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Integrated Water Service
479 Island Highway
Victoria, BC, V9B 1H7

T: 250.474.9600
F: 250.474.4012
www.crd.bc.ca

December 1, 2023

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Regional Water Supply Commission – Correspondence

Gord Baird, Chair, Regional Water Supply Commission
Via Email: gord.baird@gmail.com

Dear Chair Baird:

RE: PROPOSED DEVELOPMENT COST CHARGE BYLAW, CRD REGIONAL WATER SUPPLY SERVICE AND URBAN DEVELOPMENT INSTITUTE COMMENTS

The Capital Regional District (CRD) has initiated a process to implement a Development Cost Charge (DCC) Bylaw for the CRD's Regional Water Supply Service. This letter summarises the rationale for the program, as well as addresses the concerns raised by the Urban Development Institute (UDI) in their letters issued to municipal councils in November 2023, as it relates to the proposed DCC program.

Development Cost Charge Program Rationale

As communities within the CRD grow there is added pressure on regional and municipal infrastructure. This pressure is likely to be further increased by the 2022 Provincial Bill 43 *Housing Supply Act* and the associated housing targets. While Bill 43 seeks to provide homes for people, it does not consider the required infrastructure upgrades to service those homes. As noted in the recent Federation of Canadian Municipalities (FCM) press release "We simply cannot build new housing without first expanding or upgrading the municipal water, transportation and community infrastructure those housing units require" – Next Generation Infrastructure report, FCM, Fall 2023.

The introduction of a DCC program is in alignment with the CRD's Corporate Priorities (2023-2026 Corporate Plan) and strategic objectives (Regional Water Supply 2017 Strategic Plan) and provides direction for sustainable water service delivery for the region. The CRD's Regional Water Supply 2022 Master Plan (2022 Master Plan) provides a road map to ensure a continued reliable and resilient water supply, meeting the future community needs, including works required to accommodate growth.

Water rates, grants and DCCs are the primary tools available to the Regional Water Supply Service to fund new projects. As the Regional Water Supply Service provides a substantial benefit to both existing developments and new users, many of its capital projects are eligible for inclusion in a DCC program under the *Local Government Act* (LGA).

The LGA provides DCCs as a tool in recognition that there is an inherent responsibility on developers to pay their fair share of the infrastructure costs required to service their developments. This is referenced in the [DCC Best Practices Guide](#) as the "Benefiter Pays" principle whereby "Infrastructure costs should be paid by those who will use and benefit from the installation of such systems." DCCs as a cost sharing tool are important to equitably apportion

the benefit and costs of infrastructure in a transparent and fair manner that does not place a significant cost burden on water rate payers.

By not having DCCs in place for the Regional Water Supply Service the infrastructure costs necessary to support new growth must be paid for by CRD residents through higher water bills.

Further details on the design of the proposed Regional Water Supply DCC program are provided later in this letter.

Urban Development Institute Letter

In November 2023, all municipal mayors and councillors within the Regional Water Supply Service Area received a letter from the UDI, titled *Re: A Call for Caution: A Comprehensive Review of CRD's Water Supply Conversion Plan*.

The CRD takes this opportunity to address the concerns raised by the UDI.

Water Supply and Demand

As part of the 2022 Master Plan, a sensitivity analysis was completed to assess potential demand scenarios and their impact on future water resource requirements.

As the UDI noted, the CRD has seen a decline in water consumption from 559 litres per capita (person) per day (l/c/d) in 1998 to the current (2019) 337 l/c/d (includes residential, industrial, commercial, institutional and agricultural demand). The success of the demand management program has been recognized in the 2022 Master Plan. Though a steady decline in the per-capita average day demand was seen from 1995 to 2010, the trend has flattened out in the last 10 years. To ensure the CRD continues to provide reliable drinking water supply for the current and future population, the 2022 Master Plan includes a conservative estimation of future reductions in per capita consumption and assumes the average day per capita consumption remains constant at the ten-year average of 366 l/c/d. The 2022 Master Plan does note that these assumptions should continue to be re-evaluated and actual demands and sizing of facilities will be based on a review at the time of preliminary design and adjustments made if necessary.

Based on the median of the population growth projections considered, the 2022 Master Plan identifies the need for a supplementary water source by 2045. Even with lower than projected population growth or further reductions because of conservation measures, design and construction required for an additional water supply would be required within the 30-year outlook for the proposed DCC program.

Rationale for the Water Filtration

Preliminary discussions with Island Health during the development of the 2017 Regional Water Supply Strategic Plan indicated that it was not a matter of if but when filtration would be required. The Strategic Plan guided the development of the 2022 Master Plan. The 2022 Master Plan concluded that it is likely that a filtration process will be required to supplement the existing disinfection processes in the future, particularly when water from the Goldstream and Leech sources are used to supplement supply (by 2045). Filtration will remove turbidity, harmful bacteria, protozoa, algal cells and other colour causing substances. Over time, even the Sooke source

water quality is expected to decrease due to the impacts of climate change, mixing with other sources and more significant seasonal water fluctuations in the reservoir resulting from increased demand. Several nearby suppliers have implemented filtration over the past two decades, including Metro Vancouver (2010), Nanaimo (2016), Comox Valley (2021), Seattle-Tacoma (2001/2015) and Portland (2027). Planning and implementing filtration treatment will take several years and it is recommended to have filtration systems ready in advance of any needs or requirements.

Cost Assumptions

The 2022 Master Plan recommends 21 major projects be implemented over the next 30 years that are deemed critical to improve the resiliency of the Regional Water Supply Treatment and Transmission System and will be necessary in the longer term to provide enough drinking water to support the growing region.

Cost estimates were completed by subject matter experts using Class D (concept level) cost estimates and included allowances for contingencies and inflation. In total, the recommended projects are valued at \$1.5 billion in 2022 dollars and \$2.1 billion in inflated dollars to 2050 to account for future design and construction costs. Cost estimates will be further refined over time to reflect actual/projected inflationary adjustments.

The treatment and design requirements will be further refined based on pilot studies and further fieldwork. After the refinement of the design in the preliminary design phase, cost estimates will be updated.

Master Plan Public Engagement

The 2022 Master Plan work was initiated in early 2021 and was completed in the spring of 2022. The development process included a public engagement element. Feedback received will be used to guide how the plan is implemented over time. Some of the public information and engagement opportunities included:

- Water Advisory Committee Presentation and associated Staff Report (May 13, 2022).
- Regional Water Supply Commission (RWSC) Presentation and associated Staff Report (May 18, 2022).
- CRD Board Presentation (June 8, 2022).
- CRD Media Release and associated media coverage:
 - [Regional Water Supply 2022 Master Plan Released \(crd.bc.ca\)](https://www.crd.bc.ca/2022/05/13/regional-water-supply-2022-master-plan-released/)
 - [Capital Region waterworks plan could top \\$2 billion - Goldstream News Gazette \(goldstreamgazette.com\)](https://www.goldstreamgazette.com/news/crd-waterworks-plan-could-top-2-billion/)
 - [A \\$1 billion filtration plant is at the centre of a new plan for Victoria's water supply | CBC News](https://www.cbc.ca/news/canada/vancouver-region/crd-water-supply-master-plan-1.6022327)
 - <https://vancouverisland.ctvnews.ca/capital-regional-district-approves-2b-30-year-water-supply-master-plan-1.6022327>
 - <https://www.vicnews.com/news/crd-board-approves-master-plan-for-greater-victoria-regional-water-supply-103999>
 - <https://www.timescolonist.com/local-news/crd-board-approves-30-year-water-master-plan-5683653>

- Get Involved Public Participation webpage <https://getinvolved.crd.bc.ca/2022-regional-water-supply-master-plan> was open to the public.
- Presentation to municipal staff and provincial regulators at the Annual Drinking Water Symposium in Victoria (2022 and 2023).

All the above noted Committee, Commission and Board meetings were open to the public. An engagement summary report was presented to the RWSC in July 2022 which noted that the public engagement website for the 2022 Master Plan was visited 753 times, 157 participants downloaded documents from the website, and 22 participants shared comments or asked questions. Social media was also used to raise awareness of the 2022 Master Plan, promote the engagement site, and invite the public to provide their feedback. In total, Facebook posts reached 12,352 users with 328 engagement site link clicks and Twitter posts resulted in 837 impressions, with 32 engagement site link clicks.

The CRD will continue to engage the public for each project identified in the 2022 Master Plan as they are designed and implemented.

Proposed Development Cost Charge

DCCs are regulated by the province with guidance for the development of DCC programs being provided through the LGA and DCC Best Practices Guide. Importantly, for a new DCC Bylaw to be adopted by the CRD, it must be submitted to the Ministry of Municipal Affairs and approved by the Inspector of Municipalities. To be approved, the DCC program can only apply to growth related projects, with the costs allocated proportionally based on the benefiting factor (e.g., the relative benefit of a project to new versus existing growth).

The two main inputs to a DCC program are the DCC-eligible project costs and the projected growth those projects will serve over the 30-year time horizon of the program. To gauge the potential impact of growth on the water system, the CRD has reviewed regional growth projections, municipal planning policies, water modelling analyses and consultation with municipal staff across the region. This growth was then reviewed alongside DCC-eligible projects identified in the 5-year Capital Plan and the 2022 Master Plan to determine what extent each project would benefit future development. For example, the Leech Watershed was purchased to expand the region's future water supply. The use of this water source will be realized once demand approaches and exceeds the available water supply (Sooke Lake Reservoir). Therefore, any infrastructure required to utilize the Leech Watershed is fully related to growth. For most of the remaining projects in the DCC program the project costs are shared proportionately between existing development and future growth based on an estimated 30-year population increase of 35%. Non-growth-related projects, such as renewal projects with no capacity increase, are not eligible for funding by DCCs and have not been included in the program.

Overall, it is important to understand that DCCs are a cost sharing tool, and that if adopted the Regional Water Supply DCC program will only contribute 36% (or \$523.4 million) of the total \$1.4 billion in DCC-eligible project costs identified over the next 30-years. The remaining \$920.9 million will be paid for by current and future water users.

Without investments in the water system to meet the demand caused by growth, the demand for water will eventually exceed supply. The CRD is proactively planning to be prepared to meet future demands and DCCs are required to help fund and implement the region's long-term water supply needs.

Next Steps

Based on the DCC project schedule, CRD staff will make any revisions to the DCC program design based on feedback from municipal councils, the Regional Water Supply Commission (RWSC) and the CRD Board. After receiving feedback from the RWSC on the draft program (Q1, 2024), CRD staff will adjust the DCC program as required prior to undertaking stakeholder consultation with the development community and the public. This will include invitations to UDI and other key stakeholders identified by the CRD to participate in virtual and / or in-person information meetings on the proposed DCC rates and principles. The comments received from this consultation will be presented to the RWSC and CRD Board by staff and ultimately included in the DCC Background Report for submission to the Ministry of Municipal Affairs. Although public engagement is planned for the spring of 2024, CRD staff will be engaging UDI in the coming weeks to review the concerns raised in their letter.

The Water Advisory Committee and the RWSC have been informed of our progress to date and have endorsed the continuation of the project to the consultation phase, which we are working through now. The RWSC will continue to be informed through the consultation phase and will ultimately be responsible for providing a recommendation to the CRD Board to finalize program details and eventually adopt a DCC Bylaw.

Conclusion

DCCs have been applied to developments throughout British Columbia for decades. The 2022 Master Plan identified DCCs as a cost-sharing funding mechanism to assist in funding the 30-year capital works program. The introduction of a Regional Water Supply DCC program would also help to mitigate the cost of water service for the average ratepayer over time, recognizing the increased cost of development.

Sincerely,



Alicia Fraser, P.Eng.
General Manager, Integrated Water Services

Attachment: UDI Sample letter to Mayor and Council

cc: Capital Regional District Board
Regional Water Supply Commission
Water Advisory Committee
Ted Robbins, Chief Administrative Officer, CRD



**URBAN
DEVELOPMENT
INSTITUTE**
CAPITAL REGION

**447 HERALD STREET
VICTORIA, BC V8W 3N8**

November 15, 2023

Mayor and Council
District of Metchosin
4450 Happy Valley Road
Victoria, BC V9C 3Z3

Re: A Call for Caution: A Comprehensive Review of CRD's Water Supply Conversion Plan

Mayor and Council:

The Capital Regional District (CRD) has adopted a plan to convert our region's water supply from its current low-energy, low-cost, gravity delivery system to a high-cost, high-energy pump driven system at an enormous cost to construct and maintain. This would be the most expensive capital project ever undertaken in the CRD to provide a solution to a problem that lacks a strong rationale.

With extremely limited public engagement conducted remotely during COVID year 2022, the CRD is now proposing a new levy in the form of a significant new Development Cost Charge (DCC) on new housing and commercial construction. This all is in order to fund a massive multi-billion-dollar water filtration plant and related works that very few people in the CRD know exists.

The Urban Development Institute – Capital Region (UDI) requests that all Capital Region municipalities pause their consideration of the CRD's request for this new DCC in order to allow a thorough third-party review of the proposed plan, its costs, and its funding formula. The following are reasons for local Councilors to consider allowing for further study before adopting this expensive new tax on new housing.

Water Supply and Demand

The CRD 2022 Water Master Plan assumes there will be no further reduction in per capita water consumption in the future.

Assumption: Per Capita Water Demand will not continue its current long term downward trend.

The CRD's 2022 Master Plan Appendix C contains the following statement:

"Per capita demands have declined from 559 L/c/d in 1998 to the current per capita demand of 337 L/c/d (combined residential, ICI and agricultural) With a modest reduction to 300 L/c/d, the Sooke watershed could supply enough water to meet demand until 2060."

And yet, the CRD's stated demand assumptions from its "Get Involved" FAQ page are as follows:

"The per capita demand used to calculate the forecast total annual demand was 366 litres per capita per day (this figure represents demand across all sectors including residential, agriculture, industrial, commercial and institutional, as well as water losses throughout the system). **Per capita water demand is projected to remain relatively stable when projecting future demands at the supply level...**"

The CRD is proceeding to levy a charge on the basis that the per capita water use will not continue to trend downward regardless of its historical trend, which is contrary to its own 2022 Water Master Plan which states clearly how continued reductions to per capita demand are entirely reasonable. Given continued implementation of low-flow fixtures, and continued public enthusiasm for reduced water use, its unclear why the CRD is publicly projecting that per capita water demand would halt its decades long decline, while its own technical report appears to contradict this assumption.

Assumption: Increasing the cost of water at a rate of 10 to 20% per year as stated in its Master Plan consultation FAQ will not reduce per capita water consumption.

This assumption is contrary to a basic economic principle that when the price of a commodity increases, demand decreases. Using the assumed rate of wholesale water cost increase at a minimum of 10% per year and applying this over a 20-year period results in 6.7X increase in water supply costs, which in turn would result in a large decrease in consumption. Even rounding down to a 5X increase for the simplicity of calculation, if an average household water bill is \$400 today, multiplied by 5X equals a \$2,000 water bill. A reasonable assumption in this case is that water consumers will dramatically curtail water use and avoid over-consumption and waste of water. At this level of cost increase, dramatic reductions in consumption would be realised.

Rationale for the Water Filtration and Conversion to High Energy Demand System is Lacking

The 2022 Water Master Plan details a complete re-working of the entire water supply for Greater Victoria. It includes converting the low-energy, gravity supply system to a system requiring a massively expensive water filtration plant that would require large and ongoing energy and capital maintenance programs. As well, water would no longer flow in power outages without significant stand-by, backup power generation.

As its member municipalities spend large sums of money to comply with carbon reduction strategies, the CRD is proposing to build a massive energy-intensive facility that would replace a natural ecosystem service function in favour of a mechanical filtration system at enormous cost to build and operate.

The basis of this assumption appears to be a determination that recent wildfire activity in the interior of the Province reflects a probability that a catastrophic fire could occur in the Sooke Reservoir watershed. Given that the watershed is closed to the public, is patrolled and monitored, and sits in a coastal location immediately adjacent to the centre of Victoria, the risk of a catastrophic fire is significantly diminished. An extensive professional risk analysis is recommended in order to develop a full understanding of the probability of catastrophic loss prior to proceeding with upgrades based on a qualitative assumption that this risk is in fact catastrophic. There may be a more cost-effective solution to mitigate this risk compared to the construction of a filtration plant with a billion dollar plus price tag.

Given the importance of this watershed and free natural ecosystem service that it provides, additional consideration should be given to wildfire prevention and mitigation practices before proceeding with such a costly plan. Further, additional analysis is also needed to determine what impacts such a project would have on our region's Greenhouse Gas reduction strategy, given the importance of GHG reduction to all CRD municipalities.

Third Party Review of Cost Assumptions

The costs of construction have inflated over 20% in the past 24 months based on direct industry experience and input from UDI membership who are carefully managing their construction projects to ensure viability.

The assumed inflationary adjustment to the base cost of \$1.528 billion 2022 dollars to only \$2.05 billion dollars for expenditures assumed from 2031 through 2049 should be reconsidered and subjected to a third-party review. This assumption fails to acknowledge the massive and unprecedented levels of cost inflation experienced in the past two years and represents only a 35% increase over a period of 20+ years. It is entirely possible the cost of this project in 2024 dollars may already have inflated well beyond the assumed base year assumption of \$1.528 Billion. The current \$2 Billion cost reflects an increase of only about 1.5% to 2% per year and is wholly inadequate given current conditions.

UDI recommends carrying a 5% to 10% annual inflation assumption. Using a 5% inflation assumption for 20 years would result in an approximate \$3.5 to \$4 Billion dollar cost. It would be prudent to double the 2022 Master Plan's assumed \$2.05 billion cost.

Expanded Public Engagement Necessary

The CRD Water Engagement report identifies a lack of meaningful engagement and instead relies entirely on a web-based engagement, a trend that appears to have become entrenched during the COVID lockdowns. Using the CRD's own public engagement summary, only 157 participants actually visited more than one webpage, and only 22 participants submitted feedback. An additional 383 participants may have seen it through either purposeful or accidental visits to one webpage. The summary report was only downloaded 101 times.

The CRD is proposing to proceed with this multi-billion-dollar filtration system on the basis of 22 written submissions collected through a web-based consultation platform that few people knew about. Most people impacted by this new plan have no idea it exists or that the CRD is proposing a multi-million-dollar capital project. The proposed DCC and water filtration upgrade plan came as a surprise to many UDI members.

On behalf of our members, which includes both for profit and not-for-profit builders as well as affordable housing providers, we respectfully call for greatly expanded, meaningful engagement before this major new DCC is implemented. It is essential to note that the UDI, a key stakeholder in the development and growth of the region, would have welcomed the opportunity to contribute valuable insights and perspectives during the formation of this critical plan. A project of this magnitude necessitates collaboration with all relevant stakeholders to ensure a well-rounded understanding of the potential implications and benefits.

Development Cost Charge Proposal

The water filtration plans rationale is centred on addressing the potential future impacts of a catastrophic forest fire, and not primarily because of new residential demand from net new connections to the regional water system.

Development Cost Charges are mandated by the Province to follow principles of Fairness, Equity, and Accountability, and must ensure that the benefitor pays. The following excerpt from the Province's DCC Best Practice Guide outlines the requirements:

BENEFITOR PAYS - Infrastructure costs should be paid by those who will use and benefit from the installation of such systems.

FAIRNESS AND EQUITY - Recognizing that costs should be shared in some way amongst benefiting parties, DCCs should employ mechanisms that distribute these costs between existing users and new development in a fair manner. Further, within the portion of costs that are attributable to new development, DCCs should be used to equitably distribute costs between the various land uses and different development projects.

ACCOUNTABILITY - The establishment of DCCs should be transparent local government process, and all information on which DCCs are based should be accessible and understandable by stakeholders.

The CRD is asking local governments to adopt new DCC bylaws that would apply the minimum lawful municipal assist factor of 1%, leaving 99% of the cost of this proposed new DCC on new housing and commercial construction in order to fund a facility that primarily benefits existing users. This fails each of the Fairness, Equity, Accountability, and Benefitor Pays tests identified above. It is clear that the proposed upgrades are not a result a new growth.

The CRD's own analysis demonstrates that the primary benefit from this proposed new spending is for existing users. Creating a new DCC with a primary benefit to existing users, but assigning them only 1% of the cost, fails to meet the Provincial guidelines for DCCs.

Financial Analysis on the Effect on New Housing is Lacking

It is not clear if the CRD has completed any analysis to determine if new housing or the commercial construction sector can bear the additional costs. In the face of construction and interest rate cost increases, as well as the implementation of expanded DCC programs by municipal governments for infrastructure that directly supports growth, UDI questions what analysis has been done to determine that new housing and commercial uses can afford to pay this significant new DCC.

As an example, Saanich recently reduced their CACs as a result of an in-depth financial feasibility analysis which showed that new housing cannot bear increased costs at this time. Has the CRD undertaken a similar analysis to determine viability and impact on the delivery of new housing? The goals of the CRD municipalities are to deliver their own priority infrastructure to support growth such as new roads, parks and recreation centres, or sewer and stormwater upgrades. Will local government be foregoing these upgrades in order to allow for the expansion of the water filtration system?

Alignment to Official Community Plans

Has the CRD aligned their financial model with the Official Community Plans (OCP) of each municipal government? At the recent Sidney presentation given by the CRD on this DCC proposal, it was clear that the assumptions used for commercial growth are not consistent with Sidney's OCP. The question arose: where will Sidney plan to put the 2.2 million new square feet of commercial / industrial / and institutional space the CRD report forecasted? This amount of space exceeds Sidney's own projections, and therefore begs the question of how this assumption was made? Does the CRD report have other flaws in its methodology?


In Colwood, the CRD is assuming nearly 3 million square feet of new commercial, industrial and institutional building area. Has the CRD attempted to align this assumption to Colwood's own OCP projections for growth? It would be prudent of the CRD to review their reports assumptions and to ensure their growth factors align with the municipalities OCPs.

Conclusion

In closing, the Urban Development Institute – Capital Region respectfully urges that all Capital Region municipalities exercise caution and prudence by declining to endorse the Capital Regional District's (CRD) proposed water supply conversion plan. The concerns raised regarding per capita water demand assumptions, the rationale for the water filtration system, the flawed cost projections, lack of meaningful engagement, and the disproportionate burden of Development Cost Charges (DCCs) to be placed on new housing and commercial construction highlight the need for a comprehensive third-party review. The potential impact on the region's greenhouse gas reduction strategy, the lack of financial analysis on the impact to new housing, and the failure to align with Official Community Plans further underscore the

necessity for a careful and unbiased evaluation. The UDI advocates for a pause in the consideration of the DCC implementation, allowing time for a thorough examination of the proposed plan's initiative. The future of our region demands a well-informed and transparent decision-making process that aligns with the principles of fairness, equity, accountability, and the genuine benefits of all stakeholders.

Kind Regards,

A handwritten signature in black ink, appearing to read "Kathy Whitcher", followed by a horizontal line extending to the right.

Kathy Whitcher
Executive Director – UDI Capital Region