Making a difference...together

WATER ADVISORY COMMITTEE
Notice of Meeting on **Tuesday, March 28, 2023 at 12 PM**
Board Room, 6th Floor, 625 Fisgard Street, Victoria, BC

Celine Davis
(Resident / Ratepayer)
Mike Doehnel
(Vice Chair, Saanich Peninsula Water Commission)
Ashley Fernandes
(Environmental)
Tayler Krawczyk
(Agriculture)
Alex McArdle
(Agriculture)
Craig Nowakowski
(Island Health)
Katie Oppen
(Scientific)
Adam Pakvis
(DND – Commercial / Industrial Water User)
John Rogers
(Vice Chair, Juan de Fuca Water Dist. Commission)
Wilf Scheuer
(Commercial / Industrial)
Celia Stock
(Vice Chair, Regional Water Supply Commission)
David Timothy
(Fish Habitat)
Jennifer Todd
(Environmental)
Mike Turner
(Fisheries)
Kathleen Zimmerman
(Agriculture)

AGENDA

1. TERRITORIAL ACKNOWLEDGEMENT

2. ELECTION OF CHAIR

Pursuant to Terms of Reference
Election conducted by Regional Water Supply Commission Vice Chair

3. ELECTION OF CHAIR

Election conducted by newly elected Chair

4. APPROVAL OF AGENDA

5. ADOPTION OF MINUTES

***Recommendation**: That the minutes of the September 1, 2022 meeting be adopted.*

6. CHAIR'S REMARKS

7. PRESENTATIONS/DELEGATIONS

The public are welcome to attend Committee meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application for "Addressing the Board" on our website and staff will respond with details. Alternatively, you may email your comments on an agenda item to the Water Advisory Committee at iwsadministration@crd.bc.ca. Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

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*To ensure quorum, advise **Denise Dionne, ddionne@crd.bc.ca** if you cannot attend.*

IWSS-297445977-10199

8. GENERAL MANAGER'S REPORT

9. COMMITTEE BUSINESS

9.1. Water Advisory Committee Orientation Presentation

9.2. Proposed Regional Water Supply Development Cost Charge Program and Bylaw

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

9.3. Agricultural Water Rate Review – Progress Update

There is no recommendation, the presentation is for information only.

9.4. Summary of Recommendations from Regional Water Supply Commission

There is no recommendation, the summary is for information only.

9.5. Water Watch Report

There is no recommendation, the report is for information only.

10. WATER ADVISORY COMMITTEE PROPOSED MEETING SCHEDULE

Regular meetings of the Water Advisory Committee shall be held on the fourth Tuesday of the month commencing at 12 pm unless otherwise determined.

- *March 28, 2023*
- *June 27, 2023*
- *September 26, 2023*
- *December 12, 2023 Special date (in lieu of December 26)*

11. NEW BUSINESS

12. ADJOURNMENT

Next Meeting: Tuesday, June 27, 2023

Making a difference...together

MINUTES OF A MEETING OF THE Water Advisory Committee, held Thursday, September 1, 2022 at 1:30 pm, Goldstream Conference Room, 479 Island Highway, Victoria, BC

PRESENT: **Commissioners:** Heather Thompson (Chair); G. Baird; C. Davis (EP); M. Doehnel; A. Fernandes (EP); T. Krawczyk; J. Rogers (EP); W. Scheuer; D. Timothy (EP); M. Turner (EP)
Staff: T. Robbins, General Manager; S. Irg, Senior Manager, Integrated Water Operations; D. Dionne, Administrative Coordinator (Recorder)
REGRETS: E. Cote (Vice Chair); J. Caradonna; C. Nowakowski (Island Health); J. Todd

EP = Electronic Participation

The meeting was called to order at 1:32 pm.

1. TERRITORIAL ACKNOWLEDGEMENT

The Chair provided the Acknowledgement.

2. APPROVAL OF AGENDA

Addition to Agenda:
Item 6.1.1: Handout: Summary of Feedback – 2022 Regional Water Supply Master Plan

MOVED by G. Baird, **SECONDED** by W. Scheuer,
That the agenda be approved as amended.

CARRIED

3. ADOPTION OF MINUTES

MOVED by T. Krawczyk, **SECONDED** by G. Baird,
That the minutes of the May 13, 2022 meeting be adopted.

CARRIED

4. CHAIR'S REMARKS

The Chair advised that this would be her last meeting as she and her family are moving. She expressed her appreciation for being elected as Chair and thanked the Committee for their work over this past year.

5. PRESENTATIONS/DELEGATIONS

There were no presentations or delegations.

6. COMMITTEE BUSINESS

6.1. Update on the 2022 Master Plan – Engagement Results and Plan Approval [Verbal]

DRAFT

6.1.1. Handout: Summary of Feedback – 2022 Regional Water Supply Master Plan

T. Robbins provided an overview of the staff report that was presented to the Regional Water Supply Commission on July 20, 2022. He noted that the report included the Water Advisory Committees report and detailed comments.

Staff responded to questions from the Committee:

- Filtration technology and the possibility of taking advantage of new technologies prior to construction.
- The life expectancy of the current Ultraviolet (UV) plant; the reactors are being upgraded within the next two to three years.
- Sediment pond filtration for runoff water; Deception reservoir will operate almost as a sedimentation bed.
- The process for continued input and feedback as projects start to come online; project and budget approvals would be through the five-year budget and capital plan approvals.
- The Water Advisory Committee could play a consultation role on the upcoming projects.

6.2. Update on the Agricultural Water Rate Study [Verbal]

S. Irg provided the following updates:

- The agricultural water rate is funded through the Regional Water Supply operating budget, which funds the difference between the Municipal rate and the agricultural water rate.
- The current agricultural water rate has not changed since 2010.
- Stantec was retained to conduct a review of the current rate and conduct a rate model options study.
- There will be some stakeholder consultation, likely two engagement sessions, one with governing entities and the other would be the agricultural community.
- The objective is to determine a fair rate that supports farming that contributes to the region and a rate structure that encourages water conservation.
- Hoping to have the report finalized by early 2023 to be included in the 2024 budget approvals.
- There was a delay in starting this study primarily due to the effort that staff put into the First Nations Water Rate model which was a priority for 2022.

Discussion ensued:

- Water Advisory Committee's feedback and options were summarized for Stantec's consideration and provided good information and guidance.
- The Master Plan outlined agricultural water use as 3% of annual demand. Need to consider the importance of resiliency in food security for the region.
- Ensuring that the customers providing food and food crops are benefitting from the water rate.
- The Water Advisory Committee would like to be engaged as part of Stantec's consultation process.

- The uniqueness of the Capital Regional District's subsidy model and that there has not been a similar study for comparison, staff were able to draw on some other examples from around BC to include for consideration.

M. Turner left the meeting

6.2.1. Study Scope and Schedule

Stantec's scope and schedule was included for information.

6.2.2. Agricultural Water rate Working Group Recommendations

The Water Advisory Committee's feedback was included as part of the Request for Proposals. A summary of the feedback and suggestions was also provided to Stantec.

6.2.3. Next Steps

The next steps are for Stantec to:

- Prepare stakeholder list and consultation plan
- Conduct stakeholder consultation

6.3. First Nations Water Rate Model – 2023 Implementation Plan [Verbal]

T. Robbins provided the following updates:

- Staff have been developing a First Nations water rate model.
- The Nations felt that the Regional Water Service wholesale water rates should apply to them the same as it does for Municipal governments.
- Staff are advancing implementation by applying the rate through Regional Water Supply service agreements and drafting the conveyance agreements, subject to Commission approval.
- The 2023 budget has been developed with the conveyance fee allowance included.

6.4 Summary of Regional Water Supply Commission Recommendations

There is no recommendation. The summary of recommendations is for information only.

6.5 Water Watch Report

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

7. COMMITTEE MEMBERSHIP

7.1. Local Government Elections – October 15, 2022 [Verbal]

The local elections are on October 15, 2022. Once the elections have taken place, Municipalities will appoint Directors to the Capital Regional District Board and standing

committees, including the Regional Water Supply Commission. As such the Water Advisory Committee will not likely meet again this year.

7.2. Expiring Terms – December 31, 2022 [Verbal]

Staff noted that members may serve up to three, two-year terms on the Committee. All members whose terms are coming to an end are eligible to serve another term. Staff Will be advertising for vacancies. Members wishing to serve another term should submit their interest to Denise at their earliest convenience. Likewise, any member wishing not to continue for another term should also submit their intention. Staff will follow up with an email to all members.

7.2.1. Committee Members – Two-Year Term

- Wilf Scheuer, Commercial & Industrial, Commercial, Institutional (ICI) (ending first term)
- Celine Davis, Resident/Ratepayer (ending first term)
- David Timothy, Fish Habitats (ending second term)
- Jeremy Caradonna, Scientific (ending first term)
- Tayler Krawczyk, Agriculture (ending second term)

7.2.2. Water Commission Representatives – Appointed Annually by Each Water Commission

(Following the establishment of new councils, commission appointments and commission elections)

- John Rogers, Juan de Fuca Water Distribution Commission Representative
- Gord Baird, Regional Water Supply Commission Representative
- Mike Doehnel, Saanich Peninsula Water Commission Representative

8. NEW BUSINESS

C. Davis thanked the Chair for all her work on summarizing and coordinating the Committee's comments and report for the 2022 Master Plan, and for her work as Chair of the Committee this past year.

9. ADJOURNMENT

MOVED by Commissioner T. Krawzcyk, **SECONDED** by Commissioner G. Baird,
That the September 1, 2022 meeting be adjourned a 2:57 pm.

CARRIED

_____
CHAIR

_____
SECRETARY

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Water Advisory Committee

March 28, 2023

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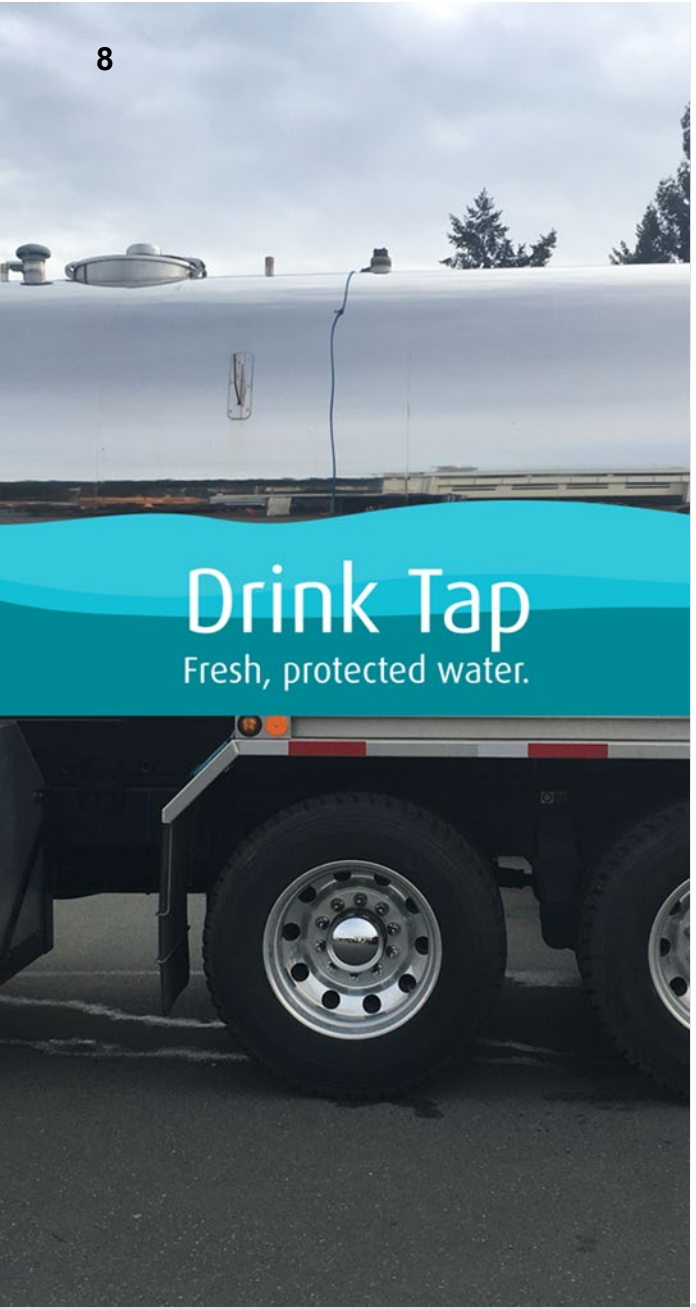

Agenda

1. Introduction
2. Service Support Staff
3. Governance Framework
4. Regional Water Supply Source & Infrastructure Overview
5. Service Delivery – CRD Departmental Programs
6. Budgets
7. Budget Factors & Upcoming Initiatives
8. Water Demand Rates

Meet the team

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Ted Robbins CAO, Capital Regional District	**Ian Jesney** Acting General Manager, Integrated Water Services
Joseph Marr Acting Senior Manager, Infrastructure Engineering, Integrated Water Services	**Annette Constabel** Senior Manager, Watershed Protection, Integrated Water Services
Shayne Irg Senior Manager, Water Operations, Integrated Water Services	**Jan van Niekerk** Senior Manager, Customer and Technical Services, Integrated Water Services
Glenn Harris Senior Manager, Environmental Protection & Water Quality, Parks & Environmental Services	**Laurel Westinghouse** Senior Financial Advisor, Finance & Technology
Tanya Duthie Manager, Administration Services, Integrated Water Services	**Denise Dionne** Administrative Coordinator & Commission Secretary, Integrated Water Services

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Provincial Act & Regulation & CRD Bylaws

- *Capital Region Water Supply & Sooke Hills Protection Act* 1997 – Service Establishment
- Capital Region Water Supply & Sooke Hills Protection *Regulation* 1997 – Commission Establishment
- CRD Bylaw No. 2537 – Water Supply Local Service Area Establishment Bylaw
- CRD Bylaw No. 2539 – Regional Water Supply Commission Bylaw
- CRD Bylaw No. 4186 – CRD Board Delegation Bylaw
- CRD Bylaw No. 2570 – Water Supply Fee & Charge Bylaw (Amending Bylaw 4270)
- CRD Bylaw No. 2739 – Adoption of Strategic Plan for Water Management

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CRD Bylaws & Strategic Plan

- CRD Bylaw No. 2804 – Water Supply Area Protection Bylaw (Amending Bylaw 4050)
- CRD Bylaw No. 3061 – Water Conservation Bylaw (Amending Bylaw 4248)
- CRD Bylaw No. 3516 – Cross Connection Control Bylaw (Amending Bylaw 4047)
- CRD Policies – Procurement (& Delegation) Policy
- 2017 Strategic Plan for the Greater Victoria Water Supply System
- 2022 Master Plan

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Service & Governance Framework

- **CRD Board -** Chair Colin Plant
  - Vice Chair Maja Tait
- **Regional Water Supply Commission -** Chair Gord Baird
  - Vice Chair Celia Stock, Water Advisory Committee Member
- **Saanich Peninsula Water Commission -** Chair David Kelbert
  - Vice Chair Mike Doehnel, Water Advisory Committee Member
- **Juan de Fuca Water Distribution Commission -** Chair Gord Baird
  - Vice Chair John Rogers, Water Advisory Committee Member
- **Water Advisory Committee**

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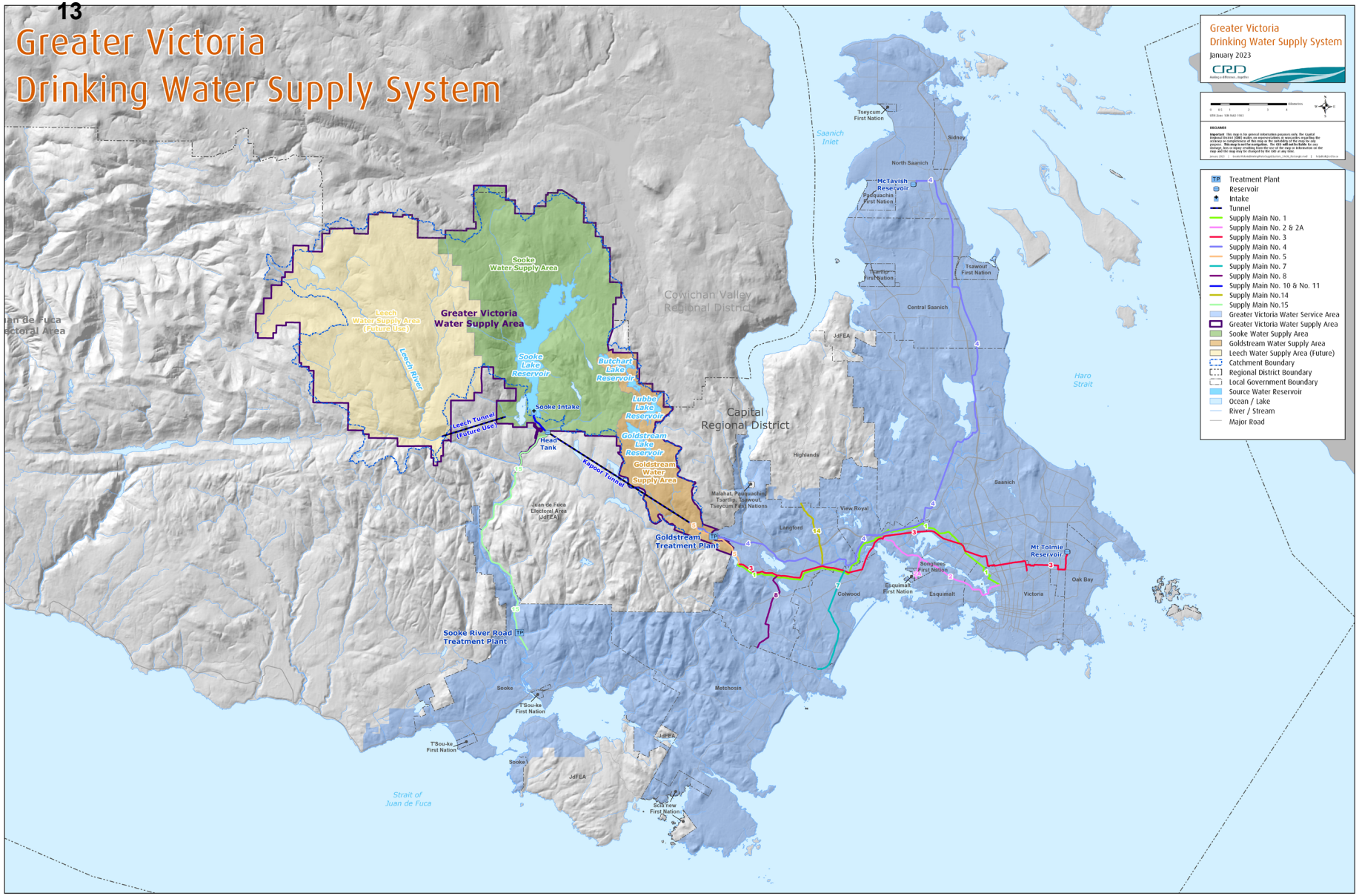

System Infrastructure Overview

Water Supply Source & Treatment

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Greater Victoria Water Supply Area

- 20,605 ha - Sooke, Goldstream, Leech Watersheds
- 6 Lake Reservoirs & 11 Dams
- Sooke Lake Reservoir – Primary Supply Source
- Goldstream Reservoir System – Secondary Supply Source
- Unfiltered Source Water with 3-Step Disinfection Process
  - Primary Disinfection
    - Ultraviolet light – targets parasites (Giardia & Crypto)
    - Free chlorine – targets bacteria & viruses
  - Secondary Disinfection
    - Ammonia to produce chloramine – long-lasting disinfectant residual
  - Unfiltered Raw Source Water
    - Turbidity (cloudiness) typically < 1 NTU
    - E.Coli bacteria < 20 CFU/100 mL
- Average 140 million litres of water treated & delivered every day

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System Infrastructure Overview

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Transmission & Pipes

- Approx. 132 km of water main
- Pipe diameters range from 300mm – 2,130mm plus Kapoor Tunnel is 2,400 diameter
- Pipe construction and material types:
  - Welded Steel 63%
  - Ductile Iron (DI) 12%
  - Kapoor Tunnel 7%
  - Concrete 9%
  - PVC 7%
  - AC 2%
- 55 Bulk Meters
- 2 Reservoirs (Tolmie, McTavish)
- 2 Treatment Plants
  - Goldstream
  - Sooke River Road
  - Both provide UV, Chlorine & Ammonia

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Service Overview

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CRD Departmental Programs

- Operations & Engineering
  - Water System Operation and Maintenance
  - Capital Project Delivery – IWS Construction Crew
  - Engineering Design & Project Management
  - System Infrastructure Planning & Asset Management
  - Emergency Response
- Plant Maintenance & Fleet Management
  - Preventive Maintenance Planning & Management for Operations
  - Fleet: Service Vehicles & Heavy Equipment
- Water Quality
  - Water Quality Sampling, Accredited Lab Testing, Reporting, Regulatory Compliance
  - Cross Connection Control

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Service Overview

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CRD Departmental Programs

- Watershed Protection
  - Wildfire Management, Security & Emergency Response
  - Road, Drainage Structures & Facilities O&M
  - Vegetation & Forest Fuel Management
  - Wildlife, Forest Hydrology, Forest Health & Resilience
- Demand Management
  - Administration of Water Conservation Bylaw
  - Promotion of responsible water use through public outreach and education
- Customer Service
  - Field Response to Customer Concerns
  - Leaks, Pressure Issues, Meter Inquiries
- Water Metering & Billing
  - Municipal Meter Reading & Billing

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Budget Planning and Approval Overview

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Service Budgets

- Operating & Capital Budgets
  - Provides for all expenditures for Operation & Maintenance (O&M), administration of water service and capital projects
  - Utility Rate Model – Full Cost Recovery
- Operating, Capital Project Lists & Supplemental budget items considered by Commission annually in September for recommendation to CRD Board
- Service Funding
  - 100% of Operating & Distribution Capital, including debt servicing, funded by sale of water

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Budget Overview

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2023 Budget Factors & Upcoming Initiatives

- 2022 Budget – year end budget projections
- Water demand projection and trends
- Operating budget adjustments
- First Nations service provider changes
- Continuing investment in infrastructure upgrades
- Capital funding & debt servicing

Upcoming & Continuing Initiatives

- Post Disaster Water Supply & Distribution
- Disinfection Plant & Dam Upgrades
- Strategic Plan Update
- Initial implementation of 2022 Master Plan
- Development Cost Charge Program

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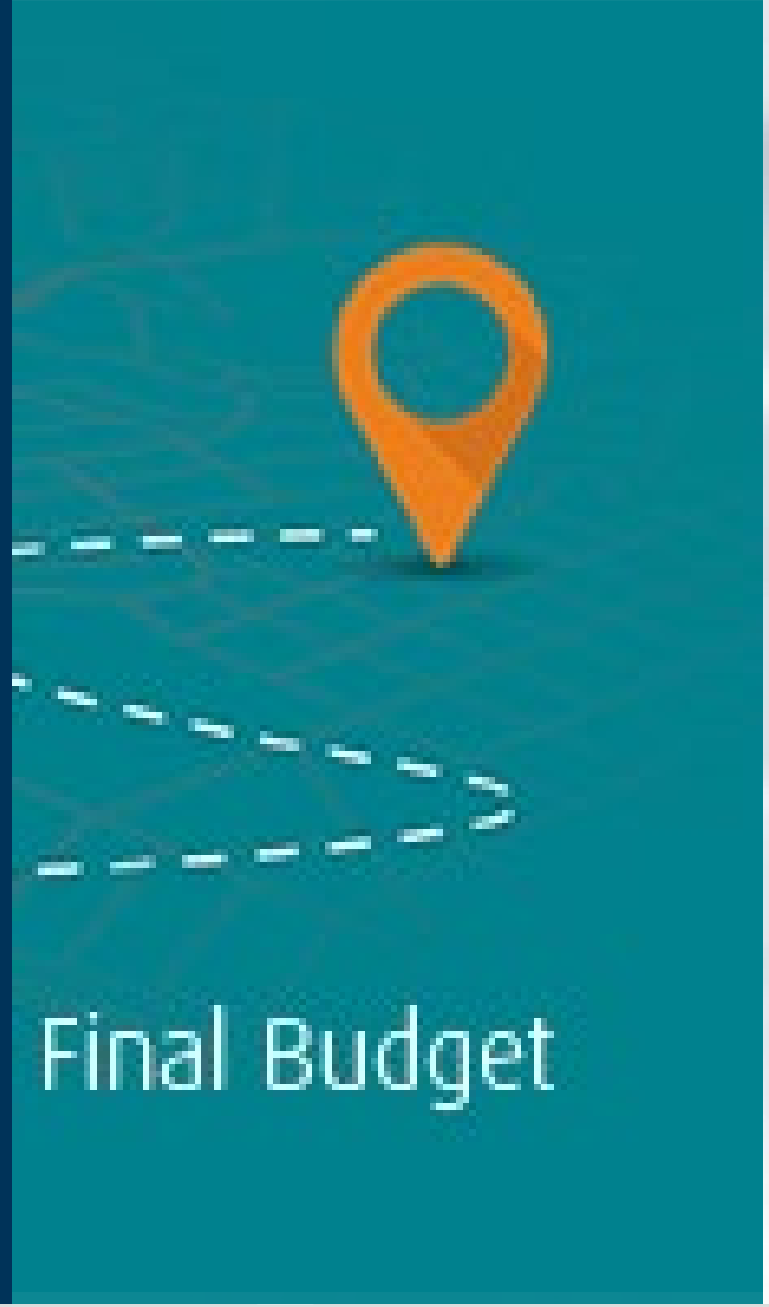
Budget Overview



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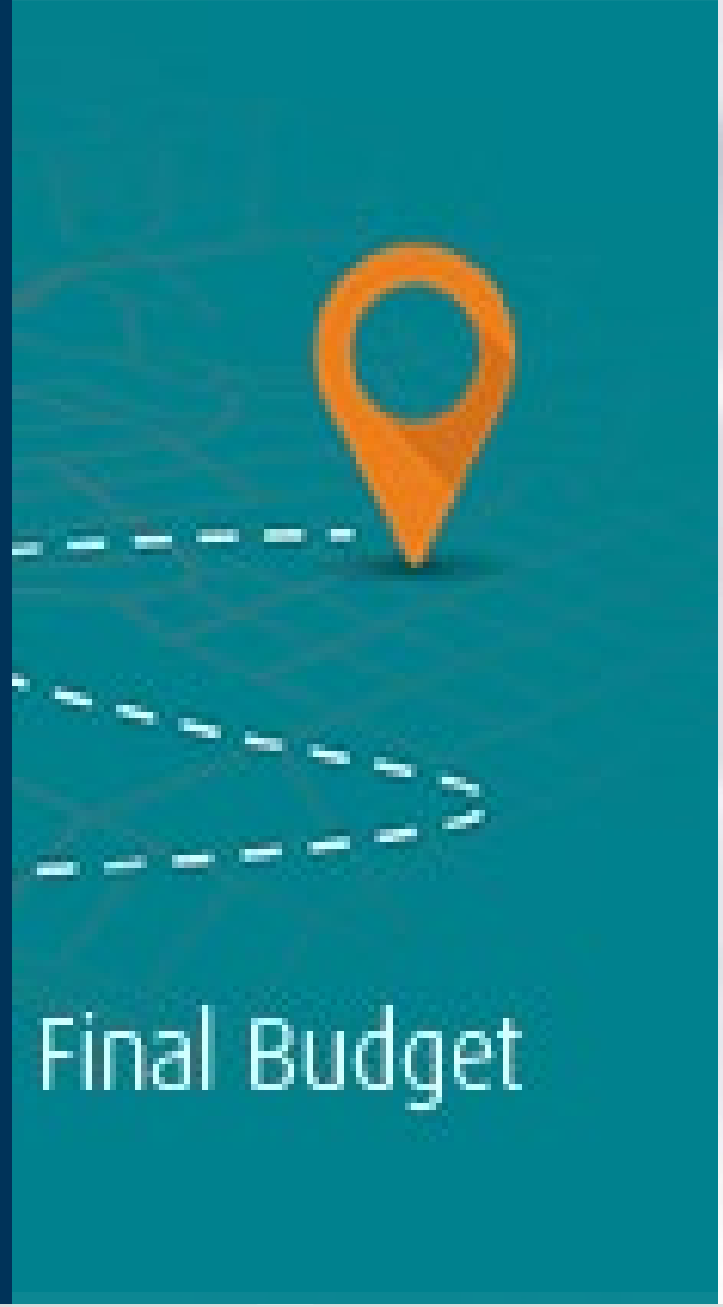
Budget Context

2023 Budget Context	% of Expenditures
Debt Servicing	19.3%
Capital Funding	32.1%
Supply System O&M	16.7%
Supply System Engineering	1.3%
Service Administration	0.6%
Watershed Protection Program	14.9%
Cross Connection Control Program	1.9%
Demand Management Program	1.8%
Water Quality Program	4.8%
Agricultural Water Rate Funding	4.4%
Conveyance Fee – First Nations Service	2.2%
Total	**100%**

Budget Overview



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Service Budget

2023 Budgets	
Total Budget	$39.92 M
Total Supply Capital	$37.62 M
RWS - JDF Shared Capital	$.91 M

2023 Budget Context	
Operations and Maintenance (Core)	$16.79 M
Conveyance Fee	$0.87 M
Agriculture Water Rate Funding	$1.75 M
Transfers to Water Capital	$12.82 M
Debt Service Costs	$7.69 M
	$39.92 M

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Water Demand & Rates

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- 2023 Regional Water Supply Wholesale Rate: $0.7698 / cubic metre
- 2023 Agricultural Rate: $0.2105 / cubic metre
- 2023 Budget Water Demand: 49,500,000 cubic metres

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Thank you

@crdvictoria

Capital Regional District

CRDVictoria

crd.bc.ca

Making a difference...together

WAC 23-01

REPORT TO WATER ADVISORY COMMITTEE
MEETING OF TUESDAY, MARCH 28, 2023

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

ISSUE SUMMARY

To provide an update to the Water Advisory Committee (WAC) on the proposed Development Cost Charge (DCC) Program progress and to seek advice from WAC to inform and advise the Regional Water Supply Commission.

BACKGROUND

The Regional Water Supply 2017 Strategic Plan included a Commitment to "Explore Regional Water Development Cost Charges to fund future growth-related supply system infrastructure improvements". The Regional Water Supply service does not have a DCC bylaw, although a bylaw was considered in the mid-1990's but ultimately it was not adopted. DCC bylaws exist for three existing Capital Regional District (CRD) utilities; Juan de Fuca Water Distribution Service (Bylaw 2758), Saanich Peninsula Water and the Saanich Peninsula Wastewater Services (combined Bylaw No. 3208).

The 2020 Regional Water Service Capital Plan included an item to design a Regional Water DCC Program (20-08) and a consultant, Urban Systems Ltd. (USL), was hired to study the issue in a phased approach. In general, the project is being completed in two phases:

Phase 1 – Conduct the background assessment
Phase 2 – Undergo a political process for bylaw adoption (includes stakeholder engagement, etc.)

DCC's are used to finance capital costs related to "growth" and are regulated in accordance with the Local Government Act (LGA) of BC, *Division 19 – Development Costs Recovery*, defines the eligibility, application, process, and so on. The Province of BC has issued guidance documents; *Guide for Elected Officials* and *Best Practices Guide* (~2005) (Appendices A and B).

The design of DCC's (Phase 1) generally follows a seven-step process:

1. Project Future Growth
2. Identify Required Works
3. Estimate Infrastructure Costs
4. Allocate Costs to Growth/Existing Users
5. Assign Costs to Land Use Types
6. Convert Costs into DCC Rates
7. Apply Assist Factor

USL, has undergone the seven-step process and in doing so, has projected growth data, identified required works from the capital plan and the 2022 Master Plan. Further, they have estimated the growth component and applied an assist factor to determine conceptual DCC's for various types of land use (i.e. residential, institutional, commercial and industrial). The results are shown in Appendix C – Regional Water Service DCC Program – Proposed Rates. Staff from USL will

present on this topic at this meeting (Appendix D) to supplement this staff report. Upon completing Phase 1 of this assignment, USL will deliver:

1. Regional Water Supply (RWS) DCC Policy Memorandum
2. Covering Memorandum (work-in-progress)
3. Regional Water Supply Development Cost Charge Background Report (work-in-progress – to include draft DCC bylaw)

IMPLICATIONS

Implications of imposing DCC's have been identified and considered by USL including implications related to First Nations, the Regional Growth Strategy, social, financial, alignment with strategic and master plans, and administration, all of which will be outlined in the noted reports.

CONCLUSION

The *Regional Water Supply 2017 Strategic Plan* included a commitment to "Explore Regional Water Development Cost Charges (DCC) to fund future growth-related supply system infrastructure improvements". Urban Systems Ltd. conducted a study and presented their findings to date. It is proposed to engage the Water Advisory Committee to review the issue and to provide comments to the Regional Water Supply Commission for its consideration. Should the Regional Water Supply Commission pursue a DCC program and bylaw, then Phase 2 would be considered for stakeholder consultation and bylaw adoption. Phase 2 would also include further DCC program maturation, submission to the BC Inspector of Municipalities and ultimately, DCC Bylaw adoption and implementation.

RECOMMENDATION

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

Submitted by:	Patrick Stephens, EIT, Project Engineer, Water Supply Engineering and Planning
Submitted by:	Scott Mason, B.Sc., P.Eng., Manager, Water Supply Engineering and Planning
Concurrence:	Joseph Marr, P.Eng., Acting Senior Manager, Infrastructure Engineering
Cconcurrence:	Ian Jesney, P. Eng., Acting General Manager, Integrated Water Services

ATTACHMENT(S)

Appendix A: Table of Contents, Development Cost Charge Guide for Elected Officials
https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/finance/dcc_elected_officials_guide_2005.pdf

Appendix B: Table of Contents, Development Cost Charge Best Practices Guide, Ministry of Community Services
https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/finance/dcc_best_practice_guide_2005.pdf

Appendix C: Regional Water Supply Development Cost Charge Program – Proposed

Appendix D: Urban Systems Ltd. Presentation

Appendix E: Feedback Questions

Development Cost Charge

GUIDE FOR ELECTED OFFICIALS

BRITISH COLUMBIA
Ministry of Community Services

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APPENDIX A

Introduction

It is widely accepted that growth, when facilitated by good planning, benefits communities and their economies. Local governments have come to recognize, however, that the accommodation of growth is not a cost-free exercise. Growth creates demands for the construction of new infrastructure, and the expansion of existing local services. The cost of meeting these demands is often substantial and, at times, beyond the ability of local governments to fund using existing financial resources.

The development industry understands that growth creates new demand for local government infrastructure and services. The industry also understands that local governments are not able to directly absorb all growth-related service costs, and that growth itself should assist in funding service needs. A range of development finance tools has been created to enable local governments to collect from development a portion of growth-related expenditures. Development cost charges (DCCs) represent one such tool.

The *DCC Guide for Elected Officials* is designed to increase understanding about DCCs among local government leaders. The *Guide* uses a "question & answer" format, which addresses important questions on DCCs and their use. The questions are grouped under the following headings:

- DCCs Defined;
- Establishing DCCs;
- When to Use DCCs;
- DCCs in the Broader Context;
- DCCs and Development; and,
- DCCs across British Columbia.

APPENDIX A

The *Guide* deals with the basics, or fundamentals, of DCCs.

For a more detailed review and information about the technical aspects of DCCs, please refer to the *Development Cost Charge Best Practices Guide*, a Ministry of Community Services publication available electronically through the search function of the British Columbia Government website at www.gov.bc.ca

Development Cost Charge

BEST PRACTICES GUIDE

BRITISH COLUMBIA
Ministry of Community Services

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APPENDIX C

Regional Water Supply DCC Program – Proposed Rates

Proposed RWS DCC Program – Rates

Development Category	Collection Unit	RWS (Proposed) 1% MAF	JDF WDS*	Saanich Peninsula Water**	Saanich Peninsula Wastewater**
Low Density Residential (single family)	per Lot	$9,045	$2,922	$0	$1,790
Medium Density Multi Family (duplex, townhouse, etc.)	per Unit	$7,914	$2,557	$0	$ 1,413
High Density Multi-Family (apartments)	per Unit	$5,088	$1,644	$0	$933
Commercial	per GFA in m^2	$33.92	$10.74	$0	$4.00
Industrial	per GFA in m^2	$16.96	$5.82	$0	$3.89
Institutional	per GFA in m^2	$73.49	$23.74	$0	$5.30

* DCC Bylaw update is underway
** Last reviewed in 2018, next review 2023

CRD

URBAN SYSTEMS

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Capital Regional District

Regional Water Supply - Development Cost Charge (DCC) Program

DCC Report – Regional Water Supply Commission Presentation

March 28th , 2023

URBAN SYSTEMS

Agenda

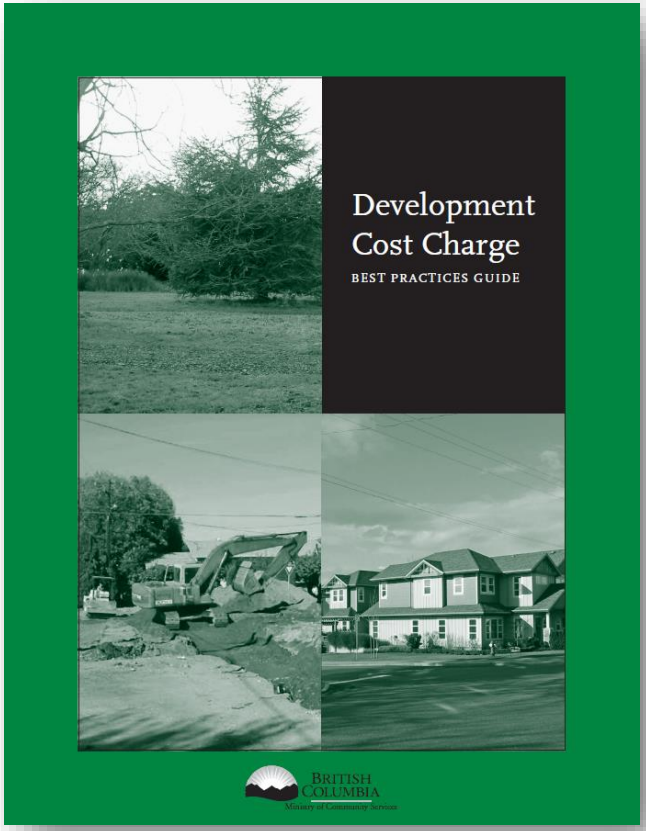
- What are DCC's, what do they pay for, and who pays them?
- Review current DCCs and Regional Water Supply
- Key policy considerations used to develop the proposed RWS DCC Program
- How do we calculate DCCs
  - Growth Estimates
  - Benefit allocation
  - Recoverable costs
  - Assist Factor
- Proposed RWS DCC Program and Rates
- Next Steps

OVERVIEW OF DCCs

What are DCCs?

- Fees to help communities recover the costs of “off-site” infrastructure needed for growth (i.e. capacity)

- Regulated by the province
  - Section 14, Division 19 of the Local Government Act
  - Provincial DCC Best Practices Guide
  - Ministerial approval
- Based on “benefiter pay” principle
- Transparent and equitable



Philosophy of DCCs

1. Foster fairness (e.g. growth pays for growth)
2. Ensure consistency
3. Minimize financial risk to the CRD
4. Ensure certainty for the development community (e.g. clear policy framework)
5. Promote transparency
6. Ensure timely processing of development applications

Who pays DCCs?

- Applicants for **subdivision approval** to create single family development sites

- Applicants for **building permits** to construct multi-family, commercial, industrial, and institutional development

Current DCCs Rates in the CRD

Development Category	Collection Unit	JDF WDS*	Saanich Peninsula Water**	Saanich Peninsula Wastewater**
Low Density Residential (single family)	per Lot	$2,922	$0	$1,790
Low Density Residential (small lot single family)	per Lot	$2,922	$0	$1,429
Medium Density Multi Family (duplex, townhouse, etc.)	per Unit	$2,557	$0	$ 1,413
High Density Multi-Family (apartments)	per Unit	$1,644	$0	$933
Commercial	per GFA in m^2	$10.74	$0	$4.00
Industrial	per GFA in m^2	$5.82	$0	$3.89
Institutional	per GFA in m^2	$23.74	$0	$5.30

* DCC Bylaw update is underway

** Last reviewed in 2018, next review 2023

RWS DCC REVIEW
KEY POLICY CONSIDERATIONS & APPROACHES

Extent of DCC application

- The proposed RWS DCC is based on a region-wide application for the following reasons:
  - Aligns with best practice and other CRD DCC Bylaws
  - Appropriate for the regional nature of water supply service and aligns with the inclusion of large capital projects that will benefit the entire system (e.g., WTP)
  - This approach also facilitates bylaw simplicity and accuracy, reduced administrative effort, cash flow and funding flexibility

Proposed DCC Program Time Horizon

- Options considered either a 20-year time horizon to align with other DCC programs or a 30-year time horizon to align with the RWS 2022 Master Plan and the regional growth projections

- The RWS DCC reflects a 30-year revolving DCC timeframe to align with the infrastructure planning timeframe

- This approach maintains the relationship between anticipated growth and infrastructure needed to service growth

RWS DCC PROGRAM DEVELOPMENT

Work to Date - DCC Program Development

(1) Growth Projections and Timeline

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

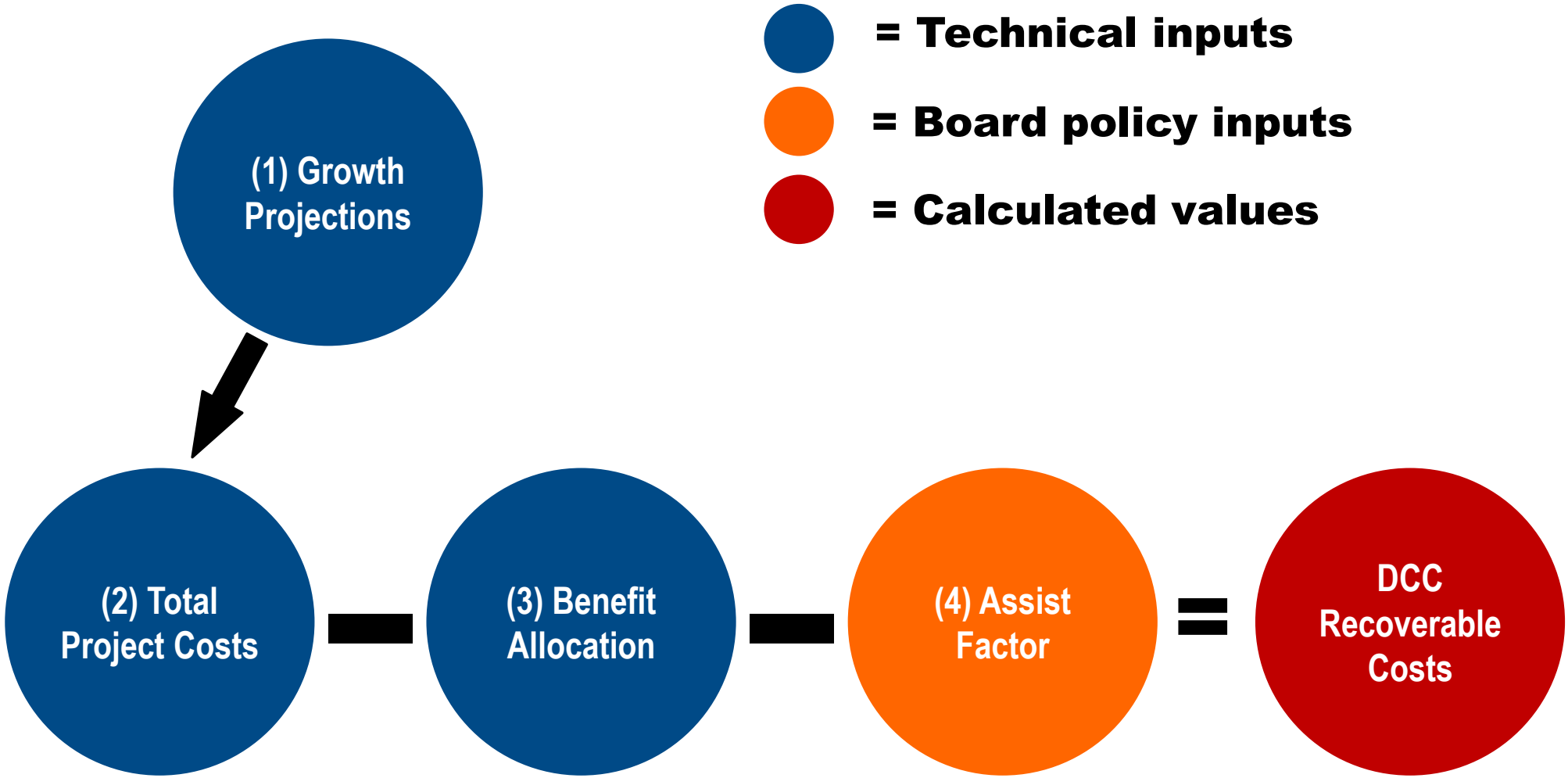
(2) DCC Program Development and Project List

Determining DCC projects based on where new development is occurring over the next 30 years (i.e. where new services will be required), Transportation and Mobility Strategy, 5-year Capital Plan and staff inputs.

(3) Project Benefit Allocations

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

DCC Recoverable Costs (i.e., Net DCCs)



Growth Estimates Approach

- Growth estimates are calculated for 30-year DCC time horizon

- Growth estimates were developed through a comprehensive growth model, which uses current CRD population growth data in the RGS, and land use information from each local government.

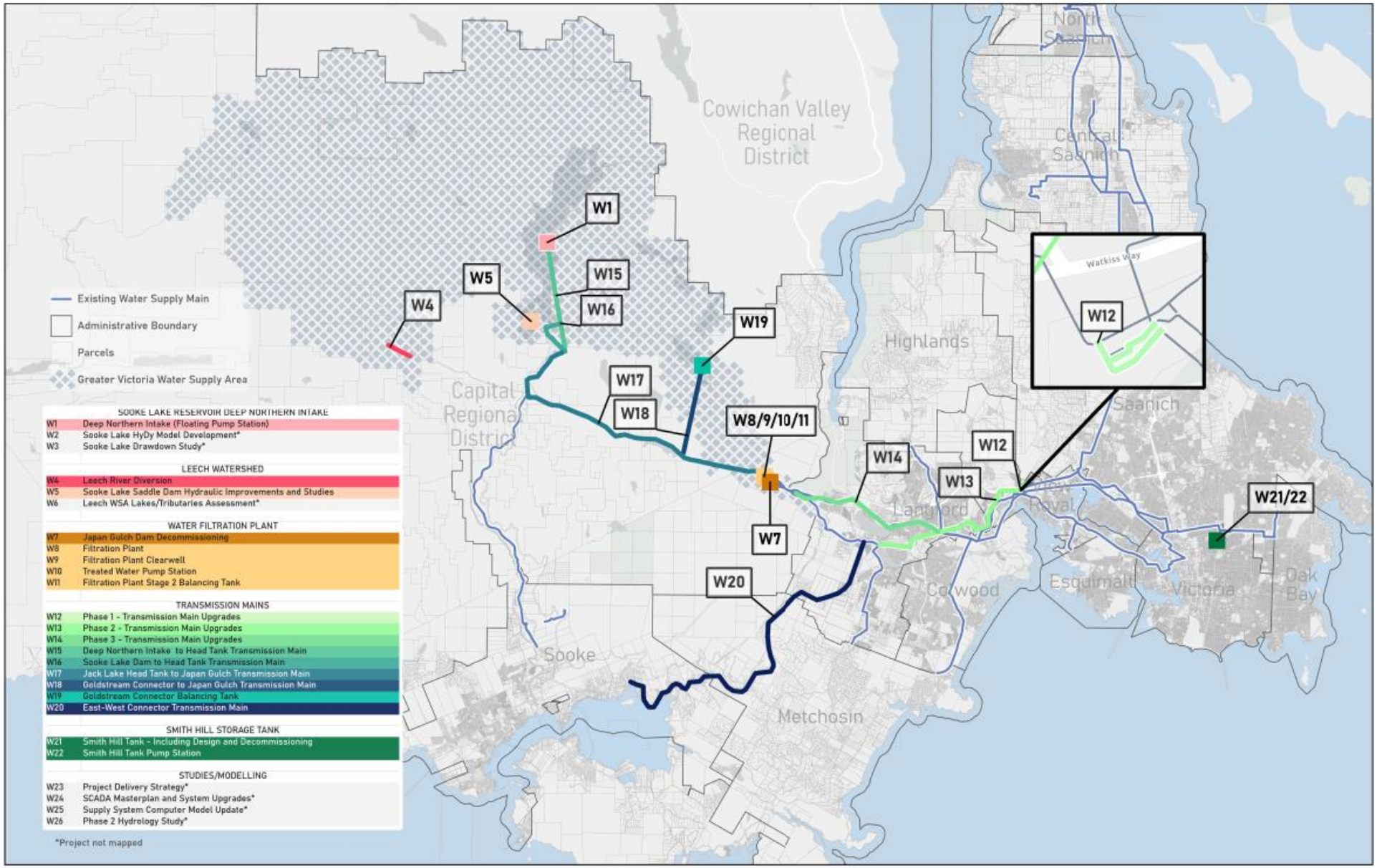
DCC Project List Approach

- DCC projects within the 30-year timeframe were identified from available infrastructure / capital plans and staff input, including:
  - Regional Water Supply 2022 Master Plan
  - CRD RWS Capital Plan

- 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

- This approach also aligns with the region-wide DCC application as discussed earlier

RWS DCC Program – Mapping



RWS DCC Program – Projects & Costs – 30 years

Project	Cost Estimate	DCC Benefit Factor	Benefit to New Development	Assist Factor (1%)	DCC Recoverable	CRD Costs (1)
Sooke Lake Reservoir Deep Northern Intake	$74.7M	35%	$26.2M	$0.3M	$25.9M	$48.8M
Leech Watershed	$28.5M	100%	$28.5M	$0.3M	$28.2M	$0.3M
Water Filtration Plant	$819.1M	35%	$286.7M	$2.9M	$283.8M	$535.3M
Transmission Mains	$487.0M	100%/ 35%	$236.1M	$2.4M	$233.7M	$253.2M
Smith Hill Storage Tank	$31.3M	50%	$15.6M	$0.1M	$15.5M	$15.8M
Studies/Modelling	$3.8M	100%	$3.8M	$0.04M	$3.8M	$0.04M
TOTAL	$1,444.3M	35-100%	$596.9M	$6.0M	$590.9M	$853.5M

Benefit Allocation Approach

Each project in the RWS program has been assigned a benefit allocation based on how it will benefit growth versus the existing population as follows:

- 100% benefits for projects required only to increase capacity due to growth or to service growth (technical)
- 50% benefits for projects expected to benefit both new and existing development equally (rule of thumb)
- 35% benefits for projects that benefit new based on % of new population to total (technical)

DCC Assist Factor

- Legislation requires that local governments must “assist” development for DCCs
- The Board has complete discretion – can vary from 1% (least assistance) to 99% (most assistance)
- Most communities have an Assist Factor between 1% and 10%
- Assist amount is funded from other CRD revenues (i.e. not DCCs)
- Proposed RWS DCC Rates assume the minimum 1% Assist Factor

RWS DCC DRAFT RATES

Proposed RWS DCC Program – Rates

Development Category	Collection Unit	RWS (Proposed) 1% MAF	JDF WDS*	Saanich Peninsula Water**	Saanich Peninsula Wastewater**
Low Density Residential (single family)	per Lot	$9,045	$2,922	$0	$1,790
Medium Density Multi Family (duplex, townhouse, etc.)	per Unit	$7,914	$2,557	$0	$ 1,413
High Density Multi-Family (apartments)	per Unit	$5,088	$1,644	$0	$933
Commercial	per GFA in m^2	$33.92	$10.74	$0	$4.00
Industrial	per GFA in m^2	$16.96	$5.82	$0	$3.89
Institutional	per GFA in m^2	$73.49	$23.74	$0	$5.30

* DCC Bylaw update is underway

** Last reviewed in 2018, next review 2023

Proposed RWS DCC Program – Rate Options

Development Category	Collection Unit	RWS DCC (Proposed) 1% MAF	RWS DCC (5% MAF Option)	RWS DCC (15% MAF Option)	RWS DCC (30% MAF Option)	RWS DCC (50% MAF Option)
Low Density Residential (single family)	per Lot	$9,045	$8,679	$7,765	$6,395	$4,568
Medium Density Multi Family (duplex, townhouse, etc.)	per Unit	$7,914	$7,594	$6,795	$5,595	$3,997
High Density Multi-Family (apartments)	per Unit	$5,088	$4,882	$4,368	$3,597	$2,569
Commercial	per GFA in m^2	$33.92	$32.55	$29.12	$23.98	$17.13
Industrial	per GFA in m^2	$16.96	$16.27	$14.56	$11.99	$8.56
Institutional	per GFA in m^2	$73.49	$70.51	$63.09	$51.96	$37.11

* DCC Bylaw update is underway
** Last reviewed in 2018, next review 2023

POTENTIAL NEXT STEPS

Stakeholder Consultation and Bylaw Adoption

- The Best Practices Guide recommends consulting with key stakeholders as part of a new DCC bylaw or DCC bylaw update

- If the CRD decides to proceed with Phase 2 of the DCC project the following consultation could be undertaken:
  - Meet with Elected Officials in member municipalities to communicate the proposed DCC program and the CRD's intent to implement the RWS DCC Bylaw
  - Consultation with CRD Board, Regional Water Supply Commission and staff
  - Facilitate open houses for the public and/or meetings with the development community in member municipalities to provide notification and seek feedback on proposed DCC rates
  - Use the CRD's website to provide information and updates for the general public as the project progresses.


QUESTIONS?

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APPENDIX E
FEEDBACK QUESTIONS IN RESPONSE TO
PRESENTATION BY URBAN SYSTEMS LTD.

FILLABLE FORM

1. Are you for or against the application of a Regional Water Development Cost Charge?

   Select one

   ☐ For
   ☐ Against
   ☐ Neutral

2. Who should pay for infrastructure upgrades related to growth?

   Select one

   ☐ Existing users
   ☐ New Development
   ☐ Combination

3. Do you agree with a Municipal assist factor of 1 percent?

   Select one

   ☐ For
   ☐ Against
   ☐ Neutral

4. Would you support a phased Development Cost Charge Implementation by modifying the municipal assist factor over time?

   Select one

   ☐ For
   ☐ Against
   ☐ Neutral

5. Do you agree with the following land use categories: Low Density Residential (Single Family), Medium Density Multi Family Residential (Townhouse), High Density Multi-family Residential (Condo), Institutional, Commercial and Industrial?

   Select one

   ☐ For
   ☐ Against
   ☐ Neutral

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6. Do you support CRD moving on to Phase 2 of the Regional Water Development Cost Charge Program, which includes stakeholder consultation and bylaw adoption?

   Select one

   ☐ For

   ☐ Against

   ☐ Neutral

7. Do you have any other comments you would like to pass onto the Regional Water Supply Commission.

   Enter text below

Please submit your feedback response to iwsadministration@crd.bc.ca by **April 14, 2023**

Making a difference...together

WAC 23-02

REPORT TO WATER ADVISORY COMMITTEE
MEETING OF TUESDAY, MARCH 28, 2023

SUBJECT **Agricultural Water Rate Review – Progress Update**

ISSUE SUMMARY

To provide the Water Advisory Committee with an update on the Agricultural Water Rate Review.

BACKGROUND

The Capital Regional District (CRD) has provided an agricultural water rate through the Regional Water Supply Service since 2002. Properties that hold a BC Assessment farm classification are eligible to receive the rate subject to provision of CRD Bylaw No. 2570 which sets out how the rate applies. The rate subsidy is funded through the annual Regional Water Supply Service operating budget, this funds the difference between the municipal retail rate and the agricultural rate.

The Agricultural rate of $0.2105 has not changed since 2010 while the wholesale and municipal retail water rates have steadily increased. In 2023 the Regional Water Supply agricultural rate funding budget is $1.75 million.

Stantec Consulting Ltd. (Stantec) has been retained to complete a review of the current agricultural water rate, rate model, and rate application. Stantec is continuing to advance the project and will ultimately complete a final report that recommends a rate model, including an implementation plan.

Stakeholder engagement is an important part of this process and input from the Water Advisory Committee will be instrumental to achieve the outcome.

CONCLUSION

The Agricultural Water rate has not changed since 2010. Stantec Consulting Ltd. was retained to complete a review of the current agricultural water rate, rate model and rate application. The Water Advisory Committee will provide input on the review as part of the stakeholder engagement process.

RECOMMENDATION

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

Submitted by:	Shayne Irg, P.Eng., Senior Manager, Water Infrastructure Operations
Concurrence:	Ian Jesney, P. Eng., Acting General Manager, Integrated Water Services

ATTACHMENT(S)

Appendix A: Stantec Consulting's Agricultural Rate Review Presentation
Appendix B: Agricultural Water Rate Background Information

IWSS-297445977-10209

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Stantec

CRD Agricultural Water Rate Review and Rate Model Options Study

WAC

March 28,2023

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Breakdown of Agricultural Water Bills in 2022

1,090,000 **cubic meters of agricultural water** was provided to farmers growing trees, crops, and feed

$1.7 million cost of subsidy

25% of water was used by the **top 1% highest users**

680 accounts (80% Agricultural Residential, 20% Agricultural)

50% accounts received less than $500 in subsidized water in 2022

20% accounts received $0 in subsidy in 2022
(i.e., they did not use more than 455 cubic metres in a calendar year)

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Today's Goal

Provide sufficient information and context for participants to help us answer 2 questions:

How large should the subsidy be? **How to structure rates to collect revenue?**

To do this we will present:

- Economic Framework (a cost benefit lens to guide analysis)
- Review of Potential Options
  - Administrative Changes
  - Rate Changes
- Questionnaire (to be completed later)

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Today's Goal

Provide sufficient information and context for participants to help us answer 2 questions:

How large should the subsidy be? **How to structure rates to collect revenue ?**

To do this we will present:

- Economic Framework → How large should the subsidy be?
- Review of Potential Options
  - Administrative Changes → Information to support magnitude of subsidy
  - Rate Changes → How to structure the collection of rates to support agriculture, address concerns of retail utilities and incentivize conservation
- Questionnaire → **Gather WAC input**

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Economic Framework: Guiding the Analysis

Economic Framework ► A cost benefit lens

COSTS

Private – Farmers' costs of production, returns on investment

Public – Rate subsidy ($1.7M in 2022 budget)

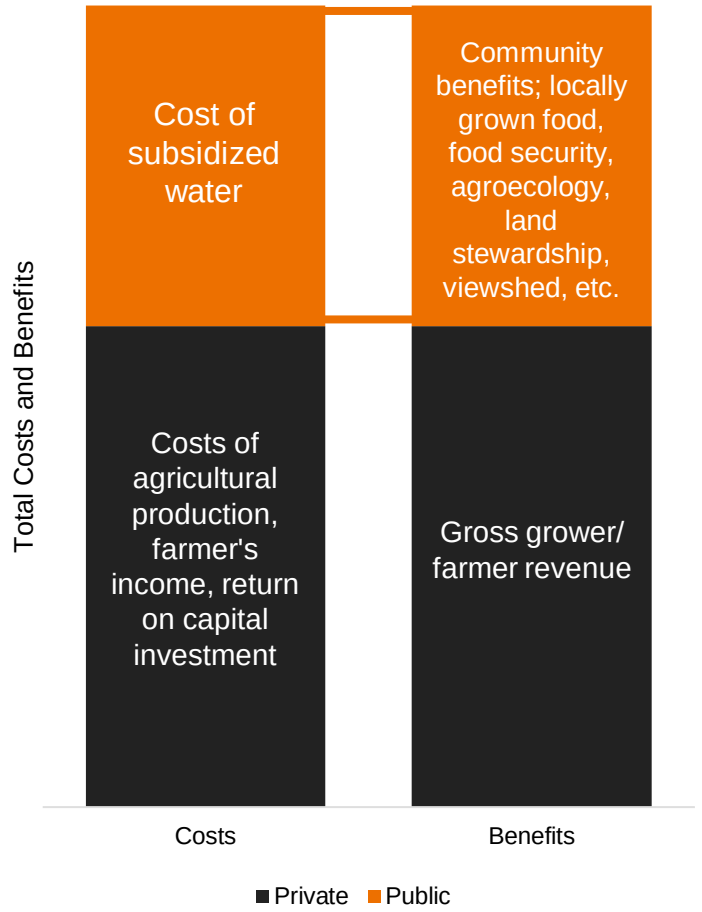
BENEFITS

Private – Returns to farmers

Public – Regional objective (more later)

Balanced Investment in Public Benefits

e.g., water rate funding = public benefits



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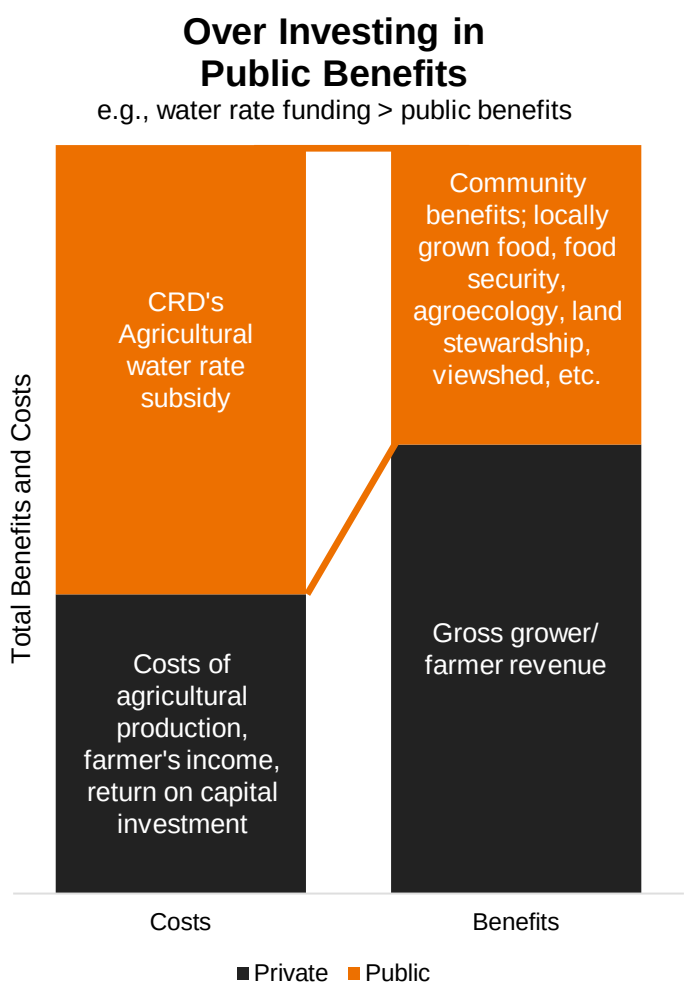
Economic Framework: Guiding the Analysis

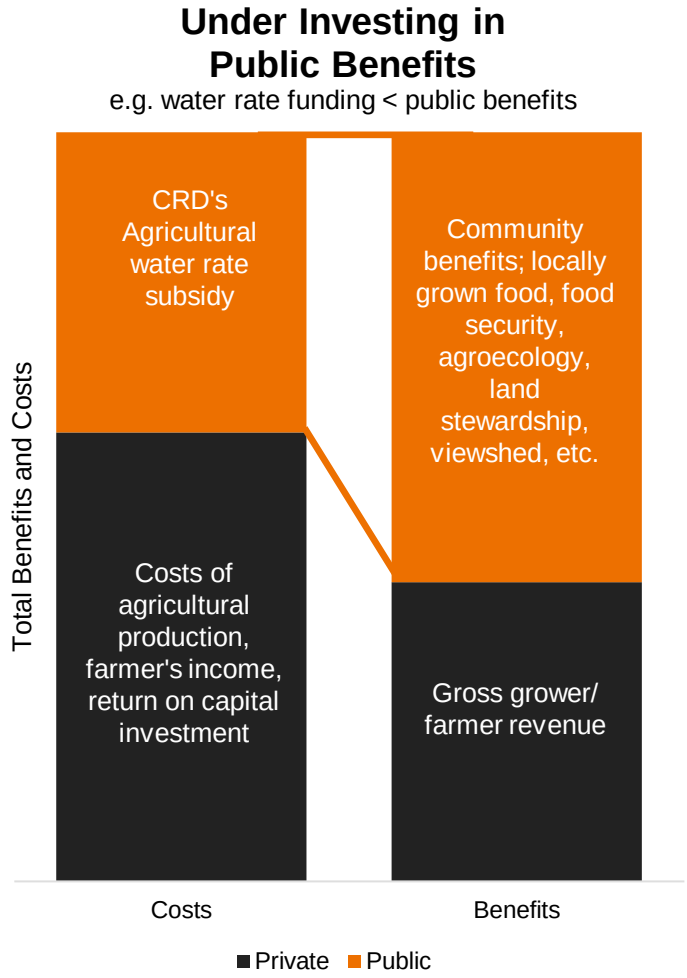
Community benefits are less than the water rate funding.

ACTION ▶ Reduce the agricultural rate subsidy



Community benefits are greater than the water rate funding.

ACTION ▶ Increase the water rate subsidy



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Options to Evaluate

1. Administrative Changes
(non-mutually exclusive)

1.a Require annual reporting from recipients of the subsidy

1.b Expand eligibility and revise application

Other changes to consider:

1.c Address unequal coverage of fixed meter costs by standardizing the rebate for fixed and consumptive costs

1.d Adjust billing cycle to work better for agricultural cycles

1.e Report on usage on demand

2. Rate Changes
(mutually exclusive)

2.a No change to agricultural rate subsidies

2.b Charge the wholesale rate for current agricultural customers

2.c Cap the subsidy ($ amount or % of budget)

2.d Provide a base rate per hectare of arable land

2.e Provide a ‘discount’ % off the retail residential rate

2.f Stop the subsidy

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1.a Annual Reporting Requirement Examples

(Page 5) - It was strongly felt that if agricultural users were to be charged reduced rates, those rates should only apply to bona fide farm operators. …. Those at the workshops pointed to the need for legitimate agricultural activities to be conducted in order to receive an agricultural rate. It was also noted that SEKID's system currently offers allocations to all agricultural land holders, regardless of whether agriculture is occurring or not.

EXAMPLE:

City of Kelowna Agriculture Water Rate Design Engagement Report 1

QUESTIONS:

Feasible to implement?

Helpful in determining total value of subsidy?

If so:

- How detailed?
- Include conservation questions?
- Required for renewal?

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1.a Annual Reporting Requirement Examples

[Province of Saskatchewan]

Westlands Water District

Reports on crop types and economic value

[Westlands Water District]

EST. 1920 MADERA IRRIGATION DISTRICT

Reports on crop types and irrigation methods

[Madera Irrigation District]

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1.b Expand Eligibility

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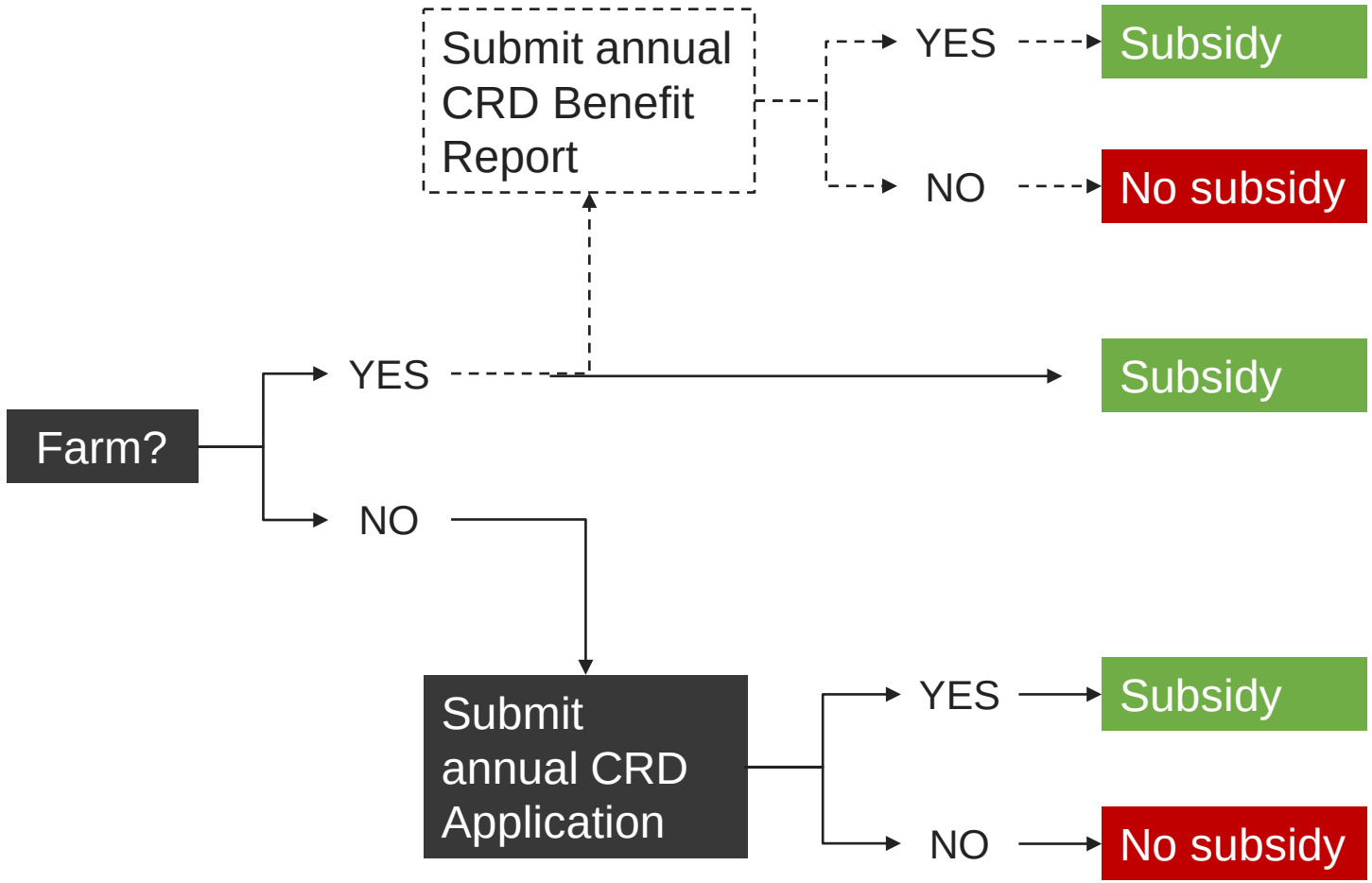

WHY:

Allows for inclusion of other water users that support local agriculture but do not have farm status (e.g., urban farms)

WHAT:

Introduce an alternative application for water users to still receive the subsidy

QUESTIONS:

How many more/less subscribers?

How does rate revenue/water demand change?

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Rate Change Options

2.a No change to agricultural rate subsidy

2.b Charge the wholesale rate for current agricultural customers

Agricultural water rate matches the matches the wholesale rate and increases along with it.

2.c Cap the subsidy ($ amount or budget %)

Set a target for the total annual subsidy budget based on recognition of value. Work backwards to develop a rate that hits the target amount. Annual increase could be tied to the increase of cost-of-service rates.

2.d Rate per acre/ hectare arable land with increasing rates for overconsumption

Water allotment provided per acre (or hectare) based on type of agriculture & crop, charged base rate for that allotment. Increasing rates for over-allocation and/or off-season use. Consider an ability-to-pay study.

2.e Provide a “% discount” off the retail residential rate

Set the agricultural rate equal to the same “% discount” from the retail residential rate for all municipalities, i.e., 50% discount.

2.f Stop the subsidy

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2.d Base Rate Per Acre/Hectare of Arable Land

Example

Regional District of North Okanagan

- $84.85 per hectare of allocation per quarter ($339/year)
- Charged increasing over-allocation consumption fee and off-season fee:
- Agricultural accounts for 55% of water demand

City of Kelowna

- Annual allotment fee of $332/ hectare of allocation
- Charged increasing over-consumption rates:

REGIONAL DISTRICT NORTH OKANAGAN

MEMBER MUNICIPALITIES:		ELECTORAL AREAS:	
CITY OF ARMSTRONG	VILLAGE OF LUMBY	"B" – SWAN LAKE	"E" – CHERRYVILLE
CITY OF ENDERBY	CITY OF VERNON	"C" – BX DISTRICT	"F" – ENDERBY (RURAL)
DISTRICT OF COLDSTREAM	TOWNSHIP OF SPALLUMCHEEN	"D" – LUMBY (RURAL)	

Over Allocation Consumption Fee

Agricultural water customers pay for allocation – a volume of water for agricultural use during the irrigation season. Allocation limits help the utility manage the resources required to support irrigation water demand and encourage efficient water use, as agricultural water demand accounts for over 55% of all water used each year. Efforts to manage leaks make a big difference in helping maintain our water supplies during our drier summers.

Allocation is based on the Ministry of Agriculture's crop water demand recommendation of 5,500 cubic meters of water per hectare [m^3/ha] per year. Provincial agrologists calculated the 5,500 value using average growing conditions in Greater Vernon to ensure crops have sufficient water.

Allocation is quoted in hectares (ha) as it is based on the area being cultivated. For example, if a customer had 1.0 ha of allocation, they would multiply this number by 5,500 to get the annual volume of water allowed on that property for agricultural purposes:

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2. Comparison of Rate Options

Option		IMPACT			ATTRIBUTES		
		CRD financial impact	Reduction in farm and public benefits	Administrative level of effort	Gives CRD ability to set rate to equal perceived public benefit	Promotes water conservation	Rate constant across agricultural accounts
2.a	No change						
2.b	Set Ag. rate equal to the CRD wholesale rate						
2.c	Cap subsidy						
2.d	Rate per acre/ hectare arable land with increasing rates for over-consumption						
2.e	Retail rate discount						
2.f	Stop program						

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2. Comparison of Rate Options

Option		IMPACT			ATTRIBUTES		
		CRD financial impact	Reduction in farm and public benefits	Administrative level of effort	Gives CRD ability to set rate to equal perceived public benefit	Promotes water conservation	Rate constant across agricultural accounts
2.a	**No change**	$1.7M (in 2022)	Low	Low	No	No	Yes
2.b	**Set Ag. rate equal to the CRD wholesale rate**	$1.25M (in 2022)	Medium	Low	No	No	Yes
2.c	**Cap subsidy**	e.g., $1M or 2% of CRD budget	Medium	Medium	Yes	No	Maybe
2.d	**Rate per acre/ hectare arable land with increasing rates for over-consumption**	Requires rate study, i.e., $300/ hectare/yr, $0.30/m^3 over allotment	Unknown	High	Yes	Yes	Yes
2.e	**Retail rate discount**	Medium	Medium	Low	Yes	No	No
2.f	**Stop program**	$0	High	Low	No	No	No

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Today's Goal

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To do this we presented:

- Economic Framework → How large should the subsidy be?
- Review of Potential Options
  - Administrative Changes → Information to support magnitude of subsidy
  - Rate Changes → How to structure the collection of rates to support agriculture, address concerns of retail utilities and incentivize conservation
- Questionnaire → **Gather WAC input**

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Questionnaire

The CRD will email you a link to the questionnaire after today's meeting.

The questionnaire will be open until April 11. Please note the questionnaire is intended only for WAC members at this time.

You will be asked to enter your name to monitor participation only. This information will not be shared, and responses will remain anonymous.

Next Steps: A final report outlining a recommended option will be completed in collaboration with the CRD and the outcomes will be shared.

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CRD Agricultural Water Rate Review and Rate Model Options Study: **Background Information**

Background

The Capital Regional District (CRD) contracted Stantec Consulting to review and analyze the CRD's agricultural water rate. The analysis includes a review of the water rate model and a recommendation of potential model options. The goal of the rate review is to:

*Recommend **a fair rate that supports farming operations** that contribute to the **regional objective** of supporting local food production, while addressing the **service budget implications** and the additional cost burden to non-agricultural customers.*

— CRD Regional Water Supply Consulting Services for Agricultural Water Rate Review and Rate Model Options Study Request for Proposal

What is the Agricultural Water Rate Program?

The CRD has provided an agricultural water rate through the Regional Water Supply Service since 2002. Properties that hold a BC Assessment farm classification[1] are eligible to receive the rate subject to the provisions of CRD Bylaw No. 2570[2], which sets out how the rate applies to properties with or without a residence. Historically, the rate has been substantially lower than the municipal retail or distribution rates which was intended to promote and support local food production. The agricultural rate provides a benefit to farmers by lowering the cost for crop irrigation and livestock rearing. The rate 'subsidy' is funded through the annual Regional Water Supply Service operating budget which funds the difference between the municipal retail water rate and the agricultural water rate, keeping the municipalities/distributors 'whole' financially.

The rate was implemented with the objective of supporting local food (fruits, vegetables and livestock) and feed production. The rate has not changed since 2010, while during that time, the Regional Water Supply bulk supply or 'wholesale' water rate and the municipal distribution or 'retail' water rates have steadily increased.

For context, the 2021 Regional Water Supply agricultural rate funding budget was $1.6 million. In 2020 there were 532 Agricultural/Residential (AR) and 133 Agricultural (AG) accounts that received the agricultural water rate. The Regional Water Supply agricultural water volume was 1.053,155 cubic metres.

See the attached CRD Agricultural Water Rate Timeline for an overview of the rate history.

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[1] See the BC Assessment Authority Understanding Farm Classification website for more details, located: info.bcassessment.ca/services-and-products/Pages/Understanding%20Farm%20Classification.aspx

[2] See the CRD Regulations and Bylaws website for more details, located: www.crd.bc.ca/about/regulations-bylaws

Conceptual Economic Framework

The goal of the review is to recommend **a fair rate that supports farming operations** that contribute to the **regional objective**, of supporting local food production, while addressing the **service budget implications** and the additional cost burden to non-agricultural customers.

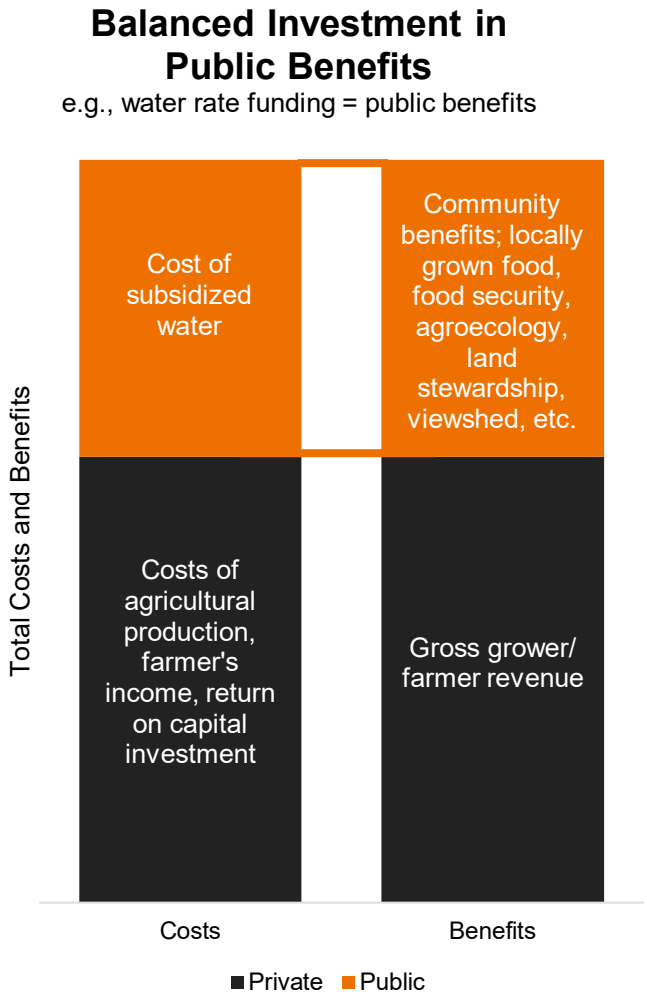
An economic framework that may be useful in guiding the analysis considers the benefits and costs of achieving the regional objective, supporting local food production. We need not quantify the benefits or costs to use the framework, but it can be useful in considering both how to 'support farmer operations' – the benefits – and address the 'service budget implications' – the costs.

As applied to irrigated water supply programs, particularly those that include a subsidized rate structure, it is useful to categorize the benefits and costs into private and public. Private benefits account for the gross revenue that farmers receive for their output (e.g., fruits, vegetables, and livestock). Private costs include their costs of production (e.g., supplies, labor, water, and a return on their time and capital investments). To be in business these private benefits must exceed the private costs.

Public benefits account for **the benefits that society sees in the agricultural industry** as well as the **economic "ripple" effects** that production agriculture creates. For example, the value of public benefits is on display in the 2003 Regional Growth Strategy (RGS) during which members of the public and stakeholder groups expressed the greatest interest in food and agriculture systems out of all nine sustainability topics (CRD, 2023).[3] The categories of public benefits cited by the CRD include locally produced food, agroecology, climate change and adaption, and land stewardship. Other public benefits of agriculture production that have been cited in other regions include agrotourism, educational opportunities, preservation of undeveloped lands, and food security. These benefits need not be quantified to be considered in the benefits cost analysis. In fact, the magnitude of these public benefits is based on individual or group values and may require stakeholders to reach a consensus about the value of the benefits. The public benefits that are generated from the economic "ripple effects" feel somewhat more tangible and are often quantified in similar studies. The ripple effects include jobs created by the value added in businesses that support agriculture as well as the processing and marketing of agricultural output, for example when berries are processed into frozen products or sold at a local farmers' market. Taken together, the more tangible economic ripple effects and the less tangible categories of benefits comprise total public benefits of the agriculture industry.

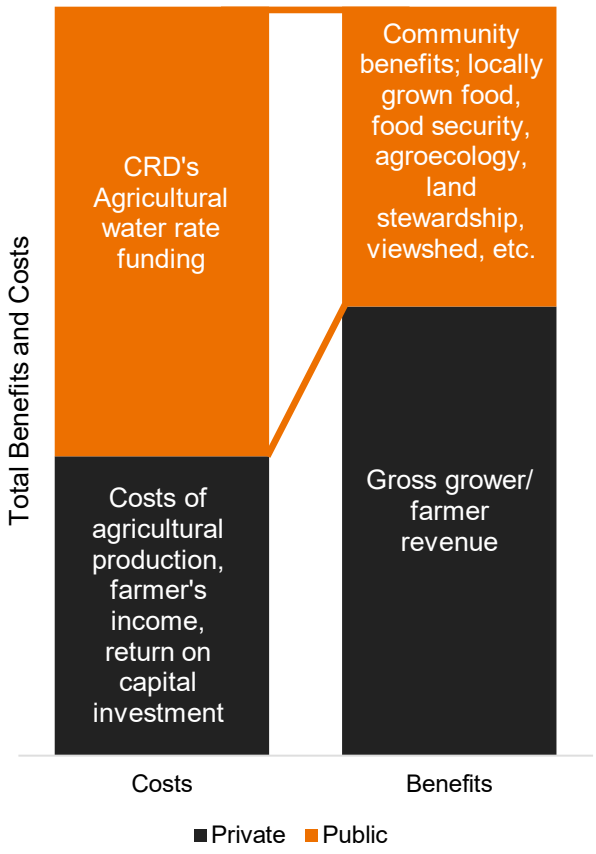
[3] See the CRD Regional Food and Agriculture Strategy website located at: Food & Agriculture | CRD

The public costs are simply the **value of the total water rate subsidy**. Prudent fiscal management suggests that these public costs should be less than the perceived public benefit of the subsidy. The challenge ensues when stakeholder groups have difficulty agreeing as to the value of the public benefits and therefore the magnitude of the subsidy. See the following charts for examples of the conceptual framework.



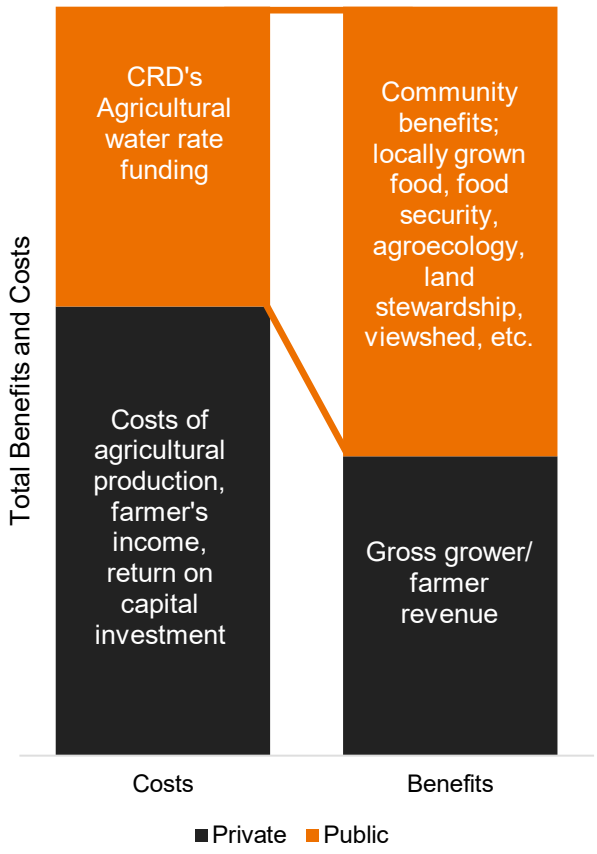
Over Investing in Public Benefits

e.g., water rate funding > public benefits



Under Investing in Public Benefits

e.g. water rate funding < public benefits



Concerns That Have Been Expressed with the Existing Agricultural Rate

This list of concerns expressed with the existing agricultural rate has been compiled from Regional Water Supply Commission and WAC meeting minutes, and CRD staff reports.

- Recipients of discounted agricultural water rate currently pay around 70% less than non-agricultural customers (in terms of wholesale pricing)
- Some jurisdictions are not rolling the water-rate savings back into agricultural infrastructure
- Some recipients of discounted water rates are not using the water to produce food and feed
- Unwillingness of homeowners in municipalities in which there is no agricultural land to subsidize
- Possibility that water may not be used wisely if it is priced low
- Who will pay to extend piping systems to farms that are not presently served with regional water
- Water being used for agriculture has been disinfected, the same as potable water
- Qualifications should be tightened up for farms that are eligible for the agricultural rate
- Inconsistent application of the rate subsidy – in some cases the fixed water charge was being charged to customers with agriculture only meters
- Water use is heavily concentrated within a limited number of subsidy recipients

CRD Agricultural Water Rate Timeline

OBJECTIVE:

Support local food (fruits, vegetables and livestock) and feed production

Legend

— Wholesale Rate ····· Agricultural Rate

How CRD Bylaw No. 2570 works:

Properties that hold a **BC Assessment farm classification** are eligible to receive the rate.

AGRICULTURAL (AG)

No residence, all water consumption is related to agriculture:

Agricultural water rate applies to:
Total volume of water consumed

AGRICULTURAL/RESIDENTIAL (AR)

Property has a residence, some water consumption is related to agriculture:

Local municipal distribution water rate applies to:
First 455 cubic metres consumed in a calendar year
(Rates around the region typically range from $1.50 to $2.21 per cubic metre)

Agricultural water rate applies to:
Volume of water consumed during remainder of the year

2023 Regional Water Supply agricultural rate funding budget could be 7–11.4% of the total annual budget.

If rates increase 15% annually, by 2030 the CRD wholesale rate would be $2.24.

In the unlikely case that municipal water rates do not increase, the agricultural water rate funding budget would comprise 7% of the CRD total annual budget for 2030.

If municipal water rates increase at the same rate as the CRD wholesale rate, the rate funding budget would comprise 11.4% of the CRD total annual budget for 2030.

The CRD Board began to explore an agricultural water rate subsidized by domestic water rates on the recommendation of the Regional Water Supply Commission.

Farmers in the CRD paid the highest irrigation rates in North America and could not be competitive when paying these rates.

1997

The Regional Water Supply Commission agreed to provide farm status properties in the greater Victoria area with water for agricultural use at the wholesale rate.

This interim water rate was subject to annual review, with a major review of water use and the benefits to local agriculture after five years.

The rate was implemented with the objective of supporting local food (fruits, vegetables and livestock) and feed production.

The agricultural water rate helped increase agricultural production; however, the rate did not make local famers competitive.

2000

$0.2060

CRD has provided an agricultural water rate through the Regional Water Supply Service since 2002 when Bylaw No. 2570 was established which made the agricultural water rate official.

Properties that hold a BC Assessment farm classification are eligible to receive the rate subject to the provisions of CRD Bylaw No. 2570, which sets out how the rate applies to properties with or without a residence.

2002

$0.2860

$0.2060

CRD Water Services established a partnership with the BC Ministry of Agriculture and Lands and the Peninsula Agricultural Commission to conduct a study of agricultural water use and conservation practices in Greater Victoria.

The objective of the study was to determine the sources, quantities and uses of water in agriculture in the municipalities of North Saanich, Central Saanich, Saanich, and Metchosin. Evaluation of water use efficiency and future water needs for agriculture were also objectives.

2004

$0.3128

$0.2060

2005

$0.3212

$0.2060

Combined increases in wholesale rate and agricultural use result in growth of the agricultural water rate subsidy from $191,000 to $460,000

In 2018, the CRD partnered with the Ministry of Agriculture to develop an Agriculture Water Demand Model and Agricultural Land Use Inventory for the CRD.

The objective of the study was to identify the amount of actively farmed land in the region, provide a baseline for monitoring land use change, identify land use trends for areas with historic agricultural uses, identify crop production/type and agricultural water demand and sources.

The study was also intended to provide better information to support further consideration of the agriculture water rate application and methodology.

2010

$0.5443

$0.2105

Regional Water Supply agricultural water volume was 1,053,155 cm^3, confirming that there is some reliance on 'city' water to support agricultural water needs.

In 2020 there were 532 Agricultural/Residential (AR) and 133 Agricultural (AG) accounts that received the agricultural water rate.

2020

$0.6968

$0.2105

Current agricultural water demand represents 2 to 3% of annual Regional Water demand.

Regional Water Supply Service budget impact:

2021 Regional Water Supply agricultural rate funding budget was $1.6 million

The rate budget continues to be increased to keep pace with the reimbursement claims, which is primarily a result of the ever-increasing gap between the rates.

2021

$0.7148

$0.2105

Regional Water Supply agricultural rate funding budget $1.6 million

Rates will have to increase annually to cover costs of new investments needed to continue to meet increasing demand (2022 Master Plan).

2022

$0.7332

$0.2105

2030

$2.2400

$0.2105

Regional Water Supply agricultural rate funding budget 7–11.4% of the total annual budget, depending on municipal water rate increases

Capital Regional District

HOTSHEET AND ACTION LIST

Regional Water Supply Commission

Wednesday, January 18, 2023 **11:30 AM** **CRD Boardroom**
625 Fisgard Street
Victoria, BC

The following is a quick snapshot of the FINAL Regional Water Supply 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.

2. ELECTION OF CHAIR

Gord Baird was acclaimed as Chair.

3. ELECTION OF VICE CHAIR

Celia Stock was elected as Vice Chair.

5. ADOPTION OF MINUTES

That the minutes of the September 28, 2022 meeting be adopted.

CARRIED

9. COMMISSION BUSINESS

9.2 Commission Representation on Water Advisory Committee and Committee Member Appointments

Recommendation: That the Regional Water Supply Commission:

1. Appoint the Vice Chair to the Water Advisory Committee for a one-year term ending December 31, 2023; and,

2. Strike a nominating committee consisting of the Commission Chair or Chair's delegate, Commission Vice Chair, Juan de Fuca Water Distribution Commission Vice Chair and Saanich Peninsula Water Commission Vice Chair to review the applications; and that the nominating committee report back to the Commission, providing its recommendations for appointment in a closed meeting.

CARRIED

Capital Regional District

HOTSHEET AND ACTION LIST

Regional Water Supply Commission

Wednesday, February 15, 2023 **11:30 AM** **6th Floor Board Room**
625 Fisgard Street
Victoria, BC

The following is a quick snapshot of the FINAL Regional Water Supply 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

That the minutes of the January 18, 2023 meeting be adopted.

CARRIED

7. COMMISSION BUSINESS

7.1 2023-2027 Regional Water Supply Service Capital Plan Update

Recommendation: The Regional Water Supply Commission recommends to the Capital Regional District Board:

That the 2023 Regional Water Supply Service Capital Budget and Five Year Capital Plan be updated to include $365,000 for Project 20-27 GVWSA Forest Resilience, for ecological restoration thinning trials development and implementation costs and $365,000 in revenue from the project.

CARRIED

The Following Reports Were Received for Information

7.2 2022 GVWSA Wildfire Management

7.3. Water Conservation Initiative Once-Through Cooling Project Reduced Rebates Program - Environmental Benefits

7.4. Water Quality Report for Greater Victoria Drinking Water System – July to December 2022

7.5. Summary of Recommendations from Other Water Commissions

7.6. Water Watch Report

File No. 902-03

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued March 20, 2023

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	March 31 5 Year Ave		March 31/22		March 19/23		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	92,634	20,379	92,727	20,400	92,530	20,357	99.8%
Goldstream	8,235	1,812	9,825	2,162	9,906	2,179	99.9%
Total	100,868	22,191	102,552	22,561	102,436	22,536	99.8%

2. Average Daily Demand:

For the month of March	102.7 MLD	22.60 MIGD
For week ending March 19, 2023	104.1 MLD	22.90 MIGD
Max. day March 2023, to date:	106.8 MLD	23.51 MIGD

3. Average 5 Year Daily Demand for March

Average (2018 - 2022)	103.3 MLD [1]	22.73 MIGD [2]

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

4. Rainfall March:

Average (1914 - 2022):	160.4 mm
Actual Rainfall to Date	71.0 mm (44% of monthly average)

5. Rainfall: Sep 1- Mar 19

Average (1914 - 2022):	1,360.2 mm
2022/2023	870.8 mm (64% of average)

6. Water Conservation Action Required:

If each of us saves a little, together we can save a lot.
Visit our website at www.crd.bc.ca/water for more information.

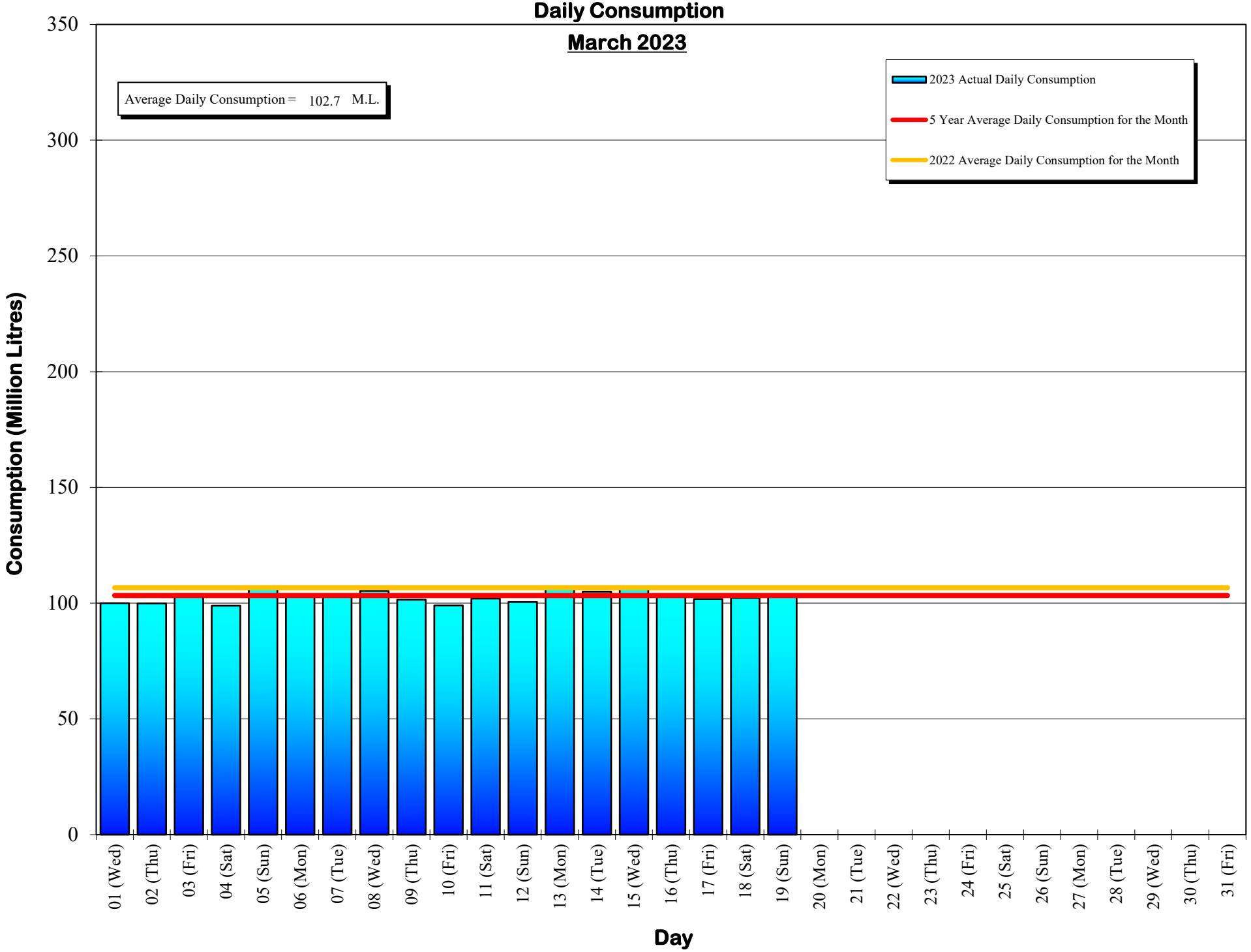
If you require further information, please contact:

Ian Jesney, P. Eng.
Acting 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

March 2023



J:\WATERENG\HYDROLGY\AMRIT\MONTHEND.23\H2o watch 2023Cons. Chart

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Daily Consumptions: - March 2023

Date	Total Consumption (ML) [1.]		Total Consumption (MIG) [2.]	Air Temperature @ Japan Gulch High (°C)	Air Temperature @ Japan Gulch Low (°C)	Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am Rainfall (mm)	Snowfall [3.] (mm)	Total Precip.
01 (Wed)	100.0		22.0	3	-2	Cloudy / Showers	3.3	0.0	3.3
02 (Thu)	99.9		22.0	7	0	Cloudy / Snow / Rain	8.9	93.9	18.3
03 (Fri)	103.9		22.9	5	0	Cloudy / Snow / Showers	5.1	5.0	5.6
04 (Sat)	98.9	<=Min	21.8	4	1	Cloudy / Showers	12.7	0.0	12.7
05 (Sun)	106.7		23.5	7	0	Cloudy / P.Sunny / Sleet	0.3	2.5	0.6
06 (Mon)	103.1		22.7	7	0	Cloudy	0.0	0.0	0.0
07 (Tue)	102.7		22.6	7	0	Cloudy / P. Sunny / Showers	1.5	0.0	1.5
08 (Wed)	105.3		23.2	8	-1	Cloudy / P. Sunny	0.0	0.0	0.0
09 (Thu)	101.5		22.3	8	2	Cloudy / P. Sunny / Showers	0.8	0.0	0.8
10 (Fri)	99.0		21.8	6	2	Cloudy / Showers	4.8	0.0	4.8
11 (Sat)	102.0		22.4	8	2	Cloudy / P. Sunny / Showers	0.5	0.0	0.5
12 (Sun)	100.5		22.1	7	0	Cloudy / Rain	15.2	0.0	15.2
13 (Mon)	106.1		23.3	8	2	Sunny / P. Cloudy / Showers	6.3	0.0	6.3
14 (Tue)	105.0		23.1	8	1	Cloudy / P. Sunny / Showers	1.5	0.0	1.5
15 (Wed)	106.8	<=Max	23.5	10	0	Sunny / P. Cloudy	0.0	0.0	0.0
16 (Thu)	103.3		22.7	8	-1	Sunny	0.0	0.0	0.0
17 (Fri)	101.8		22.4	11	0	Sunny	0.0	0.0	0.0
18 (Sat)	102.3		22.5	13	1	Sunny	0.0	0.0	0.0
19 (Sun)	103.2		22.7	14	3	Sunny / P. Cloudy	0.0	0.0	0.0
20 (Mon)									
21 (Tue)									
22 (Wed)									
23 (Thu)									
24 (Fri)									
25 (Sat)									
26 (Sun)									
27 (Mon)									
28 (Tue)									
29 (Wed)									
30 (Thu)									
31 (Fri)									
TOTAL	1952.0 ML		429.48 MIG				60.9	101	71.0
MAX	106.8		23.51	14	3		15.2	94	18.3
AVG	**102.7**		22.60	7.8	0.5		3.2	5	3.7
MIN	98.9		21.76	3	-2		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 March (1914-2022)	160.4 mm
Actual Rainfall: March	71.0 mm
% of Average	44%
Average Rainfall (1914-2022): Sept 01 - Mar 19	1,360.2 mm
Actual Rainfall (2022/23): Sept 01 - Mar 19	870.8 mm
% of Average	64%

Number days with precip. 0.2 or more
12

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

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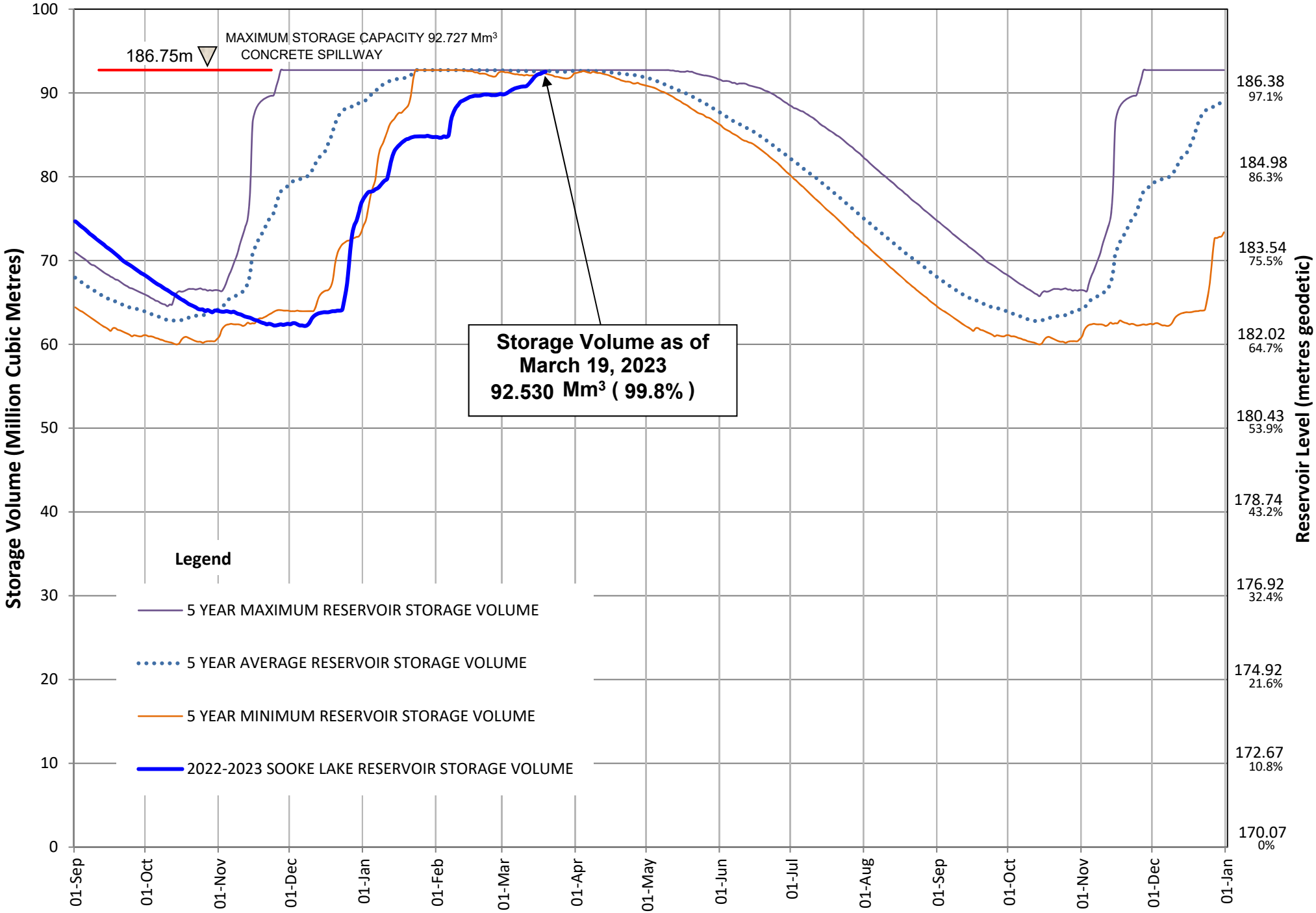
SOOKE LAKE RESERVOIR STORAGE SUMMARY
2022 / 2023



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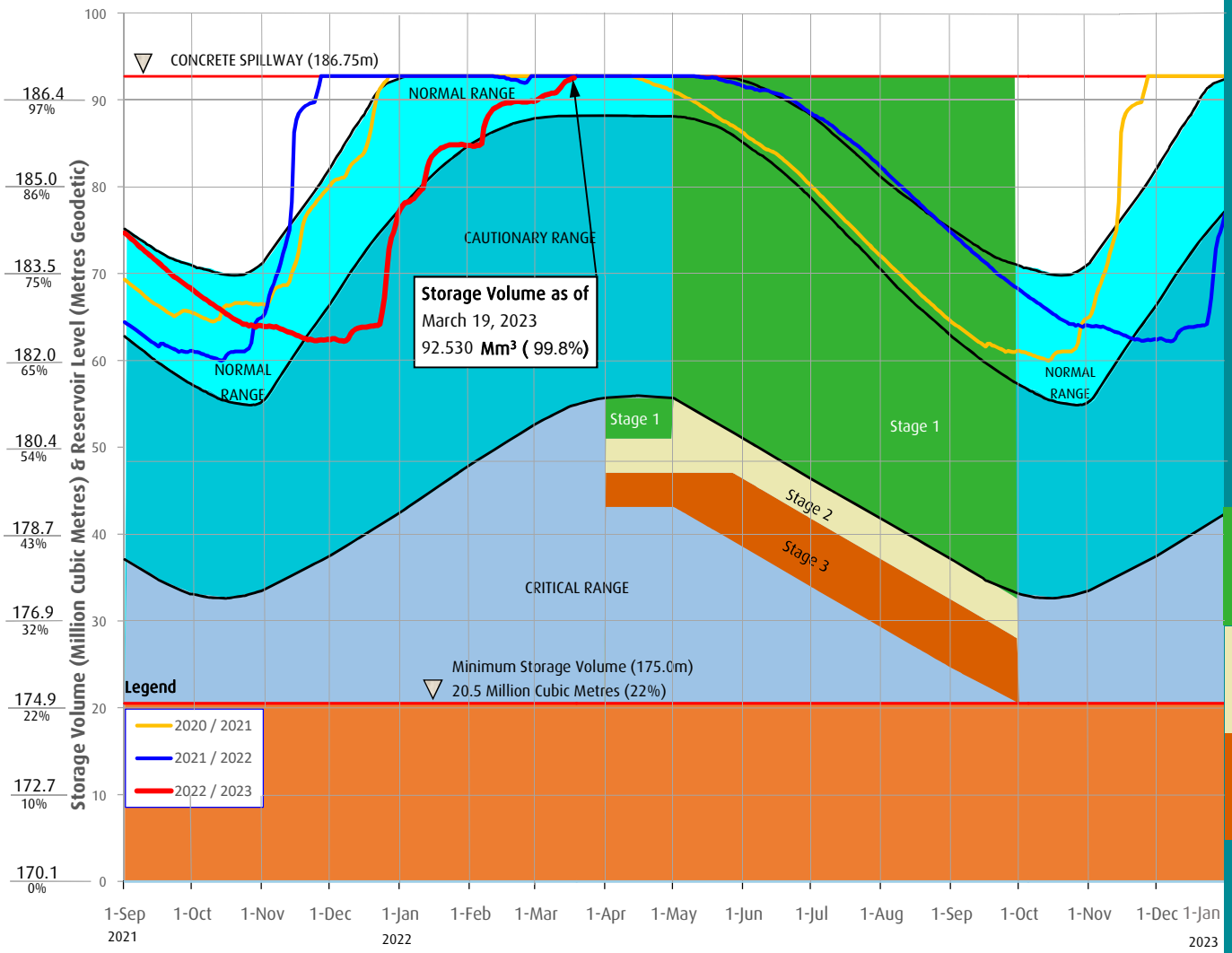
Sooke Lake Reservoir Storage Level

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

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Making a difference...together

Useable Reservoir Volumes in Storage for March 19, 2023