



**INFRASTRUCTURE COMMITTEE MEETING
OF THE VILLAGE OF LIONS BAY
HELD ON THURSDAY, MARCH 21, 2024 AT 6:00 PM
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY
AND VIA ZOOM VIDEO CONFERENCE**

ZOOM INVITE LINK: [HTTPS://US02WEB.ZOOM.US/J/2780145720](https://us02web.zoom.us/j/2780145720)
TO JOIN VIA PHONE, DIAL 778-907-2071 | MEETING ID: 278 014 5720

AGENDA

1. **Call to Order**
2. **Approval of the Agenda**
3. **Public Questions & Comments**
4. **Approval of Minutes**
 - A. Infrastructure Committee Meeting Minutes – February 15, 2024 *(page 4)*
5. **Business Arising from the Minutes**
6. **Unfinished Business**

Identifier	Description	Responsible	Status
23087	Locate previous PWM’s update report to the IMP indicating the projects that are completed.	PWM	
23092	Solicit Village resident technical expertise for each working sub group.	All	
23095	Prepare a resident volunteer recruitment piece for the 01 September Village Up-date.	NTA	✓
23111	All I.C. members will be provided with a copy of the IMP and the enhanced Asset Management Plan. The document is complicated and requires a dedicated I.C. meeting to fully understand the implications for the Village.	KB/PWM	
23112	Convene a February I.C. Round Table Meeting to focus on a 10 and 20 year horizon plan to identify the new and replacement infrastructure requirements and related expenses.	NTA/All	

Agenda – Infrastructure Committee – March 21, 2024

Village of Lions Bay

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23113	CAO and/or Council to be asked to allow members of the I.C. to have selective access to the PW document library.	PWM	
23115	PWM to ask administration to post the 2022 Water Report and ASG to review for a discussion in February as a part of 23112.	PWM/ASG	✓
23116	A group tour of the Magnesia and Harvey Creek intakes to fully understand the concern and consequences of the Magnesia Creek intake plugging is to be arranged before the end of November. ASG to solicit the expertise of a competent and responsive engineer to allow this project to proceed.	All	✓
23117	BU will review the SCADA system on behalf of the I.C. and work with the PWM to up-grade the hardware and software. A Requirements Document is anticipated at mid 2024.	BU/PWM	Partial
23118	Assist the PWM in determining the best option for the replacement of the Highway Water Tank. ASG to solicit the expertise of a competent and responsive engineer to allow this project to proceed.	ASG	
23121	HM to assist the PWM in preparing REQ/RFP documentation for estimate and work on water main replacement Creekview Place and for the estimate for Highview Place. HM to assist the PWM and CAO in reviewing submissions once received.	HM/PWM	✓
23122	ASG to assist the PWM in preparing REQ/RFP documentation for estimate for the supply and installation of an alkalinity feed system for each WTP. ASG to assist the PWM and CAO in reviewing submissions once received.	ASG/PWM	
23123	The I.C. submit a written list of projects it feels Council should support in 2024 prior to the forthcoming budget session.	All	✓
23124	Meet with members of the CAC to see if and where the common ground is with respect to water metering in the Village, allowing for possible coordinated recommendations.	NTA/ASG/BU	
23125	ASG to find vendors who can supply portable WTP on short notice, in the event of a local wildfire in the watersheds, for rent for up to 36 months.	ASG	
23126	ASG with PWM and crew to get a handle of the practicality, within the realities of priorities.	AGS/PWM	
23127	AGS to approach bigger vendors regarding portable water treatment plants	AGS	
23128	Arrange for a Long-Term Planning Meeting in May 2024.	All	

7. New Business

- A. Confirmation of flow meter accuracy/calibration/fouling at the Harvey Creek WTP.
- B. Water metering – Request for Council (*page 11*)
 - i. Water metering program discussion:
<https://vancouver.citynews.ca/2024/03/06/bc-water-metering-climate-crisis/>
 - ii. Documents supplied by John Rob:
<https://drive.google.com/drive/folders/1EAV7dvR12seP9GSz69fnRj7L0HMnHCcJ?usp=sharing>
- C. Preparation of a Water Management Plan, physical and communication options, in the event there is a house fire in Lions Bay during the coming summer drought season, or more generally at times of low raw water supply (summer or winter).
- D. Firefighting/ water use (*page 15*)
- E. How can the I.C. assist PW in getting ready for the anticipated drought, and how can we assist PW once we are in the middle of the drought (education/communications from the independent body of experts etc.)

8. Public Questions & Comments

9. Adjournment

10. Next Meeting – April 18, 2024



**INFRASTRUCTURE COMMITTEE MEETING
OF THE VILLAGE OF LIONS BAY
HELD ON THURSDAY, FEBRUARY 15, 2024 AT 6:00 PM
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY**

MINUTES

In Attendance: Mayor Ken Berry
Councillor Neville Abbott – Chair
Committee Member Anthony Greville
Committee Member Brian Ulrich
Committee Member Hilary Monfared (via conference) (joined at 6:22 pm)

Absent with regret: Councillor Jaime Cunliffe

Staff: Public Works Manager, Karl Buhr
Deputy Corporate Officer, Marina Blagodarov (Recorder)

1. Call to Order

The Infrastructure Committee Meeting was called to order at 6:05 pm.

2. Appointment of the Recorder

DCO to be the recorder for the meeting.

3. Approval of the Agenda

Moved/Seconded

THAT the agenda of February 15, 2024, Infrastructure Committee be adopted as amended:

- Add Closed Session to the agenda subject to:
Matters to be considered under the following sections of the *Community Charter* and **90 (1)** (l)discussions with municipal officers and employees respecting municipal objectives, measures and progress reports for the purposes of preparing an annual report under section 98 [annual municipal report];
- Under section 8. New Business, restructure order to A. D. B. C.

CARRIED

4. Public Questions & Comments

A. Marek Sredzki: inquired the following:

1. How does the Village identify, and measure, suspected water leaks?

2. How does the Village expect to resolve the leaks; what are the alternatives for water resources if the Village runs out of water?
3. What are the options for storing water? Concerns regarding fire risks in the upcoming summer season.

Chair Abbott noted that this topic is scheduled for discussion on the current agenda. The fire angle will be further explored during the EPC meeting.

Mayor Berry indicated he would be willing to assume the portfolio of determine the best long term water supply options for the Village. This includes a review of membrane filtration opposite purchasing from M.V. for water quality, and a comparison of wells opposite desalination for peak demand shaving. This duty reassignment was agreed to.

5. Approval of Minutes

- A. Infrastructure Committee Meeting Minutes – December 14, 2023

Moved/Seconded

THAT the Infrastructure Meeting Minutes be adopted as presented.

CARRIED

6. Business Arising from the Minutes

None.

7. Unfinished Business

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Minutes – Infrastructure Committee – February 15, 2024

Village of Lions Bay

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23087 On going.

23092 On going.

23095 Tick as completed, as item 23092 is on going.

23101 Complete.

23111 Asset management plan – PWM to distribute. Committee to look at the document first.

23112 Suggestions on what is pressing, defer to New Business item 7D.
Recommendation that the May I.C. Meeting be dedicated as a long term planning meeting.

23113 Documents are sitting in library.

Recommendation to Council: THAT committee members have access the Infrastructure Library.

23114 Complete.

23115 Tick as completed, document has been delivered.

23116 Tick as complete.

PWM to take Committee Member to Magnesia Creek on February 16, 2024, at 10:00 am.

23117 On going

23118 Tick as completed.

23121 PWM noted that there has been a budget request – speculating that not be granted this year. Tick as completed, as it is no longer required.

23122 PWM noted that is a budget request – PWM to get more technical details.

Action: ASG with PWM and crew to get a handle of the practicality, within the realities of priorities.

23123 Tick as completed.

23124 Committee Members met with Norm B. (CAC member), to review, water metering and all agreed metering is a good option, but is not the best use of limited financial resources. Discussion ensued about installing meters, which would require grant funding. PW is trialing 3 different meter models, in order to find out where the leaks are located. Potential leaks are thought to be mainly between the curb stop valve and the house.

Making the installation of a private side water meter a requirement for all new building permits, including external renovations and major landscaping was recommended.

It was noted that any water saved due to lower resident consumption during the winter months cannot be stored and saved for the summer drought season as it is not possible to build a storage reservoir within the watershed. Constructing additional water storage volume as either tanks or a surface pond is not a viable solution.

It was discussed that the Village could set an example by changing all vegetation (except for the LBBP) to Xeriscaping. Grant funding should be available to start the process, and maybe even extend to residents. No I.C. assignment was given to this activity – staff?

23125 Wild-fire watershed contamination: Portable water treatment plants are not readily available for rent as vendors do not keep units on their shelves. When a portable, temporary, WTP skid is required, it will have to be sourced from one of the major international manufacturers with North American assembly facilities.

Action: ASG to approach potential vendors.

8. New Business

A. Leak Detection protocol – both public and private side leaks.

- PWM updated that significant losses due to leaks continue and are thought to be mainly from the curb stop valve to the resident home. Significant losses are most likely not from the public side distribution mains themselves.
- Tree growth over time has a negative impact on private side line failure.
- PWM expressed how PW is listening for and catching water leaks. Operation is done in the morning between the hours 4:00 am and 5:00 am.
- Water tanks: the two storage tanks do not draw down to lower than 94% full in the low flow seasons and stay between 98% and 96% full in the high flow winter season.
- No storage reservoirs – solution to low water supply in the drought season, including winter if one intake is blocked or taken off-line due to high turbidity, has to be to minimize water losses via leakage.
- Find more leaks on residents' side, as this is the bigger issue.
- PW found 60 – 70 thousand US gallons per day of private side leaks in the last month.
- Zone metering would be more effective. 3 meters have already been ordered.
- There are options to have a private leak detection company survey the Village at a cost \$2 K per day. Expected overall cost is projected to be \$30 - \$40 K
- Locations for the zone metering have already been dug. Temporarily on Oceanview, Islevue and Brunswick Beach.
- Highway Tank – whether or not the Highway Water Tanks is leaking, it is physically failing, and needs to be replaced.
- A water meter is to be put on the outlet to the Highway Tank next week to determine if the tank is leaking or if this major source of water loss below the highway and into said tank, is from the downstream distribution system.
- Discussion ensued about a possibility to hire a summer student to listen for private side leaks during the summer months, or perhaps perform some general labour duties to allow an experienced PWD member to focus solely on leak detection.
- It was addressed that there is a failing infrastructure.
- PW checks 10 homes per day are being check for water leaks.
- Seek out if there are grants for water line replacements.
- PWM to *report* to Council, and *report* to IC after the fact.

- D. Consider Item 23112 as the primary agenda item for the March 21st IC meeting.

Action: Committee to arrange for a Long-Term Planning Meeting in May 2024.

Items 8B and 8C were merged.

- B. Update from Council & COW budget meetings held in January related to Infrastructure Funding Recommendations.
C. Public Works Budget Supplementals

Update from CotW as follows. These recommendations will

Project 1. - Bridge End Repairs

- Bridges ends are a maintenance issue and moved to the operations side of the budget.
- None of the bridges were installed as part of the original Village development.
- Discussion ensued which bridges in the Village would be a priority for replacement.

Recommend to Council

THAT Cross Creek Road Bridge would be the priority for replacement. Bayview Road will be assigned second priority, other bridges to follow dependent on budget.

- It was noted that it would be necessary to reduce traffic flow to one lane for the duration of the repair/replacement.
- Question was raised on the single lane bridge repairs would be completed or if residents would lose access.

Project 2. - Water Distribution Project.

- Highway Tank Replacement remains a high priority.

Project 3. – Magnesia Creek Intake

- The intake rebuild is most likely to be deferred to a future year.

Project 4. - Zone Metering and SCADA

- SCADA upgrades remain on the approved budget list.

Project 5. - Watermains Replacement Project

- Likely to be deferred.

Project 6. - Drainage Projects

- Drainage issues: Mountain Dr and one on lower Kelvin Grove.
- PWM expressed the need of a Project Manager, in order to complete various projects.

- Current pressing drainage issues are on end of Mountain Dr and under the Railway Tracks on Kelvin Grove.

Project 7. - pH adjustment Project

- Likely to be deferred.

It was suggested that drainage is a biggest issue in the Village.

Recommendation to Council:

THAT there are four major projects that need to be addressed:

- Bridges End Repairs
- Highway Tank/ Water leaks
- Drainage
- Zone Metering and SCADA

PWM expressed the need of a Project Manager, in order to complete various projects. If Council needs further information, IC will provide.

9. Public Questions & Comments

- A. Marek Sredzki: Assessing the water situation. Valves positioned between residents and the village property.

10. Adjournment

Moved/Seconded

THAT the Infrastructure Committee Meeting be adjourned.

CARRIED

The meeting adjourned at 8:26 pm.

The committee meeting did not proceed to a closed session.

11. Next Meeting

The next meeting is scheduled for March 21, 2024.

Chair

Corporate Officer

Date Adopted by Committee:	
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THE MUNICIPALITY OF THE VILLAGE OF LIONS BAY

Type	Recommendation for Council – draft for IC discussion		
Title	Implementation of Water Metering in Lions Bay		
Authors	Norm Barmeier & John Robb	Reviewed By:	Neville Abbott
Date	Feb 1, 2024	Version	V2
Issued for	Infrastructure Committee Feb 21, 2024		

Recommendation:

The Lions Bay Climate Action Committee (CAC) recommends that council i) accept in principle the adoption of water metering contingent on ii) the development of a program and an implementation plan that addresses single-residence vs zone metering, equipment, capital costs and financing, rate structures, and community engagement. It recommends that this plan be prepared with through collaboration of the Infrastructure and Climate Action committees as soon as is practical, with the aim, after adoption, of subsequently giving direction to staff to phase in the residential water metering program as developed.

Climate Change and Lions Bay

The Lower Mainland has experienced a sustained warming trend since the 1950s¹. Based on sophisticated climate model predictions conducted by the Pacific Climate Impacts Consortium (PCIC), ongoing climate projections for Vancouver² are: warmer summer temperatures, with more extreme heat days and heatwaves; warmer winter temperatures and less frequent frost; less rain and more dry days in the summer months; more precipitation falling in fall, winter and spring; and an increased fraction of precipitation falling as rain. With an El Nino/La Nina cycle, 2024 portends our future, with a lower snowpack (39% as of early February) and warmer, dry weather through July at least.

Our location means that Lions Bay has a higher risk of climate associated risks than many communities: rising sea-levels; consequences of extreme weather events such as excessive rain, heat, wind, and drought; and fire. Critical to Lions Bay’s sustainability as a community is water security: much of the year we have an excess of water supply, but with no reservoir and a limited aquifer, we are currently totally dependent on the winter snow-pack to provide water supplies through the summer and fall months.

Our community needs a program of climate change mitigation in the face of an expectation of annual drought conditions: actions can be targeted in 3 interlinked areas: i) alternative water sources (to current); ii) storage and distribution initiatives; and iii) residential and municipal conservation. Water

¹ Curry CL and Lao I, 2023, Land Temperature and Hydrological Conditions in 2022 pp 17-21 In: Boldt, J.L., Joyce, E., Tucker, S., and Gauthier, S. (Eds.), State of the physical, biological and selected fishery resources of Pacific Canadian marine ecosystems in 2022. Can. Tech. Rep. Fish. Aquat. Sci. 3542: viii + 312 p. (2023)

² Climate Predictions for the City of Vancouver: Highlights Report, Nov 2023

metering supports conservation but also can provide information that both informs infrastructure issues and opportunities. What gets measured is better managed, and implementation of a variable use water rate structure increases awareness of the link between use and pay which typically when implemented then leads to reduced water use. This has been understood for a substantial period of time: 2009 stats in Canada found that households on a flat rate of water use 52% more water than those paying for volume used.³ Water metering is the first step in the kind of wide-scale water conservation action that Lions Bay needs to provide for residential climate resilience against declining water security. It is a realistic concern that insufficient climate mitigation initiatives will, over time, simply reduce the desirability of Lions Bay as a location for existing and new residents.

Water-Metering Adoption Background

Two reports are referenced: the first since it represents a contracted proposal for water metering in the District of Mission that contains data and information equally relevant to this proposal⁴; and the second because it contains a series of case studies and lessons learned on implemented metering⁵.

British Columbia, has made significant strides in promoting sustainable water management practices through the widespread adoption of residential water metering. This proactive approach aims to address water conservation, enhance accountability, and manage costs effectively.

Water Conservation:

One of the primary advantages of residential water metering is the promotion of water conservation. By providing households with real-time data on their water usage, residents become more aware of their consumption patterns and are empowered to make informed decisions about their water usage. This added awareness can lead to more mindful water practices, such as fixing leaks, using water-efficient appliances, and adopting water-wise landscaping and irrigation practices.

Statistics from municipalities across British Columbia indicate a notable reduction in water consumption following the implementation of residential water metering. For instance, cities like Vancouver, Surrey, and Kelowna have reported significant decreases in per capita water use. (need to find stats)

Accountability:

Residential water metering also fosters a sense of accountability among residents. With accurate measurement of water usage, individuals can track their consumption and understand the direct implications of their actions on both the environment, their septic systems, and ultimately their wallets. The less water you use, the less maintenance you have to do on your septic system, ultimately extending the life of your septic field. This accountability and awareness extends beyond individual households to encompass the broader community, encouraging a collective effort to preserve our water, particular during summer months when the stream is low.

As of the latest available data, a growing number of municipalities in British Columbia have embraced residential water metering programs. Approximately 80% of urban centers, including Vancouver, Victoria, and Abbotsford, have implemented or are in the process of implementing water metering

³ Environment Canada’s 2011 Municipal Water Pricing Report.

⁴ District of Mission Water Meter Feasibility Report, February 2020

⁵ Residential Water Metering in Metro Vancouver. Best Practice Guideline for Local Governments, August 2019

Commented [NA1]: And to Tony's point identify areas where it didn't work and how to prevent this happening.

Commented [JR2R1]: Yes, I'd like to find some stats on this - plenty alluded to, but not a lot of easily found before and after data. I'm curious about the 'where it didn't happen' comment - clearly that's important in the development of an implementation plan.

initiatives. This widespread adoption reflects a shared commitment to responsible water management practices and emphasizes the importance of individual accountability in getting us through the dry summer months.

With climate change we have an increased looming risk of running out of water in the summer months, metering will give us the ability to identify residents that are putting others at risk by not following the restrictions when imposed.

Cost Management:

Beyond environmental and septic system considerations, residential water metering has proven to be a cost-effective solution for both consumers and municipalities. By accurately measuring water usage, billing becomes more precise, ensuring that residents pay only for the water they consume. This promotes fairness in cost distribution and eliminates the need for flat-rate billing systems, which may disproportionately burden certain households.

Metering will also allow for a premium pricing structure during times of severe shortage and allow residents to do high consumption activities such as filling pools when water is in abundance during winter and spring.

Furthermore, the financial savings resulting from reduced water consumption have a cascading effect on municipal budgets. With fewer resources required for water treatment, distribution, and infrastructure maintenance, public works can allocate staff to other essential services, contributing to overall economic efficiency.

In the case of Lions Bay the economy of scale with respect to ongoing operations and maintenance cost, quickly reveals that Lions Bay has an expensive water supply strategy.

Water metering may offer some significant savings to both the residents and the municipality by lowering inefficiencies and leaks in the system, reducing consumption, and as such reducing expensive maintenance.

Table 1. Comparison of flat rate billing for water around BC

Municipality	Cost - Flat rate \$/year
District of North Vancouver	630
City of North Vancouver	631
Nelson	569
Vancouver	568
Village of Lions Bay	1,882

Commented [JR3]: I am in 2 minds about this section - everything in here is well detailed in the 2 reports should people read them as I would hope - it's not a bid ask. On the other hand a concise summary has it's uses for those who need a 2min read.

Commented [NA4]: What about comparisons to metered communities? Will this imply reduced usage over flat rate communities?

Commented [JR5R4]: As above, I agree that building out this data set is important to add meat to a compelling case.

Commented [NA6]: Could we find a comparison to other muni that make there own water? Bowen has 3 systems that covers half the Island others on wells.

Water Metering Implementation

This requires the development of a cohesive program and implementation plan for adoption. The Metro Vancouver report referenced summarizes key elements (starting on Page 18). The critical components to be addressed as part of the program are the level of metering anticipated possibly as a phased approach including the necessary equipment; capital cost and maintenance financing, rate structures

(uniform, tiered, seasonal), and community outreach (early and often). Each component has a need for comprehensive proposals likely developed by a proactive dedicated group of volunteers and council members who have a commitment to an appropriate program that meets the village's climate resilience head-on while based on the principles of fairness, equity and inclusion. Such a body may need to have access for funding to provide for third party specialized input.

Commitment Required from the Village

Access to the VU

That the CAO will support access to the Village Update in compliance with council policy and procedures when receiving articles written for publication.

Staff time required.

It is not anticipated that staff time will be required at this time, other than the actions which would normally be associated with the VU.

Resolution

As per above.

FOLLOW UP ACTION AND COMMUNICATION

Per Council direction.



STAFF REPORT

DATE: Sunday, March 17, 2024 **FILE:** \\J. Public Works\5600 Water\240313
firefighting water reserve policy.2.docx

TO: CAO Ross Blackwell MAP, MCIP, RPP

FROM: PWM Karl Buhr

RE: **FIREFIGHTING WATER RESERVE POLICY**

RECOMMENDED COUNCIL RESOLUTIONS ARISING FROM THIS REPORT:

- THAT Council stipulates *Water Short Supply* status shall be any period in which either the Harvey or Magnesia water storage tank will not refill the previous 24 hours of usage in the next 12 hours, and directs that at Water Short Supply status, use of water for firefighting purposes shall cease when either tank reaches 50 percent full; and
- THAT Council stipulates *Water Constrained Supply* status shall be any period in which either the Harvey or Magnesia water storage tank will not refill the previous 24 hours of usage in the next 24 hours, and directs that at Water Constrained Supply status, use of water for firefighting purposes shall cease when either tank reaches 75 percent full.

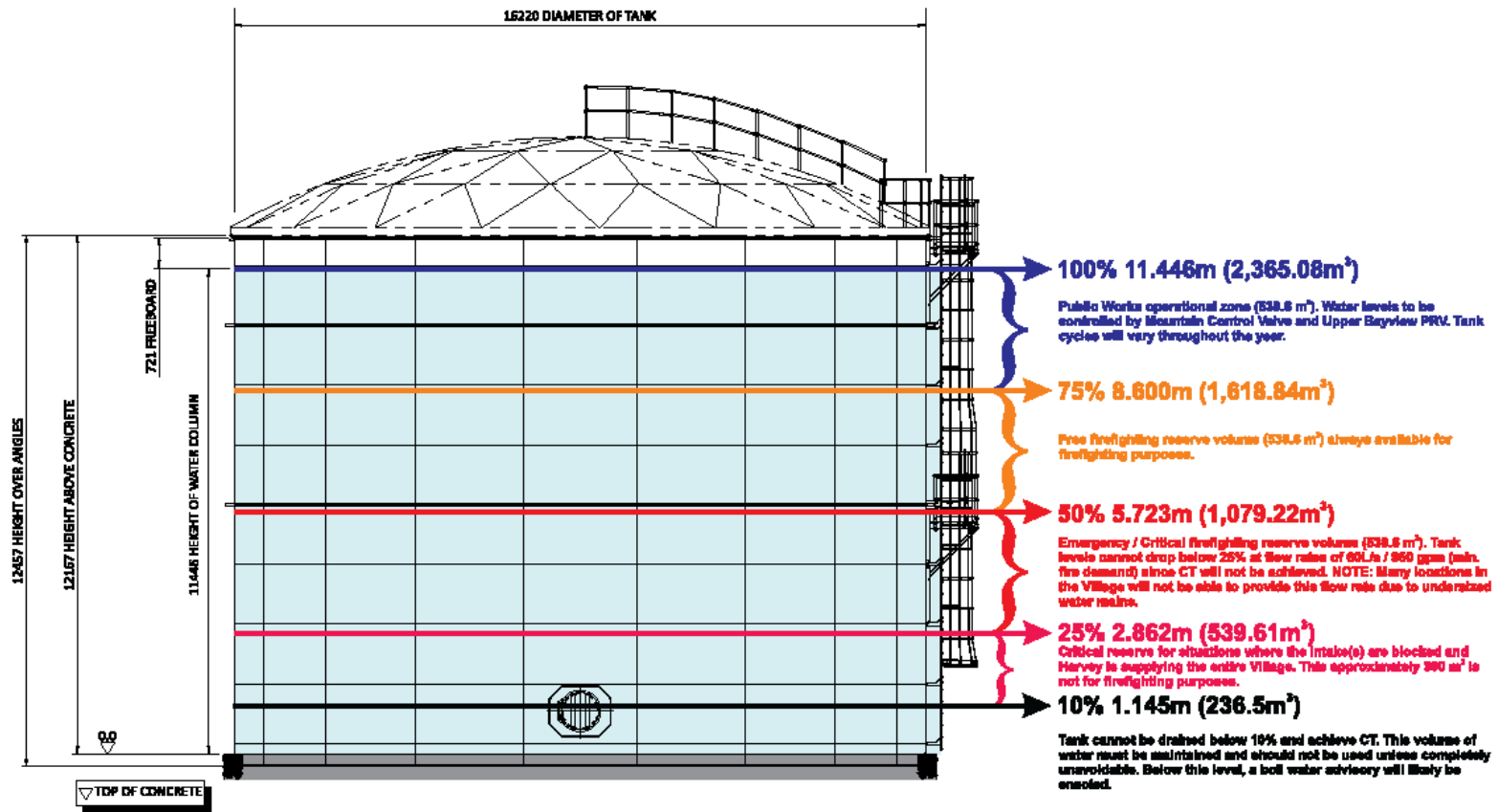
BACKGROUND:

Staff's Feb. 2024 Water Shortage Plan report to Council indicated that the Emergency Program Committee discussed but had not formalised policy around firefighting water reserve in times of short supply. The recommendation for such policy is provided herewith.

DISCUSSION:

In times of adequate water supply, the operating parameters for Lions Bay's two water storage tanks are provided by the diagrams below. Referring to the Critical Note box, the SCADA upgrades required have been implemented.

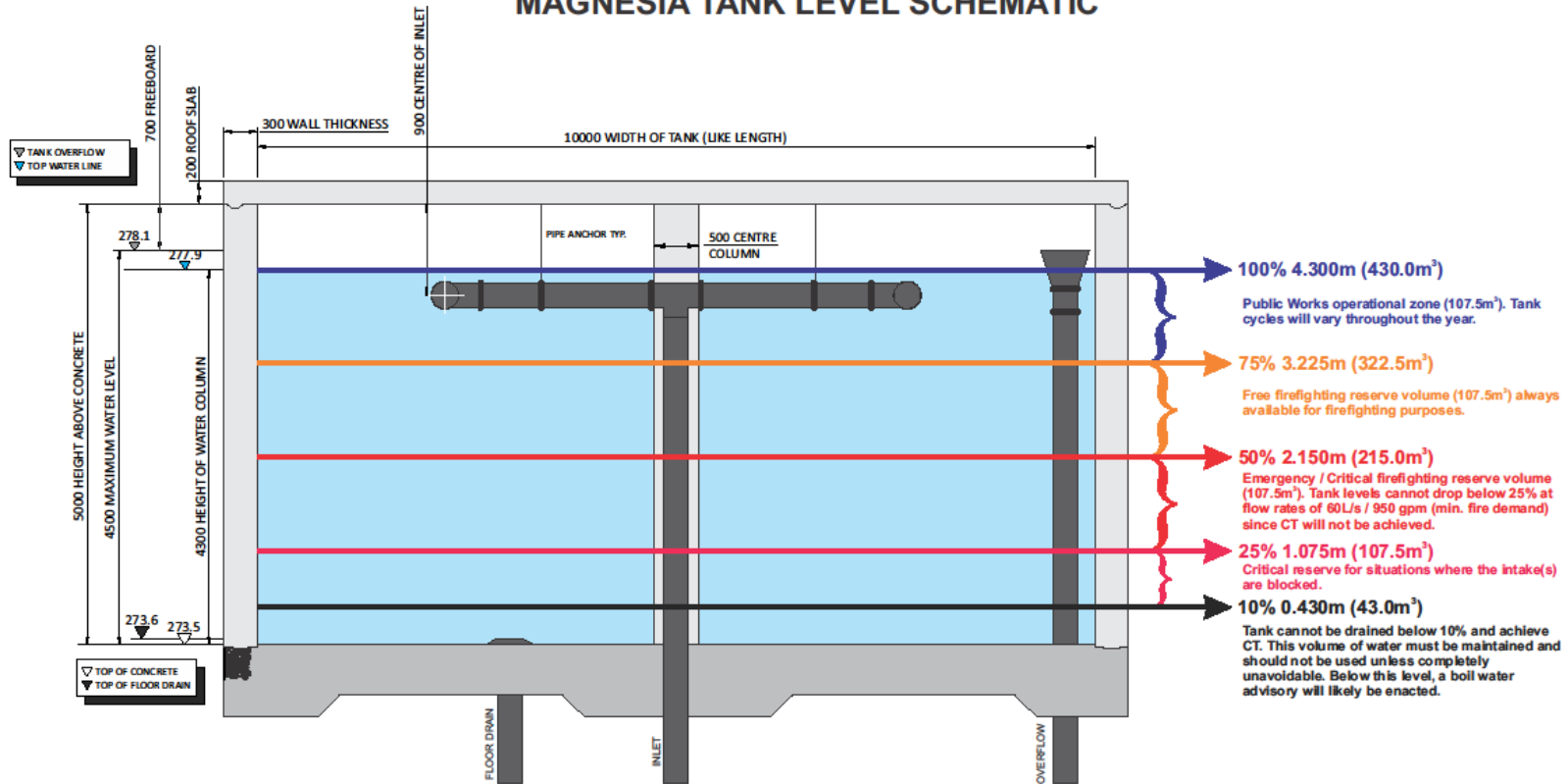
HARVEY TANK LEVEL SCHEMATIC



TANK ELEVATIONS



MAGNESIA TANK LEVEL SCHEMATIC



CRITICAL NOTE

With incoming summer flows of 200 gpm or 12.5L/s and fire flow requirement of 60L/s, the drawdown flow rate will be 47.5L/s. The tank will drain to 25% in just under 2 hours. This does not consider normal or even peak demand. The two-hour time factor is a critical milestone as, for example, if the fire occurs outside of normal hours, staff will have 2 hours (much less during peak demand periods) to respond from their residences to the Works Yard, then to the Mountain Control Valve (MCV) to feed the Magnesia Creek side of the system from the Harvey Tank. Once SCADA has been installed and online control of the MCV is active, the switch can be done remotely without operators having to attend the scene. Consideration should be given to boosting chlorine injection in the event of a fire to maintain CT. That said, if a fire event occurs during the summer months, during peak demand periods, and we have a communications failure or power loss at either Magnesia or Harvey, Fire will need to notify Public Works to respond and manually transfer the Mountain Control Valve so that water can be fed from the Harvey Reservoir to the Magnesia Creek side of the system. A manual transfer could take up to an hour depending upon response time for Public Works Operators.



In times of low water supply, the operating considerations above are irrelevant: with water mains in service, *at zero inflow*, both tanks would be depleted in under 24 hours at last summer's 750,000 GPD peak consumption, or in under two days at current (March 2024) consumption, or in three days *on current leakage alone*.

But, as outlined in the Water Shortage Plan presented to Council on Feb. 20, reserving water in the tanks to recharge mains and hydrants against the *possibility* of a fire¹ would *ensure* mains ran dry in the meantime. That event is the worst-case scenario:

- **Mains would only be able to be flushed and hyper-chlorinated once supply was assured, maybe late September.**
- **Even though approx. 550 known property line curb stop valves could be closed, there would be no certainty that non-potable water was not inadvertently used in premises where curb stop valves are unlocated or leak².**

THE BEST OPTION IS TO USE ALL AVAILABLE SUPPLY TO KEEP THE MAINS OPERATIONAL, DESPITE HIGH LEAKAGE. In consequence, staff recommend Council adopt the water supply statuses presented as resolutions above.

OPTIONS ARISING FROM THIS REPORT (PREFERRED UNDERLINED):

- (1) Resolve as recommended
- (2) Provide other explicit and specific direction to use available resources and timelines
- (3) Receive report for information only.

FINANCIAL CONSIDERATIONS:

None: policy only.

LEGAL CONSIDERATIONS:

Advise Vancouver Coastal Health, Fire Underwriters Society, mutual aid partners, BC Wildfire of this policy.

¹ As has been previously reported to Council, the Fire Department has advised the Emergency Program Committee that unless a fire is within hose range of a water reserve holding tank, lacking a water tanker to act as a tender, the department could not utilise water reserves because fire engines, which hold only 500 USG of water, can't be pulled off scene to go to refill. However, the department is now investigating whether a suitable tanker can be rented or leased for the summer, in which case the mothballed Oceanview and Brunswick water tanks will be refurbished to store and deliver non-potable firefighting water.

² Effort is already being made to locate 30 missing curb stops.