

## REGULAR COUNCIL MEETING – AGENDA

Minutes for the Regular Council Meeting scheduled for  
Tuesday, April 30, 2019 at 7:00 p.m. in Council Chambers at  
Village Hall, 2697 Sunnyside Road, Anmore, BC

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### ELECTED OFFICIALS PRESENT

Mayor John McEwen  
Councillor Polly Krier  
Councillor Tim Laidler  
Councillor Kim Trowbridge  
Councillor Paul Weverink

### OTHERS PRESENT

Juli Halliwell, CAO  
Karen Elrick, Manager of Corporate Services  
Jason Smith, Manager of Development Services  
Luke Guerin, Operations Superintendent

#### 1. Call to Order

Mayor McEwen called the meeting to order at 7:00 p.m.

#### 2. Approval of the Agenda

It was MOVED and SECONDED:

R305	That the Agenda be approved as amended to include the addition of Item 11 (a) Infill Development Policy and Conflict of Interest and renumber the subsequent items accordingly.
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Carried Unanimously

#### 3. Public Input

Charles Christie, Anmore, regarding proposed tax increase.

Doug Richardson, Anmore, regarding Cordovado subdivision and OCP policy.

#### **4. Delegations.**

##### **(a) BC Hydro – Coquitlam Gates Tunnel Project**

Mr. Mark Nichol, Project Manager, provided a Powerpoint presentation on the Coquitlam Gates Tunnel Project to Council which is included as Attachment 1 and forms part of these minutes:

Points included:

- History of Coquitlam Buntzen Diversion Tunnel
- Purpose of tunnel:
  - Diversion of water
  - Act as a reservoir discharge facility
- Coquitlam Buntzen system overview
- Project progress to date
- Hydro-technical studies and modelling objectives
- Fisheries considerations
- Project schedule and next steps

Discussion included:

- Safety concerns and need for continued communication with Anmore regarding any changes in water levels
- Potential for power generation from the water tunnel

##### **(b) Anmore Green Estates – Strata Council – sewer connection and Liquid Waste Management Plan**

Ms. Brandie Roberts, Anmore Green Estates provided a presentation to Council outlining concerns regarding Anmore Green Estates.

Ms. Roberts' points included:

- Desire of Anmore Green Estates (AGE) to meet with Council, and for Council to advocate for community members
- Liquid Waste Management Plan (LWMP) which includes option for sewer connection for through joining Greater Vancouver Sewage and Drainage District or treatment of sewage on site
- AGE's view of lack of public consultation for LWMP
- Desire for confirmation of responsibility of fees related to services

Discussion points included:

- Confirmation that the Village's intent is that the property owners that would benefit from the service of the sewer connection would bear the full cost of

providing the service

- AGE's view that entire community would benefit from sewer connection, not just AGE, and that the cost to each property owner within AGE could be \$3,000 per year for GVSDD membership
- Mayor McEwen offered to attend GVSDD with AGE representative to make a presentation regarding potential for adjustment of membership fee
- Open house will hosted by Village in mid June to provide clarification

## 5. **Adoption of Minutes**

### (a) **Minutes of the Regular Council Meeting held on April 16, 2019**

It was MOVED and SECONDED:

R306                      That the Minutes of the Regular Council Meeting held on April 16, 2019 be adopted as circulated.

Carried Unanimously

## 6. **Business Arising from Minutes**

## 7. **Consent Agenda**

It was MOVED and SECONDED:

R307                      That the Consent agenda be adopted.

Carried Unanimously

- (a) **Metro Vancouver – 2018 Regional Parking Study – Key Findings** - Full report available <http://www.metrovancouver.org/services/regional-planning/transportation/regional-parking-studies/Pages/default.aspx>

Recommendation:      THAT Council receive the letter from Metro Vancouver dated April 15, 2019 regarding Metro Vancouver 2018 Regional Parking Study – Key Findings, for information.

- (b) **Metro Vancouver Drinking Water Conservation Plan Guide** – Full plan available <http://www.metrovancouver.org/services/water/WaterPublications/DrinkingWaterConservationPlan.pdf>

Recommendation: THAT Council receive the letter from Metro Vancouver dated April 16, 2019 regarding Metro Drinking Water Conservation Plan, for information.

- (c) **Metro Vancouver Office Development in Metro Vancouver's Urban Centres – 2018 Update** – Full Update available  
[http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Office\\_Development\\_in\\_Metro\\_Vancouver's\\_Urban\\_Centres-2018Update.pdf](http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Office_Development_in_Metro_Vancouver's_Urban_Centres-2018Update.pdf)

Recommendation: THAT Council receive the letter from Metro Vancouver dated April 24, 2019 regarding Office Development in Metro Vancouver's Urban Centres, for information.

- (d) **Communication from Union of BC Municipalities dated April 16, 2019 regarding 2017 CEPF: Emergency Social Services – Increase Local Capacity: Training & Trailer**

Recommendation: THAT Council receive the letter from Union of BC Municipalities dated April 16, 2019 regarding CEPF: Emergency Social Services – Increase Local Capacity: Training & Trailer, for information.

- (e) **CARIP Survey Public Reporting**

Recommendation: THAT the report dated April 26, 2019 from the Manager of Development Services regarding CARIP Survey Public Reporting be received, for information.

**8. Items Removed from the Consent Agenda**

**9. Legislative Reports**

- (a) **2307 Sunnyside Road – Proposed Comprehensive Development Rezoning**

Mr. Jason Smith, Manager of Development Services, provided an overview of the staff report of the 19 lot proposal. Mr. Smith included information on components of the proposal including amenity contribution, trail network extension, extension of Sunnyside Road right of way, and riparian area protection.

Discussion points included:

- Parking requirements would be the same as for RS1 zoning
- Secondary suites would be permitted in this proposal while secondary suites are not currently permitted within other CD zones
- No provision for coach houses and a limit of one accessory building would be permitted
- The proposal is consistent with OCP policies
- Driveway entrance gates would not be permitted
- Tree retention would be regulated within the Tree Management Bylaw
- Part of Sunnyside Road right of way is now on private property and this proposal would address that issue

It was MOVED and SECONDED:

R308                      THAT Council grant first, and second reading to Village of Anmore Zoning Amendment Bylaw 597-2019 and refer Village of Anmore Zoning Amendment Bylaw 597-2019 to the Advisory Planning Commission for review and comment, and THAT Council direct staff to set a date for the public hearing should the Advisory Planning Commission suggest no further changes to Village of Anmore Zoning Amendment Bylaw 597-2019.

Carried Unanimously

**(b)      Anmore Five-Year Financial Plan Bylaw No. 595-2019**

It was MOVED and SECONDED:

R309:                      That Council adopt Anmore Five-Year Financial Plan Bylaw No. 595-2019.

Carried Unanimously

**(c)      Anmore Tax Rates Bylaw No. 596-2019**

It was MOVED and SECONDED:

R310                      That Council adopt Anmore Tax Rates Bylaw No. 596-2019.

Carried Unanimously

**10.      Unfinished Business**

**11.      New Business**

**(a) Infill Development Policy and Conflict of Interest**

Mr. Jason Smith, Manager of Development Services, provided an overview of the staff report and advised that due to the requirement of the Judge hearing the current court application related to conflict of interest and quorum, and the timeline requirement imposed for public comment that staff recommends that Item 11(b) be deferred pending the completion of the court application.

It was MOVED and SECONDED:

R311                      THAT the report titled “Infill Development Policy and Conflict of Interest” and dated April 30, 2019 be received, for information

Carried Unanimously

**(b) Infill Development Policy and the Community Amenity Contribution Target**

It was MOVED and SECONDED:

R312                      THAT Council defer consideration of the Infill Development Policy and the Community Amenity Contribution Target.

Carried Unanimously

**(c) Lower Mainland Local Government Association (LMLGA) Conference – May 8-10, Harrison Hot Springs, BC**

Ms. Juli Halliwell, CAO, confirmed that there is budget provision for one member of Council to represent the Village at this conference and that calculated costs would fall within the budget allocation.

It was MOVED and SECONDED:

R313                      That Council authorize Councillor Polly Krier to attend the 2019 LMLGA Conference to be held May 8 – 10, 2019 in Harrison Hot Springs, BC

Carried Unanimously

**12. Recommendations of Committees.**

None.

**13. Mayor's Report**

- April 18 conference call with Minister Robinson and Ministry of Environment regarding AGE sewer hook up and timelines
- April 18 attended Sasamat Volunteer Fire Department Board of Trustee Meeting
- April 20 attended Easter at Spirit Park
- April 23 attended Pacific Parkland Foundation AGM
- April 25 attended Translink meeting
- April 26 attended Metro Board Meeting and then board strategic planning
- May 1 will attend TransLink meeting with small communities Bowen Island, Lions Bay, Belcarra, and Anmore; noted request for bus stop at entrance to Crystal Creek Drive
- Mayor McEwen offered well wishes and thanks to departing staff member Luke Guerin and to Anmore Times representative Morgan Weverink as it is his last meeting representing Anmore Times

**14. Councillors Reports**

Cllr. Weverink noted that he wishes to bring forward an agenda item regarding nuisance bears to the next Environment Committee meeting.

Cllr. Krier reported that:

- Attended Village Easter Egg Hunt
- Attended Walk a Mile in Her Shoes event – Soroptomist Club
- Will attend Canadian Tire jumpstart classic car fundraiser on May 5
- Scheduling next dementia workshop
- Planning for picnic in the park in August

**15. Chief Administrative Officer's Report**

Ms. Juli Halliwell, CAO reported that:

- Stage one water restrictions are now in effect and information is available on Village website
- An agreement for shared services with Belcarra for bylaw enforcement for summer months has been reached to address parking issues. A pilot will occur on May long weekend, weather dependent, and will include electronic sign board messaging if parking lots are full
- Minor paving on Uplands Drive will take place tomorrow

**16. Information Items**

None.

**17. Public Question Period**

Ken Honigman, Anmore, regarding safety concerns related to paving trucks  
Glen Coutts, Anmore, regarding riparian areas within CD zone proposal, and conflict of interest

Charles Christie, Anmore, regarding bylaw enforcement

Doug Richardson, regarding riparian area within CD zone proposal, Community Amenity Contribution spreadsheet report, and public hearing for CD zone proposal

Ray Neufield, Anmore, regarding Anmore Green Estates rezoning

Doug Richardson, Anmore, regarding Anmore Green Estates

Anmore Green Estates Resident regarding Anmore Green Estates sewer

**18. Adjournment**

It was MOVED and SECONDED:

R314                      THAT the meeting was adjourned at 8:31p.m.

Carried Unanimously

"Karen Elrick"

Karen Elrick  
Corporate Officer

"John McEwen"

John McEwen  
Mayor



# COQUITLAM TUNNEL GATES PROJECT

Mark Nichol, Project Manager

April 30, 2019



# Agenda

- Introduction
- Project Scope
- Project Overview
- Project Update
- Hydro-technical Studies
- Fisheries Considerations
- Next Steps
- Discussion

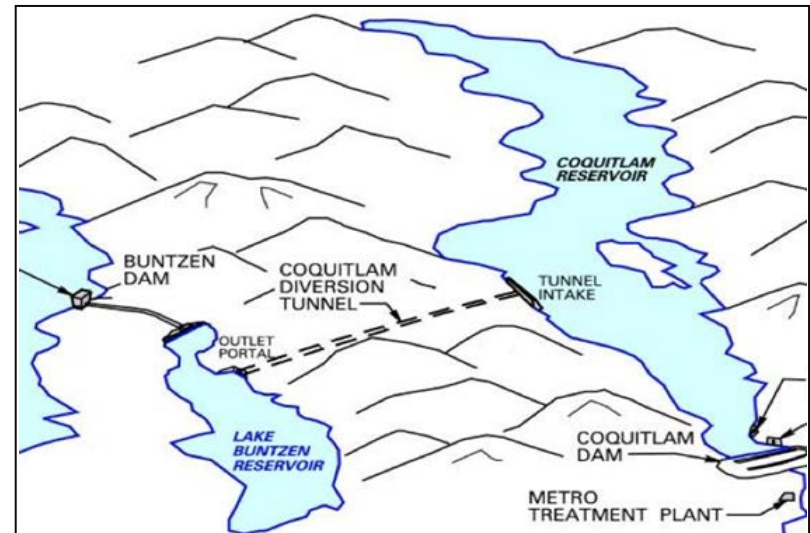


# Coquitlam – Buntzen Diversion Tunnel



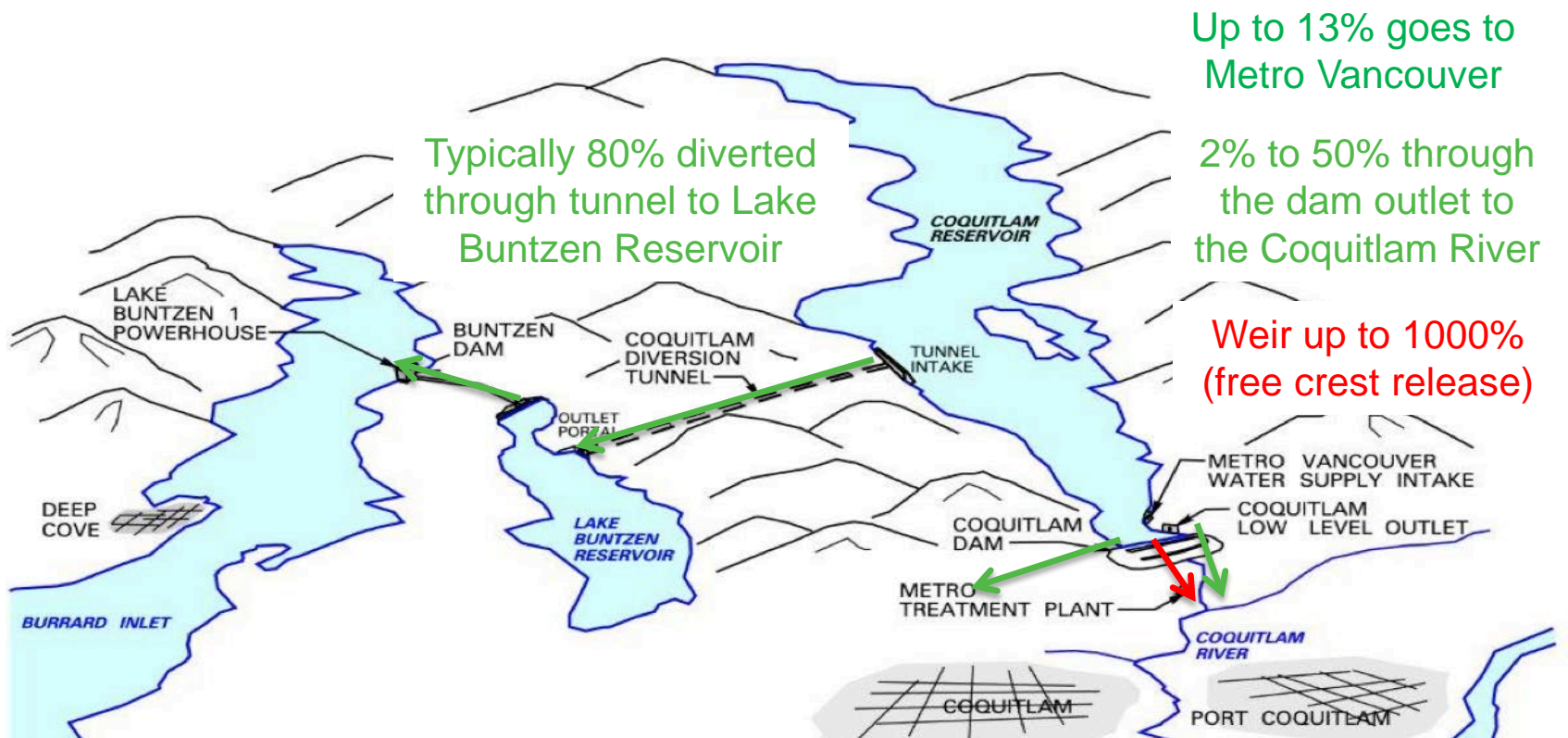
CVA 371-2516 City of Vancouver Archives

- Coquitlam Buntzen power system construction completed in 1905 to provide power to Vancouver.
- Tunnel enlarged between 1909 and 1911.
- Tunnel located five kilometers northwest of the Coquitlam Dam under Eagle Mountain.
- 3.9 kilometers long to the Lake Buntzen outlet.



# What's the purpose of the tunnel?

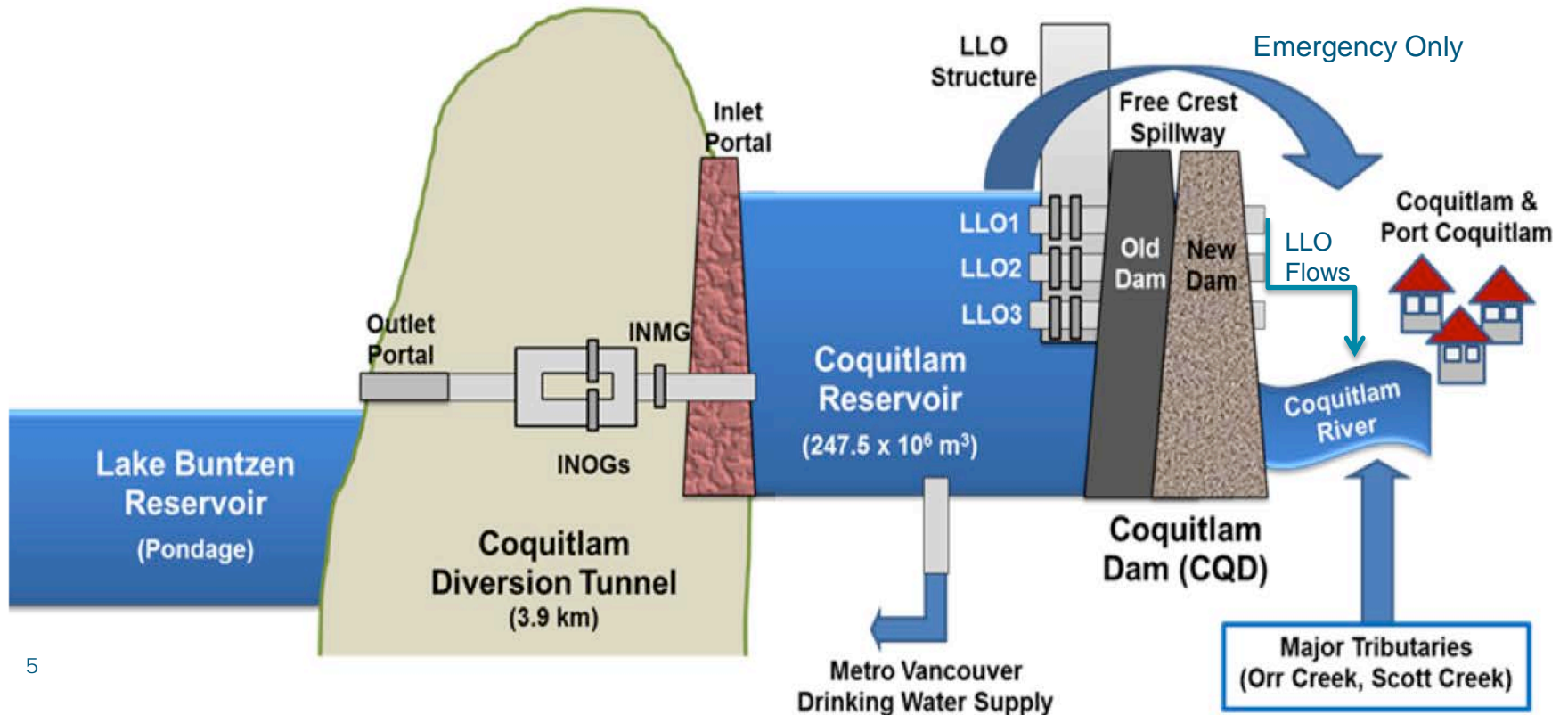
1. To divert water from the Coquitlam Reservoir to Buntzen Lake for generation at Lake Buntzen Powerhouse.
2. Also used as a reservoir discharge facility to control Coquitlam Reservoir elevations and mitigate downstream flooding risks in areas near the Coquitlam River.



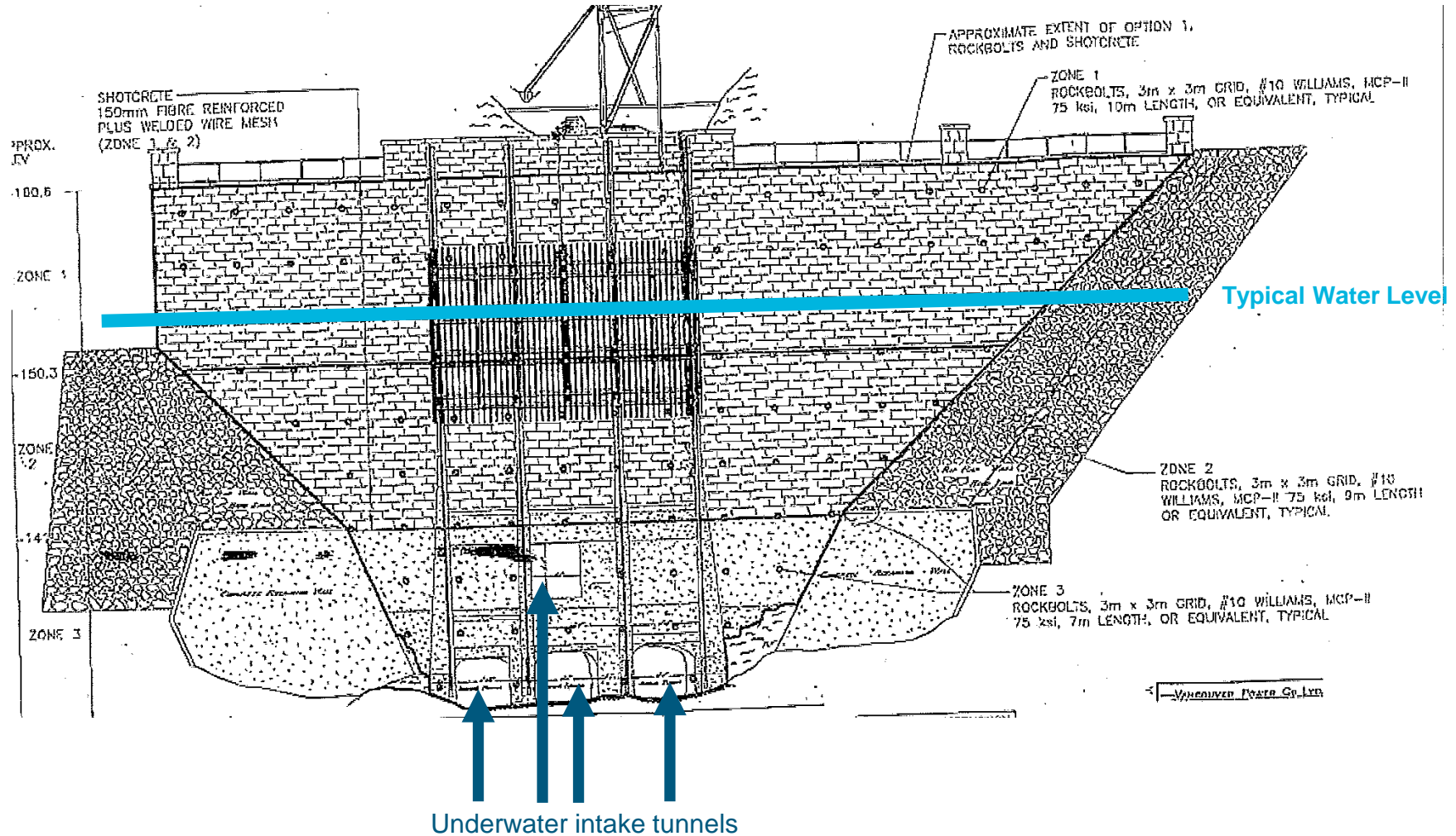


# Coquitlam Buntzen system overview

- We'll need to lower the reservoir level prior to the outages to reduce spilling risks.
- Pre-outage drawdowns of the Coquitlam Reservoir expected targets are:
  - Winter elevation 143 metres.
  - Summer elevation 150 metres (constrained in the summer by Metro Vancouver needs and agreements).
- During the outage all flows will be into the Lower Coquitlam River via the LLO gates.



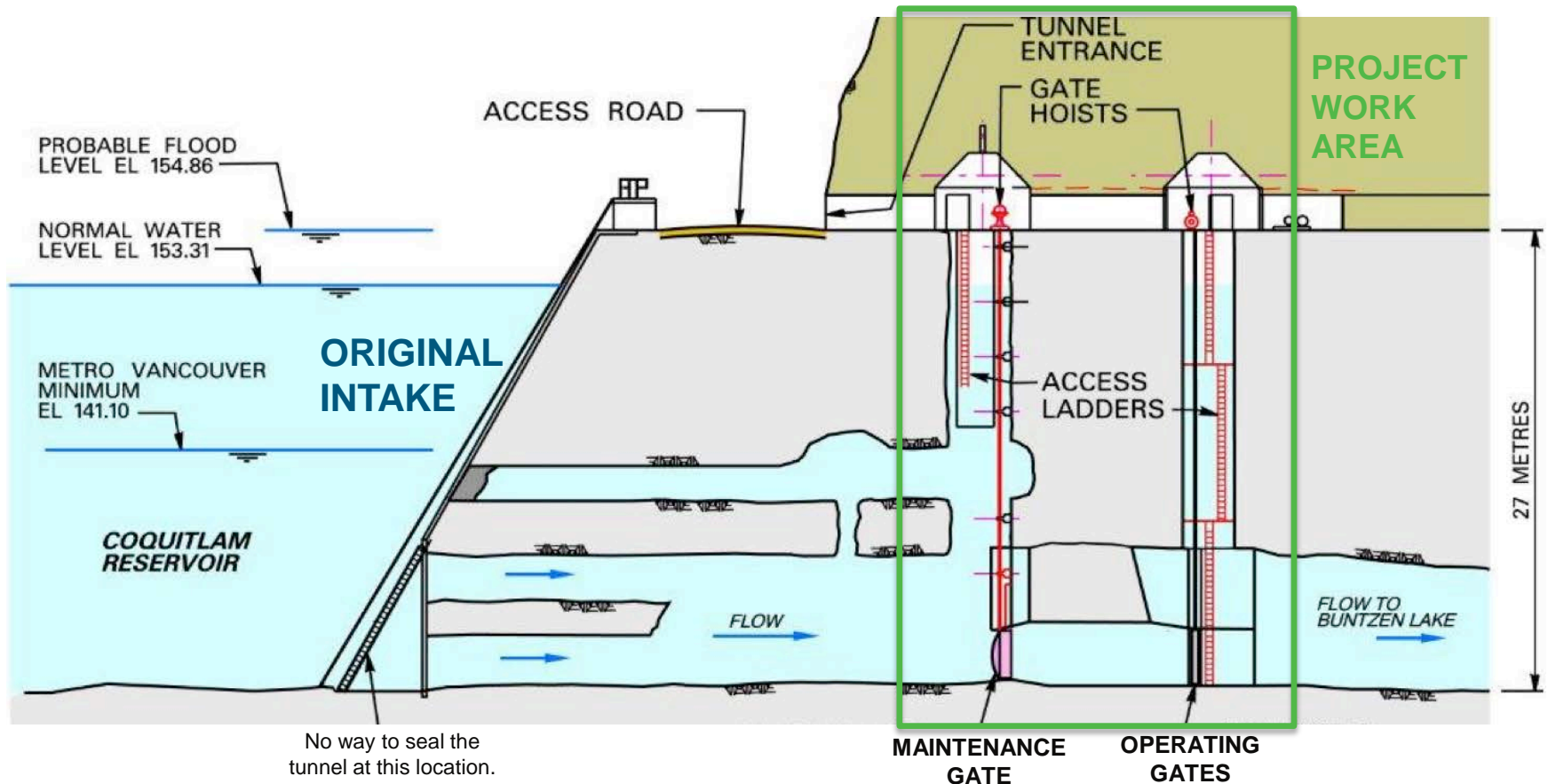
# Coquitlam Reservoir Original Tunnel Intake (not in scope)



There is no provision to seal the tunnels from the lake at the intake.

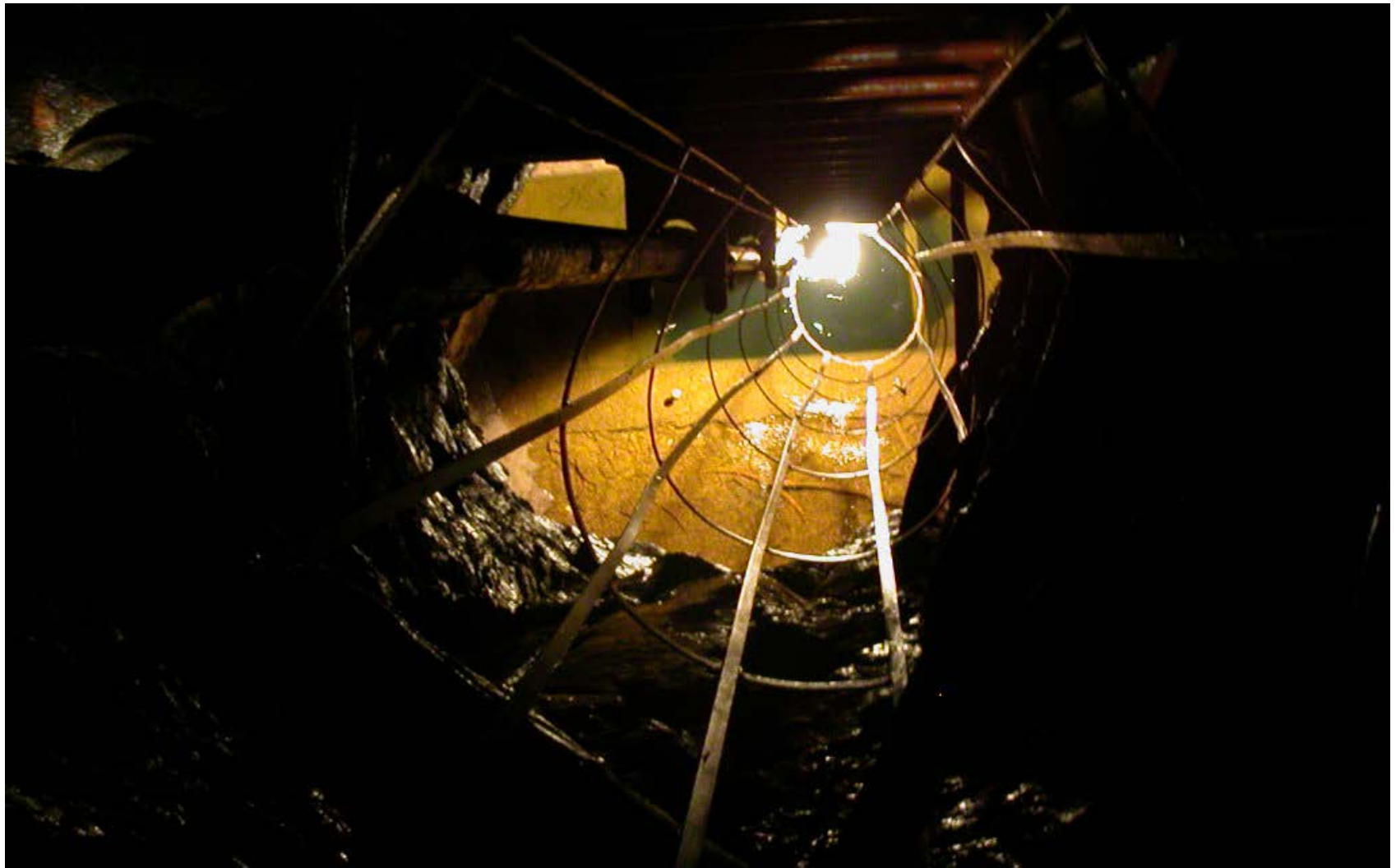
# Project Scope and Purpose

To replace the maintenance gate and the operating gates to ensure that we can control the gates and therefore the flow of water within the Coquitlam-Buntzen system.



An outage of the tunnel is required to do this work.

# Maintenance Gate – access ladder





# Operating Gate

27 metre shaft, note heavy leakage from the gates in the closed position



# Project Overview



Maintenance gate diver access upstream.



Maintenance gate downstream access when the gate is closed. Installed in 1909. Gate sluice failed and replaced in 1954.

# Project progress to date



Operating gate (one of two) installed in 1911 does not meet current safety standards.

- Conceptual and Feasibility Design completed.
- A detailed underwater inspection and survey of the tunnel and the intake completed.
- Hydro-technical modeling has been undertaken to determine how long tunnel outages can occur to minimize Coquitlam river spilling risks.
- Areas of potential riverbank erosion from spilling have been surveyed.
- Consultation with First Nations.
- Consultations with Metro Vancouver and municipalities.
- Consultations with regulatory authorities.
- Stage 1 Preliminary Design is 30% completed with two vendors competing for a Stage 2 Design supply and install award.

# Hydro-technical Studies

## Six Modeling Objectives

1. Avoid free crest spilling at the Coquitlam Dam to prevent downstream flooding in areas near the lower Coquitlam River.
2. Maintain the reservoir below the elevation of 150 metres to provide safety for underground workers.
3. Provide 100% of Metro Vancouver water needs in the summer months.
4. Provide target flows in the Lower Coquitlam River that avoid or minimize impact to fish or fish habitat per license commitments.
5. Maintain river discharge to less than 140 m<sup>3</sup>/s at the Coquitlam River Bridge according to license commitment.
6. Meet all water license commitments for Lake Buntzen Reservoir for elevations and discharge.

# Construction staging to meet hydrotechnical modelling objectives

## Recommended outage scenario to best meet the objectives:

- Three, two-month tunnel outages: Winter 2021, Summer 2021, Winter 2022.
- By having subsequent winter-summer-winter outages, the outages required will decrease the project duration from three to two calendar years.
- This would lessen the potential impact to fisheries resources by reducing multi-generational impacts on Coquitlam fish species.
- Spilling to lower the reservoir is tentatively scheduled to begin in October 2020 with the first tunnel outage occurring in January 2021.
- The Project in-service date is scheduled for November 2022.



# Fisheries Considerations

- Lesser impact for fisheries to spill with winter outage vs. summer outages
- Ensure flows remain above minimum and below maximum requirements for the fisheries resource.
- We'll voluntarily re-open the tunnel in the summer if there is a need to pass Coquitlam flows over fisheries impact threshold amounts.
- The Project will not exceed the maximum fish flow targets in the Coquitlam River.
- The Project will work with BC Hydro Operations to minimize flow fluctuations.
- Plan to increase flows during the winter to reduce summer impacts to fisheries.
- A variance to the BC Hydro Water License Order will be required to allow for the flow change.

Reservoir Elevation (m)	LLOG Max Discharge (m <sup>3</sup> /s)	Max Fish Flow Winter (m <sup>3</sup> /s)	Max Fish Flow Summer (m <sup>3</sup> /s)
150	37	30.8-32.3	6.9-10.2
148	32	30.8-32.3	6.9-10.2

# Modified Operations

- The construction work will be staged so that one set of gates is always available to control water flows.
- In the event of significant water inflows into the Coquitlam Reservoir during construction, emergency tunnel recall will be possible within 4 hours to assist with lowering the reservoir.
- In the event of an extreme drought year, generation can be suspended and water licence spilling to the Coquitlam River may be modified slightly.
- Prior to construction, the snowpack and water levels will be analyzed to assess the risks.
- Project construction may be deferred 12 months in an extreme drought or extreme wet year or if the tunnel is recalled during construction.

# Project schedule

Preliminary engineering is underway. Two experienced contractors are competing for the final design supply and install contract.

Activity	End Date
Preliminary engineering design awarded (Stage One - two proponents)	October 2018
Proposal submission date (Stage Two - final design with firm pricing)	Sept 2019
Implementation phase approval	June 2020
Award contract for Detailed Design and Construction Work (Stage Two)	June 2020
Construction of maintenance gate wall (2 month outage)	March 2021
Construction of maintenance gate (2 month outage)	Sept 2021
Construction of operating gates (2 month outage)	March 2022

We're currently in a black out period and not able to share additional project information while stage submissions and Stage One design details are evaluated.



# Project Communication Next Steps

- Complete further consultation with First Nations on the project. The Kwikwetlem Nation has agreed with the proposed methodology and supports the project with archeological studies in the reservoir included.
- Continue engagement with:
  - Metro Vancouver and other potentially affected public stakeholders.
  - Department of Fisheries and Oceans.
  - BC Ministry of Environment.
  - Neighboring municipalities.
- Apply to the Comptroller of Water Rights for a variance to the Water Licence Order.
- Complete public safety and communications planning.

# Project Summary

The Tunnel Gates Project will upgrade this important facility and ensure that:

- Coquitlam reservoir elevations and operations can be reliably managed.
- Water license commitments are met at Coquitlam and Buntzen.

Project construction planning includes measures to:

- lower the risks of free crest release and spilling to avoid flooding potential along the Lower Coquitlam River.
- support First Nations archeology in the Coquitlam River and Reservoir.
- provide the required aquatic habitat water release into the Coquitlam River.
- mitigate risks to the integrity of the aquatic habitat and the fisheries species in the lower Coquitlam River.
- safeguard the Metro Vancouver water source during summer months.
- meet water license commitments at Lake Buntzen.
- maintain recreational water levels at Lake Buntzen.

# Questions?

