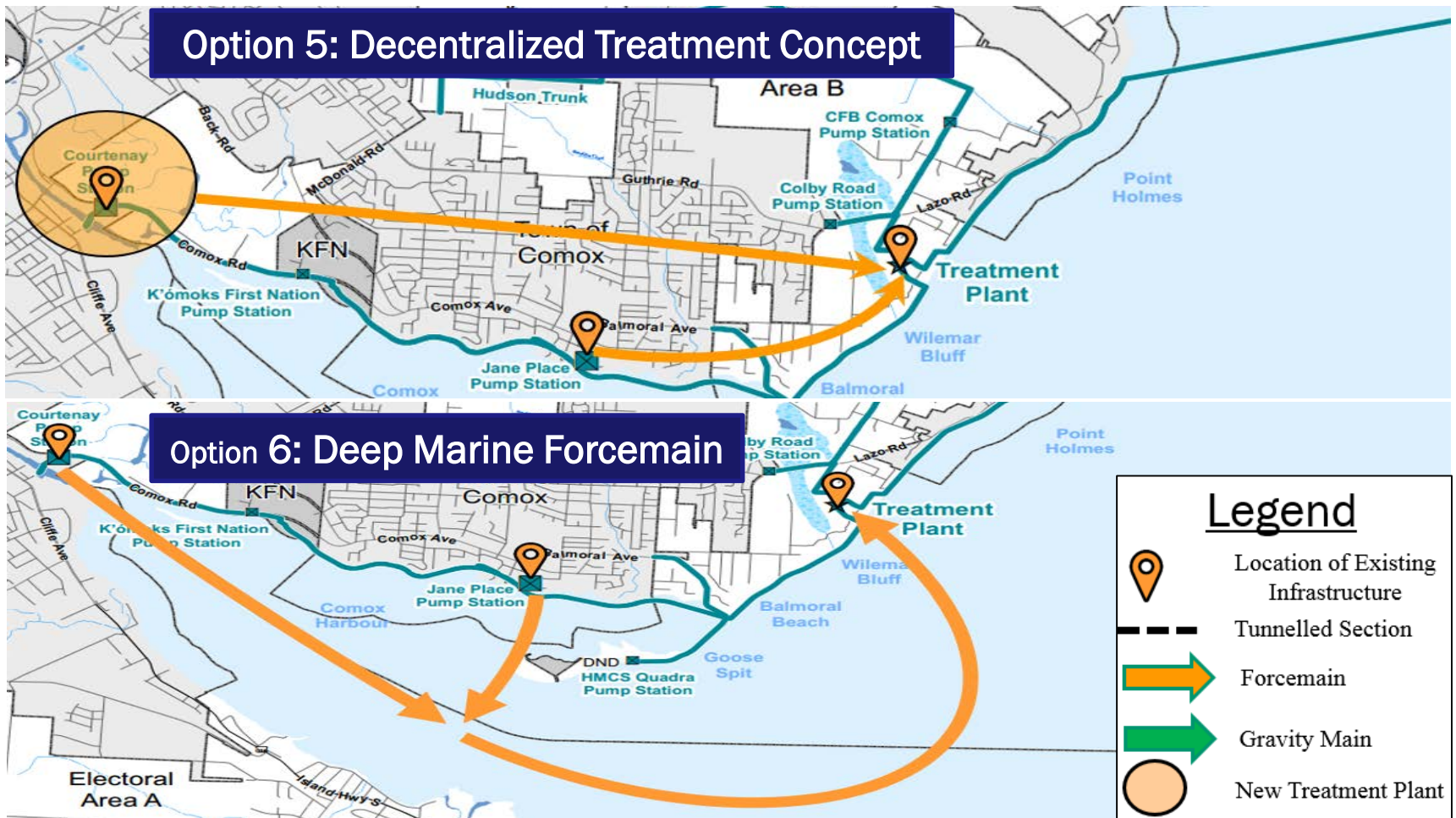


Legend

-  Location of Existing Infrastructure
-  Tunnelled Section
-  Forcemain
-  Gravity Main
-  New Pump Station

Option 5: Decentralized Treatment

Option 6: Deep Marine Forcemain



Treatment Options

Option 1: Meets minimum regulatory requirements

Option 2: Secondary treatment for all flows

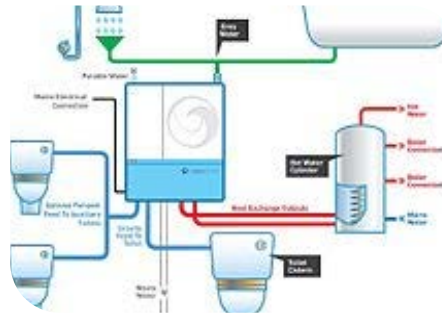
Option 3: Advanced/filtration for flows up to two times Average Dry Weather Flow

Option 4: Advanced/filtration for all flows

Resource Recovery Options



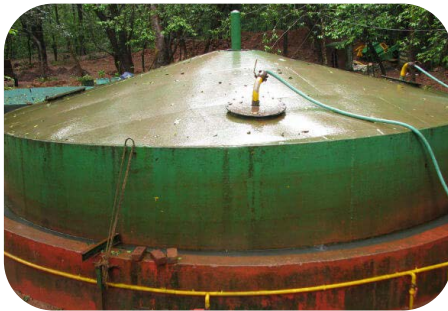
Reclaimed Water



Heat Recovery



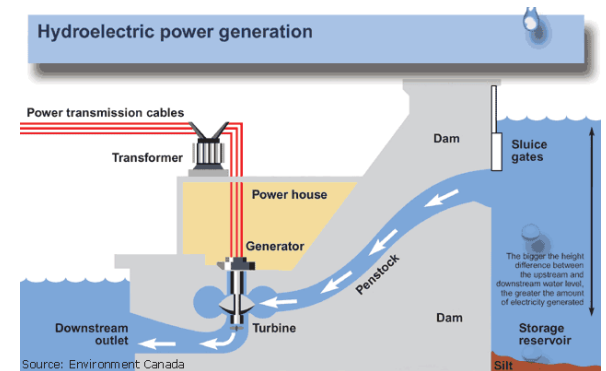
Compost Production



Biogas Production



Fertilizer Pellets Production



Hydro-electric Power Generation

Next Steps

Prepare Conceptual Studies and Class 'D' costs of the long list of options (WSP)

Develop short list of options using evaluation system (TACPAC, March 22)

Consult with the KFN Chief & Council about the short list of options (CVRD, week of March 25)

Approve the short list of options (sewage commission, April 16)

Liquid Waste Management Plan

LONG LIST PUBLIC CONSULTATION

Level of Engagement

Increasing level of public involvement in decision-making 

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Present the Long List	Determine if any options are missing red flags, other considerations		Feedback to Public Advisory Committee	

Engagement Summary

497
Online Visits

56
Information
Session
Attendees

111
Survey Visits

Information Sessions



Your Ideas: Treatment and Resource Recovery

Share your thoughts on the options presented for wastewater treatment and resource recovery here. Have we missed anything? Are there any that should be removed?

Share your thoughts.

If possible for each option, could info of available about energy requirements be included?

More info if possible on technologies for screening + dewatering processes

More info please on lifespan of each option if there is any difference

Any close to

Option #1 by Class through a smooth of other that is on wastewater

Option #1 is a very good alternative

My understanding is that to get most of the possible benefits for the sewage flow from the plant, we need to have a good water treatment process. The process should be able to handle the high volume of water.

Themes of Feedback



Protection of the foreshore



High treatment standards



Consider the cost



Comox 2 opposition

Feedback from KFN Chief & Council

Conveyance

- Support for LWMP objective
- No support for estuary alignments

Treatment

- Support for UV disinfection of treated effluent

Consultation

- Timely and meaningful consultation
- Workshops for the KFN community

Engagement Milestones



LWMP Public Consultation Plan

QUESTIONS?