Capital Regional District

625 Fisgard St.,
Victoria, BC V8W 1R7

Notice of Meeting and Meeting Agenda
Regional Water Supply Commission

Wednesday, September 25, 2024 **11:30 AM** **6th Floor Boardroom**
625 Fisgard St.
Victoria, BC V8W 1R7

MEMBERS:
G. Baird (Chair); K. Harper (Vice Chair); J. Caradonna; N. Chambers; C. Coleman; Z. de Vries; S. Duncan; C. Graham; S. Gray; C. Green; K. Guiry; S. Hammond; K. Jordison; S. Kim; D. Lajeunesse; T. Morrison; T. Phelps Bondaroff; J. Rogers; C. Stock; M. Wagner; M. Westhaver; A. Wickheim

1. TERRITORIAL ACKNOWLEDGEMENT

2. APPROVAL OF THE AGENDA

3. ADOPTION OF MINUTES

24-855 Adoption of the Minutes of the July 17, 2024 Meeting

Recommendation: That the minutes of the July 17, 2024 Regional Water Supply Commission meeting be adopted.

Attachments: Draft Minutes - July, 17 2024

4. REPORT OF THE CHAIR

5. PRESENTATIONS/DELEGATIONS

Delegations will have the option to participate electronically. Please complete the online application for "Addressing the Board" on our website located here https://www.crd.bc.ca/about/board-committees/addressing-the-board and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the Regional Water Supply Commission at iwsadministration@crd.bc.ca. Delegation requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

5.1 Presentations

5.2 Delegations

6. GENERAL MANAGER'S REPORT

7. CONSENT AGENDA

7.1. 24-859 2025 Regional Water Supply Strategic Plan Engagement Update

Recommendation: 1. That the revised draft 2025 Strategic Plan for the Greater Victoria Water Supply System be endorsed; and
2. That staff be directed to proceed with the engagement plan.
(NWA)

Attachments: Staff Report: 2025 RWS Strategic Plan Engagement Update
Appendix A: Summary of Workshop Feedback
Appendix B: 2025 Draft Strategic Plan Outline

7.2. 24-860 Designation of Watershed Security Officers

Recommendation: The Regional Water Supply Commission recommends that the Capital Regional District Board:
Appoint Nathan Prenger as Watershed Security Officer for the purpose of Section 233 of the Local Government Act and Section 28(3) of the Offence Act, and in accordance with Capital Regional District Bylaw No. 2681.
(NWA)

Attachments: Staff Report: Designation of Watershed Security Officers

7.3. 24-856 Recommendations from Other Water Commissions

Recommendation: There is no recommendation. This report is for information only.

Attachments: Summary of Recommendations from Other Water Commissions

7.4. 24-857 Water Watch Report

Recommendation: There is no recommendation. The report is for information only.

Attachments: Water Watch Report

8. COMMISSION BUSINESS

8.1. 24-863 Proposed Regional Water Supply - Development Cost Charge Program and Bylaw Update

Recommendation: That staff be directed to complete further public and development community engagement related to the draft Regional Water Supply Development Cost Charges Background Report, attached as Appendix B, prior to drafting the Regional Water Supply Development Cost Charge Bylaw.
(NWA)

Attachments: Staff Report: Proposed RWS - DCC Program and Bylaw Update
Appendix A: Urban Systems – CRD RWS DCC: Engagement Summary
Appendix B: Urban Systems – Draft RWS DCC Background Report
Appendix C: Urban Development Letter and CRD Response

8.2. 24-858 Regional Water Supply Service 2025 Budget Requirement for Bear Hill Extension Project

Recommendation: That the cost of the Bear Hill Trunk Watermain Extension capital project No. 21-05 be cost-shared between the Regional Water Supply and Saanich Peninsula Water services, with up to 50% of the total cost being included in the 2025 Regional Water Supply Capital Plan.
(WA)

Attachments: Staff Report: RWS Service 2025 Budget Requirement for Bear Hill Extension Pr
Appendix A: SPW/RWS Transmission Main Project Coordination Schematic

8.3. 24-920 Demand Management Program Update

Recommendation: There is no recommendation. This report is for information only.

Attachments: Staff Report: Demand Management Program Update
Appendix A: Demand Management Research & Planning
Appendix B: Demand Management Outreach & Education

9. NOTICE(S) OF MOTION

10. NEW BUSINESS

11. MOTION TO CLOSE THE MEETING

11.1. 24-861 Motion to Close the Meeting

Recommendation: That the meeting be closed for Intergovernmental Relations in accordance with the Community Charter, Part 4, Division 3, Section 90 (2)(b). [2 Items]

12. RISE AND REPORT

13. ADJOURNMENT

Next Meeting: October 17, 2024

Votinq Key:
NWA - Non-weighted vote of all Commissioners
NWP - Non-weighted vote of participants (as listed)
WA - Weighted vote of all Commissioners
WP - Weighted vote of participants (as listed)

Capital Regional District

625 Fisgard St.,
Victoria, BC V8W 1R7

Meeting Minutes

Regional Water Supply Commission

Wednesday, July 17, 2024 **11:00 AM** **6th Floor Boardroom**
625 Fisgard St.
Victoria, BC V8W 1R7

PRESENT: G. Baird (Chair); K. Harper (Vice Chair); J. Caradonna; N. Chambers; C. Coleman; S. Duncan; C. Graham; S. Gray; C. Green; K. Guiry; S. Hammond (EP); K. Jordison (EP); S. Kim; D. Lajeunesse; T. Morrison (EP); T. Phelps Bondaroff; J. Rogers; C. Stock; M. Wagner; C. Plant (for M. Westhaver); A. Wickheim

STAFF: T. Robbins, CAO; A. Fraser, General Manager, Integrated Water Services; J. Ussery, Manager, Resource Planning, Watershed Protection; J. Marr, Senior Manager, Infrastructure Engineering; S. Irg, Senior Manager, Water Infrastructure Operations; G. Harris, Senior Manager, Environmental Protection; J. Kelly, Manager, Capital Projects; J. Zimmerman, Communications Coordinator; D. Dionne, Administrative Coordinator; M. Risvold, Committee Clerk

REGRETS: C. Stock, M. Westhaver, Z. de Vries

EP = Electronic Participation

The meeting was called to order at 11:00 am

1. TERRITORIAL ACKNOWLEDGEMENT

The Chair provided a territorial acknowledgement.

2. APPROVAL OF THE AGENDA

Item 10.1 was moved to item 5.3.

MOVED by Commissioner Phelps Bondaroff and SECONDED by Commissioner Green, That the agenda be approved as amended.
CARRIED

3. ADOPTION OF MINUTES

Adoption of the Minutes of the June 19, 2024 Meeting

Attachments: Draft Minutes, June 19, 2024

MOVED by Commissioner Kim and SECONDED by Commissioner Caradonna, That the Minutes of the June 19, 2024 meeting be adopted.
CARRIED

4. CHAIR'S REMARKS

The Chair acknowledged the earlier start time for the meeting and advised the boardroom is available on Friday in the event more time is needed for the workshop.

5. PRESENTATIONS/DELEGATIONS

5.1 Presentations

There were no presentations.

5.2 Delegations

5.2.1 Delegation - Jack Hull; Resident of District of Saanich: Re: Agenda Item: 10.1. Correspondence Re: Regional Water Supply Master Plan

J. Hull spoke to agenda item 5.3. Staff responded to a question from the commission with regard to concrete pressure pipe in the water distribution system.

5.3. Correspondence [Received]: From Mr. Jack Hull: Regional Water Supply Master Plan

This correspondence was received for information.

6. GENERAL MANAGER'S REPORT

There was nothing to report.

7. COMMISSION BUSINESS

7.1 Draft 2025 Strategic Plan for the Greater Victoria Water Supply System

Attachments: Staff Report: Draft 2025 Strategic Plan for the Greater Victoria Water Supply System
Appendix A: Regional Water Supply 2017 Strategic Plan
Appendix B: February 21, 2024, 2017 RWS Strategic Plan Close-out Report
Appendix C: 2025 Draft Strategic Plan Outline
Appendix D: Comments from the Water Advisory Committee
Appendix E: Presentation

A. Fraser spoke to item 7.1 and read the mission statement that was drafted through the management team at Integrated Water Services.

The commission participated in a strategic plan workshop facilitated by Joanna Winter.

MOVED by Commissioner Chambers and SECONDED by Commissioner Green, That staff take the actions and feedback received from the Commission and incorporate into the draft strategic plan for consideration at a future meeting.
CARRIED

7.2 Regional Water Supply Service 2024 Mid-Year Capital Projects and Operations Update

Attachments: Staff Report: RWS Service 2024 Mid-Year Cap Proj & Ops Update
Appendix A: Current Status of Active Projects

J. Marr and S. Irg spoke to item 7.2.

This report was received for information.

7.3 Water Quality Summary Report for Greater Victoria Drinking Water System - January to April 2024

Attachments: Staff Report: Water Quality Summary Report for GVDWS - Jan-Apr 2024
Appendix A: Water Quality Summary Report - GVDWS - Jan-Apr 2024

G. Harris spoke to item 7.3.

This report was received for information.

7.4 Recommendations from Other Water Commissions

Attachments: Summary of Recommendations from Other Water Commissions

This report was received for information.

7.5 Water Watch Report

Attachments: Water Watch Report

This report was received for information.

8. NOTICE(S) OF MOTION

There were none.

9. NEW BUSINESS

There was no new business.

10. CORRESPONDENCE

10.1 Correspondence [Received]: From Mr. Jack Hull: Regional Water Supply Master Plan

Attachments: Correspondence: Jack Hull: RWS Master Plan

Agenda item 10.1 was moved to item 5.3.

11. ADJOURNMENT

MOVED by Commissioner Coleman and SECONDED by Commissioner Green, That the meeting be adjourned at 1:13pm.
CARRIED

_____
CHAIR

_____
SECRETARY

Making a difference...together

RWSC 24-13

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024

SUBJECT **2025 Regional Water Supply Strategic Plan Engagement Update**

ISSUE SUMMARY

To provide an update and seek approval of the 2025 Strategic Plan outline, which has been updated based on the feedback provided from the Commission at its July 17, 2024, meeting.

BACKGROUND

At its July 17, 2024 meeting the Regional Water Supply Commission (Commission) participated in a workshop to provide valuable feedback on the draft 2025 Strategic Plan (Plan). The Commission requested that staff update the Strategic Plan outline based on the feedback provides and bring back to the Commission at the next meeting for approval.

The feedback from the commission has been captured in Appendix A - Summary of Workshop Feedback. Based on discussion in the meeting and the feedback from the commission, staff have updated the outline to incorporate added actions agreed upon by the Commission. Those changes are reflected in the updated Strategic Plan framework attached as Appendix B, with changes denoted in **contrast colour**.

Public Engagement Update

Staff have proposed a two-phase public engagement process, with information available on the Capital Regional District's (CRD) public engagement platform (GetInvolved.crd.bc.ca). The first phase informs the public about the planning framework and seeks to understand the community's interest in the plan and the preferred ways to share additional feedback as the strategic plan takes shape. Phase 1 of the public engagement will run from August 29 to September 30, 2024.

Starting in November 2024, the second phase would focus on seeking feedback from interested parties regarding the proposed Commitments, Priorities and Actions in a draft strategy. The second phase would include an online survey and open house, using feedback from phase one to inform decisions around in-person or virtual participation options. A response period of 45 days would allow for the receipt of responses to be included in an Engagement Summary to be brought back to the Commission at a future meeting.

ALTERNATIVES

Alternative 1
1. That the revised draft 2025 Strategic Plan for the Greater Victoria Water Supply System be endorsed; and
2. That staff be directed to proceed with the engagement plan.

Alternative 2
That this report be referred back to staff for additional refinement.

IMPLICATIONS

Service Delivery Implications

Further refinement of the Strategic Plan Outline may delay the planned public and First Nations engagement and ultimately the finalization of the Strategic Plan, however it is important that this Plan accurately represent the Commission's priorities for the next five to ten years.

CONCLUSION

The draft 2025 Strategic Plan outline for the Greater Victoria Water Supply System has been prepared. The vision for the plan is to produce a concise, strategic plan that serves the Regional Water Supply Commission, serves as a guiding document for service delivery and is suitable for public consumption. The planning horizon extends to 2050, focusing on Plan Commitments, Strategic Priorities, and Actions, while this specific Strategic Plan focuses on actions to be undertaken in the next five to ten years. Engagement, including feedback from the Regional Water Supply Commission, the Water Advisory Committee, the municipal and First Nations water purveyors and the public, is a key part of the development process. The next step is to proceed with the engagement plan and gather feedback to be incorporated before finalizing the plan.

RECOMMENDATION

1. That the revised draft 2025 Strategic Plan for the Greater Victoria Water Supply System be endorsed; and
2. That staff be directed to proceed with the engagement plan.

Submitted by:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

Appendix A: Summary of Workshop Feedback
Appendix B: 2025 Draft Strategic Plan Outline

APPENDIX A

Regional Water Supply Strategic Plan Update

Regional Water Supply Commission Workshop

July 17, 2024

Summary of Workshop Feedback

Prepared by Joanna Winter, July 2024

Contents

Workshop Overview and Comments

Session Overview

Joanna Winter was engaged by the Capital Regional District to assist with a process to update the 2017 Water Supply Strategic Plan. The Regional Water Supply Commission had requested staff to develop recommendations for an updated Strategic Plan, but not to create a whole new plan.

At an April 30th workshop, management staff reviewed the existing plan and developed recommendations for updated Commitments, with accompanying Priorities to help achieve the Commitments.

On May 28, a workshop was held during a scheduled meeting of the Water Advisory Committee. The purpose of this meeting was to discuss the proposed updates to the 2017 Water Supply Strategic Plan and receive input from the committee in order to develop recommendations to the Regional Water Supply Commission to inform its own strategic planning workshop to be held on July 17, 2024.

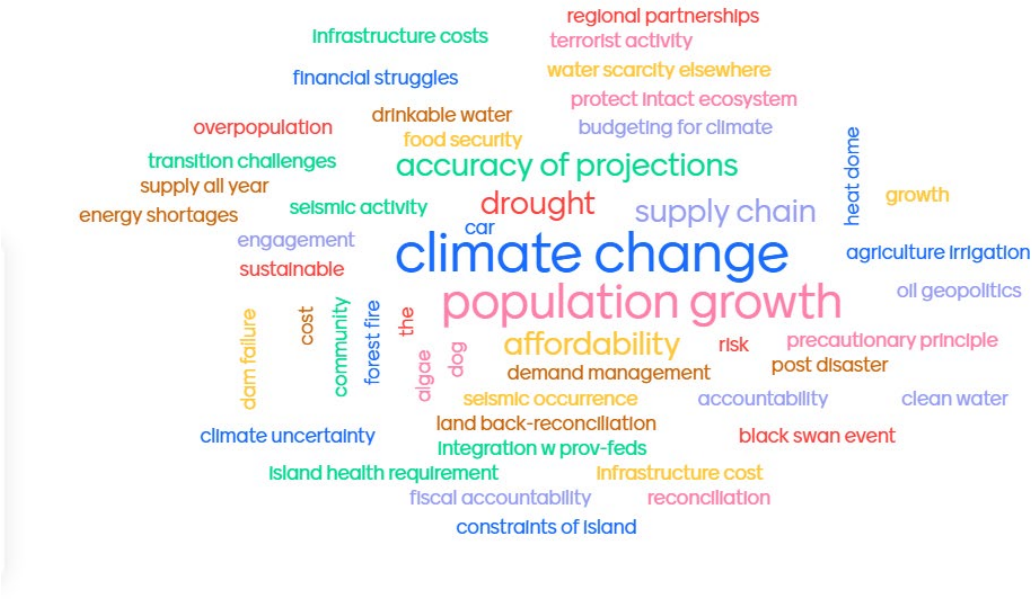
The Regional Water Supply Commission held its workshop during the regular Commission meeting on July 17, 2024. The Workshop process is attached in the Appendices.

During the Commissioner input portion of the workshop, Commissioners were asked to add substantive new priorities and/or actions, or propose amendments to the draft priorities and actions as presented. During the follow-up discussion, suggestions were separated into actionable items and those which could be construed as comments or principles. All suggestions will be summarized in detail in this report.

Follow-up items for staff are noted throughout this document in italics.

Trends

Using the online application Mentogram, Commission members were asked to add any additional externals trends or risks to the work previously done by staff and the Water Advisory Committee.



.

Guiding Principles

The following proposed guiding principles were presented to the group. In the 2017 Strategic Plan, these were referred to as "Focus Areas".

Empowering Staff For Sustainable Water Management

Supporting A Growing Region With Reliable Service

Respecting And Adapting To The Changing Environment

Managing Our Resources Effectively And Efficiently

Proactively Managing Internal And External Risks – Balancing

Fostering Collaborative Relationships With Customers And Partners To Improve Our Service.

During discussion on the commitments, priorities and actions, there were a number of comments about the importance of ensuring awareness of, adaptation to and compliance with federal and provincial legislative changes as they arise. It was suggested that consideration be given to acknowledging this in a guiding principle; although awareness of all legislation is integral to staff responsibilities, the general public may be reassured to see this explicitly stated in the Strategic Plan.

Mission Statement

The draft mission statement as developed by staff was presented for review and comment. The 2017 version of the Strategic Plan did not include a mission statement and staff felt it was important to include one in order to provide a clear overall purpose.

The General Manager, Integrated Water Services presented the Mission Statement, and asked for Commission input on a concern expressed by the Water Advisory Committee that the use of the term *drinking water* is too narrow in scope and should be expanded to include all water

Together we provide reliable, high-quality drinking water to help ensure the health and sustainability of the growing communities we serve today and in the future

Discussion included changing the term *drinking* to *potable, tap* or *drinkable* water.

Staff agreed to review these suggestions and consider appropriate wording changes to the mission statement.

As noted in the chart in the next section, these suggested changes could be incorporated into wording of Commitments and some Priorities.

Commitments, Priorities & Actions

The facilitator pointed out that another term for "Commitments" in strategic planning is "Goals". These are broad statements that guide the development of more specific "Priorities" (or "Objectives" to help achieve the goals. "Actions" are the actual work of implementing the Strategic Plan.

Commissioners were tasked with placing suggestions for amendments or new actions on the printouts displayed around the room. The *Comments* column in the following table contains each suggestion made during this exercise.

The group reviewed and discussed each comment/action noted. The *Follow-up* column contains specific commitments to action or further review that arose from discussion.

Commitment 1: Provide high quality, safe drinking water	
Comments	**Follow-up (if required)**
Change wording to "Provide High quality safe water" (delete 'drinking')	*Staff to review*
Priority 1: Protect and manage the Greater Victoria Water Supply Area for the protection of long-term sustainable high-quality source water	
Comments	**Follow-up (if required)**
Develop a policy that defines the parameters and requirements for consideration of renewable energy or environmentally sustainable enterprises in the Greater Victoria Watershed Area	*Incorporate as a new, longer-term action*
I always question the validity of the data and projections	
Update the risk assessment analysis (longer term) for multiple risks: • Population growth • Cyber-security • Seismic activity • Terrorist activity • Climate change/forestry impacts	This is foundational activity and staff undertake ongoing questioning of baseline statistics being used
Consider loss of tree canopy due to drought conditions	Ongoing activity
Begin exploring agreements with First Nations on land titles while the CRD retains operation use/access	*Staff will review this suggestion, but it was generally agreed that this activity should take place at the Board level*

Priority 2: Ensure drinking water quality with a multi-barrier risk-based approach	*Earlier comments apply to the use of 'drinking' throughout the Strategic Plan*
Comments	**Follow-up (if required)**
Concern about the impact of multiple users, climate plans, electrification on river flow, fish, drinking water and water for agriculture etc.	This is an ongoing concern for the Water Service. *Staff will review the document to see whether language could be enhanced*
Priority 3: Advance our understanding of the water supply area and source water to prepare for the future	
Comments	**Follow-up (if required)**
Water supply is rainfall, not infrastructure	Comment. No action required
Emergency supply options – tankers, desalination	This forms part of a longer-term discussion with other parties – local governments, provincial government with respect to risk management
Mimic natural forest ageing – leave logs in the ground with thinning	This must be balanced with the need to reduce risk of wildfire
Don't wait for municipalities – need for CRD to collect reliable data to based decisions on while also checking in with municipalities and other local governments. Of course, working closely is key but do not rely on what CRD water service cannot control	Staff confirmed that using reliable data on all assumptions is foundational to their work in this area
Water conversation – this region uses four time more water than European areas	Comment. No action required
Start exploring multi-jurisdictional legislative overlaps that may arise. This can help inform potential complexities for the next Strategic Plan (e.g., Canada Water Agency)	*See note under Guiding Principles regarding alignment with changing legislation at all levels of govenrment*

Commitment 2: Provide an adequate, reliable, long-term supply of drinking water	*Earlier comments apply to the use of 'drinking' throughout the Strategic Plan*
Comments	**Follow-up (if required)**
Add to this commitment recognition of water for other uses such as outdoor watering, agriculture, commercial, cleaning, etc. * Since we are providing this service it should be acknowledged formally (or we could change our scope)	*Earlier comments apply to the use of 'drinking' throughout the Strategic Plan. Staff will review the document for appropriate references to multiple uses of the region's water supply*
Delete the word 'drinking' from this commitment	*Earlier comments apply to the use of 'drinking' throughout the Strategic Plan*
Priority 1: Continuously plan and prepare for future water supply needs.	
Comments	**Follow-up (if required)**
Alternate water sources e.g. desalination	Previously addressed. No action required
Assist municipalities to enable post-disaster potable water strategies	Addressed in Commitment 3 Priority 3: Foster partnerships with municipalities and First Nations to develop a robust integrated drinking water plan for emergency response and natural disasters.
Long-term supply of water for agriculture	It is understood that all references to water supply include agriculture in this document; as noted above, staff will review the document for references to multiple uses of water
Priority 2: Enhance public connection to, confidence in and responsibility for water supply and value of water	
Comments	**Follow-up (if required)**
Explore other innovative public engagement strategies to help increase public participation. Emphasize in-person information sessions. Provide in-person public participation opportunities	*These suggestions will be taken into account during planning for the public engagement on the Strategic Plan and other opportunities for public engagement*
Share climate and risk modelling with the public so that they understand why costs and project are needed; to increase	Previously addressed in the comments. No action required

public trust and help them to understand what is needed and why	
Possible adequate supply of water for Sooke and Goldstream rivers for fall salmon returns	Ongoing program. No action required
Priority 3: Optimize our available water supply through adaptive demand management strategies	
Comments	**Follow-up (if required)**
Perhaps offer incentives for those homes with gravel lawns rather than grass	Comment. No action required
Priority 4: Implement a sustainable and equitable long-term financial plan	
Comments	**Follow-up (if required)**
Develop a very long-term capital asset budget that includes climate costing scenarios and potential cost-recovery opportunities	*This is in the Master Plan but could be considered for a long-term action*
Make a commitment to communities, residents, rate payers, developers etc. that there is always a commitment to act in a manner of fiscal responsibility, accountability for any Strategic Plan	Foundational. No action required
Overall I continue to hear that this is an adaptive plan and a guide – suggest to put this in the title – Example: This is a living document, adaptable guide, planning guide, to suggest these can be opportunities to be flexible when needed or to change the course if needed or change direction is a better way is shown	*Consider this type of language in an introduction to the final document*

Commitment 3: Provide efficient, effective and innovative operations of the drinking water supply system	*Earlier comments apply to the use of 'drinking' throughout the Strategic Plan*
Priority 1: Make evidence-based infrastructure decision to ensure reliable system performance and long-term sustainability	
Comments	**Follow-up (if required)**
Add 'community-responsive' after 'evidence-based'	*Staff will consider this suggestion*
Emphasize sustainable (green) technology	*Staff will consider this suggestion*
Align plans with changing provincial and federal legislation	*See note under Guiding Principles regarding alignment with changing legislation at all levels of government*
Priority 2: Assure long-term sustainability and capacity of water management operations through sufficient resources, robust processes, strategic partnerships, effective tools and continuous innovation	
Comments	**Follow-up (if required)**
Determine a standard of 'innovation' – are we open to collaborating with SpaceX? Or sticking to more 'tried and true' methods, which may be less 'leading edge'?	Comment. No action required
Seek opportunities to build localized supply chain/redundancies e.g. work with SIPP	Applies to CRD as a whole. *Staff will review for possible addition to existing language in Strategic Plan*
Seek opportunities to reduce power requirements to run water supply treatment and distribution	*Staff will review for possible addition to existing language in Strategic Plan*
Priority 3: Enhance the security and sustainability of the water supply by effectively managing risks and enhancing emergency response capabilities	
Comments	**Follow-up (if required)**
Desalination r	Previously addressed. No action required
Investigate options for supply from other sources (e.g. coastal river systems)	Previously addressed. No action required

Priority 4: Attract, develop and retain a diverse, knowledgeable and empowered workforce	
Comments	**Follow-up (if required)**
Include succession planning and promotions for innovation	*Although this applies more appropriately to the overall CRD HR strategy, staff will consider incorporating more explicit language about succession planning*
Create First Nation job shadowing/internships opportunities to strengthen relationships and incorporate traditional knowledge	This is already explicit in the CRD's HR strategy

Voting on Priorities

Each Commissioner was provided with 10 dots that they could use to vote for those actions that they believed were the highest priority. This exercise was done to provide staff with an indication of Commission priorities, although it was pointed out that longer-term actions with a higher number of votes would not necessarily be moved up to the medium- or near-term. The actions below are listed in the order of the votes which they received. Actions receiving no votes are not listed.

It is important to note that, due to lack of time, this exercise was carried out after the close of the Commission meeting, at the request of Commissioners who were eager to provide input on the actions. The input noted below does not represent all Commissioners, but is included for the record. Commissioners may wish to redo this exercise at a future meeting where all of those who wish can provide input.

Action	Commitment/Priority	Votes Received
Mature our asset and maintenance management processes to maximize data driven decision making	Commitment 3, Priority 1, Medium-term	6
Foster partnerships with municipalities and First Nations to develop a robust integrated drinking water plan for emergency response and natural disasters	Commitment 3, Priority 3, Near-term	6
Undertake post-wildfire and sediment delivery modelling to inform water treatment and water quality preparedness plans and filtration design prior to and after the introduction of alternate water sources. (Link	Commitment 1, Priority 3, Longer-term	4

Action	Commitment/Priority	Votes Received
hydrodynamic model and water quality model)		
Continue to monitor the watershed and implement climate adaptation and mitigation initiatives to reduce the impacts associated with the magnitude and rate of projected climate change on ecosystems, water quality and infrastructure in the Greater Victoria Water Supply Area and update strategies where needed.	Commitment 1, Priority 1, Near-term	3
Explore opportunities for integrating First Nations traditional ecological knowledge and perspectives in the protection and stewardship of the Greater Victoria Water Supply Area	Commitment 1, Priority 1, Longer-term	3
Define a strategy to increase additional water resources, building on alternatives outlined in Master Plan a. Refine strategy and infrastructure needs to access additional capacity within existing CRD land to meet 2050 projected demands b. Define ultimate water resources capacity within existing CRD owned watershed lands	Commitment 2, Priority 1, Medium-term	3
Cultivate strategic partnerships with skilled contractors and consultants through long-term agreements ensuring access to expertise and resources for timely responses to procurement opportunities to meet capital needs	Commitment 3, Priority 2, Medium-term	3
Update risk assessment analysis for multiple risks: • Population growth • Cyber-security • Seismic activity • Terrorist activity	Commitment 1, Priority 1 *** This received three dots, but during discussion prior to voting, it was agreed that this**	3

Action	Commitment/Priority	Votes Received
• Climate change/Forestry impacts	**is a foundational approach always undertaken by staff**	
Protect water supply and ecosystems from contaminants and invasive plants, animals, and pathogens	Commitment 1, Priority 1, Near-term	2
On a prescribed timeframe, routinely update assumptions and future growth projection as it is related to the Master Plan and Development Cost Charge Programs	Commitment 2, Priority 1, Near-term	2
In collaboration with municipal partners, develop a regional strategy and standards regarding storage capacity (reservoirs) within the transmission and municipal distribution systems.	Commitment 2, Priority 1, Medium-term	2
Develop and promote curriculum within schools on drinking water	Commitment 2, Priority 2, Near-term	2
Continue with public engagement through official channels like the Water Advisory Committee	Commitment 2, Priority 2, Near-term	2
Continue to engage First Nations and put in place Bulk Water Agreements supporting development of stronger government to government relationships	Commitment 2, Priority 4, Near-term	2
Identify grant and partnership opportunities to fund future filtration infrastructure needs	Commitment 2, Priority 4, Medium-term	2
Foster partnerships with technology providers and research institutions to stay at the forefront of innovation in water management	Commitment 3, Priority 2, Medium-term	2
Explore opportunities for Mutual Aid Agreements	Commitment 3, Priority 2, Medium-term	2
Include succession planning and innovation promotion in the Strategic Plan	Commitment 3, Priority 3 * **This was not actually identified as a new Action**	2
Expand opportunities for traditional knowledge and First	Commitment 1, Priority 1, Medium-term	1

Action	Commitment/Priority	Votes Received
Nations input in stewardship of watershed lands		
Continue to enhance capabilities in wildfire prevention, preparedness, early detection, suppression, forest fuel reduction and post-wildfire emergency rehabilitation measures to reduce and mitigate the potential impacts of a large-scale wildfire in the Greater Victoria Water Supply Area on water quality and supply	Commitment 1, Priority 1, Medium-term	1
Develop a policy that defines the parameters and requirements for consideration of renewable energy or environmentally sustainable enterprises in the GVWSA	Commitment 1, Priority 1, Longer -term ***New Action**	1
Develop a management strategy specific to non-catchment lands	Commitment 1, Priority 1, Longer-term	1
Continue to update and expand the drinking water safety plan	Commitment 1, Priority 2, Near-term	1
Continue baseline water sampling and data collection projects which support future infrastructure design	Commitment 1, Priority 2, Near-term	1
Ongoing water quality monitoring program in source and treated water to verify proper system operations and identify potential water quality risks	Commitment 1, Priority 2, Near-term	1
Complete modelling of climate change effect on forests and effectiveness of fuel reduction treatments to help guide management of the Greater Victoria Water Supply Area forests into the future	Commitment 1, Priority 3, Near-term	1
Develop reservoir inflow and circulation models and conduct analyses to improve the understanding of these linkages and how they affect drinking water quality and the health of aquatic ecosystems	Commitment 1, Priority 3	1

Action	Commitment/Priority	Votes Received
Leveraging Internet of Things, create a digital 'dashboard' with real time reporting on key weather, stream flow, reservoir level, reservoir release and other water quality and supply data to facilitate internal awareness and decision-making and communication with outside regulators and stakeholders. Links to public engagement	Commitment 1, Priority 3, Longer-term	1
Work collaboratively with Municipal partners to clarify and define service level related to water supply and lines of demarcation	Commitment 1, Priority 2, Medium-term	1
Continue to evolve and promote public tours of the watershed	Commitment 2, Priority 2, Near-term	1
Develop a long -term media/communication strategy that engages the public on efforts to protect and improve the resilience of drinking water treatment and supply	Commitment 2, Priority 2, Medium-term	1
Develop and evolve policy and bylaws to support effective demand management and maximizing water supply	Commitment 2, Priority 3, Medium-term	1
Continuous refinement of policy and practices to facilitate optimal supply and demand management	Commitment 2, Priority 3, Longer-term	1
Continue to refine the long term financial plan	Commitment 2, Priority 4, Medium-term	1
Refine asset class specific maintenance plans to optimize and extend asset life	Commitment 3, Priority 1, Medium-term	1
Expand critical spares program to continue to reduce system downtime or service interruptions	Commitment 3, Priority 1, Longet-term	1
Participate in industry associations to leverage applicable operational experience and best practices that can add value to our system	Commitment 3, Priority 2, Near-term	1

Action	Commitment/Priority	Votes Received
Continuously evaluate and integrate innovative solutions, such as smart meters, leak detection technologies, and renewable energy sources, to enhance system resilience and sustainability.	Commitment 3, Priority 2, Medium-term	1
Continuously evaluate and integrate innovative solutions, such as smart meters, leak detection technologies, and renewable energy sources, to enhance system resilience and sustainability.	Commitment 3, Priority 2, Medium-term	1
Explore the technology, tools and sensors that can further inform and enhance specific asset class maintenance plans	Commitment 3, Priority 2, Longer-term	1
Include succession planning and innovation promotion in the Strategic Plan	Commitment 3, Priority 4 * **This was not actually identified as a new Action**	
Enhance personal and professional development opportunities to better support career advancement, including formal and informal mentorship opportunities	Commitment 3, Priority 4, Medium-term	1
Ongoing training for management through the CRD's iLead program in partnership with Royal Roads University	Commitment 3, Priority 4, Medium-term	1

Next Steps

Due to the lengthy discussion on the proposed changes and comments on Priorities and Actions, there was not time to complete the workshop and review the proposed next steps. It was agreed that staff will review the notes form the workshop and bring a revised draft of the Strategic Plan to the Commission's September meeting for review and adoption. Unfortunately, the Commission was not able to review the proposed step of public consultation on the draft Strategic Plan. It was intended that this would commence in November; however, advance planning is required in order to meet this timeline.

When public consultation is completed, any suggestions would be incorporated into a revised draft of the Strategic Plan, which would be brought back to the Commission for endorsement and referral to the Capital Regional District Board.

Schedule 1: Workshop Process

Premise:

In addition to looking at Commitments, and the Priorities under each Commitment, the Commission will have an opportunity to consider proposed near-, medium- and longer-term Actions. The following approach is intended to maximize use of the time available.

1. Review — 20 minutes

Joanna and Alicia will go over the slide deck for information and context

2. Input (Interactive Session) — 10 minutes
    - Members will be asked to write on sticky notes any Actions they feel are missing and/or any changes they would like to see in Commitments/Priorities (with the main focus being on the Actions
    - Actions must be clearly worded and labelled as near-, medium- or long-term
3. Discussion — 35 – 45 minutes
    - The group will discuss each proposed addition or change (author may make a pitch as to why they wish this included, as necessary)
4. Vote — 5 minutes
    - By show of hands, members will vote on changes they wish to include in the draft Water Supply Strategic Plan
    - Items receiving a majority vote will be included
5. Prioritize (Interactive Session) — 5 minutes
    - Using 10 sticky dots provided, members will indicate the actions they feel are most important
    - These are not necessarily ones to be done first, as some will require groundwork before they can be undertaken
6. Discussion (as time permits)
    - The group will discuss the five (or so) Actions that receive the most dots to better understand priorities
    - This exercise will provide important feedback to staff
7. Next Steps
    - Review of next steps by Alicia
8. Resolution
    - Following the discussion, the Chair can introduce the recommendation contained in the staff report

2025 DRAFT STRATEGIC PLAN OUTLINE

MISSION STATEMENT:

"Together we provide reliable, high-quality drinkable water to help ensure the health and sustainability of the growing communities we serve today and in the future."

GUIDING PRINCIPLES:

Empowering Staff For Sustainable Water Management

Our staff are the cornerstone of our operations, essential for maintaining the reliability and efficiency of our water supply service. Through strategic investments in training, retention, recruitment, and safety protocols, we cultivate a supportive environment where our team can thrive. Prioritizing their well-being and fostering a culture of innovation ensures the continued success and resilience of our water management efforts and our service.

Supporting A Growing Region With Reliable Service

Our commitment to the region is to provide clean, reliable water to our customers now and into the future. We achieve this through forward-thinking planning to ensure we are preparing for the future demands on our water system. We carefully balance internal and external pressures, costs, and investments over time to meet the changing needs.

Respecting And Adapting To The Changing Environment

We foster a culture of respect and stewardship of the watershed lands to supply high quality source water, while also protecting biodiversity and forest sustainability. This involves adapting our infrastructure and operational practices to enhance resilience against extreme weather events and other climate and environmental changes.

Managing Our Resources Effectively And Efficiently

The sustainability and longevity of the water supply cannot be achieved through infrastructure investments alone. Implementing strategies to manage, maximize and optimize utilization of existing resources is at the heart of preparing for the future. We are improving efficiency by equipping staff with the tools they need to do their jobs and with data to make better informed decisions.

Proactively Managing Internal And External Risks – Balancing

The implementation of a comprehensive risk management strategy is integral to all aspects of our work serving the region. This involves balancing the consideration of opportunities and risks, with a focus on allocating resources effectively to maintain and enhance current operations. We continue to prioritize the identification and mitigation of risks to our water supply system and water quality, particularly those related to climate change impacts, service reliability, and associated health and safety concerns for both staff and the communities we serve.

Fostering Collaborative Relationships With Customers And Partners To Improve Our Service

We must demonstrate the value of and effort behind the water supply service to foster appreciation and respect for this essential resource. We advance this by openly sharing information about the water supply system and its operations to the public, while actively seeking feedback on our service. We also collaborate with municipal staff to continue improving and aligning our services to the needs of the region's residents. We build strong partnerships and create opportunities for collaboration so we can continue to improve.

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

1. Protect and Manage the Greater Victoria Water Supply Area for the protection of long-term sustainable high-quality source water.

ACTIONS:

Near-Term Actions

- Protect water supply and ecosystems from contaminants and invasive plants, animals, and pathogens. Example Initiatives:
  a. Complete study to document biosecurity risk and revise or implement new biosecurity protection measures

- Continue to monitor the watershed and implement climate adaptation and mitigation initiatives to reduce the impacts associated with the magnitude and rate of projected climate change on ecosystems, water quality and infrastructure in the Greater Victoria Water Supply Area and update strategies where needed. Example Initiatives:
  a. Undertake a feasibility study to determine optimal siting and operating procedure to access cooler deep northern Sooke Lake Basin water. (3 to 5yrs informed by model inflow model)
  b. Develop a forest management strategy or plan to prioritize and guide forest management treatments and activities

Medium-Term Actions

- Continue to enhance capabilities in wildfire prevention, preparedness, early detection, suppression, forest fuel reduction and post-wildfire emergency rehabilitation measures to reduce and mitigate the potential impacts of a large-scale wildfire in the Greater Victoria Water Supply Area on water quality and supply. Example Initiatives:
  a. Increased use of infrared and drone technology and monitoring software to provide early detection and monitoring
  b. Develop post wildfire response plans to protect water quality
  c. Trial the use of prescribed burning and other techniques to manage forest fuel build up.

- Expand opportunities for traditional knowledge and First Nations input in stewardship of watershed lands.

- Continue to seek ownership, management, or influence of watershed lands and watershed buffer lands in aligned with Greater Victoria Water Supply Area land prioritization.

Longer-Term Actions

- Explore opportunities for integrating First Nations traditional ecological knowledge and perspectives in the protection and stewardship of the Greater Victoria Water Supply Area
- Develop a management strategy specific to non-catchment lands
- Develop a policy that defines the parameters and requirements for consideration of renewable energy or environmentally sustainable enterprises in the Greater Victoria Watershed Area

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

2. Ensure drinking water quality with a multi-barrier risk-based approach.

ACTIONS:

Near-Term Actions
• Continue to update and expand the drinking water safety plan
• Refine the schedule and delivery strategy for the implementation of filtration and other related infrastructure improvements. Include consideration for predecessors, successor and triggers for each task and step.
• Continue baseline water sampling and data collection projects which support future infrastructure design.
• Ongoing water quality monitoring program in source and treated water to verify proper system operations and identify potential water quality risks. This also includes research and studies into contaminates of emerging concern (e.g. Per- and polyfluoroalkyl substances (PFAS), microplastics, 6PPD (a common rubber antiozonant, with major application in vehicle tires) etc.)
• Maintain, enhance the cross-connection program.
Medium-Term Actions
• Commence water filtration pilots to refine the design parameters for future water treatment processes and cost estimate, to inform preliminary design
• Maintenance of ISO 17025 Laboratory accreditation and Provincial Health Officer certification
Longer-Term Actions
• Enhance/expand network monitoring. Remote continuous lake monitoring.

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

3. Advance our understanding of the water supply area and source water to prepare for the future.

ACTIONS:

Near-Term Actions
• Complete modelling of climate change effect on forests and effectiveness of fuel reduction treatments to help guide management of the Greater Victoria Water Supply Area forests into the future.
Medium-Term Actions
• Develop reservoir inflow and circulation models and conduct analyses to improve the understanding of these linkages and how they affect drinking water quality and the health of aquatic ecosystems.
• Enhance, expand, and integrate the monitoring of watershed hydrology and water quality in the Greater Victoria Water Supply Area to improve understanding of the linkages among weather, stream flows, reservoir circulation and water quality.
• Continue to partner with the Province, Canadian Forest Service, University of Victoria, the forWater Network and others to better understand the water supply area forested and aquatic ecosystems, risks from insects, diseases, and invasive species; to inform best management for water supply and congruent natural values.
• Assess forest management trials (thinning, juvenile spacing, prescribed burning) in terms of the impact of the treatment on forest fuel, tree and stand growth and health, microclimate
Longer-Term Actions
• Undertake post-wildfire and sediment delivery modelling to inform water treatment and water quality preparedness plans and filtration design prior to and after the introduction of alternate water sources. (Link hydrodynamic model and water quality model.)
• Leveraging Internet of Things, create a digital ‘dashboard’ with real time reporting on key weather, stream flow, reservoir level, reservoir release and other water quality and supply data to facilitate internal awareness and decision-making and communication with outside regulators and stakeholders. Links to public engagement.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

1. Continuously plan and prepare for future water supply needs.

ACTIONS:

Near-Term Actions
• On a prescribed timeframe, routinely update assumptions and future growth projection as it is related to the Master Plan and Development Cost Charge Programs.
Medium-Term Actions
• Define a strategy to increase additional water resources, building on alternatives outlined in Master Plan **a.** Refine strategy and infrastructure needs to access additional capacity within existing CRD land to meet 2050 projected demands **b.** Define ultimate water resources capacity within existing CRD owned watershed lands
• In collaboration with municipal partners, develop a regional strategy and standards regarding storage capacity (reservoirs) within the transmission and municipal distribution systems.
• Work collaboratively with Municipal partners to clarify and define service level related to water supply and lines of demarcation.
Longer-Term Actions
• If required, develop a land acquisition strategy to expand long term water supply to meet the needs beyond 2050.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

2. Enhance public connection to, confidence in and responsibility for water supply and value of water.

ACTIONS:

Near-Term Actions
• Continue to evolve and promote public tours of the watershed
• Develop and promote curriculum within school on drinking water.
• Develop an ongoing virtual speaker series that would include presentations by third party experts on emerging topics concerning water.
• Continue with public engagement through official channels like the Water Advisory Committee.
Medium-Term Actions
• Develop a long -term media/communication strategy that engages the public on efforts to protect and improve the resilience of drinking water treatment and supply.
• Assess opportunities to receive two-way communication with existing customers related to the quality of service provided.
Longer-Term Actions
• Develop Live Data stream/website or App on water system – outages, fun facts, and construction.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

3. Optimize our available water supply through adaptive demand management strategies.

ACTIONS:

Near-Term Actions
• Define the “by sector” demand baseline and define long term targets.
Medium-Term Actions
• Leverage baseline and targets to define a multi-year demand management strategy • Develop and evolve policy and bylaws to support effective demand management and maximizing water supply. • Investigate opportunities for creating shared and consistent data sets with municipalities to facilitate efficient trending.
Longer-Term Actions
• Continuous refinement of policy and practices to facilitate optimal supply and demand management.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

4. Implement a sustainable and equitable long-term financial plan.

ACTIONS:

Near-Term Actions
• Implement a development cost charge (DCC) program and Bylaw for the Regional Water Supply
• Continue to engage First Nations and put in place Bulk Water Agreements supporting development of stronger government to government relationships
Medium-Term Actions
• Continue to refine the long-term financial plan
• **Investigate the introduction of a framework that measures the investment in climate adaptation and mitigation vs. the cost of inaction.**
• Identify grant and partnership opportunities to fund future filtration infrastructure needs
Longer-Term Actions
• Continue to assess opportunities to streamline or strengthen utility governance

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

1. Make evidence-based and community-responsive infrastructure decisions to ensure reliable system performance and long-term sustainability.

ACTIONS:

Near-Term Actions
• Continue to develop and consolidate various risk registries to prioritize expenditures based on risk.
Medium-Term Actions
• Mature our asset and maintenance management processes to maximize data driven decision making. Example Initiatives: a. Align our work management tools and business processes to improve maintenance management practices, efficiency, and reliability. b. Define data standards and Key Performance Indicators (KPIs) related to maintenance and asset management and develop dashboards to track and identify trends. c. Refine the comprehensive asset management plan to prioritize maintenance and capital projects.
• Refine asset class specific maintenance plans to optimize and extend asset life
• Continue to develop and improve our SCADA system to inform operational decision making
Longer-Term Actions
• Create and automate integrated process narrative for the transmission system to optimize system performance and improve energy efficiency.
• Expand critical spares program to continue to reduce system downtime or service interruptions.
• Invest in technology for decision-making support and reporting.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

2. Assure long-term sustainability and capacity of water management operations through sufficient resources, robust processes, strategic partnerships, effective tools, and continuous innovation.

ACTIONS:

Near-Term Actions
• Continuously assess and improve internal processes and procedures to streamline operations, reduce costs and increase efficiency. Example Initiatives: a. Align our work management system and Maintenance Management process
• Modernize contract and project management tools, to support more efficient and effective project delivery and budgeting.
• Participate in industry associations to leverage applicable operational experience and best practices that can add value to our system.
Medium-Term Actions
• Continuously evaluate and integrate innovative solutions, such as smart meters, leak detection technologies, and renewable energy sources, to enhance system resilience, sustainability **and support our corporate energy efficiency and emissions reduction goals as outlined in the CRD Climate Action Strategy.**
• Cultivate strategic partnerships with skilled contractors and consultants through long-term agreements ensuring access to expertise and resources for timely responses to procurement opportunities to meet capital needs.
• Foster partnerships with technology providers and research institutions to stay at the forefront of innovation in water management.
• Create agreements with municipalities for shared capital delivery of contracts.
• Explore opportunities for Mutual Aid Agreements
Longer-Term Actions
• Develop educational initiatives (workshops, webinars, etc.) to assist potential vendors understand and navigate the procurement process effectively.
• Explore the technology, tools and sensors that can further inform and enhance specific asset class maintenance plans.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

3. Enhance the security and sustainability of the water supply by effectively managing risks and enhancing emergency response capabilities.

ACTIONS:

Near-Term Actions
• Foster partnerships with municipalities and First Nations to develop a robust integrated drinking water plan for emergency response and natural disasters **and in alignment with the evolving requirements of the Emergency and Disaster Mitigation Act.**
• Continue regular safety training and drills for employees focusing on WorkSafeBC requirements, best practices for handling hazardous materials, operating equipment safely, and responding to emergencies effectively.
• Continue to actively protect the Greater Victoria Water Supply Area and water supply infrastructure from unauthorized physical activities or access. Examples of Initiatives would include: a. Considering opportunities to acquire ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer. b. Explore the potential for partnerships with other CRD departments, not for profit organizations, and First Nations in the acquisition and management of important buffer lands adjacent to the GVWSA. • Identify and mitigate risks to our digital environmental to safeguard against cyber threats and data breaches.
• Continue to develop and resource the dam safety program, while fostering strong relationship with British Columbia Dam Safety Office (group)
• Develop and implement Dam Safety Public Engagement and Communication plans, including a public-facing webpage with dam safety and emergency preparedness information.
• Construct the Instrumentation System Improvements at Sooke Lake Dam, including integrating instrumentation data to SCADA system, to improve dam safety, warning time, and emergency preparedness.
Medium-Term Actions
• Enhance risk register with physical and cyber security concerns to guide mitigation measures.
• Implement Dam Safety Instrumentation improvements at large dams. Work to be prioritized based on each dam's Dam Failure Consequence Classification.
• Engage consulting industry to identify at innovative delivery alternatives to expedite the delivery of the backlog of dam upgrades to meet regulatory requirements.
• Reassess large risks to dam portfolio, including regional seismic risk, flood risk, and plan for capital improvements.
Longer-Term Actions
• Formalize and document the dam safety management system
• Design and implement seismic rehabilitation and capital improvements at higher consequence dams, including Sooke Lake Dam and Deception Gulch Dam.
• Complete legislated Dam Safety Reviews with support of expert consultants to reassess dam safety issues and planned capital improvements.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

4. Attract, develop, and retain a diverse, knowledgeable and empowered workforce.

ACTIONS:

Near-Term Actions
• Continue IWS Utility Operator cross training program within each Environmental Operator Certification Program discipline.
• Support and encourage staff to participate in industry associations such as BCWWA, CWWA or AWWA or others.
• Continue to partner with post-secondary Co-op programs to consider cooperative education opportunities.
• Ongoing evaluation and success of the CRD's Utility Operator Program, this is an internal program designed to provide career development and progression as utility staff gain additional experience and related British Columbia Environmental Operators Certificate Program certifications.
• Continue to partner with CRD Human Resources and Corporate Safety on related training opportunities, including personal and professional development.
• Continue to explore formal and informal opportunities for development, through temporary assignments, senior pay opportunities, as well as through auxiliary posted opportunities.
Medium-Term Actions
• Enhance personal and professional development opportunities to better support career advancement, including formal and informal mentorship opportunities.
• **Develop a long-term resource strategy and succession planning program for the service that considers the strategic priorities, as well as the changing infrastructure landscape within the service.**
• Ongoing training for Management through the CRD's iLead program in partnership with Royal Roads University.
Longer-Term Actions
• Provide training to management, team leads and supervisors on Effective Utility Management or equivalent.

Making a difference...together

RWSC 24-10

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024

SUBJECT **Designation of Watershed Security Officers**

ISSUE SUMMARY

To appoint additional Watershed Security Officers with authority to enforce Bylaw No. 2804, Capital Regional District (CRD) Water Supply Area Regulations and Bylaw No. 4225, CRD Parks Regulation.

BACKGROUND

Bylaw No. 2804, CRD Water Supply Area Regulations, designates personnel authorized to enforce the bylaw. Authorized personnel are defined as "peace officer, conservation officer, or person appointed or employed by the CRD as a park officer, animal control officer, bylaw enforcement officer, *watershed security officer*, or other authorized CRD employee".

Watershed Security Officers were last appointed in July 2023 and currently there are five appointed. A review of roles and training indicates there is one additional Watershed Security Officer to be designated at this time. CRD staff appointed as Watershed Security Officers receive bylaw training and have experience with bylaw compliance and enforcement for the Greater Victoria Water Supply Area (GVWSA). Watershed Security Officers supplement the existing service of CRD Bylaw Enforcement Officers who will continue to provide advice, additional coverage, and assistance with serious and complex incidents in the GVWSA.

The CRD Parks Regulation Bylaw No. 4225 was amended in June 2017 to include Watershed Security Officers to provide authority to enforce park regulations along the Sooke Hills Wilderness Trail (portion of the Great Trail) through and near the GVWSA. Parks Officers were already designated with authority to enforce the Water Supply Area Regulation. Both CRD Regional Parks and Watershed Protection officers provide compliance and enforcement regardless of whether an infraction occurs within or outside of the trail corridor. Regional Parks and Watershed Protection staff liaise to provide a consistent approach with the public in providing compliance and enforcement along the trail.

Pursuant to Section 233 of the *Local Government Act* and Section 28(3) of the *Offence Act* and in accordance with CRD Bylaw No. 2681, the Regional Board must make resolutions for appointment to the office of Watershed Security Officer.

ALTERNATIVES

Alternative 1
The Regional Water Supply Commission recommends that the Capital Regional District Board:
Appoint Nathan Prenger as Watershed Security Officer for the purpose of Section 233 of the Local Government Act and Section 28(3) of the Offence Act, and in accordance with Capital Regional District Bylaw No. 2681.

Alternative 2
That no additional Watershed Security Officers be appointed at this time.

IMPLICATIONS

Service Delivery Implications

The appointment of Watershed Security Officers assists CRD staff in delivering on compliance and enforcement of the Water Supply Area Regulation to protect drinking water for Greater Victoria for the long term.

Nathan Prenger's qualifications for bylaw enforcement are supported by his completion of the Bylaw Compliance, Enforcement & Investigative Skills Level 1 Certificate. In addition to this key certification, he has undergone training in managing aggressive behavior, including Verbal Judo and Violent and Aggressive Behaviour Management courses. His training also includes a documented review of Watershed Security Patrol Procedures with Security Program staff. These courses equip him with the necessary skills to enforce bylaws, manage aggressive behavior, and conduct security patrols effectively.

Social Implications

The ability to enforce the Water Supply Area Regulation is important in maintaining compliance and society's expectation for a closed watershed for drinking water. The Sooke Hills Wilderness Trail and the increased residential growth in the Langford and Goldstream areas are increasing pressure as members of the public look for new and interesting areas for recreation nearby. Existing security infrastructure (gates and fences) provides a visual barrier and a barrier to vehicles and motorcycles but cannot keep out pedestrians and cyclists without presence and enforcement.

CONCLUSION

To enforce CRD Bylaw No. 2804 Water Supply Area Regulations and Bylaw No. 4225 Parks Regulation, it is recommended that the CRD Board make resolutions for appointment to the office of Watershed Security Officer.

RECOMMENDATION

The Regional Water Supply Commission recommends that the Capital Regional District Board:
Appoint Nathan Prenger as Watershed Security Officer for the purpose of Section 233 of the Local Government Act and Section 28(3) of the Offence Act, and in accordance with Capital Regional District Bylaw No. 2681.

Submitted by:	Annette Constabel, M.Sc., RPF., Senior Manager, Watershed Protection
Concurrence:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

Capital Regional District

HOTSHEET AND ACTION LIST

Saanich Peninsula Water Commission

Thursday, July 18, 2024 **9:30AM** **Meeting Room 2**
Sidney Community Safety Building
2245 Oakville Ave.
Victoria, BC

The following is a quick snapshot of the FINAL Saanich Peninsula Water Commission decisions made at the meeting. The minutes will represent the official record of the meeting. A name has been identified beside each item for further action and follow-up.

3. ADOPTION OF MINUTES

The minutes of the May 16, 2024 meeting were adopted as circulated.

7. COMMISSION BUSINESS

The following Items were received for information:

7.1 Saanich Peninsula Water Service 2024 Mid-Year Capital Projects and Operations Update
7.2 Summary of Recommendations from Other Water Commissions
7.3 Water Watch Report

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued September 16, 2024

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	September 30 5 Year Ave		September 30/23		September 15/24		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	64,109	14,104	61,346	13,496	64,421	14,173	69.5%
Goldstream	6,644	1,462	7,459	1,641	8,176	1,799	82.5%
Total	70,753	15,566	68,805	15,137	72,598	15,971	70.7%

2. Average Daily Demand:

For the month of September	171.1 MLD	37.65 MIGD
For week ending September 15, 2024	158.5 MLD	34.87 MIGD
Max. day September 2024, to date:	195.0 MLD	42.91 MIGD

3. Average 5 Year Daily Demand for September

Average (2019 - 2023)	157.4 MLD [1]	34.63 MIGD [2]

[1]MLD = Million Litres Per Day [2]MIGD = Million Imperial Gallons Per Day

4. Rainfall September:

Average (1914 - 2023):	65.5 mm
Actual Rainfall to Date	16.9 mm (26% of monthly average)

5. Rainfall: Sep 1- Sep 15

Average (1914 - 2023):	24.9 mm
2023/2024	16.9 mm (68% of average)

6. Water Conservation Action Required:

CRD's Stage 1 Water Conservation Bylaw is now in effect through September 30, 2024
Visit our website at www.crd.bc.ca/water for more information.

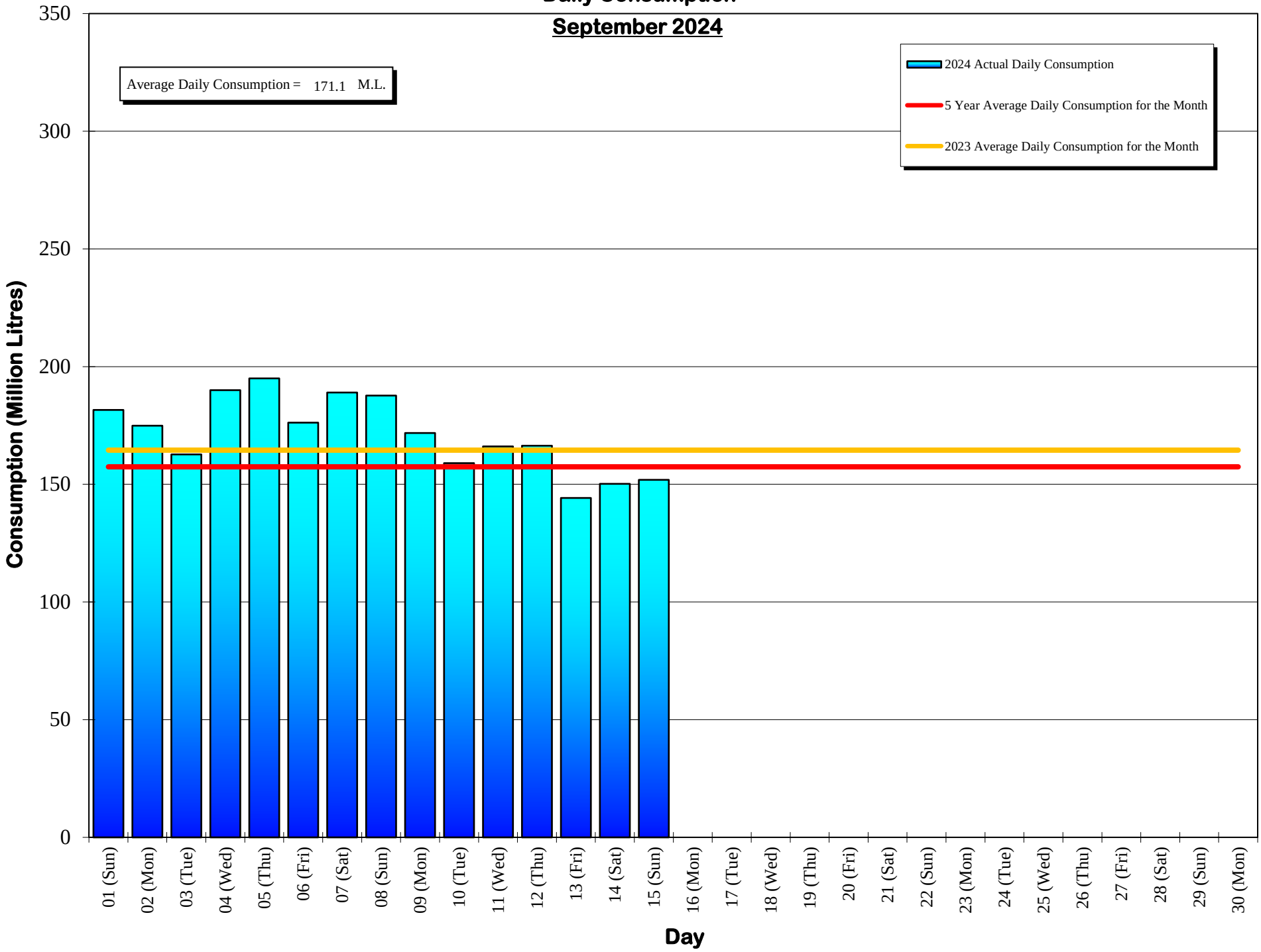
If you require further information, please contact:

Alicia Fraser, P. Eng.
General Manager, CRD - Integrated Water Services
or
Glenn Harris, Ph D., RPBio
Senior Manager - Environmental Protection

Capital Regional District Integrated Water Services
479 Island Highway
Victoria, BC V9B 1H7
(250) 474-9600

Daily Consumption

September 2024



J:\WATERENG\HYDROLGY\AMRIT\MONTHEND.24\H2o watch 2024Cons. Chart

Daily Consumptions: - September 2024

Date	Total Consumption (ML) [1.]		(MIG) [2.]	Air Temperature @ Japan Gulch High (°C)	Low (°C)	Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am Rainfall (mm)	Snowfall [3.] (mm)	Total Precip.
01 (Sun)	181.6		39.9	28	15	Cloudy / P. Sunny	0.0	0.0	0.0
02 (Mon)	174.9		38.5	24	13	Sunny / P. Cloudy	0.0	0.0	0.0
03 (Tue)	162.7		35.8	21	12	Cloudy / P. Sunny	0.0	0.0	0.0
04 (Wed)	190.0		41.8	25	12	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Thu)	195.0	<=Max	42.9	30	14	Sunny	0.0	0.0	0.0
06 (Fri)	176.2		38.8	30	16	Sunny	0.0	0.0	0.0
07 (Sat)	189.0		41.6	27	16	Cloudy	0.0	0.0	0.0
08 (Sun)	187.7		41.3	23	15	Cloudy / P. Sunny	0.0	0.0	0.0
09 (Mon)	171.8		37.8	21	13	Sunny / P. Cloudy	0.0	0.0	0.0
10 (Tue)	159.0		35.0	21	11	Sunny / P. Cloudy / Showers	1.8	0.0	1.8
11 (Wed)	166.1		36.5	16	11	Cloudy / Showers	1.3	0.0	1.3
12 (Thu)	166.4		36.6	20	10	Sunny / P. Cloudy	0.0	0.0	0.0
13 (Fri)	144.2	<=Min	31.7	19	10	Cloudy / Showers	13.5	0.0	13.5
14 (Sat)	150.2		33.0	18	10	Sunny / P. Cloudy / Showers	0.3	0.0	0.3
15 (Sun)	151.9		33.4	18	9	Sunny / P. Cloudy	0.0	0.0	0.0
16 (Mon)									
17 (Tue)									
18 (Wed)									
19 (Thu)									
20 (Fri)									
21 (Sat)									
22 (Sun)									
23 (Mon)									
24 (Tue)									
25 (Wed)									
26 (Thu)									
27 (Fri)									
28 (Sat)									
29 (Sun)									
30 (Mon)									
TOTAL	2566.7 ML		564.69 MIG				16.9	0	16.9
MAX	195.0		42.91	30	16		13.5	0	13.5
AVG	**171.1**		37.65	22.7	12.5		1.1	0	1.1
MIN	144.2		31.73	16	9		0.0	0	0.0

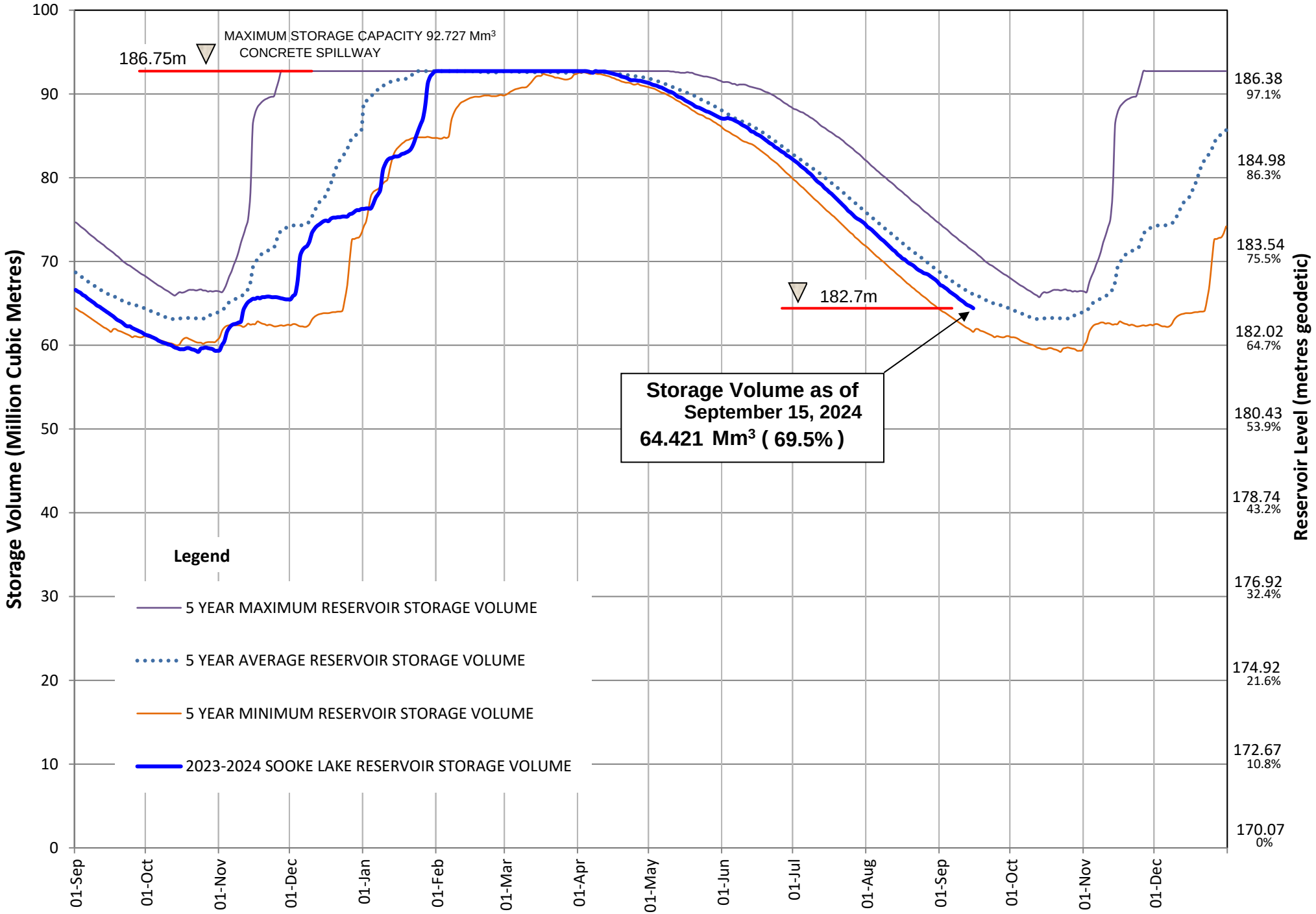
1. ML = Million Litres 2. MIG = Million Imperial Gallons 3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

Average Rainfall for September (1914-2023)	65.5 mm
Actual Rainfall: September	16.9 mm
% of Average	26%
Average Rainfall (1914-2023): Sept 01 - Sep 15	24.9 mm
Actual Rainfall (2023/24): Sept 01 - Sep 15	16.9 mm
% of Average	68%

Number days with precip. 0.2 or more
4

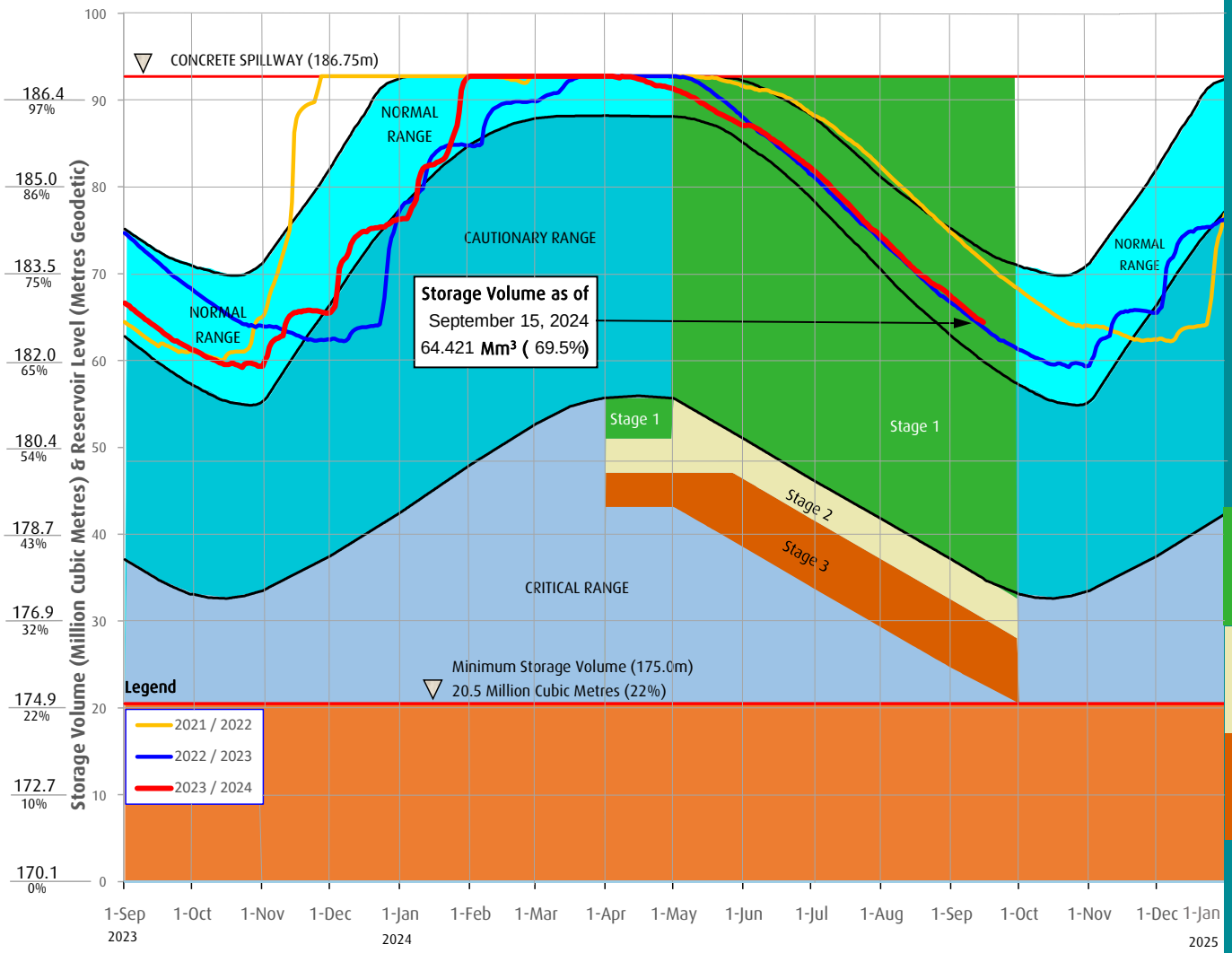
Water spilled at Sooke Reservoir to date (since Sept. 1) = 0.00 Billion Imperial Gallons
= 0.00 Billion Litres

SOOKE LAKE RESERVOIR STORAGE SUMMARY
2023 / 2024



Sooke Lake Reservoir Storage Level

Water Supply Management Plan



FAQs

How are water restriction stages determined?

Several factors are considered when determining water use restriction stages, including,

1. Time of year and typical seasonal water demand trends;
2. Precipitation and temperature conditions and forecasts;
3. Storage levels and storage volumes of water reservoirs (Sooke Lake Reservoir and the Goldstream Reservoirs) and draw down rates;
4. Stream flows and inflows into Sooke Lake Reservoir;
5. Water usage, recent consumption and trends; and customer compliance with restriction;
6. Water supply system performance.

The Regional Water Supply Commission will consider the above factors in making a determination to implement stage 2 or 3 restrictions, under the Water Conservation Bylaw.

At any time of the year and regardless of the water use restriction storage, customers are encouraged to limit discretionary water use in order to maximize the amount of water in the Regional Water Supply System Reservoirs available for nondiscretionary potable water use.

Stage 1 is normally initiated every year from May 1 to September 30 to manage outdoor use during the summer months. During this time, lawn watering is permitted twice a week at different times for even and odd numbered addresses.

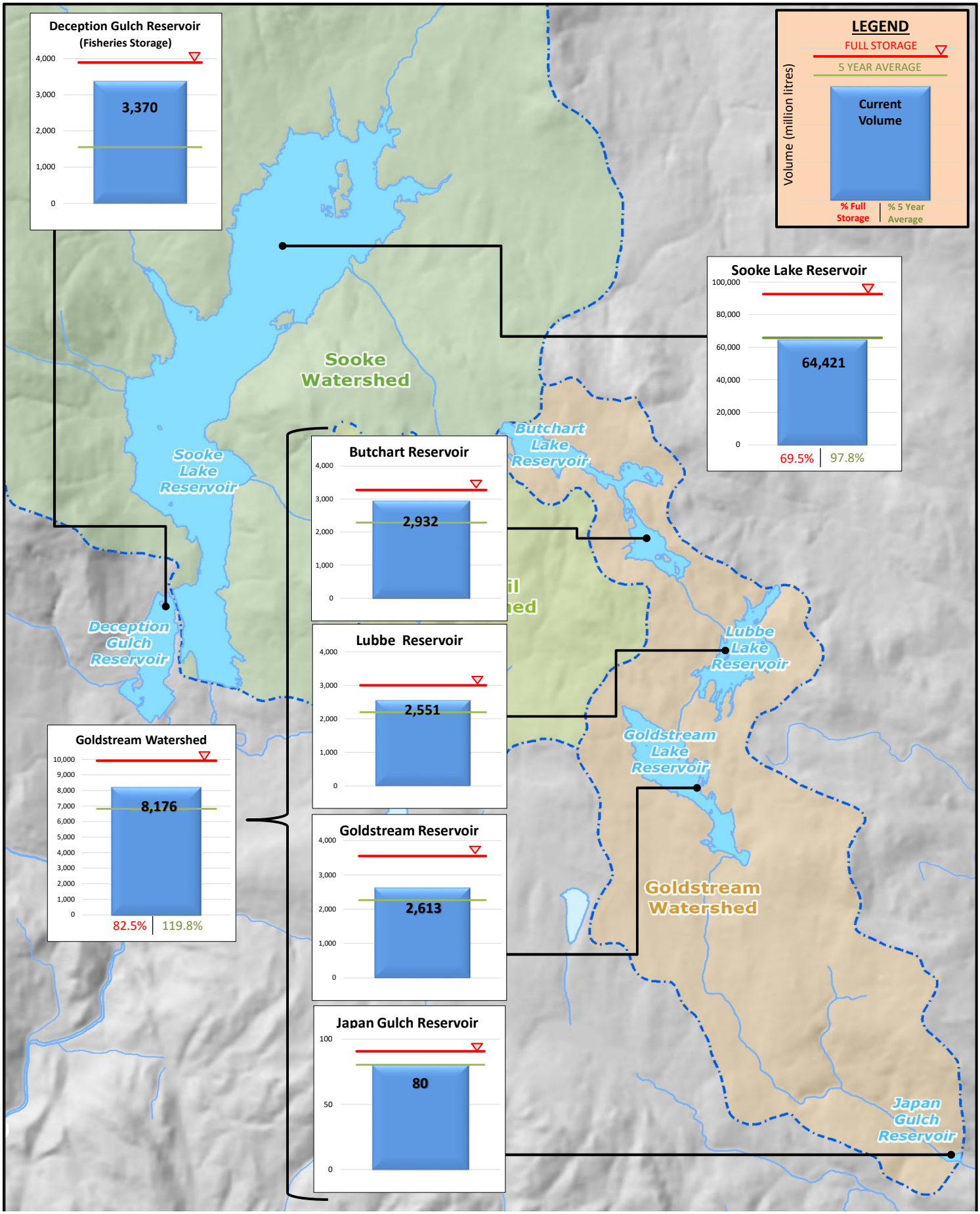
Stage 2 Is initiated when it is determined that there is an acute water supply shortage. During this time, lawn water is permitted once a week at different times for even and odd numbered addresses.

Stage 3 Is initiated when it is determined that there is a severe water supply shortage. During this time, lawn watering is not permitted. Other outdoor water use activities are restricted as well.

For more information, visit www.crd.bc.ca/drinkingwater

Making a difference...together

Useable Reservoir Volumes in Storage for September 15, 2024



Making a difference...together

RWSC 24-11

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024

SUBJECT **Proposed Regional Water Supply - Development Cost Charge Program and Bylaw Update**

ISSUE SUMMARY

To provide the Regional Water Supply Commission (Commission) with an update on the Development Cost Charge (DCC) program. This update includes the presentation of the Capital Regional District (CRD) Regional Water Supply (RWS) DCC: Engagement Summary (Volume 2) and Draft RWS DCC Background Report which summarizes the program development to date. In addition, staff are seeking direction to undertake additional engagement related to this program.

BACKGROUND

At its May 17, 2023 meeting, the Commission provided direction to implement the proposed DCC bylaw through a three phase process aligned with the DCC Best Practices Guide from the Province of British Columbia.

The proposed RWS DCC program and bylaw development process has been structured into three phases:

- Phase 1 – Conceptualization (Completed - May 17, 2023)
- Phase 2 – Refinement and Consultation (In progress)
    - Engagement Summary Vol 1 - Municipal Staff and Councils (Dated - Mar 13, 2024)
    - Engagement Summary Vol 2 – Public and Development Community (Dated - Sept 5, 2024)
    - Draft RWS DCC Background Report – September 2024
- Phase 3 – Implementation

Between September 2023 and March 2024, staff undertook the first portion of Phase 2, which included meeting with, and presenting to, municipal staff and Mayors and Councils from each member municipality. The purpose of these meetings was to confirm the municipality's most recent growth estimates, inform the municipalities of the pending DCC bylaw, and to answer any immediate questions surrounding the initiative. A summary of this municipal engagement, CRD RWS DCC: Council and Staff Engagement Summary (Volume 1) was appended to the March 20, 2024 staff report for the Commission's consideration.

Concurrent to the municipal council engagement, in November 2023, the CRD prepared and posted a RWS DCC webpage. The intent of this website was to ensure information about the RWS DCC project was made publicly available prior to formal engagement. The webpage content includes relevant background information and details on the proposed RWS DCC program including next steps. The webpage will continue to be updated as the program advances.

A Public Engagement Plan for the proposed RWS DCC was developed in alignment with the CRD's Public Participation Policy and the DCC Best Practices Guide. The Engagement Plan proposed launching a *"Get Involved"* engagement webpage including a ten-question survey and hosting two virtual information sessions: one for the public and one for the development community by invitation. A virtual platform was selected as the preferred engagement method to

help accommodate the participants and allow for interested parties from outside the region to participate.

At its April 17, 2024 meeting, the Commission provided direction for CRD staff to proceed with the Public Engagement Plan for the proposed RWS DCC program. The Commission also directed staff to explore options for DCC waivers or reductions for eligible forms of development.

RWS DCC ENGAGEMENT

Virtual Information Sessions

As outlined in the Public Engagement Plan, the project team hosted two virtual information sessions in June 2024, one for the public and one for the development community. The purpose of these information sessions was not to collect information, but to answer questions to allow attendees to be in a better position to submit informed feedback through the online survey.

Prior to hosting the public and development community information sessions, the CRD advertised the upcoming sessions (and the survey) through several media outlets including the Black Press newspapers, Times Colonist, social media, (Facebook, X, LinkedIn), and a Media Release.

On May 30, 2024, invitations for the development community virtual information session were distributed through the Urban Development Institute (UDI), Canadian Homebuilders Association, Sooke Builders Association, Vancouver Island Construction Association, Victoria Residential Builders Association, and the Westshore Developers Association. A sample invitation letter is included in Attachment A of the Engagement Summary, Volume 2 (Appendix A).

The public session was held on June 19, 2024 with over 40 attendees and the development community session was held on June 20, 2024 with over 50 attendees. The sessions consisted of the CRD and Urban Systems Limited (USL) presenting on the background of DCC's, progress to date for the RWS DCC program, draft rates and program components, timelines and next steps.

At the end of the presentation period, attendees were able to submit questions to the project team (via the chat function), which were verbally answered and discussed in further detail. As the questions were answered verbally, each information session was recorded and posted to the *"Get Involved"* webpage for future reference, or for those who were unable to attend the sessions.

A copy of the presentations and a complete transcript of all questions asked at the two virtual information sessions is available in Attachment E though H of Appendix A.

Common themes of questions and feedback received during the information sessions are summarized in Sections 3 and 4 of Appendix A.

After hosting the two virtual information sessions, a request for further in-person engagement was received from the UDI. An in-person meeting was held at the CRD offices on September 10, 2024. Those in attendance included members of the development community, the CRD Chair, the Commission Chair, the MLA for Langford - Juan de Fuca and senior CRD staff. Questions were submitted in writing prior to the meeting and a letter of response is attached (Appendix C).

"Get Involved" Webpage and Survey

The CRD's *"Get Involved"* engagement webpage for the RWS DCC was posted on May 29, 2024 and included a number of resources such as Frequently Asked Questions, project timelines, supporting resources, DCC background information, and related CRD corporate documents.

The *"Get Involved"* webpage included a ten-question survey used to gauge public understanding, interest and support for the proposed RWS DCC program. The survey included an open-ended question for respondents to provide any additional feedback on the proposed DCC program. The survey remained open from May 29 until July 5, 2024, and there were 231 respondents. The survey questions, a summary of survey results, and feedback received through the open-ended question are all included in Attachment C and D of Appendix A.

Key questions related to the DCC program:
1: In your opinion, who should pay for water infrastructure upgrades required to service growth?
Of the 239 responses received:

- 108 (45.2%) indicated that a combination of existing users and new development should pay for the water infrastructure upgrades required to service growth.
- 95 respondents (39.7%) selected the option that new development should pay through the proposed RWS DCC program.
- 24 respondents (10%) chose the existing users option, which would be funded through water user rates.
- 12 respondents (5%) were unsure or undecided.

2: Do you agree or disagree with the proposed Regional Water Supply Development Cost Charges as a mechanism for cost-sharing future infrastructure related to growth.
Of the 239 responses received:

- 108 (45.2%) respondents indicated either their strong support (54 respondents, 22.6%) or their support (54 respondents, 22.6%) for the proposed RWS DCC program.
- 94 respondents (39.4%) indicated either their strong disagreement (58 respondents, 24.3%) or disagreement (36, 15.1%) with the proposed RWS DCC program.
- 37 respondents (15.5%) were neutral about the program.

First Nation Engagement

On May 29, 2024, a letter was sent to local First Nations informing them of the proposed RWS DCC bylaw, upcoming virtual information sessions, online survey opportunity and an offer for additional information session(s). A sample letter is included in Attachment B of Appendix A.

Feedback was received from MÁLEXEŁ (Malahat), Songhees and Sc'ianew (Beecher Bay) First Nations. Follow up meetings were held with Malahat and Sc'ianew First Nations at their request, while a written response was provided to Songhees First Nations. Both Malahat and Sc'ianew First Nations have requested further information on the implications of the DCC program on Treaty Lands.

DRAFT RWS DCC BACKGROUND REPORT

The Final RWS DCC Background Report will be submitted to the Inspector of BC Municipalities prior to final bylaw approval. The Draft RWS DCC background report has been updated with

details previously presented during the engagement period and is included as Appendix B. The draft report includes residential and non-residential growth rates, summarizes growth related/benefiter pays projects and calculates the proposed DCC rates by land category. The calculations within the report also include the DCC benefit factor for each project and the Municipal Assist Factor of 1%, as directed by the Commission at its April 17,2024 meeting. The DCC Background report will also include a summary of the engagement and consultation with interested parties undertaken as part of the program development once complete.

NEXT STEPS

Based on feedback received regarding the limitations of the virtual information sessions and requests for an opportunity to review the full content of the Draft RWS DCC Background Report, staff have committed to publishing the Draft RWS DCC Background Report prior to bylaw adoption and exploring the potential for further engagement related to the Draft RWS DCC Background Report. Further engagement would generally utilize the CRD's *"Get Involved"* engagement platform along with a comment form, issuing an information bulletin and promoting the opportunity through social media and paid advertising. The addition of a further comment period would delay the program by a minimum of three months but would provide a more defensible engagement process and allow comment on the details of the cost apportionment and population projections not fully detailed previously.

Staff are recommending that the public engagement plan be amended to allow this additional comment period of 30 days for both the Development Community and the public. The feedback from this comment period will be summarized and presented with the DCC bylaw recommendation tentatively scheduled for December.

Concurrently, the CRD is seeking a legal opinion related to DCCs and Aboriginal and Treaty Lands. The scope of the legal opinion is to obtain a summary of a regional district's powers to waive, reduce, or credit DCCs as they relate to Reserve lands under the *Indian Act;* Additions to reserve lands under the *Indian Act*; Treaty settlement lands; and Fee simple lands within the boundary of an electoral area or municipality owned by a corporation controlled by an *Indian Act* band. This topic will be addressed in a separate DCC waivers or reductions staff report, with a copy of the legal opinion once received. The CRD will continue having government-to-government conversations and working directly with interested First Nations to answer any questions related to the proposed DCC program.

Staff plan to bring forward staff reports in December related to options for DCC Waivers or Reductions, the draft DCC Bylaw for first, second and third readings before issuance to the BC Inspector of Municipalities for approval (pursuant to the BC Local Government Act) as well as, additional public and interested parties engagement, if directed by the commission.

Once reviewed and approved by the Inspector of Municipalities, the bylaw would return to the CRD Board for adoption.

Once adopted, Phase 3 – Implementation, would commence which would include aiding the member municipalities with the implementation and ongoing effort to collect and remit DCC's to the CRD. Some municipalities already collect DCC's and others do not, and therefore may need assistance to prepare.

ALTERNATIVES

Alternative 1

That staff be directed to complete further public and development community engagement related to the draft Regional Water Supply Development Cost Charges Background Report, attached as Appendix B, prior to drafting the Regional Water Supply Development Cost Charge Bylaw.

Alternative 2

That staff be directed to draft the Regional Water Supply Development Cost Charges Bylaw, without further public and development community engagement.

IMPLICATIONS

Regulatory and Policy

The implementation of the proposed RWS DCC program and bylaw aligns with the CRD 2023-2026 Corporate Plan, and the RWS 2017 Strategic Plan. Without a DCC bylaw and related revenue due to growth, the existing users of the service are burdened with the cost of growth including infrastructure upsizing and water supply expansion.

DCC bylaws are subject to review and approval by the Inspector of BC Municipalities under the legislative context of the *Local Government Act*. Although there are no mandatory public consultation activities listed in the DCC legislation, the Inspector of BC Municipalities may refuse approval of a DCC bylaw if the DCC's are found to be excessive, deter development or discourage construction of reasonably priced housing. Proof of a meaningful public process to obtain input from interested parties must be demonstrated for the Inspector's review of the DCC bylaw. In reviewing the future RWS DCC bylaw, the Inspector of BC Municipalities will review the CRD's engagement process to ensure a meaningful public process was undertaken to obtain input from interested parties prior to first reading of the DCC bylaw.

Financial Implications

Without a DCC program and bylaw, the existing users of the service will continue to be burdened with the infrastructure costs related to growth and as growth occurs, remaining system capacity will be depleted. Many pending growth-related capital expenditures have been identified in the Capital Plan and the Regional Water Supply 2022 Master Plan.

Intergovernmental Implications

The administration, collection, and remittance of DCC's requires involvement by both the CRD and the member municipalities and the roles and responsibilities can vary. It is recognized that a proposed DCC bylaw would be an increase in administrative effort for municipalities and some municipalities do not have existing DCC programs to build upon. The CRD would work with each member municipality to ensure they prepared to administer the DCC program and bylaw.

Social Implications

The cost of housing has increased significantly, including social housing, and a proposed DCC would be another financial burden to the cost of development. The *Local Government Act* allows for local governments to waive or reduce DCC charges for certain types of developments including not-for-profit rental housing, supportive living housing, for-profit affordable rental housing, subdivision of small lots designed to result in low greenhouse gas emissions and developments designed to result in low environmental impact.

At its April 17, 2024 meeting the Commission directed staff to report back with options for implementing DCC waivers or reductions, and a staff report will be coming forward in late fall or early winter outlining the options.

First Nation Implications

The proposed DCC bylaw would not apply to development on First Nations reserve lands as local municipal and regional district bylaws are not valid on First Nation lands. The CRD has sent a letter to the First Nations advising them of the proposed DCC program and to indicate that the program would not apply to First Nations reserve lands.

The introduction of a DCC program would benefit First Nations that receive water from the Regional Water Service, similar to existing municipal residents, the DCC program would mitigate future bulk water rate increases for the First Nations related to growth. At this time the implications of the DCC program on DCCs and Treaty Lands is unknown and being explored.

CONCLUSION

The Regional Water Supply Commission (Commission) directed staff to undertake engagement with interested parties on the proposed Regional Water Supply Development Cost Charge (DCC) program. The Capital Regional District has undertaken engagement through an online survey and two virtual information sessions (one for the public and one for the development community). Feedback received through this process is presented in this staff report for the Commission's review and consideration when finalizing details of the proposed Regional Water Supply DCC bylaw and program. The Draft Regional Water Supply DCC Background Report has been presented, which will be submitted to the Inspector of BC Municipalities prior to the DCC bylaw approval. Staff are seeking direction to undertake further engagement to allow feedback on the Draft Regional Water Supply DCC Background Report.

RECOMMENDATION

That staff be directed to complete further public and development community engagement related to the draft Regional Water Supply Development Cost Charges Background Report, attached as Appendix B, prior to drafting the Regional Water Supply Development Cost Charge Bylaw.

Submitted by:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

Appendix A: Urban Systems – CRD RWS DCC: Engagement Summary (Volume 2) dated September 5, 2024
Appendix B: Urban Systems – Draft RWS DCC Background Report – September 2024
Appendix C: Urban Development Letter, dated September 5, 2024
CRD Letter to UDI, dated September 16, 2024

URBAN SYSTEMS ENGAGEMENT SUMMARY

DATE: September 5, 2024
TO: Capital Regional District (CRD) Integrated Water Services
FROM: Urban Systems Ltd.
FILE: 1692.0050.02
SUBJECT: CRD RWS DCC: Interested Parties Engagement Summary (Volume 2)

1.0 OVERVIEW

As noted in the Province of British Columbia's *DCC Best Practices Guide*, consulting interested parties is a guiding principle when establishing a Development Cost Charge (DCC) program. While not mandatory, there should be adequate opportunities provided for meaningful and informed input from the public and other interested parties.

Throughout the development of the proposed Regional Water Supply (RWS) Service DCC, the project team presented to municipal staff and Councils across the Capital Regional District (CRD) over the course of September 2023 to March 2024. Staff presentations focused on refining the technical inputs within the program (i.e., growth estimates) and Council presentations were intended to provide information on the draft rates and the eligible projects. In all sessions, feedback was recorded and later used by the Integrated Water Services (IWS) department to further refine the program. Once these sessions were concluded, updates were provided to the Regional Water Supply Commission (RWSC) at the March 20 and April 17, 2024 meetings whereupon the CRD was directed to proceed with interested parties engagement. For more information, please see **Volume 1 of the Engagement Summary** which was presented to the RWS Commission on **April 17, 2024** and is available in the meeting agenda.

In collaboration with the CRD's Corporate Communications department, the CRD developed an Engagement Plan which mapped out a process for collecting feedback from interested parties on the proposed RWS DCC program. The approved Engagement Plan was consistent with the CRD's Public Participation Policy and other recommended best practices for public engagement.

CRD staff and Urban Systems Ltd. (USL) conducted engagement with interested parties throughout June and July 2024. Engagement included two separate virtual information sessions with the public and members of the development community, along with an online survey hosted on the CRD's Get Involved engagement webpage. Feedback, questions, and comments were welcome from interested parties during the sessions and through the survey. There was also an opportunity for interested parties and the public to learn more about the proposed DCC program on the CRD's engagement website. This document provides an overview of all the engagement with interested parties outlined above.

A summary of the survey results is included in **Section 2.0**. The summaries for the public (**3.1**) and development community (**3.2**) information sessions in **Section 3.0** are based on the questions received during each session. Sample invitation letters sent to organizations in the development community and to First Nations, as well as the distribution lists, can be found in **Attachments A** and **B**, respectively. The survey questions hosted on the CRD's engagement webpage are included in **Attachment C** and the simplified survey response report can be found in **Attachment D**. Full transcripts of questions received during the live engagement sessions, along with the presentations used in each session, can be found in **Attachments E – H**.

Recordings of the virtual information sessions can be accessed through the CRD's Get Involved page. These recordings include answers to the questions outlined in the following sections.

1.1 ADVERTISING AND OUTREACH SUMMARY

In advance of the virtual public and development community information sessions, the CRD completed a series of advertising and outreach initiatives, including social media, paid advertising (via Facebook), ads in all local Black Press Newspapers on June 5, 6, 12, 13 (local papers are only distributed on a weekly basis), an ad in the June 8 copy of the Times Colonist, and a media release on May 29.

In addition, letter invitations for the development community information session were sent to the following organizations: the Urban Development Institute – Capital Region (UDI), Sooke Builders Association (SBA), Victoria Residential Builders Association (VRBA), West Shore Developers Association, Canadian Home Builders' Association (CHBA, B.C. Chapter), and the Vancouver Island Construction Association (VICA). Refer to **Attachment A** for a sample letter.

Invitations were also sent to all First Nations with territory in the RWS service area and Nations who receive water service through the CRD to inform of the proposed RWS DCC program and to invite feedback on the program. Refer to **Attachment B** for a sample invitation letter and the distribution list.

1.2 HIGHLIGHTS FROM PREVIOUS MUNICIPAL STAFF AND COUNCIL ENGAGEMENT

Throughout the last phase of engagement spanning Fall 2023 to Spring 2024, there were a series of common themes raised by staff and Councils across the CRD.

Councils were generally supportive of the need to fund important growth-driven infrastructure and responded positively to the rationale behind the proposed DCC but were nevertheless concerned about the high project costs and the impact of the DCC on housing affordability and development viability.

Municipal staff were also understanding of the need for the proposed DCC and the identified projects; similar to what was heard during the Council presentations, they also expressed concerns about the project costs and the effect of this DCC on their ability to update municipal DCCs.

For more information on these sessions, please refer to **Volume 1 of the Engagement Summary which was presented to the RWS Commission on April 17, 2024**.

2.0 ONLINE SURVEY

To gather feedback from all interested parties and those unable to attend the live sessions, a 10-question public survey was developed and hosted on the CRD's Get Involved page from May 29, 2024 to July 5, 2024. Links to the survey were also shared in both information sessions. There were 231 respondents to the survey.

Most of the survey questions were focused on gauging each respondent's familiarity with DCCs and their views on various program elements, such as the Municipal Assist Factor and the possibility of waivers or reductions for eligible development.

There was an opportunity for respondents to provide additional input through an open-ended response at the end of the survey. Common themes across responses are identified and summarized in **Section 2.2**.

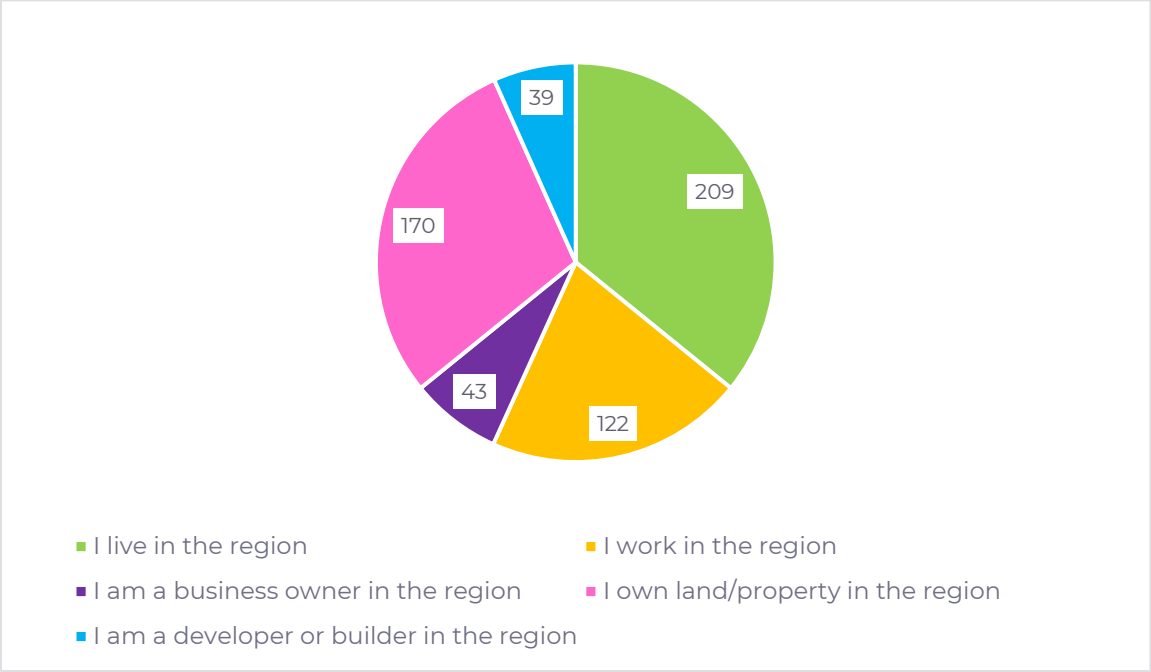
To see a simplified survey responses report, please refer to **Attachment D**.

2.1 SURVEY SUMMARY

Included within this section are the results of some key survey questions. All survey questions are included in **Attachment C** and the simplified report with response data is included in **Attachment D**.

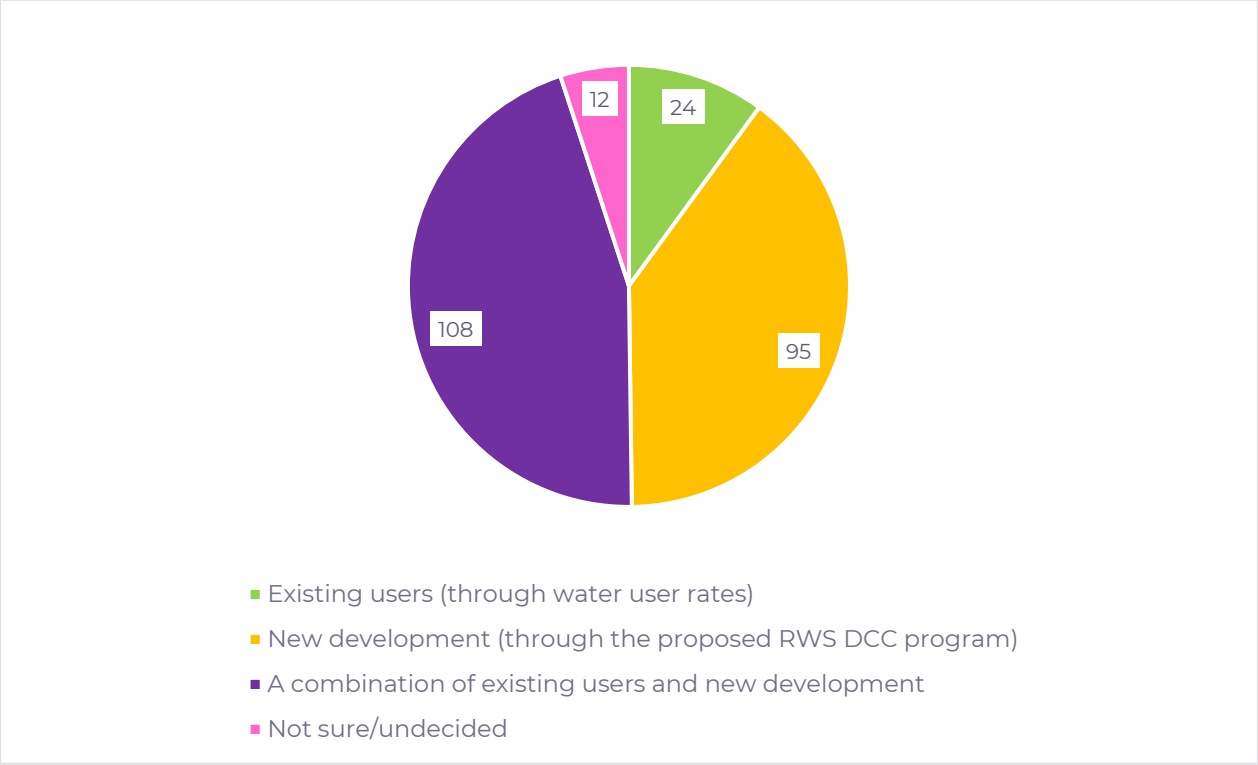
2.1.1 Survey Question 4: What is/are your connection(s) to the Capital Region?

Note that for this question, multiple options could be selected by respondents.



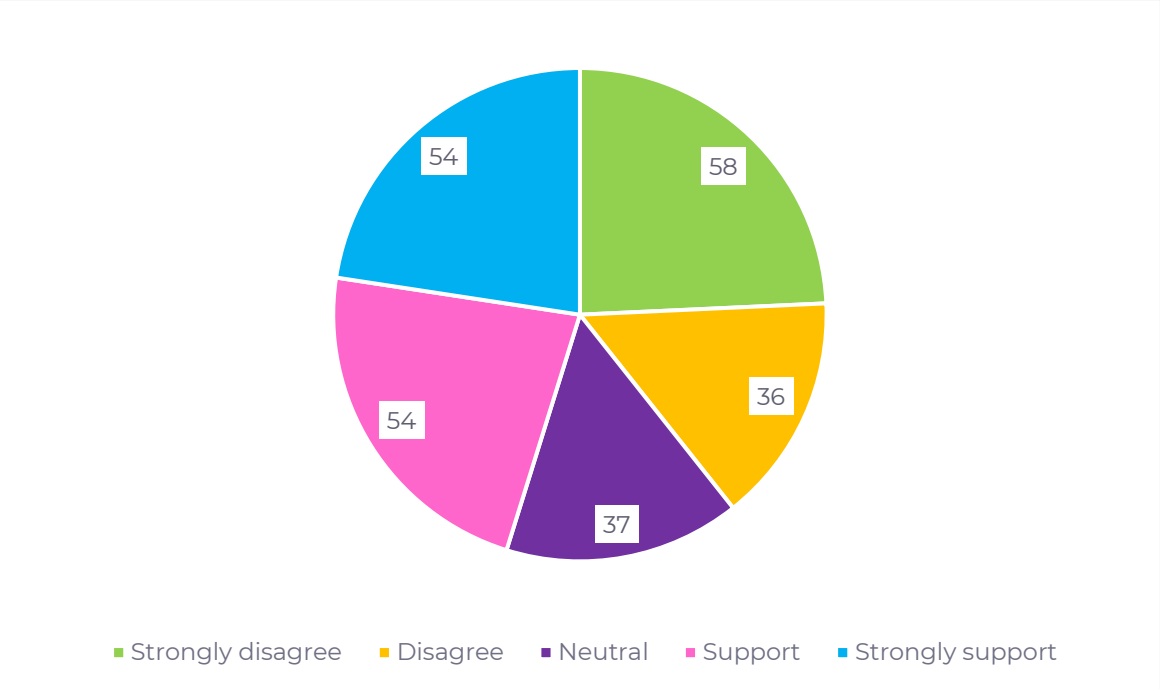
There were 238 individual responses to this question and 583 total selections made, suggesting most respondents selected multiple responses. Of the 583 responses received for this question, 209 (35.8%) respondents live in the region, 170 (29.2%) own land/property in the region, 122 (20.9%) work in the region, 43 (7.4%) are business owners in the region, and 39 (6.7%) are developers or builders in the region.

2.1.2 Survey Question 5: In your opinion, who should pay for water infrastructure upgrades required to service growth?



Of the 239 responses received, 108 (45.2%) indicated that a combination of existing users and new development should pay for the water infrastructure upgrades required to service growth. 95 respondents (39.7%) selected the option that new development should pay through the proposed RWS DCC program. 24 respondents (10.0%) chose the existing users option, which would be funded through water user rates. 12 respondents (5.0%) were unsure or undecided.

2.1.3 Survey Question 6: Do you agree or disagree with the proposed Regional Water Supply Development Cost Charges as a mechanism for cost-sharing future infrastructure related to growth?



Of the 239 total responses to this question, 108 (45.2%) respondents indicated either their strong support (54 respondents, 22.6%) or their support (54 respondents, 22.6%) for the proposed RWS DCC program. 94 respondents (39.4%) indicated either their strong disagreement (58 respondents, 24.3%) or disagreement (36, 15.1%) with the proposed RWS DCC program. 37 respondents (15.5%) were neutral about the program.

2.2 OPEN-ENDED SURVEY RESPONSES

One question in the survey provided an opportunity for respondents to write an open-ended response with comments, questions, or feedback for the CRD regarding the proposed DCC program. Key themes from this portion of the survey are summarized below:

Water Conservation, Resource Management, and Infrastructure

Some respondents suggested the implementation of increased water conservation measures to defer growth-related projects or user-pay principles (e.g., increasing the bulk water rate), for both existing residents and new developments, to potentially reduce the proposed DCC rates. Many respondents agreed that the development community should bear the responsibility for costs associated with connecting new developments to the water service (i.e., growth).

Infrastructure Planning, Implementation, and Resilience

Respondents had mixed responses on the recommended projects in the RWS 2022 Master Plan, which largely informed the proposed RWS DCC project list. Some respondents supported the identified projects and the benefiter-pay principle (i.e., growth should pay for growth). Respondents also recognized the need for building

new infrastructure to ensure system resilience. Others expressed concern about the traditional timeline for the administration of waivers or reductions, that final developments may have fewer eligible development units than applied for at the outset, and the effect of the proposed DCC on construction costs.

Costs and Budgeting

Respondents raised concerns about the total project costs in the proposed DCC program and cited a comparable Metro Vancouver wastewater project as an example of the potential for cost overruns.

Equitable Contribution and Cost Distribution

Many survey respondents expressed concerns about the cost distribution between new and existing residents. Existing residents would like to see development pay most of the costs for the proposed, growth-driven infrastructure included within the DCC program.

There appeared to be some confusion regarding what existing residents would pay for; existing residents would not be responsible for paying the proposed RWS DCCs.

Fairness and Impact on Housing Affordability

A commonly raised concern was the impact of the proposed DCC on housing affordability throughout the region. Two common comments included concerns that these DCCs would negatively impact housing supply and escalate costs, and that waivers should be provided to ensure that non-market rental remains a viable option in the region.

Funding Strategies and Economic Impact

Respondents asked about the possibility of incorporating alternative funding strategies (e.g., grants, taxation, user rate adjustments) to off-set the proposed DCCs. There were, however, concerns raised about how increased taxation or user rates would affect existing residents. Many inquired about the possibility of the CRD receiving provincial or federal assistance.

Transparency and Public Consultation

Some survey respondents indicated an interest in community information sessions regarding the proposed DCC program. A few responses included concerns about the engagement conducted to date, suggesting that the process could benefit from additional transparency. Some responses suggested the importance of consulting the public and First Nations on the major infrastructure projects included within the proposed program.

3.0 VIRTUAL INFORMATION SESSIONS

Two virtual information sessions for interested parties were held for the development community and the public in June 2024. The following subsections summarize the key themes raised in each session: **Section 3.1** focuses on the public information session and **Section 3.2** focuses on the development community session.

Full transcripts from both information sessions are included at the end of this report; refer to **Attachment F** for the public transcript and **Attachment H** for the development community transcript.

3.1 PUBLIC INFORMATION SESSION

The public information session was held over Zoom on June 19, 2024 from 6:00-7:30pm. In addition to CRD staff and consultants from USL, there were approximately 40 attendees. Key themes raised during the session included:

Master Plan and Risk Evaluation

Attendees raised questions around projects identified in the RWS 2022 Master Plan, their timing, and the associated costs. There were additional questions around the risk evaluations conducted by the CRD to date; most were focused on clarifying the methodologies used for cost calculations and the level of risk identified for landslides, wildfires, and contamination.

Budgeting and Construction Costs for Infrastructure

Questions arose regarding the costing for the projects included in the DCC program, particularly around the level of confidence in the estimates, the year the estimates were prepared, and how the CRD will secure additional funding for any cost overruns.

Demand Management and Elasticity, Consumption, and Bulk Water User Rates

Participants inquired into the possibility of water demand reductions resulting from increased bulk water user rates. Additional questions were asked about the possibility of the CRD reviewing and reducing its water demand projections to defer growth-related projects and how much bulk water user rates would increase with the proposed RWS DCC in place. There were also a series of questions asking whether the CRD will conduct any studies or sensitivity analysis into its projections regarding future water demand.

DCC Process, Engagement, and Bylaw Adoption

During the session, attendees asked questions about how the DCC rates were calculated and inquired into the various milestones in the RWS DCC process, such as the expected date of bylaw adoption. Other questions inquired into the personnel that would be responsible for reviewing the DCC every 5 years (for a major update).

Many questions were asked about the engagement conducted to date and whether additional opportunities for feedback would be provided over the course of the DCC program development. Questions were asked about the possibility of additional public sessions and whether the public has been notified through other means (e.g., billing methods). There were also questions about consultation with First Nations.

Alternative Funding Mechanisms (Waivers or Reductions, Grants, Financing Options)

Attendees inquired into alternative funding mechanisms to off-set the proposed DCC rates, such as the possibility of the CRD receiving grants from the provincial and/or federal governments and, if received, how they would impact the program (i.e., the possibility of rates being lowered).

Other questions arose regarding the possibility of waivers or reductions and what definitions will be used to determine eligibility.

3.2 DEVELOPMENT COMMUNITY INFORMATION SESSION

The development community information session was held over Zoom on June 20, 2024 from 2:30-4:00pm. In addition to CRD staff and consultants from USL, there were approximately 45 attendees. Key themes from this session included:

DCC Program Elements

Reflecting the intent of the session, many questions were received regarding various aspects of the DCC program.

A few questions focused on the assist factor, namely whether it will increase from 1% and the possibility of these rates being phased in through reductions to the assist factor. Regarding the benefit allocations, questions were asked about the rationale in assigning the 35% allocation to new development. Attendees inquired whether the 65% attributed to existing users could not be collected from water user rate increases. Some questions were critical about the benefit allocations and suggested that the allocations should ensure that current users are paying their fair share. In response to these questions, it was noted that the RWSC provided direction to proceed with a 1% Municipal Assist Factor and the 35% benefit allocation was based on the projected population change over a 30-year time horizon.

The DCC calculations were also the subject of a few questions, with attendees requesting to view the underlying calculation work (e.g., technical inputs such as the growth projections and equivalency factors) that was used to set the proposed rates.

Attendees also inquired about the timeline for the proposed program and wished to know when the charges would come into effect. Similar questions inquired about how in-stream protection would work for this program. A few questions were asked about how the Bylaw would be adopted and if each municipality would need to approve it at the local level.

Many questions were asked about the engagement conducted as part of the DCC program development, namely if there would be future opportunities to provide feedback on the program, with some suggesting that more engagement was preferred.

Funding Sources and Alternative Funding Mechanisms

Numerous questions were received about the funding sources for the proposed DCC program and a few questions focused on whether the CRD has applied for any federal or provincial grants. Other questions inquired into how the projects would be funded if the DCC program does not go ahead, or how the projects would be funded if DCC revenue is lower than anticipated.

Housing Impacts

Attendees asked a few questions about the impact of the proposed DCC on housing throughout the CRD, with some expressing concern that the DCC will affect the feasibility of missing middle housing. Questions were also received about waivers or reductions and whether these would be created for for-profit rental housing and/or affordable housing.

Economic Analysis

Building on concerns around the proposed RWS DCC rates, attendees asked whether any economic analysis had been conducted on the effect of the proposed DCCs on the housing market. Staff noted that the current program

work completed to date has not included an economic analysis and some participants noted that this may be a valuable way of determining the economic impacts of the proposed DCCs on housing.

Water Rates and Demand Management

Attendees asked whether it would be possible to revise the CRD's water consumption projections to reflect comparable data in other communities. There were mixed comments about the bulk water user rates, with some saying the user rates should increase to more accurately reflect the use by existing users, and others saying the rates are already too high.

Master Planning and Infrastructure Budgeting

Citing the City of Victoria's Crystal Pool referendum as an example, participants inquired as to whether the CRD should conduct a referendum for the proposed RWS DCC program. Other questions were asked about the need for some of these projects at this time and the likelihood of these large projects staying on budget.

4.0 CLOSING

This second volume of the engagement summary is intended to serve as a reference for the Regional Water Supply Commission to support their consideration of the proposed Regional Water Supply DCC program.

Note that verbal answers to the questions posed in both virtual information sessions with interested parties are available in recordings of the sessions (both the presentations and the recordings are available on the CRD's webpage for the proposed RWS DCC program).

More information can also be found in staff reports and supporting materials on the CRD's webpage for the RWS DCC program.

The following supplementary attachments are appended after this section:

- **Attachment A** – Sample Invitation Letter to Development Community and Distribution List
- **Attachment B** – Sample Invitation Letter to First Nations and Distribution List
- **Attachment C** – Survey Questions
- **Attachment D** – Survey Response Report – Proposed Regional Water Supply Development Cost Charge Program (Simplified)
- **Attachment E** – Public Information Session Presentation (June 19, 2024)
- **Attachment F** – Transcript from Public Information Session (June 19, 2024)
- **Attachment G** – Development Community Information Session Presentation (June 20, 2024)
- **Attachment H** – Transcript from Development Community Information Session (June 20, 2024)

ATTACHMENT A: SAMPLE INVITATION LETTER TO DEVELOPMENT COMMUNITY AND DISTRIBUTION LIST

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

May 30, 2024

File: 5220-20
Regional Water Supply DCC Program

Urban Development Institute (UDI) – Capital Region
Kathy Whitcher, Executive Director

BY EMAIL: udivictoria@udi.org

Dear Kathy Whitcher:

RE: INVITATION TO PARTICIPATE IN A VIRTUAL INFORMATION SESSION FOR THE PROPOSED REGIONAL WATER SUPPLY DEVELOPMENT COST CHARGE PROGRAM

The Capital Regional District (CRD) is hosting a virtual information session for the development community regarding the proposed Development Cost Charge (DCC) program for the Regional Water Supply (RWS) Service. The proposed RWS DCC program would help fund improvements to regional water system infrastructure required to support growth in the CRD. Currently, there is no DCC program for the RWS Service, which delivers safe and sustainable drinking water to residents in Greater Victoria.

The virtual information session will include a presentation regarding the proposed program followed by a question-and-answer period.

Members of the Development Community can share their feedback on the proposed RWS DCC program by:

- Attending the Virtual Information Session on **June 20, 2024 from 2:30-4:00 PM**
  Zoom Meeting Link
- Completing the online survey, available on the Get Involved platform, by **July 5, 2024**

The Get Involved platform provides background information, resources, frequently asked questions and the survey for the proposed RWS DCC program. The online survey includes the ability to provide written comments and will remain open for feedback until **July 5, 2024**.

In addition to the Development Community virtual information session, a public virtual information session has also been scheduled for June 19, 2024 from 6:00-7:30 PM.

Please feel free to forward this invitation to your association's membership body. We look forward to your participation in the virtual information session and survey.

IWSS-461155881-17

Urban Development Institute - May 30, 2024
Regional Water Supply Development Cost Charges Program Virtual Information Session – Development Community **2**

Should you have any questions or concerns, regarding this invitation, please contact waterplanning@crd.bc.ca.

Sincerely,

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

cc: Joseph Marr, Senior Manager, Infrastructure Engineering

DEVELOPMENT COMMUNITY DISTRIBUTION LIST:

- Sooke Builders Association (SBA)
- Urban Development Institute (UDI) – Capital Region
- Victoria Residential Builders Association (VRBA)
- West Shore Developers Association
- Canadian Home Builders' Association (B.C. Chapter)
- Vancouver Island Construction Association

ATTACHMENT B: SAMPLE INVITATION LETTER TO FIRST NATIONS AND DISTRIBUTION LIST

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

May 29, 2024

File: 0400-60
Correspondence

xʷsepsum (Esquimalt Nation)
Samuel Saunders, Acting Executive Director
1189 Kosapsum Crescent
Victoria, BC V9A 7K7

BY EMAIL: samuel@Esquimaltnation.ca

Dear Samuel Saunders:

SUBJECT: CAPITAL REGIONAL DISTRICT REGIONAL WATER SUPPLY SERVICE PROPOSED DEVELOPMENT COST CHARGE BYLAW

We are reaching out for your input regarding the Capital Regional District's Regional Water Supply Service proposed Development Cost Charge bylaw. The Capital Regional District is committed to maintaining safe, reliable, and sustainable drinking water service delivery for all residents in the region. Given this, it is critical that we proactively address the highest risks facing the water system, including lack of redundancy of critical components, climate change impacts, seismic vulnerabilities and changing water treatment needs, as well as growing population and utility funding.

Through the Capital Regional District's corporate priorities and strategic objectives, the Capital Regional District has been proactively planning capital improvements related to the Regional Water Supply Service, many of which have been identified in the Capital Regional District's Regional Water Supply 2022 Master Plan. The capital improvements, many of which are proposed to accommodate the increased water demand associated with anticipated population growth in the region, span over 30 years and have been valued at $1.53 billion in 2022 dollars. The Capital Regional District is proposing to adopt a Development Cost Charge bylaw which would impose charges on development, aligned with the principles of "benefiter pays" or "growth pays for growth".

Water rates, grants and Development Cost Charges are the primary tools available to the water service to fund new projects. As the water service provides a substantial benefit to both existing developments and new users, many of its capital projects are eligible for inclusion in a Development Cost Charge program under the BC Local Government Act. The Capital Regional District and many local municipal governments already have Development Cost Charge programs in place to fund infrastructure required for growth, however there is currently no Development Cost Charge program to support the Regional Water Supply infrastructure required to service growth.

IWSS-1010509271-238

Samuel Saunders – May 29, 2024
Capital Regional District Regional Water Supply Service Proposed Development Cost Charge Bylaw **2**

Introducing a Development Cost Charge program would mitigate future water rate increases for First Nations and municipalities that receive water from the Regional Water Service.
If approved, the Development Cost Charge bylaw would apply within the area of the jurisdiction of the Local Government (Capital Regional District). **The proposed Development Cost Charge bylaw would not apply to development on First Nations reserve lands** as municipal and regional district bylaws are not valid on First Nation reserve lands.

The Capital Regional District is interested in hearing from your Nation regarding the proposed Development Cost Charge program. Background resources including Capital Regional District public information summarizing the rationale, draft Development Cost Charge rates, progress to date, next steps and resources are available on our Get Involved engagement platform. The Capital Regional District will also be hosting a public virtual information session on **June 19, 2024 from 6:00–7:30 pm** that you are encouraged to participate in (Zoom Meeting Link). The public virtual information session will also be recorded and available on the Get Involved platform after the information session. Additionally, there is a feedback survey available on the Get Involved platform; please note that the **survey closes July 5, 2024.**

We would also be happy to offer an information session to your Nation and discuss further. Please reach out if you would like to meet to learn more and share your feedback. We also welcome input in writing.

Though the Development Cost Charge program includes projects identified in the Regional Water Supply 2022 Master Plan, these projects have not progressed beyond the conceptual design phase included in the Master Plan. The Master Plan provides a conceptual-level road map for infrastructure solutions to maintain safe drinking water supply into the future, given the demand of future population growth and the impact of various risks on the service including climate change.

Currently, the only projects in the Master Plan that have approved funding to move forward to design are upgrades to two transmission mains, one which is looking at increasing the available pressure in the transmission main from Humpback Pressure Control Station (Irwin Road) to the Watkiss Pressure Control Station Inlet, and the second is a transmission main replacement project from Leigh Road along Goldstream Avenue to Veterans Memorial Parkway. The two transmission main upgrade projects are just beginning preliminary design. The other projects in the Master Plan will require further review and approval prior to moving forward with further investigation.

The scope of projects identified in the Master Plan will require further refinement and consultation. We appreciate that further discussion is required with your Nation in relation to the projects proposed in the Master Plan. We recognize that you have expressed interests regarding the Master Plan and we look forward to continuing the conversation.

The Capital Regional District welcomes questions, comments and feedback for its consideration prior to adopting the proposed Development Cost Charge bylaw and ask that feedback be provided by **July 5, 2024 via the Get Involved platform.**

Samuel Saunders – May 29, 2024
Proposed Development Cost Charge Bylaw, Capital Regional District Regional Water Supply Service **3**

If you are unable to attend the virtual information session on June 19, 2024 or would prefer to speak directly with me, I can be reached at **aafraser@crd.bc.ca** or 250.360.3061. We look forward to hearing from you.

Yours truly,

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

cc: Ted Robbins, Chief Administrative Officer, Capital Regional District
Caitlyn Vernon, Manager, First Nations Relations, Capital Regional District
Joseph Marr, Senior Manager, Infrastructure Engineering, Capital Regional District

FIRST NATIONS INVITATION DISTRIBUTION LIST:

- BOḰEĆEN (Pauquachin First Nation)
- Cowichan Tribes
- Halalt First Nation
- Lyackson First Nation
- MÁLEXEŁ (Malahat Nation)
- paaʔčiidʔatx̓ (Pacheedaht First Nation)
- Sc'ianew First Nation (Beecher Bay)
- Spune'luxutth (Penelakut Tribe)
- SṮÁUTW̱ (Tsawout First Nation)
- Stz'uminus First Nation
- T'Sou-ke First Nation
- Ts'uubaa-asatx (Formerly Lake Cowichan)
- W̱JOŁEŁP (Tsartlip First Nation)
- W̱SIḴEM (Tseycum First Nation)
- xʷsepsum (Esquimalt Nation)
- Songhees Nation

ATTACHMENT C: SURVEY QUESTIONS

SURVEY QUESTIONS

1. How familiar are you with development cost charge programs?
    a. Very familiar
    b. Moderately
    c. Somewhat
    d. Slightly
    e. Not at all
2. Where do you live?
    a. [Options include all CRD municipalities and Other]
3. Are you a CRD customer?
    a. Yes
    b. No
    c. Unsure
4. What is/are your connection(s) to the capital region?
    a. I live in the region
    b. I work in the region
    c. I am a business owner in the region
    d. I own land/property in the region
    e. I am a developer or builder in the region
5. In your opinion, who should pay for water infrastructure upgrades required to service growth?
    a. Existing users (through water user rates)
    b. New development (through the proposed RWS DCC program)
    c. A combination of existing users and new development
    d. Not sure/undecided
6. Do you agree or disagree with the proposed Regional Water Supply Development Cost Charges as a mechanism for cost-sharing future infrastructure related to growth?
    a. Strongly support
    b. Support
    c. Neutral
    d. Disagree
    e. Strongly disagree

7. Do you agree with the proposed Municipal Assist Factor of 1%?
    a. Strongly agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly disagree
8. Do you support eligible forms of waiving or reducing DCCs for non-market rental housing including government, non-profit, and co-op housing?
    a. Strongly support
    b. Support
    c. Neutral
    d. Disagree
    e. Strongly disagree
9. Do you have any other questions, comments, or concerns about the proposed Regional Water Supply DCC program? (Please do not provide any personal or identifying information such as name, address, phone number, etc.)
    a. [Open-ended question]
10. After reviewing the information provided, or attending the info session, how would you rate your understanding of DCCs?
    a. Excellent
    b. Above average
    c. Average
    d. Below average
    e. Poor (I still don't understand DCCs)

ATTACHMENT D: SURVEY RESPONSE REPORT – PROPOSED REGIONAL WATER SUPPLY DEVELOPMENT COST CHARGE PROGRAM (SIMPLIFIED)

Development Cost Charge Program Survey

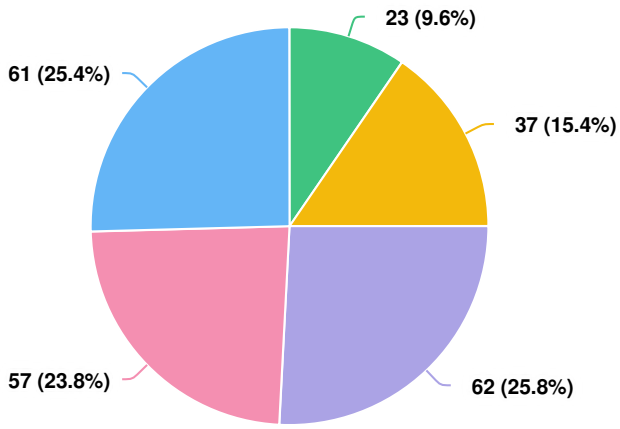
SURVEY RESPONSE REPORT
29 May 2024 - 05 July 2024

PROJECT NAME:
Proposed Regional Water Supply Development Cost Charge Program

BANG THE TABLE engagementHQ

SURVEY QUESTIONS

Q1 How familiar are you with development cost charge programs?

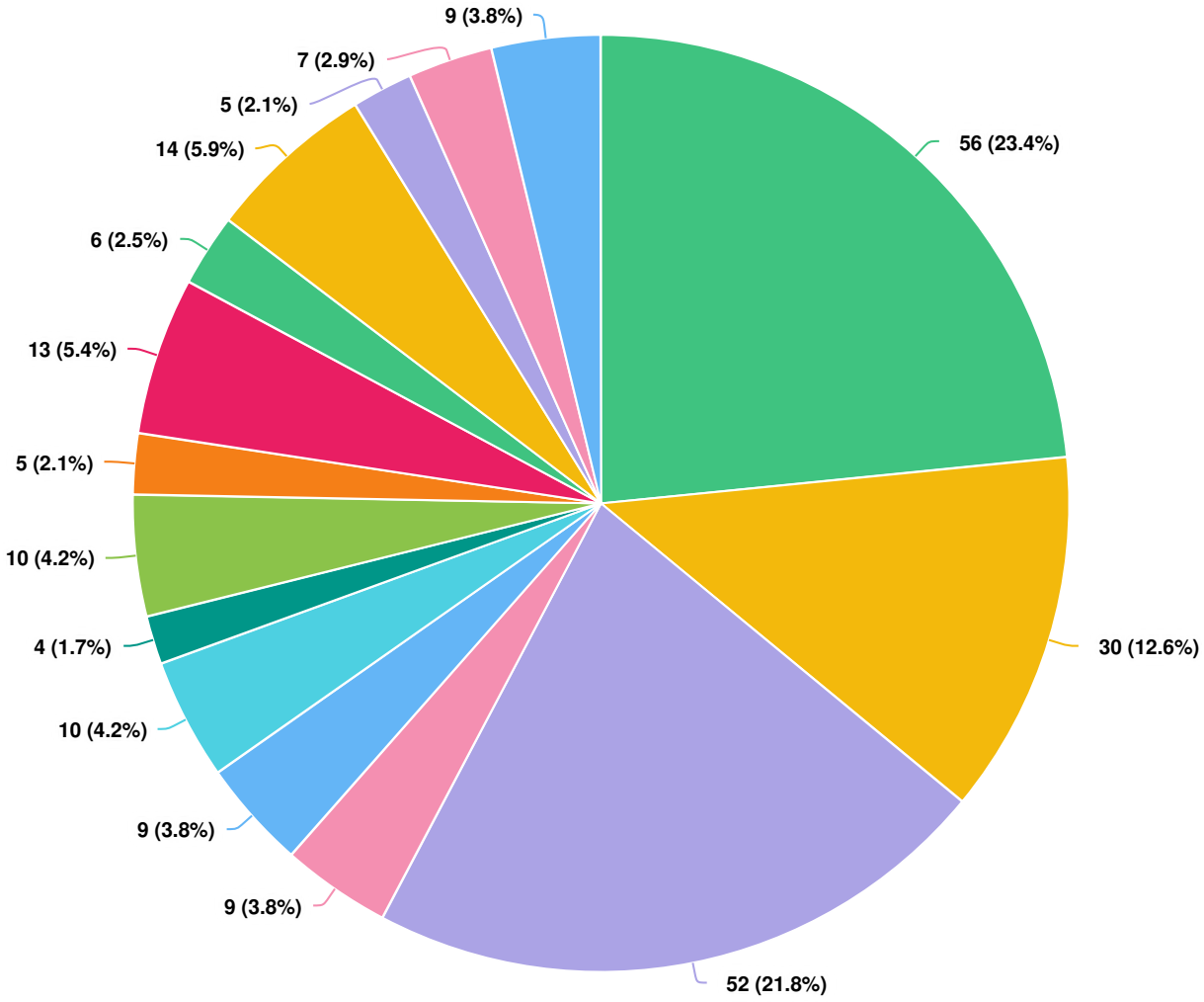


Question options

Not at all Slightly Somewhat Moderately Very familiar

Optional question (238 response(s), 3 skipped)
Question type: Radio Button Question

Q2 Where do you live?

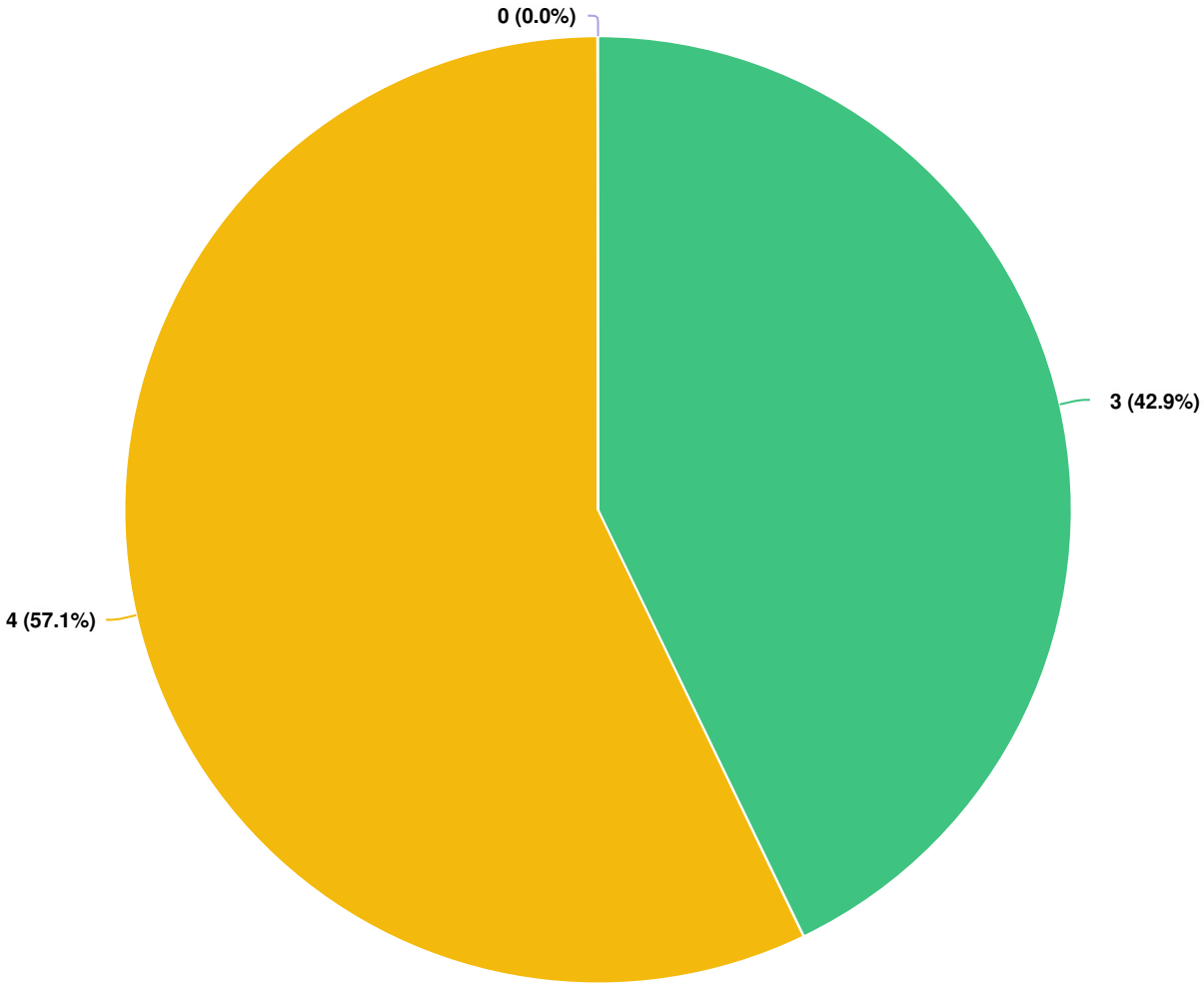


Question options

Saanich, Victoria, Langford, Oak Bay, Sooke, Esquimalt, Sidney, Colwood, Central Saanich, North Saanich, View Royal, Metchosin, Highlands, Juan de Fuca electoral area, Other (please specify)

Optional question (237 response(s), 4 skipped)
Question type: Radio Button Question

Q3 Are you a CRD water customer?

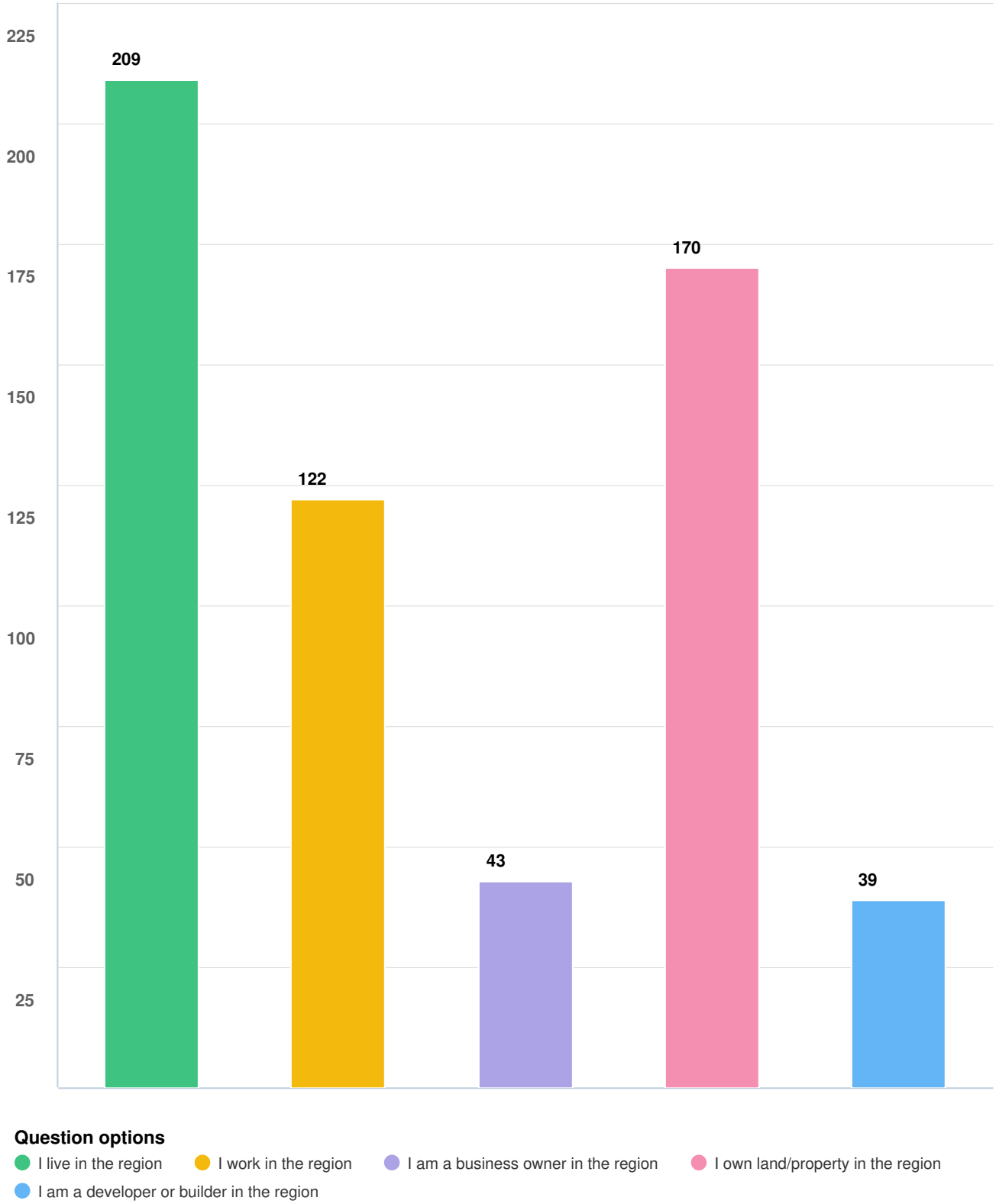


Question options

Yes No Unsure

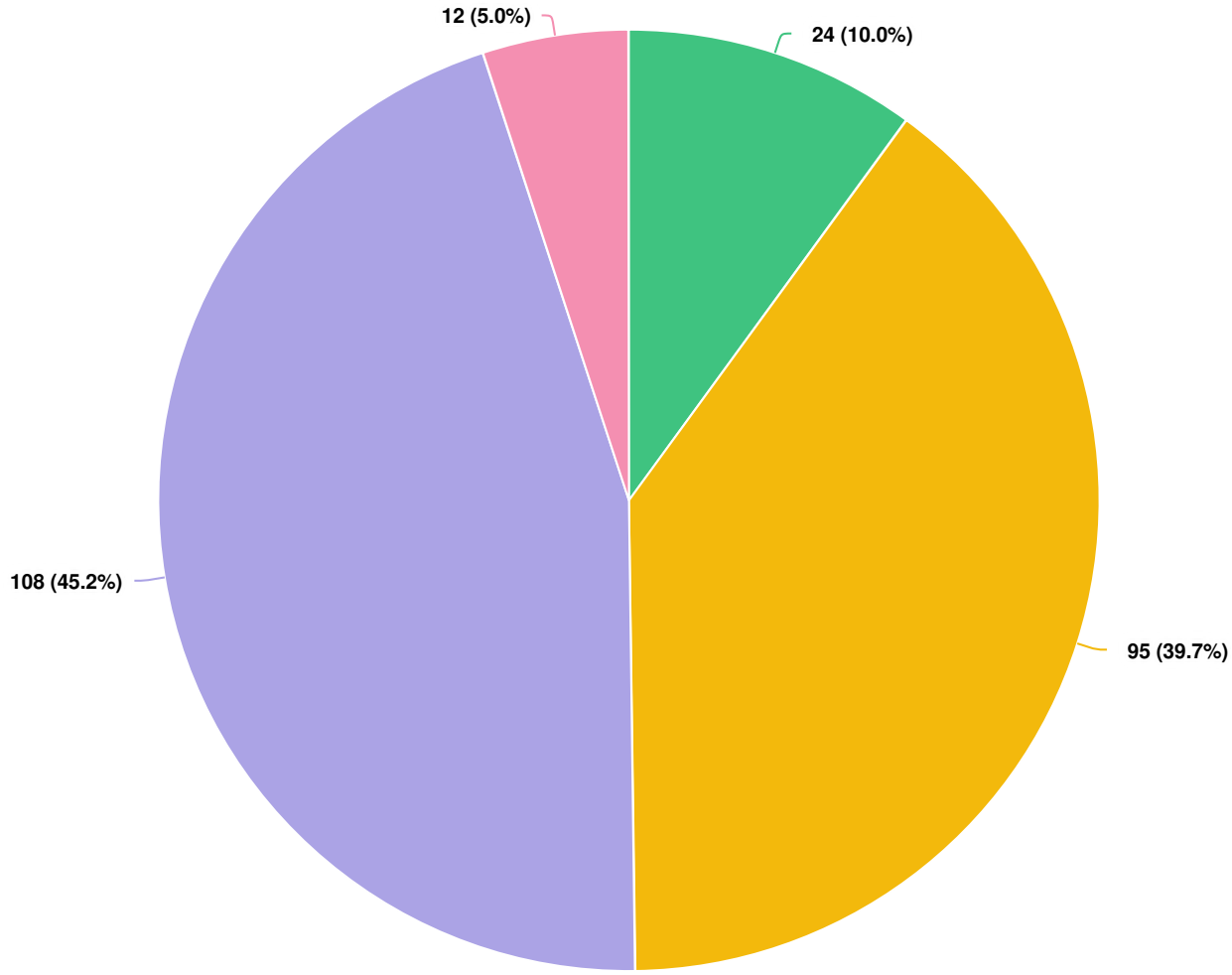
Optional question (6 response(s), 235 skipped)
Question type: Radio Button Question

Q4 What is/are your connection(s) to the capital region?



Optional question (238 response(s), 3 skipped)
Question type: Checkbox Question

Q5 In your opinion, who should pay for water infrastructure upgrades required to service growth?

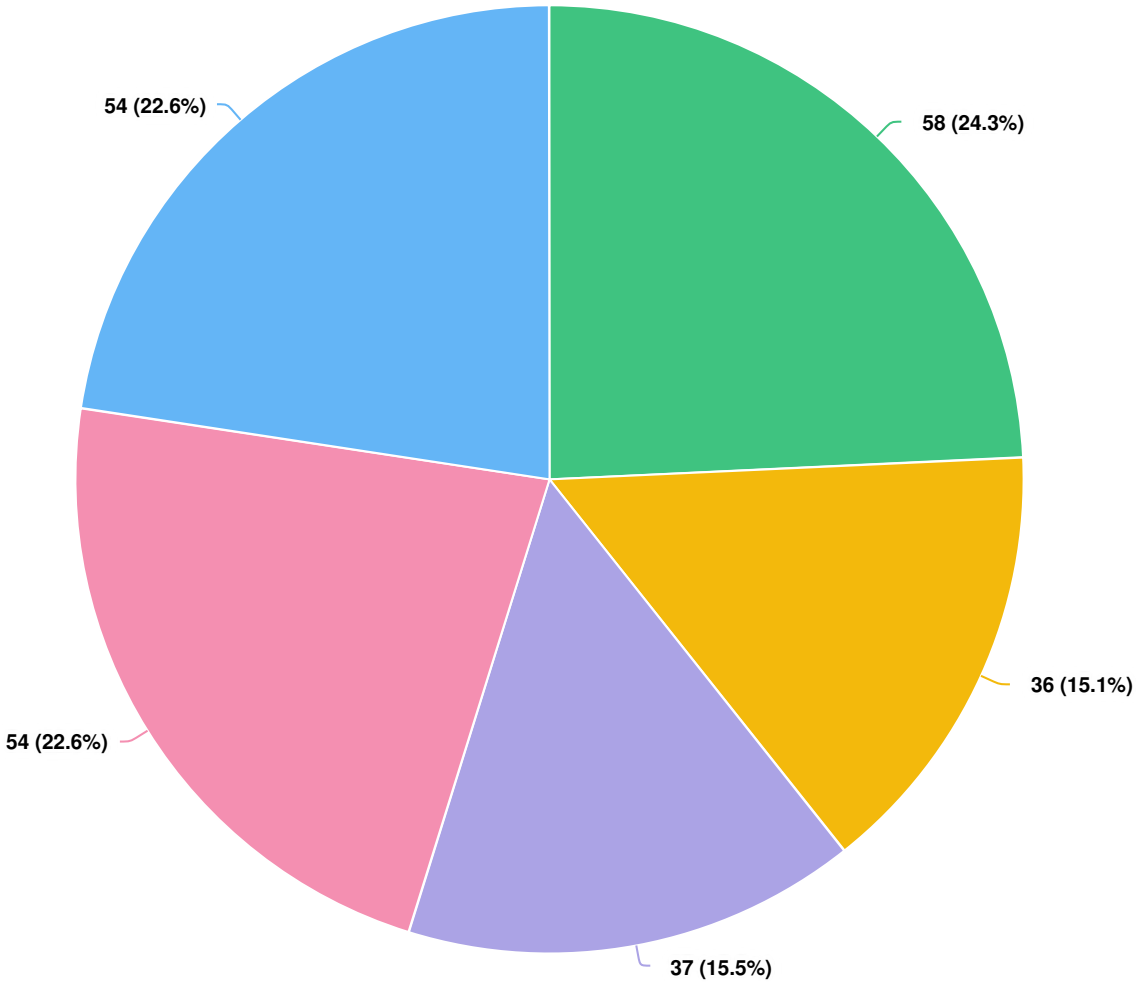


Question options

- Existing users (through water user rates)
- New development (through the proposed RWS DCC program)
- A combination of existing users and new development
- Not sure/undecided

Optional question (237 response(s), 4 skipped)
Question type: Radio Button Question

Q6 Do you agree or disagree with the proposed Regional Water Supply Development Cost Charges as a mechanism for cost-sharing future infrastructure related to growth?

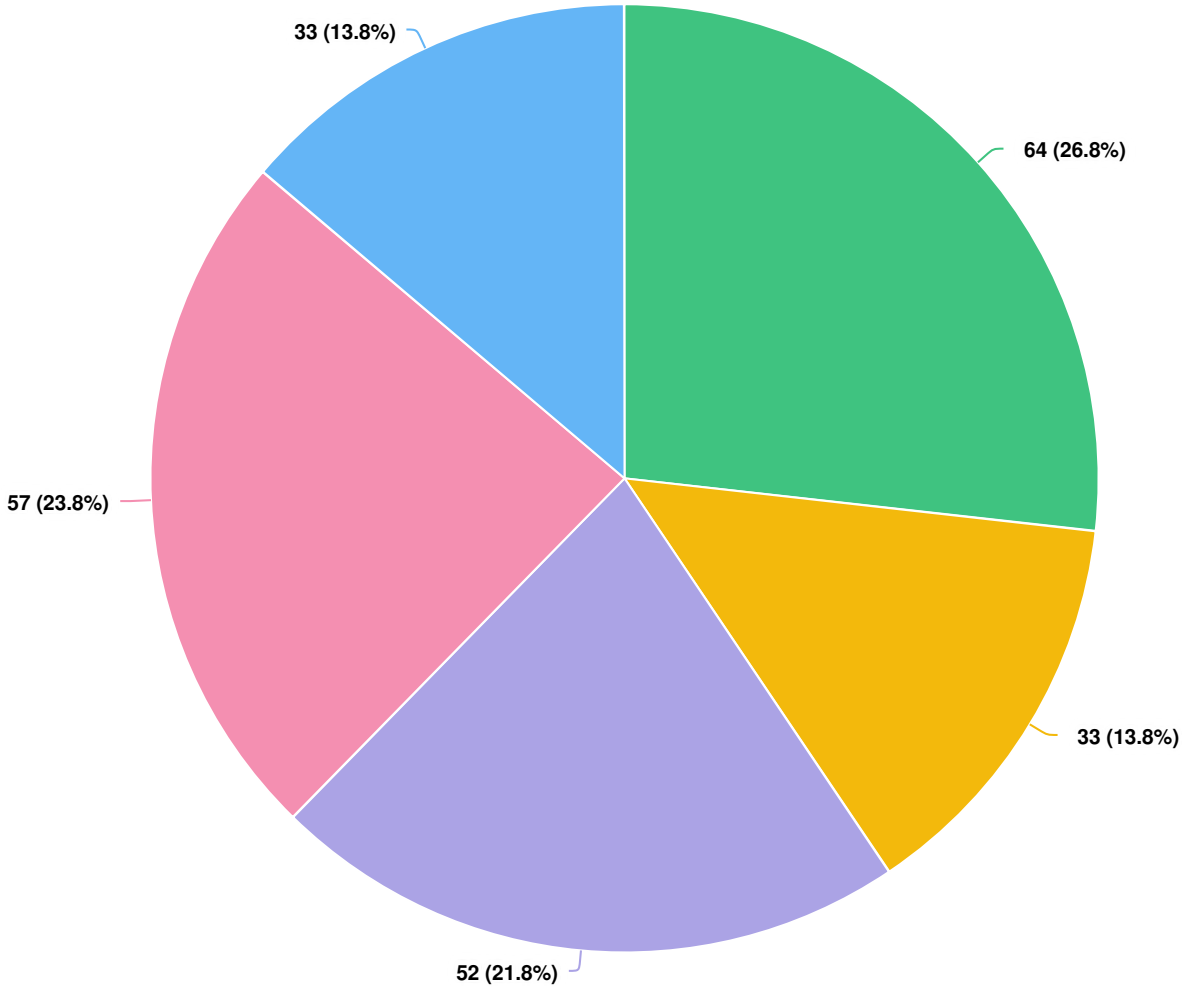


Question options

Strongly disagree Disagree Neutral Support Strongly support

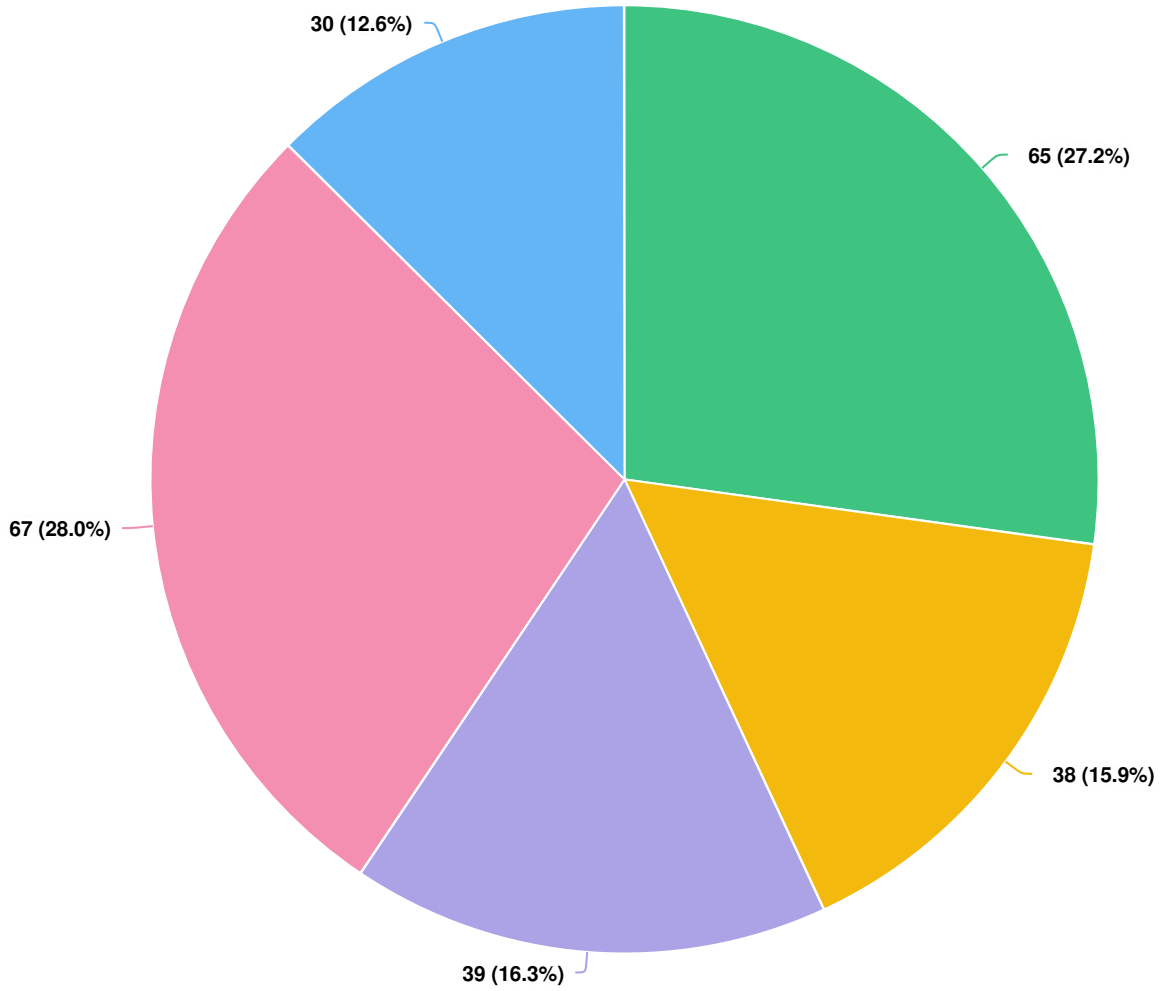
Optional question (237 response(s), 4 skipped)
Question type: Radio Button Question

Q7 Do you agree with the proposed Municipal Assist Factor of 1%?



Optional question (237 response(s), 4 skipped)
Question type: Radio Button Question

Q8 Do you support eligible forms of waiving or reducing DCCs for non-market rental housing including government, non-profit and co-op housing?



Optional question (237 response(s), 4 skipped)
Question type: Radio Button Question

Q9 Do you have any other questions, comments or concerns about the proposed Regional Water Supply DCC program? (Please do not provide any personal or identifying information such as name, address, phone number etc.)

Anonymous
5/29/2024 10:32 AM

Is there any consideration being given to various aspects of conservation of water resources when considering new development, I am thinking of things like cisterns for saving seasonal rain as well as cisterns to store and release waste water in off peak times to take the pressure off existing infrastructure? If someone was building something new and was including significant storage of the kind noted could that be considered as an offset to a DCC?

Anonymous
5/29/2024 11:06 AM

TIde raises all ships. All water consumers need to contribute to expansion/maintenance of services analagous to property taxes paid by long term owners AND new owners equally contribute to municipal services. DCC's are NOT paid by the developer, the costs are transferred to the cost of home contruction and paid by the home buyer. This makes new housing even MORE unaffordable.

Anonymous
5/29/2024 11:23 AM

Any waivers or reductions for low income housing should have strict requirements that prevent developers from negotiating high reductions for a disproportionately small number of low income housing units. Similarly, if a developer decides to reduce the number of low income housing units after being approved any reductions or waivers they received should be reviewed and either cancelled or reduced.

Anonymous
5/29/2024 12:04 PM

Consider increased pressure on local governments to update &/or implement additional DCC charges (in addition to the Regional Water Supply program), and the combined effect of the 'stacked' charges the development community will face. The Province's recent legislative changes to increase housing supply puts pressure on local infrastructure, which will require funding. The challenge is finding the balance between what the development community will work with, and what tax/utility payers will face. Infrastructure grant funding is critical - are there Federal/Provincial funding opportunities to support this major infrastructure program?

Anonymous
5/29/2024 10:08 PM

Developers must be the ones who have to pay for the costs of bringing water into a development. There should be no more allowances for drilling wells into an already threatened aquifer.

Anonymous
5/30/2024 08:29 AM

Way too late implementing, developers right now need to be paying or dont build! What is not talked about is all new development requiring grey water recycling systems for toilets, etc. Status quo is not ok, the unsustainable growth of the island will run us out of water. All develop needs to be at a higher water conservation level NOW.

Anonymous
5/30/2024 09:06 AM

Waiving fees for non market housing makes it difficult to understand the total cost of these projects. If we support non market housing we should fund it in a clear way with its own budget.

Anonymous
5/30/2024 10:52 AM

As a survey option, the survey omits senior levels of government (all BC taxpayers and federal taxpayers) funding regional water supply upgrades. Adding DCCs to fund CRD regional water supply boosts housing costs in the most expensive regions in North America. DCCs should only pay for necessary upgrades immediately servicing the new development. And even those costs have spiraled out-of-control by municipalities ignoring the province's DCC Best Practices Guide.

Anonymous
5/30/2024 03:14 PM

The proposed upgrades to the CRD water supply system are based on flawed data as pointed out in the Report by Jonathan Huggett. The cost of building and development is not sustainable and this further and unnecessarily inflates the cost of new homes

Anonymous
5/31/2024 06:58 PM

Why is there unrestrained, free for all development in the Westshore region of the CRD when we obviously have limitations on water? We’ve 13 municipalities in the CRD with obvious transportation bottle necks and now something as vital and finite as water is becoming a “development” issue? We live on a rock people and there’s. no unlimited resources and land here so let’s stop this craziness before we’re really in trouble!

Anonymous
6/01/2024 11:31 AM

Maybe if we dont permit any commercial or lawn watering we would not have a water shortage.

Anonymous
6/01/2024 01:22 PM

Wasting money

Anonymous
6/01/2024 05:34 PM

I've read quite a bit of the 2022 master plan. I think building the proposed new infrastructure and maintaining existing infrastructure is essential for future water users. It needs to be there when the need is there so build ahead of the need. Overbuilding is better than cheaping

	out and fail to provide the service needed when it is needed. Developers can build nice small practical family dwellings to keep costs down instead of five bedroom palaces for retired couples.
Anonymous 6/01/2024 05:54 PM	I don't support this program. DCCs will reduce housing construction and increase the costs of buying a home. The costs for RWS development should be paid through progressive taxation systems.
Anonymous 6/02/2024 08:13 AM	Growth should pay for growth.
Anonymous 6/02/2024 02:30 PM	As the question (7) is worded, I do not agree with waivers/reductions. I would prefer to see either a credit or rebate to users once the development is completed and tenanted and is truly non-profit, non-market rent and co-op housing. Too many projects start out with declared percentages of affordable units and that gets dropped as the project progresses. I feel it is easier to withhold that money and then give when targets are met, rather than expect the waiver amount to be paid back. The developer will need to account for the full expenditure up front.
Anonymous 6/03/2024 05:24 PM	The DCC for development should pay for grand majority of the new filtration plant costs as this plant is required to bring on new water supply from Leech watershed that needs filtration. If we reduce DCC for non-market housing - it depends on whether these are funded by higher level of govt - if so, then DCC should be paid.
Anonymous 6/03/2024 08:55 PM	I am concerned that the influx of new residents and resulting housing boom which in turn requires significant infrastructure investment would result in tax increases and rate increases for existing residents, who see no benefit from all the growth. That would be quite unfair, in my view. If the developers don't pay, and the taxes paid by new homeowners don't cover it, who will -- presumably existing ratepayers?
Anonymous 6/04/2024 11:38 AM	None at this time
Anonymous 6/04/2024 04:00 PM	1) I believe the premise of the DCC program is fundamentally flawed, The Master Plan which is the basis for future works is predicated on future water usage / consumption, per capita, remaining stagnant at todays' rates. This need nor, nor should be the underlying

assumption. There are ample opportunities for water consumption measures. Similarly, no account has been made for price induced usage changes, ie if / when water rates increase dramatically (as it proposed), then there shall be a corresponding drop in consumption. Lastly, future consumption rates don't correctly account for the change in housing typology (ie move to higher density townhomes + condos). Higher density developments require less water consumption , eg less lawn irrigation etc. 2) The sharing of future costs needs to be equitably born between current and future rate payers. We need to be careful and avoid unfairly burdening new residents to the area with an unequal share of costs.

Anonymous
6/04/2024 04:29 PM

Two concerns: 1) projected water demand rates used in forecasting major infrastructure timelines are too blunt; longer term demand per capita can and should decline (including through more aggressive policy decisions around watering restrictions and higher rates); 2) DCCs of this magnitude, while often considered a cost "paid by developers", will in fact largely be passed through to consumers and impact cost of new housing. Municipal assist factor of 1% is far too low. WE SHOULD GENERATE MORE OF THIS FUNDING THROUGH HIGHER WATER RATES, AND THIS WILL HAVE THE ADDITIONAL/MUTUAL BENEFIT OF INCENTIVIZING CONSERVATION, WHICH IN TURN COULD ALLOW PARTIAL DEFERMENT OF THE CAPITAL PROJECTS!

Anonymous
6/05/2024 03:18 PM

Failure in duty to consult the Public on this major capital project - a now consistent trend Failure to consult with First Nations Taxpayers and Ratepayers will be subjected to drastic increases in water costs of which they remain completely unaware once CRD starts spending capital funds on the Master plan Provincial And Federal housing objectives are directly compromised by this DCC CRD Water DCC will supplant higher priority Public amenities Faulty rationale, lack of scientific rigour, magical thinking on costs - North Shore wastewater, CRD biosolids are great recent examples Complexity and costs exceed the ability of local CRD staff to manage Not compliant with DCC Best Practices CRD is over-simplifying a very complex issue and hiding the fact that they have failed to properly account for the costs, the implications, and the suitability of water treatment.

Anonymous
6/07/2024 01:37 PM

This new program does not take into considerations any infrastructure needed to supply CRD pipe water to existing properties whose wells are running dry.

Anonymous

I understand that upgrades to infrastructure will be necessary for

6/09/2024 08:55 PM

some new developments due to increased demand and that doing this comes at a financial cost but the DCC program isn't going to work the way the CRD says it will. It will ultimately be the end user of the service (in this case water) that will end up paying for it. The developers will simply pass along the cost for fees paid to the future purchaser of a unit in a new given development OR the CRD goes after the money by hiking user rates. Either way the taxpayer gets it in the end. It's just the way it works. What I want to know is... where am I, the end user supposed to keep getting the money from????

Anonymous
6/10/2024 09:23 PM

I'm concerned that there are too many levels of bureaucracy, which requires society to pay for!

Anonymous
6/11/2024 09:18 AM

It makes sense that projects related to growth could be covered by DCCs. However, existing residents also benefit from a more robust infrastructure. We are in a housing and affordability crisis and expanding service allows for lower costs to build housing which benefits the community at large. Additionally, reviewing projects (https://getinvolved.crd.bc.ca/2022-regional-water-supply-master-plan), only some of them are related to increased demand with many of the others are related to quality and resiliency which should be considered regardless of growth: 1. Goldstream Filtration - $1.07b - Quality/Resiliency 2. East-West Connector - $77.64m - Part of Goldstream Filtration - Quality/resiliency 3. Smith Hill - $41.75m - Emergency storage - Quality/Resiliency 4. Deep intake - $135.41m - Supply 5. Third Main - $9.13m - Supply but also quality/resiliency (50-50) 6. Goldstream Reservoir - $89.82m - Supply 7. Jack Lake - $284.96m - Supply 8. Leech River - $41.9m - Supply 9. Main Upgrades - $295.42m - Supply and also quality/resiliency (50-50) Of the total budget of around $2,046m, only about $615m could be related to supply (30%). There also doesn't appear to be information available about what the rate increase would need to be to accomplish this work over the next 30 years, especially if you factor in the time value of collected funds.

Anonymous
6/11/2024 09:32 AM

If as a community our top priority is housing, align policy to match it. It's that simple. Get out of the mindset of trying to squeeze everything you can out of the front of a development and realize that you will be able to fund more projects on the back end through spreading the cost amongst all users, not the few who are building housing.

Anonymous
6/11/2024 10:00 AM

Here is a quick real estate development and housing economics 101 lesson for policymakers: 1. Increasing Development Charges Decreases Housing Affordability: For projects to commence,

developers must obtain construction financing from a bank. Banks typically require a project to demonstrate a minimum 10-15% profit margin and pre-sell at least 70% of the project's total units. Typically, about 50% (or more) of those who purchase pre-sale condos are investors, not end-users. In other words, to provide new housing supply, a real estate developer depends on both investors and end-users. This effect is also felt in rental buildings, where rents need to be raised to maintain the minimum return required by banks. 2. Higher Charges Drive Up Construction Costs: When development charges (and other government taxes) increase, these higher charges drive up construction costs, which developers must pass on to potential buyers and renters. This is no different than introducing a tax on any other commodity: if you add a tax to oranges, everyone needs to pay more for oranges. Note that approximately 33% of the cost of building housing is in government taxes. 3. Reduced Housing Supply Increases Prices: When development charges increase, developers need to raise the purchase price for pre-sale units and rents, reducing the pool of potential purchasers and slowing down the production of new housing. The diminished housing supply exacerbates the supply-demand imbalance, leading to higher prices for both rentals and purchases. Inflating property values also increases property taxes for current residents, costs which are then passed on to potential purchasers and renters of existing properties--a vicious cycle continues. These real estate economic principles are often misunderstood or ignored by the common voter or layperson. Many are either ignorant of these principles or refuse to believe them, similar to how some people deny scientific facts like the Earth being round. Economic reality contrasts starkly with political decision-making. Policymakers often prioritize short-term electoral gains over sound economic principles, playing to an uninformed voter base. Politicians, seeking to maintain their positions, adopt populist measures that appeal to voters but disregard economic science. As a result, policies that introduce higher taxes through increased development charges, intended to fund infrastructure and services, ultimately harm housing affordability and economic stability. This affects both current residents and those seeking to enter the housing market in Victoria. Instead of raising development charges, policymakers should explore alternative strategies to fund the necessary infrastructure for new housing: 1. Incentivize Private Investment: Simply, reduce taxes on new housing. Less taxes will increase new housing supply and increase the tax revenue base in the form of new property tax revenue for the government. Offer tax incentives or credits to private investors and developers who contribute to infrastructure development. This can reduce the financial burden on developers while still funding necessary infrastructure. 2. Public-Private Partnerships (PPPs): Establish partnerships between the government and private sector to share the costs and responsibilities of infrastructure development, leveraging private

	capital and expertise. 3. Density Bonuses: Offer developers the option of increased density or additional building height in exchange for contributions to infrastructure projects, generating more revenue from the same land. By exploring these alternatives, policymakers can find more balanced and sustainable ways to fund infrastructure without disproportionately burdening developers, ultimately enhancing housing affordability and economic stability for all residents of Victoria.
Anonymous 6/11/2024 01:24 PM	Additional costs to development will choke off supply. Housing development margins in todays market are razor thin. For each positive step taken it seems government takes 2 negative steps backwards.
RM 7/01/2024 07:43 AM	What population level can the CRD's water resources (current and planned) support?
Anonymous 6/11/2024 02:52 PM	Community info sessions would be good..
Anonymous 6/11/2024 04:34 PM	Housing construction targets will be impacted by increased DCC rates. New developments benefit everyone, i.e. by way of an increased Property Tax base.
Anonymous 6/12/2024 01:15 PM	However we finance a water supply in the Region, we cannot increase supply if there is not enough water. We are in times of increasing drought everywhere. When we do not have enough water available for all our needs, especially to irrigate growing fields for the food we need to survive, we cannot somehow create more water. Water supply is demising. We need to face obvious facts.
Anonymous 6/12/2024 01:15 PM	how much will this billion dollar plant inpact my taxes
Anonymous 6/13/2024 02:30 PM	As increased population growth of the CRD is being MANDATED by the Provincial Government, I feel that it's incumbent upon the Provincial Government to fund the majority of infrastructure requirements (100%) that result from this growth.
Anonymous 6/13/2024 02:43 PM	Since the Provincial Government is the body that is pushing for increased densification and urban sprawl then the Provincial

	Government should be willing to accept the majority of costs associated with this growth, i.e. water, sewer, transportation. I also think that this survey is flawed because the CRD has no way of confirming who is actually filling out a survey. They should be resident taxpayers, as opposed to other third parties who may be able to fill out multiple copies of this survey as there is no identifier required. What is to stop a developer (who may share greater costs) from having a bot fill out hundreds of these surveys in their favour?
Anonymous 6/14/2024 10:21 AM	Sorry just feel it's an added level of government . I'm confident as far as water management goes the CRD has done a good job todate. The future is unclear.
Anonymous 6/14/2024 10:35 AM	Your survey doesn't ask many questions. Seems a little directed. Avoiding the final outcome of increasing our water rate by triple today's cost. Also I disagree with borrowing money to allow most improvements. A slow increase in water rates should flow into capital fund to allow these expenses. I think that is not presently allowed. Good households don't live it dept.
Anonymous 6/14/2024 12:02 PM	I support DCC's as a suitable way to fund necessary future infrastructure. What I don't support is a massive price swing in DCC's to fund what I believe to be unnecessary contingency infrastructure. This pole has been set up in a strange way that doesn't really communicate what the CRD is doing. You should clearly communicate the percentage change in DCC's to the public along with the specific infrastructure within the plan. This massive increase to DCC's while we are in a housing crisis is irresponsible. The cost will be passed directly onto homebuyers. I would also like to see actual evidence these projects are necessary. When researching deeper (something the public shouldn't have to do) it appears like the CRD is building redundant infrastructure for the absolute worst case disaster. All public organizations have an obligation to look at the bigger picture instead of just covering themselves without any thought of cost.
Anonymous 6/14/2024 01:57 PM	The lack of consultation and transparency with the public is extremely concerning and disappointing. This is a complex issue that has evidently not been thought through properly and will have a significant impact on multiple stakeholders who are unaware.
Anonymous 6/14/2024 02:52 PM	There are more ways to finance infrastructure than DCC’s and the proposed approach is grossly unfair. The reality is that every $ of

	added cost to new housing pushes up the cost of all housing over time. A rising tide floats all boats. The DCC should be nixed and instead costs borne equally by all water rates users (the end user). If we want people to consume less of something, you increase the cost. If we increase the cost of housing through this, there will be less housing, if we increase the water rates, there will be less consumption. What's better, less housing, or a more conscious use of our water resources? The latter all day long.
Anonymous 6/14/2024 03:57 PM	Users of resources should pay for them which will reduce use and wastefulness.
Anonymous 6/15/2024 09:49 AM	My feeling was that new developments, other than 100% non market housing, should pay 100% of the expansion costs, however, I was not aware that the province requires a 1% contribution from current home owners. I suppose this is not too onerous.
Anonymous 6/15/2024 12:26 PM	I remain unsure how this differs from a simple tax or increase in water price increase. Drinking water is obviously a hugely important component of regional government, but it is already by far and away the largest expense in the CRD.
Anonymous 6/15/2024 01:03 PM	- The government initiatives to create more housing are directly counter to this proposed DCC - Complete lack of consultation
Anonymous 6/16/2024 07:32 AM	The CRD should put out a survey asking if people if they support the proposed $2 billion water supply upgrade plan! That plan has numerous flaws including, but not limited to not presenting all the relevant information, and providing alternative options.
Anonymous 6/17/2024 09:28 AM	This unnecessary project is way beyond the core responsibility of the non-elected CRD water board. Regionally elected councils who are accountable to their constituents are adamantly against what amounts to a massive tax increase, and the 4x or 5x increase in water rates/DCC's is counter to the provincial government's mandate to make housing more affordable. We also feel that the CRD has failed in their duty to consult the Public on this major capital project (a consistent trend), failed to consult with local First Nations regarding the environmental impacts. The CRD Taxpayers and Ratepayers will be subjected to drastic increases in water costs of which they remain completely unaware, and are against what the elected representatives on council have voiced to the CRD during the

	presentations they completed over the past 6 months. The program's cost counters the Provincial And Federal housing objectives are directly compromised by this DCC, is not compliant with current DCC best practices, and complexity and costs clearly exceed the ability of local CRD staff to manage. We feel that the CRD Water DCC will supplant higher priority Public amenities and was proposed with a faulty rationale, lack of scientific rigour, magical thinking on costs, and will turn into the CRD's version of the ongoing North Shore wastewater treatment plant boondoggle. Please do not move forward with this project.
Anonymous 6/18/2024 07:13 AM	Strongly agree that growth needs to pay for the infrastructure to support it. Worried that lobbying will influence the outcome and make existing users pay for it. I would like to see a mechanism that places limits to growth.
Anonymous 6/18/2024 07:16 AM	It is important that a full scope and accurate budget needs to be in place, and be transparent, before moving ahead with a project of this magnitude and before starting to collect funding from DCCs or increased water rates.
Anonymous 6/18/2024 12:40 PM	no
Anonymous 6/18/2024 07:51 PM	New users should be responsible for the costs. If the utility upgrades required are triggered by growth and development, builders/developers should be paying for that.
Anonymous 6/18/2024 08:47 PM	Just seems like the public will pay through increased water rates no matter what is implemented . The home owners here are being hit on all sides right now by higher government taxes from all levels. Higher cost of living, we’re bleeding our pay checks into government coffers more and more with less left just to get by. Renters too are getting further behind. Seems like this is the wrong time to put your hands in our pockets again.
Anonymous 6/18/2024 09:05 PM	This process is set uobto pass. The Commission should look at the debacle at North Vancouver before spending tax dollars residents cannot afford .
Anonymous 6/19/2024 07:07 AM	The 2022 Regional Water Supply Master Plan Review written by Jonathan Huggett P.Eng., 10 January 2024, illuminates multiple

shortcomings and perhaps negligence of the CRD RWS DCC plan. It most definitely indicates a need for further study before embarking on excessive expenditures for infrastructure projects. The CRD must pause this implementation and consider the facts presented by Jonathan Huggett. The people of the CRD deserve all of the facts and substantial input before determining if a major project is to proceed and how it will be paid for.

Anonymous
6/19/2024 07:42 AM

2 billion dollars. 2 billion dollars. 2 billion dollars. Please reconsider your options. This plan is incredibly expensive and the track record of large scale infrastructure projects coming in at or under budget is very poor. People claim to want 'affordable' or 'attainable' housing but at every turn municipal, regional, provincials and likely federal governments are increasing the cost of housing (that we desperately need we are constantly told) with taxes, step codes and now this. I do not support this plan in its current form.

Anonymous
6/19/2024 08:56 AM

I think it has strong foresight for future needs and capacity. While expensive, I believe it positions the region well for future growth and is much needed.

Anonymous
6/19/2024 09:30 AM

With increase of mortgage rates, house insurance, cost of living, property tax increase, upkeep, how can I afford to stay in my home. It is imperative that each of you consider all these dare I say consequences to every person in every decision you make. Every level of government has their hand out for what they deem absolutely necessary but does nit look at the onslaught brought down on the average home owner. Please stop!

Anonymous
6/19/2024 09:39 AM

My family is on well. If I have to pay for someone else's water, you better be sending a pipe my way as well. Sarah dr in OP for reference.

Anonymous
6/19/2024 10:30 AM

Forward looking plan that is important and necessary.

Anonymous
6/19/2024 01:21 PM

I believe the whole cost of this program is wasteful of taxpayers money.

Anonymous
6/19/2024 03:07 PM

I strongly believe that a better review of the overall plan including the proposed costing so far presented be thoroughly reassessed by a fully independent and qualified third party. $2B is an extremely high

estimate starting place and government and community based organizations like the CRD usually do a very poor job of estimating costs. These are often seriously seriously underestimated and leaves taxpayers with significant cost overruns down the road. By the time these overruns become evident the original board members making the decisions are long gone and the nee CRD decision makers will blame the overruns on errors of previous administrations. You can count on this happening 100%. Better to now spend the money and have this project fully reviewed by a very knowledgeable third party(s) before letting a poor uninformed decision guide implementation of the present plan. I strongly recommend that you step back and reassess or unable to do so that you step aside and let others do this important review with full public disclosure during and after the process.

Anonymous
6/19/2024 03:32 PM

If growth is goung to happen the developers shoukd be funding the infrastructure as the mae a lot of money off sales and so should the municipslities as they r making alot more in property taxes...u r pricing users out of the market

Anonymous
6/19/2024 03:38 PM

All users should fund system maintenance. Growth (new users) should pay 100% of expansion costs. Growth should also fund required upgrades to existing systems that are added onto. Such as pressure increases when required. Pumping water uphill is expensive

Anonymous
6/19/2024 04:09 PM

One thing that has been brought to the discussion recently due to the emergency in calgary and other water infrastrucure in north america is the longevity of pre cast concrete pipes and relying on a single main water main of which the crd’s could be more of a challenge to access and fix. I hope there will be more attention given to not only the issues with growth but with our aging infrastructure too.

Anonymous
6/19/2024 08:13 PM

Infrastructure required in the region for growth should be jointly funded by DCC and existing rate payers. Everyone benefits from economic activity so everyone should help pay.

Anonymous
6/20/2024 07:03 AM

Increasing DCC's will eliminate smaller developers and local development companies and we will only see large corporations continuing to develop because they have bigger profit margins and can afford to hold larger debts until a project is completed. We will see less town home and single family dwellings created if DCC's are increased.

Anonymous
6/20/2024 09:04 AM

I note that there is no question in this survey that asks whether or not we support a billion dollar treatment plant in the first place. I would argue the case has not been made that it is necessary, nor do I believe that if it is completed it will come in anywhere close to on-budget.

Anonymous
6/20/2024 12:15 PM

What will the actual cost of the infrastructure be because the projected rates you have used are no longer valid to make an informed decision on behalf of CRD residents? What is the actual cost of the average homeowner's annual water consumption bill? What is the actual timeline of the projects given the research is no longer valid and requires updating? What will the CRD do to avoid going down the same overbudget and overtime road as Metro Vancouver's water treatment plant? The CRD's have no capacity to pay for such cost overruns...our children cannot be burdened with this in rents and house pricing. The projects within the entire proposed plan are not all new development related, therefore why would it be reasonable to put the entire program cost into a DCC that is then put onto the cost of new construction, which would in-turn increase the price of housing in the CRD? How have you separated and calculated the community (all water users) from the new development (growth) for the proposed DCC for who will benefit from each component of the proposed plan? How have you ensured this DCC follows provincial best practices? Why do we need such an extravagant plan? How have you evaluated the benefits of less costly plan options that the CRD community will sustain and thrive on?

Anonymous
6/20/2024 12:47 PM

What happens to the existing water delivery infrastructure in the CRD when we go from a gravity-fed system to a pressurized system? What is the analysis of the costs for this within your proposed plan? What happens to the pressurized system in the event of a big earthquake? What are the contingencies in the event the pressurized system fails?

Anonymous
6/20/2024 03:09 PM

Do the DCC rates take into consideration the end user becoming a rate payer who would also be contributing. The fees seem drastic for developers and negatively affecting affordability in an already challenged market. I think the DCC rates should be reduced and pushed down to the end user in the rates

Anonymous
6/20/2024 03:47 PM

DCC's are unfair for new users, they have to pay for the DCC and then pay water user rates. Existing users have not had to pay DCC's even if they were once new users.

Anonymous
6/20/2024 04:07 PM

It seemed like no real research had been done in that session to establish the proposed rates.

Anonymous
6/20/2024 04:40 PM

More waste of taxpayers money.

Anonymous
6/21/2024 01:45 PM

I still believe the consultation and feedback collected is insufficient to confidently proceed with such a substantial infrastructure spending project that will be the financial responsibility of all current and future residents/generations. DEBT CONCERN: I respect and appreciate the importance and value of maintaining the CRD's water infrastructure, however the costs and associated taxes proposed are extremely large with no fixed termination date. While I understand there is a reoccurring 5-year review process, it's my opinion that the process should be controlled or HEAVILY influenced by the public. Each of our governmental bodies are already significantly burdened with debt, as a result of poor oversight and fiscal policy, and this ultimately is passed to the citizens and tax payers to pay. In this instance, I am concerned for the financial responsibility and accountability of another governmental body (CRD Water) initiating another self regulated spending project that will dramatically increase taxes on CRD residents, which will undoubtedly drive up costs directly and indirectly in all industries, and contribute to the ongoing emigration trend of younger working class citizens. In the event a negative net migration trend occurs or a decline in development due to market conditions or high costs, how will the CRD compensate for the costs incurred from this project? FINANCIAL MODELLING: The modelling seems to make numerous assumptions, which increase the risk of budget deviation. It has not been made apparent to myself and likely others how these likely cost increases will be addressed without further increasing taxes/DCCs. The figures shown appear more as a 'best guess', but in reality the actuals will determine the finalized costs. Im sure this process is complex and to achieve hard figures is extremely difficult given the long time horizon for these projects, however the current modelling is misleading as it does not communicate the true costs and only shows the net costs after various assumptive deductions are made. In the financial and investment realm, investors and lenders alike would be unwilling to proceed with a project where the pro forma is incorporating potentially optimistic assumptions. For these reasons, I have not been satisfied with the figures presented. There are several other reasons behind my lack of support for this infrastructure project, however the two items listed above are paramount in my eyes. Please note, my feedback is based on the info that I have been provided and am aware of. I understand the difficulty CRD Water must be experiencing trying to circulate digestible information to a large volume of individuals. I can imagine the detail requested by some, such as

	myself, isn't necessarily ideal to distribute to the general public as it may further confuse or disinterest them in the proposal. Nonetheless, it think these points must be considered on such a serious matter that will impact our regional economy, cost of living, housing, and lifestyles for several decades and likely in perpetuity. I hope the CRD understands the gravity of the proposal put forward, and thoroughly consideration of the cascading effects it will in have on our community's future, not purely through the lens of water infrastructure maintenance.
Anonymous 6/21/2024 03:12 PM	This survey asks questions that are quite binary. I think that there are nuances to implementing waivers and reductions for eligible forms of development. For example, I would not include government, non-profit and co-op housing as equal types of non-market housing. Regardless, in general I agree with a DCC program.
Anonymous 6/21/2024 04:54 PM	DCC program needs to be re examined not because it's a DCC program but for the 2 billion dollar price tag. I believe an independent consultant has deemed the expenditure unnecessary. So yes, to DCC's NO! to 2 billion dollar expenditure.
Anonymous 6/24/2024 03:17 AM	New development is overburdened by fees as it is. This is another hindrance to the creation of much needed housing supply and reduces the viability of development, as well as the desirability of investing in the region.
Anonymous 6/24/2024 08:27 AM	Adding more costs to creation of housing and other new development is exacerbating the housing crisis and severely driving up the cost of all new construction, which will limit business growth.
Anonymous 6/24/2024 08:41 AM	It is crucial to share the cost of growth between new project DCC and existing users to facilitate the deliver of all forms of housing in the region. If the entire cost of infrastructure upgrades that will also be used to service existing users downstream, there will be very little housing delivered creating even larger challenges in the CRD.
Anonymous 6/24/2024 08:53 AM	Waivers for DCCs for non-market rental housing need to be based on sound economic analysis to encourage this type of housing.
Anonymous 6/24/2024 09:54 AM	-Waivers should be provided for market rental housing as well, to continue to make market rental viable in the region. -As a new DCC

this should phased over time and slowly stepped up to the current rates, this is a big change with no time for the market to properly adjust

Anonymous
6/24/2024 02:34 PM

Time to put the brakes on the CRD and it's out of control spending.

Anonymous
6/24/2024 03:11 PM

We all consume water. So we should all pay for infrastructure upgrades, with no one group of people, nor any level of government being able to opt out of their share of the cost.

Anonymous
6/25/2024 08:46 AM

Do not use Metro Vancouver as an example. They did not meet the requirement for analysis and consultation, and industry is challenging this with the Province. The Metro DCCs are starting to prevent land from transacting, which is a risk indicated in the Province's Best Practice Guidelines. Also, the concept of in-stream protection for existing projects is now being discussed in Ottawa at the Federal Level. 12 months protection for a project that takes two -four years is not acceptable. Once a site is purchased, the decision is made and the money is spent. It is not fair to have the risk of DCCs increase after acquisition of land. Lastly, this concept of "growth paying for growth" seems to be missing the important sub concept of "Nexus and Proportionality", which means that a link between a project and the impact needs to be established and the project needs to only pay its proportionate share. This is also in the Province's Best Practice Guide.

Anonymous
6/25/2024 02:35 PM

It is inappropriate to make a billion dollar investment into water projects based on limited survey input and with zero consideration of how the new DCC will impact the financial viability of new housing.

Anonymous
6/25/2024 03:13 PM

Whilst this survey focuses on DCCs, and questions are really limited to this topic, I wish to register my concern about a number of aspects with the overall Master Plan, works implementation, and payment mechanisms. It is important to note that many of my concerns then flow into the DCC issue. My concerns are as follows: 1) Public input into Masterplan a. I don’t feel there was adequate time, or notification, offered to the general public. This is especially so given the project +/- $2B worth of project spending. b. Given the Master Plan is essentially a technical document from which policy can be derived, it does not speak specially to the manner in how and when costs will be paid. So public input made on the Master Plan was done so without the knowledge of how it will impact residential rates, of that of DCCs. Now this information is available, a wider engagement should take

place, and perhaps revisit, some of the Master Plan assumptions and recommendations. 2) Water Demand Analysis a. On face value the Master Plan reasonably assumes a per capita projected water demand of 366 L/c/d, noting this is the average 10 year figure. Importantly, the Master Plan states (page 65 reference Figure 3.5), that if demand were reduced to 300 L/c/d then the Sooke supply extends to 2060, and a figure of 250 L/c/d extends it further to 2070. b. However, no commentary is presented in the Masterplan about what impact significant price increases in the residential rate (now estimated between 200-400+%) would have on the future demand. Surely it would be safe to conclude that by more than doubling user rates, then there would be a significant drop in use to below that 300 L/c/d figure. If this is the case, then much of the planned work need not be undertaken in the short / medium term, which in turn has a direct impact on DCC charges. c. In CRD presentations that I have viewed there has been the continued point that demand estimates will be revised every 5 years, however, there is data available now which indicates the projected demand shall be far lower than the adopted 366 L/c/d. d. New housing being built is overall to a higher density and has less water demand. Future projections should at the very least take into account these lower demand figures. e. It's understood newer existing neighbourhoods, like Westhills in the West Shore, have detailed data that shows demand is significantly lower in such neighbourhoods. Though it appears this data is not being utilised by the CRD. f. In summary on this point, a full and detailed analysis of water demand is required. It should consider both historic data sets, but more importantly future demand conditions, in addition to undertaking a sensitivity analysis on the elasticity of demand when coupled with dramatical price rises to residential rates. This should then be used to inform whether some of the proposed works are required. 3) Residential Rate increases a. It does not appear it is the intent of the CRD to undertake any engagement with the public on the likely price increases to the residential rate, estimated somewhere between 200-400%. I find this remarkable given the magnitude of the increases, and strongly encourage the CRD to reconsider. b. Clarity should be provided on how the price increases are to be implemented. c. Given there is a great deal of focus on the DCC rate implementation (early 2025), one would expect the residential rate increases to commence hand in hand with those of the DCC. Is this the case, and if not, then advice should be provided as to when this will happen? I concur with the CRD in assessing the long-term needs of water supply for the region. I similarly agree that costs incurred need to be equitably shared between the various users, both existing and future residents. I do, however, take exception to some of the fundamental assumptions made, as highlighted above, which in turn materially affect the recommendations of the proposed works and their timing. These assumptions should be revised and more fully analysed, along with greater involvement with the public and

community groups along the way.

Anonymous
6/26/2024 08:05 AM

I don't believe that the actual project should go ahead, but to put the cost of the project on new home owners/renters in an already unattainable situation isn't an acceptable solution.

Anonymous
6/26/2024 06:54 PM

Developers for the most part should pay for infrastructure required to service that development. It is not reasonable to expect current residents to pay for something that is adequate for their needs. Replacing aging infrastructure should be shared between current users and developers.

Anonymous
6/29/2024 09:45 AM

The entire project has not been thought through thoroughly. There are other options to consider. There are far too many assumptions being made and not based on the data. The estimated costs are based on historical estimates and do not reflect future costs.

Anonymous
6/29/2024 01:58 PM

The proposed costs are to provide upgrades as development and population increases. Hence the cost should be a part of the developers costs which is likely passed onto new buyers of this development. It should not be an added cost to existing homeowners. They should be grandfathered in. Developers want to make record profit? Too bad so sad, they need to pay for this.

Anonymous
6/29/2024 02:17 PM

My concern is that it doesnt go far enough, and would support more DCC usage towards all projects, in order to minimize the CRD portion and thus minimize property tax impacts

Anonymous
6/29/2024 03:01 PM

no

Anonymous
6/29/2024 04:24 PM

Nobody can afford upgrades right now leave it alone

Anonymous
6/29/2024 07:20 PM

Will this include upgrading sewer system and adding sewer in areas that are already developed. For example goldstream meadows where I live.

Anonymous
6/29/2024 08:16 PM

I don’t understand it enough to have a strong opinion, but wonder how equitable it is to have the same rate for a single person in a

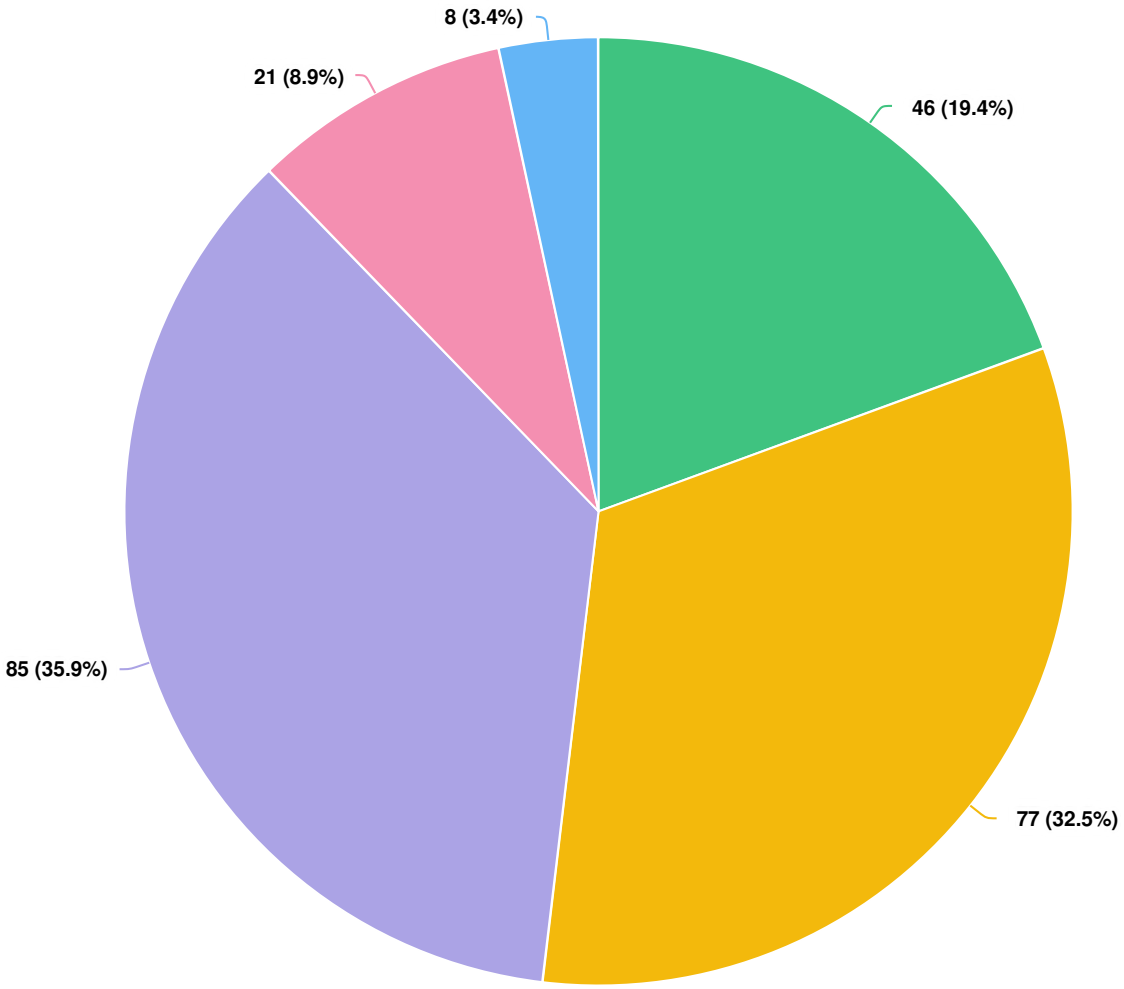
	detached home as opposed to a family of 4 or 5, for example. I believe it should be more applicable based on actual consumption rather than just type of dwelling.
Anonymous 6/30/2024 09:04 AM	I'm not sure why this is even being discussed we have the best water available and what I understand there is no issue regarding water available for many years to come
Anonymous 6/30/2024 10:00 AM	What percentage is the provincial government paying? All residents should pay, not only via property tax. Projects always run over cost, what is the contingency plan. Infrastructure of this nature should be funded by the Provincial and Federal government as well as developers Not via any portion of property taxes. Once the infrastructure is built it should fall to the residents to maintain and operate it.
Anonymous 6/30/2024 01:00 PM	If the final decision is not primarily through user rates, is the payment spread over time or charged to homeowners as a one-time lump sum? I'm thinking of the $9000+ listed for detached homes. I would seriously object to a large sum at any given time, as my budget simply can't manage it.
Anonymous 6/30/2024 10:50 PM	I think it is really good that the CRD is planning ahead for our water infrastructure. With the population growth we're seeing, along with the effects of climate change and related droughts, we need to be thinking about this. Saving up over time for a big cost like infrastructure to meet our future water needs makes a lot of sense.
Anonymous 7/01/2024 04:08 PM	All infrastructure should be paid for by the users. using DCC's to fund this means that new users are paying more to use this infrastructure than existing users, once as a DCC and second in the rates. Housing is already too expensive in the CRD and layering on costs just make it worse. The Province, CRD and Municipalities all claim they want affordable housing, but continue to layer on cost after cost that do the exact opposite. If we need new infrastructure you should find ways to pay for it by cutting excess bureaucracy and government bloat. By adding costs to build more housing, less housing will be built which will drive up the costs even further.
Anonymous 7/02/2024 10:52 AM	It seems that existing users should pay for the upgrades but anything supplied for new development should be paid by developers who will of course a pass on the costs. Water supply is no different than a

	roof- why should older established residents pay for a new home's roof?
Anonymous 7/03/2024 09:21 AM	The 1% assist factor does not account for the benefit existing users receive from system upgrades/expansion
Anonymous 7/03/2024 10:27 AM	For the decade starting in 1995 over $150 million was invested in the Regional water system to improve and expand the water supply system (increasing the capacity of Sooke Reservoir, seismic upgrades, feeder main replacements etc.,) and the purchase of current and future water supply lands. These expenditures were funded primarily from the wholesale water rate. (A small amount came from reserve funds). Had a DCC been implemented based the 1995 Long Term Water Supply plan was adopted new developments would have been burdened with costs and funds accumulated for projects that were deferred through non-engineering initiatives to reduce demand. A DCC may disincentivize the Water Services from pursuing reductions in demand to defer growth related projects.
Anonymous 7/03/2024 10:33 AM	I believe that the vast majority of the stakeholders who will be ultimately paying for this unnecessary infrastructure have not been given adequate notification or ability for input as was made clear based on the attendance of only 20-26 people on the public information session. Advertisements is unread and outdated mediums such as the Time Colonist and Gazette only make sense if the goal of the CRD is for people to not be aware of what they are doing. If true transparency with the stakeholders was in fact the goal, these public meetings along with a true explanation of what the impacts will be on all water users should be included in their monthly bill to all utility users and then provide option for proper input.
Anonymous 7/03/2024 01:19 PM	I also think that residential owners who are looking at putting in a secondary carriage house (now permitted in my area) should also have DCC charges waived or reduced when they apply for the building permit. Adding $9044 or even $7914 to the cost of a building permit for a back yard home would reduce the number of people who would look at doing this type of build. Another option might be to defer or amortize the clost of the DCC over a period of years so that the homeowner has a chance to recoup some funds before having to pay it all. Single family homeowners do not have the same access to financial resources that larger development companies have. The DCC is counter-intuitive to helping homeowners create the housing space the region needs.

Anonymous 7/05/2024 10:09 AM	I have been a very conservative user of water resources for the last 35 years I have not watered my lawn. I am consistently hit with increased taxes on all.levels. I want to see any taxes related to water consumption prorated according to individual household consumption. I am on a fixed income and getting taxed to death to support others. Enough already. Those of us responsible users deserve a break or what is the incentive
Anonymous 7/05/2024 10:52 AM	I didn't read about any average home owner water user rate increase. Is their any? #9- I didn't feel that the information discussed on the information recording was very informative for the home owner. Not explained enough.
Anonymous 7/05/2024 06:44 PM	New development should be charged.

Optional question (108 response(s), 133 skipped)
Question type: Essay Question

Q10 After reviewing the information provided, or attending the info session, how would you rate your understanding of DCCs?



Question options

Excellent | Above Average | Average | Below Average | Poor (I still don't understand DCCs)

Optional question (235 response(s), 6 skipped)
Question type: Radio Button Question

ATTACHMENT E: PUBLIC INFORMATION SESSION PRESENTATION (JUNE 19, 2024)

CAPITAL REGIONAL DISTRICT PROPOSED REGIONAL WATER SUPPLY DEVELOPMENT COST CHARGE PROGRAM

Public Information Session
June 19, 2024

getinvolved.crd.bc.ca/water-supply-dcc

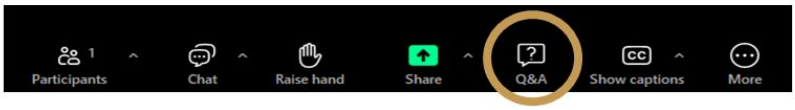
This presentation was developed by Urban Systems on behalf of the CRD

TERRITORIAL ACKNOWLEDGEMENT

The CRD conducts its business within the Territories of many First Nations, including but not limited to BOḰEĆEN (Pauquachin), MÁLEXEŁ (Malahat), P'a:chi:da?aht (Pacheedaht), Pune'laxutth' (Penelekut), Sc'ianew (Beecher Bay), Songhees, SŦÁUTW̱ (Tsawout), T'Sou-ke, W̱JOŁEŁP (Tsartlip), W̱SIKEM (Tseycum), and xʷsepsəm (Esquimalt), all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.

HOUSEKEEPING

- Please hold your questions to the end
- Use the Q&A function to submit your questions

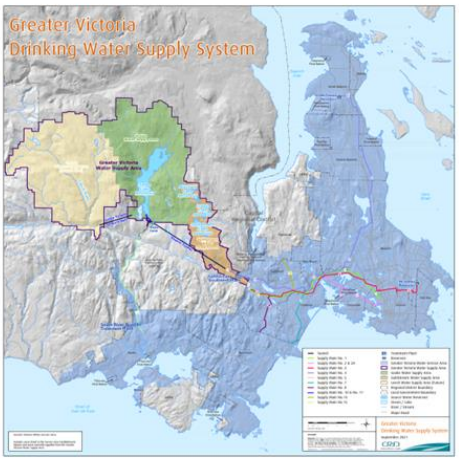


CRD INTRODUCTION

- Supporting Corporate Documents
  - CRD 2023-2026 Corporate Plan
  - CRD Regional Water Supply (RWS) 2017 Strategic Plan
  - CRD RWS 2022 Master Plan
- Political Oversight and Direction
  - Water Advisory Committee (WAC)
  - Regional Water Supply Commission (RWSC)
  - CRD Board

WHAT IS THE REGIONAL WATER SUPPLY SERVICE?

- The CRD's Regional Water Supply (RWS) Service provides bulk drinking water to the Municipalities and First Nations in the Greater Victoria Area
- The system provides water for residential, industrial, commercial, institutional, and agricultural uses to approximately 40,000 people
- The primary source is the Sooke Lake Reservoir
- Major components of the RWS System include: 3 watersheds, 15 dams, 2 tunnels, 2 disinfection facilities, ~120km of transmission mains



AGENDA

- DCC Overview
- Proposed Regional Water Supply (RWS) DCC
  - Program Development
  - Policy Considerations
- Proposed RWS DCC Bylaw Rates
- Next Steps
- Discussion and Questions

DCC OVERVIEW

WHAT ARE DCCs?

- Help communities recover the costs of **off-site infrastructure needed for growth**
- Based on the **principle of cost-sharing** infrastructure between existing taxpayers and new developments
- **Provincially-regulated** development finance tool
  - Part 14, Division 19 of the Local Government Act
  - Provincial DCC Best Practices Guide
  - Development Cost Charge Guide for Elected Officials

WHY USE DCCs?

- Fosters a **fair** and **equitable** approach where growth pays for growth and infrastructure costs are **transparent**
- Creates **consistency** for the development community through a clear policy framework
- Ensures **certainty** that services support growth and development
- Minimizes **financial risk** to the CRD
- Ensures **timely** processing of development applications

HOW ARE DCCs COLLECTED?

- Paid for by developers
- Charged at time of building permit or subdivision
- Collected by municipalities
- Charged for new units that are developed (not renovations)

WHAT PROJECTS CAN DCCs PAY FOR?

DCCs CAN BE USED TO FUND	DCCs CANNOT BE USED TO FUND
Infrastructure and Studies needed to support growth • Transportation • Water • Drainage • Sewer **Parks needed to support growth** • Land acquisition • Park improvements **Facilities needed to support growth** • Fire protection • Police • Solid waste and recycling facilities	• Infrastructure or parks needed for **existing** development (e.g., asset replacement) • Operations and Maintenance Costs • Community buildings (e.g., libraries, recreation centres) ****DCC projects must be growth-related****

RWS DCC PROGRAM DEVELOPMENT

GROWTH PROJECTIONS AND TIMELINE

Determining project timing and priorities over the 30-year time horizon (2023-2053) based on where growth is occurring.

DCC PROGRAM DEVELOPMENT, CAPITAL COSTS, AND PROJECT LIST

DCC projects within the 30-year time frame were identified from available infrastructure, capital plans and staff input, including the RWS 2022 Master Plan and the CRD RWS 2023 Capital Plan. The RWS 2022 Master Plan recommends infrastructure upgrades over the next 30 years.

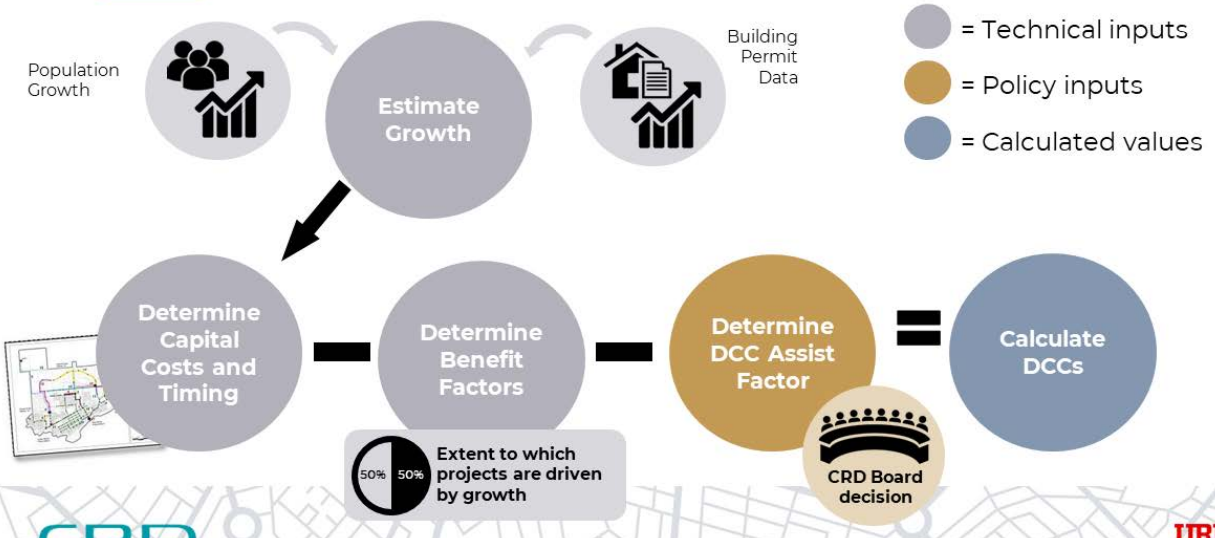
Eligible DCC projects were prioritized based on their benefit to future growth and their likelihood of being constructed within the 30-year DCC time horizon. Conversely, renewal is not DCC-eligible.

PROJECT BENEFIT ALLOCATIONS

Determining the relative benefit of each project to the existing community vs. new development and the proportion of capital costs attributable to new vs. existing development.

CRD URBAN SYSTEMS

HOW DO WE DETERMINE THE DCC RATE?

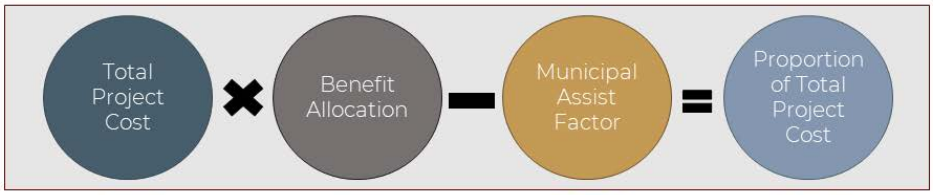


CRD URBAN SYSTEMS

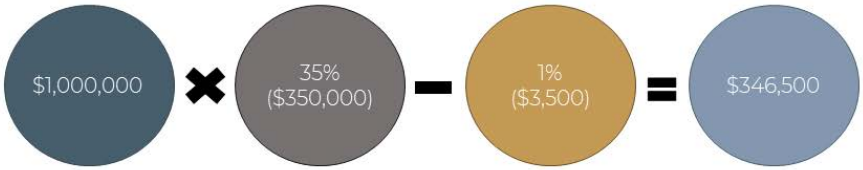
BASIC DCC CALCULATION

DCC RECOVERABLE COSTS

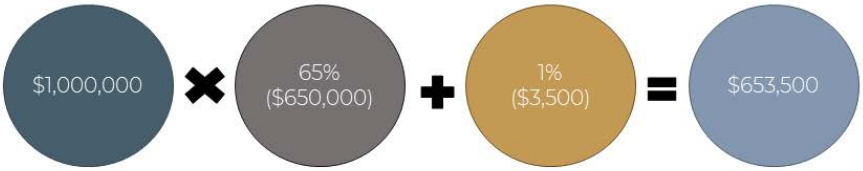
Note: for growth-driven projects only



Developer Contribution:



CRD Contribution:

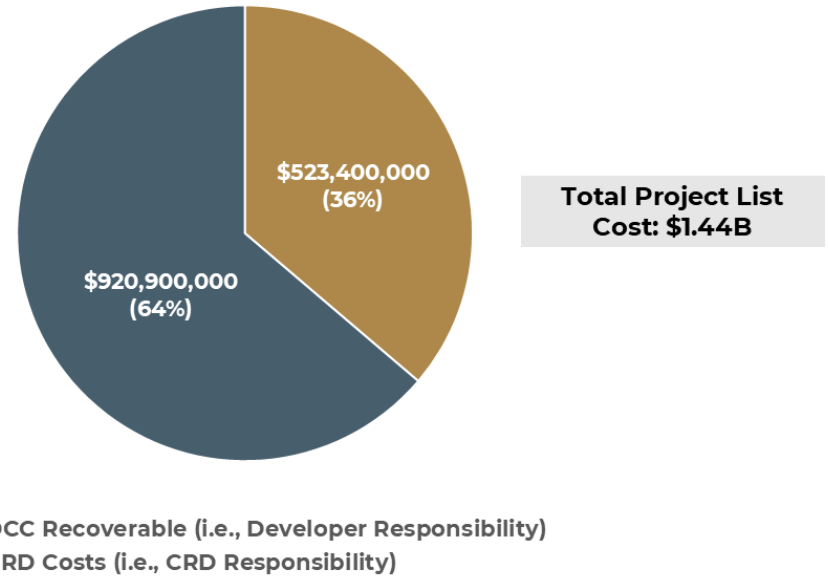


RWS DCC PROGRAM PROJECTS & COSTS – 30 YEARS

Project	Total Program Costs	Benefit to New vs. Existing Development	DCC Recoverable (i.e., Developer Responsibility)	CRD Costs (i.e., CRD Responsibility)
Sooke Lake Reservoir Deep Northern Intake	$74.7M	35%	$25.9M	$48.8M
Leech Watershed	$28.5M	100%	$28.2M	$0.3M
Water Filtration Plant	$819.1M	35%	$283.8M	$535.3M
Transmission Mains	$487.0M	35%	$168.7M	$318.2M
Smith Hill Storage Tank	$31.3M	50%	$15.5M	$15.8M
Studies/Modelling	$3.8M	35%	$1.3M	$2.5M
TOTAL	$1,444.4M	35-100%	$523.4M	$920.9M

Note: The 1% Municipal Assist Factor is equivalent to $5.3M; the CRD will recover this cost through the Regional Water Supply rate

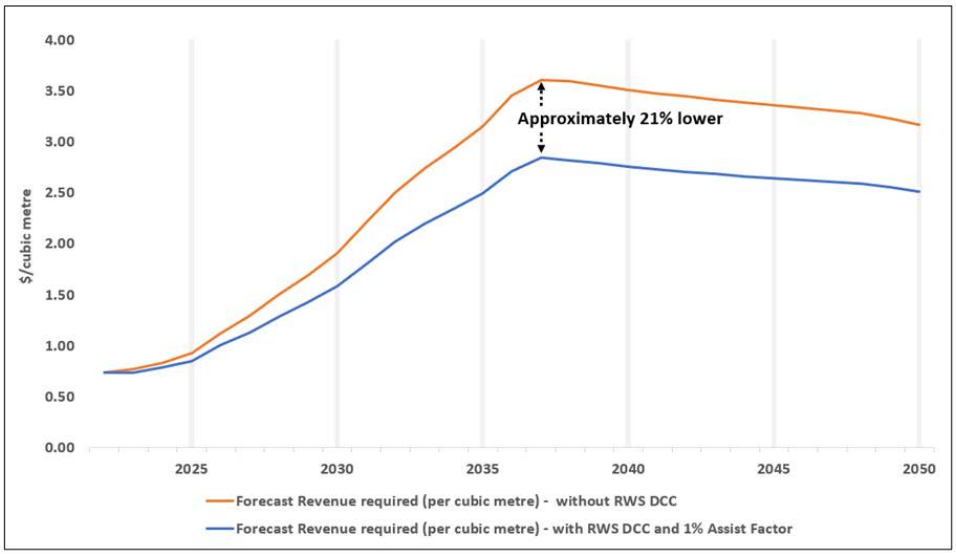
RWS DCC PROGRAM: PROJECT COST BREAKDOWN



PROPOSED RWS DCC RATES

Land Use	Unit of Charge	Draft DCC Rates
Low Density Residential (Single Family)	per lot	**$9,044**
Medium Density Residential (Duplex, Townhouse)	per unit	**$7,914**
High Density Residential (Apartments)	per unit	**$5,087**
Commercial	per m^2 gross floor area	**$33.92**
Industrial	per m^2 gross floor area	**$16.96**
Institutional	per m^2 gross floor area	**$73.48**

RWS SERVICE CONCEPTUAL RATE INCREASES

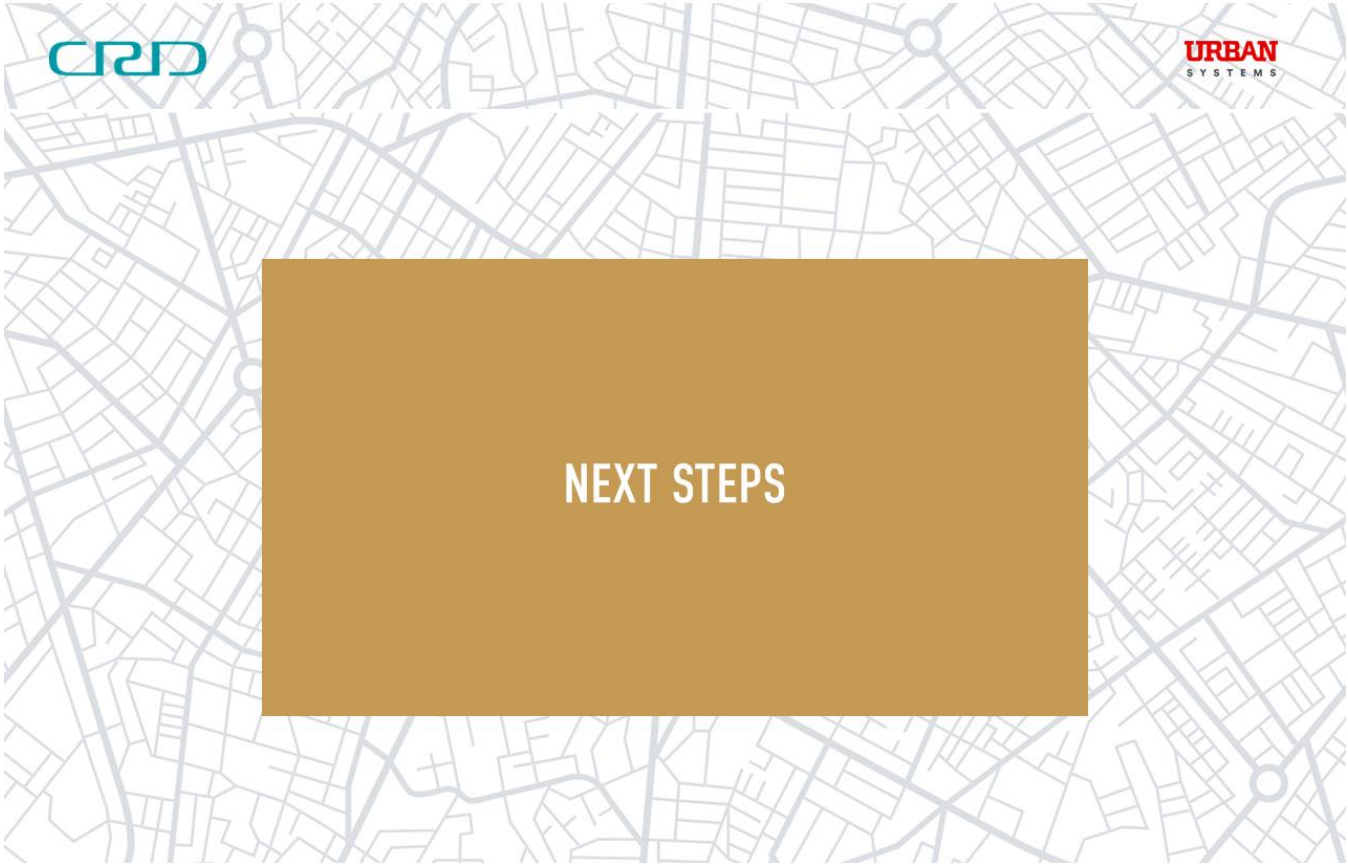


WAIVERS AND REDUCTIONS

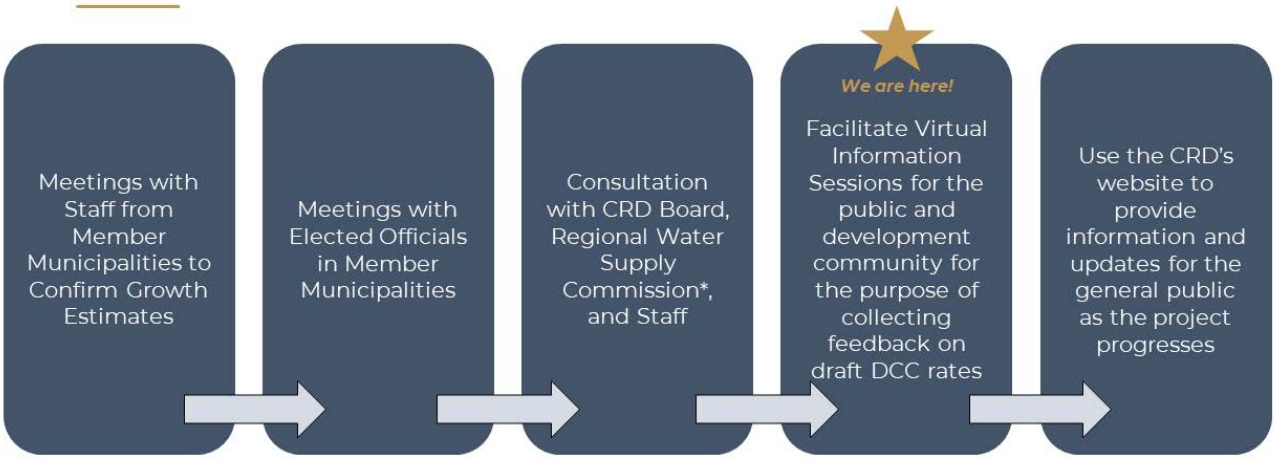
- The *Local Government Act* (LGA) allows Council/CRD Board to waive or reduce DCCs payable on specific types of "eligible development", including:
  - Not-for-profit affordable housing
  - For-profit rental housing
  - Housing designed for reducing environmental impact/GHGs

WAIVERS AND REDUCTIONS

- **The Regional Water Supply Commission has directed Staff to review options for waiving or reducing DCCs for eligible affordable housing initiatives**
- Where the DCC is waived or reduced, the amount waived is to be entirely supported by ratepayers
- Waivers and reductions can be established in a separate bylaw that does not require Inspector approval
- Through this process, options for grants in support of affordable housing are also being reviewed

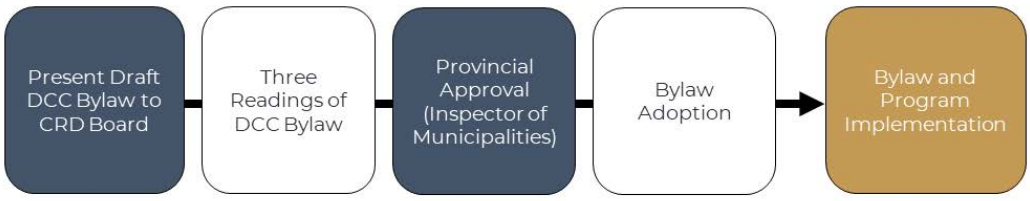


ENGAGEMENT & BYLAW ADOPTION



RWS DCC BYLAW IMPLEMENTATION

- If adopted, the DCC program has a proposed implementation date of early 2025
- 12-month in-stream application protection from updated DCC rates
- Many applicants will not be impacted until early 2026
- CRD will re-evaluate and update the program every 5 years to account for changes in growth, project costs, and any grants received



FEEDBACK

- All feedback will be collected via CRD's **Get Involved platform**
  - getinvolved.crd.bc.ca/water-supply-dcc
  - or scan the QR Code to access the engagement platform

- The RWS DCC survey and feedback opportunities close **July 5, 2024**

DISCUSSION AND QUESTIONS

THANK YOU!

ATTACHMENT F: TRANSCRIPT FROM PUBLIC INFORMATION SESSION (JUNE 19, 2024)

#	Question
1	Is the DCC rate based on the schedule and estimated costs of growth related projects contained in the 2022 master plan?
2	Is it not 400,000 people on CRD Sooke Lake Reservoir water, not 40,000?
3	Does the CRD plan to take action to reduce demand to 300l/c/d to defer growth related projects.
4	As reported in the local media does the CRD plan to proceed with the bypass to the Kapoor tunnel for construction in the early 2030's even though the Master Plan timing is the 2045 - 2050 timeframe? If so why? The Calgary situation has no relevance here. Feeder mains are steel relatively easy to repair in unlikely event of rupture.
5	Won't the developers recover the DCC through high prices for housing? In other words isn't it the public who pays?
6	Has the DCC calculation into consideration the increasing proportion of multifamily units?
7	Thanks. Is the Sooke "redundant line included in the transmission costs? Are people in the CRD not on CRD piped water expected to pay for this set of projects?
8	Did that graph show water rates quadrupling!?
9	Does this mean residential water bills will increase 4x for an average ratepayer?
10	Timing for the $1B+ filtration plant requirement, which forms the biggest part of the DCC calculation, is predicated on a projected rate of water demand per capita over time, including future growth. The Masterplan assumes that all new development from today until the year 2100 will continue to use water at the same per capita rate as existing development, but we know for sure that this assumption is incorrect (new homes today use significantly less water due to improved plumbing codes, to say nothing of future water conservation initiatives). How is this being factored into DCC calculations?
11	It sounds like fees could be collected as early as January 2025. When is adoption of this Bylaw set for?
12	Why does CRD not have 2 step water consumption use like BC Hydro has for electricity?
13	I missed one aspect, does the funding model include any provincial or federal infrastructure grants?
14	If a new home is constructed to a highly water-efficient standard, for example by using 50% less water than an existing home benchmark, will a DCC credit be available based on its proportionately lower demand on the water system?
15	Could you please provide more clarification on how 65% population growth will only need 35% development of housing
16	How many members of public are participating in this information session?
17	Other regional infrastructure projects (not limited to the CRD) have ran significantly over budget and timeline. With that in mind, How is the CRD intending to remain on budget and on timeline? If cost over runs occur, where will the additional funding come from?
18	Regarding the flat line trend of water demand noted, can comment be made on what the expectation of demand would be if residential rates increase by 2 to 4 fold, which it is understood would be required to fund the non-DCC works

19	You are showing a 4x increase to residential water rates. This would reduce water consumption dramatically. Yet CRD refuses to acknowledge this in their projections. Why?
20	How did you determine the benefit to New vs existing development for the projects & costs for 30 years? the projects are Sooke lake reservoir deep northern intake, Leech watershed, water filtration plant, transmission mains, Smith Hill storage tank?
21	Could CRD not increase water rates without spending Billions of dollars?
22	Higher water rates does reduce demand
23	When is CRD going to make rainwater harvest (filtered and UV light treated) as potable in Code? Does r/w harvest count under the new builds that get a lower rate?
24	We've just heard that population growth rates may be underestimated and per capita water use rates may be overestimated. Should further study be applied to validate and fine tune these important variables?
25	Once these projects are completed and the costs are paid off, will the CRD guarantee these fees are eliminated rather than compound with future DCCs and taxes?
26	We were told in the CRD-Water meeting today that public will be allowed in the information session with the developers / How can I get access to the meeting with the developers tomorrow?
27	Why has CRD not done meaningful consultation with the public or First Nations? Some internet questions asked during COVID seems inadequate
28	This session is just an information sharing session. This is not consultation. This is the equivalent of asking if we want the new house painted pink or purple. But you haven't explained why we need the new house…
29	Have grant applications been made from higher levels of government? And if grants are received will the grant money be allocated to lower the development DCCs?
30	why would the CRD expect grants when grants are typically not available for growth related projects?
31	Has any sensitivity analysis been done to determine what demand reductions will result from a quadrupling of water rates? It's basic university level demand curve and has a large body of science behind it. It appears CRD assumes NO reduction in demand.
32	What level of confidence does the CRD have in delivering the complete program, at an estimated cost of +/-$2B, on budget. For context, the public is learning of the ballooning cost of the North Shore Wastewater Treatment Plant, where the budget of $700M is now looking closer to $4B
33	This is based on very basic and evidently under estimated. They appear class E at best. What year are costs based on?
34	If the modelling doesn't include grants, how does the model change? To me this is paramount to stipulate, unless the desired grants are guaranteed.
35	How can you not know? This is a foundational assumption of the water master plan
36	We don't need to bring water from Leech River which require building filtration plan why do you attribute only 35% of the cost of filtration to the future growth?
37	Does the CRD plan to carry out a study of the elasticity of demand to understand the relationship between price and demand? It has all the necessary data.

38	Water rates have been rising exactly in line with inflation at 2% per year. A quadrupling of rates is vastly more than that. It's a massive oversight that you simply assume the same water demand. Has a peer review been done on this massive assumption?
39	Still on the demand matter, and impact residential price increase have on demand. It's acknowledged that the CRD shall evaluate the demand and costs very 5 years, however by that stage the projects may be underway and monies taken. Strongly suggest additional analysis be undertaken now on the elasticity of demand, as the Master Plan does note that with lower demand, many of the work may not be needed, or at least substantially deferred.
40	Would you please provide us with the transcript of Q&A session.
41	Relating to my previous question regarding budget management, when would the finalized budget be released. Can this be released prior to adoption of this bylaw? Also, given the long term execution timelines laid out in this proposal, is it reasonable to provide any cost figures at this point in time? From my perspective, the CRD is asking the population to commit to a 'blank cheque' without knowing future construction costs.
42	I don't think this was answered - Does r/w harvest off a metal roof count under the new builds that get a lower DCC rate ? It is an environmentally positive building
43	Sorry, I may have missed it, but who reviews and assess the necessity of the costs at the 5 year milestones? Is this an internal review completed by the CRD itself?
44	Please circle back to my consultation question. It was not answered. Why has no meaningful consultation been done with the public?
45	Will CRD provide a transcript of the questions? I'm finding that many are not being answered
46	Possibility of wild fire, landslide and other factors to require filtration plan is very low but bring water from the Leech River for future growth is a certainty. How did you calculate and attribute 65% of cost to wildfire and landslide and only 35% for introduction of the Leech River water to the Sooke Lake System? Would you please provide us with your detailed analysis and calculations.
47	Why does the CRD not conduct in person public consultation?
48	Why is this the delivery platform?? This is just terrible
49	what level of risk have you assessed for a major fire necessitating a filtration plant? Ditto for landslides
50	Why are you not doing both types of consultation?
51	Why not host multiple in person sessions around the region in addition to this online format. Online is not accessible to many residents. Many don't know it's happening.
52	Will there be in person sessions as well?? There is no humanity with this communication style.
53	Is the risk of contamination by biosolids part of the risk evaluation? Will they be tested for by the CRD?
54	My question was not answered. Please circle back
55	Not sure if this has been touched on yet, but have notices been provided through the billing methods to all home owners and stakeholders to ensure that all parties have had adequate knowledge of this

56	thank you!

ATTACHMENT G: DEVELOPMENT COMMUNITY INFORMATION SESSION PRESENTATION (JUNE 20, 2024)

CAPITAL REGIONAL DISTRICT PROPOSED REGIONAL WATER SUPPLY DEVELOPMENT COST CHARGE PROGRAM

Public Information Session
June 20, 2024

getinvolved.crd.bc.ca/water-supply-dcc

This presentation was developed by Urban Systems on behalf of the CRD

TERRITORIAL ACKNOWLEDGEMENT

The CRD conducts its business within the Territories of many First Nations, including but not limited to BOḰEĆEN (Pauquachin), MÁLEXEŁ (Malahat), P'a:chi:da?aht (Pacheedaht), Pune'laxutth' (Penelekut), Sc'ianew (Beecher Bay), Songhees, SŦÁUTW̱ (Tsawout), T'Sou-ke, W̱JOŁEŁP (Tsartlip), W̱SIKEM (Tseycum), and xʷsepsəm (Esquimalt), all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.

HOUSEKEEPING

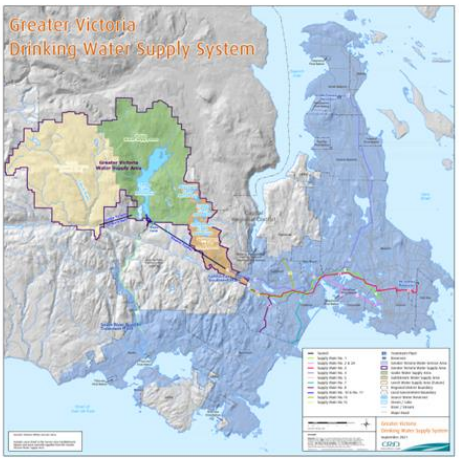
- Please use the Q&A function to submit your questions
- Please do not use the Raise Hand function – all questions must be submitted via the Q&A function
- Questions will be answered at the end of the presentation; however, you can submit your questions at any time during the presentation
- Please note that disrespectful, inappropriate, off topic or duplicate questions will not be answered

CRD INTRODUCTION

- Supporting Corporate Documents
  - CRD 2023-2026 Corporate Plan
  - CRD Regional Water Supply (RWS) 2017 Strategic Plan
  - CRD RWS 2022 Master Plan
- Political Oversight and Direction
  - Water Advisory Committee (WAC)
  - Regional Water Supply Commission (RWSC)
  - CRD Board

WHAT IS THE REGIONAL WATER SUPPLY SERVICE?

- The CRD's Regional Water Supply (RWS) Service provides bulk drinking water to the Municipalities and First Nations in the Greater Victoria Area
- The system provides water for residential, industrial, commercial, institutional, and agricultural uses to approximately 400,000 people
- The primary source is the Sooke Lake Reservoir
- Major components of the RWS System include: 3 watersheds, 15 dams, 2 tunnels, 2 disinfection facilities, ~120km of transmission mains



AGENDA

- DCC Overview
- Proposed Regional Water Supply (RWS) DCC
  - Program Development
  - Policy Considerations
- Proposed RWS DCC Bylaw: Program and Rates
- Community Comparisons
- Next Steps
- Discussion/Questions

DCC OVERVIEW

WHAT ARE DCCs?

- Help communities recover the costs of **off-site infrastructure needed for growth**
- Based on the **principle of cost-sharing** infrastructure between existing taxpayers and new developments
- **Provincially-regulated** development finance tool
  - Part 14, Division 19 of the Local Government Act
  - Provincial DCC Best Practices Guide
  - Development Cost Charge Guide for Elected Officials

CRD URBAN SYSTEMS

WHY USE DCCs?

- Fosters a fair and equitable approach where growth pays for growth and infrastructure costs are transparent
- Creates consistency for the development community through a clear policy framework
- Ensures certainty that services support growth and development
- Minimizes financial risk to the CRD
- Ensures timely processing of development applications

HOW ARE DCCs COLLECTED?

DCCs are paid by applicants for:

- Subdivision approval or building permit

DCCs are collected at:

- Time of subdivision (single family residential) or building permit (multi-family, commercial, industrial, institutional)

WHAT PROJECTS CAN DCCs PAY FOR?

DCCs CAN BE USED TO FUND	DCCs CANNOT BE USED TO FUND
Infrastructure and Studies needed to support growth • Transportation • Water • Drainage • Sewer **Parks needed to support growth** • Land acquisition • Park improvements **Facilities needed to support growth** • Fire protection • Police • Solid waste and recycling facilities	• Infrastructure or parks needed for **existing** development (e.g., asset replacement) • Utility service connections • Operations and Maintenance Costs • Community buildings (e.g., libraries, recreation centres) – *eligible for collection under ACCs* ****DCC projects must be growth-related****

RWS DCC PROGRAM DEVELOPMENT

GROWTH PROJECTIONS AND TIMELINE

Determining project timing and priorities over the 30-year time horizon (2023-2053) based on where growth is occurring.

DCC PROGRAM DEVELOPMENT, CAPITAL COSTS, AND PROJECT LIST

DCC projects within the 30-year time frame were identified from available infrastructure, capital plans and staff input, including the RWS 2022 Master Plan and the CRD RWS 2023 Capital Plan. The RWS 2022 Master Plan recommends infrastructure upgrades over the next 30 years.

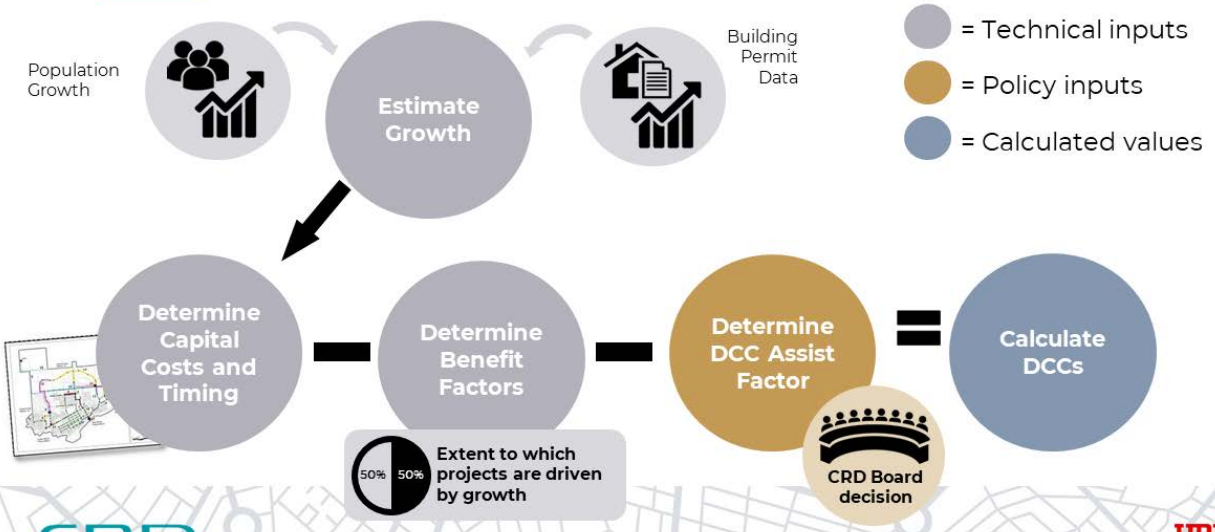
Eligible DCC projects were prioritized based on their benefit to future growth and their likelihood of being constructed within the 30-year DCC time horizon. Conversely, renewal is not DCC-eligible.

PROJECT BENEFIT ALLOCATIONS

Determining the relative benefit of each project to the existing community vs. new development and the proportion of capital costs attributable to new vs. existing development.

CRD URBAN SYSTEMS

HOW DO WE DETERMINE THE DCC RATE?



CRD URBAN SYSTEMS

DCC ASSIST FACTOR

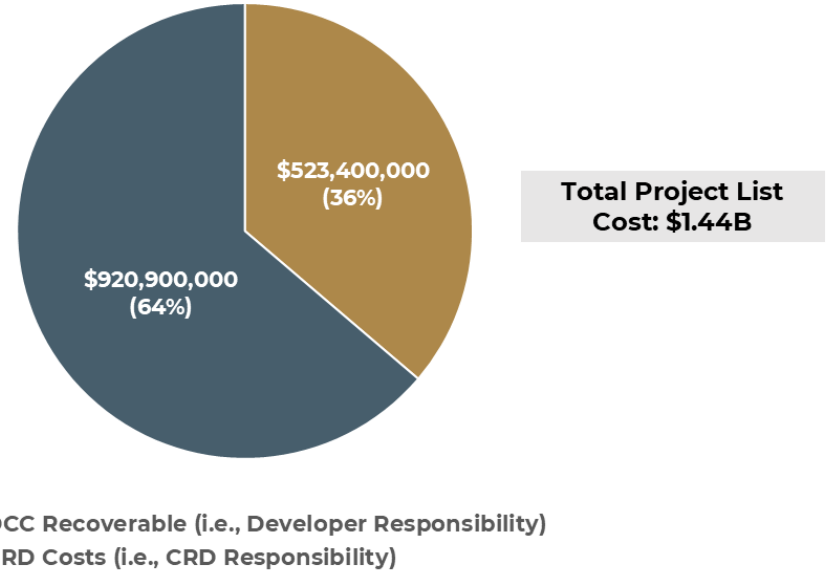
- The Local Government Act requires the CRD to "assist" development for DCCs
- The assist amount would be funded through the Regional Water Supply user rate; CRD member municipalities are not responsible for funding the Assist Factor
- The Assist Factor can vary from 1% (least assistance) to 99% (most assistance)
- Assist factors are typically between 1-10%
- The Regional Water Supply Commission (RWSC) has reviewed Assist Factor options and directed us to proceed with a 1% Assist Factor

RWS DCC PROGRAM PROJECTS & COSTS – 30 YEARS

Project	Total Program Costs	Benefit to New vs. Existing Development	DCC Recoverable (i.e., Developer Responsibility)	CRD Costs (i.e., CRD Responsibility)
Sooke Lake Reservoir Deep Northern Intake	$74.7M	35%	$25.9M	$48.8M
Leech Watershed	$28.5M	100%	$28.2M	$0.3M
Water Filtration Plant	$819.1M	35%	$283.8M	$535.3M
Transmission Mains	$487.0M	35%	$168.7M	$318.2M
Smith Hill Storage Tank	$31.3M	50%	$15.5M	$15.8M
Studies/Modelling	$3.8M	35%	$1.3M	$2.5M
TOTAL	$1,444.4M	35-100%	$523.4M	$920.9M

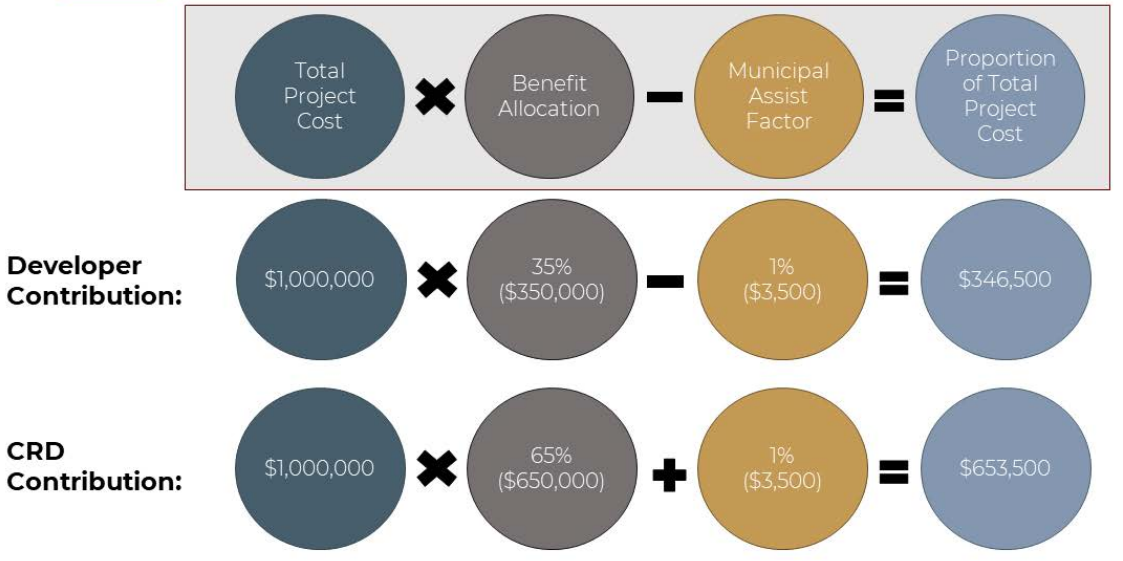
Note: The 1% Assist Factor is equivalent to $5.3M; the CRD will recover this cost through the Regional Water Supply rate

RWS DCC PROGRAM: PROJECT COST BREAKDOWN



DCC RECOVERABLE COSTS

Note: for growth-driven projects only

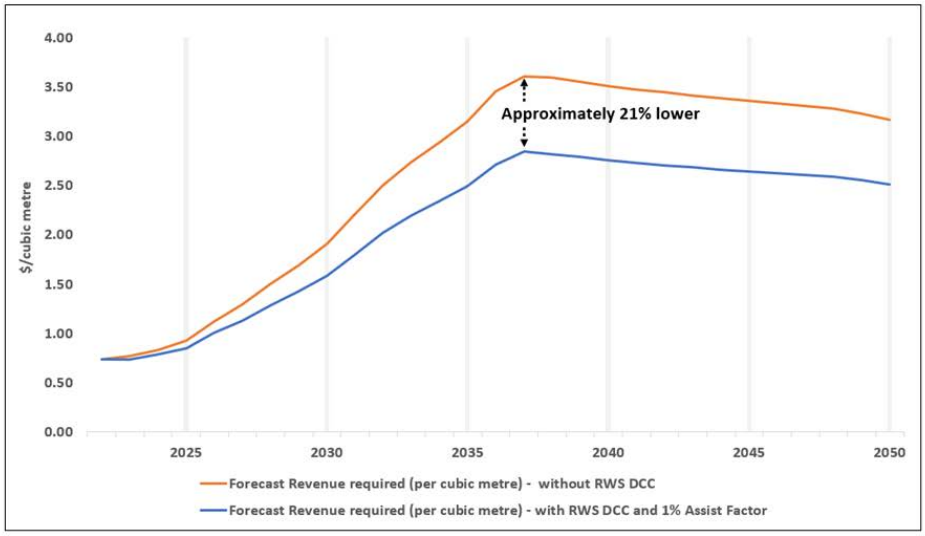


PROPOSED RWS DCC RATES

Land Use	Unit of Charge	Draft DCC Rates
Low Density Residential (Single Family)	per lot	**$9,044**
Medium Density Residential (Duplex, Triplex, Fourplex, Townhouse, etc.)	per unit	**$7,914**
High Density Residential (Apartments)	per unit	**$5,087**
Commercial	per m^2 gross floor area	**$33.92**
Industrial	per m^2 gross floor area	**$16.96**
Institutional	per m^2 gross floor area	**$73.48**

Note: These land use categories align with existing categories established in other CRD DCC Bylaws

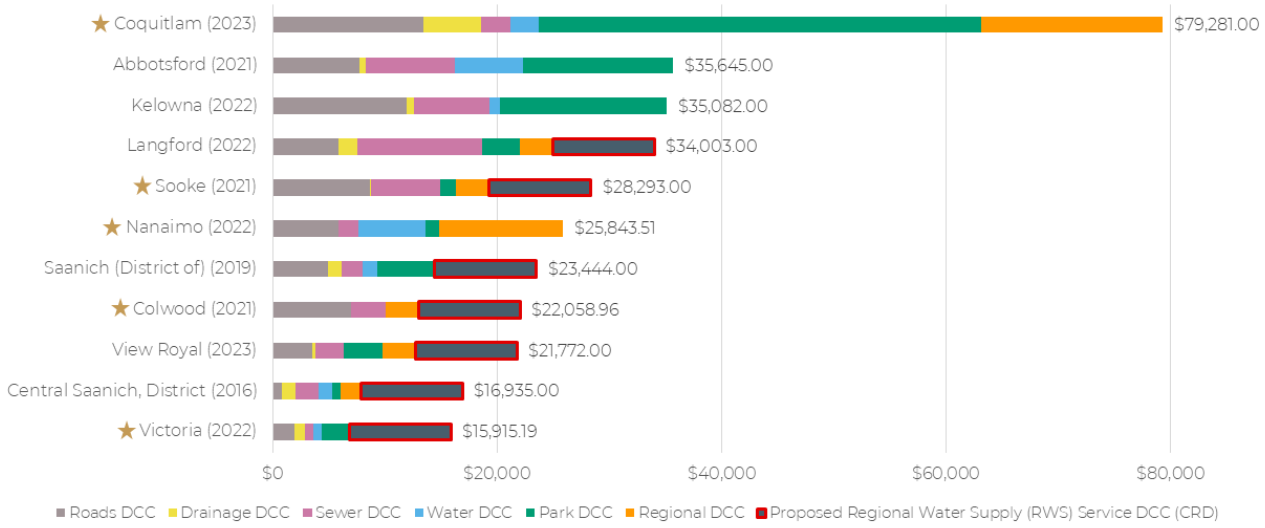
RWS SERVICE CONCEPTUAL RATE INCREASES



COMMUNITY COMPARISONS

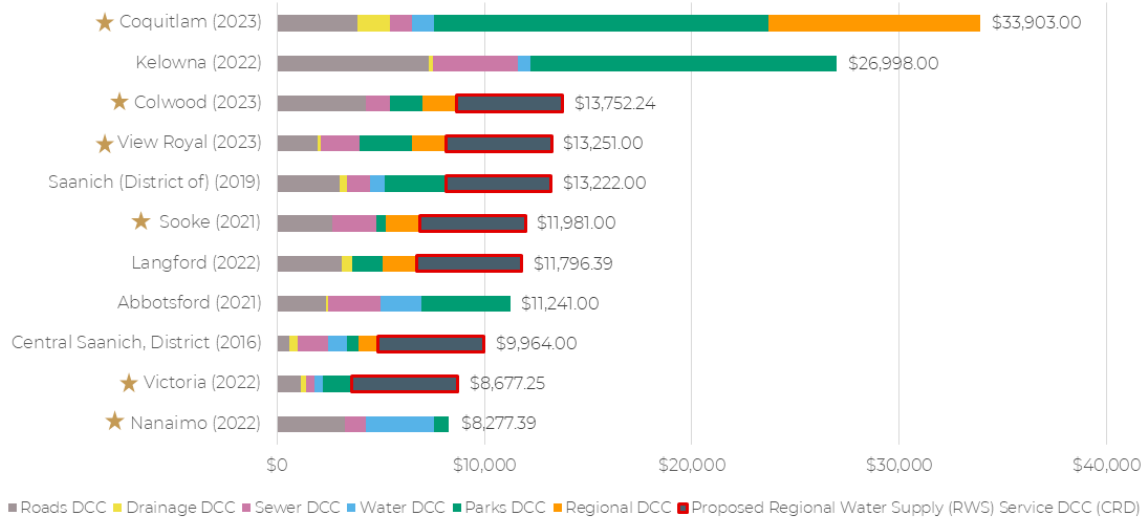
LOW DENSITY RESIDENTIAL (PER UNIT)

★ = currently being updated



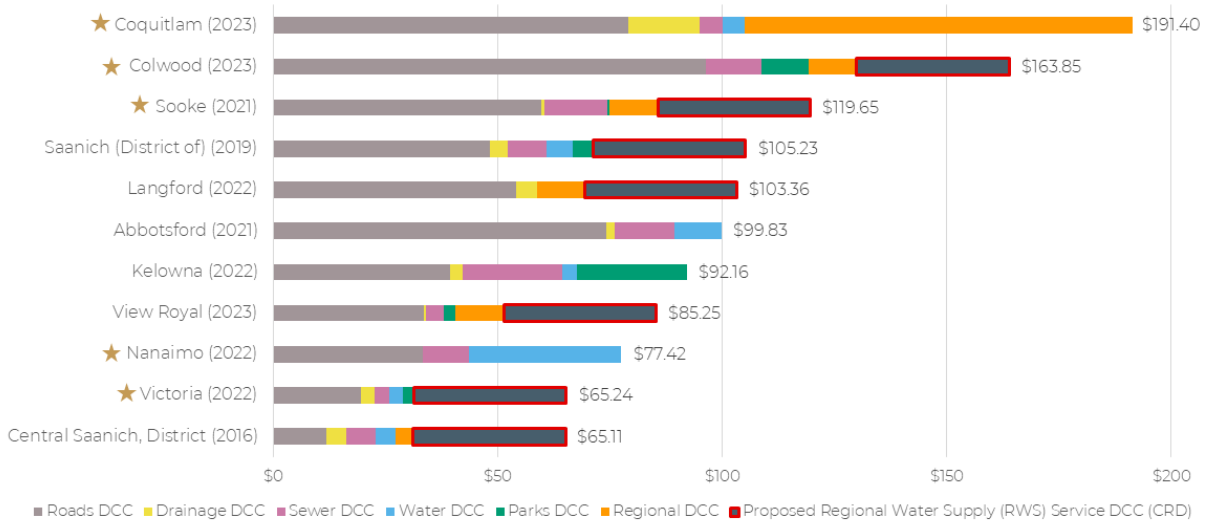
HIGH DENSITY RESIDENTIAL (PER UNIT)

★ = currently being updated



COMMERCIAL (PER M² GROSS FLOOR AREA)

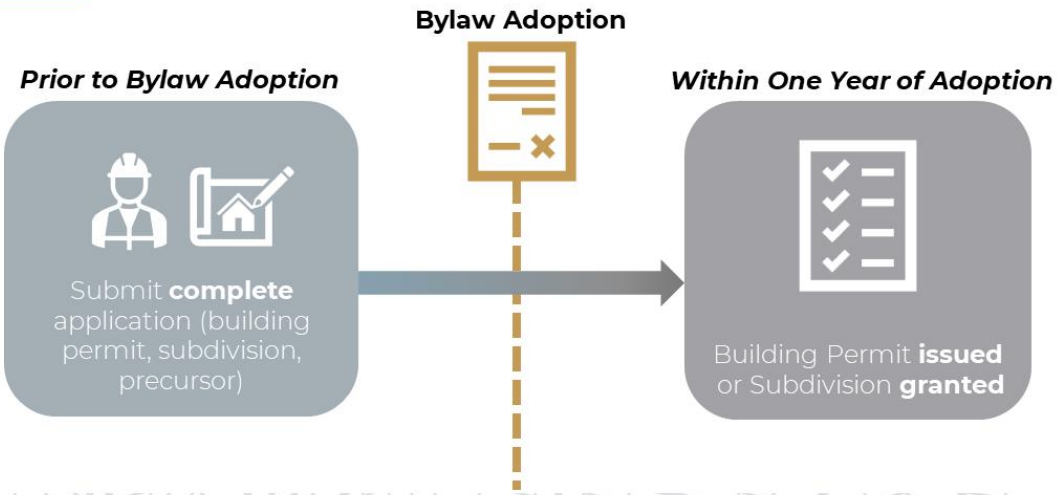
★ = currently being updated



IN-STREAM PROTECTION

- New DCC rates will be **effective at bylaw adoption**
- However, legislation provides protection to in-stream:
  - Building permit applications
  - Subdivision applications
  - Precursor applications (re-zoning and development permit)

IN-STREAM PROTECTION

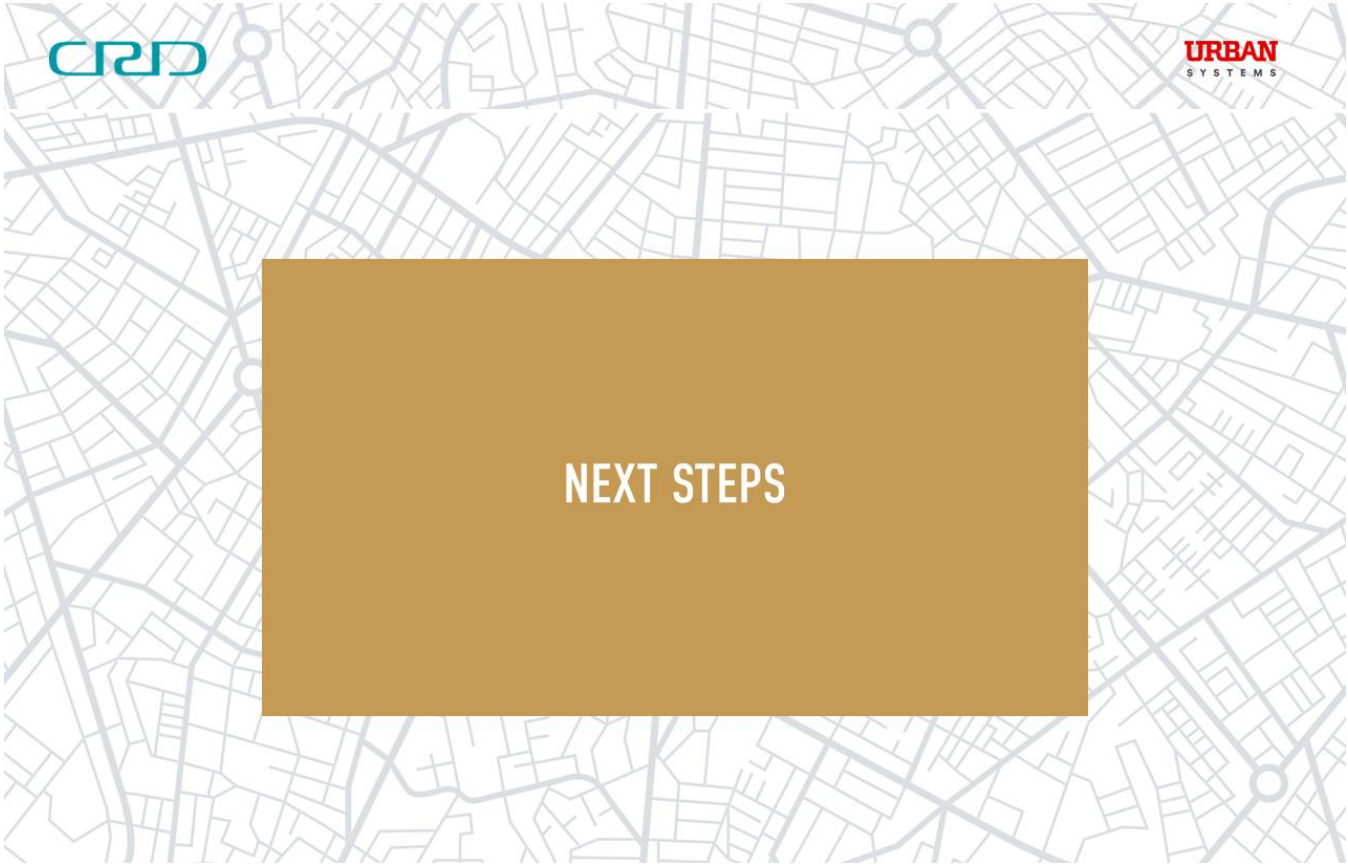


WAIVERS AND REDUCTIONS

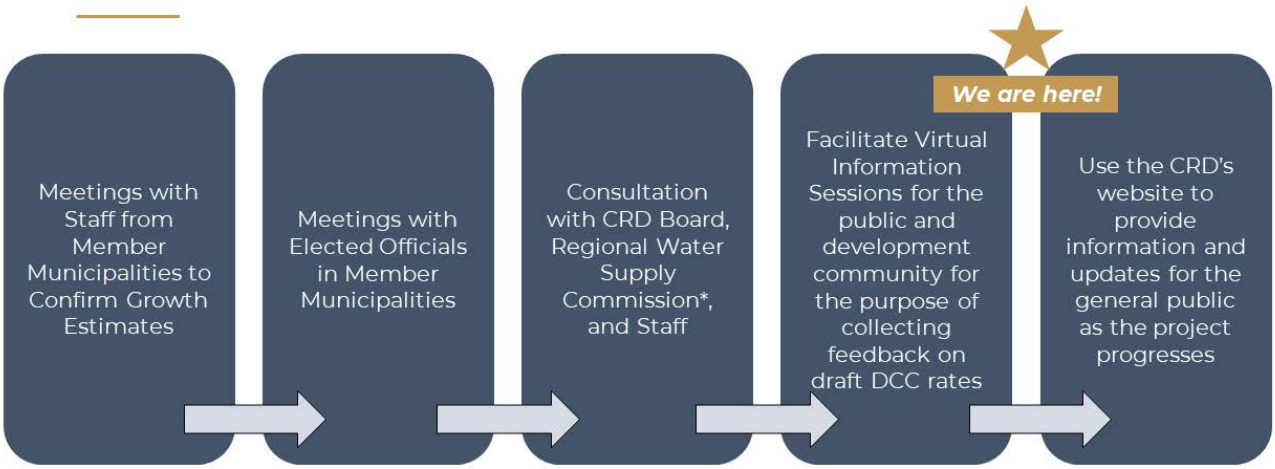
- The *Local Government Act* (LGA) allows Council/CRD Board to waive or reduce DCCs payable on specific types of "eligible development", including:
  - Not-for-profit affordable housing
  - For-profit rental housing
  - Housing designed for reducing environmental impact/GHGs

WAIVERS AND REDUCTIONS

- **The Regional Water Supply Commission has directed Staff to review options for waiving or reducing DCCs for eligible affordable housing initiatives**
- Where the DCC is waived or reduced, the amount waived is to be entirely supported by ratepayers
- Waivers and reductions can be established in a separate bylaw that does not require Inspector approval
- Through this process, options for grants in support of affordable housing are also being reviewed

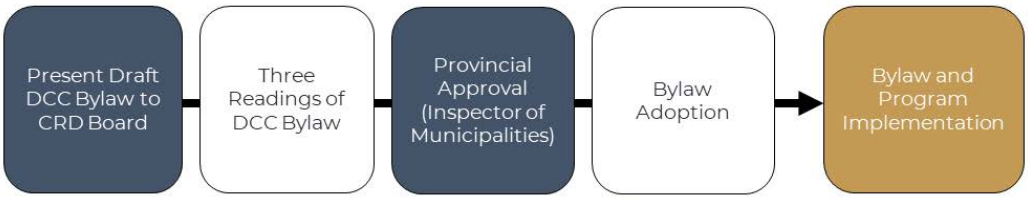


ENGAGEMENT AND BYLAW ADOPTION



RWS DCC BYLAW IMPLEMENTATION

- If adopted, the DCC program has a proposed implementation date of early 2025
- 12-month in-stream application protection from updated DCC rates
- Many applicants will not be impacted until early 2026
- CRD will re-evaluate and update the program every 5 years to account for changes in growth, project costs, and any grants received



FEEDBACK

- All feedback will be collected via CRD's Get Involved platform (getinvolved.crd.bc.ca/water-supply-dcc)

  or scan the QR Code to access the engagement platform

- The RWS DCC survey and feedback opportunities close July 5, 2024

CRD URBAN SYSTEMS

DISCUSSION AND QUESTIONS

THANK YOU!

ATTACHMENT H: TRANSCRIPT FROM DEVELOPMENT COMMUNITY INFORMATION SESSION (JUNE 20, 2024)

#	Question
1	Put most simply what % of the planned upgrades are paid by existing home owners versus new home owners?
2	What if development does not occur at the pace you expect and the DCC Revenue is not there?
3	what is the proposed assist Factor?
4	If this benefits both existing and new users equally why are only new users being made to pay for this instead of raising utility rates for all users?
5	I'm not clear on why a 1% assist factor would be applied. Can you please explain why existing rate payers are not on the hook financially for these upgrades, as they are not related to the need for more water supply, but rather filtration
6	Are current users really paying their fair share of depreciated infrastructure that is being replaced?
7	Compounded on top of other significant development costs in the last few years, these additional proposed exponential costs would have disastrous consequences to new build projects. Please clarify why more of a percentage, well beyond 65%, can not be collected from usage rate increase?
8	The City of Victoria is undertaking a referendum to ask citizens if they want to pay for the new Crystal Pool, shouldn't the CRD be considering a similar question to the public for taking on the regions most expensive infrastructure project in history? Particularly given how well other major projects have stayed on budget like the wastewater treatment plant in Vancouver
9	If the DCC program doesn't go ahead who will pay?
10	When will this come into effect and how does in-stream protection work?
11	What is the CRD history of meeting budgets on these types of Infrastructure Projects. Are these budgets realistic. Certainly this has not been the case in Metro Vancouver.
12	*types
13	How does the DCC affect homelessness and the housing crisis?
14	Was the Sewer Treatment Plan over budget? If so by what %
15	Is in stream based on BP, DP or Rezone?
16	The Ministry Development Cost Charge Submission Summary Checklist Question #1 is: "The development of a DCC bylaw should include a meaningful public process to obtain input from stakeholders prior to first and third readings." Since CRD has avoided all public consultation except for one public and one developer-only Zoom sessions with communication functions limited to text messages being gate-kept by CRD staff and consultants, has the Ministry provided any indication that this failure to consult *[NOTE: Question ended here]*
17	You mentioned that the Commission decided to reduce the MAF to 1% - will that change?
18	Water rates have risen exactly at the rate of inflation for 20 years now. CRD is now proposing a nearly 400% increase in 15 years. At yesterday's public session, it was revealed that no economic analysis has been done to forecast demand reductions, and that CRD is forecasting that demand will remain static throughout its forecast period. This is a major flaw in the basic underlying assumption of the program. Please explain the rationale for this major omission?
19	How was the 35% assist factor determined, what are the metrics / rational used to get to that %?

20	Can the calculations that support the setting of the DCC rates be shared please. This will help us collectively better understand the premises of the rates proposed.
21	Does the CRD have per capita demand data specifically isolated to new construction?
22	Follow up question. Canadian national per capital water use, and also the Westhills SSL system have dramatically lower water consumption than the CRD assumed demand. CRD has dismissed this as not worth pursuing, and yet this demand rate X population is the driver of needing access to Leech River watershed. Future growth is largely in condo and townhome format which consume much less water and importantly have much less outdoor watering demand. For a billion+ dollar infrastructure spend, how does *[NOTE: Question ended here]*
23	The Westhills water system in Langford, which is comprised of 100% new development (from 2010 onward), has compiled several years worth of demand data showing a much lower per capita usage rate than the master plan assumptions. Would the CRD be willing to consider data like this prior to finalizing the DCC starting rate(s)?
24	The 1 year protection doesn't align with project timelines - it takes 18-24 months to get to BP in most areas. This encourages applicants to submit ASAP, even when drawings are not complete, which leads to city staff time and frustration (I have heard this from senior planners in every city I have worked in). What is the CRD doing about extending this timeline to align with actual approvals? Projects are underwritten prior to rezoning so we should be allowing at least 2 years of a waiver period to be fair to all stakeholders.
25	It appears the DCC charges will likely come into effect in early 2025. Can you please advise when the residential rate increases shall be imposed. Presumably this will be on a similar schedule to the DCC introduction.
26	Shouldn't cost estimates be a class B or C for such a large program?
27	Have CRD projects typically fallen within the Class C budgets and contingencies carried at the outset>
28	Given the size, scope, and financial impact of these capital projects, which directly affect community members through increases in housing costs or user rates, has the public consultation process adequately provided community members with the opportunity to voice their concerns?
29	What % Increase are the fees over the current fees?
30	CRD claims all aspects of the master plan program are required. And yet CRD has not provided any detailed background details for the justification. We are supposed to just accept this? There is a lack of analysis with respect to fire risk, seismic risk, or demand management assumptions. Will CRD share more information in an in person public format to work through these questions with the public and industry?
31	Would you please explain why only host and panelists will be able to see all questions and who is asking them? Also please let us know how many people participating in this session.
32	If new users over time are also subject to higher water rates, aren't new users contributing more that 35% of the costs over the 30 yr time horizon?
33	Will CRD make this study regarding risks public?
34	Has the CRD looked at actual costs for Missing Middle housing? A 10 unit project adds $80K to a project, which is approx. a 30% jump in Municipal fees for a project of this size. This is, given most builders have financial lenders, passed onto homeowners. And if the homes cannot be sold, the applicant is unlikely to move forward with the project. Small scale projects, which cities are promoting, will halt.

	Has the CRD discussed this with individual cities on the impact? Growth will not increase at expected rates if the homebuilding industry cannot provide attainable housing for new residents.
35	Filtration requirement is driven by risk unrelated to development. With lower demand figures, accessing Leech River may not be required for many decades longer. This 1.1++++ Billion treatment plant seems to be driven by non-growth aspects. Please explain how CRD justifies its inclusion at 1/3 into the DCC despite this.
36	The survey provided is extremely leading. How were the questions developed and are the questions statistically valid?
37	Has the RWSC directed staff to review waiving/reducing DCCs on for-profit rental housing or only affordable housing?
38	Has an economic analysis been completed to determine what effect the DCC's will have on our housing market?
39	A lot of development is stalled due to DCC/DCL Rates and Const. Costs. What if you do not get the DCC revenue for your must haves?
40	how many responses to your survey have you received?
41	Most of the larger Cities have increased requirements across the board when it comes to building housing - fees, sustainable requirements, accessibility, are all important but do add cost. Has the CRD done a deep dive into what it actually takes, financially, to building a single home? If so, how does the CRD justify the increased cost to future homeowners with it becoming more onerous for people to buy or rent?
42	What analysis has been done to consider if new housing projects can support these charges?
43	At last nights public session, many of my questions were ignored or only partially answered. CRD is controlling this Zoom session very tightly. I would like to register my objection to this stage-managed process. Will the CRD provide the public and industry with meaningful in-person consultation with published results?
44	Why can't the DCC be stepped to the target assist factor each year over 5 years?
45	We have a project in stream that will take two years and have a SOC from Langford. Is a SOC (Statement of Conditions) considered protection for an in stream project by the CRD?
46	Has the CRD explored opportunities to borrow funds for the project to mitigate the impact of the increase in water rates?
47	Can you please provide the financial analysis you have completed?
48	*types
49	Will you share the economic feasibility study you are referencing with respect to how "healthy" projects will have no problem paying this? It is not our experience that this is true.
50	My question is not about rate setting, but about the financial analysis of the impact on new housing, can we please see this analysis?
51	Has Urban Systems designed DCC programs for other similarly sized (>$1B) water projects spanning 30 Year timeline?
52	2. The development industry is being asked to contribute well over $500 Million toward these capital projects. Aside from this digital webinar, will CRD be offering further opportunities for direct engagement with the development industry, such as in-person stakeholder sessions?
53	Is the CRD open to changing any of the proposed rates or extending the instream protection at this point in the approval of this policy?

54	1. Given the inverse relationship between DCC and water usage rates, how and when will the public be engaged about the proposed tripling/quadrupling of water rates? This is relevant to developers, as water efficiency will become increasingly significant in the design, construction, and sales/marketing process.
55	Federal Housing Minister says no DCC increases over next 3 years to qualify for billions in infrastructure upgrade grants. Have you applied for a federal grant?
56	will you consider an in person session with housing developers? We are specifically requesting that opportunity
57	You are using a self-selection survey method for public engagement about DCC which will not produce an accurate views of general public about this issue. When participants voluntarily choose to participate in a survey rather than being randomly selected we will have self-selection bias and the result will not reflect public views. The result will be only views of a sub-section of the society with particular interest on the subject. To seek truly accurate views of the citizens about any issues we need to have a valid random survey done by a reliable independent party. An online self-selection survey will not reflect the true views of the people living in CRD jurisdiction. This is true with all online self-selection survey results.
58	What is the specific process if CRD Board adopts this DCC bylaw? Will each municipality need to approve it at the local level?
59	That's why I asked the question as it's a CRD dcc? I think the answer you gave is "it depends" and ask Langford? Is that correct?
60	can you please point us to the specific legislation or regulations that require these upgrades?
61	Has there ever been any federal or provincial grants provided to the CRD for "growth related water facilities"?
62	Given the North shore wastewater treatment plant fiasco, and the capital cost estimates appear to be Class E at best, and given un-precedented inflation, the project costing is clearly out of date. Will CRD considering updating its estimates before DCC implementation?
63	Did you consider determining the percentage of cost in the DCC program by estimating the amount of water that residents of new construction will use vs. that used by existing residents?
64	In Sooke we have just seen an additional DDC adjustment to approx from $16,400 to $20,600 per SF. The additional CRD DCC will bring total DCCs to $30,000 SF. For a community that is struggling with many infrastructure issues, what work have you done with the District of Sooke to analyze housing impacts to this area as the total DCCs relative to housing values is proportionately much greater.
65	do you feel that 140 responses to your survey is an adequate number?
66	Re-asking my questions again, as this wasn't addressed previously - Given the inverse relationship between DCC and water usage rates, how and when will the public be engaged about the proposed tripling/quadrupling of water rates? This is relevant to developers, as water efficiency will become increasingly significant in the design, construction, and sales/marketing process.
67	Given that non-revenue water, including leaks and unmetered usage, represents over 20% of water delivered through certain municipal systems, what responsibility will be put on these system operators to reduce demand (and thus DCC/rate impacts)?

68	what is the rationale for not completing an impact analysis given the priority on housing deliver. It was suggested that this would be a big costs, but compared to the billion dollar price tag this would be a small piece that would provide important information
69	The development industry is being asked to contribute well over $500 Million toward these capital projects. Aside from this digital webinar, will CRD be offering further opportunities for direct engagement with the development industry, such as in-person stakeholder sessions?
70	Has Urban Systems designed DCC programs for other similarly sized (>$1B) water projects spanning comparable (30 Year) timelines?
71	My question was not answered.
72	Still same question please - The development industry is being asked to contribute well over $500 Million toward these capital projects. Aside from this digital webinar, will CRD be offering further opportunities for direct engagement with the development industry, such as in-person stakeholder sessions?
73	Esquimalt currently has no DCCs would they also need to adopt this and charge DCCs?
74	Metro Van did an analysis on impacts to housing. This panel has said this is a similar scale policy. Why is the CRD not going to undertake an analysis on the impacts to housing costs?
75	I didn't hear the answer to this: Has the RWSC directed staff to review waiving/reducing DCCs on for-profit rental housing or only affordable housing?
76	When does this go to the board for final approval?
77	Which First Nations have been consulted and are they all in favour?
78	Very disappointed that my question (re-sent twice further) on further in-person engagement was not addressed. Trusting this objection can be noted.

APPENDIX B

CAPITAL REGIONAL DISTRICT

REGIONAL WATER SUPPLY SERVICE DEVELOPMENT COST CHARGE BACKGROUND REPORT

DRAFT | September 2024

URBAN SYSTEMS
312 – 645 FORT STREET, VICTORIA BC V9W 1G2
T: 250.220.7060

URBAN SYSTEMS

PREPARED FOR:

CAPITAL REGIONAL DISTRICT
625 Fisgard Street
Victoria, BC V8W 1R7

ATTENTION:

Patrick Stephens, EIT
Project Engineer

PREPARED BY:

URBAN SYSTEMS LTD.
Shaun Heffernan, MCIP, RPP

Senior Planner / Principal
E: sheffernan@urbansystems.ca | T: 778.557.7213

DATE: SEPTEMBER 2024

FILE:

1692.0050.02

TABLE OF CONTENTS

FIGURES

TABLES

EXECUTIVE SUMMARY

Currently, the Capital Regional District (CRD) has no Development Cost Charge (DCC) Bylaw for the Regional Water Supply (RWS) service which supplies water to most areas within Greater Victoria. The 2017 RWS Strategic Plan outlines exploring DCCs as a priority for this service and the 2023-2026 Corporate Plan included an initiative to implement a DCC program for the RWS service. A DCC program was developed in the past; however, a DCC Bylaw was not adopted (circa 1994).

The adoption of a RWS DCC bylaw is seen as an important step for supporting the implementation and funding of future critical infrastructure needs identified in the Capital Regional District (CRD) RWS 2022 Master Plan.

The development of this DCC program included the following:

- Review of existing policies and administrative procedures to determine appropriate approaches for this DCC program and bylaw;
- Review of residential and non-residential growth estimates;
- Review of critical and growth-related RWS infrastructure;
- Identification of eligible DCC projects, cost estimates, and appropriate benefit allocations;
- Staff workshops and Council presentations in all CRD member municipalities;
- Consultation with the public and interested parties;
- Determination of appropriate land use categories and units of charge; and,
- Allocation of costs based on infrastructure impact.

The proposed DCC rates based on the inputs to the DCC program are provided in Table 1 below.

Table 1 - Proposed DCC Rates

Land Use	Unit	Rate
Low-Density Residential	Per lot	$9,044
Medium-Density Residential	Per dwelling unit	$7,914
High-Density Residential	Per dwelling unit	$5,087
Commercial	Per sq.m. GFA	$33.92
Industrial	Per sq.m. GFA	$16.96
Institutional	Per sq.m. GFA	$73.48

1.0 BACKGROUND

The Capital Regional District (CRD) is seeking to implement a Development Cost Charge (DCC) Bylaw to help fund the growth-driven infrastructure needed for the Regional Water Supply (RWS) service. The two main background documents that support the development of this program development include: the 2017 RWS Strategic Plan, which outlines exploring DCCs as a priority for this service; and the RWS 2022 Master Plan that outlines the necessary projects to service growth.

The CRD provides regional water supply services which treat and supply bulk water to most areas within Greater Victoria. Figure 1 shows the service areas for the thirteen (13) municipalities and one (1) electoral area included in this DCC program. The regional water supply also services eight (8) First Nation communities that are exempt from the proposed DCC program and subsequent rates.

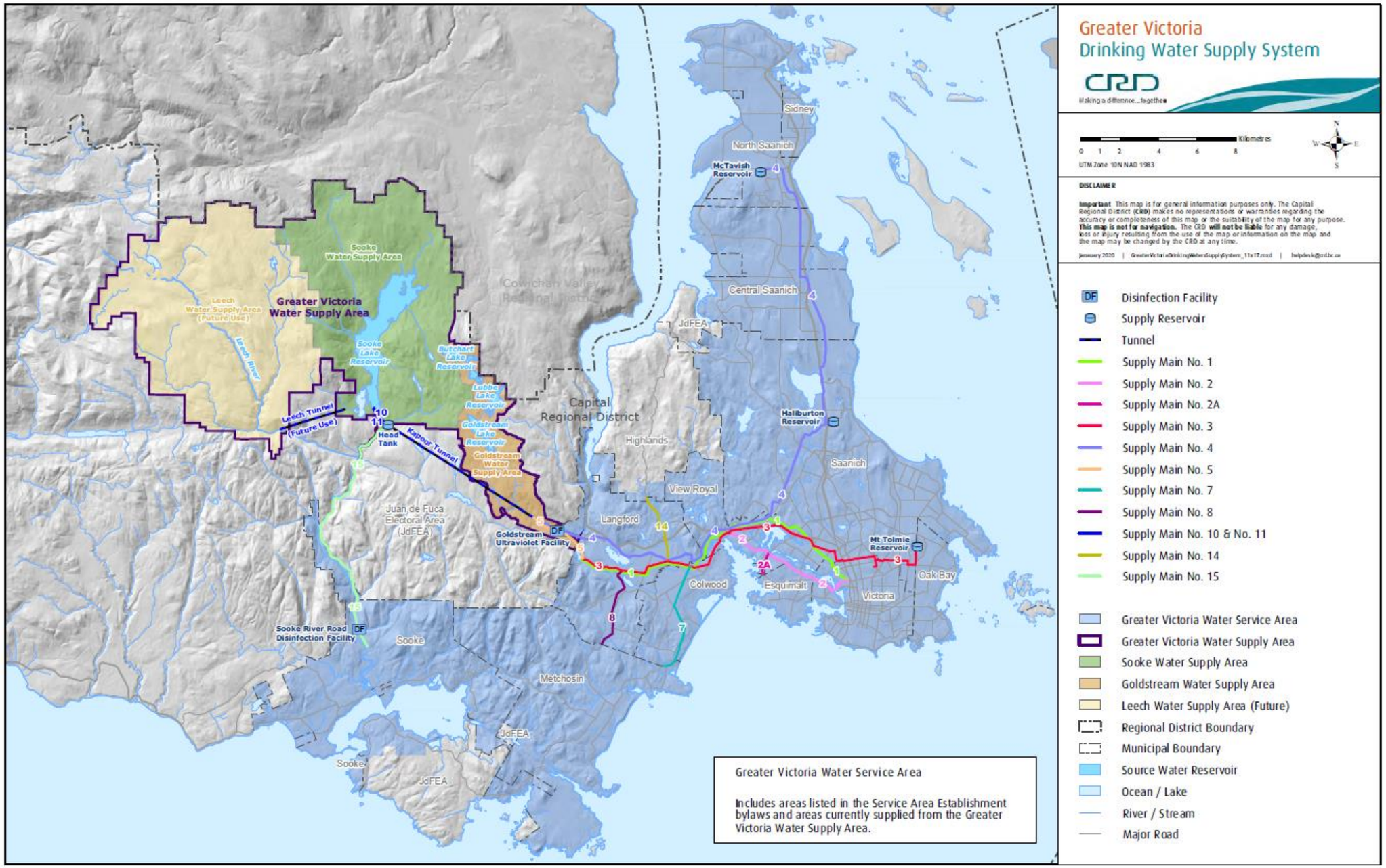
Urban Systems Ltd. was retained to assist the CRD in the development of the program and bylaw, with an emphasis on aligning the development of the DCC program with the CRD's existing water DCC bylaws, which include the *Development Cost Charges Bylaw (Juan de Fuca Water Distribution), Bylaw No. 2758 (Consolidated)*, and the *Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 3208 (Consolidated)*. Note that these Bylaws are amended from time to time.

The proposed DCC program and rates in this report are based on priority growth-related infrastructure needs and capital costs identified in the RWS 2022 Master Plan and the CRD's 2023 Draft Capital Plan. Region-wide growth estimates are calculated based on the CRD's Regional Growth Strategy with reference to Official Community Plan (OCP) land use designations for the member municipalities and supported with BC Stats data.

As defined by the Water Supply Local Service Area Establishment Bylaw No. 2537 (which is amended from time to time), the communities within the service area that are included in this DCC program are:

- City of Victoria
- Township of Esquimalt
- District of Saanich
- District of Central Saanich
- District of North Saanich
- District of Oak Bay
- Town of View Royal
- District of Sooke
- City of Langford
- City of Colwood
- Town of Sidney
- District of Metchosin
- District of Highlands
- Juan de Fuca Electoral Area A

Figure 1 - Regional Water Supply Service Area



The proposed DCC program ensures that those who will use and benefit from the services provided pay their share of the growth-related costs in a fair and equitable manner (the 'benefiter pays' principle). A comprehensive review of the potential for development throughout the communities serviced by the RWS system was completed as part of this proposed DCC program development. The proposed DCC program creates certainty for the development industry by providing predictable and consistent charges for water supply services and by facilitating the orderly and timely construction of infrastructure by the CRD to meet the growing demand.

1.1 LEGISLATIVE CONTEXT

DCCs are charges collected by local governments to help pay for infrastructure expenditures required to service growth. The *Local Government Act* (Part 14, Division 19) sets out the general requirements under which local governments may charge DCCs. Funding generated through DCCs are used to help accommodate growth and development through capital cost investment; eligible capital costs that can be funded through DCCs include (also see Section 1.4):

- Providing, constructing, altering or expanding water, sewage, drainage and transportation facilities;
- Constructing fire, protective service, and solid waste or recycling facilities; and,
- Providing for and improving parkland.

Regional Districts wanting to collect DCCs must adopt a DCC bylaw that specifies the DCC amounts to be collected. The charges may vary with respect to:

- Different zones or different defined or specific areas;
- Different uses;
- Different capital costs as they relate to different classes of development; and,
- Different sizes or different numbers of lots or units in a development.

When developing a DCC program, municipal councils and regional district boards must consider the impact of the DCCs on development. Generally, DCCs are payable at subdivision approval or when the building permit is issued. DCCs are not payable if the new development does not negatively impact the existing infrastructure, or the impact of that development does not require infrastructure improvements.

Funds collected through DCCs must be deposited into a separate reserve account. These funds may only be used to pay for the capital costs of the works and short-term financing costs of debt incurred for capital works identified in the DCC program. Costs for capital works include not only the actual construction of the works but also the planning, engineering, and legal costs which are directly related to the works.

1.2 RELATIONSHIP TO OTHER DOCUMENTS

This proposed DCC program has been developed to be consistent with the following legislation, plans, and policy guides, including:

- *Local Government Act* (*LGA*)
- Development Cost Charges Best Practices Guide (Best Practices Guide)
- Development Cost Charge Guide for Elected Officials
- RWS 2017 Strategic Plan
- CRD 2023-2026 Corporate Plan
- CRD RWS 2022 Master Plan
- CRD Draft 2023 Capital Plan
- CRD Regional Growth Strategy (2018)
- Municipal Official Community Plans and Neighbourhood Plans

1.3 REGIONAL WATER SUPPLY SERVICE AREA

The proposed DCC bylaw facilitates the adoption of a region-wide water supply DCC. Since this is a water supply DCC, the same DCC rate is proposed to be applied for each land use deemed to generate a similar or same capital cost burden, regardless of development location within the RWS service area. Since the RWS service does not operate in isolation and is one whole system, a region-wide DCC charge is appropriate rather than an area-specific DCC charge. A region-wide approach also provides greater flexibility for allocated funding to projects within the program.

1.4 ELIGIBLE RECOVERABLE COSTS

The recoverable DCC costs include those associated with implementing the project lists based on technical input from master planning, capital plans, and staff. The eligible recoverable capital costs associated with DCC projects have been interpreted by the Ministry to include the following scope of capitalized activities:

- Planning;
- Public consultation;
- Engineering design;
- Right-of-way or parkland acquisition;
- Legal costs;
- Interim financing;
- Contract administration;
- Construction; and,
- Contingencies.

The recoverable DCC costs are derived from a benefit allocation assigned to each project based on how it would benefit growth versus the existing population. The total DCC recoverable costs factor in the project-specific benefit allocations, which are calculated using the overall capital costs.

2.0 DCC KEY ELEMENTS

Prepared by the Ministry of Municipal Affairs and Housing, the Best Practices Guide stipulates key elements that should be considered when determining DCC rates. Table 2 outlines the key elements, decisions, and supporting rationale used in the development of this DCC program. The table also indicates whether the proposed approach aligns with the Best Practices Guide.

Table 2 - DCC Key Elements

Key Element	Proposed DCC	Rationale	Aligns with Best Practices Guide?
Time Horizon	30 Years	• Aligns with the CRD Regional Growth Strategy and RWS 2022 Master Plan time horizons.	✓
Municipal-wide (system-wide) or area-specific charge	System-wide (covers all areas serviced by the RWS system, now or to service growth)	• System-wide based on infrastructure that is reasonably expected to service the whole network to meet the needs of growth in all areas.	✓
Grant Assistance	None	• No identified DCC projects anticipate grant funding at this time.	✓
Developer Contribution	None	• No identified DCC projects include a developer contribution at this time.	✓
Financing	None	• No long-term debt financing has been included.	✓
Benefit Allocation	35 - 100%	• 100% benefit is allocated to projects required only to increase capacity due to growth or to service growth. • For projects where both new and existing residents will benefit, benefit has been calculated based on the ratio	✓

Key Element	Proposed DCC	Rationale	Aligns with Best Practices Guide?
		of new population to total population (approx. 35%) or rule of thumb (50%).	
Assist Factor	1%	• The CRD Regional Water Supply Commission (RWSC) directed the project team to proceed with a 1% assist factor.	✓
Units of Charge	Per lot; per dwelling unit; per square metre of gross floor area	• *Per lot* for Low Density Residential (single family). DCCs are levied on single family lots at time of subdivision when DCCs are expected to most closely correlate with impact on infrastructure. • *Per dwelling unit* for Medium Density Residential (duplexes, triplexes, fourplexes, row houses, townhouses and manufactured homes) and High Density Residential (apartment). DCCs are levied at time of building permit for Medium Density and High Density Residential categories when number of units is known. • *Per square metre of gross floor area* for Commercial, Industrial, Institutional uses as impact on infrastructure is expected to correlate with floor space.	✓

3.0 GROWTH PROJECTIONS AND EQUIVALENCIES

3.1 GROWTH PROJECTIONS

The 30-year growth projections for different residential unit types (i.e., low, medium, and high density) and non-residential (i.e., commercial, industrial, and institutional) uses were developed using current and historic growth trends determined from BC Stats population estimates, the Regional Growth Strategy (RGS), local government planning documents, and information on major ongoing development applications. This information was used to determine the distribution of this growth between municipalities and the Regional District (Electoral Area A).

Additionally, effort was made to ensure alignment between units of charge and growth projections applied in other CRD DCC programs, notably for the Juan de Fuca Water Distribution system and the Saanich Peninsula Water and Wastewater system.

All growth projections were reviewed with each municipality and Electoral Area within the CRD through a series of staff workshops held between September 2023 and January 2024.

A summary of residential and non-residential growth is provided in Table 3 and Table 4. Growth is expressed in population for residential projections and in square meters of gross floor area and equivalent population for non-residential projections.

Table 3 - Distribution of Residential Population Growth in RWS Service Area by Dwelling Type (30-year)

RESIDENTIAL			
Dwelling Type	Number of Units	Persons per Unit	Equivalent Population
Low-Density Residential	15,190	3.2	48,608
Medium-Density Residential	13,640	2.8	38,192
High-Density Residential	33,800	1.8	60,840
TOTAL	**62,630**	-	**147,640**

Table 4 - Non-Residential Development in RWS Service Area (30-year)

NON-RESIDENTIAL		
Development Type	New Gross Floor Area (m^2)	Equivalent Population
Commercial	1,480,000	17,760
Industrial	2,130,000	12,780
Institutional	270,500	7,033
TOTAL	**3,880,500**	**37,573**

3.2 EQUIVALENCIES

The equivalencies used in this DCC program to calculate DCC rates have been reviewed and reflect those used in the CRD's existing DCC Bylaws. These equivalencies are expected to align with the impact on infrastructure for the RWS service. These equivalent units, shown in Table 5, reflect relative impact and align with DCC best practices.

Table 5 - Equivalencies

Land Use	Unit of Development	Equivalent Unit Conversion Factors (persons per unit)
Low-Density Residential	Per Lot	3.2
Medium-Density Residential	Per Dwelling Unit	2.8
High-Density Residential	Per Dwelling Unit	1.8
Commercial	Per sq.m. GFA	0.012
Industrial	Per sq.m. GFA	0.006
Institutional	Per sq.m. GFA	0.026

For residential demand, occupancy rates can be used to project demands for water services. Using the equivalencies identified above, the total new residential population is projected at 147,640.

For non-residential land uses, equivalent populations per square metre of gross floor area have been established based on best practices and industry standards. The total equivalent new non-residential population, determined by applying the equivalent unit conversion factors to the total estimated non-residential gross floor area, is projected at 37,573.

The combined residential and non-residential equivalent new population is 185,213 over the 30-year DCC time horizon.

4.0 DCC SUMMARY COSTS AND PROJECTS

4.1 DCC SUMMARY COSTS

DCC costs and rates are determined by applying the key elements, growth projections, and equivalencies described earlier in this report to projects that are determined to be DCC eligible and expected to be built within the specified DCC timeframe. A summary of the DCC costs for the RWS service is provided in Table 6.

Table 6 - DCC Program Overview and Capital Costs[2]

Total Capital Costs	Benefit Allocation	Assist Factor	DCC Recoverable Program Costs	CRD Costs [1]
$1,444.4 M	35% - 100%	1%	$523.5 M	$920.9 M

(1) *Includes assist factor and portion allocated to existing development.*
(2) *Numbers may not add due to rounding.*

4.2 DCC PROJECTS

The DCC program was developed based on a review and prioritization of growth-related projects in the CRD's Regional Water Supply 2022 Master Plan, staff inputs and the 2023 Draft Capital Plan. A summary of proposed DCC projects is provided in Table 7 (below); where applicable, projects have been mapped and are shown in Figure 2 - DCC Projects Map. The DCC calculation, equivalent conversion factors per unit and per square metre are established in Table 8. All projects are owned and capitalized by the CRD.

Table 7 – Proposed DCC Program

Item	Project	Cost Estimate (A)	DCC Benefit Factor (B)	Benefit to New Development (C = A x B)	Municipal Assist Factor 1% (D = C x Assist Factor)	DCC Recoverable (E = C - D)	CRD Responsibility F = (A - E)
SOOKE LAKE RESERVOIR DEEP NORTHERN INTAKE							
W1	Deep Northern Intake (Floating Pump Station)	$72,505,000	35%	$25,376,750	$253,768	$25,122,983	$47,382,018
W2	Sooke Lake Reservoir - Water Quality Sensors, Monitoring and Studies	$740,000	35%	$259,000	$2,590	$256,410	$483,590
W3	Conceptual Design of Floating Pump Station and Transmission Main	$1,500,000	35%	$525,000	$5,250	$519,750	$980,250
	Subtotal	**$74,745,000**	-	**$26,160,750**	**$261,608**	**$25,899,143**	**$48,845,858**
LEECH WATERSHED							
W4	Leech River Diversion	$16,700,000	100%	$16,700,000	$167,000	$16,533,000	$167,000
W5	Sooke Lake Saddle Dam Hydraulic Improvements and Studies	$10,300,000	100%	$10,300,000	$103,000	$10,197,000	$103,000
W6	Leech River Watershed Restoration, Mapping and Studies	$1,513,000	100%	$1,513,000	$15,130	$1,497,870	$15,130
	Subtotal	**$28,513,000**	-	**$28,513,000**	**$285,130**	**$28,227,870**	**$285,130**
WATER FILTRATION PLANT							
W7	Japan Gulch Dam Decommissioning	$10,256,000	35%	$3,589,600	$35,896	$3,553,704	$6,702,296
W8	Filtration Plant	$739,655,000	35%	$258,879,250	$2,588,793	$256,290,458	$483,364,543
W9	Filtration Plant Clearwell	$23,999,000	35%	$8,399,650	$83,997	$8,315,654	$15,683,347
W10	Treated Water Pump Station	$29,780,000	35%	$10,423,000	$104,230	$10,318,770	$19,461,230
W11	Filtration Plant Stage 2 Balancing Tank	$15,384,000	35%	$5,384,400	$53,844	$5,330,556	$10,053,444
	Subtotal	**$819,074,000**	-	**$286,675,900**	**$2,866,759**	**$283,809,141**	**$535,264,859**
TRANSMISSION MAINS							
W12	Phase 1 - Transmission Main Upgrades	$7,499,000	35%	$2,624,650	$26,247	$2,598,404	$4,900,597
W13	Phase 2 - Transmission Main Upgrades	$38,204,000	35%	$13,371,400	$133,714	$13,237,686	$24,966,314
W14	Phase 3 - Transmission Main Upgrades	$55,293,000	35%	$19,352,550	$193,526	$19,159,025	$36,133,976
W15	Deep Northern Intake to Head Tank Transmission Main	$38,768,000	35%	$13,568,800	$135,688	$13,433,112	$25,334,888
W16	Sooke Lake Dam to Head Tank Transmission Main	$7,384,000	35%	$2,584,400	$25,844	$2,558,556	$4,825,444
W17	Jack Lake Head Tank to Japan Gulch Transmission Main	$208,649,000	35%	$73,027,150	$730,272	$72,296,879	$136,352,122
W18	Goldstream Connector to Japan Gulch Transmission Main	$67,075,000	35%	$23,476,250	$234,763	$23,241,488	$43,833,513
W19	Goldstream Connector Balancing Tank	$5,538,000	35%	$1,938,300	$19,383	$1,918,917	$3,619,083
W20	East-West Connector Transmission Main	$58,562,000	35%	$20,496,700	$204,967	$20,291,733	$38,270,267
	Subtotal	**$486,972,000**	-	**$170,440,200**	**$1,704,402**	**$168,735,798**	**$318,236,202**

Item	Project	Cost Estimate (A)	DCC Benefit Factor (B)	Benefit to New Development (C = A x B)	Municipal Assist Factor 1% (D = C x Assist Factor)	DCC Recoverable (E = C - D)	CRD Responsibility F = (A - E)
SMITH HILL STORAGE TANK							
W21	Smith Hill Tank - Including Design and Decommissioning	$14,120,000	50%	$7,060,000	$70,600	$6,989,400	$7,130,600
W22	Smith Hill Tank Pump Station	$17,148,000	50%	$8,574,000	$85,740	$8,488,260	$8,659,740
	Subtotal	$31,268,000	-	$15,634,000	$156,340	$15,477,660	$15,790,340
STUDIES/MODELLING							
W23	Project Delivery Strategy	$200,000	35%	$70,000	$700	$69,300	$130,700
W24	SCADA Masterplan and System Upgrades	$2,000,000	35%	$700,000	$7,000	$693,000	$1,307,000
W25	Supply System Computer Model Update	$100,000	35%	$35,000	$350	$34,650	$65,350
W26	Phase 2 Hydrology Study	$1,500,000	35%	$525,000	$5,250	$519,750	$980,250
	Subtotal	$3,800,000	-	$1,330,000	$13,300	$1,316,700	$2,483,300
	TOTAL	$1,444,372,000	-	$528,753,850	$5,287,539	$523,466,312	$920,905,689

Figure 2 - DCC Projects Map (Approximate Locations)

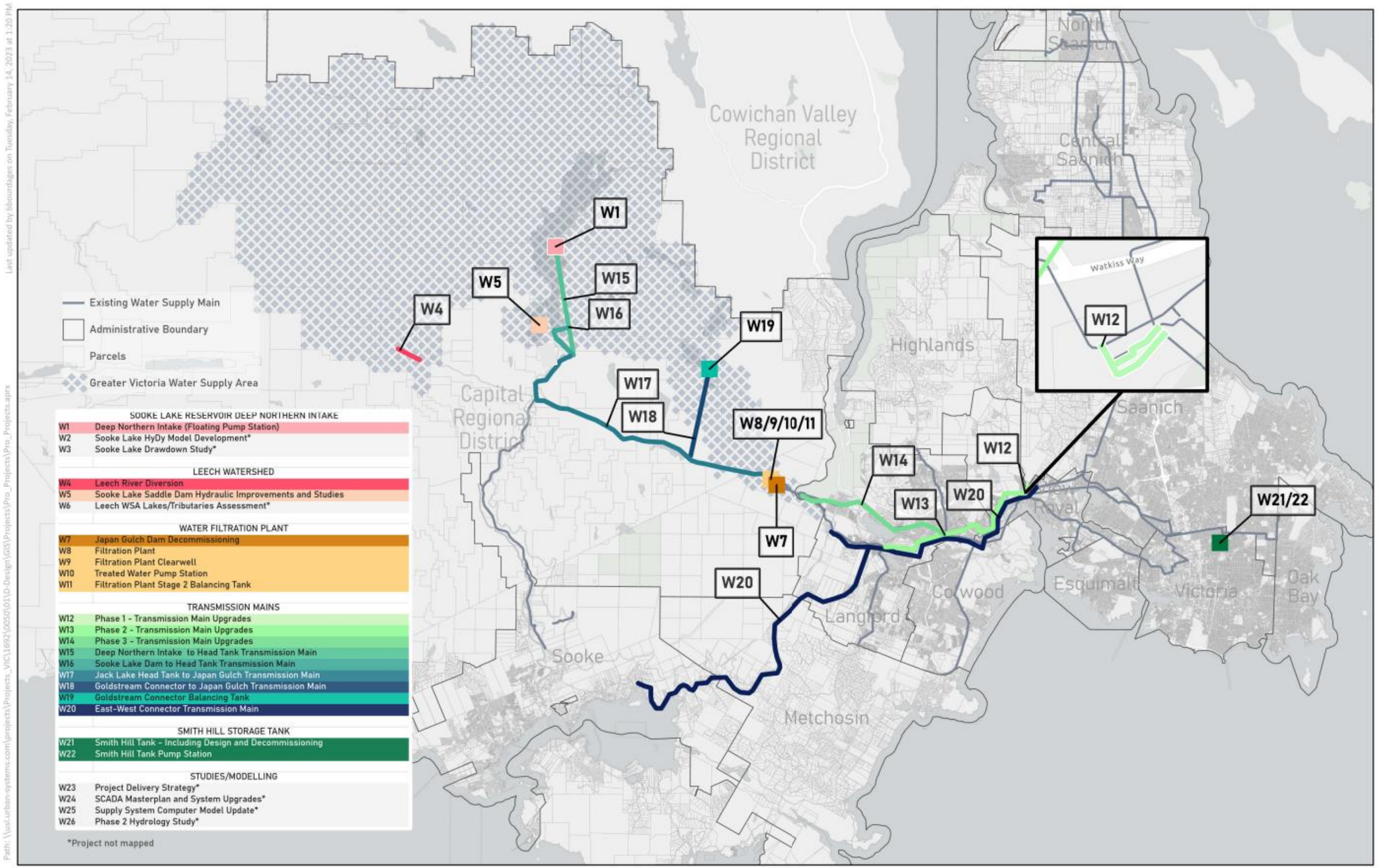


Table 8 - DCC Calculations

30 Year Time Horizon: 2022- 2051

DCC Calculation						
	Col. (1)	Col. (2)	Col. (3)	Col. (4)=(2) x (3)		Col.(5) = (4)/(a)
Equivalent Population Estimates	Unit	Estimated New Development	Persons per Unit	Equivalent Population		% Equivalent Population
Low-Density Residential	per lot	15,190	3.2	48,608		26%
Medium-Density Residential	per dwelling unit	13,640	2.8	38,192		21%
High-Density Residential	per dwelling unit	33,800	1.8	60,840		33%
Commercial	per sq.m. GFA	1,480,000	0.012	17,760		10%
Industrial	per sq.m. GFA	2,130,000	0.006	12,780		7%
Institutional	per sq.m. GFA	270,500	0.026	7,033		4%
			Total Equivalent Population:	185,213	(a)	100%
B: Unit Water DCC Calculation						
Net Water DCC Program Recoverable (Table 7)		$523,466,312	(b)			
Existing DCC Reserve Monies		$0.00	(c)			
Net Amount to be Paid by DCCs		$523,466,312	(d) = (b) - (c)			
DCCs per Person		$2,826.29	(e) = (d) / (a)			
C: Resulting Water DCCs						DCC Revenue Estimates
Low-Density Residential		$9,044	per lot	(e) X Col. (3)		$137,380,478
Medium-Density Residential		$7,914	per dwelling unit	(e) X Col. (3)		$107,941,804
High-Density Residential		$5,087	per dwelling unit	(e) X Col. (3)		$171,951,701
Commercial		$33.92	per sq.m. GFA	(e) X Col. (3)		$50,194,974
Industrial		$16.96	per sq.m. GFA	(e) X Col. (3)		$36,120,032
Institutional		$73.48	per sq.m. GFA	(e) X Col. (3)		$19,877,323

5.0 PROPOSED DCC RATES

A summary of proposed DCC rates for all land use categories are shown in Table 9 below.

Table 9 - Proposed DCC Rates

Land Use	Unit	Rate
Low-Density Residential	Per lot	$9,044
Medium-Density Residential	Per dwelling unit	$7,914
High-Density Residential	Per dwelling unit	$5,087
Commercial	Per sq.m. GFA	$33.92
Industrial	Per sq.m. GFA	$16.96
Institutional	Per sq.m. GFA	$73.48

6.0 CONSULTATION WITH INTERESTED PARTIES

Although the *LGA* does not require a consultation process with interested parties, the Best Practices Guide does suggest an opportunity for consultation be included as part of the formulation of a DCC program. The purpose of such a process is to allow interested parties to offer comments and input on the proposed DCC. The Best Practices Guide does not set a recommended format to be followed for public participation; instead, the type of public participation is up to the discretion of the CRD.

The CRD remained committed to ensuring that Municipal staff, Councils, the public, and other interested parties were informed at all major stages in the development of the Regional Water Supply (RWS) DCC program. During the earlier program development stages, 14 municipal (including CRD Electoral Areas) workshops and 13 municipal Council meetings were held, in addition to the broader consultation outlined below.

Consultation with interested parties was conducted between May and July 2024. Engagement included two information sessions, one with the public on June 19, 2024 and one with the development community on June 20, 2024. These sessions consisted of a presentation led by the project team about the proposed program and rates, followed by a Q&A period. There were approximately 45 attendees at each session, in addition to CRD staff and consultants.

For those unable to attend the sessions, a 10-question survey, recordings of previous presentations, background documents and an FAQ document was hosted on the CRD's Get Involved page from May 29, 2024 to July 5, 2024.

Key themes raised through the consultation opportunities included:

- Comments regarding the total project costs included in the proposed DCC program potentially being too high

- Comments regarding the impact of the proposed DCC on housing affordability throughout the region
- Questions regarding the possibility of incorporating alternative funding strategies (e.g., grants, taxation, user rate adjustments) to off-set the proposed DCCs
- Questions regarding the possibility of conducting an economic analysis on the proposed DCCs to determine their impact on the regional housing market
- Questions regarding projects identified in the 2022 Regional Water Supply Master Plan
- Questions regarding the preparation of the DCC program (e.g., rate calculation, project timeline, growth projections)

Transcripts and summaries of all conducted engagement opportunities were provided to the RWSC and CRD Board for review. CRD staff, the RWSC, and the CRD Board have taken the above feedback into consideration in setting the DCC rate and assist factors.

7.0 DCC IMPLEMENTATION

This section provides information that will guide implementation of the proposed RWS DCC Bylaw.

7.1 BYLAW EXEMPTIONS

The *LGA* is clear that a DCC cannot be levied if the proposed development does not impose new capital cost burdens on the Regional District, or if a DCC has already been paid in regard to the same development. However, if additional further expansion for the same development creates new capital cost burdens or uses up capacity, the DCCs can be levied for the additional costs (i.e., net increase).

The *LGA* further restricts the levying of the DCC at the time of approval for a building permit if:

- The building permit is for a church or place of public worship as per the *Community Charter*; or
- The value of the work authorized by the building permit does not exceed $50,000 or a higher amount as prescribed by bylaw; or
- Unit size is no larger than 29 sq.m. and only for residential use.

Changes to the *LGA* allow local governments to charge DCCs at the time of application for building permit on residential developments of fewer than four self-contained dwelling units, if such a charge is provided for in the Regional District's DCC bylaw. The CRD's existing DCC Bylaws specify the elimination of this exemption for residential developments of fewer than four self-contained dwelling units, resulting in the Regional District levying DCCs for development of three self-contained dwelling units or less.

7.2 DCC WAIVERS OR REDUCTIONS

Changes to the *LGA* in 2008 provide local governments with the discretionary authority to waive or reduce DCCs for certain types of development to promote affordable housing and low impact development. The CRD considered providing waivers or reductions when the existing DCC Bylaws for Juan de Fuca and Saanich Peninsula were developed and chose to continue to not provide any waivers/reductions.

The CRD is currently exploring the possible implementation of a DCC Waivers or Reductions grant program or Bylaw.

7.3 COLLECTION OF CHARGES – SUBDIVISION AND BUILDING PERMIT

Local governments can choose to collect DCCs at the time of subdivision approval or building permit issuance. Of the two possible collection times, subdivision approval occurs earlier in the process. It is expected municipalities will collect DCCs on behalf of the CRD. DCCs will be collected for Low-Density Residential Development (Single Family uses) at time

of subdivision approval. Collecting DCCs early will allow the CRD to ensure timely provision of infrastructure and services. DCCs for Medium- and High-Density Residential Development will be collected at time of building permit issuance when the final number of units is known. Non-residential land uses will also be levied DCCs at time of building permit issuance when gross floor area will be known, which results in more equitable distribution of growth costs.

7.4 COLLECTION OF DCCS ON REDEVELOPED OR EXPANDED DEVELOPMENTS

When an existing building or development undergoes an expansion or redevelopment there is usually a burden on DCC related infrastructure. In such cases, the applicant will be required to pay the applicable DCCs based on the additional number of new units or floor area for each land use type, as appropriate, at the DCC rates in the proposed DCC bylaw. DCCs are only levied on the new development/building area.

Examples of collecting DCCs on redeveloped or expanded developments are as follows:

- If a single family residential unit is replaced by another single family residential unit then no additional DCCs are payable as there is no new burden.
- If a lot is subdivided into two, for example, to construct two small lot single family residential units, then DCCs are payable on the one additional single family residential lot.
- If a multi-family residential development is replaced by another multi-family residential development with the same unit mix and number of units, then no additional DCCs are payable.

7.5 IN-STREAM APPLICATIONS

Should the proposed DCC Bylaw be adopted, rates will be in force immediately at time of DCC Bylaw adoption; however, the *LGA* provides special protection from rate increases for development applications that are submitted prior to the adoption date. There are two ways a developer can qualify for protection from the DCC rates:

1. Pursuant to section 511 of the *LGA* (subdivision).

   If the DCC Bylaw is adopted after a subdivision application is submitted and the applicable subdivision fee is paid, the new DCC Bylaw has no application to the subdivision for 12 months after the DCC Bylaw is adopted. As such, if the subdivision is approved during the 12 months' grace period, no DCC rates apply since this is a new DCC fee. This only applies in cases where DCCs are levied at subdivision.

OR

2. Pursuant to section 568 of the *LGA* (building permits).

   The DCC Bylaw is not applicable to a construction, alteration or extension if: (a) a building permit is issued within 12 months of the DCC Bylaw adoption, AND (b) either a building permit application, a development permit application or a rezoning application associated with the construction (defined as "precursor application") is in stream when the DCC Bylaw is adopted, and the applicable application fee has been paid. The development authorized by the building permit must be entirely within the area subject to the precursor application.

The above is a summary of sections 511 and 568 of the *LGA* and not an interpretation or an explanation of these sections. Developers are responsible for complying with all applicable laws and bylaws and seeking legal advice as needed.

7.6 DCC CREDITS AND REBATES

The CRD has an established JdF WDS DCC Credits Policy that specifies when the CRD will provide a DCC credit and the parameters of how a credit is calculated. This Credit Policy aligns with the use of DCC credits and rebates as stipulated in the *LGA* and referenced in the Best Practices Guide. However, given the scale and nature of the Regional Water Supply service and DCC project list, it is not anticpated that developers will be involved in the delivery of any of the proposed RWS DCC projects. Though if this were to occur, it is expected a similar approach to credits as used for the JdF WDS will be applied to the RWS service.

7.7 DCC MONITORING AND ACCOUNTING

In order to manage the DCC Program, the CRD should enter all the projects contained in the DCC program into its management system. The system would monitor the status of the project from the conceptual stage through to its final construction. The system would include information about the estimated costs, the actual construction costs, and the funding sources for the projects. The construction costs would be based on the tender prices received, and the land costs based on the actual price of utility areas and or other land and improvements required for servicing purposes. The system would indicate when projects are completed, their actual costs, and would include new projects that are added to the program.

7.8 DCC REVIEWS

It is recommended that the CRD review the proposed RWS DCC program annually to monitor changes in project status, costs, or growth. Based on its annual review, the CRD may make minor amendments to the DCC rates. Typically, a major amendment to the DCC program and rates is needed every 3 – 5 years.

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

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

Making a difference...together

RWSC 24-12

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024

SUBJECT **Regional Water Supply Service 2025 Budget Requirement for Bear Hill Extension Project**

ISSUE SUMMARY

To recommend project delivery coordination and cost sharing between the Regional Water Supply (RWS) and Saanich Peninsula Water (SPW) services for the Bear Hill Trunk Watermain Extension (Bear Hill Trunk).

BACKGROUND

To support understanding of the project references below, a schematic has been provided in Appendix A.

Saanich Peninsula Water:
In 1991, a SPW Management Plan report identified system upgrades to the SPW system which included the Bear Hill Tank system, complete with a Bear Hill trunk watermain from the Bear Hill tank to Dean Park Lower tank. The Bear Hill trunk was determined to be constructed in three separate phases, of which the first two were completed in the early to mid-1990s. The Bear Hill Trunk currently extends from Bear Hill tank to the Saanichton area at East Saanich Road and Wallace Drive and consists of a 762 millimeter (mm) and 610mm diameter ductile iron watermain.

In 2015, a SPW Watermain Condition Assessment report recommended that the Bear Hill Trunk watermain be completed with approximately 3 kilometers (km) of watermain within 10-years (by 2025). Benefits of completing the trunk watermain include improving system redundancy, improving the ability to complete maintenance work on Main No. 4, and providing a higher tolerance/acceptance to main breaks, thus improving the overall resilience of water supply to the Saanich Peninsula. The Saanich Peninsula Water Supply Commission have endorsed this project to be completed under Capital Project No. 21-05.

In November 2023, Capital Regional District (CRD) entered a contract with a design consultant to progress CRD's Transmission Main Upgrade Program, which included seven projects between both the SPW and RWS systems. As of August 2024, the design team is working toward the 90% design deliverable for the Bear Hill Trunk and have provided a Class C cost estimate ranging from $17.7 million (M) to $24.6M in construction costs. This cost estimate exceeds the available $12.9M funding in the SPW Loan Authorization Bylaw No. 4411, which poses risk of delay or cancellation of the project.

Regional Water Supply:
As part of the same Transmission Main Upgrade Program that is delivering the Bear Hill Trunk project, a separate project is being delivered to replace an approximately 2.9km section of concrete cylinder pipe in RWS Transmission Main No. 4 from the intersection of Lochside Drive and Island View Road to the intersection of Central Saanich Road and Mount Newton Cross Road. This project was selected to improve resiliency by replacing some critical sections of concrete cylinder pipe with more resilient steel mains. The project has been awarded $6M in grant

funding through the Strategic Priorities Fund and has been endorsed by the RWS Commission under RWS Capital Project No. 23-17. As of August 2024, the design team is working toward the 90% design deliverable for the Main No. 4 - Mt Newton to Highway 17 project and have provided a Class C cost estimate ranging from $21.7M to $30.1M in construction costs. Construction of this pipe replacement, particularly the tie-ins at the project limits, would pose significantly lower risk if an additional water supply to the Saanich Peninsula, such as the Bear Hill Trunk connection, was available. This is a significant indirect benefit to the RWS system to have the Bear Hill trunk project tendered concurrently and commissioned before tie-ins of RWS Capital Project No. 23-17.

In 2022, CRD completed the Regional Water Supply Master Plan ("Master Plan"). Within this Master Plan, was project M11 – Twin Critical Main No. 4, which included the recommendation to twin 3.1km of Main No. 4 (610/762mm diameter) from the intersection of Central Saanich Road and Mount Newton Cross Road to the intersection of Aldous Terrace and Lowe Road. Cost estimates within the Master Plan were preliminary, but based on those estimates, the portion of work related to the 3.1km scope listed above could be estimated to exceed $25M, when filtering out other project components and adjusting to 2025 dollars. The intent of this project was to increase capacity and improve resiliency for the Saanich Peninsula water service. The capacity and resiliency improvements proposed by this scope within the Master Plan would largely be achieved by the Bear Hill Trunk project being undertaken as part of SPW Capital Project No. 21-05 but it is also noted that there are still additional segments of concrete cylinder pipe on the Saanich Peninsula portion of Main No. 4 that will still be gradually transitioned to more seismically resilient pipe materials over time.

SPW, RWS and Municipal Shared Benefit:
There is mutual benefit in combining all the works described above, which is why CRD staff have initiated this work under a larger program. Having the Bear Hill Trunk extended to Lower Dean tank will provide greater resiliency to the Saanich Peninsula system and mitigate risk when completing the tie-ins as part of RWS Capital Project No. 23-17. CRD staff have been frequently in discussion with municipal staff from both District of North Saanich (North Saanich) and District of Central Saanich (Central Saanich) and intend to coordinate the installation of their distribution watermains and surface improvements for both municipalities.

ALTERNATIVES

Alternative 1
That the cost of the Bear Hill Trunk Watermain Extension capital project No. 21-05 be cost-shared between the Regional Water Supply and Saanich Peninsula Water services, with up to 50% of the total cost being included in the 2025 Regional Water Supply Capital Plan.

Alternative 2
That funding not be provided for the Bear Hill Trunk Watermain Extension.

IMPLICATIONS

Financial Implications

The Bear Hill Trunk (part of SPW Capital Project No. 21-05) and RWS Master Plan Option M11 both recommend projects of similar cost that will provide similar hydraulic capacity and resiliency improvements to the water supply on the Saanich Peninsula.

The Bear Hill Trunk will also meet the hydraulic improvement requirements proposed under RWS Master Plan Option M11, which would have a value exceeding $25M in 2025 dollars. While savings are to be expected from no longer needing to twin this section of main for hydraulic reasons, it is also prudent to point out that this 3.1km section of piping is still among the more than 9km of concrete cylinder pipes on the section of Main No. 4 that serves the Saanich Peninsula, all of which will still require eventual replacement for end of life and/or seismic resiliency at some point in the future. The Bear Hill Trunk will be of great benefit to the water supply during all future pipe upgrades to Main No. 4, including the replacements being proposed under RWS Capital Project 23-17.

The Bear Hill Trunk is currently in the detailed design stage and will be ready to tender for construction as early as the first quarter (Q1) of 2025. Sharing the cost of the Bear Hill Trunk between RWS and SPW services is believed to be a cost-effective means for both services to address capacity requirements and improve resiliency of their water systems on the Saanich Peninsula. Existing SPW Loan Authorization Bylaw No. 4411 provides insufficient funding for the full cost of this project. Without funding support from the RWS service, SPW would require a new Loan Authorization Bylaw to fund the project, which requires time and an approval process, exposing the project to the risk of deferral or cancellation, in which case, the RWS service would still be expected to complete the works recommended within the Master Plan, at a greater total cost. Not proceeding with the Bear Hill trunk extension project could also impact the ability to complete RWS Project No. 23-17, which has $6M in grant funding available and is scheduled to start construction in 2025.

CRD proposes that RWS funds up to 50% of the cost of the Bear Hill Trunk project, which is currently estimated at $20.5M (+/-20%) and that the 2025 RWS Capital Plan include an update to Capital Project No. 23-17 to include Bear Hill Trunk funding, in addition to the +/-3km of Main No. 4 segment replacement, to a combined maximum RWS funding of $39M for both projects. This budget reflects the current mid-range construction estimates for these projects, plus estimated engineering, project management and administrative costs. Prior to awarding a Construction Contract, a separate recommendation will be provided to the RWS Commission that will reflect actual tender pricing received and a reassessment on the budget.

Service Delivery Implications

Currently, all the CRD's water supply to North Saanich and Town of Sidney passes through Supply Main No. 4 and has no redundancy south of Lowe Pump Station. This provides limited operational flexibility to be able to conduct maintenance or repairs on this main, including the tie-ins that would be required to complete RWS Project No. 23-17. Completing the Bear Hill Trunk would greatly improve operational flexibility of the water supply to the Saanich Peninsula.

Environmental & Climate Action

Segments of Main No. 4 along the Saanich Peninsula include concrete cylinder pipe, which is considered less seismically resilient than steel or ductile iron watermains. Proceeding with the Bear Hill Trunk will improve the overall resiliency of the water supply to the Saanich Peninsula and better align CRD with the operational flexibility to also replace critical sections of Main No. 4, increasing resiliency further.

First Nations Reconciliation

RWS Capital Project No. 23-17 is to replace a concrete cylinder pipe segment of Main No. 4 that passes directly adjacent to Tsawout First Nation, which will increase resiliency of the supply main in this area. Proceeding with Bear Hill Trunk will give more operational flexibility to be able to complete the tie-ins for replacement of this segment of Main No. 4.

Intergovernmental Implications

CRD staff have been frequently coordinating with North Saanich and Central Saanich municipal staff and intend to co-deliver the installation of distribution watermains and surface improvements for both municipalities as part of a combined tender that includes the Bear Hill Trunk and RWS Capital Project No. 23-17. Both municipalities would be contributing funding to cover their own portions of the work. Not only will delaying the installation of the Bear Hill Trunk have implications in completing RWS Project No. 23-17, but it will also delay capital projects for both North Saanich and Central Saanich, which CRD has intended to facilitate as part of this larger program.

CONCLUSION

The Bear Hill Trunk project is of benefit to both the Regional Water Supply (RWS) and Saanich Peninsula Water (SPW) services and will improve overall resiliency to the water supply on the Saanich Peninsula. Proceeding with the Bear Hill Trunk extension project now, would meet the intent of a significant portion of the works identified within RWS Master Plan, Project M11. Cost sharing with SPW would be of mutual financial benefit to both services. Proceeding with this project will provide the operational flexibility for Capital Regional District (CRD) to proceed with replacement of a segment of Main No. 4, which has been identified as RWS Capital Project No. 23-17 and is already approved for partial grant funding. The CRD has also been working collaboratively with the District of North Saanich and District of Central Saanich and intend to co-deliver infrastructure upgrades for both municipalities as part of both above referenced CRD projects.

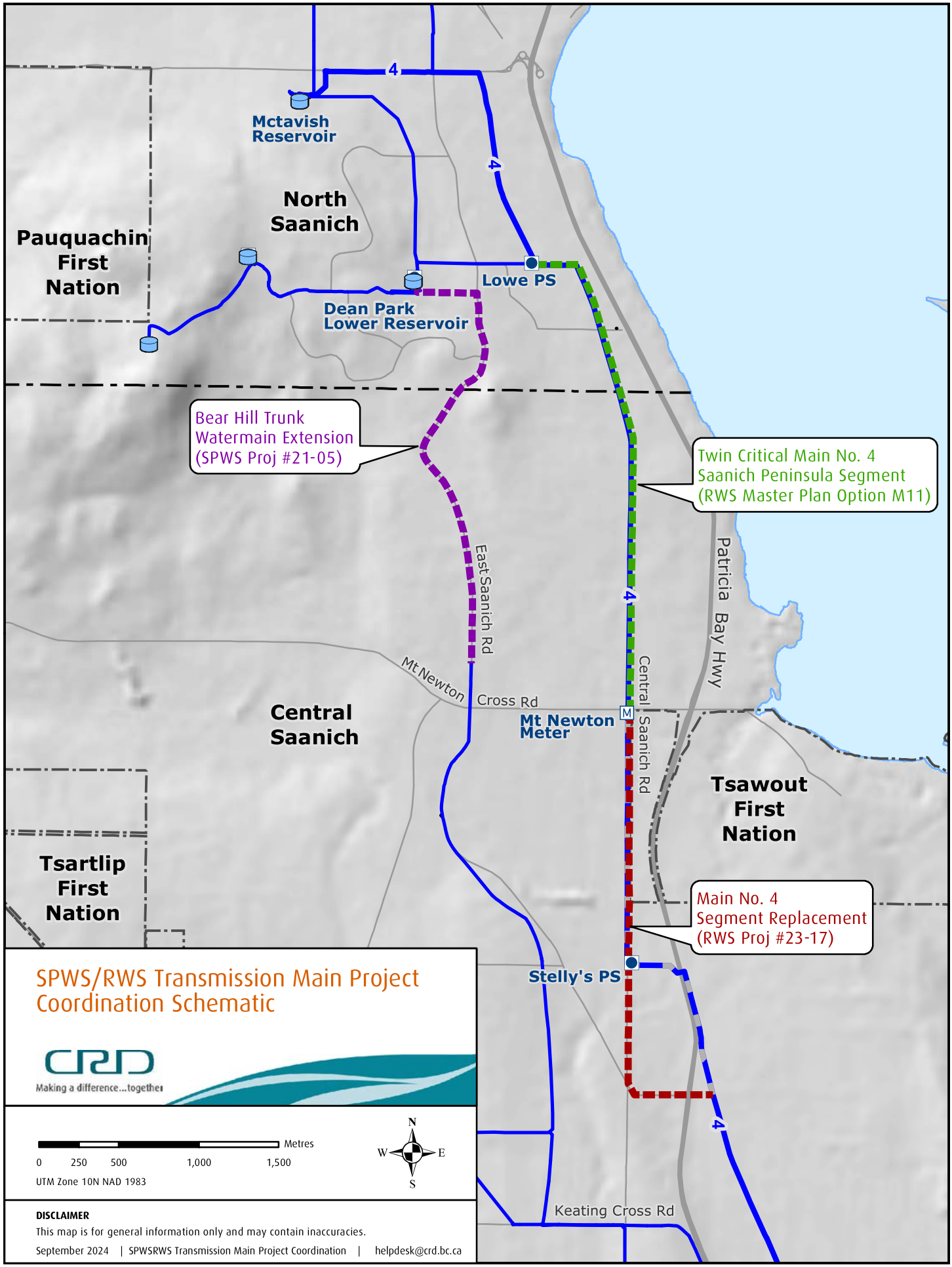
RECOMMENDATION

That the cost of the Bear Hill Trunk Watermain Extension capital project No. 21-05 be cost-shared between the Regional Water Supply and Saanich Peninsula Water services, with up to 50% of the total cost being included in the 2025 Regional Water Supply Capital Plan.

Submitted by:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

Appendix A: SPW/RWS Transmission Main Project Coordination Schematic


Mctavish Reservoir
North Saanich
Pauquachin First Nation
Lowe PS
Dean Park Lower Reservoir
Bear Hill Trunk Watermain Extension (SPWS Proj #21-05)
Twin Critical Main No. 4 Saanich Peninsula Segment (RWS Master Plan Option M11)
East Saanich Rd
Patricia Bay Hwy
Central Saanich Rd
Mt Newton Cross Rd
Mt Newton Meter
Central Saanich
Tsawout First Nation
Tsartlip First Nation
Main No. 4 Segment Replacement (RWS Proj #23-17)
Stelly's PS
Keating Cross Rd
4
SPWS/RWS Transmission Main Project Coordination Schematic
Making a difference...together
Metres
0 250 500 1,000 1,500
UTM Zone 10N NAD 1983
N
W E
S
DISCLAIMER
This map is for general information only and may contain inaccuracies.
September 2024 | SPWSRWS Transmission Main Project Coordination | helpdesk@crd.bc.ca

Making a difference...together

EEP 24-53

REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024

SUBJECT **Demand Management Program Update**

ISSUE SUMMARY

To provide an update to the Demand Management Program.

BACKGROUND

Demand management forms an integral component of the regional drinking water service. Current and future demand determines operational needs, capital planning and strategic focus on the long-term sustainability of providing an adequate, safe supply of drinking water for the region.

A knowledge of the current and future demand curve influences how the Capital Regional District (CRD) manages the overall service and what strategies it should use to inform the public and reach the CRD's demand targets and objectives.

The program aims to understand the "who, when, why and where" of drinking water use, as well as how much is and will be used (daily, seasonally, annually and long-term) through data analysis, trend analysis and projections. Beyond climate change impacts, the program also identifies and evaluates factors that influence demand projections (e.g., population growth, economic growth, residential housing stock/fixture replacement, tourism impacts, agricultural demand and consumer habits) and then applies a targeted water conservation strategy that can influence the demand curve over time. The region has a healthy supply of water and the overall message is focused on using that supply wisely. There is a Water Conservation Bylaw that provides guidance for increasing water restrictions, with enforcement; however, because of the CRD's stewardship and planning, the key tools for water conservation are through education and outreach.

There are multiple objectives for the Regional Drinking Water Service. Most of the region's drinking water is consumed by the residential or household sector. However, water remains an integral part of our community's objectives. Providing potable water for our growing tourism industry that is a major component of the regional economy, as well as supporting the regional agricultural sector and ensuring food security and economic opportunities, are also important for the region and our drinking water service. The CRD needs to manage the service to meet operational objectives while supporting these other regional objectives.

The CRD monitors the annual cycle of reservoir drawdown in the summer and replenishment through the winter months and plans accordingly for long-term demand and to ensure water quality. The daily cycle is also important. Peak instantaneous demand at the start of the day can impact operations at the treatment plants and through the distribution systems. Demand management will also support the strategic planning to ensure a sustainable water supply for our growing region. This vision is part of our Strategic Plan and, together with the Master Plan, will inform the management of the service in the coming decades.

Demand Trends

Total regional demand reached its lowest point in 2013 and has shown an increasing trend of an average annual increase of +2% since then (Appendix A). This indicates that population growth and increased water use in response to a changing climate, and possibly behaviour changes, are beginning to overtake ongoing water conservation efforts and advancements in water efficiency.

The declining trend in regional per capita demand, from a high of approximately 400 litres per capita per day in 2011 to a low of approximately 340 litres per capita per day in 2020, is consistent with observations from other jurisdictions. Early drivers to reduce demand were the introduction rebates for high-efficiency appliances and fixtures, new housing construction with efficient indoor technologies, and densification in housing, which resulted in a decrease in demand due to smaller yards and less irrigatable area. Recently, greater general awareness of water conservation has driven further behavioral changes, resulting in further reductions.

The 2023 regional per capita demand was approximately 340 litres per capita per day (lcpd), which compares favourably to similar utilities in the Pacific Northwest. Future work will focus on further refining usage trends from year to year across the region and creating projections based on regional growth patterns.

Demand data can be broken down by land-use type. Residential demand accounts for 68% of total regional water consumption, while Institutional, Commercial, and Industrial (ICI) demand accounts for 22%, agricultural demand is 3% and non-revenue water (i.e., losses and leaks) comprises approximately 7% of total regional demand. Municipal retail data shows demand patterns for different ICI sectors. The five consistently highest demand ICI sectors in 2023 (% of total annual demand) are: retail/general sales (6%), schools and research facilities (4%), agriculture (3%), hotels (2%) and recreation centres/hall/arenas (2%).

Regional residential-only per capita demand is 230 lcpd, while the average Canadian residential demand is 220 lcpd. One significant factor that contributes to the higher residential demand in the region is that spring starts earlier and summer extends longer than in many other areas, leading to greater outdoor water use compared to some other utilities. Climate change will likely further intensify this, as the summer seasons are expected to become hotter, drier and longer and lead to more demand in the future.

Outreach & Education

The CRD has focused on education and outreach in its water conservation strategy in recent years. Appendix B describes the outreach and education components of the Demand Management program. High water users and key sectors or businesses are identified for targeted outreach through analysis of the demand data. There are targeted programs currently underway to reduce residential indoor water use, educate the public on outdoor watering (irrigation) best practices, and reduce peak demands that often occur on the mornings of watering days. The CRD has leveraged print and digital materials, social media, as well as in-person engagement with irrigation and other water-related industries, and delivering workshops and information booths at fairs, public events and trade shows. In addition, the CRD has encouraged changing out once-through-cooling equipment through a rebate program and offered free water audits for ICI businesses with high volumes of water use.

Future initiatives for outreach and education include expansion of the leak detection and mitigation program, reducing water use in multi-family residential buildings, exploring incentives to encourage better water efficiencies, conducting market research into the knowledge and attitudes of residents in the region around water conservation, and engaging with the agricultural community to identify water use efficiencies.

NEXT STEPS

Staff will continue to refine the per capita consumption targets for the region based on current and future trends.

Staff will also enhance messaging around shifting the early-morning peak demand. There are significant impacts from the intensity and volume of flow at the treatment plant where the start of

the household day, together with initiating irrigation systems, puts tremendous pressure on the infrastructure, most noticeably at 4:00 am.

The 2025 workplan will also include formalizing the CRD's efforts around demand management into a comprehensive Water Conservation Plan. This will involve documenting water conservation efforts being undertaken across the regional and municipal systems and will require coordination with municipal staff to compile this Plan.

IMPLICATIONS

Environmental & Climate Implications

Climate change will impact the regional water cycle, with a general trend of warmer temperatures, shorter, wetter and more intense winters and hotter, drier and longer summers. Growing seasons for agriculture will also be extended and result in increased demand. More extreme heat events and prolonged droughts have the potential to increase future demands by extending the need for seasonal irrigation. One challenge for the CRD is aligning the regional messages that there is a safe, sufficient supply of potable water versus the situation faced by the Gulf Islands and up-island with water supply, along with the provincial messages for drought conditions throughout Vancouver Island.

Alignment with Existing Plans & Strategies

Regional water demand information supports the CRD and municipalities in their strategic planning processes related to supply and distribution infrastructure upgrades, including Water Master Plans.

CONCLUSION

The demand management program conducts research and analysis in support of the overall regional drinking water service with the strategic goal to provide a long-term supply of safe drinking water. The program is integral to the delivery of the overall drinking water service by informing on current water usage patterns and trends and engaging the public on the value of the water to drive behavioral changes. Regional growth, climate change, as well as changing demographics and development patterns, are all drivers affecting water demand and, by extension, strategic, financial, capital and operational decisions. The CRD is committed to maintaining a strong focus on demand management to achieve long-term sustainability goals.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Luisa Jones, MBA, General Manager, Parks, Recreation & Environmental Services
Concurrence:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Demand Management Research & Planning
Appendix B: Demand Management Outreach & Education

APPENDIX A

DEMAND MANAGEMENT RESEARCH & PLANNING

September 2024

Background

The management of the CRD (Capital Regional District) Regional Water Supply System has undergone a shift merely providing an adequate supply of water to incorporate demand management and the active promotion of responsible water use, thereby enhancing the sustainability and quality of the existing supply.

The program takes an analytical approach (e.g., research, data and analysis) that complements the water conservation strategy (e.g., bylaw, outreach, education) to support stakeholders (e.g., water purveyors and residents, businesses and institutions) in understanding current and future water supply and demand, effects from climate change, and how to achieve efficient water use. Currently, targeted outreach and education informed by research and data analysis of regional water use trends are the focus of the program.

The demand curve, which illustrates the total regional water use each year, is influenced by several factors, including population growth, climate change, changes in land use, replacement and densification of the existing housing stock, new industries and commercial developments, technology changes, and population variation from seasonal tourism. The program seeks to understand the temporal and spatial variations in the demand curve and to examine the effect of various strategies on demand over time.

The research and planning component to the Demand Management program seeks to understand how, when and where water is being used, which then informs the water conservation strategy. Data analysis and monitoring trends also contribute to our understanding of the timing and need for a new supply system infrastructure.

In order to support the regional water service, the program has several key objectives:

1) undertake research both on the who/what/where/when of water use in the region and track the demand curve, including an explicit recognition of within-region variability (i.e., between local governments) and variability over time
2) develop strategies and tools to encourage water conservation
3) forecast the demand curve into the future
4) promote water conservation across the region to achieve lower possible per capita water consumption while recognizing other regional priorities related to food security and tourism, etc.
5) educate our customers and stakeholders on the predicted water supply versus demand curves over time; and
6) work with internal departments to inform and support long-term strategic planning for the regional water supply service

To achieve these objectives, the program focuses resources on the sectors and initiatives likely to result in the most immediate and cost-effective reductions in water use. The program uses an adaptive approach that adjusts resources and targets programs in response to observed trends in water use.

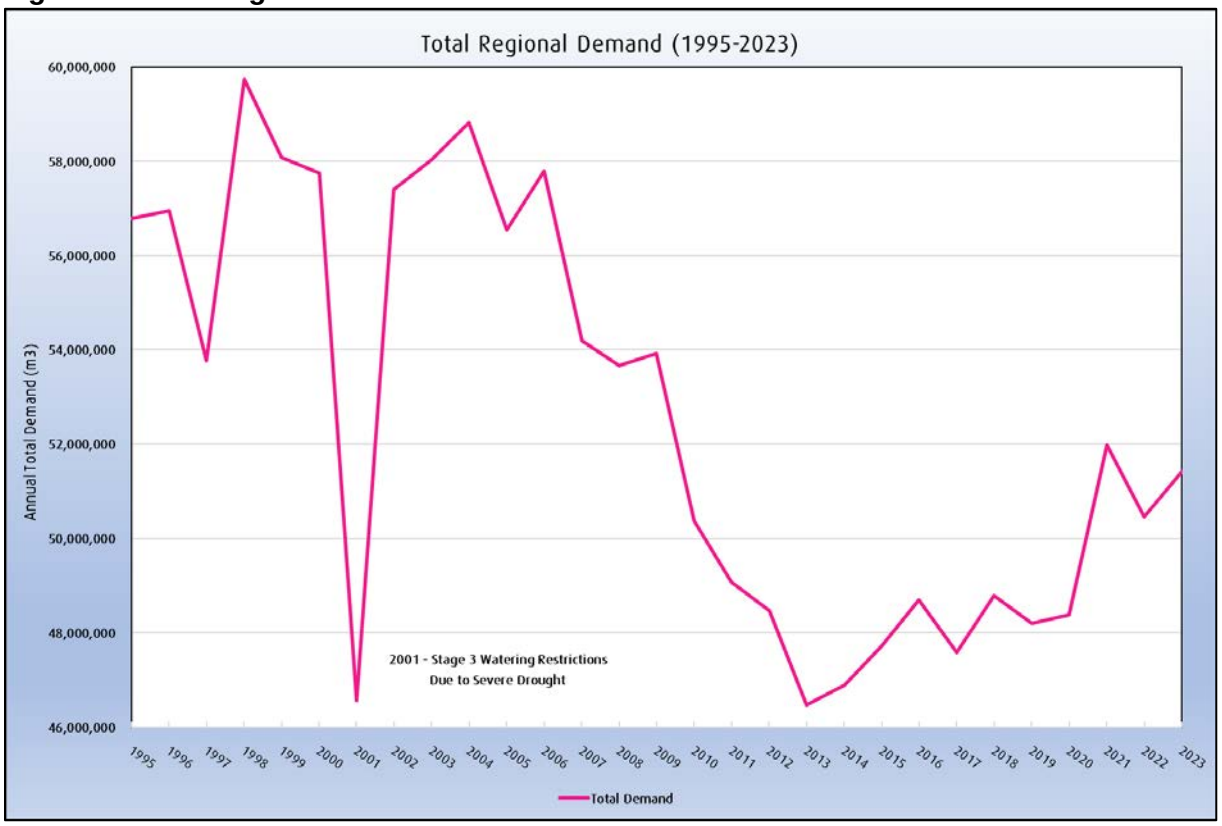
Current Demand Trends in the Region

Like most North American utilities, total regional demand has steadily decreased for about 20 years (Figure 1) since the late-1990s due to advancements in water efficiencies and conservation efforts. Beginning around 2018, total regional demand began to plateau and, in recent years, appears to show a slight increase.

The primary drivers of increasing demand are population growth and climate change (more frequent and extreme heat events and prolonged droughts leading to more outdoor watering), but other factors, such as complacent water use behaviours and a lack of conservation messaging, may also be influencing demand upward.

Total regional demand reached its lowest point in 2013 and has shown an increasing trend to present. Total regional demand increased by +2% between 2022 and 2023, and the three-year average is an increase of +2%. This indicates that population growth, increased watering in response to weather conditions, and possibly behaviour changes, such as complacency, are beginning to overtake ongoing water conservation efforts and advancements in water efficiency.

Figure 1. Total Regional Demand



Like total regional demand, per capita demand had also shown a decreasing trend since the mid-1990s (Figure 2). However, since approximately 2017, regional per capita demand shows a levelling out trend that has begun to increase slightly in recent years. Regional per capita demand has fluctuated around 340 litres per capita per day and increased +2% between 2022 and 2023, and the three-year annual average is an increase of +3%. This increase is slightly greater than

the regional population growth rate of +1.6%, meaning regional water demand is slightly outpacing population growth. This indicates a shift in water use behaviour in the region, which may be partially driven by increasingly longer, drier summers.

Demand Management efforts began in the mid-1990s, and by the early 2000s, decreases in demand were largely driven by improvements in water efficiencies in household fixtures and appliances, such as low-flow toilets and high-efficiency washing machines, as well as financial incentives in the form of rebates. In more recent years, decreases in demand have been driven by ongoing conservation messaging and targeted outreach.

Figure 2. Historical Proportional Regional Demand by Land Use Categories

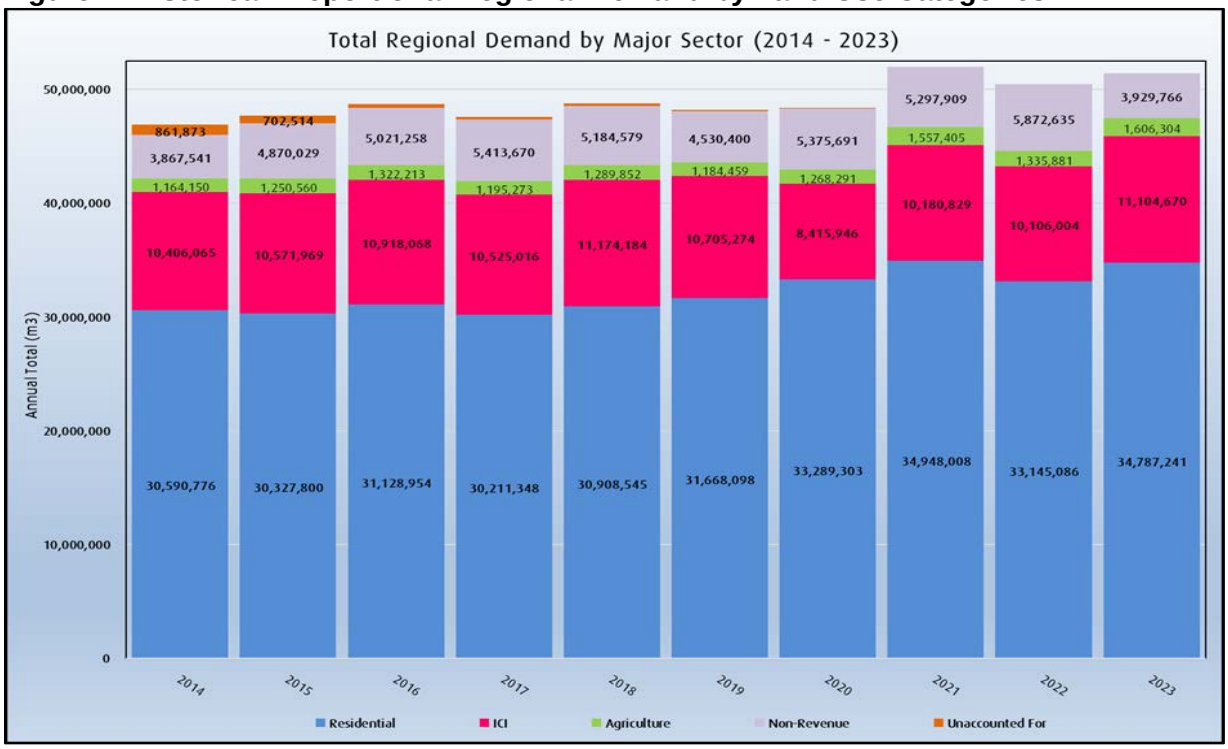
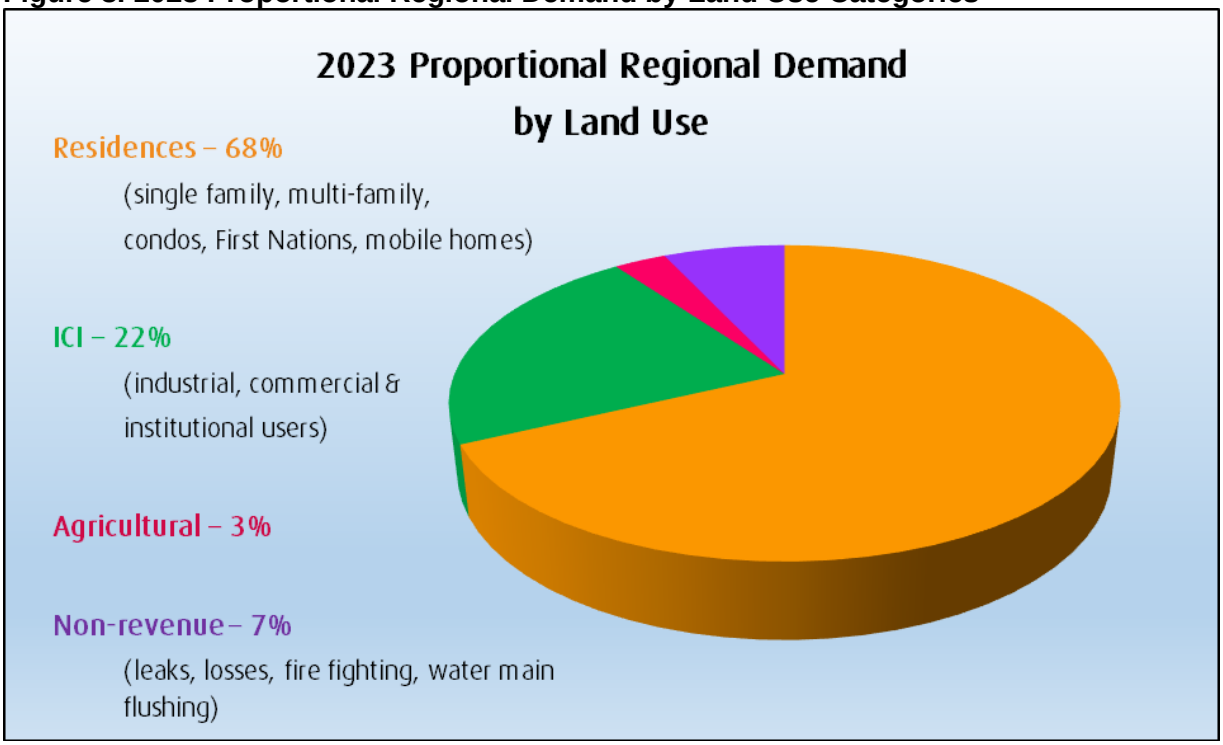


Figure 3. 2023 Proportional Regional Demand by Land Use Categories



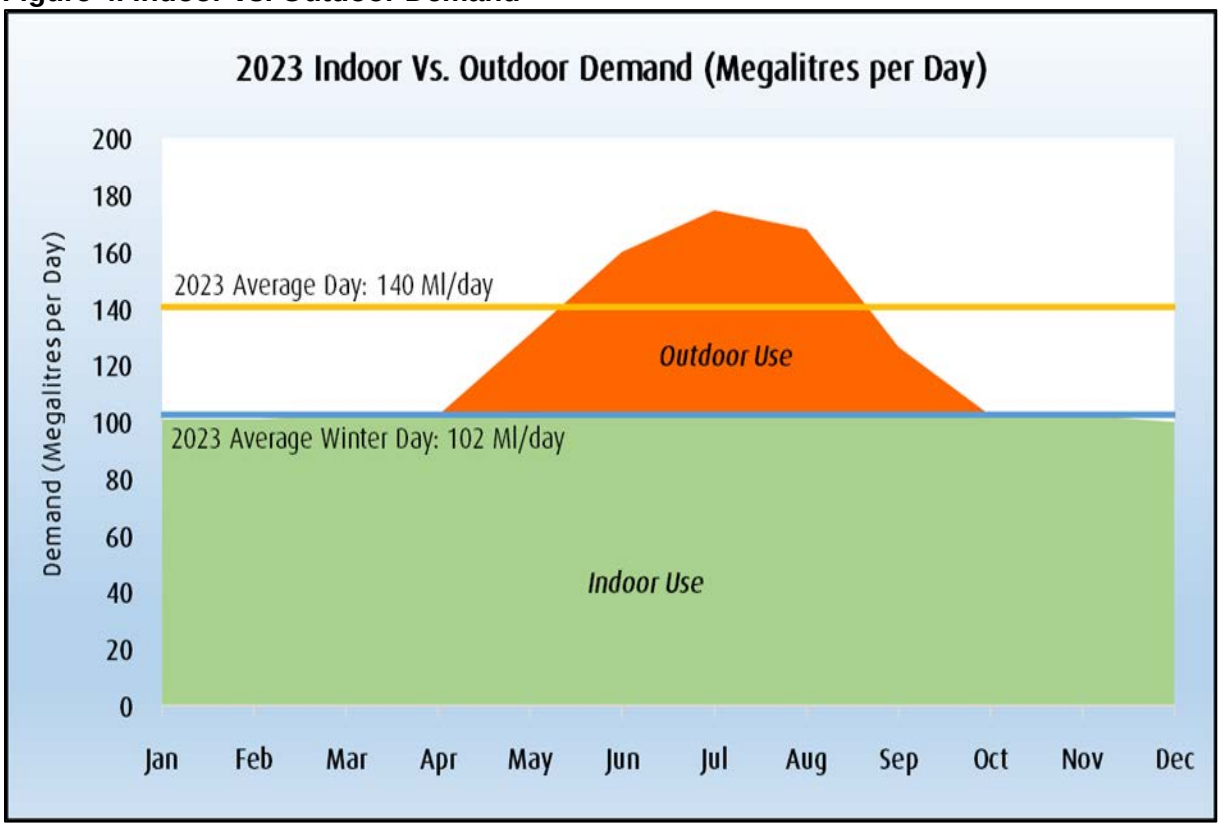
Residential demand accounts for the majority of water use at 68% of total demand, while the ICI sector comprises 22% of total demand.

Agricultural demand has remained proportionately at 3% of total demand for many years. While this sector is overall still a small water use category in the region, it has seen growth on this small scale in terms of volume used year over year. In 2023, the volume of water for agricultural use was +16% greater than the previous three-year average. The agricultural sector has grown ~10%/year since 2019 and is therefore one of the fastest growing water demand sectors in the region. Increasing demand in the agriculture sector is likely due to small increases in active farming, coupled with more irrigation due to more frequent and extreme heat events and recent drought conditions.

The non-revenue (e.g., water main flushing, fire fighting, leaks and breaks/repairs) demand proportion, the difference between the bulk water sales to the municipalities and their retail water sales, averaged 10% over the previous three years and comprised 7% of total demand in 2023. Annual water main flushing of CRD water distribution mains, which is done to maintain good water quality and to maintain infrastructure, accounts for approximately 0.3% of total demand per year. A review of comparable utilities in the Pacific Northwest revealed that non-revenue demand proportions are typically in the range of 11-18%. However, a reduction of water loss through leaks, which is a discretionary non-revenue demand, is part of asset management best practices and should be addresses by all regional water purveyors.

Seasonal Demands

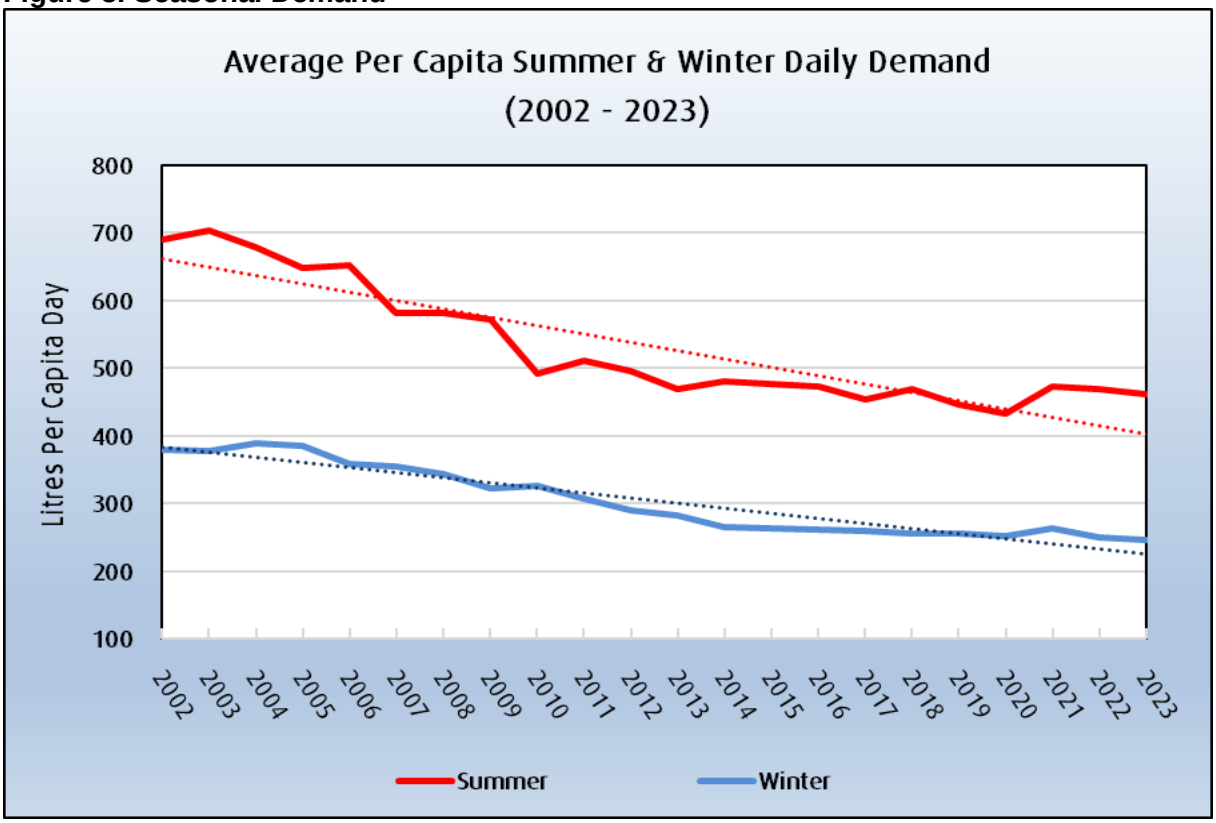
Figure 4. Indoor vs. Outdoor Demand



Summer demand is approximately 40% higher than winter demand (Figure 4). Outdoor demand typically begins in May and extends through September. In hotter years, outdoor demand can begin earlier and extend later into the fall. Typically, November and December are the region's wettest months when we rely on rain to fill the Sooke Lake reservoir.

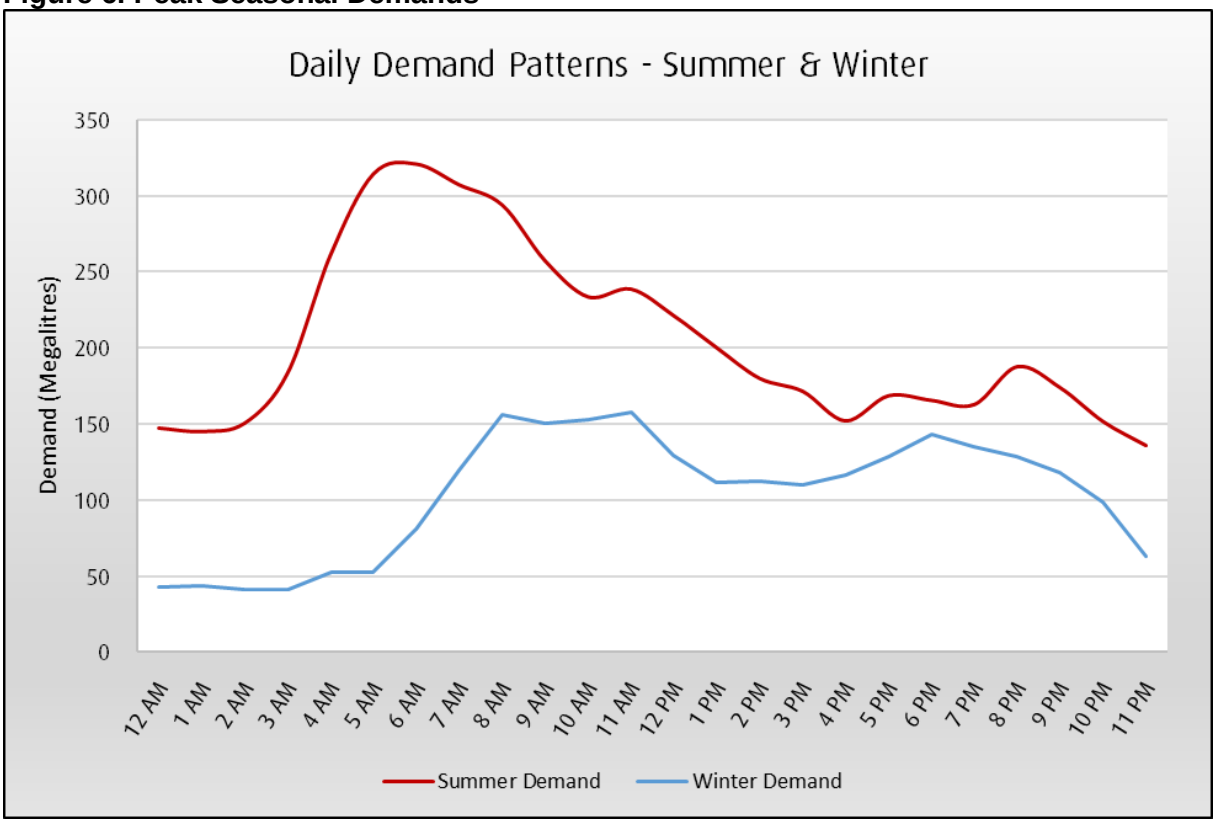
Similar to total per capita demand, both summer and winter demands have exhibited a declining trend, followed by a plateau and more recently an increasing trend (Figure 5). Winter demand is considered to be the base demand because it is very predominately indoor water use. The increasing trend in winter demand indicates that reductions in demand from water efficiencies and conservation activities may have achieved their maximum effectiveness at reducing demand.

Figure 5. Seasonal Demand



Peak Demands

Figure 6. Peak Seasonal Demands



Reducing peak demands is a key objective of the regional service. Decreasing peak daily and instantaneous demands reduces the impacts to the water disinfection and conveyance systems, protects water quality and will extend the life of existing infrastructure.

Peak demands are observed as spikes in the morning and evening (Figure 6). Summer peak demands occur earlier in the morning than in winter due to summer irrigation. Peak demands during the summer often occur on the top of the hour on watering days (e.g., peaks occur at 4 am, 5 am, 6 am), indicating that irrigation systems are being programed to begin watering at those times. While those times are within the allowable watering periods, the instantaneous demand for water all at one time presents a challenge for infrastructure to meet that demand and also has the potential to stir up sediments in the supply system, leading to water quality issues.

The *Water Conservation Bylaw* was amended in April 2024, to include a wider range of watering times for programmable irrigation systems to be set to. The intent is to reduce the instantaneous demands that occur on the top of the hour on watering day mornings and to spread out the demand from irrigation systems over a larger window. Lawn watering using irrigation systems is now allowed from 12:01 am to 10:00 am on the historically assigned watering days for all addresses on their specified watering days during the watering bylaw period (May 1 to September 30). Furthermore, outreach and education are underway, targeting irrigation professionals to encourage them to choose a start time that doesn't fall on the top of the hour (e.g., 1:13 am, 2:46 am, 9:09 am etc.).

Future Regional Development and Per Capita Demands

The program will investigate the variability across the region in growth rates, urban planning and housing stock and their impacts on per capita and overall water demand.

Annual growth rates in some municipalities (Victoria & Esquimalt +2%, Sooke +4%, Colwood, Langford & View Royal +5%) are significantly higher than the regional annual growth rate (+1.6%). We continue to assess changes in per capita demands related to increasing densification and potential decreases in outdoor water demands resulting from smaller yards and less irrigatable area. Data will continue to be collected and analyzed to assess and identify trends.

The current total regional per capita demand is approximately 340 lcpd. Staff will continue to refine this value, with inter-regional and year to year variability and update projections on a regular basis. Water consumption is dynamic both in the short-term and long-term and it will be a main focus of the program to accurately quantify current demand and predict future demand.

APPENDIX B

DEMAND MANAGEMENT OUTREACH & EDUCATION

September 2024

SECTION 1. RESIDENTIAL WATER CONSERVATION

Background

From 1992 to 2016 the *Water Conservation Bylaw* watering restrictions were heavily enforced by Capital Regional District (CRD) Residential Water Conservation staff. These efforts included an outreach team of four staff physically checking homes in the summer to ensure compliance. A significant number of ads and staff resources were dedicated to ensuring that residents were aware of the bylaw. The CRD participated in events throughout the region to ensure that the residents were aware and compliance was met. In 2016, the *Water Conservation Bylaw* was amended to be less prescriptive and pivoted away from enforcement to an educational approach. In 2020, due to the pandemic, in-person outreach was not possible, and outreach was moved online, to video and social media content and digital and print advertising.

In recent years, the CRD Residential Water Conservation outreach campaigns have centered on informing residents on ways they can use water wisely. This includes educating and building awareness about where our water comes from, that it is finite and valuable, and different ways residents can conserve. The CRD residential water conservation messaging runs year-round, with messaging divided into seasons: in the colder months, Waterwise Indoors and Fix a Leak Week; and in the warmer months, Waterwise Summer and Waterwise Outdoors.

Water Wise Indoors

In the winter, the Waterwise Indoors program promotes waterwise tips for different areas inside the home, including the bathroom, kitchen and laundry room. The main themes of this campaign include encouraging residents to turn off the tap while brushing their teeth, strive for five-minute showers, implement water-efficient appliances, and detect leaks in their homes. This campaign includes a digital and print ad campaign, directing residents to the website where they can find more information. Social media posts generate engagement with contests and quizzes. Information sheets are available on the website, as well as at temporary displays set up at recreation centres throughout the region.

Fix A Leak

Each March, the CRD participates in Fix A Leak Week, an annual campaign that educates homeowners about leak detection best practices to reduce the amount of potable water loss in the region. Industry research says that approximately 14% of residential water use is attributed to leaks. To help residents proactively look for leaks in their homes, the CRD distributes Fix a Leak Week kits throughout the region for residents to pick up. These kits include toilet dye tabs, a bag to measure the flow rate of the showerhead, a new aerator for their faucet, and educational printed material. Print and digital ads and social media campaign raise awareness about where these kits are located and the benefits of looking for leaks.

Water Wise Summer

The Waterwise Summer campaign specifically promotes messaging about the *Water Conservation Bylaw* and promotes the activation of Water Use Restriction Stages. From May 1 to September 30 each year, Stage 1 Water Use Restrictions are in effect. Ad and social media campaigns communicate this information throughout the region.

Water Wise Outdoors

Residential water use almost doubles in the region in the summertime, primarily due to outdoor discretionary water use. The Waterwise Outdoors campaign provides information and tips to residents about how they can reduce their outdoor discretionary water use. This includes information about water wise lawn care and garden practices, efficient irrigation systems, collecting rainwater and planting native plants.

Digital and print ads, and social media posts help to share these messages throughout the region and direct residents to the website. Educational videos for water wise lawn care, native plants and irrigation best practices are available on the CRD website for residents to reference. The CRD offers annual workshops and webinars by trained experts about gardening with drought-tolerant native plants, creating climate-resilient gardens that better retain water and collecting rainwater for use in drier times. During the summer, the CRD's team of outreach summer staff attend community events to talk to residents about water conservation, and throughout the year there are outreach displays set up at places like community centres and garden centres, for people to learn about water conservation in their communities.

Water Stations

The CRD has five Water Stations that event organizers throughout the region can use during the summer months. These Water Stations provide clean drinking water to event goers who can use them to refill their water bottles. In the summer of 2023, the Water Stations were at 15 different events. When possible, the CRD Water Stations are accompanied by water conservation outreach materials to further enhance their impact to the community.

Current Initiatives

In addition to the above campaigns, in 2024 the Residential Water Conservation program has two new focuses. Reducing early morning water demand is a primary focus for the summer months, while engaging with Multi-Use Residential Buildings will take place in the fall and winter.

Reducing Early Morning Water Demand

A recent change was made to the *Water Conservation Bylaw* to reduce early summer morning water demand to protect the drinking water infrastructure and drinking water quality. A new lawn watering allowable time for timed/automatic irrigation systems was added to the bylaw. Promoting this new time to property owners, and landscape and irrigation professionals, asking them to modify the start times for irrigation systems to the overnight watering time and to ensure that systems do not start at the top of the hour, is a key part of this campaign.

Multi-Use Residential Buildings

After single family residential (49% of total retail use), condominiums and multi-use residential buildings (MURBs) together use 23% of the total retail use. A survey commissioned by CRD Environmental Resource Management in 2020 found that this sector is harder to reach due to the structure of utility billing. Typically, residents living in MURBs do not pay their water bills individually, so the incentive for residents to reduce water consumption to save financially is not an effective tactic. Using retail water demand data, water conservation staff can identify MURBs that are high water users and target them with specific messaging. Applying indoor and outdoor conservation key messages, both residential and Institutional, Commercial, and Industrial (ICI) water conservation staff will work with strata organizations and property management companies to help bring awareness to water conservation in MURBs.

Residential End Uses of Water Study

Alliance for Water Efficiency (AWE) and the Water Research Foundation (WRF) plan to update the Residential End Uses of Water Study in 2024-2025, which is an industry standard report utilized by many North American utilities. Flume Data Labs and Water DM were awarded the contract to deliver this study and the CRD was chosen as a partner in this project. The Residential End Uses of Water Version 3 study aims to increase understanding of single-family household end use and creates a baseline for multi-family household end use of water. The study will attempt to evaluate similarities and differences between single-family and multi-family households and between types of multi-family households.

All residential water end use estimates for the CRD's residential water conservation, ICI water conservation and demand management programs are informed by the 2016 Residential End Use Study Version 2, completed by AWE and WRF in 2016. This study provides residential end use data and statistics for fixtures and appliances in the home, including showers, taps and water-using appliances. Data from these studies is important for informing water conservation outreach initiatives and the demand management decision-making and forecasting processes for drinking water supply in the region. By participating in this study and providing CRD billing data for research analysis, the research findings can be used to update and inform demand management programs with a greater level of confidence.

Potential Future Initiatives

There has been a 10% increase in summer water demand and a 3% increase in winter water demand since 2019. With future programs and campaigns, the CRD will need to emphasize and enhance both indoor and outdoor water conservation messaging with additional programming. Currently, water conservation staff rely on purchasing ads, posting on social media, attending events, and distributing informational material to convey messages. Additional methods, such as conducting site visits, creating incentive programs, and completing residential surveys will be evaluated as future projects to increase residential awareness, create tools for residents to reduce their water demand, and gain valuable feedback about these programs.

1) Healthy Landscapes

Developing a residential healthy landscape assessments program would enhance education and outreach focused on decreasing outdoor water use, such as lawn watering and installing drought-tolerant landscaping, more efficient irrigation, and reducing water lost through leaks. This program would help residents, through on-site visits, workshops and webinars, to practice waterwise habits on their properties, such as converting traditional lawns and non-native gardens to native plant gardens. The City of Guelph created its own Healthy Landscape program, and its data demonstrated a 6.9% reduction in residential water use from site visits conducted by City of Guelph staff.

2) Incentive Programs

Water conservation tools, such as rain collection systems, micro/drip irrigation systems, soil moisture sensors and water flow monitors, can help residents reduce their water use. Incentive programs for water saving technology can reduce the financial barrier for residents to implement this technology in their homes and businesses.

Smart water flow monitors, for example, could help to reduce water loss by household and business water leaks. Water flow monitors provide real-time end use data to the user to show where and how much water is being used in a home or business. An incentive program would reduce the upfront cost of a flow monitor and give residents the tools to better understand their water consumption. These devices can provide data to the CRD and the resident about how much water is used for different activities. They can also detect leaks quickly, preventing the loss of clean drinking water in the home.

Smart water flow monitors can also provide valuable water end use data to research initiatives, such as the Residential End Uses of Water Study. Without a water flow monitor program, the CRD is only able to offer billing data to this study, which only gives a broad idea of the water use within the region. In the future, the ability to provide water flow monitor data on a region-wide scale to a research initiative such as this could allow the CRD to access residential end use data and statistics for fixtures and appliances in the home particular to our region. This data could be integral to understanding how water is used within our region and where opportunities for reductions are.

3) Market Analysis

Program evaluation surveys, previously done each year, could help staff assess the program's success and the reach that the program has within the community. They could also inform residential water conservation outreach campaigns going forward. Currently, the CRD’s measures of success are click-through rates on the website, engagement at events, webinars, and residential water demand. Although useful indicators of success, broader and more detailed responses would provide greater clarity and direction for water conservation programming.

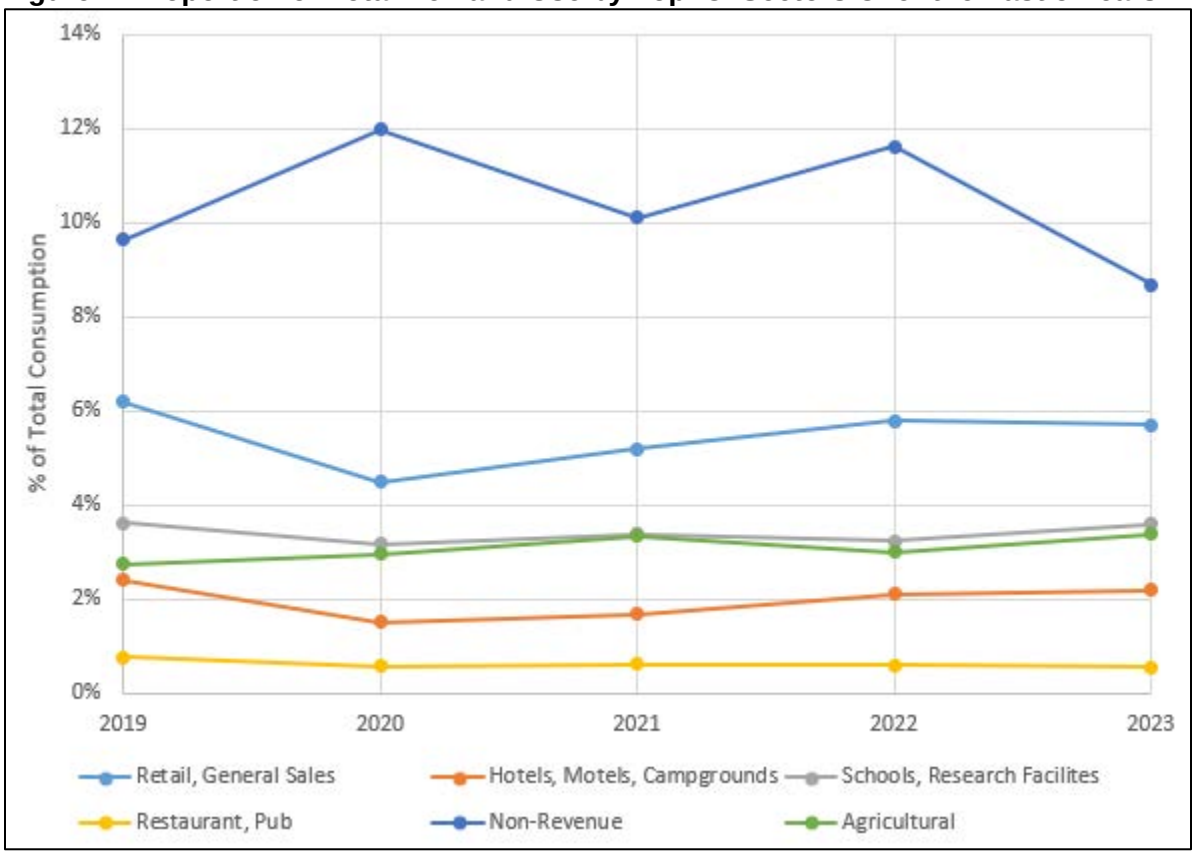
SECTION 2. INDUSTRIAL/COMMERCIAL/INSTITUTIONAL WATER CONSERVATION

Background

The Industrial/Commercial/Institutional (ICI) program promotes water use efficiency to help reduce operating costs, energy and greenhouse gas consumption, both at the business level, primarily due to less energy used to heat water, and at the larger regional level.

The retail water use data has consistently shown that the top five ICI categories are retail and general sales, schools and research facilities, agriculture, hotels, and restaurants and pubs, as shown in Figure 1 with non-revenue consumption for comparison.

Figure 1. Proportion of Total Demand Use by Top ICI Sectors Over the Past 5 Years



Water Use Assessments

The ICI demand management program historically had a larger complement of staff and conducted in-depth water use audits for several larger institutions and commercial facilities. Since 2017, smaller water use assessments were conducted producing succinct reports that demonstrate the business case for conserving water to promote the adoption of water-efficient fixtures and practices.

Starting in 2019, water use assessments were integrated with the Climate Action Program to add energy use and some greenhouse gas emission reduction planning to the reports. Participating

facilities also receive free replacement faucet aerators, information on rebate programs such as the Once-Through-Cooling (OTC) rebate, and other best practice recommendations. The first sector these assessments were offered to was hotels, since they were likely to have OTC equipment, the replacement of which results in immediate and cost-effective reductions in water use.

In 2020, specific high water-using accounts were identified by a consultant report. Based on those findings, the retail and general sales category was targeted next, separated into grocery stores in 2021, and malls in 2022. Because assessments are voluntary, several of the highest users declined to participate. In 2023, the focus turned to the schools and research facilities category. The large institutions (e.g., University of Victoria) had previously been audited, so the assessments focused on high schools.

Estimated savings if all recommendations were implemented, including the savings from faucet aerators and pre-rinse spray valves that were replaced for free by the CRD during site visits, are:

Sector or Sub-sector	Estimated Annual Water Savings (m^3/year)	Estimated Annual Emissions Savings (tCO2e/year)
Hotels	106,000	180
Grocery stores	16,500	170
Malls	27,000	55
High schools	10,500	Not calculated
Total	160,000	405

The largest reductions in water use were found by replacing once-through cooling equipment, discussed below. The quickest return on investment was found by replacing additional hand faucet aerators.

Once-Through-Cooling Regulation

CRD staff initially amended the *Water Conservation Bylaw* to ban the use of once-through cooling (OTC) devices in 2016; however, the ban was rescinded in 2018 due a conflict with the BC Building Code and the regulatory powers of local government. Meetings with provincial staff occurred in 2021, and CRD staff explored alternate regulatory options, completed a legal review, and proposed wording to include a ban on the use of water from the Greater Victoria Drinking Water System in OTC devices. *The Water Conservation Bylaw* amendment was approved by the CRD Board in 2023, and the new ban goes into effect in 2028.

Once-Through Cooling Rebates

Staff were directed to advertise and administer an OTC equipment replacement rebate program in the 2022-2026 budgets, for a total amount of $20,000 per year. Beyond the operating cost and environmental savings, the rebate program increases the incentive to replace OTC. The program has been promoted through advertising to sectors identified as likely to use OTC, direct mail-outs to businesses confirmed to have OTC, and refrigeration service providers.

Uptake on this program has been low and only $3,000 in rebates have been issued to date. Communication with owners of OTC units indicates that systems have been changed out without

applying for the rebate program. Known OTC replacements to date, including those identified during water use assessments prior to the rebate program, are estimated to save 35,000 m^3/year of drinking water.

Aerator Replacement Program

CRD staff visited commercial facilities on a voluntary basis that used water supplied by the Greater Victoria Drinking Water System and replaced any inefficient hand sink faucet aerators for free. Over 400 aerators were replaced, saving an estimated 15,000 m^3/year. Savings from aerators replaced during water use assessments are included in the estimates for the assessment program above.

Agricultural

An Agricultural Water Demand Model Report was prepared by the Ministry of Agriculture for the CRD in 2019 to more accurately estimate the total water needed for agricultural irrigation. A large portion of the irrigation in the region is from the Greater Victoria Drinking Water System. The report found that vegetable irrigation was primarily accomplished through efficient irrigation methods; however, most agricultural use in the region is for forage crops. The report found that improving irrigation efficiencies would be an effective approach to reduce consumption. It also estimated significant increase in water demand due to climate change, despite limitations to the model.

Current Initiatives

In addition to the above program components, other than the aeration replacement program, in 2024 the ICI Water Conservation program has two new focuses. Reducing early morning water demand is a primary focus for the spring and summer months, while continuing the smart flow monitor pilot and building relationships with property management groups will take place in the fall and winter.

Water Use Assessments

Water use assessments continue to be conducted each year. Facilities that have received assessments in previous years are also followed up with to assess progress on recommendations and support implementation. In 2024, staff are focusing on secondary and middle schools as a sub-sector of the schools and research facilities category. In addition to recommendations highlighting the business case for conservation, this year, participating facilities will also be informed of the amendment to the watering schedule as outlined in the *Water Conservation Bylaw.*

Once-Through Cooling Rebates & Regulation

Advertising for the OTC equipment rebate will continue this year, pending availability of space in the annual communications schedule. To encourage uptake this year, the application requirements will be simplified, and CRD staff will reach out directly to property management groups who stand to see the benefits of the utility costs savings. Messaging continues to focus on informing businesses that the rebate program ends in 2026 and that the bylaw ban of the use of water from the Greater Victoria Drinking Water System in this equipment goes into effect in 2028.

Multi-Use Residential Buildings

As discussed in the Residential Water Conservation program section above, the ICI program is also working to help identify MURBs that are high water users and target them with specific messaging highlighting the business case for strata councils and property or building managers to encourage water efficiency in MURBs.

Smart Water Flow Monitors

A pilot study using smart flow monitors and real-time leak detection technology started in 2023 and continues in 2024. The study started as a collaboration between CRD Climate Action and CRD Facilities Management to identify the cause of abnormal water usage at the CRD Headquarters building. The pilot also included two MURBs owned by the Capital Region Housing Corporation and one commercial building, in collaboration with City of Victoria water billing staff. Most pilot participants so far have achieved significant reductions in the use of water through reduction in leaks and education and awareness of their unique water usage patterns. The monitors being used in the Residential End Uses of Water Study discussed above were designed to work best in single-family residential settings but are expanding into the MURB market. The ICI pilot study is using monitors designed to work best in office and MURB buildings.

Agricultural

While the relative proportion of water used by the agricultural sector has remained steady at approximately 3%, the total volume has been increasing. In 2023, the volume of water used by agriculture increased by 20% relative to 2022 and was 16% higher than the three-year average. Recognizing the importance of local food security and climate-related challenges faced by the agricultural sector, planning is underway to expand knowledge of agricultural water use due to increasingly hot and dry summers, as well as peak hour demand effects. Additional supports and expertise are needed.

Fix-a-Leak Week

While the water conservation program has always had an annual messaging campaign that encourages residential users to check for leaks and educates homeowners about leak detection best practices to reduce the amount of potable water loss in the region, this year, the campaign was expanded to include similar messaging for commercial users.

Peak Demand

Targeted outreach to ICI users that have irrigation systems has begun. 960 businesses and 40 parks and municipal staff were contacted to share an information sheet and ask that automatic timers be adjusted to outside the peak hours. Follow-up phone calls to the highest volume users are also underway, including schools and research facilities, golf courses, parks & recreation facilities, and municipal green spaces.

Future Initiatives

Water Use Audits

It is expected that the water use audit program will continue; however, in the future, it may be more efficient to focus assessments on the type of usage rather than business sector. According to industry experts, cooling towers, on average, account for 40% of a building's water demand. Increasing the efficiency of this equipment is a prime opportunity for significant water savings. Research identifying buildings with cooling towers, as well as staff resources to dedicate to follow-up verification, are both needed to realize this potential.

Reported assessment results from the high school sector show that some schools have high demand during the summer when students are not present, indicating that irrigation is likely a driving factor. There currently are no local consultants that perform irrigation audits, which are a specialized skill set. More work is needed to develop this expertise in the region.

Once-Through Cooling Regulation

The Demand Management program will shift from rebates to regulation of OTC equipment. Advertising has already begun to inform ICI water users of the impending ban. Planning on the mechanism for inspections and enforcement is underway, but it is expected that efficiencies can be found by relying on staff with plumbing expertise to incorporate the regulation of the *Water Conservation Bylaw* into their existing inspection schedule.

Incentives

Results from the ICI smart water flow meter pilot will be evaluated for a potential incentive program to encourage the adoption of smart and leak-detecting monitors in commercial and institutional applications. This technology can help achieve significant reductions in water use by showing building owners and managers their unique usage patterns and alerting them to leaks, preventing water wastage and saving them money. Staff will compare the effectiveness, cost and ease of installation of the monitors being used in the Residential End Uses of Water Study compared to the monitors from the pilot, as well as perform a market analysis to determine the best technology to promote.

Multi-Use Residential Buildings

CRD staff are also participating in a Residential End Uses of Water Study starting in 2024, which will further help identify usage trends to help customize messaging for this sector specific to the CRD. This information will help direct the creation of materials specifically for property managers, owners and strata councils and to promote the business case for water efficiency, as well as the adoption of smart flow monitoring technology.

Agricultural

It is expected that issues due to peak hour demand effects will increase over the coming years if not mitigated soon. To effectively work with this sector, more knowledge regarding variables such as the number of hectares being farmed, hectares being irrigated, irrigation techniques and efficiencies, future agricultural build outs, types of agricultural activities in the region (local food supply, forage crops, hobby farms) and the volume of local food supply should be built on for a greater understanding of agricultural demands. To successfully achieve this, additional support and expertise are needed.