Making a difference...together

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

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

September 16, 2024

File: 0510-20
Developer Engagement, RWS DCC

BY EMAIL: bmycroft@gablecraft.ca

Ben Mycroft
Chair of the Urban Development Institute Capital Region

Dear Mr. Mycroft:

RE: CAPITAL REGIONAL DISTRICT RESPONSE TO DEVELOPMENT COMMUNITY QUESTIONS

Thank you for your questions and the follow up meeting with the Capital Regional District (CRD) on September 10, 2024. We appreciate the time you have spent detailing your concerns and further expanding on them in the meeting. The following is a written summary of the verbal responses provided in the meeting, and where possible, we have expanded on those responses below.

Disclosing Foundational Data

1. Will the CRD release the Urban Systems Ltd. reports on which the Development Cost Charges (DCC) are based, in accordance with the Province's Development Cost Charge Best Practices Guide and allow adequate time for stakeholder analysis prior to proceeding with implementation of the DCC? If not, why not?

    - Key program inputs, including details regarding the DCC project list, benefit allocations and municipal assist factor have been provided as part of the stakeholder engagement process in presentations and as well on the CRD's Get Involved page – Proposed Regional Water Supply Development Cost Charge Program | Get Involved CRD.
    - Yes, we will publicly release the Urban Systems Draft DCC Background Report and related documents prior to the Bylaw receiving three readings and within the package submitted to the Ministry of Municipal Affairs.
    - The CRD is in the process of compiling a DCC Background Report and will provide a draft version to the Regional Water Supply Commission (the commission) in September. Following the commission meeting, the report will be posted online on the CRD Get Involved page. This report will provide further details requested on the rationale for the project cost apportionment.

2. How does the CRD reconcile the DCC Best Practices Guide with the statements made by the General Manager?

    - The statement refers to changes in budgets due to refined scopes and cost estimates. It has been noted that these projects (as identified in the Master Plan) are at a conceptual level and as designs progress, the project scopes will be refined based innovations over time and input from interested parties. If there are opportunities to do so, projects may also be realigned as long as the same goals are achieved.
    - Regularly completing minor or major updates to DCC programs are encouraged in the DCC Best Practices Guide to capture changes in costs, grants received, inflation, and other factors. The CRD has committed to regular updates of all its DCC programs.
    - Projects identified in the DCC program have been outlined in the Master Plan and/or the five-year capital plan. These projects benefit future users by ensuring both capacity and quality of the water supply and are therefore eligible for DCC funding based on provincial requirements outlined in the DCC Best Practices Guide and in alignment with the 'benefiter pay' principle.
    - To date, existing users have been paying for works that also benefit new development and will continue to do so going forward unless a DCC program is introduced.

Water Demand Growth Rate Assumptions

3. Why has the CRD forecasted compound growth in water demand when there is no data which suggests that is a reasonable assumption? Will the CRD analyse current water use trends based on available retail billing data to establish a statistically valid rate of growth in water demand?

    - As noted in the 2022 Master Plan, the total supply-level (all sectors/uses and nonrevenue water) per capita water demand at the time (2020) was 337 litres per capita per day (L/c/d), down from the 2010 to 2019 average of 366 L/c/d. This equates to a total annual demand of 48 million cubic metres per year.
    - It is important to note that total water demand is based on both population and per capita demand, which is also influenced by climate, in that hotter drier years typically have higher per capita demands. The overall water demand is increasing in the Region; the total regional water demand reached its lowest point in 2013, and regional demand has been increasing since. For example, the 2023 total annual water demand was approximately 51 million cubic metres, a roughly 6% increase in total water demand from the 48 million cubic metres seen in 2020. Further, the regional per capita demand has ranged from 337 L/c/d in 2020 to as high as 357 L/c/d in 2021.
    - To ensure the CRD continues to provide a reliable drinking water supply for the current and future supply population, the Master Plan included a conservative estimate of future water reductions and assumed that the per capita demand remains constant at the 10-year average of 366 L/c/d. The DCC Best Practices Guide requires Regional Districts to use current project costs and do not allow for future inflation. The CRD's approach to the per capital demand assumption follows the same principal in that we cannot assume that demand will decrease, however, the per capita demands will be updated every five years based on actuals.

- It is important to note that to plan for the future, we have to aggregate total demand at a regional level for all sectors including commercial, industrial and agricultural. The Westhills Water System is a localized example with limited diversity of land uses, which does not reflect the scale and diversity of the CRD's Regional Water Supply (RWS) system which spans 13 member municipalities and an Electoral Area. As previously stated, the CRD will nevertheless monitor consumption and adjust projections accordingly. To note, there is only a 14% difference between the Westhills average day demand of 315 L/c/d and the Regional average day demand of 366 L/c/d regardless.
- Again, DCC project eligibility is not solely determined based on capacity, but also level of service and who will benefit from the proposed works in alignment with the 'benefiter pays' principle. All these projects are to reduce risk and improve resilience in the RWS System and have been endorsed by the commission. Those elements of the project that provide redundancy and resilience also incorporate additional capacity required to service future population growth. Even with a reduction in per capita consumption, these projects will still be required within the 30-year DCC program window and will benefit future users.
- Though the DCC program will continue to utilize actual average per capita demands for planning purposes, the CRD will review and provide the Regional and Juan de Fuca historic per capita demands per sector in the coming week.

4. How did you calculate the price elasticity of demand in the CRD Master Plan's long-term water models?

    - The CRD's approach to demand is to remain conservative and proactive. The CRD cannot undertake long term planning based on unrealized demand reductions to future water consumption and is therefore using the water usage levels identified today as a benchmark for future consumption. This is consistent with the DCC Best Practice Guide regarding project costs.
    - The CRD is also committed to regularly updating the Regional Water Supply Master Plan every 5 years (or sooner, depending on need) as part of the Master Plan update. Major and minor updates to the proposed RWS DCC program will reflect price elasticity – project costs can be updated in both a major or minor update. The CRD is aware that many of the projects included on the proposed DCC's project list are still in the conceptual phase and that costing for these projects will be updated as more information is made available and these projects progress towards construction.

Public, First Nations, and Developer Consultation

5. Will the CRD commit to engaging in real, meaningful public consultation with its direct stakeholders, First Nations, and the general public? If not, why not?

    - The CRD has remained committed to ensuring that Municipal staff, Councils, the public, and other interested parties are informed at all major stages in the development of the RWS DCC program.

- Engagement opportunities to date have included: 13 municipal staff workshops, 13 municipal Council meetings, 2 Regional Water Supply Commission meetings, 2 virtual information sessions, an online survey, and a project webpage. This level of engagement meets or exceeds the expectations for consultation outlined in the DCC Best Practices Guide.
- Many organizations that historically relied on in-person engagement switched to relying on digital engagement during the pandemic. What we learned in that time was though there are some challenges there are also opportunities with digital engagement.
- Among the opportunities are the ability to reach new audiences and invite participation from residents who would not otherwise join. Virtual sessions do not have geographic/travel constraints, plus a recorded session is available for people who cannot attend at the scheduled time.
- The decision of whether to do engagement solely online or in combination with in-person engagement is specific to each project. Reviewing past open houses for Juan De Fuca DCCs we offered an in-person open house that had minimal participation. Based on this we focused our efforts on reaching a broader range of residents and developers from across the region through digital channels.
- First Nations within the CRD were invited to all virtual information sessions and encouraged to complete the survey. The CRD is having government-to-government conversations with interested First Nations and will continue to work directly with First Nations to answer any questions related to the proposed DCC.
- First Nations reserve lands and other federal lands currently do not pay any DCCs and will not be paying the proposed RWS DCC unless otherwise agreed to. Any development on non-reserve privately held / fee simple lands may be subject to DCCs and other development charges both regionally and locally. There is currently no mechanism in legislation or the DCC Best Practices Guide to exempt non-reserve privately held / fee simple lands owned by First Nations from paying DCCs.
- The transcripts of questions asked during both virtual information sessions, as well as all comments submitted through the survey, will be shared in the Public Engagement Summary. The Public Engagement Summary will be included alongside the Draft DCC Background Report (Background Report) which will be published in the Regional Water Supply Commission September agenda package and will be posted on the CRD Get Involved page.
- We acknowledge the further feedback provided in the meeting regarding the format of the virtual session and will strive to improve the opportunities for two-way dialogue in the future.
- As part of the September DCC Update Report to the Regional Water Supply Commission, staff will recommend the addition of a comment period on the DCC Background Report. The comment period will be opened to all public and interested parties and feedback on the draft Background Report will be incorporated in the public engagement section of the final Background Report with the verbatim comments included in an appendix. The final Background Report will be presented to the commission.

DCC Capital Works Allocations to New Growth are Not Consistent with DCC Best Practices. Benefit Allocation to New Growth is Not Correct.

6. Has the CRD allocated the benefit to development based on capacity or incremental cost? If not incremental cost as the DCC Best Practices Guide recommends, will the CRD and its consultant, Urban Systems Ltd., share the detailed benefit allocation?

    - The Guide also notes in section 6.3 that "service population could also be a way of allocating benefit". This is the approach that the CRD and Urban Systems has taken when determining benefit allocation for projects. As the Guide subsequently notes, "if only a planning level of engineering analysis is available at the time of bylaw development, general ranges of benefit could be assigned based on technical data accompanied by good engineering judgement."
    - As most of the DCC projects identified are expected to benefit both existing development and future growth equally, distributing the costs proportionately based on population was determined to be the most equitable approach and most aligned with the DCC Best Practices Guide and the 'benefiter pay' principle. This is in alignment with the methodologies used in many other municipal DCC programs in British Columbia to apportion DCC costs. The 35% benefit factor used to reflect increase in service population is based on a 30-year equivalent population increase of 185,000 including both residential and non-residential uses.
    - As per Section 6.3 of the DCC Best Practices Guide, the example referred to in the question is one of many possible methodologies for calculating benefit allocation.
    - As also noted in section 6.2 of the DCC Best Practices Guide: "For storm drainage, sanitary, and **water**, new infrastructure systems or extensions into previously unserviced areas clearly have little benefit to existing users. However, for infrastructure components that are well integrated into existing systems, such as an interconnected watermain, allocating benefit may be more difficult. If existing residents are inadequately served by existing utilities, existing users may receive benefit in the form of improved service." Methodology examples 6.2 (Case 1B), 6.3 (Case 1C), 6.4 (Case 2) and 6.5 (Case 3A) of the DCC Best Practices Guide more closely reflect the methodologies used to calculate the benefit allocations for many of the projects identified in the proposed DCC program as they better reflect the anticipated benefit of the identified DCC projects.
    - The implementation of the proposed RWS DCC will ensure that existing residents and future development equitably share the costs included in the DCC program, thereby appropriately balancing any potential increases to the water user rate. It should be noted that DCCs are only covering 36% ($523 million) of the total anticipated project costs ($1.44 billion in 2022 dollars).
    - A detailed description of specific benefit allocations applied is provided in Appendix A.

7. Will the CRD undertake a study to determine the sensitivity of demand to water rate increases substantiate assumptions on growth in water demand with an objective of deferring major capital expenditures. If not, why not?

    - The response to this question was addressed above in question 4.

Kapoor Tunnel Redundancy

8. Given the potential for the bypass to remain unused until 2100 as it is not currently required for capacity, will the CRD commit to undertaking a seismic evaluation prior to proceeding with the bypass, and if the CRD intends to proceed anyway, how does the CRD intend to incorporate the cost into the current DCC, given that the project is not required for growth within the DCC study timeframe (30 years)?

    - This project is to provide redundancy as the Kapoor tunnel is the only feed to 400,000 users and a potential single point of failure. The consequence of the failure of this asset would prevent the delivery of drinking water to customers for a prolonged period, failing to meet our commitments to the residents.
    - The Master Plan projects, including the Jack Lake bypass, are to reduce risk and improve resilience in the Regional Water Supply System and have been endorsed by the Regional Water Supply Commission.
    - These projects will be required within the 30-year DCC program window and will benefit both existing and future users regardless of a seismic analysis. These projects will incorporate the additional capacity needed to service both the existing population and future growth as addressed in question 6.
    - Opportunities for evaluating capacity will continue as the project gets closer to delivery. The CRD has committed to updating the DCC program and the RWS Master Plan every 5 years to account for any changes.
    - Once completed the bypass will also be used to allow regular and consistent maintenance, inspections and repairs of the Kapoor tunnel without being constrained by water quality or quantity concerns with the current back up system (Goldstream Lake).

Impacts to New Housing Cost and Supply

9. Will the CRD commit to undertaking and publicly sharing an economic feasibility analysis to determine what the affects of these new DCCs will have on the future housing supply, prior to taking it forward to the CRD Board for Bylaw consideration?

    - Economic feasibility analyses are not required by the Province for DCC programs; rather, they are a recommendation for Amenity Cost Charge programs.
    - As an economic feasibility study is not required by the Local Government Act or the DCC Best Practices Guide, the vast majority of previously completed DCC programs do not include an economic feasibility analysis. Nevertheless, staff and councils work to ensure that any proposed rates are reasonable and will not deter development.
    - The City of Victoria recently completed an economic feasibility study which showed limited impacts on development viability (1% of projects until 2030) in the City despite DCCs increasing by 2-3 times previously.
    - We have not yet received any direction from the Regional Water Supply Commission or the CRD Board to complete an economic analysis.

- Completing an economic feasibility study for the RWS DCC is likely to be time consuming and costly given the diversity of housing markets, development fees and development timelines of communities within the RWS service area. This work may also not yield any meaningful information as the impact of DCCs is expected to vary across the member municipalities and region.
- Any reduction to the DCC will increase water user rates which will also affect the affordability for all water users, not just developers and home builders.

In closing, we would like to reiterate our thanks for the time you took to bring forward your concerns. We acknowledge the important role that that development industry plays in meeting the needs of the growing communities of the CRD. We also acknowledge the strain that the current economy is putting on your business and projects. We are committed to continuing to seek feedback from this group on the design of the DCC program but are also obligated to the existing rate payers to implement a DCC program. To date, existing users have been paying for works that support new development and will continue to do so unless a DCC program is introduced.

The CRD wants to ensure the 'benefiter pay' principle is upheld, and new developments are contributing to those future projects that benefit those developer project costs going forward. Understanding that a DCC program for this service is required, the Regional Water Supply Commission is respective to considering actionable recommendations from the development community on how this program be designed and implemented.

Yours truly,

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

Attachments: (3)
Appendix A: DCC Benefit Rationale
Appendix B: DCCs being proposed by the CRD for the 2022 Regional Water Supply Master Plan – Questions
Appendix C: Letter to Chair Plant

cc: Ted Robbins, Chief Administrative Officer, Capital Regional District
Joseph Marr, Senior Manager, Infrastructure Engineering
Caitlyn Vernon, Manager, First Nations Relations
Colin Plant, Chair, CRD Board
Gord Baird, Chair, Regional Water Supply Commission
Shannon Russell, Keycorp

Appendix A: DCC Benefit Rationale

A 100% benefit allocation is used for projects required only to increase system capacity to support new growth. Projects assigned this benefit allocation include the Leech Watershed, which is required to develop a new water supply source. This is required only if future growth occurs, which is aligned with the methodology outlined in Example 6.1 (Case 1A) in section 6.3 of the DCC Best Practices Guide.

Item	Project	Cost Estimate A	DCC Benefit Factor B	Benefit to New Development = A x B
LEECH WATERSHED				
W4	Leech River Diversion			
W5	Sooke Lake Saddle Dam Hydraulic Improvements and Studies			
W6	Leech River Watershed Restoration, Mapping and Studies			
	Subtotal	**$28,513,000**	**100%**	**$28,513,000**

Using the "rule of thumb" rationale a 50% benefit is allocation was used for projects that provide both capacity increases as well as improvements to the existing level of service. Projects assigned this benefit allocation include the Smith Hill Storage Tank, which will provide an additional balancing tank and pump station. The Smith Hill Storage Tank would help accommodate growing demands in the Victoria core area, as it would help balance flows during periods of high demand. This project both enhances the existing level of service for domestic, fire and emergency purposes and adds additional capacity to accommodate and service future growth. This aligns with the methodology outlined in Example 6.2 (Case 1b) in section 6.3 of the DCC Best Practices Guide.

Item	Project	Cost Estimate A	DCC Benefit Factor B	Benefit to New Development = A x B
SMITH HILL STORAGE TANK				
W21	Smith Hill Tank - Including Design and Decommissioning			
W22	Smith Hill Tank Pump Station			
	Subtotal	**$31,268,000**	**50%**	**$15,634,000**

A 35% benefit allocation is used for DCC projects that are expected to benefit both existing development and future growth proportionately. Projects assigned this benefit allocation include the: Sooke Lake Reservoir Deep Northern Intake, Water Filtration Plant, Transmission Mains and Studies and Modelling, which provide an increased level of service, increased resilience, redundancy and additional capacity to service future population growth. The DCC Best Practices Guide notes in s. 6.3 that "service population could also be a way of allocating benefit" and distributing the costs proportionately based on population was determined to be the most equitable approach and most aligned with the DCC Best Practices Guide and the 'benefiter pay' principle. This also aligns with the methodology outlined in Example 6.4 (Case 2) of the DCC Best Practices Guide.

Item	Project	Cost Estimate A	DCC Benefit Factor B	Benefit to New Development = A x B
SOOKE LAKE RESERVOIR DEEP NORTHERN INTAKE				
W1	Deep Northern Intake (Floating Pump Station)			
W2	Sooke Lake Reservoir - Studies			
W3	Conceptual Design of Floating Pump Station and Transmission Main			
	Subtotal	**$74,745,000**	**35%**	**$26,160,750**
WATER FILTRATION PLANT				
W7	Japan Gulch Dam Decommissioning			
W8	Filtration Plant			
W9	Filtration Plant Clearwell			
W10	Treated Water Pump Station			
W11	Filtration Plant Stage 2 Balancing Tank			
	Subtotal	**$819,074,000**	**35%**	**$286,675,900**
TRANSMISSION MAINS				
W12	Phase 1 - Transmission Main Upgrades			
W13	Phase 2 - Transmission Main Upgrades			
W14	Phase 3 - Transmission Main Upgrades			
W15	Deep Northern Intake to Head Tank Transmission Main			
W16	Sooke Lake Dam to Head Tank Transmission Main			
W17	Jack Lake Head Tank to Japan Gulch Transmission Main			
W18	Goldstream Connector to Japan Gulch Transmission Main			
W19	Goldstream Connector Balancing Tank			
W20	East-West Connector Transmission Main			
	Subtotal	**$486,972,000**	**35%**	**$170,440,200**
STUDIES/MODELLING				
W23	Project Delivery Plan			
W24	Master Planning and System Upgrades			
W25	Supply System Computer Model Update			
W26	Phase 2 Hydrology Study			
	Subtotal	**$3,800,000**	**35%**	**$1,330,000**

CRD AND CAPITAL REGION BUILDING INDUSTRY LEADERS MEETING
SEPTEMBER 10, 2024, 10:00AM
RE: DEVELOPMENT COST CHARGES BEING PROPOSED BY THE CRD
FOR THE 2022 REGIONAL WATER SYSTEM MASTER PLAN

QUESTIONS

DISCLOSING FOUNDATIONAL DATA

The Province of British Columbia Development Cost Charge (DCC) Best Practices Guide states:

The establishment of DCCs should be a transparent, local government process, and all information on which the DCCs are based should be accessible and understandable to stakeholders.

This Urban Systems Ltd. document used to determine the proposed DCCs was requested during the public/developer Zoom consultation, but that request was declined and remains un-released to the public. Without his information, the public and the affected development industry have not been afforded the opportunity to understand the detailed assumptions and formulation of the DCC prior to CRD Board's consideration of the Bylaw.

QUESTION 1:

Will the CRD release the Urban Systems Ltd. reports on which the DCCs are based, in accordance with the Province's Development Cost Charge Best Practices Guide and allow adequate time for stakeholder analysis prior to proceeding with implementation of the DCC? If not, why not?

Further, in the June 28, 2024 Capital Daily article, Alicia Fraser, the CRD's integrated water services general manager, stated that "A financial plan would be developed by the CRD for the ministry submission though this wouldn't be a finalized budget forever," said Fraser but rather will be used as a funding tool to ensure the reserves are there for infrastructure as it is needed." She also states that "The DCCs don't commit the CRD to building every single specific project. Rather, they're a long funding tool to ensure that there is funding being put into reserves for that infrastructure to be created when it's needed,".

The Best Practices Guide states "Therefore, certainty should be built into the DCC process, both in terms of stable charges and orderly construction of infrastructure."

QUESTION 2:

How does the CRD reconcile the Best Practices Guide with the statements made by the General Manager?

WATER DEMAND GROWTH RATE ASSUMPTIONS

The 2022 Water Master Plan and the resulting DCCs are based on the projects and project implementation schedule included in the Plan. The approach lacks rigour and makes no attempt to forecast water use trend data shown in the Plan's own long term data set. The total water demand today has declined during the past 30 years, despite the population increasing over 42% from 317,989 people in 1996 (source: Canada Census, 1996), to an estimated 453,425 in 2023 (source: CRD Population Estimates, May 2024).

Water demand growth will be moderated further with the planned increased cost of water, and lower water use in new homes on smaller lots and in multi-family homes. As condo, apartment, and townhomes come to dominate new housing, with new single-family homes no longer a significant factor in new housing supply. Further, all this new housing replaces older water inefficient, and large lot homes. See the attached "Appendix A" detailed summary of the Westhills Water System which demonstrates that new housing supply, even one that is predominantly single family in nature yields significantly lower incremental per capita water consumption that that assumed by Stantec in the 2022 Water Master Plan.

QUESTION 3:

Why has the CRD forecasted compound growth in water demand when there is no data which suggests that is a reasonable assumption? Will the CRD analyse current water use trends based on available retail billing data to establish a statistically valid rate of growth in water demand?

We know that significant increases to water rates, such as those proposed by the CRD 2022 Master Plan, will have a corresponding reduction effect on water demands. We also know that significant opportunities exist to reduce regional water demand from the 2010-2019 baseline which underpins the CRD's 2022 Master Plan (for example: 35% of all water supplied to the region is used outdoors; municipal systems are bleeding upwards of 20% of their water supply and other non-revenue categories like leaks, theft and unmetered consumption); in fact, the Master Plan authors (Stantec) state that *"modest and achievable reductions in demand … will go a long way to extending the life of the Sooke Lake Reservoir beyond the 2050 planning horizon"*.

QUESTION 4:

How did you calculate the price elasticity of demand in the CRD Master Plan's long term water models?

PUBLIC, FIRST NATIONS, AND DEVELOPER CONSULTATION

The Best Practices Guide states:

> ***The development of DCCs must provide adequate opportunities for meaningful and informed input from the public and other interested parties.***

The CRD 2022 Water Master Plan, upon which the DCC is based, had only 22 public comments received during its Covid-era consultation. This document has not been scrutinized by the public, and questions relating to it are diverted or declined.

The CRD provided only two opportunities for public input on the DCCs via Zoom with no in-person public consultation and no web-platform consultation. Participants of these sessions were only permitted to ask questions through a chat function. Many questions and follow up questions were not answered, and many others were determined unilaterally by the moderators to be 'similar to others' and thereby not answered. Questions that were contingent on the 2022 Water Master Plan were disregarded as being not directly relevant to the DCC consultation. The published videos of those consultation events do not include records of the questions asked, and only provide records of those answered. We made a request for the full list of questions but were denied.

This consultation process does not appear to follow the general standard of public engagement best practices.

Further, with regard to First Nations Consultation, in In their Summary of Feedback Report for the July 20, 2022, meeting, the CRD's Regional Water Supply Commission (RWSC) stated its "commitment to engage First Nations communities respectfully and appropriately in regional plans, strategies, decision making and shared interests." However:

- On June 10, 2022, CRD staff emailed letters (many to unchecked addresses) to 16 Nations across the southern Island. Nations were given mere days to respond to an on-line overview and information session prior to relaying their interests in the Plan.
- On July 20th the Regional Water Supply Commission approved the 2022 Master Plan despite Commissioner Isitt motioning to postpone the approval so First Nations

could be given time to comment on the Plan. Then on August 10th, the CRD Board also approved the Plan, despite the lack of consultation with First Nations.

- The CRD stated that although they had not received written responses from First Nations to date, given the timeframe for engagement and acknowledging the other engagement and referral demands on First Nations communities, the CRD does not consider the response reflective of the interests and concerns of the Nations. The CRD states it will be conducting more and specific engagement with First Nations on a project-by-project basis as each project proceeds through further study and design phases.
- Two years later Malahat and Beecher Bay First Nations are formally expressing their upset that the CRD has not adequately or meaningfully engaged with First Nations (see attached letters).

QUESTION 5:

Will the CRD commit to engaging in real, meaningful public consultation with its direct stakeholders, First Nations, and the general public? If not, why not?

DCC CAPITAL WORKS ALLOCATIONS TO NEW GROWTH ARE NOT CONSISTENT WITH DCC BEST PRACTICES. BENEFIT ALLOCATION TO NEW GROWTH IS NOT CORRECT.

Working without the detailed summary report by Urban Systems Ltd. , we are forced to review the limited public reports available. Nonetheless the CRD DCC is evidently non-compliant with the Provincial DCC Best Practices Guide yet again with respect to the benefit allocation to new growth. The USL allocation is based on capacity, and not cost.

In the presentation report to the RWSC on March 28, 2023, assigned a benefit allocation for various component works ranging from 35% to 100% based on technical analysis and 'rule of thumb'.

In a report to the RWSC on May 3, 2021, USL provided the following example of technical analysis. 'Increasing a water main from 150mm to 300mm = approximately 25%/75% benefit'. In this example, the benefit is based on capacity, meaning that the capacity of a 300mm pipe is four times that of a 150mm pipe, and that 25% is assigned to existing users, and 75% is assigned to future users. However, the cost to install a 300mm pipe is not four times that of a 150mm pipe. Using the USL method the benefit allocation is greatly

overstated and not consistent with the Best Practices Guide. The Best Practices Guide example based on the cost of replacing a 250mm pipe with a 300mm pipe is that the cost of 250mm pipe is $50,000, while 300mm pipe cost is $60,000. Benefit to existing users is" $50,000/$60,000 (83%) and benefit to new development is $10,000/$60,000 (17%).

Allocation based on cost is particularly important for the filtration facility because the economies of scale factor into the cost of capacity for existing users and that required for growth, i.e. the cost per megalitre for the growth increment will be less than the cost per megalitre for existing users. CRD has not demonstrated any technical rationale for the incremental cost of the additional filtration to future development, at least publicly.

QUESTION 6:

Has the CRD allocated the benefit to development based on capacity or incremental cost? If not incremental cost as the DCC Best Practices Guide recommends, will the CRD and its consultant, Urban Systems Ltd., share the detailed benefit allocation?

It is projected that the wholesale water rate will increase significantly if the 2022 Master Plan is fully implemented. Depending on the municipality, residents could see their water bills increase by more than 200%. Basic economic theory states that as the price increases, demand will decrease. Indoor water use is considered inelastic (i.e., not price sensitive), whereas outdoor water use (discretionary) is considered to be elastic and price sensitive.

QUESTION 7:

Will the CRD undertake a study to determine the sensitivity of demand to water rate increases substantiate assumptions on growth in water demand with an objective of deferring major capital expenditures. If not, why not?

KAPOOR TUNNEL REDUNDANCY

The hydraulic capacity of the existing Kapoor Tunnel has ability to convey projected demands until approximately the year 2100. With the high-pressure main failure in Calgary (and more recently in Montreal) comments were made by the CRD to proceed with the Kapoor Tunnel bypass to provide redundancy, estimated to cost $350 million.
This redundant capacity appears to be required primarily to address the perceived risk to existing users of a tunnel failure, with some benefit to future development.

QUESTION 8:

Given the potential for the bypass to remain unused until 2100 as it is not currently required for capacity, will the CRD commit to undertaking a seismic evaluation prior to proceeding with the bypass, and if the CRD intends to proceed anyway, how does the CRD intend to incorporate the cost into the current DCC, given that the project is not required for growth within the DCC study timeframe (30 years)?

IMPACTS TO NEW HOUSING COST AND SUPPLY

The new housing market is currently facing strong headwinds from increased cost of construction, interest rates, and increasing and significant new government fees and charges. Project economics are operating on razor thin margins, with many planned projects now being stopped prior to starting. Our industry believes adding this new DCC will curtail new housing supply, and those that do proceed will face higher costs that will be passed on to new home buyers and renters.

CRD's consultant, Urban Systems Ltd., stated clearly during the Zoom consultation that no modelling has been done to determine the impacts on housing costs.

QUESTION 9:

Will the CRD commit to undertaking and publicly sharing an economic feasibility analysis to determine what the affects of these new DCCs will have on the future housing supply, prior to taking it forward to the CRD Board for Bylaw consideration?

APPENDIX A

WESTHILLS WATER DEMAND ANALYSIS
New Construction Data vs. CRD Master Plan Projections

Background

The 2022 CRD Master Plan ("Master Plan") prepared by Stantec combines long-term projections of water demand and population growth in order to estimate when our water source (Sooke Lake Reservoir) will approach its limit in terms of providing a reliable and safe supply to the region. When this limit is reached, the Master Plan calls for diversion of the Leech River into Sooke Lake as a supplemental source. The natural water quality profile of this source will in turn require a Filtration Plant, projected to cost >$1B (the largest single capital project within the Master Plan, by far).

Master Plan Water Demand Projections & Assumptions

The Master Plan uses the average per-capita Average Day Demand (ADD) and Winter Day Demand (WDD) for the period of 2010-2019 and assumes these rates of demand will hold constant across the entire region until the year 2100 (i.e. assumes all new/future growth will continue to use the same amount of water per-capita):

- **366 L/c/d ADD** average for CRD from 2010-2019
- **274 L/c/d WDD** average for CRD from 2010-2019

These figures are fundamentally important because they – along with population projections – form the basis of **when** the $1B Filtration Plant will be required. Using these per capita demand rates, the Master Plan projects that the Sooke Lake supply will reach its limit in the year 2045. It then states, if ADD is reduced to 300 L/c/d (described by Stantec as "modest and achievable"), this limit is extended to 2060; at 250 L/c/d, it could be extended beyond 2070.

While not directly factored into long-term projections and sensitivity analyses, the Master Plan also references "Residential Only" demands, which are helpful when assessing water conservation:

- **240 L/c/d Residential Only**, CRD average annual demand in 2020
- **220 L/c/d Residential Only**, North America average annual demand in 2016

New Construction Water Demand

The Westhills Water System (WWS) in Langford provides a uniquely valuable dataset for observing water demand in new construction for the following reasons:

- WWS supplies a mixed-use community with a resident population of approx. 3,000 living in a diverse range of housing types, with everything constructed after the year 2009.
    - This is important, because low-flow plumbing code changes and CRD water conservation bylaws, the two biggest drivers of water conservation in the last 25 years, were introduced in the early-/mid-2000s.
- WWS is a standalone modern water distribution system, with 100% of its input supply recorded through a CRD wholesale/bulk meter, coupled with near-total end use metering and virtually zero non-revenue water (e.g. line losses).
- Westhills is comprised of small lots and medium-to-high density land uses, which is indicative of what new growth across the CRD will look like in the decades ahead (i.e. large single-family lots as seen in places like Oak Bay or Gordon Head will not be the predominant form of new growth moving forward).

Westhills Water System (WWS) – Demand Figures

Data from the WWS over a three-year period between 2021 and 2023 (provided by SSL, the utility operator) yields the following demands:

- **315 L/c/d ADD** average for WWS from 2021-2023*
- **170 L/c/d WDD** average for WWS from 2021-2023**

**ADD skewed higher than typical new construction because the WWS currently has a much higher ICI-to-residential ratio (40% ICI vs. 22% ICI for the wider CRD); with ICI especially driving up summer usage. For example, the community of only 3,000 people currently includes three large schools with irrigated grass fields, regional recreation centre with swimming pool (YMCA), large-scale earthworks requiring active dust control (e.g. water trucks and spray cannons), and significant boulevard irrigation on new main roads, which are often constructed years before adjacent land uses are fully realized. As Westhills builds out, it should more closely align with the CRD's sector ratios and thus see ADD drop below 300 L/c/d without factoring in any further conservation efforts.*

***WDD is a more apples-to-apples comparison with the CRD Master Plan data, as it strips away the unusually high and temporary non-residential outdoor water use at Westhills.*

Residential Only demand is similarly worth observing. As of 2024, the makeup of housing in Westhills is 70% detached, 19% town/row housing, and 11% multi-family. Future growth is expected to include minimal new detached housing and these ratios will eventually be reversed at full community buildout. Despite having a much higher ratio of detached housing in Westhills than should be expected as a share of future growth across the region in the coming decades, observed Residential Only demand is much lower than the CRD average:

- **182 L/c/d Residential Only**, WWS average annual demand, 2021-2023
    - **130-140 L/c/d** if restricted to townhomes and multi-family only

CRD Master Plan vs. New Construction – Direct Comparisons

As others have observed, a critical component of the Master Plan is that it assumes all future growth will continue to use water at the average rate observed for the region between the period of 2010-2019. By comparing the Master Plan's 2010-2019 demands with those occurring today in the newly constructed Westhills Water System, we see the following:

	CRD Master Plan	New Development	Difference
ADD (L/c/d)	366	315	14% less
WDD (L/c/d)	274	170	38% less
Res. Only (L/c/d)	240	182	24% less

Closing

The 2022 Master Plan serves as a robust high-level guide for our regional water supply system. As the authors quite rightly state, *"when developing water demand forecasts based on a per-capita demand model, the projected population introduces the greatest source of uncertainty in the results compared to the uncertainties in the actual demand assumptions"*.

Given the inherent uncertainty with long-term population growth, and the volatile nature of predicting hyper-localized impacts of climate change, it is imperative that the most reliable (and controllable) ingredient in our master planning – water demand – is properly scrutinized and validated.

Despite the timing of such immense capital projects being linked to the water demand profile of future growth, the Master Plan contains precious-little data specific to new construction within the region; presumably because that level of detail cannot be easily extracted from the larger CRD dataset. Readily available water demand information from the Westhills Water System could be exceptionally valuable in this exercise and this information can be considered by the CRD and its supporting members in an effort to continue refining the Master Plan.

CANADIAN HOME BUILDERS' ASSOCIATION VANCOUVER ISLAND

UDI URBAN DEVELOPMENT INSTITUTE CAPITAL REGION

SOOKE BUILDERS ASSOCIATION

VICTORIA RESIDENTIAL BUILDERS ASSOCIATION

West Shore DEVELOPERS ASSOCIATION

September 5, 2024

Colin Plant
Chair
Capital Regional District
625 Fisgard Street
Victoria, BC V8W 1R7

Dear Chair Plant:

In preparation for your September 10, 2024, meeting with leaders from the Capital Region building industry, please find attached our questions pertaining to the Development Cost Charges being proposed by the CRD for the 2022 Regional Water System Master Plan.

We agreed to provide these questions in advance so you could ensure you were well prepared with answers, and together we could have a more fulsome discussion on this important issue.

We look forward to our meeting. Please do not hesitate to contact me if you have any questions or concerns.

Yours sincerely,

Ben Mycroft
Chair
Urban Development Institute Capital Region
On behalf of: Canadian Home Builders Association
Sooke Builders Association
Victoria Residential Builders Association
West Shore Developers Association

Attachment

cc: The Honourable Sean Fraser, Minister of Housing, Infrastructure and Communities
Honourable Anne Kang, Minister of Municipal Affairs
The Honourable Ravi Kahlon, Minister of Housing
MLA Ravi Parmar, Langford-Juan de Fuca