



Annacis Island Wastewater Treatment Plant

Construction Outlook (Q4 2026 – Q2 2027)

HIGHLIGHTS FROM METRO VANCOUVER'S LIQUID WASTE SERVICES, WATER SERVICES, AND PROJECT DELIVERY DEPARTMENTS

Metro Vancouver

LIQUID WASTE SERVICES, WATER SERVICES, PROJECT DELIVERY

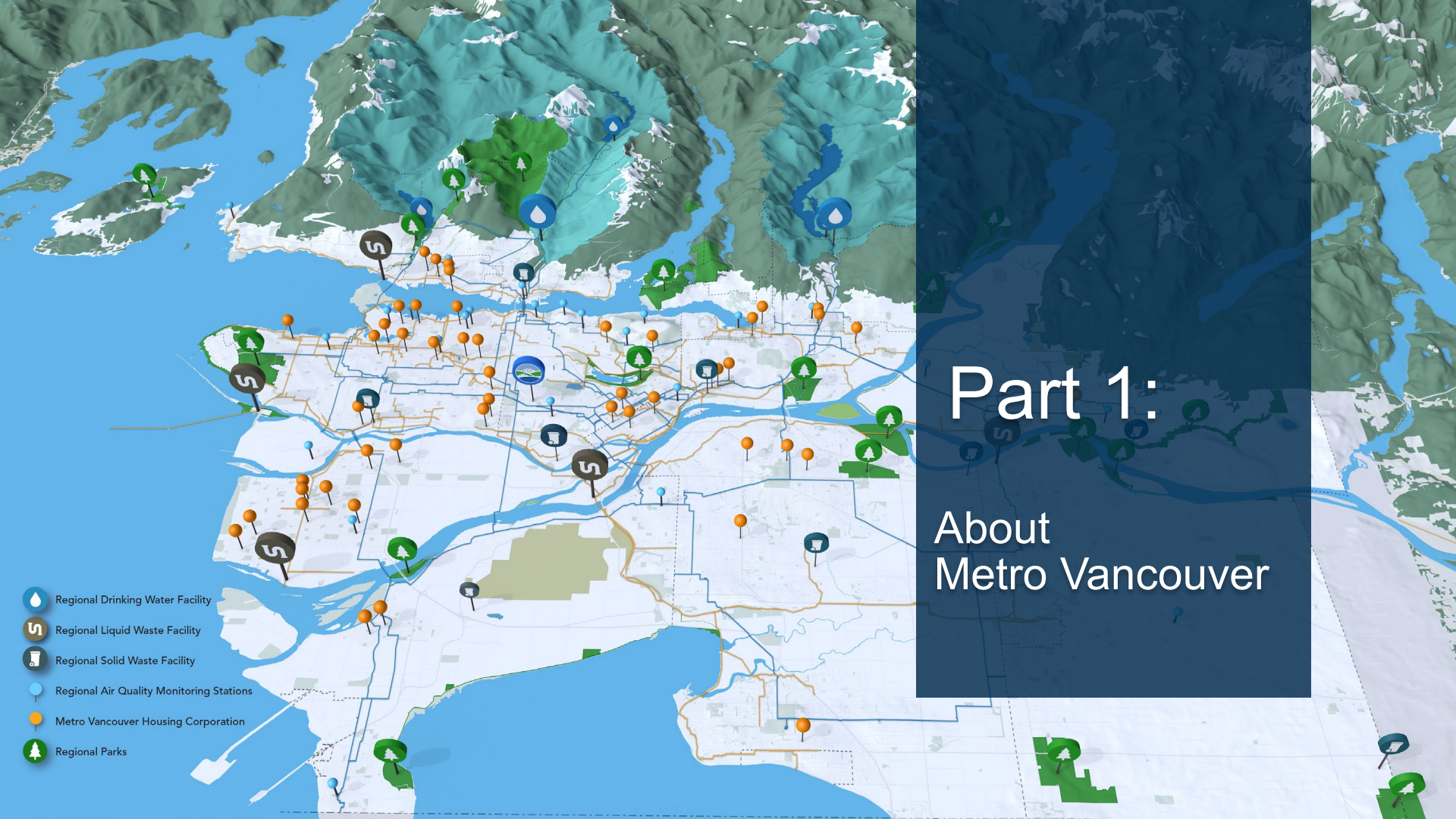
October 6, 2026

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metrovancouver

TODAY'S AGENDA

Topic	Duration	Presenter
About Metro Vancouver	8 minutes	• Richard Dieu, Commercial Supervisor
Water Services: Upcoming Projects	30 minutes	• Matthew Dybwad, Division Manager • Peter Gates, Consultant • Bahador Fathivand, Project Lead
Liquid Waste Services: Upcoming Projects	25 minutes	• Joan Liu, Division Manager • Victor Castellanos, Senior Engineer
Project Delivery: Upcoming Liquid Waste Projects	25 minutes	• Daniel LeBlond, Project Manager • Stephen Sorensen, Lead Sr. Engineer • Rudolph Nieh, Senior Engineer
Closing Remarks	2 minutes	• Richard Dieu, Commercial Supervisor



Part 1:

About Metro Vancouver

METRO VANCOUVER LEGAL ENTITIES AND SERVICES



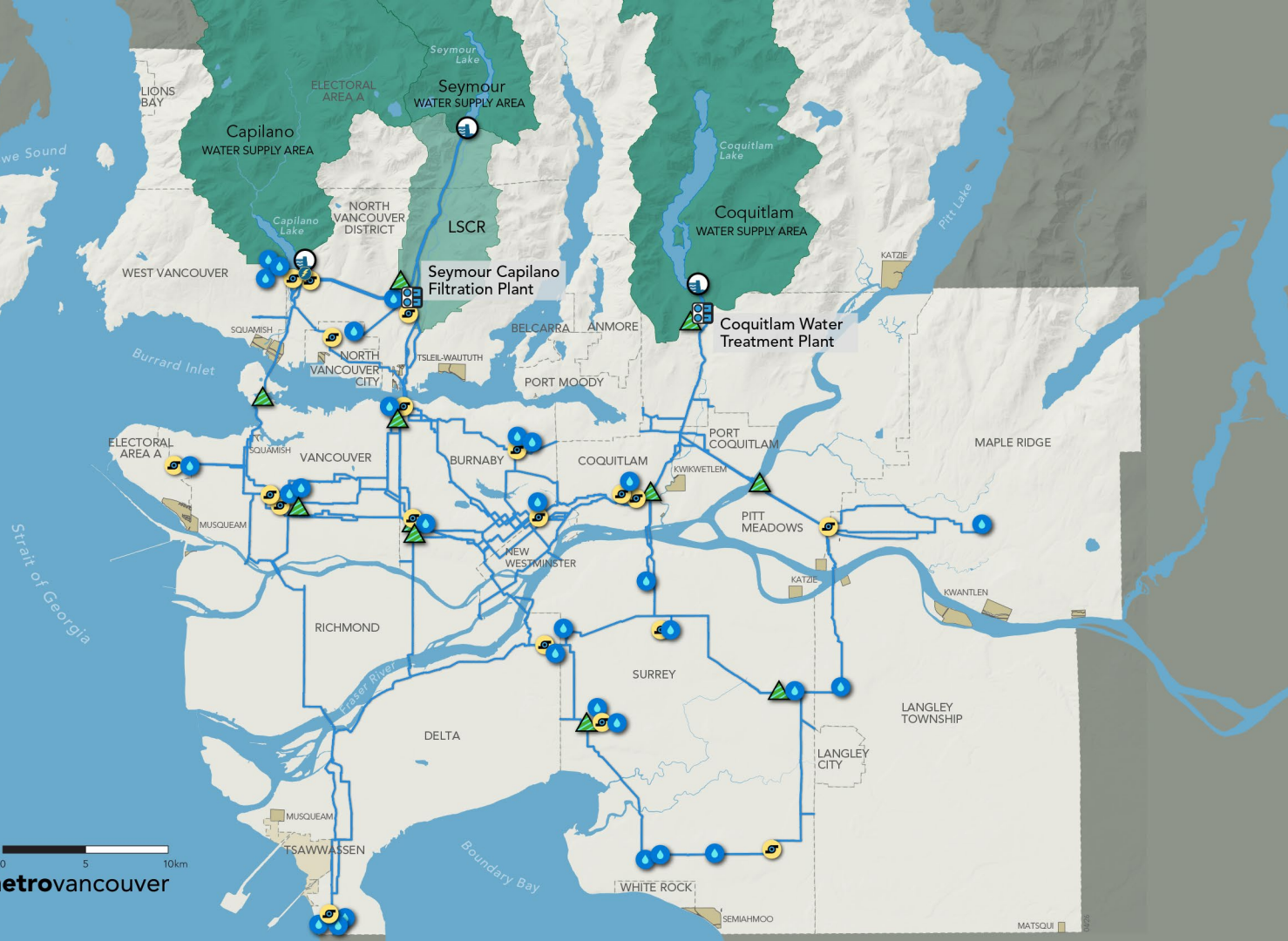
WATER SERVICES OVERVIEW

- 3 water supply areas and source reservoirs
- 2 water treatment plants
- 170,000 water quality tests each year
- 520 kilometres of water mains delivering 1 billion litres, rising to over 1.5 billion litres in summer
- 5 dams, 28 storage reservoirs, 19 pump stations, and 8 rechlorination stations



REGIONAL DRINKING WATER SYSTEM

- Water Supply Area
- Lower Seymour Conservation Reserve (LSCR)
- Dam
- Water Main
- Disinfection Facility
- Water Reservoir/Tank
- Pump Station
- Energy Recovery
- Water Treatment Plant
- Municipal Boundary
- First Nation Treaty Lands
- First Nation Reserve Lands



LIQUID WASTE SERVICES OVERVIEW

- 19 member jurisdictions; roughly 3 million residents
- 530 kilometers of trunk sewers, 34 pump stations, 3 storage tanks
- 5 wastewater treatment plants
- 1.2 billion litres of wastewater treated per day
- 3 urban drainage areas: Still Creek/Brunette, Port Moody/Coquitlam, and University



Burnaby Lake North Interceptor



Annacis Island WWTP Trickling Filter Rehabilitation



Sapperton Pump Station

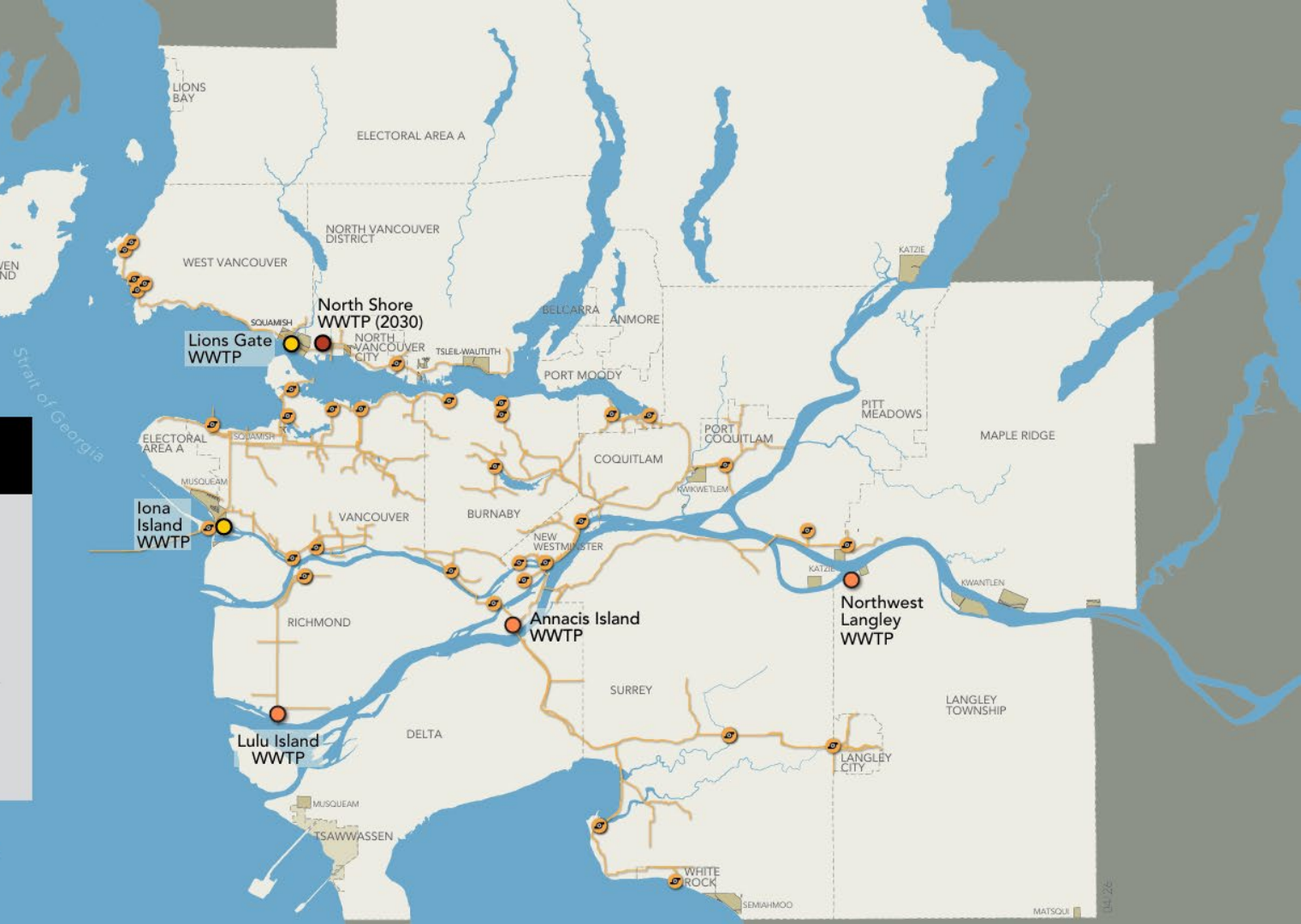


Iona Island WWTP Gravity Thickener #3

REGIONAL LIQUID WASTE SYSTEM

- Primary Treatment
- Secondary Treatment
- Tertiary Filtration
- Sewer Pump Station
- Regional Sewer Mains

- Municipal Boundary
- First Nation Treaty Lands
- First Nation Reserve Lands



PROJECT DELIVERY OVERVIEW

- Highest Value, Risk, and Consequence projects (HVRC)
- HVRC projects include wastewater treatment plant construction/expansion, securing new water sources, and water supply tunnels
- Projects in different stages of construction, from early works to substantial completion
- Variety of procurement opportunities for small, medium, and large-scale contractors



Coquitlam Watershed



Iona Island WWTTP



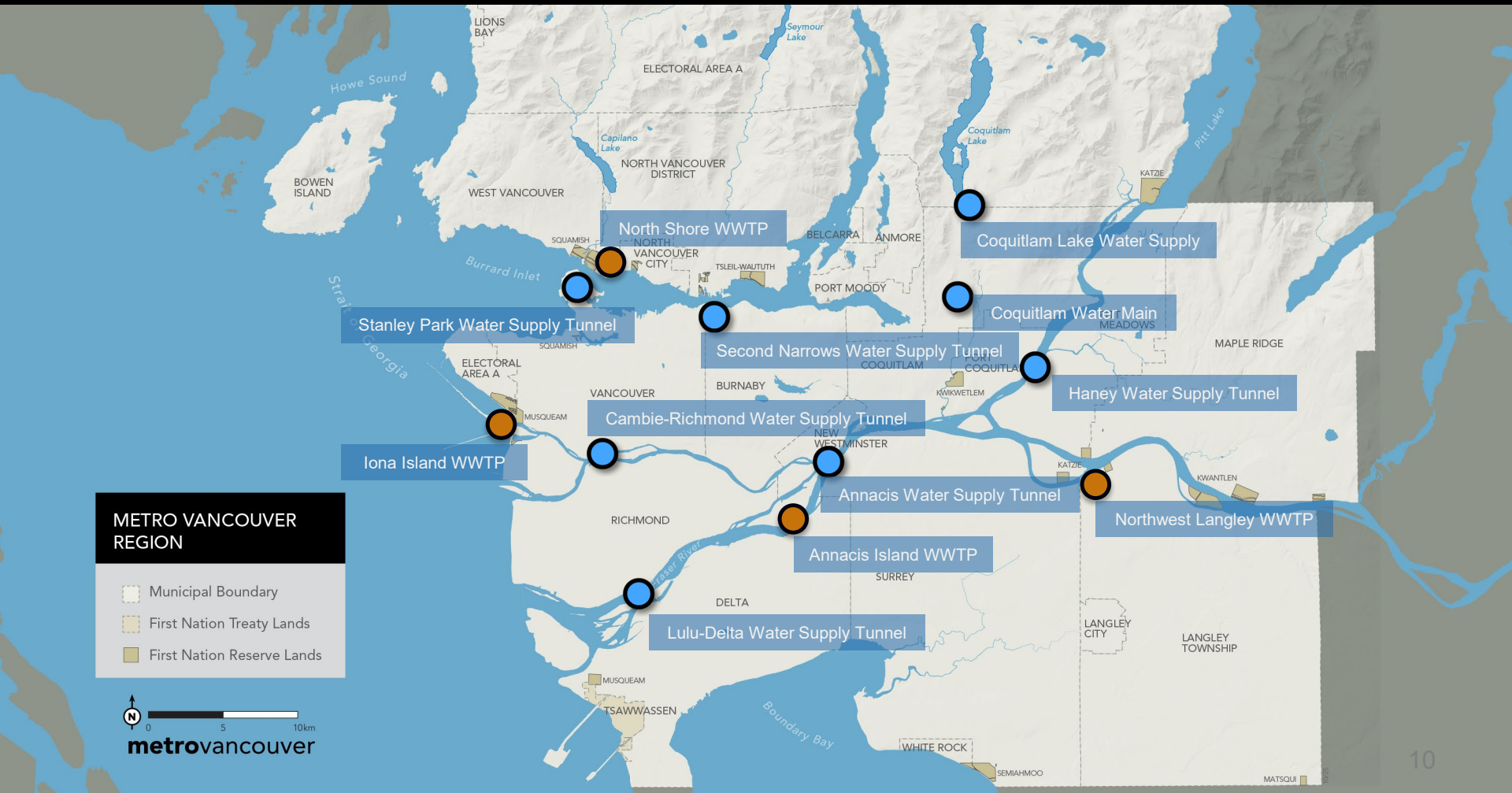
Golden Ears Pump Station



Annacis Water Supply Tunnel



Major Projects

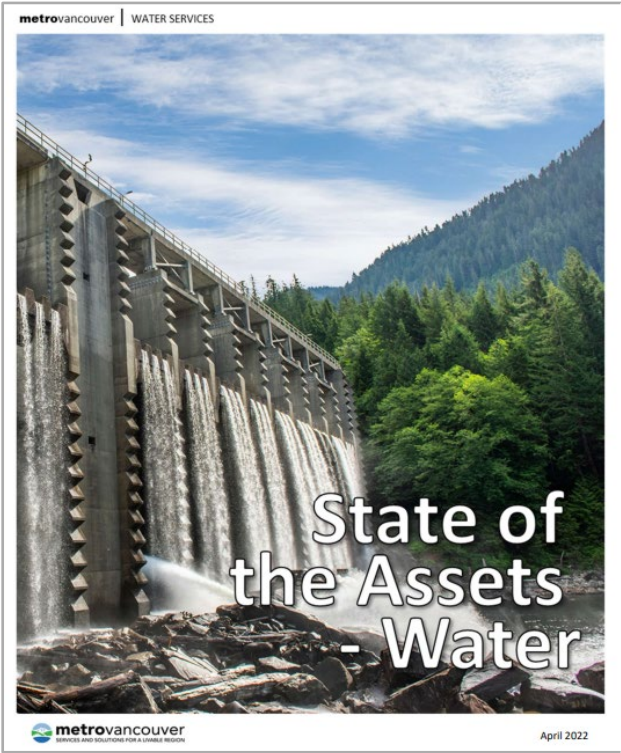


Part 2:

Water Services Upcoming Projects



STATE OF THE ASSETS REPORT – 2022



Asset	Condition
Water Supply Area (built assets)	Good
Dams	Good
Treatment Plants	Very good
Water Mains	Fair
Reservoirs	Fair
Rechlorination Stations	Good
Pump Stations	Fair
Communication Systems	Good
Works Yards	Good

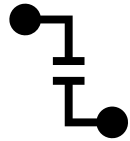
FEATURED PROJECTS

Water Services



Water Mains and Pump Stations

- Central Park Main No. 2 Phase 4



Water Treatment Plants and Facilities

- Coquitlam Water Treatment Plant CO2 System Improvements
- Rechlorination Upgrade Construction
- Seymore Capilano Filtration Plant Clearwell Baffle Replacement Pilot



Dam Facilities

- Hazardous Material Abatement

WATER MAINS AND PUMP STATIONS

Central Park Main No. 2 Phase 4

Scope Summary:

- Installation of 4 kms of 500 mm ductile iron pipe
- Installation of line valves

Project Schedule:

- Expected issue date for RFQ/RFP:
Q4 2026



Central Park Water Main

WATER MAINS AND PUMP STATIONS

Central Park Main No.2 Phase 4

Challenges:

- Environmental and permitting
- Minimizing community impacts

Expectations:

- Detailed construction methodology, experienced staff
- Environmental compliance
- Sequencing construction activities



Central Park Water Main

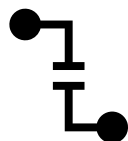
FEATURED PROJECTS

Water Services



Water Mains and Pump Stations

- Central Park Main No. 2 Phase 4



Water Treatment Plants and Facilities

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Dam Facilities

- Hazardous Material Abatement

WATER TREATMENT PLANTS AND FACILITIES

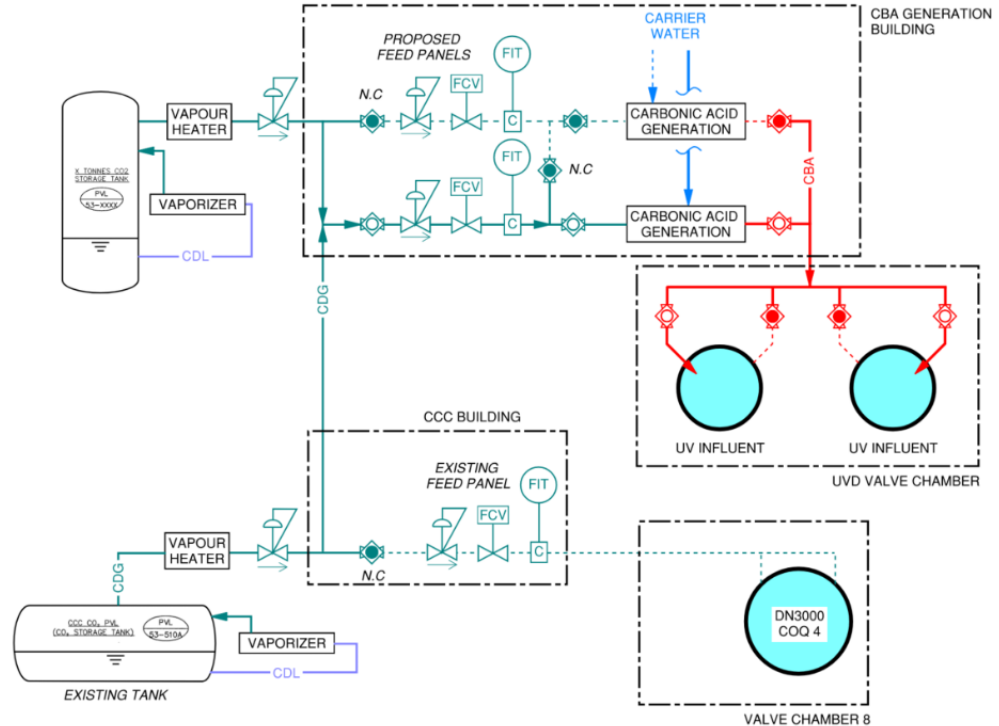
Coquitlam Water Treatment Plant CO₂ System Improvements

Scope Summary:

- Installation of new carbonic acid-based CO₂ system

Procurement Schedule:

- Expected issue date for RFQ/RFP: Q1/Q2 2027



WATER TREATMENT PLANTS AND FACILITIES

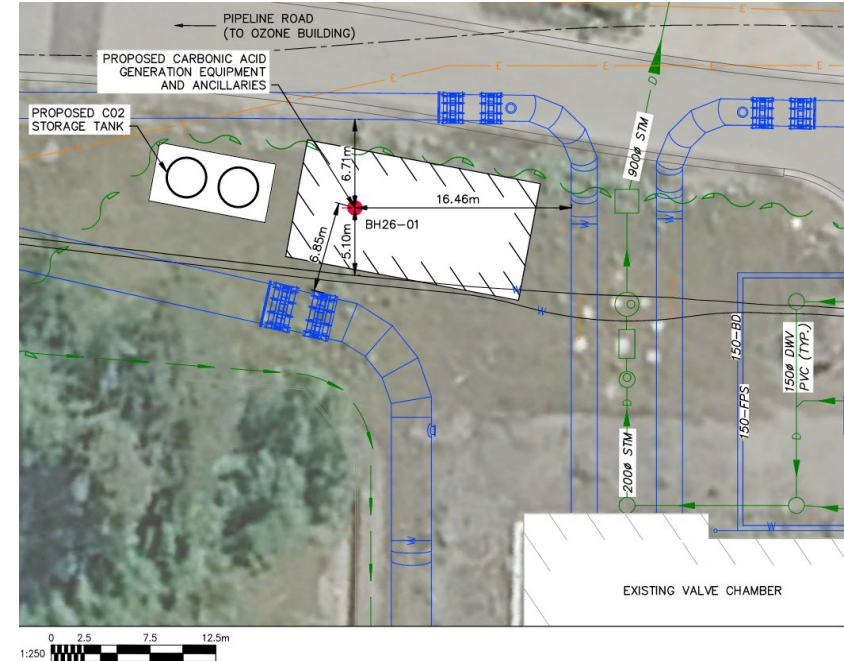
Coquitlam Water Treatment Plant CO₂ System Improvements

Challenges:

- Proprietary programming
- Proximity to ozone and water mains
- Minimizing plant process disruptions during tie-ins and commissioning
- Electrical interruption during tie-ins

Expectations:

- Understanding of pH control via CO₂ injection and Electrical Instrumentation and Controls for system tie-in and commissioning
- Construction within CWTP or similar infrastructure





Clayton Rechlorination Station

WATER TREATMENT PLANTS AND FACILITIES

Rechlorination Upgrade Construction

Scope Summary:

- Upgrade and replacement work at 3 rechlorination stations:
Cape Horn, Clayton, Pitt River

Procurement Schedule:

- Expected issue date for RFQ/RFP:
Q1/Q2 2027



WATER TREATMENT PLANTS AND FACILITIES

Rechlorination Upgrade Construction

Challenges:

- Archaeological (Pitt River/Cape Horn) and residential (Clayton)
- Construction sequencing
- Minimizing service interruptions
- Maintaining operations and chemical deliveries

Expectations:

- Experience with rechlorination station work
- Working collaboratively with First Nations and residential communities

Pitt River Rechlorination Station

WATER TREATMENT PLANTS AND FACILITIES

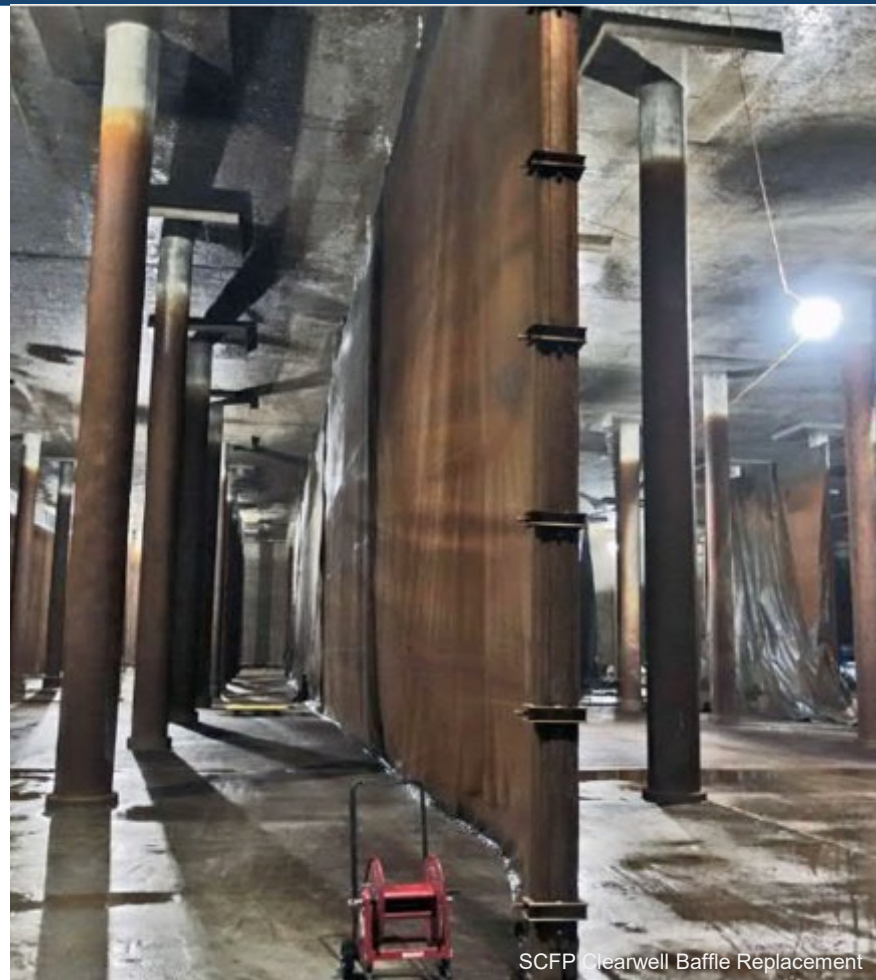
SCFP Clearwell Baffle Replacement Pilot

Scope Summary:

- Replacement of first and second-pass baffle curtains with a composite system of geomembrane, concrete, and stainless-steel baffle walls

Procurement Schedule:

- Expected issue date for RFQ/RFP: Q1/Q2 2027



SCFP Clearwell Baffle Replacement

WATER TREATMENT PLANTS AND FACILITIES

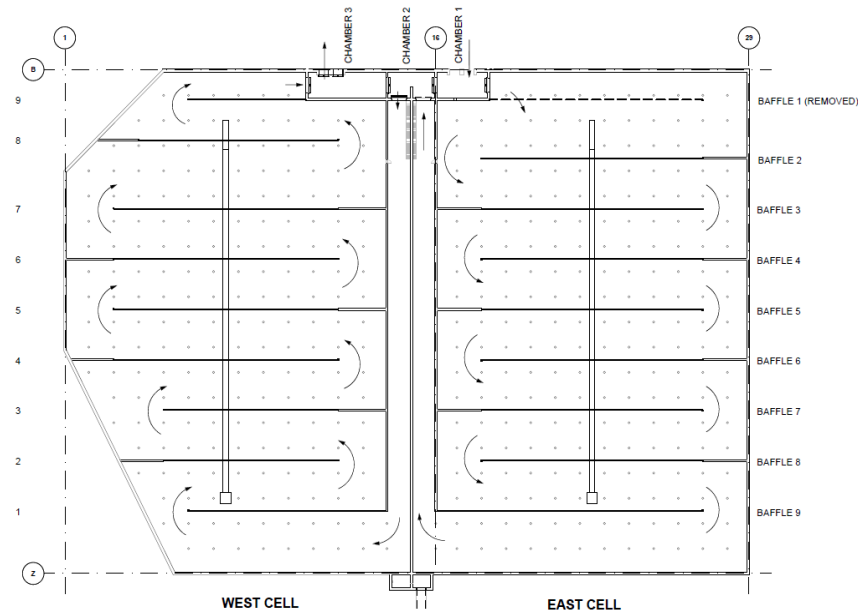
SCFP Clearwell Baffle Replacement Pilot

Challenges:

- Tight window during low-demand season
- NSF 61 compliance
- Managing potential water leaks

Expectations:

- Construction of concrete walls
- Installation of geomembrane baffle or liner



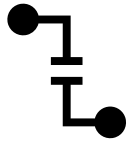
FEATURED PROJECTS

Water Services



Water Mains and Pump Stations

- Central Park Main No. 2 Phase 4



Water Treatment Plants and Facilities

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Dam Facilities

- Hazardous Material Abatement

DAM FACILITIES

Cleveland Dam and Seymour Falls Dam Hazardous Material Abatement

Scope Summary:

- Hazardous material abatement of lead and asbestos, including environmental containment and surface preparation, restoration, and repair

Procurement Schedule:

- Expected Issue Date for RFQ/RFP:
Q1/Q2 2027



Hazardous Materials Abatement

DAM FACILITIES

Cleveland Dam and Seymour Falls Dam Hazardous Material Abatement

Challenges:

- Coordination with ongoing dam operations
- Maintaining uninterrupted operations
- Handling hazardous materials to protect drinking water quality and environment

Expectations:

- Hazardous materials abatement
- Containment and contaminated waste management
- Working within active dam facilities
- Confined space and work-at-height activities



Hazardous Materials Abatement

The image shows the interior of a wastewater treatment plant. In the foreground, there are two large blue centrifugal pumps mounted on concrete bases. They are connected to a complex network of large, horizontal silver pipes. The pipes have various valves, including a prominent red-handled valve on the right. The facility has a high ceiling with blue structural beams and industrial lighting. In the background, more equipment and a white pillar are visible.

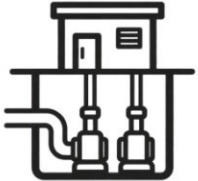
Part 3:

Liquid Waste
Services

Upcoming
Projects

FEATURED PROJECTS

Liquid Waste Services



Pump Stations & Sewer Mains

- Cliff Ave Pump Station Upgrade
- Stoney Creek Trunk Sewer Upgrade - Burnaby



Wastewater Treatment Plants

- Lulu Island Wastewater Treatment Plant (WWTP) Projects
 - a) Gravity Thickener Redundancy
 - b) Refurbishment of Secondary Clarifiers

PUMP STATIONS AND SEWER MAINS

Cliff Avenue Pump Station Construction

Scope Summary:

- New wet mount submersible sanitary pump station to replace existing Westridge Pump Station
- Above-grade electrical and generator room

Procurement Schedule:

- Expected issue date for RFQ: November 2026
- Expected issue date for tender: February 2027



Project Site

PUMP STATIONS AND SEWER MAINS

Cliff Avenue Pump Station Construction

Challenges:

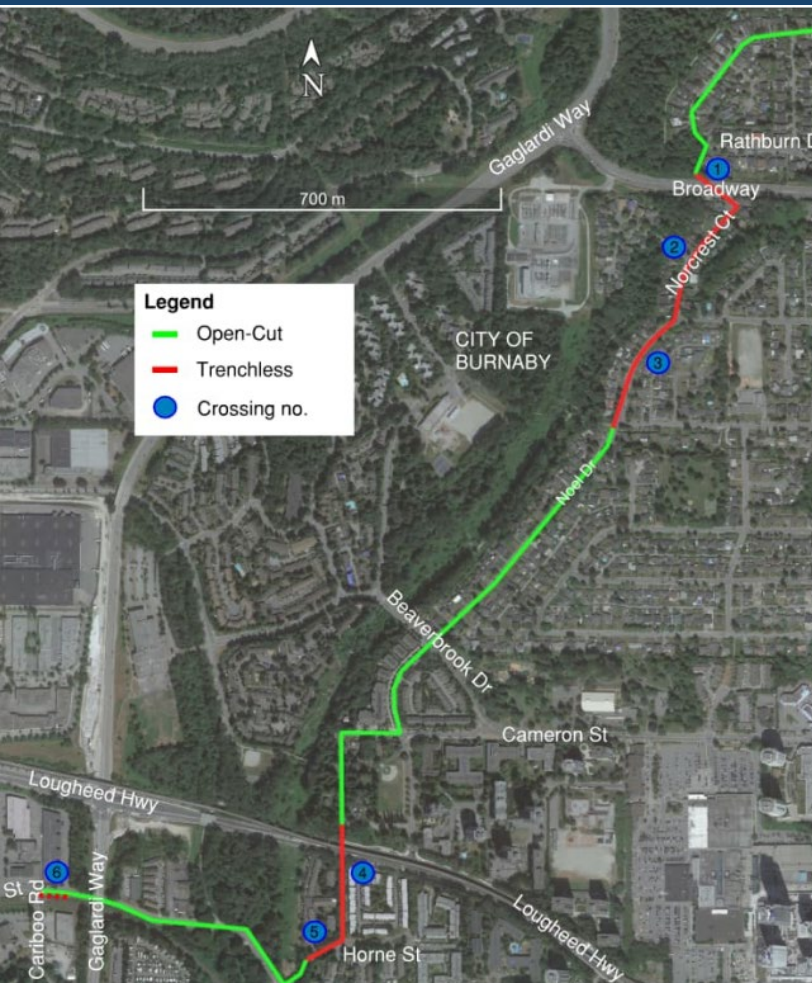
- Constrained workspace including underground and overhead utilities
- Steep gradient (12%) across site
- Stakeholders include City of Burnaby, BC Hydro, Canadian Pacific Kansas City Railway, Trans Mountain Corporation, Shell Oil
- Work within residential neighbourhood

Expectations:

- Pump station to be operational throughout construction and commissioning of Cliff Avenue Pump Station



Rendering of Site



PUMP STATIONS AND SEWER MAINS

Stoney Creek Trunk Sewer Upgrade

Scope Summary:

- **Contract 1:** 920 metres of 1219mm diameter concrete pipe micro tunnel with ~8 launching/receiving shafts
- **Contract 2:** 2.2 kilometres, 766 to 1066mm diameter PVC open cut

Procurement Schedule:

- **Contract 1:** Expected issue date for RFQ/RFP: Q1 2027
- **Contract 2:** Expected issue date for RFQ/RFP: Mid to late 2028



Stoney Creek Trunk Sewer Upgrade

PUMP STATIONS AND SEWER MAINS

Stoney Creek Trunk Sewer Upgrade

Challenges:

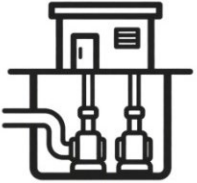
- Narrow / dead-end streets
- Proximity to private homes
- Glacial till
- Curved reaches
- Environmental scrutiny

Expectations:

- Transparent, team-based project delivery
- Adaptive to site conditions
- Proactive risk management
- Minimizing impacts to community

FEATURED PROJECTS

Liquid Waste Services



Pump Stations & Sewer Mains

- Cliff Ave Pump Station Upgrade
- Stoney Creek Trunk Sewer Upgrade - Burnaby



Wastewater Treatment Plants

- Lulu Island Wastewater Treatment Plant (WWTP) Projects
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LULU ISLAND WWTP PROJECTS

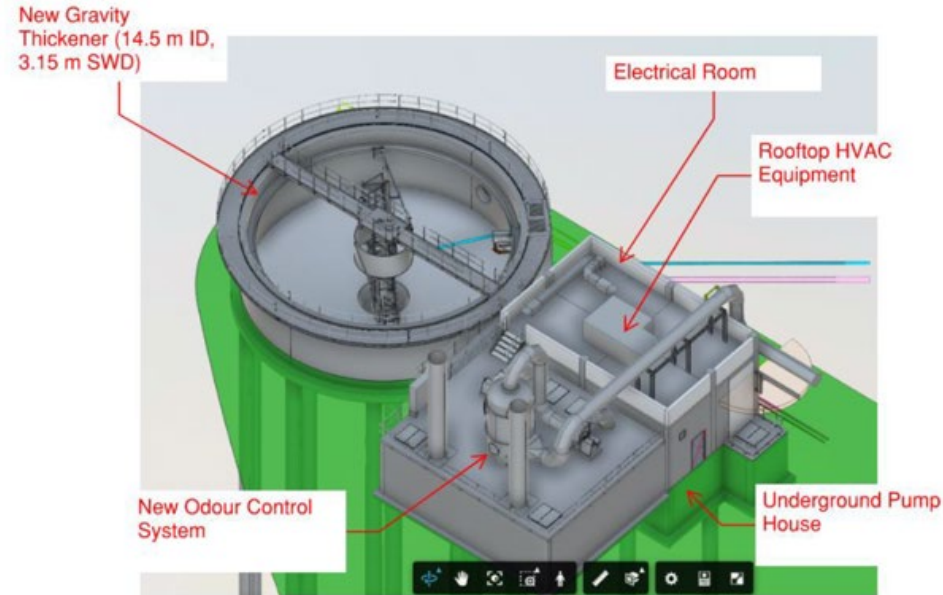
Gravity Thickener Redundancy

Scope Summary:

- Construct a new gravity thickener, complete with, a new odour control system, electrical room, and pump house
- Decommission existing biofield and relocate utilities to allow for construction
- Refurbish existing gravity thickener with new mechanism and perform concrete repairs

Procurement Schedule:

- Expected issue date for RFQ/RFP: Q2/Q4 2027



LULU ISLAND WWTP PROJECTS

Gravity Thickener Redundancy

Challenges:

- Coordination at Lulu Island
- Keeping plant operational during construction

Expectations:

- Detailed tie-in plan, utility relocation plan, and traffic management plan
- Existing infrastructure protected from vibration and settlement during construction
- Refurbishment of existing gravity thickener can only start after the new gravity thickener is operational





Lulu Island Secondary Clarifiers

LULU ISLAND WWTP PROJECTS

Refurbishment of Secondary Clarifiers

Scope Summary:

- Replacement of mechanisms of four secondary clarifiers (SCL)
- Localized concrete repair
- Targeted replacement of aging EIC assets related to the SCLs

Schedule Summary:

- Expected Issue Date for RFQ/RFP: Q2/Q4 2027



Lulu Island WWTP

LULU ISLAND WWTP PROJECTS

Refurbishment of Secondary Clarifiers

Challenges:

- Only one clarifier can be taken out of service at a time, during dry season
- Site access and laydown space is constrained and must be coordinated
- New clarifier equipment must fit and connect to existing structures, making accurate field verification critical

Expectations:

- Clarifier equipment must be installed and commissioned to meet seasonal window
- Construction must be closely coordinated with plant operations and other projects



Part 4:

Project Delivery Upcoming Liquid Waste Projects

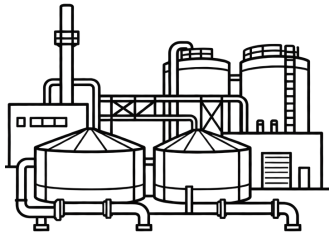
TODAY'S FEATURED PROJECTS

Project Delivery – Liquid Waste Projects



Iona Island WWTP Projects

- a) Site Grading
- b) Geotechnical Field Trials
- c) Iona Causeway Maintenance
- d) Structural Repairs and C1 Booster Pump Station
- e) Temporary Construction Power
- f) General Contractor for Elec & Mech Equipment Install



Annacis Island WWTP Projects

- a) Solid Contact Tank Modifications
- b) Optimization Works

IONA ISLAND WWTP PROJECTS

Six RFPs for Early Work Upgrades

Scope Summary:

- Rehabilitate aging infrastructure and upgrade existing plant

Procurement Schedule:

- Currently in preliminary design stage
- Ground improvements to start 2028
- Plant construction packages start 2030/2031
- Various early works start Q4 2026 – scopes outlined in following slides





Iona Island WWTP

IONA ISLAND WWTP PROJECTS

Six RFPs for Early Work Upgrades

Challenges:

- Construction while keeping plant operational
- Sequencing around seasonal requirements
- Isolation to allow for in-channel work
- Transfer pumping to keep plant operational during in-channel work
- Construction work close to sensitive ecosystems

IONA ISLAND WWTP PROJECTS: PROGRAM 1

Procurement Timelines

Scope	Procurement	Description	Process used	RFQ Target	RFP Target	Contract Release Target
1	Site Grading Construction Services	Supply of fill material, including hauling, placement, compaction, and grading across the former biosolids land drying area	RFP	-	Q4-2026	Q2-2027
2	Geotechnical Field Trials	Execution of field constructability trials for piling, stone columns, and cutter soil mixing (CSM)	RFP	-	Q1-2027	Q3-2027
3	Iona Causeway Maintenance	Multi-year contract for maintenance of the Iona Causeway including, but not limited to, snow plowing, de-icing, debris removal, vegetation clearing, and road light repairs	RFP	-	Q4-2026	Q1-2027

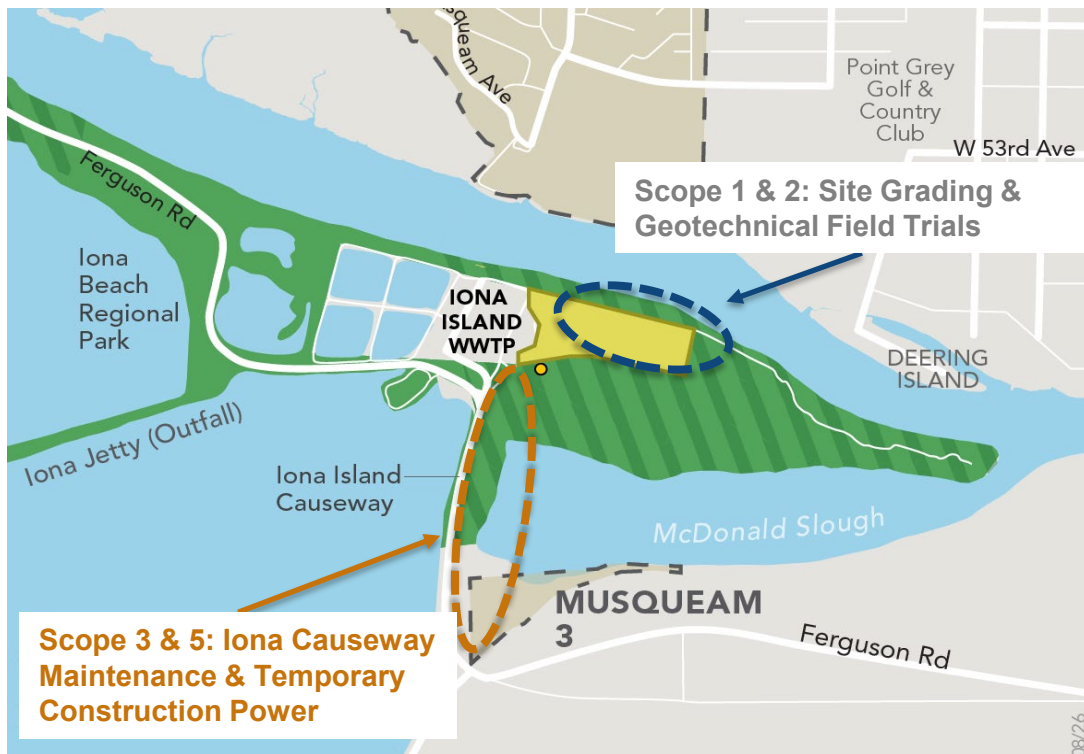
IONA ISLAND WWTP PROJECTS: PROGRAM 1

Procurement Timelines

Scope	Procurement	Description	Process used	RFQ Target	RFP Target	Contract Release Target
4	Structural Repairs and C1 Booster Pump Station Installation	Structural repairs, including crack repairs for existing pipe gallery as well as installation of a booster pump system to increase pressure of municipal water supply	RFP	-	Q2-2027	Q4-2027
5	Temporary Construction Power	Supply and installation of electrical cables to provide temporary construction power Scope excludes trenching and conduit installation	RFP	-	Q2-2027	Q4-2027
6	General Contractor for Electrical and Mechanical Equipment Installation	Installation of owner-supplied pump motors and VFDs, MCCs, switchgears, and transformers	RFP	Q1-2027	TBC	Q1-2028

IONA ISLAND WWTP PROJECTS: PROGRAM 1

Site Grading, Geotechnical, Causeway Maintenance, and Temporary Power



IONA ISLAND WWTP PROJECTS: PROGRAM 1

Existing Asset Rehabilitation





ANNACIS ISLAND WWTP PROJECTS

Two RFPs for Plant Upgrades

Scope Summary:

- Upgrade existing plant to meet growing population
- Includes civil, concrete, specialty lining, mechanical and commissioning work

Procurement Schedule:

- Detailed design for first RFP to be completed by end of 2026
- Construction for first RFP to begin mid-2027, complete by 2029
- Construction for second RFP to begin late-2027, complete by 2030

Annacis Island WWTP



ANNACIS ISLAND WWTP PROJECTS

Two RFPs for Plant Upgrades

Challenges:

- Keep plant operational
- Construction sequencing around seasonal requirements
- Isolation of large channels to allow for in-channel work
- Transfer pumping to keep plant operational during in-channel work

Annacis Island WWTP

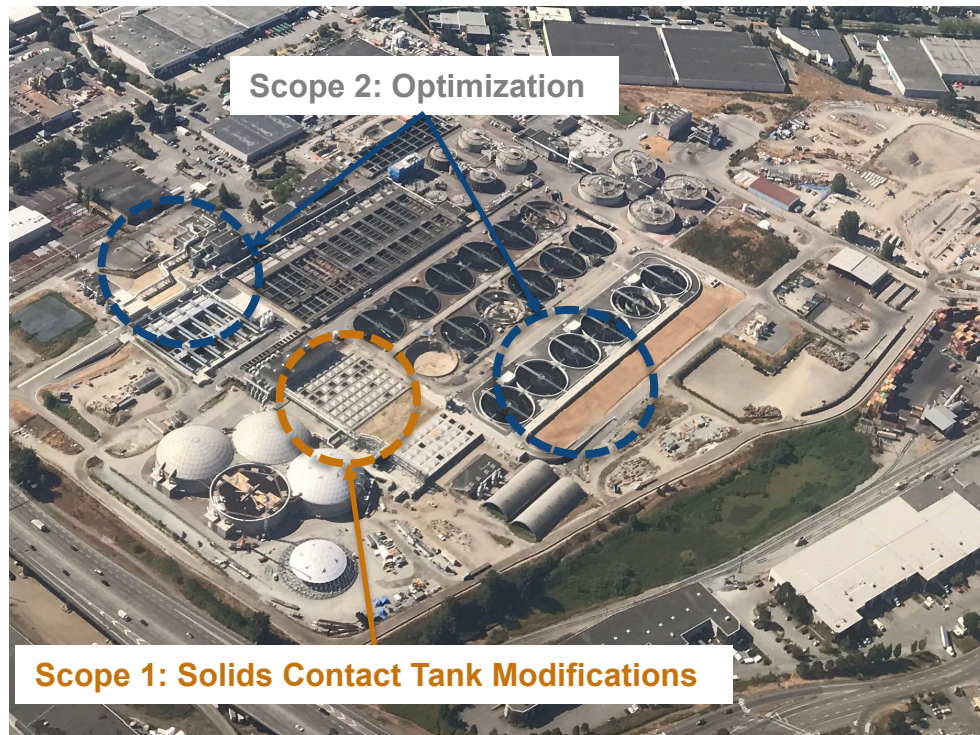
ANNACIS ISLAND WWTP PROJECTS: PROGRAM 2

Procurement Timelines

Scope	Procurement	Description	Process used	RFP Target	Contract Release Target
1	Solid Contact Tank Modifications – Contractor	Various modifications to existing channel structures, requiring significant transfer pumping	RFP	Q4-2026	Q1-2027
2	Optimization Works – Contractor	Various projects to address structural water ingress, channel lining and upgrades, and foul air system modifications	RFP	Q2-2027	Q3-2027

ANNACIS ISLAND WWTP PROJECTS: PROGRAM 2

Solids Contact Tank Modifications and Optimization



NEXT STEPS

Procurement at Metro Vancouver

- Use Metro Vancouver's [Bids & Tenders](#) online application to source goods, services, and construction
- Metro Vancouver's Procurement Division is responsible for providing goods, services, and construction. Additional details can be found in the attached spreadsheet.
- For more information on Metro Vancouver's procurement policies, including potential procurement preferences for First Nation economic entities or a Bidder that sub-contracts to a First Nation economic entity, please refer to "[Procurement and Asset Disposal Authority Policy](#)".



Sapperton Pump Station

Was this presentation helpful? Please let us know via email to:

contractor-engagement@metrovancover.org



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